



CALIFORNIA
HEALTH BENEFITS REVIEW PROGRAM

**Implementation of Senate Bill 1704:
California Health Benefits Review Program
Analysis of Legislation Mandating or
Repealing Health Care Benefits and Services**

A Report to the California State Governor
and Legislature

December 22, 2009

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TABLE OF CONTENTS

Executive Summary.....	5
Introduction.....	9
The National and State Context for AB 1996 and SB 1704	9
CHBRP’s Initial Objectives (AB 1996) and Current Charge (SB 1704, AB 1540).....	11
Fulfilling Legislative Intent: CHBRP’s Analyses and Products.....	13
CHBRP Analyses.....	13
Legislative Briefings and Workshops	21
Disseminating Knowledge Obtained Through CHBRP’s Experiences.....	22
Continuous Quality Improvement.....	23
Challenges Inherent to CHBRP’s Analytic Process	26
CHBRP’s Structure and Processes	31
Overall Structure	31
Process and Workflow.....	36
Analytic Methods.....	43
Future Directions in the National and State Context.....	66
Trends in Mandate and Repeal Bills	66
Federal Initiatives	68
References.....	70
Appendices.....	73

TABLES AND FIGURES

Table 1: CHBRP Analyzed Bills: Topics Addressed and Final Bill Status, 2003-2009.....	14
Table 2: Summary of CHBRP Reports on Repeal Bills, 2006-2009.....	17
Table 3: CHBRP’s Criteria for Evaluation, As specified under California Health and Safety Code Section 127660.....	41
Table 4: Health Insurance in California, 2009.....	51
Figure 1: Process Flow of CHBRP Analyses.....	32
Figure 2: 60-Day Timeline.....	42
Figure 3: Health Insurance in California, 2009–Regulatory Authority.....	52
Figure 4: Health Insurance in California, 2009–Detailed View.....	53

EXECUTIVE SUMMARY

The California Health Benefits Review Program (CHBRP) was originally established in response to Assembly Bill (AB) 1996 (Thomson, 2002), which “requested the University of California to assess legislation proposing mandated health care benefits to be provided by health care service plans and health insurers.” The provisions of AB 1996, originally set to sunset on January 1, 2007, were extended by Senate Bill (SB) 1704 (Kuehl, 2006) and further extended by AB 1540 (Assembly Health Committee, 2009). Current statute would extend CHBRP until June 30, 2015. SB 1704 added the provision that requested the University of California, through CHBRP, analyze legislation that would repeal existing benefit mandates and current statute extends those provisions. SB 1704 had also requested the University of California (UC) to submit a report to the Governor and the Legislature by January 1, 2010, describing the implementation of SB 1704 as enacted (Statutes of 2006: Chapter 684).¹ This report is submitted in compliance with that request.

CHBRP’s Charge

Under current law, CHBRP (California Health and Safety Code Section 127660 *et seq.*) is charged with responding to requests from the State Legislature to provide independent analysis of the medical, financial, and public health impacts of proposed health insurance benefit mandates and repeals. Each analysis is to be completed within a 60-day period, usually before the Legislature begins formal consideration of a mandate or repeal bill. CHBRP is charged with maintaining conflict-of-interest policies to prohibit participation in the analyses by a person with a material financial conflict of interest. CHBRP applies this prohibition broadly, including to content experts and participating faculty and staff. When conducting financial impact analyses, the program is to use a certified actuary or other person with relevant knowledge and expertise. All reports are to be available on the Internet and made available to the public upon request. Financial support for CHBRP is provided through a non-General Fund source, specifically, fees levied by the Department of Managed Health Care and the California Department of Insurance on health care service plans and health insurers, respectively, the total annual amount of which would not exceed \$2 million. Legislative requests to CHBRP are to be made by the appropriate policy or fiscal committees, which the legislative leadership has designated as the Assembly and Senate Health Committees.

CHBRP Overall Structure

CHBRP’s central office is housed at the University of California, Office of the President and staffed with a small professional analytic and coordinating staff. Although CHBRP is administered by UC, it functions independently from UC’s institutional policy and program interests in responding to the Legislature’s requests for analyses. CHBRP work is conducted by its Faculty Task Force and contributors from the University of California, San Francisco; University of California, Berkeley; University of California, Los Angeles; and University of California, Davis. Other members of the Faculty Task Force are drawn from UC’s Schools of Medicine and Public Health, as well as from the

¹ See Appendix 1 for complete text of AB 1996 (2002), SB 1704 (2006), and the relevant provisions of AB 1540. CHBRP is not required under current statute to submit a report until January 1, 2014; however, it was deemed appropriate to provide this report in compliance with the intent of SB 1704.

University of Southern California, Loma Linda University School of Medicine, and Stanford University. CHBRP works with a team of librarians at UC to assist with literature searches. CHBRP contracts with actuarial firm Milliman, Inc., to assist with its cost impact analysis. A National Advisory Council, made up of experts from outside the state of California and designed to provide balanced representation among groups with an interest in health insurance benefit mandates, reviews draft studies to assure their quality before they are transmitted to the Legislature. A strict conflict-of-interest policy ensures that the analyses are undertaken without financial or other interests that could bias the results. Since its inception, the CHBRP has been administered by the University of California at a cost well within the \$2 million maximum annual allocation (about \$0.0078 PMPM) provided under CHBRP's authorizing statute by funds derived from an assessment of health insurers and plans regulated by the California Department of Insurance and the Department of Managed Health Care.

CHBRP's Products and Its Uses

Since its inception, CHBRP has striven to provide the Legislature with a standardized, impartial framework to evaluate bills within the complex policy arena of health insurance through its reports. CHBRP analyses explicitly address (1) the medical effectiveness of the benefit or service proposed to be mandated in terms of clinical outcomes, (2) the projected cost impacts of the mandate in terms of per member per month premiums and total expenditures, (3) the estimated public health impacts in terms of the population health outcomes, and (4) data limitations and caveats.

From February 2004 to January 2010, CHBRP will have issued 58 complete reports analyzing proposed benefit mandates or repeals, as well as 9 formal follow-up letters to the Legislature clarifying analysis or providing further explanation of amended bills. Three of 58 reports addressed bills considered to be repeals. All 58 analyses were completed within the 60-day timeframe or were designated specifically as two-year bills for which an extended submission date is permitted.²

The range of issues addressed by mandate and repeal bills is wide. Different services and benefits may have specific analytic questions that are relevant to the Legislature's deliberation of the bill. For example, the analytic questions related to coverage of a preventive screening or test may be different than the analytic questions related to a parity bill. For each of these bills, CHBRP strives to be flexible and address salient analytic questions while still adhering to CHBRP's statutory charge.

About 60% of CHBRP reports found that the mandate under analysis was for services or benefits that were generally considered effective. The majority of reports (about 80%) estimated that the mandate would incrementally increase total health care expenditures; the remaining 20% estimated no overall increase in total health care expenditures resulting from the mandate, usually because the benefit was widely covered or there was no estimated increase in utilization associated with the mandate. More than half of the reports estimated a positive public health impact as a result of the mandate. The remaining reports either concluded that the impact of the mandate on the overall health of the public was unknown due to insufficient evidence or that there would be no public

² This exception occurred in CHBRP's initial year of operation when the first analyses were requested before staff had been hired and analyses procedures established. This was also permitted for bills that were made into two-year bills and repeal bills. The Legislature permitted additional time for bills for CHBRP to develop methodology following reauthorization.

health impact because the benefit was already widely covered or there was no estimated increase in utilization.

In terms of repeal analyses, CHBRP has not received a request to analyze a bill that would repeal some specific, single benefit mandate. Instead, CHBRP has received requests to analyze bills that would allow carriers to develop and sell products that are not subject to California benefit mandate laws or regulations. By their nature, these repeal bills do not typically place new requirements on carriers to make changes but rather *allow* carriers to develop, market, or sell products that were previously prohibited in the market. The market response to such repeal bills is therefore often uncertain, since it is unclear whether carriers would develop new products, and whether group or individual purchasers would offer or take up those new health insurance products. This inherent uncertainty required CHBRP to develop alternative research strategies and methodologies to address the potential effects of repeal bills' provisions on the California market.

Of the 55 mandate and 3 repeal bills that have been introduced, 23 bills have been passed by the Legislature but vetoed by the Governor, and 6 have been enacted into law. Bills mandating benefits or services for which there is clear evidence of effectiveness are likely to be enacted by the Legislature. Bills for which there is no evidence of effectiveness are not likely to pass out of the Legislature. The Governor, in general, has demonstrated based on veto messages that he is not likely to sign mandate bills into law, citing increased costs, reduced market flexibility, or an increase in the number of uninsured as a result of rising costs. In addition, in 2007 when the California Legislature and the Governor were considering various broad-based health care reform proposals, the Governor indicated that in his veto messages that he was reluctant to sign bills that would only incrementally affect the health care system. Five of six bills signed into law by the Governor were associated with no estimated cost increases, with a small estimated cost increase (less than 0.001% of total expenditures) or with a quantifiable and substantial public health impact.

In addition to producing reports, CHBRP also:

- Explains technical findings to the legislative staff including bill author staff and policy and appropriation committee staff
- Provides pre-session briefings and post-session workshops for legislative staff and other interested parties roughly twice a year at the State Capitol; these sessions are intended to promote an understanding of health insurance and the relevant laws and regulations in California, as well as ensure transparency and understanding of CHBRP's analytic process
- Testifies at hearings when requested to do so by the relevant policy or appropriation committees

During the hearings for SB 1704, bill author Senator Sheila Kuehl stated that the analyses produced by CHBRP "provide a valuable resource to the Legislature and other policymakers by providing objective information about the real-world impact of health benefit mandates" (Assembly Health Committee, 2006). In addition, "the author and supporters [of SB 1704] write that there is broad agreement among consumer groups, plans, insurers, and other observers that CHBRP's process has successfully brought objective, quantitative analysis to benefit mandate proposals. These analyses have helped inform the debate over the costs and health advantages of particular mandates." (SBFI Committee, 2006) CHBRP reports are used heavily to inform the analyses, testimony, and deliberation for the policy (health) and appropriations committees. Since the passage of SB 1704,

CHBRP's reports continue to be used by various stakeholders, Legislators, and legislative and agency staff as follows:

- **Committee staff** systematically summarize CHBRP reports for inclusion in the policy and fiscal committee hearing legislative analyses;
- **Bill authors and sponsors** proponents and opponents of bills routinely quote from CHBRP reports during hearing remarks and testimony;
- **Advocacy organizations, health plans/insurers, trade associations, and underwriting organizations** have used CHBRP's reports to make cases in support of, or in opposition to, the passage of mandate bills.

Based on interviews, legislative and agency staff and stakeholder groups such as health plans and consumer groups all report that they rely on CHBRP's reports because they are considered useful, comprehensive, and impartial.

Staff and stakeholder groups report that the analyses are used to deliberate whether the bill avoids unintended consequences and whether the mandate will address the problems it seeks to resolve. CHBRP's reports have also been used in other ways, for example, by other states as they consider mandate legislation.

INTRODUCTION

The California Health Benefits Review Program (CHBRP) was originally established in response to Assembly Bill (AB) 1996 (Thomson, 2002), which “requested the University of California to assess legislation proposing mandated health care benefits to be provided by health care service plans and health insurers.” The provisions of AB 1996, originally set to sunset on January 1, 2007, were extended by Senate Bill (SB) 1704 (Kuehl, 2006) and further extended by AB 1540 (Assembly Health Committee, 2009). Current statute would extend CHBRP until June 30, 2015. SB 1704 added the provision that requested the University of California (UC), through CHBRP, analyze legislation that would repeal existing benefit mandates, and current statute extends those provisions. SB 1704 had also requested UC to submit a report to the Governor and the Legislature by January 1, 2010, describing the implementation of SB 1704 as enacted (Statutes of 2006: Chapter 684).³ This report is submitted in compliance with that request.

The University of California provided a similar report to the Legislature and Governor in compliance with AB 1996 on December 22, 2005. That report, *Implementation of Assembly Bill 1996: University of California Analysis of Legislation Mandating Health Care Benefits and Service*, may be found at www.chbrp.org. Because that report includes the background and context for the establishment of CHBRP, this implementation report will briefly summarize the background of the program, summarize analyses and outcomes since inception, and focus on the programmatic changes that have been implemented since the CHBRP was reauthorized under SB 1704. This report will summarize:

- the context in which AB 1996 and SB 1704 were enacted
- the objectives and provisions of SB 1704
- important elements of CHBRP’s infrastructure and processes
- refinements of methodology and process
- analyses requested and provided since inception
- policy context for benefit mandates given national health care reform initiatives and health care trends

The National and State Context for AB 1996 and SB 1704

In the late 1990s, state mandated health benefit laws were proliferating in states across the nation. In their comparative analysis of mandated benefit laws, Laugesen et al. (2006) tracked this trend quantitatively:

- 1949-1969: 19 laws
- 1970s: 171 laws
- 1980s: 365 laws
- 1990s: 569 laws

³ See Appendix 1 for complete text of AB 1996 (2002), SB 1704 (2006), and the relevant provisions of AB 1540 (2009). CHBRP is not required under current statute to submit a report until January 1, 2014; however, it was deemed appropriate to provide this report in compliance with the intent of SB 1704.

Applying the authors' methodology to updated data sources, CHBRP's internal analysis identified that, from 2000 through 2008, 357 such mandated benefits passed into law across the nation, maintaining the historically high levels of the 1980s and 1990s.⁴

Researchers attribute the proliferation of mandated benefit laws to several factors. First, these laws were a product of the managed care "backlash" of the 1990s. Specifically, the rise of health maintenance organizations (HMOs), and their willingness to use utilization and network controls led interest groups and elected officials to believe that legislation was necessary to curtail health plans' ability to deny services or limiting access to certain provider types (Blendon et al., 1998; Laugesen, 2006). Second, political factors combined to make these types of bills more likely to be enacted since the costs are relatively small and diffused over a large population while the benefits are concentrated on a small group of stakeholders who have a strong interest in actively advocating for the legislation (Oliver and Singer, 2006; Schauffler, 2006; Wilson, 1980).

In California, more than 40 mandated benefits had been enacted into state law by the close of 2001, and during the 2001-2002 session, 10 benefit mandate bills were introduced (AB 1996, 2002). At that time, concerns arose regarding cost containment, increasing opt-outs by small employers, the potential of large employers switching to self-insured health insurance products (thereby exempted from state-mandated benefits), and whether well-intended mandates actually served their intended purposes. In response, 17 states, including California, passed laws requiring the evaluation of health benefits mandates during 2001-2002. Since then, 15 additional states have passed mandate evaluation laws, bringing the total to 32 as of 2009.

Between 2002 and 2006, the number of benefit mandate bills introduced in the Legislature remained steady. Table 1 includes the list of mandate bills that were referred to CHBRP for analysis from 2003 through 2009. Given this stability, the California Legislature deemed it valuable to continue obtaining evaluations of such legislative proposals (SBFI Committee, 2006).

In addition, CHBRP's reports provided by 2005 were deemed useful by the Legislature and a variety of stakeholder groups who supported extending CHBRP's sunset date. This includes both stakeholder groups who were typically proponents and opponents of benefit mandate bills. For example, Senator Sheila Kuehl was the sponsor of SB 1704 and other supporters of the bill included the California Department of Insurance, the California Medical Association, Health Access, and California Association of Health Underwriters (Senate Rules Committee, 2006). According to the author, the analyses produced by CHBRP "provide a valuable resource to the Legislature and other policymakers by providing objective information about the real-world impact of health benefit mandates" (Assembly Health Committee, 2006). In addition, "the author and supporters write that there is broad agreement among consumer groups, plans, insurers, and other observers that the CHBRP process has successfully brought objective, quantitative analysis to benefit mandate

⁴ For methodological consistency, CHBRP's analysis used the 2008 version of the Blue Cross Blue Shield Association's (BCBSA) annual State Legislative Health Care and Insurance Issues, the principal data source used in Laugesen et al. (2006), and applied the same criteria in defining mandated benefits: (1) laws had to meet the definition of a benefit mandate as established under California law, discussed elsewhere in this report; (2) laws passed in fewer than three states were excluded from analysis; and, (3) revisions to existing mandates may be counted as additional laws, as the data source does not make this distinction. Because more data sources were used in the original paper, CHBRP's analysis may not represent a full extension the original analysis, and therefore should be taken as independent analysis modeled upon these authors' methods and applied to updated BCBSA data.

proposals. These analyses have helped inform the debate over the costs and health advantages of particular mandates.” (SBFI Committee, 2006)

At the time of CHBRP’s reauthorization there was concern about the introduction of legislation that would effectively repeal existing benefit mandate laws. In 2006, Congress considered legislation called the Health Care Choice Act of 2005 (H.R.2355) that would have allowed a specific type of health insurance product, called association health plans, to be exempt from all state-mandated benefits. According to the Senate Health Committee’s Legislative Analysis (2006)⁵, “The expectation of the author and other proponents [of SB 1704] is that health plans and health insurers, in order to compete with association health plans, would sponsor legislation in California allowing plans and insurers to sell policies without certain mandated benefits.” Thus, the California Legislature deemed it valuable to evaluate the medical effectiveness, cost, and public health impacts of repeal legislation, including this in CHBRP’s charge under SB 1704.

CHBRP’s Initial Objectives (AB 1996) and Current Charge (SB 1704, AB 1540)

According to the preamble in AB 1996 (2002):

The Legislature finds that there is an increasing number of proposals that mandate that certain health benefits be provided by health care service plans and health insurers as components of individual and group contracts. The Legislature further finds that many of these would potentially result in better health outcomes that would be in the public interest. However, the Legislature also recognizes that mandated benefits may contribute to the cost and affordability of health insurance premiums. Therefore, it is the intent of the Legislature that the University of California conduct a systematic review of proposed mandated or mandatorily offered health-benefit mandates. This review will assist the Legislature in determining whether mandating a particular coverage is in the public interest.

AB 1996 went on to specify the analytic questions that were to be addressed by UC’s reviews; these specific provisions were also extended under SB 1704 and AB 1540 (California Health and Safety Code, Sections 127660-127664). As discussed, SB 1704 added the analysis of benefit mandate repeals to CHBRP’s charge. The following lists the provisions of CHBRP’s current enabling statute:

- 1) UC is requested to establish CHBRP.
- 2) Legislation proposing to mandate (or repeal) a benefit or service is defined as a proposed statute that requires (or repeals the requirement on) a health care service plan and/or health insurer to:
 - a. permit an enrollee to obtain health care treatment or services from a particular type of health care provider;
 - b. offer or provide coverage for the screening, diagnosis, or treatment of a particular disease or condition; or
 - c. offer or provide coverage of a particular type of health care treatment or service, or of medical equipment, medical supplies, or drugs used in connection with a health care treatment or service.
- 3) All legislation proposing or repealing a “mandated benefit or service” is to be analyzed by

⁵ This Health Care Choice Act failed to pass the House of Representatives in 2006. Subsequent versions of this bill have been introduced in Congress in 2007 and in 2009.

UC and a written analysis is to be prepared with relevant data on the legislation's public health, medical, and financial impacts, as defined (See Table 3, CHBRP's Criteria for Evaluation for more details).

- 4) Support for UC to conduct these analyses is to be provided through a non-General Fund source, specifically fees levied by the Department of Managed Health Care (DMHC) and the California Department of Insurance (CDI) on health care service plans and health insurers, respectively, the total annual amount of which shall not exceed \$2 million.
- 5) Legislative requests to UC are to be made by an appropriate policy or fiscal committee chairperson or legislative leadership. (This task is currently delegated to the Chair of the Senate Health Committee and the Chair of the Assembly Health Committee.)
- 6) UC is to submit analyses of proposed health insurance mandate bills to the appropriate committee no later than 60 days after receiving a request from the Legislature.
- 7) UC is to develop and implement conflict-of-interest provisions to prohibit participation in the analyses by a person with a material financial conflict of interest, including a person who has a consulting or other agreement with an entity that would be affected by the legislation.
- 8) UC is to use a certified actuary or other person with relevant knowledge and expertise to determine the financial impact of a given bill.
- 9) UC is to post all analyses on the Internet and make them available to the public on request.
- 10) UC was to provide the Governor and Legislature with a report on the implementation of SB 1704 by January 1, 2010. The current enabling statute moves this report date to January 1, 2014. The established "sunset date" for the program is extended to June 30, 2015, unless a later enacted statute extends or repeals that date.

FULFILLING LEGISLATIVE INTENT: CHBRP'S ANALYSES AND PRODUCTS

Since its inception, CHBRP has striven to provide the Legislature with a standardized, impartial framework to evaluate health insurance mandates in the context of this complex policy arena. This section summarizes the products CHBRP has delivered to date, summarizes the reports' findings, reviews CHBRP's continuous quality improvement efforts and its responsiveness to legislative requests, and presents challenges to CHBRP's process.

CHBRP Analyses

From February 2004 to January 2010, CHBRP will have issued 58 complete reports analyzing proposed benefit mandates or repeals, and 9 formal follow-up letters to the Legislature clarifying completed analyses or providing further explanation of amended bills. Three of 58 reports addressed bills considered to be repeals.

All 58 analyses requested of CHBRP were completed within the 60-day timeframe or were designated as two-year bills for which an extended submission date is permitted.⁵ Appendix 18 provides a complete list of these analyses. CHBRP also produced 9 follow-up letters in time to provide useful information to legislative staff and members for the relevant hearings, often in fewer than 60 days.⁶ One example of such a follow-up letter relates to SB 92 (Aanestad, 2009). After CHBRP had received the request for analysis, the bill was amended to include a specific definition of medical necessity in the Health & Safety Code and the Insurance Code. CHBRP was requested to provide information about how those bill language changes may affect coverage determinations.

Topics of Bills Analyzed

The list of bills CHBRP has analyzed, their relevant topics, and their final status are included in Table 1 below. Because of the range of issues addressed by mandate bills, CHBRP researchers must be sophisticated generalists, capable of obtaining the knowledge base necessary to effectively develop an appropriate analytic approach quickly. CHBRP also retains content experts who serve as subject matter experts and help to identify key literature. Different services and benefits may have specific analytic questions that are relevant to the Legislature's deliberation of the bill. For example, the medical effectiveness question related to a preventive service (such as HPV vaccination) would differ from that of a measure that required an anesthetic agent to be covered when provided in conjunction with a colonoscopy. For HPV vaccinations, the relevant analytic question for medical effectiveness was fairly straightforward: was the vaccine effective in preventing the development of precancerous lesions of the cervix? For anesthesia with colonoscopy, the effectiveness question was not related to the effectiveness of colonoscopy in preventing colon cancer. The question was

⁶ This exception occurred in CHBRP's initial year of operation when the first analyses were requested before staff had been hired and analyses procedures established. This was also permitted for bills that were made into two-year bills and repeal bills. The Legislature permitted additional time for bills for CHBRP to develop methodology following reauthorization.

primarily whether the anesthetic agent was more effective than traditional sedation methods in terms of patient outcomes.

Table 1. CHBRP Analyzed Bills: Topics Addressed and Final Bill Status, 2003-2009

Analyzed Legislation	Author	Topic	Status
2004			
AB 438	Lieber	Romero	Failed passage out of Legislature
AB 547	Liu	Ovarian cancer screening	Gutted/amended
AB 1084	Maddox	Vision services providers	Reintroduced as AB 1927
AB 1549	Frommer	Childhood asthma	Reintroduced as AB 2185
AB 1927	Cohn	Vision services providers	Gutted/amended
AB 2185	Frommer	Asthma management	Enacted
SB 101	Chesbro	Substance disorders	Reintroduced as SB 1192
SB 1192	Chesbro	Substance disorders	Failed passage out of Legislature
SB 174	Scott, Koretz, and Wiggins	Hearing aids for children	Reintroduced as SB 1158
SB 897	Speier	Maternity services	Reintroduced as SB 1555
SB 1157	Romero	Elimination of intoxication exclusion	Vetoed by Governor
SB 1158	Scott	Hearing aids	Vetoed by Governor
SB 1555	Speier	Maternity services	Vetoed by Governor
2005			
AB 8	Cohn	Mastectomies and lymph node dissection	Gutted/amended
AB 213	Liu	Lymphedema	Failed passage out of Legislature
AB 228	Koretz	Transplant services for persons with HIV	Enacted
AB 1185	Koretz	Chiropractic services	Failed passage out of Legislature
SB 415	Alquist	Alzheimer's disease drugs	Gutted/amended
SB 572	Perata	Mental health benefits	Failed passage out of Legislature
SB 573	Romero	Elimination of intoxication exclusion	Vetoed by Governor
SB 576	Ortiz	Tobacco cessation services	Vetoed by Governor
SB 749	Speier	Autism	Failed passage out of Legislature
SB 913	Simitian	Rheumatic disease drugs	Failed passage out of Legislature
2006			
AB 264	Chan	Pediatric asthma education	Vetoed by Governor
AB 2012	Emmerson	Orthotic and prosthetic devices	Enacted
AB 2281	Chan	High deductible health plans	Failed passage out of Legislature
SB 1223	Scott	Hearing aids for children	Vetoed by Governor
SB 1245	Figueroa	Cervical cancer screening	Enacted
SB 1508	Bowen	Propofol for colonoscopies	Failed passage out of Legislature

Table 1. CHBRP Analyzed Bills: Topics Addressed and Final Bill Status, 2003-2009 (Cont'd)

Analyzed Legislation	Author	Topic	Status
2007			
AB 30	Evans	Inborn errors of metabolism	Vetoed by Governor
AB 54	Dymally	Acupuncture	Vetoed by Governor
AB 368	Carter	Hearing aids for children	Vetoed by Governor
AB 423	Beall	Mental health and substance abuse services	Vetoed by Governor; reintroduced as AB 1887
AB 1214	Emmerson	Waiver of benefits	Failed passage out of Legislature
AB 1429	Evans	Human papillomavirus vaccine	Vetoed by Governor; reintroduced as AB 16
AB 1461	Krekorian	Elimination of intoxication exclusion	Enacted
SB 24	Torlakson	Tobacco cessation	Failed passage out of Legislature
SB 365	McClintock	Out-of-state carriers	Failed passage out of Legislature
2008			
AB 16	Evans	Human papillomavirus vaccine	Failed passage out of Legislature
AB 1774	Lieber	Gynecological cancer screening	Failed passage out of Legislature
AB 1887	Beall	Mental health and substance abuse services	Vetoed by Governor; reintroduced as AB 244
AB 1894	Krekorian	HIV testing	Enacted
AB 1962	De La Torre	Maternity services	Vetoed by Governor; reintroduced as AB 98
AB 2174	Laid	Amino acid–based elemental formulas	Failed passage out of Legislature; reintroduced as AB 163
AB 2234	Portantino	Breast conditions	Failed passage out of Legislature; reintroduced as AB 56
SB 1198	Kuehl	Durable medical equipment	Vetoed by Governor; reintroduced as AB 214
SB 1522	Steinberg	Standardization of the individual market	Failed passage out of Legislature; reintroduced as AB 786
SB 1634	Steinberg	Orthodontic procedures for cleft palate	Vetoed by Governor; reintroduced as SB 630
2009			
AB 56	Portantino	Mammography	Vetoed by Governor
AB 98	De La Torre	Maternity services	Vetoed by Governor
AB 163	Emmerson	Amino acid-based elemental formulas	Failed passage out of Legislature
AB 214	Chesbro	Durable medical equipment	Failed passage out of Legislature
AB 244	Beall	Mental health services	Vetoed by Governor
AB 259	Skinner	Certified nurse midwives: Direct access	Failed passage out of Legislature
AB 513	de Leon	Breast-feeding	Vetoed by Governor
AB 786	Jones	Individual health care coverage: Coverage choice categories	Failed passage out of Legislature
SB 92	Aanestad	Health care reform	Failed passage out of Legislature
SB 158	Wiggins	Human papillomavirus vaccination	Vetoed by Governor
SB 161	Wright	Chemotherapy treatment	Vetoed by Governor

Source: CHBRP, 2009.

Summary of CHBRP Reports

CHBRP analyses explicitly report on (1) the medical effectiveness of a proposed mandated benefit or service in terms of clinical outcomes, (2) the projected cost impacts of the mandate in terms of per member per month premiums and total expenditures, (3) the estimated public health impacts in terms of the population and by public health outcomes, and (4) data limitations and caveats.

For the 51 reports in which a standard medical effectiveness analysis of a mandate bill was completed⁷, 30 were associated with bills mandating services or benefits considered effective (with the majority of those based on well-designed studies⁸) (Coffman, 2009). For the remaining reports, the evidence was either mixed or insufficient to deem the service or intervention effective.

For the cost impact analysis, the majority of reports (43/53)⁹ estimated that the particular mandate would incrementally increase total health care expenditures. Ten reports estimated no overall increase in total health care expenditures as a result of the mandate, usually because the benefit was widely covered or there was no estimated increase in utilization associated with the mandate.

For the public health impact analysis, more than half of the reports (30/53) estimated a directional positive impact as a result of the mandate due either to improved health outcomes (21 reports) or decreased financial and administrative burden (9 reports). In cases where the benefit was widely covered or there was no estimated increase in utilization associated with the mandate, a conclusion of no impact on public health was made (12 reports). The remaining reports concluded that due to incomplete, inconclusive, or mixed evidence, the impact of the mandate on the overall health of the public was unknown (11 reports).

In terms of repeal analyses, CHBRP has not received a request to analyze a bill that would repeal some specific, single benefit mandate. Instead, CHBRP has received requests to analyze bills that would allow carriers to develop and sell products that are not subject to California benefit mandate laws. Summaries of such repeal bills and their key provisions are listed in Table 2. For each of these bills, CHBRP had to develop a research approach and methodology that were applicable to the provisions of each repeal bill. For SB 365, a bill that would have permitted out-of-state carriers to sell products in-state and not be subject to the California-specific regulations, CHBRP presented scenario analysis of premium impacts. In addition, CHBRP also summarized the potential impacts on risk segmentation and adverse selection based on available evidence on association health plans and other products that are not subject to state-level regulations. (Details on CHBRP's methodology for analyzing bills considered to be mandate repeals are included in the *Analytic Methods* section.)

⁷ Some bills do not lend themselves to a standard medical effectiveness analyses, therefore they are not included in this count.

⁸ See Appendix 12 for more detail on the approach to medical effectiveness analysis.

⁹ As mentioned, CHBRP has produced 58 analyses. Of those, 55 were for benefit mandate bills and 3 were for repeals. Since 2 of the 55 analyses were Issue Briefs that provided in-depth background information about the individual market (AB 786, Jones, 2009 and SB 1522, Steinberg, 2008), they are not included in the total counts here.

Table 2. Summary of CHBRP Reports on Repeal Bills, 2006-2009

Bills Analyzed	What the bill does	Medical Effectiveness Impacts	Impact of Mandate on the Health Insurance Market	Estimated Cost Impact in Terms of Total Health care Expenditures	Estimated Public Health Impact
2007					
<p>AB 1214: Waiver of Benefits (Emmerson)</p>	<p>The bill would authorize California health insurance carriers to offer, market, and sell a health care service plan or health insurance policy that does not include all of the benefits mandated under California state law, as long as the purchaser agrees to waive the benefits.</p>	<p>Many benefits mandates in California law require health insurance products to provide coverage for health care services for which there is evidence of medical effectiveness.</p>	<p>Adverse risk selection is likely to occur as a result of AB 1214 in subsequent years after the bill's implementation. Lower-risk individuals (e.g., those with less health care needs) would be more likely to switch to limited-mandate products that become available in the market, leaving higher-risk individuals in those insurance products with more generous benefits. This segmentation of risk would further increase the premium difference between generous-mandate insurance products and limited-mandate insurance products.</p>	<p>Scenario 1 findings (all currently insured would switch their current insurance to one of three prototype limited-mandate plans): Expenditure reductions (premiums and out-of-pocket expenditures) of \$1.842 billion, or 2.393%.</p> <p>Scenario 2 findings (only currently insured with HDHPs would switch to limited-mandate policies): Expenditure reduction (premium and out-of-pocket expenditures) of \$116 million, or 0.151%.</p>	<p>Mandates with a potential impact of broad public health scope if coverage is dropped:</p> <ul style="list-style-type: none"> • Mortality impact: cancer screening tests for breast, cervical, and colorectal cancers; diagnostic tests and treatments for breast cancer; diabetes management medications, services, and supplies; medication and psychosocial treatments for severe mental illness and alcoholism; preventive services for children and adolescents; and pediatric asthma management. • Morbidity impact: prescription contraceptive devices. <p>Mandates with a potential impact of moderate public health scope if coverage is dropped:</p> <ul style="list-style-type: none"> • Mortality impact: services for the diagnosis and treatment of osteoporosis and prenatal diagnosis of genetic disorders. • Morbidity impact: prosthetic devices; orthotic devices for some conditions; pain management medication for persons with terminal illnesses; acupuncture; general anesthesia for dental procedures; diagnosis and treatment of infertility, and surgery for the jawbone and associated bone joints. <p>Mandates with a potential impact of limited public health scope if coverage is dropped:</p> <ul style="list-style-type: none"> • Mortality impact: medical formulas and foods for persons with phenylketonuria, and expanded alpha-fetoprotein screening. • Morbidity impact: special footwear for persons with rheumatoid arthritis, home care services for elderly and disabled adults, and hospice care. <p>Mandates with evidence of no impact on public health if coverage is dropped: Screening the blood lead levels of children at average risk for lead poisoning.</p> <p>Mandates with an unknown impact on public health if coverage is dropped: Tests for screening and diagnosis of prostate cancer, transplantation services for persons with HIV; prosthetic devices for persons who have had a laryngectomy; special footwear for persons with diabetes; reconstructive surgery for breast cancer; and reconstructive surgery for clubfoot and craniofacial abnormalities.</p>

Table 2. Summary of CHBRP Reports on Repeal Bills, 2006-2009 (Cont'd)

Bills Analyzed	What the bill does	Medical Effectiveness Impacts	Impact of Mandate on the Health Insurance Market	Estimated Cost Impact in Terms of Total Health care Expenditures	Estimated Public Health Impact
SB 365: Out-of-State Carriers (McClintock)	This bill would allow a carrier domiciled in another state to offer, sell, or renew a health insurance policy in California without holding a license issued by the Department of Managed Health Care (DMHC) or a certificate of authority issued by the California Department of Insurance (CDI). The bill would exempt the carrier's plan contract or policy from requirements otherwise applicable to plans and insurers providing health care coverage in California if the plan contract or policy complies with the domiciliary state's requirements, and the carrier is lawfully authorized to issue the plan contract or policy in that state and to transact business there.	Medical effectiveness analysis not conducted. This bill would allow a carrier domiciled in another state to offer, sell, or renew a health plan or insurance policy in California without holding a license issued by the DMHC or without a certificate of authority issued by the Insurance Commissioner. SB 365 could represent a <i>de facto</i> repeal of all health insurance requirements in California including benefit mandate laws.	Risk segmentation could further reduce premiums for limited-benefit out-of-state plans, while increasing premiums for those plans left in the state-regulated insurance market. CHBRP estimates that an overall 10.1% decline in premiums, among the entire privately insured population of 17,335,000 Californians, would increase the number of insured by at most 192,262. The elimination of insurance coverage for services currently covered under California's benefit mandate laws may lead to a reduction in service use and an increase in out-of-pocket costs to consumers who choose to pay entirely out of pocket for services no longer covered by their health plans	Overall, covered health care expenditures would be expected to decline by 10.1%.	Enrollees of out-of-state policies would no longer be guaranteed to have coverage of treatments and services specified by the California benefit mandates. DMHC plans are required to cover maternity services; however, CDI-regulated policies can exclude coverage for maternity services. If effective prenatal services are under-utilized due to lack of coverage under out-of-state policies, it is expected to result in increased complications for women and newborns. Both DMHC- and CDI regulated health policies are required to cover the treatment for biologically based severe mental disorders at the same level they cover other medical conditions, otherwise known as mental health parity. There are several potential health outcomes associated with treatment for mental disorders and many treatments have been found to be effective. Low-cost out-of-state policies (not subject to California benefit mandates) are expected to attract healthier individuals. As a result, there would be a greater share of high-cost enrollees left in state-regulated plans. Because state-regulated plans, especially those in the small group and individual market, are likely to experience premium increases, these high-cost enrollees may face loss of insurance in the privately insured market. Racial and ethnic minorities are more likely to be uninsured compared to whites and a higher proportion of Latinos work for small businesses. To the extent that SB 365 reduces the number of uninsured, minorities could experience improvements in their health insurance status. Coverage under out-of-state policies would likely attract low-risk enrollees rather than those uninsured with chronic or high-risk conditions.

Table 2. Summary of CHBRP Reports on Repeal Bills, 2006-2009 (Cont'd)

Bills Analyzed	What the bill does	Medical Effectiveness Impacts	Impact of Mandate on the Health Insurance Market	Estimated Cost Impact in Terms of Total Health care Expenditures	Estimated Public Health Impact
2009					
SB 92: Health Care Reform (Aanestad)	This bill would allow a carrier domiciled in another state to offer, sell, or renew a health insurance policy in California without holding a license issued by the Department of Managed Health Care (DMHC) or a certificate of authority issued by the California Department of Insurance (CDI). The bill would exempt the carrier's plan contract or policy from requirements otherwise applicable to plans and insurers providing health care coverage in California if the plan contract or policy complies with the domiciliary state's requirements, and the carrier is lawfully authorized to issue the plan contract or policy in that state and to transact business there. The bill would authorize in-state carriers to offer, market, and sell a health care service plan or health insurance policy that does not include all of the benefits mandated under California state law to individuals with incomes below 350% of the federal poverty level (FPL) if the individual waives those benefits, as specified, and the plan contract or insurance policy is approved by the DMHC or the CDI.	There is evidence that many benefits mandates in California law require health plans to cover services for which there is evidence of medical effectiveness.	Out-of-state carriers would be exempt from California-specific consumer protection and financial solvency requirements and California-specific requirements related to cost and availability of insurance.	<p>Scenario 1 Findings (all currently insured switch their current insurance to a limited-mandated version of the same plan or policy): Expenditure reductions of \$1.985 billion, or 2.12%.</p> <p>Scenario 2 Findings (only currently insured with HDHPs and incomes below 350% FPL in the CDI-regulated individual market would switch to limited-mandate policies): Expenditures reductions of \$71.582 million, or 0.08%.</p>	The primary health benefit of SB 92 could be an expansion of the insured population to an estimated 5,000 to 99,000 persons. Compared to the insured, uninsured individuals obtain less preventive, diagnostic, and therapeutic care, are diagnosed at more advanced stages of illness, have a higher risk of death, and have worse self-reported health. In addition to the issues of health and health care access, the absence of health insurance can also cause substantial stress and worry due to lack of coverage as well as financial instability if health problem emerge. As a result, the 5,000 to 99,000 persons who are expected to no longer be uninsured due to SB 92 would likely realize improved health outcomes and reduced financial burden for medical expenses. The benefits of having health insurance are clear. Having less comprehensive or limited mandate health insurance exposes individuals to the financial and health risks of becoming underinsured if insurers drop coverage for effective health services currently mandated in California. Using the projections from the hypothetical scenarios, SB 92, could result in 666,000 to 18,100,000 previously insured persons moving from a plan with mandated benefits to one where coverage of mandated benefits is no longer required. With out-of-pocket expenditures for benefits previously covered potentially increasing for this population to between \$42 million and \$1.7 billion, these insured have an increased risk of foregoing treatment for services no longer covered under limited mandate policies. Additionally, it is possible that persons moving to limited-mandate plans could develop a preexisting medical condition that would exclude them from moving back to a plan with increased benefits.

Source: CHBRP, 2009.

Trends in Bill Status

Of the 55 mandate and 3 repeal bills that have been introduced, the outcomes are as follows. In the current session, CHBRP analyzed 11 bills, of which 6 were passed by the Legislature but vetoed by the Governor. In prior sessions, 17 bills were passed by the Legislature but vetoed by the Governor, and 6 have been enacted into law. Bills mandating benefits or services for which there is clear evidence of effectiveness are likely to be enacted by the Legislature. Bills for which there is no evidence of effectiveness are not likely to pass out of the Legislature. The Governor, in general is not likely to sign mandate bills into law, citing increased costs, reduced market flexibility or an increase in the number of uninsured as a result of rising costs. This is true especially in years of state budget crisis. In addition, in 2007 when the California Legislature and the Governor were considering various health care reform proposals, the Governor indicated in his veto messages that he was reluctant to sign bills that would only incrementally affect the health care system. Five of six bills signed into law by the Governor were associated with no estimated cost increases, with a small estimated cost increase (less than 0.001% of total expenditures) or with a quantifiable and substantial public health impact.

Use of CHBRP Reports

CHBRP reports are heavily used to inform the analyses, testimony, and deliberation for the policy (health) and appropriations committees. Committee staff systematically summarize CHBRP reports for inclusion in the policy and fiscal committee hearing legislative analyses. Bill authors and sponsors routinely quote from CHBRP reports during opening remarks and testimony, primarily citing the public health impact and the medical effectiveness analyses. Health plans and insurers routinely quote the cost impact analyses in CHBRP reports during opposition testimony. As will be discussed further in the *Continuous Quality Improvement* section, legislative staff, agency staff, and stakeholder groups such as health plans and consumer group rely on CHBRP's reports because they are considered comprehensive, useful, and impartial. Staff and stakeholder groups report that the analyses are used to deliberate whether the bill avoids unintended consequences and whether the mandate will address the problems it seeks to address. For example, they consider whether the bill affects the subpopulations it is intended to affect, or whether certain provisions may lead to unintended overuse, misuse, or underuse of a benefit.

Sometimes information cited in CHBRP reports is used when considering another bill on a related topic. This occurred with CHBRP's analysis of AB 1429 (Evans, 2007), a bill that would have required health plans and insurers to cover the newly developed vaccine for the human papillomavirus (HPV). The medical effectiveness analysis section of CHBRP's AB 1429 report, as well as the fiscal impact estimates, were used to examine a related bill, AB 16 (2007). That bill would have required girls entering the seventh grade to receive the HPV vaccine and to align California's school-based vaccination requirements with recommendations made by the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention.

CHBRP's analyses are sometimes used by California Public Employees' Retirement System (CalPERS). For example, this occurred with CHBRP's analysis of AB 423 (Beall, 2007), a bill that would have required health plans and insurers to cover all mental health condition and substance use disorders at parity levels with physical health conditions. CHBRP's analysis of AB 423 was used by

CalPERS's Board Committee on Health Benefits as they considered benefits, coverage and associated costs for their employees, retirees and dependants.

Advocacy organizations have used CHBRP's reports to make a case in favor of a mandate bill's passage. For example, the Amputee Coalition of America cited CHBRP's analysis of AB 2012 (Emmerson, 2006) in its advocacy materials. Specifically it cited the public health impact analysis, which cited increased functionality associated with the use of orthotics and prosthetic devices and a potential for increased productivity. Their materials also cited the cost estimates and made the case that the cost would not be prohibitive for small group purchasers to cover the benefits. (Amputee Coalition of America, 2006). Other examples of advocacy organizations citing CHBRP reports in their materials include:

- Health Access for individual market reform citing CHBRP's Issue Brief on SB 1522 (Steinberg, 2008), a bill that sought to standardize products available in the individual market, as well as to standardize information about these products to facilitate informed consumer decision-making (Health Access, 2009)
- Protection and Advocacy, Inc. (or Disability Rights of California) for SB 1198 (Kuehl, 2008), a bill that sought to require health plans and insurers to offer coverage for durable medical equipment and to ensure coverage was on par with other health care benefits (Doctor, 2008)
- Disability Right and Education Defense Fund, also for SB 1198 (Breslin, 2008)

Health plans, insurers and their associations, as well as underwriting organizations have used CHBRP reports to make a case to oppose mandate bills. In 2008 and 2009, the California Association of Health Plans (CAHP) used CHBRP's reports to conduct their own analysis of the aggregate cost of mandate bills for each year. These aggregate figures were widely quoted during the health committee hearings to make the case that, while individual mandate bills may not have a large cost impact, they would have a large impact in aggregate (CAHP, 2008; CAHP, 2009).

Other states have also used CHBRP's analyses. For example when Virginia was considering mandating the coverage of hearing aids for children, its Joint Legislative Audit and Review Commission considered CHBRP's reports of AB 368 (2007) and SB 1223 (2006) (JLARC, 2008). Massachusetts' Division of Health Care Finance and Policy considered CHBRP's analysis of AB 423 (Beall, 2007) when they delivered their analysis on a state bill that would have expanded Massachusetts's existing mental health parity law to cover all mental health conditions and substance use disorders (DHCFP, 2008).

Legislative Briefings and Workshops

In addition to ensuring the timely delivery of CHBRP reports, CHBRP staff has consistently taken steps to ensure that reports are understood by legislators and staff from author's offices and policy committees. Immediately after a report is submitted, CHBRP schedules calls with staff from the requesting health committee, with calls also offered to the author's office staff. Additional calls are scheduled with the staff of each health and appropriations committee that considers the bill, and CHBRP staff members remain available to answer the questions of any interested party throughout the legislative process. CHBRP staff routinely attend health committee hearings and have, upon request, attended appropriations committee hearings. At

hearings, CHBRP staff members have been called upon by committee members to explain report details and methodology.

In order to promote better understanding of CHBRP's role and the nature of health benefit mandates, CHBRP has regularly provided pre-session briefings and post-session workshops for legislative staff and other interested parties. Twice yearly, CHBRP organizes events in the Capitol building and publicly announces these opportunities. Every January, before the bill introduction deadline, CHBRP provides an overview briefing of the program's process and methodology. In the fall of each year, CHBRP conducts a workshop that provides more detailed background and context for the regulatory and legal framework of benefit mandates. For these briefings and workshops, committee staff from the Assembly and Senate have presented the legislative calendar and deadlines for benefit mandates bills to reinforce the notion to Assembly Members' and Senators' personal staff that CHBRP needs its full 60 days to conduct the analyses. Agency staff from the DMHC and the CDI have also participated in CHBRP workshops to provide an overview of existing laws related to health care benefits and their regulatory and enforcement activities.

Disseminating Knowledge Obtained Through CHBRP's Experiences

Independent of their work with CHBRP, members of the Faculty Task Force, staff, librarians, and actuaries have attended conferences, made presentations, and published materials to share the methods they have developed with fellow researchers and health policy experts. Such additional work helps to disseminate sound analytic methods to other states and analytic or academic bodies. In addition, by subjecting the methods to scrutiny by peers in the policy and academic communities, CHBRP stands to benefit over the longer term by continuous quality improvement in analytic methods. A full list of presentations and publication can be found in Appendix 21. Some examples of such work include:

- Publication: *Special Issue of Health Services Research: Informing Legislative Decisions on Health Benefit Mandates: The California Health Benefits Review Program*, June 2006. This issue provided information on the history, methods, and insights from CHBRP's first three years.
- Conference: *Evidence Based Library and Information Practice*, May 2007. A poster, "Library Support of Evidence-Based Practice in Health Policy" was presented.
- Conference: *American Health Insurance Plans Medical Leadership Forum*, October 2007. A presentation was made, describing CHBRP's structures and processes.
- Publication: *Pediatrics*, March 2008. An article based on CHBRP's review of a pediatric asthma bill was published.
- Conference: *Health Technology Assessment International*, July 2008. CHBRP's experience was presented as part of a panel on rapid use of technology assessments by state and provincial governments.
- Conference: *Academy Health Annual Research Meeting*, June 2009. A panel presented CHBRP's methodology and experience with real-time policy analysis and research translation for the California Legislature.

CHBRP has received attention and has been recognized as a resource outside of California. In 2006, the Virginia General Assembly directed their Joint Legislative Audit and Review Commission

(JLARC), the investigative arm of the General Assembly, to begin providing staff assistance to Virginia's Special Advisory Commission on Mandated Health Insurance Benefits. In particular, JLARC's charge was to assess, analyze, and evaluate the social and economic costs and benefits of any proposed mandated health insurance benefit or mandated provider. In developing JLARC's methods to fulfill its new charge, their staff interviewed CHBRP staff and reviewed CHBRP's methodology and processes.

Another notable example is Connecticut. Just this year, the Connecticut General Assembly passed legislation establishing a mandate evaluation program similar in both structure and analytic focus to CHBRP. Based on interviews of key staff involved in the policymaking process, legislators modeled the new program largely off the California experience. The legislation directs the Commissioner of Insurance to contract with the University of Connecticut's Center for Public Health and Health Policy to conduct both a retrospective analysis of current benefit mandates by the end of the year, as well as prospective analyses annually upon request. The program will evaluate the social and financial impacts of benefit mandates along a number of discrete lines, including an analysis of medical effectiveness in addition to utilization and premium impacts. The program will similarly be funded through a tax on health carriers. The Connecticut program will serve as a useful point of comparison for CHBRP going forward, given these structural and evaluative similarities.

CHBRP staff has worked to establish relationships with mandate evaluation programs in other states, and contacts such programs when a new analysis is underway. Other states have also leveraged the communication channels CHBRP has established (e.g., using a common listserv) to contact one another and share learning and completed mandate reports.

Continuous Quality Improvement

UC and CHBRP continuously evaluate the products, processes, and policies of CHBRP to ensure that the program is in compliance with the requirements of its authorizing statute, that it is responsive to legislative requests (within its bounds), and that it has processes in place to maintain quality assurance and make continuous quality improvements.

On an annual basis, CHBRP contacts legislative staff, agency staff, and stakeholder groups to understand how CHBRP reports were used, how reports can be improved (i.e., for readability, salience), and how CHBRP's process can continue to be responsive to its legislative mandate. CHBRP systematically interviews these individuals to ensure that standard questions are asked of groups and that each interviewee has the opportunity to voice his/her comments, concerns, etc.

Legislative staff who are contacted include those working for the Assembly Health Committee, Senate Health Committee, Senate Republican Caucus, Assembly Republican Caucus, Senate Appropriations Committee, Assembly Appropriations Committee, and personal staff of Senators or Assembly Members who served as the primary bill authors for benefit mandate or repeal bills.

Agency staff who are contacted include those at the DMHC, CDI, Managed Risk Medical Insurance Board (MRMIB), Department of Health Care Services (DHCS), and CalPERS.

Stakeholder groups who are contacted include the California Association of Health Plans (CAHP), the Association of California Life & Health Insurance Companies (ACLHIC), California Medical Association, Health Access, AFL-CIO, California Federation of Labor, California Association of Health Underwriters, and other organizations who may have served as the bill sponsor (e.g., American College of Obstetrics and Gynecology [ACOG] and Disability Rights of California)

The following summarizes these discussions, how CHBRP has responded to these issue areas, and how CHBRP continues to evaluate ways in which it can be responsive to demands on its reports while staying within its legislative mandate.

Readability, Reliability, and Content of the Reports

Based on discussions with legislative staff, agency staff, and stakeholder groups, the reports are considered reliable and impartial. One interviewee characterized CHBRP's reports as "the authority" for mandate bills. Legislative staff all reported that they utilize CHBRP's analyses, generally find the information they need in the analyses, and find the reports responsive, comprehensive, and useful. Staff also stated that CHBRP reports provide the essential technical information the Legislature needs to make decisions regarding health insurance benefit mandates. Staff noted that the revised executive summaries (which include the cost tables) are helpful in locating essential data for the legislative analyses.

If a specific point or data element is not addressed in the report, it is very difficult for an advocacy group or stakeholder to make the same point. Staff note that this is good in some ways because the information CHBRP provides is considered reliable. On the other hand, if a report does not address an issue because of CHBRP's standards or methods, then the issue may be dismissed or not considered valid during deliberations.

In response to staff feedback that a one year timeline is "not reflective" of potential benefits accruing from the mandate for any prevention program, CHBRP developed a process and method for reporting on long-term benefits and cost. One staff member suggested that it would be helpful if benefits were also in dollar form (e.g., to make a case for the return on investment [ROI] in dollars). Along those same lines, staff have reflected that CHBRP reports sometimes lack symmetry between cost impacts and public health impact analysis. For example, often there is a willingness to make assumptions and come up with calculations on the cost side while there is not necessarily a similar level of precision in calculations or estimates on the public health side. CHBRP has responded to legislative staff by hosting a roundtable discussion with senior staff and CHBRP's Vice Chairs, and has come to an agreement regarding analytic approaches that would be responsive to legislative requests but are still grounded in appropriate health service research methods and the evidence base. The group specifically agreed that it would not be appropriate to quantify health benefits in terms of dollars because, in most instances, that would require placing dollar values on human life, disease, and disability, and weighting human life differentially. Instead, the more appropriate metric is to report on health outcomes in terms of the costs per life saved (or more precisely, quality-adjusted life years) by using information available in the published cost-effectiveness literature.

CHBRP also agreed to report on other measures when the literature was available. For example, for analyses on bills related to pediatric asthma education and treatment, CHBRP reported on the number of missed school days that could be avoided as a result of the mandate.

Legislative staff also pointed to using the grey literature (research material which is not published in traditional peer-reviewed journals or indexed systematically in bibliographic databases) where appropriate and noted that they would value CHBRP reports incorporating relevant grey literature as long as researchers filter those that are worth considering. As discussed in detail in the *Medical Effectiveness Analysis* section, efforts have been made to cull the grey literature, especially when traditional peer-reviewed studies do not contain sufficient information regarding the mandated benefit or service.

Consumer groups and sponsors or proponents of certain mandate bills have expressed appreciation that the reports provided analysis on the medical effectiveness and public health impact, as well as the cost impacts. They appreciate the fact that cost impacts are broken down by out-of-pocket expenditures and employee/employer premiums. They state that such information is useful to communicate all sides of the story, and particularly value the discussion regarding affordability of health insurance as a whole. One provider group representative stated that the reports “do a good job of outlining the key issues, a feature especially important for new legislators.” Another provider group representative noted that the quantitative data are sometimes difficult to parse out if one does not have an actuarial background. This emphasized the need to “translate” the figures presented in the tables into useful bulleted points (e.g., what is the per member per month impact on premiums?).

Consumer and union groups agree that there is an inherent constraint to CHBRP’s ability to report on the impact of a mandate on reducing disparities (per CHBRP’s charge), specifically because of lack of data on utilization by key variables, such as race and ethnicity of users. They reported that it is valuable for CHBRP reports to point out where researchers cannot draw conclusions on the impact of a mandate on disparities. As discussed in the *Public Health Impact* section, CHBRP continues to report on baseline information where it exists, for example if the prevalence rate of a specific disease varies by race. In addition, when adequate information is not available, CHBRP reports make this clear.

Health plans and insurer representatives and their associations echo the sentiment that CHBRP is seen as a “credible source” for information. One plan stated that they conduct an internal analysis for some mandate bills, and their findings are generally consistent with CHBRP’s premium impact analysis. Association representatives state they appreciated the inclusion of an “executive summary” in reports and stated that it should not be simplified further, and that all the detail is warranted. Insurers stated they appreciated that administrative costs are also discussed in CHBRP reports, especially for those bills that would primarily shift out-of-pocket costs from the enrollee to the insurer.

CHBRP’s Analytic and Research Translation Process

Legislative, stakeholder, and agency staff report that CHBRP’s analytic process has generally functioned well. Agency staff appreciate CHBRP reports accompanying these types of legislation through the legislative process because they give policymakers a better sense of their potential impacts.

Legislative committee staff would like to have more time to digest the reports but are satisfied that the reports are delivered by the policy committee hearing deadlines. Committee and bill author staff appreciate having a dialogue with CHBRP staff to understand the key background issues a bill author may identify, any issues related to bill language (in terms of its potential interpretation), and the verbal “translation” of the report itself after it is delivered.

CHBRP’s adherence to its academic and rigorous methods is appreciated. However, stakeholders note that its high standards are sometimes not completely congruent with the goal of assisting the Legislature in determining whether the bill is ultimately a policy option worth pursuing. CHBRP acknowledges this challenge and notes that CHBRP’s authorizing legislation does not allow for the making of overall recommendations. To better draw readers to conclusions and caveats presented in the medical effectiveness, cost, and public health impacts sections, CHBRP staff has routinely followed up with legislative staff to provide detailed briefings. In addition, as discussed in the *Medical Effectiveness Analysis* section, the reports have been revised to more clearly state the overall conclusions in terms of medical effectiveness.

Staff appreciated CHBRP’s willingness to address policy-relevant questions for bills that seek to affect the availability of health insurance products in the California market, for example, for bills permitting out-of-state carriers to market products in-state without being subject to California regulations and for bills that would have standardized offerings of products in the individual market.

Certain legislative staff and some stakeholders noted that it would be good if a CHBRP-like process were available for other types of bills such as mandates on insurers (e.g., related to eligibility, underwriting) or mandates on providers (e.g., hospital or medical group related mandates).

Challenges Inherent to CHBRP’s Analytic Process

The overarching challenge CHBRP faces is the delivery of a scientific, rigorous, high-quality analysis within the constraints posed by the 60-day timeframe required by statute. More specifically, key process challenges include (1) identifying mandate or repeal bills in time for CHBRP analysis, (2) ensuring smooth workflow, and (3) responding to legislative queries or follow-up analysis requests for amendments. Analytic challenges include (1) establishing a baseline and making projections in a dynamic health care environment, (2) projecting public health impacts with data limitations, and (3) applicability and limitations of the medical literature.

Identifying Mandate Bills

The Assembly Health and the Senate Health Committees play an active role in communicating with members’ offices so that they are notified of potential mandate or repeal bills. On an annual basis, both the Assembly Health Committee and the Senate Health Committee send a memorandum to all Assembly Members and Senators discussing CHBRP’s process, the deadlines for the legislative year, and the requirement for a CHBRP analysis. CHBRP’s briefings and workshops have also helped bill authors to become aware of the timelines and to notify committee staff of potential bills early in the process.

The second year of each two-year legislative session presents additional challenges due to an accelerated hearing calendar. Approximately 30 days are allotted from the point of bill introduction to the time it must pass out of the policy committees in the house of origin. To address this issue and provide CHBRP the statutory 60-day time period, CHBRP works with committee staff to be notified of bills and receive requests before the bill introduction deadline. These deadlines are communicated with Assembly Member and Senators office at the beginning of the legislative session.

CHBRP has also worked with the University of California State Government Relations office to track legislation and identify potential mandate bills.

Workflow and Timing

CHBRP must have sufficient capacity to do multiple (e.g., eight or more) analyses on simultaneous 60-day timelines. CHBRP faculty, actuaries, librarians, reviewers, and staff must produce and review multiple drafts on multiple bills in a very compressed timeframe. It is important for CHBRP to also adhere to a standard rigorous process to ensure that the program completes thorough, independent analyses that are responsive to the analytic questions included in CHBRP's authorizing statute.

In addition, the number and complexity of bills referred to CHBRP for analysis are difficult to predict. CHBRP continues to monitor factors that may affect bill introduction rates (e.g., state of the California budget, health care reform initiatives). In general, CHBRP has not seen any changes in the rates of mandate bill introduction, even in years of budget crisis. This is probably because benefit mandate legislation can be written in ways by the legislator to exempt publicly funded programs and thereby eliminate a direct fiscal effect on the state budget.

As discussed in *CHBRP's Structure and Process*, a number of changes have been made to react to the inherent uncertainty of working within the legislative process. CHBRP has built additional capacity among CHBRP librarians, and with faculty and research staff at UC Davis and UCLA.

When the Legislature is not in session, CHBRP undertakes several projects to anticipate the workload of the coming year, and improve the quality and transparency of its process and products. For example, CHBRP's medical effectiveness and public health teams may develop guidelines or criteria to address specific research questions that are likely to be presented by future bills. CHBRP updates its Cost and Coverage Model annually, during the fourth quarter of the calendar year. The cost team supplies updated CHIS and CHCF/HRET data, as described in the California Cost and Coverage Model section (see Appendix 13). In addition, the cost team and Milliman incorporate, update, and validate the model based on information collected from health plans and insurers, DHCS, CalPERS, and MRMIB.

Amended Bills

CHBRP has received both informal and formal requests from legislative committee staff to revisit an analysis after the final report has been issued based on an amendment the committee or author may be seeking during or after the report has been heard in the policy committee. CHBRP's approach to addressing these requests remains consistent. CHBRP determines whether to revise an

analysis on a case-by-case basis depending on the available time and scope of the amendment. Although CHBRP attempts to remain responsive to the Legislature, the program has sought to avoid analyzing “hypothetical bills.”

CHBRP conducted two analyses of AB 2012 (Emmerson) in 2006. The first analysis was on the introduced version of AB 2012 which was primarily a provider mandate bill—a bill requiring plans and insurers that cover prosthetics and orthotic devices, to cover those items when they are *prescribed* by surgeons and doctors of podiatric medicine, and when they are *furnished* by physicians, surgeons, certified orthotists and prosthetists, or licensed health care providers acting within the scope of their license. The bill was substantially amended later in the process to mandate that any offering of coverage for orthotic and prosthetic devices, on a group basis, provide benefits under the same cost-sharing arrangements as other benefits of the health plan or insurance policy. CHBRP was able to undertake the analysis of the amendment given the timing of the availability of amended language.

In 2008, AB 16 (Evans) was gutted and amended in April to become a mandate bill that would require health plans and insurers to cover the human papillomavirus (HPV) vaccination. Because the bill was amended late in the legislative process, it was not possible for CHBRP to conduct an analysis of AB 16. However, CHBRP had produced an analysis of a virtually identical bill in 2007: AB 1429 (Evans). CHBRP issued a letter stating that CHBRP’s analysis of AB 1429 was generally applicable to AB 16. The letter also highlighted some important caveats, such as the evolving state of the medical literature and the changes in the estimated number of females who may have been vaccinated in the last year.

Dynamic Health Care Environment

Among the analytic challenges that CHBRP has faced over the last few years, many pertain to bills that seek to mandate a benefit or service for which the baseline coverage or utilization rates are dynamic. For example, when CHBRP analyzed AB 1429 (Evans, 2007), a bill that would mandate coverage of vaccination for the human papillomavirus (HPV), the vaccine had just been approved by the Federal Food and Drug Administration (FDA) and had been available in the market for less than one year. At that point, actual claims data on the use of HPV were not yet available. CHBRP’s report recognized that the HPV vaccination rate was still “dynamic, most likely rapidly increasing, and had not reached equilibrium” (CHBRP, 2007). Consequently, the level of HPV vaccination in 2007 would have differed from the vaccination rate on the effective date of AB 1429 (January 1, 2008). To address this issue, CHBRP made assumptions regarding the uptake of the vaccine relying on women’s preventive care visits to an OB/GYN for a Pap test estimated from the 2001 California Health Interview Survey (CHIS). CHBRP then accounted for the females who would have already been vaccinated at the point the bill would have gone into effect. CHBRP had the opportunity to revisit this analytic approach in 2009 for SB 158 (Wiggins). This time around CHBRP had California-specific data from the 2007 CHIS, which allowed CHBRP to impute a current vaccination rate and project a rate for females aged 11 to 26 years, who would have already been vaccinated by January 2010. CHBRP anticipates similar analytic challenges for bills that seek to mandate coverage for other relatively new technologies.

Estimating Public Health Projections with Data Limitations

CHBRP has responded to requests from legislative staff, agency staff, and other stakeholders to provide quantitative estimates of public health benefits where possible. When reliable estimates are not possible, CHBRP has provided public health impacts estimates using analysis of hypothetical scenarios. One recent example is CHBRP's analysis of AB 98 (de Leon, 2009), a bill that would have mandated that all health insurance policies include coverage for maternity services. CHBRP estimated there to be no public health impact as a result of the mandate, since CHBRP had made the assumption that all women of child-bearing age in the individual market who had purchased policies without maternity benefits would move to the next "cheapest" product available in the market—high-deductible health plans (HDHPs) with maternity coverage. Because HDHPs typically subject prenatal care services to the deductible, CHBRP concluded that the financial barriers to prenatal care services would remain the same and would not affect prenatal care service utilization (and therefore public health outcomes) in any measurable way. However, the public health section analyzed another scenario that calculated the effects on specific health outcomes *if* the women of child-bearing age in the individual market—again, who had purchased policies without maternity benefits—were to move to non-HDHPs following enactment of the mandate. CHBRP considers conducting such alternative scenario analysis only when a mandate's effect on utilization is difficult to ascertain, or to test a specific assumption used in the model. As a general practice, however, CHBRP maintains an approach of providing the most reasonable estimate, based on the available data and evidence.

Applicability and Limitations of the Medical Literature

CHBRP's medical effectiveness team has encountered three specific challenges in addition to the general challenges described above. First, some mandate bills address topics for which few well-designed studies have been completed. For example, in 2008 CHBRP analyzed a bill that would have mandated coverage for orthodontic services for oral clefts. The medical effectiveness team did not identify any studies of the effectiveness of adding orthodontic services to surgical services for oral clefts, which health plans and health insurers are required to cover under existing law. The team had to rely on guidelines based on expert opinion that were issued by professional societies. Other recent examples include bills on coverage for amino acid-based elemental formula and breast pumps.

A second challenge for medical effectiveness analyses is that some mandate bills would require coverage for multiple interventions or services, such as bills regarding coverage for maternity services or durable medical equipment. Many studies focus on a single intervention or service, and their findings are not applicable to all of the interventions or services proposed in a bill. Studies that examine multiple services often do not compare the same bundle of interventions or services, which makes it difficult to compare findings across studies.

The third challenge arises with the bills that address parity in coverage for treatment of a disease or condition rather than coverage of specific services, such as bills on parity in coverage for mental health and substance abuse services. Such bills are difficult to analyze because they implicitly assume that parity in coverage will remove financial barriers for accessing services which will, in turn, increase use of appropriate and effective services and thus improve health outcomes. The available medical literature often does not enable the medical effectiveness team to make these causal links. In each of these cases, CHBRP reports on both what the literature is able to convey and its limitations.

To the extent possible, CHBRP also provides supplemental explanatory sections when the traditional medical effectiveness analytic framework does not lend itself to the particular bill. For example, CHBRP's analysis of AB 244 (Beall, 2009) provided a section on the effects of California's previously enacted mental health parity law.

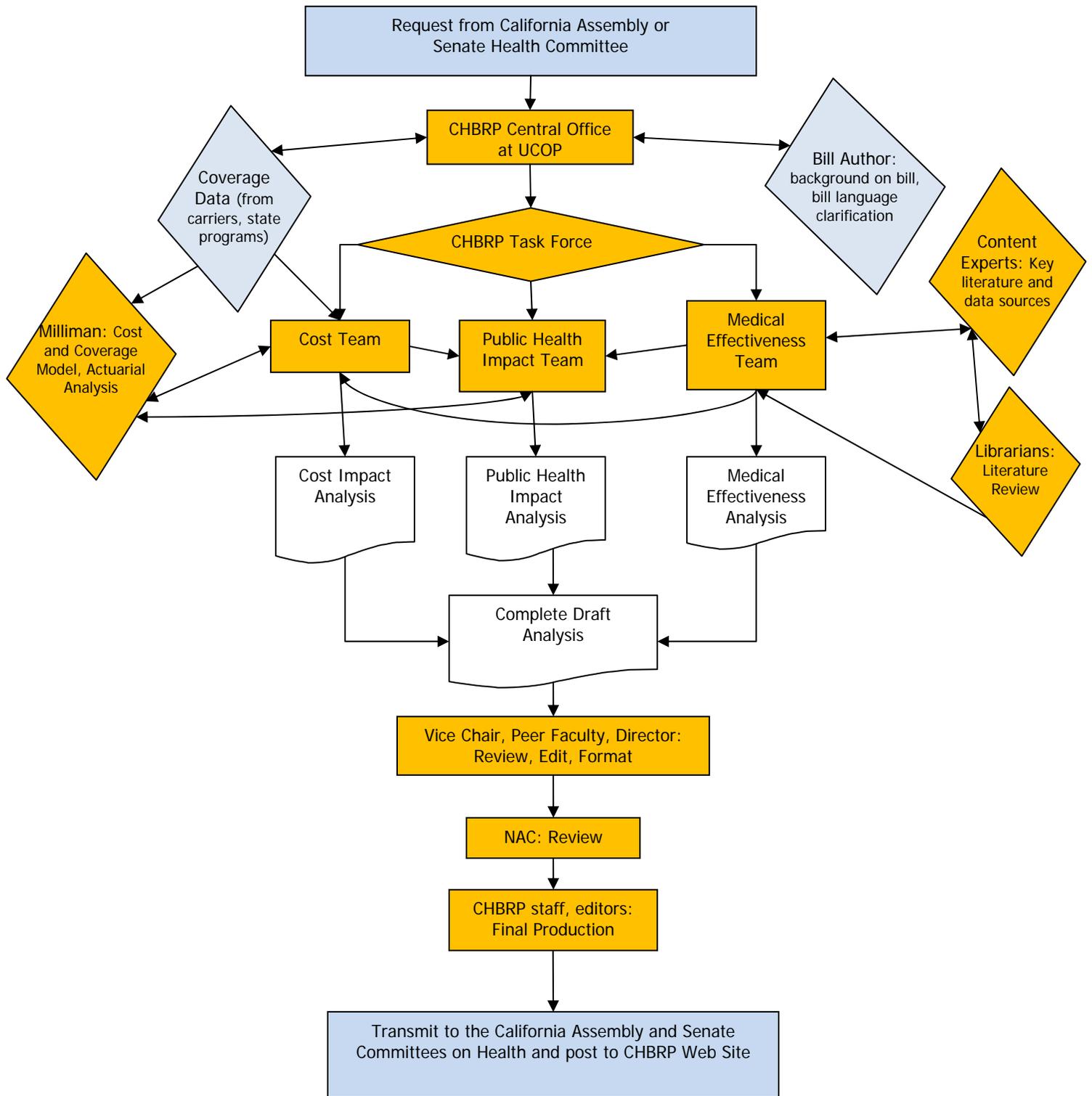
CHBRP'S STRUCTURE AND PROCESSES

Following the enactment of AB 1996, UC established CHBRP in 2003. Although CHBRP is administered by UC, it is designed to act as an independent program to respond objectively to the Legislature's requests for analyses. Since CHBRP was reauthorized under SB 1704 in 2006, the program has made several structural, process, and methodological improvements to strengthen its analytic methods, to respond to legislative requests, and to systematize workflow. This section will briefly review the general steps UC took to establish the infrastructure, process, and methods used by CHBRP and then highlight the changes made since 2006.

Overall Structure

The work CHBRP conducts involves many faculty, researchers and staff throughout the University of California system and from the three private universities with medical schools, plus actuaries, librarians, and content experts. The range of expertise reflected by the individuals who serve on CHBRP's Faculty Task Force is wide and is intended to reflect the wide range of analytic questions that are raised by CHBRP's authorizing statute. The work is also interdependent and cumulative; in other words, work from one team of researchers at one campus will inform the work of another. Analytic teams, consisting of a member of the medical effectiveness, cost, and public health teams; actuaries; librarians; content experts; and staff work collaboratively to build a cohesive analysis within the 60-day time period. Figure 1 serves as a simplified illustration of the steps taken to conduct an analysis.

Figure 1: Process Flow of CHBRP Analyses



Research Capacity and Expertise: Faculty Task Force

During the initial months following the passage of AB 1996, UC Office of the President (UCOP) considered various structural options for building the program. After consideration and discussions with faculty from various campuses, UCOP decided to implement a hybrid model in which the administration and some analytic work would occur at UCOP, but the bulk of the writing and analysis would fall to the designated campuses. This model was the more desirable approach from UC's perspective because (1) faculty, junior faculty, and graduate students could derive benefits in terms of collaborative research opportunities; (2) the quality of CHBRP reports would be enhanced by an internal peer-review process; and (3) the quality of CHBRP reports would be enhanced by using faculty who are experts in their field.

UCOP's Division of Health Affairs (now called Health Sciences and Services) solicited the deans of California's public and private medical schools and schools of public health for nominations of state experts to constitute a Faculty Task Force.¹⁰ From these nominees, researchers were selected from the University of California at San Francisco (UCSF), the University of California at Los Angeles (UCLA), and University of California at Berkeley (UC Berkeley) to serve as vice chairs to coordinate, respectively, the three statutorily required components of each bill analysis (medical effectiveness, cost impact, and public health impact analyses, respectively). Researchers from UC campuses at Davis, Irvine, and San Diego and from the University of Southern California, Loma Linda University, and Stanford University were also selected as members of the Faculty Task Force to ensure participation of all accredited medical school campuses in California. The Faculty Task Force's expertise reflects the evaluation criteria set forth in CHBRP's authorizing statute—the inclusion of experts in health services research and health policy, public health, economics, pharmacology political science, and clinical medicine. The appointments on the Faculty Task Force may change based on availability and the needs of the program.

One of the ongoing challenges of ensuring adequate research capacity is the uncertainty of the workload from year to year. In addition, because the legislative calendar dictates the workflow, multiple bills need to be analyzed simultaneously, often during the same 60-day time period. CHBRP has dealt with these challenges by building capacity at specific campuses to handle overflow. Since 2005, UC Davis has brought on additional faculty and staff that are able to conduct both medical effectiveness and public health impact analyses. In addition, UCLA has added researchers to the cost team. These additional faculty and researchers are available to handle the potential spikes in mandate bills that may arise from year to year and to take on a specific analysis if another researcher has a potential conflict of interest.

Professional Analytic and Administrative Staff

Administration and management of CHBRP resides in the system-wide UCOP within the Office of the Senior Vice President for Health Sciences and Services. CHBRP is staffed at UCOP by a small group of professional analytic staff to provide project management for the analytic and review process with the Task Force and the NAC, to ensure that reports are produced within a 60-day time period, and to serve as a liaison with the Legislature. CHBRP staff also works to ensure that reports

¹⁰ See Appendix 2, CHBRP Faculty Task Force Membership and Contributor List.

and the supporting methodology are transparent and accessible via CHBRP's Web site. CHBRP staff consists of a director, three analysts, and an administrative specialist.¹¹

Actuarial Analysis

To meet the statutory requirement to include actuarial analysis as part of the cost impact analysis, UC originally retained Milliman, Inc., (formerly Milliman USA) after a competitive bidding process in 2003. After CHBRP was reauthorized, UC re-bid the actuarial contract via a public competitive bidding process. Milliman won the contract a second time and is currently retained through the end of June 2010. Milliman's senior actuaries have been heavily involved in developing and annually updating CHBRP's *Cost and Coverage Model* and developing the methodological approach for each bill analysis. They support the cost team at UCLA in analyzing coverage, cost, and utilization impacts, and support the public health team at UC Berkeley and UC Davis by providing utilization data analyses for specific populations when available. Milliman's access to proprietary aggregate claims data enables CHBRP to obtain baseline cost and utilization data and project financial impacts that would result from enactment of a mandated benefit. Further information regarding CHBRP's contracting actuaries is included in Appendix 7.

National Advisory Council: Internal Review

CHBRP's National Advisory Council (NAC) consists of experts from outside California selected to provide balanced representation among groups with an interest in health insurance benefit mandates and repeals. The NAC is an advisory body rather than a governance board. Its membership changes based on members' availability and the program's needs to maintain a balanced group of stakeholders. The NAC is comprised of opinion leaders from key constituencies, including providers, purchasers, consumers, health policy experts, and health plans.¹²

The NAC reviews CHBRP's draft bill analyses for accuracy, balance, clarity, and responsiveness to the Legislature's request before the reports are transmitted to the Legislature.¹³ During the 60-day time period, NAC reviews occur over five days within the final two weeks. The NAC review enhances the ability of CHBRP to produce balanced, impartial analyses by providing feedback on early draft analyses from different stakeholder groups. For each analysis, CHBRP staff selects a subcommittee—generally five members—of the NAC membership to serve as the reviewers. On a rotating basis, these members are selected to represent a balanced set of perspectives, including consumers, providers, employers/purchasers, health plans, industry, and experts. NAC reviewers provide input when a particular draft explanation, method, or underlying assumption may be perceived as leading to biased results. In addition, the NAC members' input enhances the overall quality of the product by (1) reviewing and providing comments on the methods, assumptions, and data sources used in the analyses; (2) identifying sections that warrant further explanation, clarification, or citation; and (3) noting text that may need to be reworded to be more accessible to a lay audience. Since 2006, the NAC members have completed a total of 147 separate reviews.

¹¹ See Appendix 6, CHBRP staff list.

¹² See Appendix 5, National Advisory Council Membership List.

¹³ See Appendix 4, NAC Review Criteria and Guidelines.

The NAC meets annually. In addition to the annual meeting and review of draft reports, individual NAC members have provided advice to CHBRP staff on particular issues as they arise. For example, they may convene as a subcommittee to provide advice on the analytic approaches for bills that seek to affect management of prescription drugs.

Content Experts: Timely Guidance to Identify Key Literature and Data Sources:

Within a few days of receiving a request for analysis, CHBRP retains content experts—individuals with specialized clinical and health services research expertise pertaining to the benefit or service addressed by the proposed benefit mandate or repeal. These individuals are usually drawn from the UC system or from another reputable educational or research institution. Content experts are asked to help identify literature and/or data and provide advice to the analytic teams on the following:

- Key literature to facilitate the literature review and analysis to determine whether a mandated benefit, service, or treatment is clinically effective (e.g., state-of-the-art research, research specific to California, summary of evidence on effectiveness)
- Search criteria for the literature review (e.g., medical conditions and outcomes) to assure that the team is using the appropriate search terms to identify key articles
- Research in progress that could affect the final conclusions of the medical effectiveness analysis
- Clinical care management, controversies in practice, and knowledge of specialty society positions and guidelines
- Bundle of services utilized, and the associated CPT codes, ICD-9 codes, pharmaceuticals, and devices
- Potential changes in utilization due to coverage for the mandated benefit
- Effect of the mandate on clinician practice patterns

It is important to note that content experts are screened for potential conflicts of interest by reviewing their conflict-of-interest disclosure form and asking them specific screening questions. (For more information, see Appendix 9: Content Expert Identification, Screening, and Selection Process.)

Librarians: Timely and Relevant Literature Searches

When CHBRP was first established, it became clear early on that CHBRP would require resource-intensive, systematic literature reviews to be conducted within the first three weeks of the analytic process. Librarians with Masters in Library and Information Science from the UCSF and UC San Diego were first brought on to conduct literature searches. After CHBRP was reauthorized, two additional librarians from UC Davis and UC Irvine were asked to participate with the program to help improve the literature search workflow. Having a team of librarians with expertise in health insurance benefits mandate terminology and search criteria has enhanced the timing of internal deliverables and the development of medical effectiveness analyses. The librarians (1) develop search strategies specific to the mandated benefit or repeal; (2) conduct the literature search given inclusion/exclusion criteria developed by the medical effectiveness team, the cost team, the public health team, content experts, and CHBRP staff; (3) forward relevant abstracts of peer-reviewed literature to the medical effectiveness team for researchers' review and selection; and (4) conduct

literature searches of the grey literature and forward relevant abstracts to the other members of the analytic teams as needed. (See the *Medical Effectiveness Analysis* section below for more information on CHBRP's methods for examining the grey literature.)

Process and Workflow

Since inception, CHBRP has established policies and procedures to streamline activities, to ensure the production of unbiased and thorough analyses, and ensure continuous quality improvement activities are sought out and implemented.

Conflict-of-Interest Policy

CHBRP's authorizing statute specifically requests that UC develop and implement conflict-of-interest provisions to prohibit an individual from participating in an analysis or review in which the individual knows, or has reason to know, that he or she has a material financial interest, including but not limited to a consulting or other agreement that would be affected by the mandate benefit proposal or repeal.

To comply with this provision and to systematically review potential conflicts, CHBRP continues the process established by UC in 2004. Specifically, CHBRP uses a detailed conflict-of-interest disclosure form for the NAC and a separate form for use by all others (faculty, content experts, Milliman, and staff) who contribute to CHBRP analyses.¹⁴ These forms were modeled closely on a background and conflict-of-interest disclosure form designed by the National Academies of Sciences (NAS) for use with respect to studies relating to government regulation.¹⁵

It is essential that the work of the participants in CHBRP activities not be compromised by any material conflict of interest. All who participate in the development of CHBRP's analyses are required to complete and submit the disclosure form and to update it annually or whenever compelled by a change of circumstance (e.g., a new investment, equity interest, change of employment, or the specific nature of a given item of legislation for review). The completed forms are recorded and reviewed by CHBRP's Director and UCOP administrative personnel who monitor potential conflicts and, as appropriate, request recusals where actual or perceived conflicts of interest arise in relation to a given bill.

Faculty Task Force members are encouraged to publish their research results in peer-reviewed journals; however, they are expected to avoid legislative testimony or lobbying related to the findings of CHBRP studies while serving on the Faculty Task Force.

Recusals are noted in CHBRP's bill analyses. Since 2006, different subsets of CHBRP faculty have recused themselves from three separate analyses due to potential conflicts of interest. In these cases, other CHBRP researchers, including other members of the Faculty Task Force, have stepped in to conduct the relevant analysis.

¹⁴ See Appendix 10, CHBRP Conflict-of-Interest Policies, General Disclosure Form and NAC Disclosure Form

¹⁵ The UC and CHBRP are grateful to the NAS for extending its permission to use the NAS form.

Bill Language and Legislative Intent

Legislative language in benefit mandate and repeal proposals is sometimes vague and difficult to interpret. It is important for CHBRP to interpret bills reasonably and correctly since this interpretation can alter the scope of an analysis or the accuracy of impact estimates. Examples of questions that might not be addressed by bill language include (1) does the mandate apply to all insurance markets (e.g., large group, small group, and individual), (2) does the mandate apply to all populations (adults and children), and (3) does the mandate restrict utilization management or impact physician referral requirements?

CHBRP's general approach is to interpret the bill language by considering only the bill "as written." Regulatory staff from the DMHC have told CHBRP that they refer to secondary sources for legislative intent only if the law was not clear on its face or was ambiguous. For this reason, CHBRP focuses on the bill "as written" whenever possible. However, in order to address instances of ambiguous language, CHBRP developed a protocol that allows the analytic teams to request clarification of intent from bill author's office. As part of this protocol, CHBRP conducts an interview with the bill author's staff shortly after each bill request is received. Using a standardized questionnaire (see Appendix 16), CHBRP staff work with the bill author's staff to confirm mutual understanding of both the intent of the bill and the likely interpretations of the bill as written.

CHBRP's standard questionnaire allows staff, in plain language, to clarify a number of elements crucial to providing useful reports. The process identifies the issue or problem being addressed and the solution that the bill (or repeal) seeks to create. The process also identifies the populations for which the bill (or repeal) may affect health benefit coverage, and whether any populations are purposefully excluded. It also gives CHBRP staff an opportunity to ask for copies of any studies, standards of care, or other documents that the author's office finds relevant. CHBRP staff also use the process to ask whether similar bills have been introduced previously in California or in any other state.

Examples of use of bill author questionnaire

When the bill author questionnaire was applied during CHBRP's analysis of AB 2234 (Portantino, 2008), a bill concerned with breast condition screening, the process clarified that the issue of concern was *initial* screening and *initial* diagnosis of disease. The bill used the phrase "screening and diagnosis" which, in medical terms, could include not just initial testing but also post-diagnostic tests used to determine the most appropriate course of treatment. For a related bill, AB 56 (Portantino, 2009), related to breast cancer screening, the process confirmed that bill author intended to ensure that coverage adhered to "national guidelines" but did not wish to specify any particular set of guidelines. Confirmation of purposeful ambiguity prompted CHBRP to report on several national guidelines and to note for readers the differences and similarities among them.

In some cases, the process has alerted bill authors' offices to technical issues of terminology that have prompted immediate amendments of the bill. When possible, at the request of the author and with the agreement of the appropriate health committee, CHBRP has focused its review on that amended language. For example, when applied during CHBRP's analysis of SB 1634 (Steinberg, 2008), a bill concerning coverage for persons with an oral cleft, the process identified that the use of the term "disability insurance" was not intended to make vision, travel, or other specialty forms of CDI-regulated insurance responsible for covering the benefit. The author's office amended the

language to use the term “health insurance,” which made the bill “as written” match the author’s intent.

Obtaining Data from Health Plans

CHBRP must obtain accurate and timely data from health plans and insurers to conduct the cost impact analyses. Since CHBRP’s establishment, CHBRP has worked with the California Association of Health Plans (CAHP) and the Association of California Life & Health Insurance Companies (ACLHIC) to obtain contact information from the seven largest health plans and insurers in the state (together representing approximately 96% of the privately insured market in California). CHBRP has routinely collected data from health plans and insurers to obtain information about what proportion of the insured population has coverage for the mandated benefit.

Since CHBRP was reauthorized under SB 1704, CHBRP has made changes to improve the processes and enhance the content of the data collected by plans and insurers. Specifically, instead of asking for the “baseline” information several times a year, CHBRP now conducts an Annual Enrollment and Premium Survey of each health plan and insurer. CHBRP continues to collect data via a coverage survey for each proposed benefit mandate. Details on these surveys are provided below.

Annual Enrollment and Premium Survey

Before the legislative session, CHBRP collects enrollment and premium data through a survey of health plans and insurers. These data are used (1) to identify the population in health plans and insurance policies subject to state mandated benefits (i.e., health plans and insurance policies regulated by the DMHC and the CDI); and (2) to categorize enrollment by type of purchaser: small group (2-50 employees), large group (51+ employees), and individual (non-group) purchasers. In the individual market, the data are further broken down by age and gender. These data are limited to the population enrolled in privately purchased health plans and insurance policies because enrollment and premium data are available from public sources for publicly purchased health insurance.

The Annual Enrollment and Premium Survey has been refined in two ways since 2006. First, the annual survey was expanded to obtain information on enrollment by deductible (i.e., low- or high-deductible), so that the cost analysis could project estimates for bills that specifically address high-deductible health plans. Second, the annual survey was expanded to identify information on beneficiaries over 65 years of age for whom employer-based insurance was the primary payer to refine estimates for this population.

Bill-specific surveys

Following the receipt of a request for bill analysis from the California Legislature, CHBRP sends a bill-specific coverage survey to health plans and insurers that focus on information necessary for CHBRP to conduct the analysis. Examples of data requested include (1) existing (baseline) coverage for the proposed mandate, (2) cost sharing, and (3) other benefit limits or rules (e.g., prior authorization, limitations based on specific clinical guidelines).

The bill-specific coverage survey process has been refined in four ways since 2006. First, the survey now routinely asks for a description of changes that might impact administrative costs. Second, the

survey routinely asks whether the covered benefits differ between self-insured and fully-insured products. Third, CHBRP notifies the plan and insurer representative of a request for analysis from the Legislature so that they can notify the appropriate internal staff. Lastly, the bill-specific coverage survey is routinely sent to the CAHP and the ACLHIC to alert them to the requests sent to their members.

It is important to note that it is CHBRP's policy to mask plan-identifying information and to report data in aggregate in its analyses. For more information about this policy, see Appendix 17.

Obtaining Information from Consumer Groups and Other Stakeholders

CHBRP adheres to a process to obtain information from interested parties for bills under analysis. "Interested parties" are defined by CHBRP as any member of the public, such as bill sponsors, disease-specific organizations, consumer advocate organizations, health plans, or health care industry interests. CHBRP announces a new legislative request on its Web site and via its email listserv. Any interested party may request that he or she be added to the listserv. All interested parties who believe they have scientific evidence relevant to CHBRP's analysis of proposed health insurance benefit mandates are encouraged to provide that information to CHBRP's staff. In order for CHBRP to meet its statutory 60-day deadline to complete its analyses, CHBRP requests interested parties to submit information within the first 14 days of the review cycle. Currently there are approximately 250 individuals signed up to receive such notices, including legislative staff, consumer and interest groups, health plan representatives, and state government agency employees from other states. Between 2006-2009, CHBRP received information from interested parties for nine of its analyses.

Once CHBRP receives the information submitted by the public, it is disseminated to the analytic team at each campus and to the actuary. The respective teams (medical effectiveness, cost, and public health) review the information to determine whether the evidence submitted is relevant to the analysis and meets the standard of rigor for inclusion. If the information is relevant and meets the inclusion criteria, the teams decide how to incorporate the information into the analysis. All information that has been submitted is listed in an appendix in the relevant analysis.

60-Day Timeline

In order to address the evaluation criteria specified in CHBRP's authorizing statute (see Table 3) in a timely, transparent manner, CHBRP uses a 60-day timeline that details which activities occur on what day.¹⁶ The 60-day clock is initiated upon receipt of a request from the Senate Health Committee or the Assembly Health Committee (see Figure 2 for a broad illustration of the 60-day timeline).

During the first two weeks, the program will:

- review potential conflicts of interest and establish recusals
- identify and retain the appropriate content expert

¹⁶ See Appendix 11, the 60-Day Timeline of the Analytic Process.

- identify the analytic teams from the librarians, Faculty Task Force, CHBRP staff, and the actuarial firm
- work with legislative staff (including bill authors and committee staff) to understand bill language and intent
- work with bill sponsors as needed
- conduct the bill-specific coverage survey
- compile coverage information for the public program (e.g., Medi-Cal Managed Care, CalPERS)
- develop literature search strategies for the medical effectiveness analysis and for the grey literature, as needed
- conduct the literature review
- identify the appropriate codes for claims and utilization analysis
- contact other state mandate-review programs to obtain completed analyses or share relevant information (e.g., whether they have a similar mandate in law in their state)
- post on the Web site and send out to the listserv an announcement regarding the new request with information on how interested parties can submit information for CHBRP's consideration

During the following three weeks the program will:

- review information submitted by interested parties
- complete the medical effectiveness analysis
- develop an analytic approach to the cost impact analysis
- review and compile information on gender, racial, and relevant population impacts
- review and compile information on the economic burden of the disease or illness that the mandate attempts to address
- draft all three sections (medical effectiveness, cost, and public health) and compile additional information that may be warranted (e.g., a special section on implementation or additional background material)

During weeks six and seven the program will:

- complete the first draft of the fully integrated report including appendices, tables, and executive summary
- ensure internal review by Vice Chairs and designated internal peer reviewers
- revise as necessary

During the final one-and-a-half weeks the program will:

- ensure that a subcommittee of the NAC conducts a review of the analysis
- make necessary revisions
- edit, finalize, and produce the report for electronic publishing
- submit the report to the Legislature, email to listserv, and post it on the Web site

Table 3: CHBRP's Criteria for Evaluation, As specified under California Health and Safety Code Section 127660

- (1) **Public health impacts**, including, but not limited to, all of the following:
- (A) The impact on the health of the community, including the reduction of communicable disease and the benefits of prevention such as those provided by childhood immunizations and prenatal care.
 - (B) The impact on the health of the community, including diseases and conditions where gender and racial disparities in outcomes are established in peer-reviewed scientific and medical literature.
 - (C) The extent to which the benefit or service reduces premature death and the economic loss associated with disease.
- (2) **Medical impacts**, including, but not limited to, all of the following:
- (A) The extent to which the benefit or service is generally recognized by the medical community as being effective in the screening, diagnosis, or treatment of a condition or disease, as demonstrated by a review of scientific and peer reviewed medical literature.
 - (B) The extent to which the benefit or service is generally available and utilized by treating physicians.
 - (C) The contribution of the benefit or service to the health status of the population, including the results of any research demonstrating the efficacy of the benefit or service compared to alternatives, including not providing the benefit or service.
 - (D) The extent to which mandating or repealing the benefits or services would not diminish or eliminate access to currently available health care benefits or services.
- (3) **Financial impacts**, including, but not limited to, all of the following:
- (A) The extent to which the coverage or repeal of coverage will increase or decrease the benefit or cost of the benefit or service.
 - (B) The extent to which the coverage or repeal of coverage will increase the utilization of the benefit or service, or will be a substitute for, or affect the cost of, alternative benefits or services.
 - (C) The extent to which the coverage or repeal of coverage will increase or decrease the administrative expenses of health care service plans and health insurers and the premium and expenses of subscribers, enrollees, and policyholders.
 - (D) The impact of this coverage or repeal of coverage on the total cost of health care.
 - (E) The potential cost or savings to the private sector, including the impact on small employers as defined in paragraph (1) of subdivision (l) of Section 1357, the Public Employees' Retirement System, other retirement systems funded by the state or by a local government, individuals purchasing individual health insurance, and publicly funded state health insurance programs, including the Medi-Cal program and the Healthy Families Program.
 - (F) The extent to which costs resulting from lack of coverage or repeal of coverage are or would be shifted to other payers, including both public and private entities.
 - (G) The extent to which mandating or repealing the proposed benefit or service would not diminish or eliminate access to currently available health care benefits or services.
 - (H) The extent to which the benefit or service is generally utilized by a significant portion of the population.
 - (I) The extent to which health care coverage for the benefit or service is already generally available.
 - (J) The level of public demand for health care coverage for the benefit or service, including the level of interest of collective bargaining agents in negotiating privately for inclusion of this coverage in group contracts, and the extent to which the mandated benefit or service is covered by self-funded employer groups.
 - (K) In assessing and preparing a written analysis of the financial impact of legislation proposing to mandate a benefit or service and legislation proposing to repeal a mandated benefit or service pursuant to this paragraph, the Legislature requests the University of California to use a certified actuary or other person with relevant knowledge and expertise to determine the financial impact.

Disseminating CHBRP Reports

CHBRP electronically submits reports to the Chairs and Vice Chairs of the Senate and Assembly Health Committees and to other Chairs and Vice Chairs of Committees that are likely to hear CHBRP-analyzed bills (e.g., the Appropriations Committees.)

CHBRP's Web site, www.chbrp.org, provides full access to all CHBRP reports and the legislation analyzed in the reports, as required by statute. The Web site also announces new requests from the Legislature and provides instructions on how interested parties can provide CHBRP with evidence they believe should be considered in its analyses. Reference documents describing CHBRP's processes and methods are available as well. Individuals associated with CHBRP's work are also listed, including CHBRP's staff (Appendix 6), Faculty Task Force members and contributors (Appendix 3), and NAC members (Appendix 5). Lastly, the Web site serves as the primary medium for making announcements.

Analytic Methods

Medical Effectiveness Analysis

The following provisions of CHBRP's authorizing statute describe the program's responsibilities with regard to the analyses of medical effectiveness.

“The extent to which the benefit or service is generally recognized by the medical community as being effective in the screening, diagnosis, or treatment of a condition or disease, as demonstrated by a review of scientific and peer reviewed medical literature.”

“The extent to which the benefit or service is generally available and utilized by treating physicians.”¹⁷

This section presents the current methods used by CHBRP to conduct the medical effectiveness analyses and highlights the refinements that have been made to these methods since 2006.

CHBRP's approach to addressing this first provision is discussed later in this summary under the heading *CHBRP's Approach to Medical Effectiveness Analysis* and in more detail in the *Medical Effectiveness Analysis Research Approach* in Appendix 12. CHBRP addresses the second provision in its medical effectiveness analyses by discussing physician practice patterns, standards of care, and technologies approved by the Food and Drug Administration that are pertinent to the screening, diagnostic, or treatment intervention in question.

¹⁷ CHBRP's authorizing statute also includes the following two provisions under the “medical impact” section: “(C) The contribution of the benefit or service to the health status of the population, including the results of any research demonstrating the efficacy of the benefit or service compared to alternatives, including not providing the benefit or service. (D) The extent to which mandating or repealing the benefits or services would not diminish or eliminate access to currently available health care benefits or services.” Section C is addressed by the public health impact analysis and section D is addressed under the cost impact analysis section.

CHBRP’s approach to medical effectiveness analysis

CHBRP’s approach to medical effectiveness analysis is grounded in the principles of evidence-based medicine (EBM), which is defined as “a set of principles and methods intended to ensure that to the greatest extent possible, medical decisions, guidelines, and other types of policies are based on and consistent with good evidence of effectiveness and benefit” (Eddy, 2005). CHBRP applies the principles of EBM to health insurance mandates by systematically reviewing the medical literature to assess the effectiveness of interventions (e.g., preventive services, diagnostic tests, treatments) addressed by proposed mandates.

Once CHBRP receives a request from the State Legislature, the medical effectiveness team defines the parameters for a search of the medical literature in consultation with a medical librarian and an expert on the disease or condition to which the proposed mandate would apply. Once the literature search is completed, the medical effectiveness team selects studies for inclusion in the review based on a hierarchy of evidence that ranks studies by the strength of the evidence they present. The hierarchy of evidence is discussed in *Medical Effectiveness Analysis Research Approach* (Appendix 12).

Team members systematically evaluate evidence across five domains:

- Research design
- Statistical significance
- Direction of effect
- Size of effect
- Generalizability of results

Studies with strong research designs are more likely to yield accurate information about an intervention’s effects. Statistical significance indicates whether the association between an intervention and an outcome is stronger than that which might occur by chance. The direction of effect reveals whether the intervention is associated with better or poorer outcomes or has no effect on outcomes. The size of effect suggests whether an intervention’s effect is sufficiently large to be clinically meaningful to patients and/or their caregivers. Generalizability concerns the applicability of a study’s findings to the population to which a proposed mandate would apply. Many studies, for example, assess populations that are not as racially/ethnically diverse as California’s.

Conclusions regarding an intervention’s effects on outcomes are based on the strength of the evidence across the five domains described above.¹⁸ Medical effectiveness findings may relate to any one of a number of types of outcomes including the following:

- Physiological (e.g., blood pressure)
- Behavioral (e.g., smoking cessation)
- Cognitive (e.g., improved short-term memory)
- Functional status (e.g., activities of daily living, such as bathing and dressing)
- Quality of life (e.g., overall sense of well-being)
- Morbidity (e.g., specific complications, progression of disease, restricted activity days)

¹⁸ For further information about CHBRP’s approach to grading evidence of effectiveness, see *Medical Effectiveness Analysis Research Approach*, in Appendix 12

- Mortality (e.g., years of life lost)
- Health care utilization (e.g., emergency department visits)

If the language of a bill references specific outcomes, these outcomes will be included in the review. If the bill does not mention specific outcomes, the team and the content expert will identify the outcomes most relevant to the proposed mandate or repeal.

Content of the medical effectiveness sections of CHBRP reports

Key findings from the medical effectiveness review are presented in the Executive Summary of each CHBRP report. The Executive Summary also includes caveats or limitations to the medical effectiveness analysis. These may include discussions about gaps in information, the methodological quality of studies, and implications of evidence for current practice guidelines.

More detailed findings are presented in the medical effectiveness section of the main text of each CHBRP report. The medical effectiveness section of the main text includes information regarding the:

- Services covered under the proposed mandate
- Outcomes of interest
- Methods used to gather evidence
- Evidence for each outcome measure assessed
- Medical effectiveness team's conclusion regarding the effectiveness of the intervention.

All CHBRP reports contain a qualitative synthesis of the medical literature on the outcomes of interest. In some cases, the effectiveness team also produces quantitative estimates of effectiveness for select outcomes. The criteria and guidelines for quantitative estimates are discussed in *Medical Effectiveness Analysis Research Approach* (Appendix 12).

The reports also include a table that summarizes the findings for each outcome with regard to research design, statistical significance, direction of effect, size of effect, and generalizability, as well as CHBRP's conclusion regarding the intervention's effectiveness.

Further information about the effectiveness analysis is presented in two standard appendices in the reports. The first appendix describes the methods used to conduct the literature review. The second appendix consists of a table that lists the studies included in the medical effectiveness analysis and their major characteristics, such as the specific screening test, diagnostic test, or treatment assessed, the research design, the sample size, the population studied, and the location in which the study was conducted.

Enhancing the medical effectiveness analysis

Since CHBRP's reauthorization, the medical effectiveness team has worked to enhance the medical effectiveness analysis in three key areas: (1) developing criteria for using the grey literature, (2) developing criteria for using clinical practice guidelines, and (3) presenting the findings of the literature analysis.

Grey literature

The medical effectiveness team expanded the scope of its literature searches to include the grey literature, which consists of material that is not published commercially or indexed systematically

in bibliographic databases. The grey literature is primarily composed of technical reports, working papers, dissertations, theses, business documents, and conference proceedings. The medical effectiveness team decided to incorporate grey literature into CHBRP's literature searches due to concerns that bias could arise if only peer-reviewed sources for literature were evaluated for inclusion in its reviews. For example, medical journals have a subtle bias against publishing negative findings. CHBRP's hierarchy of evidence is applied in a consistent fashion to both the peer-reviewed literature and the grey literature. The sources of grey literature that CHBRP searches are discussed in *Medical Effectiveness Analysis Research Approach* (Appendix 12). Systematic reviews are the most frequently cited types of grey literature.

Clinical practice guidelines

Clinical practice guidelines are statements about appropriate health care for specific diseases or conditions that are intended to help clinicians and patients make decisions regarding screening, diagnostic testing, or treatment (IOM, 1990, pg. 38). A recent review of CHBRP's reports that cite clinical practice guidelines in the medical effectiveness section (14 bills, 2007-2009) revealed inconsistencies in their use and presentation. CHBRP developed the following criteria to standardize the use of guidelines in medical effectiveness analyses. In cases where a bill would mandate coverage for an intervention that is "consistent with national guidelines" or where a guideline is specified in a bill or is an obvious source of bill language, the medical effectiveness team will construct a table that summarizes pertinent guidelines and rates the transparency of the guideline's development process and the strength of the evidence on which they are based. The rating system is under development and will be tested during the 2010 analytic season. In cases where a bill does not reference any guidelines, the medical effectiveness team will apply the hierarchy of evidence (described in Appendix 12) and review guidelines only when little information is available from more highly ranked sources of evidence or when the information is conflicting.

Presentation of the findings of the medical effectiveness analysis

CHBRP received feedback that early CHBRP reports' discussions of the findings of the medical effectiveness analysis were sometimes difficult to grasp. The medical effectiveness team therefore developed a method to present an overall conclusion for an outcome that captures all the factors in determining the quality of the available evidence (research design, statistical significance, direction of effect, size of effect, and generalizability). The conclusion is a statement that captures the strength and consistency of the evidence of an intervention's effect on an outcome. The following terms are currently used to characterize the body of evidence regarding an outcome.

- Clear and convincing evidence with
 - Favorable effect
 - No effect
 - Unfavorable effect
- Preponderance of evidence with
 - Favorable effect
 - No effect
 - Unfavorable effect
- Ambiguous/conflicting evidence
- Insufficient evidence

The terms are defined as follows:

The conclusion states that there is “clear and convincing” evidence that an intervention has a favorable effect on an outcome if most of the studies included in a review have strong research designs and report statistically significant and clinically meaningful findings that favor the intervention. In rare cases, there may be “clear and convincing evidence” that an intervention has no effect on an outcome, or an unfavorable effect.

The conclusion characterizes the evidence as “preponderance of evidence” that an intervention has a favorable effect if the majority of studies included in a review have strong research designs and report statistically significant and clinically meaningful findings that favor the intervention. For example, for some interventions a majority of studies report statistically significant findings favoring an intervention that are large enough to be clinically meaningful, but some studies find no difference.

The evidence is presented as “ambiguous/conflicting” if the findings of studies included in the review vary widely with regard to the direction, statistical significance, and clinical significance/size of the effect.

The category “insufficient evidence” of an intervention’s effect is used where there is little if any evidence of an intervention’s effect.

One way to understand these groupings is to imagine that, after the assessment was completed, a new, well-designed, randomized controlled trial (RCT) was published with findings contrary to those of the report. Such a single contradictory study would do little to change the overall assessment of findings labeled as “clear and convincing,” but might call into question findings previously labeled as “preponderance,” and might become the basis for reevaluating findings previously labeled “ambiguous/conflicting.”

Cost Impact Analysis

This section presents the current methodology used by CHBRP to conduct the cost impact analysis of proposed mandated benefits as required and highlights the refinements that have been made to these methods since 2006.

CHBRP’s authorizing statute specifies analysis of two major sets of financial information regarding proposed health benefits mandates: (1) current coverage, utilization and cost; and (2) projected changes in coverage, utilization, and costs after the implementation of a mandate.

The specific information regarding current coverage requested by the California Legislature for each mandate includes:

- existing coverage of the service in the current insurance market
- current utilization and cost of providing a benefit
- public demand for coverage among self-insured plans
- current costs borne by insurers

The specific information regarding post-mandate effects requested by the Legislature includes:

- changes in utilization
- changes in the per-unit cost of providing the service
- administrative costs
- impact on total health care costs
- costs or savings for different types of insurers
- impact on access and availability of services

California “Cost and Coverage Model”

The UCLA cost team and actuaries from Milliman developed the Cost and Coverage Model, which establishes a baseline for benefit coverage, utilization, and costs, and allows for a projection of post-mandate coverage levels, utilization, and costs. The Cost and Coverage Model is primarily an actuarial forecasting model. Such models are particularly appropriate when substantial behavioral changes in response to mandates are likely to be limited in the short run.

Definition of terms

“Cost” is defined as the aggregate expenditures, or prices paid, for health care services—not as the costs incurred by the providers of health care. The rationale for this definition of “cost” is that legislators are ultimately interested in evaluating the financial impact of mandates on each of the major payers for health care services in the state.

The following elements of cost are included in the model:

- insurance premiums
- enrollee cost sharing
- total cost of covered benefits
- out-of-pocket costs paid by enrollees for services or items that are not covered (even if the benefit is covered, for example ancillary items for hearing aids)
- total expenditures for health insurance and uncovered mandated benefits

“Utilization” is defined as the frequency or volume of use of a mandated service. Utilization is the product of the number of health plan members who use the mandated service and the average number of mandated services they use per calendar period.

“Coverage” for a particular benefit is defined as the extent (both in terms of how many enrollees have some financial protection for a service, and the scope of that protection) to which the mandated benefit is covered by a health plan contract (those regulated by the DMHC) or a health insurance policy (those regulated by the CDI).

Data sources

To estimate current levels of coverage, utilization, and expenditures for the mandated benefit(s), CHBRP constructed a baseline Cost and Coverage Model using data from four primary sources: (1) the most recent California Health Interview Survey (CHIS); (2) the most recent California Employer Health Benefits Survey; (3) the Milliman Health Cost Guidelines; (4) CHBRP Annual Enrollment and Premium Survey; and (5) actual enrollment data from state agencies, which are used for CalPERS, and Managed Risk Medical Insurance Board (MRMIB) programs (i.e., AIM and MRMIP). The distribution of the Medicare and Medi-Cal publicly insured population is also determined by using actual enrollment data.

Demographic data sources. CHIS is used to identify the demographic characteristics and estimate the insurance coverage of the population in the state. CHIS is a random telephone survey of over 44,000 households conducted in multiple languages by the UCLA Center for Health Policy Research. This survey allows CHBRP to estimate the number of people with public and private sources of coverage, the latter including individual insurance coverage and the employer-sponsored insurance coverage.

To obtain estimates of the percentage of employees by size of firm, CHBRP has historically used the California Employer Health Benefits Survey (CEHBS) (funded by the California Health Care Foundation and conducted by various organizations over the years including The Center for Studying Health System Change and NORC). This survey of California employers is conducted annually since 2000, and the resulting data provide estimates of numbers of employees working in such firms and their types of coverage, based on a representative sample. Coverage categories include conventional fee-for-service (FFS), preferred provider organizations (PPOs), point-of-service (POS) plans, and health maintenance organizations (HMOs). Furthermore, the CEHBS also provides information on whether each health plan is self-insured or fully-insured and whether the product is an HDHP.

Data on the individual market is derived from CHIS and from CHBRP's Annual Enrollment and Premium Survey of the seven major carriers in California.

The Cost and Coverage Model includes the counts of enrollees who are subject to state regulations. The total population subject to state regulations is divided into two segments:

- Those enrolled in health plan contracts regulated by the DMHC ("DMHC-regulated plans").
- Those enrolled in health insurance policies regulated by the CDI ("CDI-regulated policies")

The portion of the population enrolled in DMHC-regulated plans is further divided into privately and publicly insured segments, whereas those enrolled in CDI-regulated policies are all privately insured.

The publicly insured population segments consist of: Medi-Cal Managed Care Plan enrollees, CalPERS HMO enrollees, and enrollees in MRMIB programs (AIM, MRMIP, and Healthy Families).

The portion of the privately insured population enrolled in DMHC-regulated plans and CDI-regulated policies are divided into three categories of private purchasers

- large-group (51 or more employees),
- small-group (two to 50 employees),
- and individual coverage.

The privately insured market is divided into these purchaser types because existing laws and regulations and proposed legislation treat them as distinct markets. For example, a law requiring carriers to offer coverage for orthotic and prosthetic devices only applies to the group market.

In addition, the Cost and Coverage Model can further categorize these group or individual purchasers by whether enrollees are in HDHPs or not. This distinction may be necessary, as federal law defines what plans constitute HDHPs, and some legislative proposals may apply exclusively to HDHPs.

The final estimates for California's population divided by market segments are given in Table 4 and shown in graphic form in Figures 3 and 4.

Table 4. Health Insurance in California, 2009

Type of Coverage	Age					Total
Uninsured						
	0-17					560,000
	18-64					4,256,000
	65+					31,000
Publicly Insured						
		DMHC-Regulated Plans¹		Other Coverage²		
Medi-Cal (not Medicare)	0-17	1,524,000		717,000		2,241,000
	18-64	828,000		1,097,000		1,925,000
	65+	7,000		32,000		39,000
Medi-Cal COHS (including dual)	0-17	0		316,000		316,000
	18-64	0		232,000		232,000
	65+	0		80,000		80,000
Healthy Families ³	0-17	686,000		0		686,000
	18-64	29,000		0		29,000
MRMIP	0-17	1,000		0		1,000
	18-64	6,000		0		6,000
	65+	0		0		0
AIM	0-17	0		0		0
	18-64	7,000		0		7,000
Other Public (non Medi-Cal, HF, Medicare, AIM, MRMIP)	All					575,000
Dually eligible-Medicare and Medi-Cal	All	152,000		798,000		950,000
Medicare (non Medi-Cal)	All	1,089,000		2,023,000		3,112,000
CalPERS, Small Firm	0-17	1,000		0		1,000
	18-64	3,000		2,000		5,000
	65+	0		0		0
CalPERS, Large Firm	0-17	215,000		59,000		274,000
	18-64	586,000		210,000		796,000
	65+	15,000		9,000		24,000
Privately Insured						
		DMHC-Regulated Plans¹		CDI-Regulated Policies³		
		HDHP	Not HDHP	HDHP	Not HDHP	
Individually purchased	0-17	97,000	119,000	149,000	83,000	448,000
	18-64	334,000	408,000	511,000	286,000	1,539,000
	65+	4,000	4,000	6,000	3,000	17,000
Self-Insured	All					3,360,000
Employment-based underwritten, Small Group	0-17	82,000	721,000	156,000	107,000	1,066,000
	18-64	205,000	1,817,000	394,000	268,000	2,684,000
	65+	2,000	17,000	4,000	3,000	26,000
Employment-based underwritten, Large Group	0-17	5,000	3,127,000	11,000	102,000	3,245,000
	18-64	14,000	7,879,000	27,000	258,000	8,178,000
	65+	0	75,000	0	2,000	77,000
All Insured & Uninsured						
California's population total						36,786,000

Sources: CHBRP, 2009: Analysis of 2007 California Health Interview Survey (CHIS); 2008 California Health Care Foundation/National Opinion Research Center (CHCF/NORC) California Employer Health Benefits Survey; 2008 CHBRP Annual Enrollment and Premium Survey; 2008 CalPERS Enrollment Data; Centers for Medicare and Medicaid Services 2006 data for Medicare; Managed Risk Medical Insurance Board (MRMIB) 2008 data for the Major Risk Medical Insurance Program (MRMIP), Access for Infants and Mothers (AIM), and Healthy Families Program (HFP); Department of Health Care Services 2008 data for Medi-Cal.

Key: HDHP= High Deductible Health Plan (deductible \$1150 and over). AIM= Aid for Infants and Mothers. CalPERS= California Public Employees' Retirement System. Medi-Cal COHS= Medi-Cal County Organized Health System. MRMIP= Major Risk Medical Insurance Program.

¹ Knox-Keene Plans include HMO, POS and certain PPO health plans subject to the Knox-Keene Act requirements which are regulated by the DMHC.

² Plans and policies under "Other Coverage" are not subject to state-level regulation by either the CDI or the DMHC.

³ Insurance Policies include PPOs and FFS health insurance products subject to the California Insurance Code, which are regulated by the CDI.

³ Healthy Families 18–64-year-old category only includes those who are aged 18 years and less because those over 18 are not eligible.

Figure 3: Health Insurance in California, 2009—Regulatory Authority

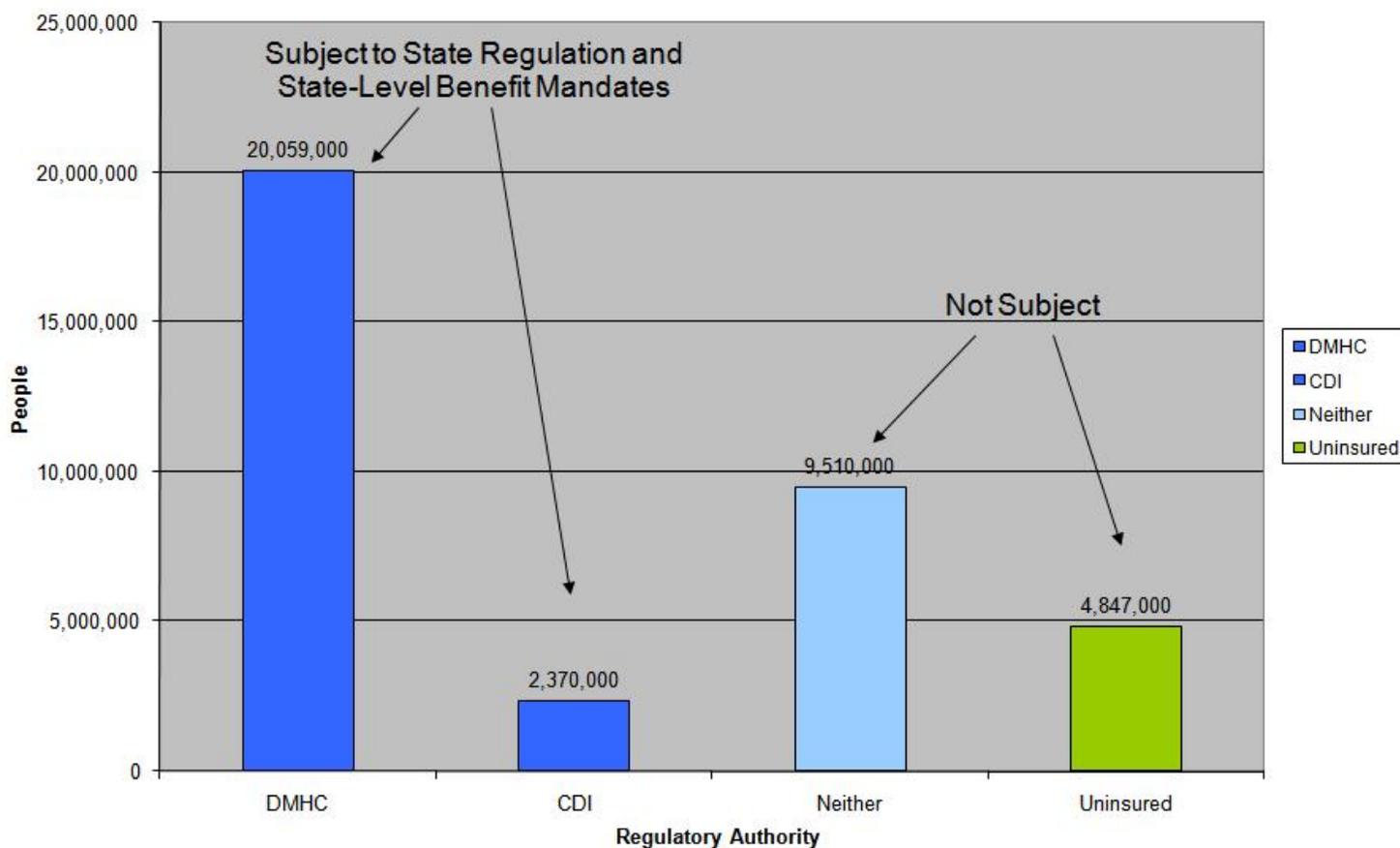
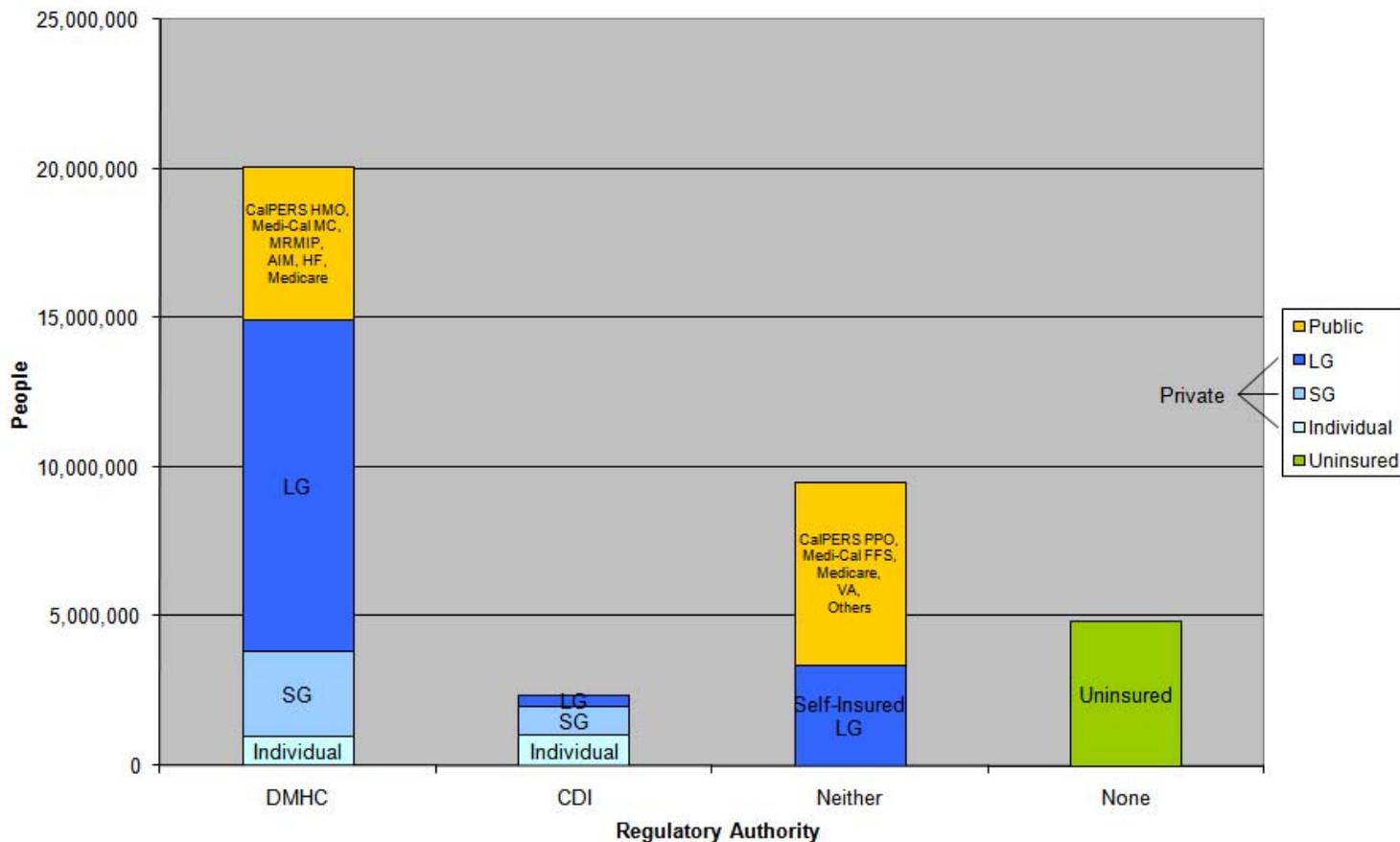


Figure 4: Health Insurance in California, 2009—Detailed View



Coverage of mandate benefits data sources. As discussed in the *Obtaining Data from Health Plans* section, in order to determine baseline coverage for a mandated benefit, CHBRP conducts a bill-specific coverage survey of the seven largest California health plans and insurers. Coverage for a particular mandated benefit may vary by market segment, since some mandates only apply to DMHC-regulated plan contracts or to CDI-regulated policies. CHBRP obtains information regarding the extent and scope of benefit coverage for CalPERS HMOs, Medi-Cal Managed Care, and Managed Risk Medical Insurance Board (MRMIB) programs through data made publicly available by the Department of Health Services (DHS), MRMIB, and CalPERS Web sites. If sufficient detail is not available, CHBRP will query these agencies to determine whether they would deem the mandated benefit as being currently covered.

Utilization and expenditure data sources. The utilization and expenditure data for the California Cost and Coverage Model are drawn primarily from multiple sources of data used in producing the Milliman Health Cost Guidelines (HCGs). The HCGs are a health care pricing tool used by actuaries in many of the major health plans in the United States. The guidelines provide a flexible but consistent basis for estimating health care costs for a wide variety of commercial health insurance plans. The HCGs are used nationwide and by several California health insurance carriers, including at least five of the largest carriers. It is likely that these organizations would use the HCGs, among other tools, to determine the initial premium impact of any new mandate. Thus, in addition to

producing accurate estimates of the costs of a mandate, the HCG-based values should also be good estimates of the premium impact numbers the health insurance carriers are likely to use.

Most of the data sources underlying the HCGs are claims databases from commercial health insurance carriers, in particular from the “Blues” plans, HMOs, self-insured employers, and from private data vendors. The data are mostly from loosely managed health care plans, such as traditional indemnity-style plans and PPO plans. The HCGs are also based on data commonly used by health services researchers.

All the baseline analyses performed by Milliman start with PPOs in the large-group market, then make adjustments to the baseline data to account for differences by type of plan or policy, size of market, and geographic location. The process of applying adjustments to arrive at estimates of baseline utilization and expenditures in each of the market segments, and the process of estimating changes in utilization due to mandates, are both described in the detailed model description, *The California Cost and Coverage Model: An Analytic Tool for Examining the Financial Impacts of Benefit Mandates*, in Appendix 13.

Changes in utilization of health care services are driven by several factors, namely changes in benefit levels, enrollees’ demand and awareness of benefit coverage, providers’ practice patterns, and level of health care management.

Enhancing methods for cost impact analysis

Since CHBRP’s reauthorization, the cost team has worked to enhance methods in three key areas: (1) building methods to conduct differential impact analysis for HDHPs and non-HDHPs, (2) developing a criteria and methods for determining whether and how many people would drop health insurance as a result of premium increases attributable to the mandate, and (3) develop guidelines and methods for determining long-term cost impacts.

Differential analysis of HDHPs and non-HDHPs

CHBRP began to collect baseline information regarding HDHPs and enhanced methods to conduct differential impacts (between HDHPs and non-HDHPs) primarily because it received a request to analyze AB 2281 (Chan) in 2006. The version of AB 2281 CHBRP analyzed would have required all HDHPs that covered preventive services to exclude those services from the deductible. In addition, there were a number of provisions designed to limit member cost-sharing and provide consumer information on costs of benefits and services. The impetus for this bill, according to the CDI, was to address the rise in the number of policies regulated under the California Insurance Code that have increased policy holders’ cost-sharing and reduced covered benefits in recent years. CDI attributed this rise in part to advantages perceived by carriers in regard to CDI-regulated policies relative to those plans regulated under the DMHC. AB 2281 did not pass the Legislature that year. However, in anticipation of other similar bills designed to affect the cost-sharing requirement in HDHPs, CHBRP adjusted its model and data collection efforts accordingly.

Estimating the impact of mandates on the uninsured

Some benefit mandates have been purported to potentially increase premiums to such an extent that they would lead to a reduction in the number of people who could afford to purchase insurance and/or in the number of employers who could afford to offer insurance to their employees. Mandates have the potential to impact access to affordable insurance, thus increasing the number of uninsured or increasing the number of individuals eligible for public health insurance programs.

CHBRP developed the *Criteria and Methods for Estimating the Impact of Mandates on the Number of Individuals Who Become Uninsured in Response to Premium Increases* (see Appendix 13, Attachment C) to systematically address this question.

In summary, because of the difficulty in estimating the independent effect of premium increases on the number of insured, CHBRP has established a minimum threshold increase of 1% in per member per month (PMPM) premiums before it will produce estimates of a proposed mandate's impact on the number of uninsured. When a proposed mandate has an impact of greater than 1% on PMPM private insurance premiums—including an impact of greater than 1% for an identifiable subgroup of the insured, even if the overall impact on PMPM premiums is less than 1%—CHBRP employs the average price elasticity of demand of -0.11% to calculate the number of those who would drop coverage (Chernew, Culter, and Keenan, 2005; Glied and Jack, 2003; Hadley, 2006)¹⁹.

In addition, when an analysis of a proposed mandate indicates that premiums will exceed the minimum threshold to produce an impact on the number of uninsured, CHBRP estimates the proportion of those individuals who would drop their group or individual coverage and subsequently become eligible for Medi-Cal benefits or other public programs. CHBRP calculates this based on the data from the California Health Interview Survey (CHIS) and employs an algorithm, developed at the UCLA Center for Health Policy Research (CHPR), to determine Medi-Cal and Healthy Families eligibility among individuals in CHIS who would be expected to drop their insurance in response to premium increases exceeding 1.0%. This algorithm provides estimates on the proportion of the newly uninsured population that would meet eligibility requirements for Medi-Cal and Healthy Families, based on family income, age, family structure, and other relevant eligibility criteria for eligibility.

The full criteria and methods are included in Appendix 13.

Estimating long-term cost impacts

CHBRP generally limits its impact analysis to a one-year horizon for several reasons. (1) CHBRP's cost impacts model for premium and total expenditure estimates mimics most insurers' internal processes for determining premiums changes in a given year. (2) CHBRP has limited capacity for modeling the long-term cost and health consequences of benefit mandates within the required 60-day timeframe. To conduct such analyses usually requires sophisticated, disease-specific simulation models (such as those used in cost-effectiveness analyses) that permit analysis of the progression of a disease over the course of individual lifetimes and allow for individual variability in disease progression, health outcomes, and subsequent costs. (3) Given the specific nature of most mandates analyzed by CHBRP, the long-term cost or public health impact *as a result* of the mandate are not necessarily addressed in the literature.

Nevertheless, some benefit mandates analyzed by CHBRP involve diseases or conditions with significant long-term health consequences and costs that are well-documented in the literature—screening and other preventive or disease management services are notable examples. In response to feedback and given the need for policymakers to make informed decisions for the long-term,

¹⁹ Price elasticity of demand refers to the change in price relative to the change in demand for that product. In this case, the price is measured by premiums and the demand is for health insurance. A price elasticity of -0.11% means a 10% increase in premiums produces a 1.1% decrease in the number of insured (or the number who drop their health insurance).

CHBRP recognizes that it is important to report on the long-term costs associated with a proposed mandate. To do so, CHBRP now uses cost-effectiveness studies that have modeled long-term costs to inform the reader as to what are the costs associated with a life saved (or a “quality-adjusted life year” saved).²⁰ Please see *Criteria and Guidelines for the Analysis of Long-Term Impacts on Healthcare Costs and Public Health* in Appendix 15 for further details.

Public demand

CHBRP’s authorizing statute also specifies that the program report on the “level of public demand for health care coverage for the benefit or service, including the level of interest of collective bargaining agents in negotiating privately for inclusion of this [mandated benefit] coverage in group contracts and the extent to which the mandated benefit or service is covered by self-funded [self-insured] employer groups.”

To determine the collective bargaining agents’ level of interest in negotiating privately for inclusion of this mandated benefit coverage in group contracts, CHBRP queries the large collective bargaining agents, such as the California Labor Federation. Based on their responses, unions do not generally include benefit-by-benefit provisions during the negotiations of their health insurance policies. Instead, they tend to negotiate on benefit “packages” with broad parameters (e.g., premium levels, cost-sharing arrangements, and coverage for dependants). In order to determine whether any local unions engage in negotiations for any particular benefit mandate, they would need to be surveyed individually.

To determine the “extent to which the mandated benefit or service is covered by self-funded employer groups,” and to serve as proxy to gauge public demand for the benefit or service, CHBRP queries the largest public self-insured employer group, CalPERS, regarding existing coverage of the proposed mandate. CalPERS benefit coverage is reported in each CHBRP bill analysis.

Public Health Impact Analysis

CHBRP’s authorizing statute requires a written analysis of the public health impact of legislation that proposes or repeals a mandated benefit or service, including but not limited to the following:

“The impact on the health of the community, including the reduction of communicable disease and the benefits of prevention such as those provided by childhood immunizations and prenatal care.

The impact on the health of the community, including diseases and conditions where gender and racial disparities in outcomes are established in peer-reviewed, scientific and medical literature.

²⁰ Cost effectiveness analysis allows one to compare the value of a new technology relative to current practice. Examples of a new technology may be a surgical procedure, a medical device, a prescription drug, a preventive screening procedure, or a vaccine. “Current practice” could mean what is considered standard practice, such as ongoing preventive screening, applying an accepted surgical procedure, or doing nothing. Cost effectiveness analysis measures value using a metric called incremental cost effectiveness ratio (ICER). This ratio is the marginal cost of using the new technology divided by the marginal benefit of using the new technology

*The extent to which the proposed service reduces premature death and the economic loss associated with disease.*²¹

This section presents the current methods and data sources used by CHBRP and it highlights the refinements that have been made to the public health impact analysis methods since 2006. Researchers from the public health team at UC Berkeley have developed the methods presented here.

Health outcomes and data sources

Prior to collection of baseline public health data, CHBRP's public health team determines and defines the relevant health outcomes related to the proposed mandate. These determinations are made in consultation with a content expert and the medical effectiveness team. Examples of health outcomes include reductions in morbidity, mortality, disability, days of hospitalization and emergency department visits; changes in self-reported health status, improvements in physiological measures of health such as blood pressure, cholesterol, weight, and forced expiratory volume; changes in health behaviors such as increased physical activity or quitting smoking; and improvements in the quality of life. For each defined health outcome, baseline data on the incidence, prevalence, and health services utilization rates of associated conditions are collected.

Four primary data sets are used to conduct the public health impact analysis: the California Health Interview Survey (CHIS), the California Cancer Registry, the CDC WONDER database, and the claims databases of Milliman.

Data elements and analysis

Four types of data are needed to conduct the public health impact analysis.

First, estimates of baseline health status and health care utilization rates of relevant services are collected. Baseline health status data include but are not limited to rates of morbidity (disease), mortality, premature death, disability, health behaviors, and other risk factors stratified by age, gender, race, and ethnicity. Measures of relevant baseline health care utilization in the affected population are obtained and may include rates of physician visits, emergency department visits, inpatient admissions, and length of stay, and prescription drug use stratified by age, gender, condition, and type of health insurance. The specific services for which utilization rates are needed vary by benefit mandate.

Second, the change in coverage suggested by the proposed legislation is estimated. This information, which is estimated as part of the financial impacts analysis, includes estimates of the number of insured Californians who are presently covered for the proposed benefit and the number who would be newly covered if the mandate were enacted. Coverage rates are derived from surveys of employers and health plans regarding current coverage for the specific mandated benefits. The affected population will vary by mandate and may be defined by gender, age, condition, and type of health insurance coverage.

Third, measures of utilization impacts are estimated for insured Californians who are presently covered for the proposed benefit and those who will be newly covered for the benefit, post-mandate. For persons newly covered by the mandate, an assumption is made about their

²¹ Health & Safety Code, Section 127660, subdivision (a) (1).

utilization of the new benefit based on current use of those with existing coverage, as well as use of similar kinds of services for the affected population. Expert opinion and a literature review guide the assumptions regarding expected changes in utilization for people who are currently covered. In some cases, increased utilization is assumed for those currently covered, based on the expected increased awareness of coverage of the benefit by both patients and providers following enactment of the mandate.

Finally, based on the findings from the literature review on medical effectiveness, estimates are made on the impact of new utilization of the mandated benefit on specific health outcomes in the affected population (e.g., the effect of asthma self-management training on the reduction of hospitalizations for children with asthma). The literature review includes studies providing information on the effectiveness of the proposed benefit or service on specific health outcomes. When data are available, as given by the *Medical Effectiveness Analysis Research Approach* included as Appendix 12, changes in coverage, utilization, and public health outcomes are quantified. The results are compiled by the public health team to produce an overall mean estimate that can be used to calculate the predicted health effects of the benefit mandate.

This final step in the analysis assesses the overall change in health outcomes in the affected population using the estimates of changes in utilization resulting from the mandate combined with the rates of effectiveness of utilization derived from the medical impact literature review. For each specific health outcome reviewed in the literature for which there are baseline health outcomes data available, the estimated impact on each health outcome is applied to the affected population to determine the overall change in health outcomes resulting from the mandate. In addition, CHBRP estimates the extent to which the proposed benefit or service reduces premature death and the economic loss associated with disease, and includes expected effects by gender and race/ethnicity, whenever data are available.²²

Enhancing methods for public health impact analysis

Since CHBRP's reauthorization, the public health team has worked to enhance methods in two key areas: (1) reporting on the likely effects of benefit mandates on race/ethnicity and gender disparities, and (2) estimating longer term public health impacts.

Racial and gender disparities

Insurance status has been found to be an important factor in health disparities, particularly in explaining health disparities by race/ethnicity (Kirby et al., 2006; Lillie-Blanton and Hoffman, 2005). Because health insurance mandates primarily affect the insured population, it is important to examine whether there are health disparities within the insured population. Among the age 18-64 insured population of California in 2007, blacks, Hispanics, and other minorities report worse overall health status compared to non-Hispanic whites (CHIS, 2007). This finding is consistent with much of the academic literature and policy reports that document racial and ethnic disparities in overall health status and disparities within specific health conditions (e.g., Ren and Amick, 1996; CDC, 2007). In contrast to racial and ethnic disparities, no major gender differences in self-reported health status were found among the California insured adult population (CHIS, 2007). Of course, some diseases and conditions primarily affect only one gender (e.g., breast cancer, prostate cancer) and others that have a greater prevalence for one gender (e.g., lupus is more common among females). When possible, CHBRP reports detail differences in disease prevalence, health services

²² For additional details on the public health impact methods for analyses, see Appendix 14.

utilization, and health outcomes by gender and race/ethnicity. This baseline information can help legislators assess the potential for differential impact of a mandate bill across different groups.

Four steps are used to assess whether disparities exist and whether the proposed mandate will have an impact on gender and/or racial disparities:

- Step 1: Conduct literature review. The public health team reviews the peer-reviewed literature for evidence of gender and racial disparities related to the mandate to establish baseline information.
- Step 2: Review data sources. The team identifies data sources that provide relevant prevalence, health utilization, and outcomes measures by gender and race/ethnicity. California-specific data are preferred; however, when California data are not available, national data sources are used.
- Step 3: Determine whether a qualitative assessment regarding disparities can be stated. Frequently, steps 1 and 2 identify disparities with regards to the general health conditions and outcomes related to the proposed mandate; however, there is not always information about disparities with respect to the specific elements of the proposed mandate.
- Step 4: Determine whether a change in disparities can be quantified. Ideally, when a reduction in disparities is deemed possible, CHBRP reports would be able to quantify the effect of the proposed mandate on gender and racial disparities. In order to accomplish this, the following information is needed by gender and/or race ethnicity within the insured population: Baseline incidence or prevalence of a condition, coverage impacts of the population affected by the mandate, and utilization impacts medical impacts (i.e., specific calculations of the effectiveness of the benefit in improving health outcomes).

In most cases, it is not possible to obtain the necessary information to quantify the impact of a proposed mandate on gender or racial/ethnic disparities. For example, CHBRP's analysis of SB 749 (Speier, 2005), which required coverage for autism screening, found that blacks were more likely to have a diagnosis of autism, and were treated for autism later in the course of the disease compared to whites. Therefore, CHBRP's report concluded that to the extent that the mandate results in earlier diagnosis and treatment for autism, this bill could reduce the disparities between whites and blacks associated with later diagnoses and treatment. The potential benefits, however, could not be quantified because no data existed on the differences in the diagnosis and outcomes of autism by race for the insured population.²³

Long-term public health impacts

Long term health consequences are an important consideration for legislators, especially for bills that would affect preventive care or disease management programs where the health benefits accrue over many years. As discussed in the *Cost Impact Analysis* section above, CHBRP has limited capacity for modeling the long-term health consequences of benefit mandates. To conduct such analyses requires sophisticated, disease-specific simulation models that permit analysis of the progression of a disease over the course of individual lifetimes and allow for individual variability in disease progression, health outcomes, and subsequent costs. Studies reporting on the cost-effectiveness of medical interventions commonly utilize such models to analyze the lifetime costs

²³ For additional details on the public health impact methods for assessing impacts of benefit mandates on gender and racial/ethnic disparities, see Appendix 14.

and benefits of specific technologies, including devices, surgical procedures, pharmaceuticals, and diagnostic tests. However, it is essentially impossible to construct such models within the 60-day timeframe allotted for CHBRP analyses. Despite these limitations, CHBRP has made efforts to provide information and, where possible, projections of the long term impacts of benefit mandates and repeals when cost effectiveness literature is available *and* the relevant literature contains sufficient details to make extrapolation to the California insured population that would be affected by the mandate possible. In such situations, CHBRP would quantify the effect of a mandate on lifetime morbidity and mortality, as discussed in the section below.

Premature death and economic loss associated with disease

Premature death is often defined as death before the age of 75 (Cox, 2006). The overall impact of premature death due to a particular disease can be measured in years of potential life lost (YPLL) (Cox, 2006; Gardner and Sanborn, 1990). In California, it is estimated that there are nearly 102,000 premature deaths each year accounting for more than two million YPLL (Cox, 2006). In order to measure the impact of premature mortality across the population impacted by a proposed mandate, CHBRP first collects baseline mortality rates. Next, the medical effectiveness literature is examined to determine if the proposed mandated benefit impacts mortality. In cases where a reduction in mortality is detected, a literature review is conducted to determine if the YPLL has been established for the given condition. Some diseases and conditions do not result in death and therefore a mortality outcome is not relevant. In addition, some benefits or treatments may be used for conditions where there is a mortality outcome, but do not result in a reduction in mortality or YPLL.

Economic loss associated with disease is generally presented in the literature as an estimation of the value of the YPLL in dollar amount (i.e., valuation of years of work life lost). For CHBRP analyses, a literature review is conducted to determine if lost productivity has been established in the literature. In addition, morbidity associated with the disease or condition of interest can also result in lost productivity, either by causing the worker to miss days of work due to their illness or due to their role as a caregiver for someone else who is ill.

When possible, CHBRP reports detail baseline mortality, YPLL of a given condition per death, and associated economic loss resulting from a reduction in productivity from premature death or illness. This baseline information can help legislators compare the severity of disease and the potential for reducing premature death and economic loss associated with disease across mandates. Examples of productivity operationalized three different ways in previously issued CHBRP reports are presented below.

Economic loss associated with premature death. Introduced in 2009, AB 56 (Portantino) mandated coverage for notification of eligibility for mammography screening. It was estimated as a result of this mandate utilization rates for mammograms would increase, leading to the prevention of 16 deaths from breast cancer each year. Research indicates that for each life lost to breast cancer that an average of 22.9 life years are lost, valued at \$272,000. An estimated reduction in 16 premature deaths from breast cancer would translate into a savings of 366 life years and \$5.2 million in related productivity.

Economic loss associated with morbidity related to condition of interest. AB 368 (Carter, 2007) mandated coverage for hearing aids for children. CHBRP's report concluded that as a result of AB 368, improvements in language and speech outcomes would be seen. Estimated on the lifetime costs associated with hearing loss vary from \$297,000-\$417,000. CHBRP's report concluded that it

was possible that AB 368 could contribute to decreased special education and productivity costs associated with hearing loss.

Economic loss associated with care-giver time off work. AB 264 (Chan, 2006) mandated coverage for pediatric asthma self-management training and education. Mortality is a rare occurrence among children with asthma, therefore it was determined that AB 264 would not impact premature death. It was also estimated that as a result of this mandate, that there would be a reduction of 36,000 days of missed school per year among children with high-risk asthma. CHBRP’s report concluded that this would likely lead to productivity gains in California through a decrease in lost workdays of caregivers for children with asthma.

Analyzing Repeal Bills

As discussed, under SB 1704 CHBRP’s role was expanded to begin analyzing health benefit mandate repeals. The authorizing statute defines a “repeal” bill as:

a proposed statute that, if enacted, would become operative on or after January 1, 2008, and would repeal an existing requirement that a health care service plan or a health insurer, or both, do any of the following:

- (1) Permit a person insured or covered under the policy or contract to obtain health care treatment or services from a particular type of health care provider.*
- (2) Offer or provide coverage for the screening, diagnosis, or treatment of a particular disease or condition.*
- (3) Offer or provide coverage of a particular type of health care treatment or service, or of medical equipment, medical supplies, or drugs used in connection with a health care treatment or service.*

Per discussions with legislative staff, the following types of bills would be considered a “repeal” bill and could trigger a request for CHBRP to conduct an analysis:

- A bill that would relax a mandate to *cover* a service and instead require carriers simply to *offer* that coverage
- A bill that would allow carriers to develop products for a subset of the market, which would be exempt from a set of mandates, such as limited benefit plans for small employers
- A bill that would relax coverage level requirements; for example, repealing requirements to cover a certain set of services at “parity” levels

As mentioned, legislative analysis of SB 1704 highlighted that the impetus for requesting CHBRP analysis of repeals was largely the Health Care Choice Act of 2005, a bill that would have allowed association health plan products to be exempt from state-mandated benefits, and the expectation that health insurance products in California would seek similar exemptions (Senate Committee on Banking, Finance, and Insurance Hearing, 04/05/06). In developing methodology for analyzing repeal bills, CHBRP considered what analytic questions within its charge were relevant for the Legislature’s consideration.

Overall approach

When considering the analytic approach to a repeal bill, CHBRP considers the scope of the benefits that would be affected. In 2007, CHBRP developed methods to anticipate the receipt of the various types of bills that would be considered a “repeal” bill, for example, a bill that would repeal a single benefit mandate or a bill that would affect benefit packages. As discussed in the *Summary of Reports*

section, CHBRP has thus far only received requests to analyze bills that would allow carriers to develop and sell products that are not subject to California benefit mandate laws.

Medical effectiveness analytic questions and approach

The analytic questions for medical effectiveness are essentially the same as for a mandate bill: 1) to what extent is the benefit or service generally recognized by the medical community as being effective, and 2) to what extent is the benefit or service generally available and utilized by treating physicians. However, given that the repeal bills CHBRP has analyzed to date sought to address the full range of benefit mandates authorized in law, the analytic approach applied to medical effectiveness has necessarily been modified.

As an example, AB 1214 (Emmerson, 2007) would have permitted the waiver of 44 health insurance benefit mandate and mandated offering statutes that address numerous health care services for a wide range of diseases and conditions. CHBRP reviewed evidence regarding the medical effectiveness of 31 of the 44 mandates that could have been waived under AB 1214. (Thirteen mandates were not analyzed because they would not require coverage for specific diseases or health care services, but instead would require coverage for a vaccination that has yet to be approved by the Food and Drug Administration, or apply to such a large number of diseases that the evidence cannot be summarized briefly.) CHBRP examined each of the 31 mandates to determine whether the mandated benefit is considered to be medically effective based on existing evidence. Conclusions were drawn from the U.S. Preventive Services Task Force recommendations, CDC recommendations, NIH guidelines, and other authoritative sources. Previous CHBRP reports were also utilized where available. For example, the medical effectiveness analysis in CHBRP's report on AB 228 (Koretz, 2005) was used as evidence on the effectiveness of covering transplantation services for persons with HIV.

Cost impact analytic questions and approach

The cost impact analytic questions and approach used in analyzing repeal bills differs substantially from those used in the analysis of mandate bills. Currently, an analysis of mandates assumes that the post-mandate coverage levels would be 100%, essentially full and universal compliance with the bills' requirements. However, it would not be reasonable to assume that all coverage would be dropped following the effective date of a repeal bill because (1) the benefit or service may be considered medically necessary per the professional standard of care, (2) employers and individuals may still demand the benefit, and (3) the associated premium decreases may be so minimal that the cost associated with the perception of taking away a benefit or service may seem more costly to the carrier or the purchaser than simply keeping the existing benefit coverage in place. Timing is also an issue of consideration. With a new mandate, carriers have had to comply by the effective date specified in the bill. With a repeal, carriers have the option to offer the newer products that exclude the repealed benefit mandate(s). Some carriers may respond right away, and others may delay in order to monitor what other carriers do and how the market responds. Collective bargaining and inertia could also delay employer response to any new choices that become available in the market.

CHBRP identified a series of analytic questions that would need to be addressed and data elements that would need to be identified for CHBRP to produce a reliable post-repeal estimate of premiums and health care expenditures. For example:

- Products available for purchase by carriers:

- Would carriers continue to include the benefit in the “base” benefit package, move it to a “rider,” or not offer it at all?
- If carriers continue to cover/offer the benefit, then with what levels of cost sharing and to what extent would the premium differential be passed down to the employer/individual?
- Employer/purchaser demand or offer rate:
 - What percentage of employers would demand that the benefit continue to be included in the benefit package they purchase? If employers no longer have to provide coverage for a service, how many will continue to offer that coverage to their employees?
 - How would this vary by market segment—i.e., for large groups, small groups, and individual markets?
- Employee/individual take-up rate:
 - How many employees would opt out of employer-based coverage if the mandate was repealed?
 - How many individual members would purchase a plan without coverage for the previously mandated benefit?

CHBRP conducted research in late 2006 and early 2007 to determine whether the necessary data points were ascertainable to prepare for a request to analyze a repeal bill. The key findings of this research are summarized here:

- CHBRP contacted other states with mandate evaluation programs to determine whether those programs analyzed benefit mandate repeals. At that time, no other programs had such a requirement. In addition, based on previous research, CHBRP found that states rarely repealed benefit mandates. The general trend is for state lawmakers to leave mandates on the books for benefits, even if they are no longer considered effective. One state, Minnesota, repealed a law requiring coverage of bone marrow transplant for breast cancer patients in 2004. However, a bone marrow transplant mandate remains on the books in nine states. A mandate for hormone replacement therapy remains on the books in Washington, D.C., Massachusetts, and Nevada. One state, Illinois, allowed one mandate to sunset in 2002: a law requiring insurers to offer coverage for patient care for those enrolled in cancer clinical trials (Laugesen et al., 2006).²⁴
- CHBRP contacted the seven largest carriers in California to determine whether they could reliably respond to a CHBRP survey on how they would react to a mandate repeal. Carriers generally stated that they would have to conduct in-depth market analysis to determine what their group and individual purchasers would continue to demand post-repeal and could not reasonably respond within the timeframes CHBRP usually requests. In addition, carriers indicated that they would want the option to take a more incremental “wait and see” approach to react to competitors’ behavior. Based on these findings, a bill-specific coverage survey requesting hypothetical reactions from carriers was determined to be an unreliable approach for obtaining coverage information about benefits subject to repeal bills.
- CHBRP identified states that have passed legislation allowing the development of limited-benefit plans to obtain information on the market response (e.g., Arizona, Arkansas, Colorado, Florida, Georgia, Kansas, Kentucky, Louisiana, Maryland, Minnesota, Montana,

²⁴ Personal communication with Susan Laudacina, Blue Cross Blue Shield Association, November 11, 2005.

New Jersey, North Carolina, North Dakota, Tennessee, Texas, Utah, Washington, and West Virginia. Interviews with carriers, state representatives, insurance brokers, and a review of the literature indicated that neither insurers nor employers have widely embraced limited-benefit plans.

- CHBRP considered relying on the behavior of self-insured plans as a proxy for how firms may react to a benefit mandate repeal (since self-insured plans are not subject to state-mandated benefits.) The logic was that, if a self-insured plan did not cover a specific benefit, it was likely that they would not purchase the benefit upon the mandate's repeal. However, if a self-insured plan currently covers a mandated benefit, it was unclear whether the insured plans would take it away or continue to cover it post-repeal, since it is unclear whether self-insured plans tend to mimic fully-insured (state-regulated) plans in a given market, or vice versa. CHBRP research, based on a review of the literature, and discussions with content experts, indicated that self-insured plans may *not* be a reliable metric of employer behavior in the absence of a benefit mandate. Small firms do not typically self-insure because they have fewer than 50 workers and do not have enough members to spread risk. Of the firms that do self-insure, research indicates that self-insured employers generally try to offer employees what is generally available in the market, such that self-insured and purchased (or fully-insured) plans are similar in terms of the benefits included in the plans and the cost of those plans (Park, 2000, Butler, 2000).²⁵ One study found that cost sharing (i.e., deductibles) is somewhat lower in self-insured PPO plans, suggesting that “self-insured plans are not a safe haven for employers seeking to offer low-benefit catastrophic coverage to their workforce” (Gabel et al., 2003). This is particularly important in California, where employers are less likely to self-insure than the national average (31% of employees were in self-insured plans in California vs. 55% nationally [CHCF/HSC, 2006]).

The research CHBRP conducted in 2007 supports the idea that an actual estimate of post-repeal coverage (and utilization of benefits) was not ascertainable due to the significant uncertainties surrounding carriers' responses, purchasers' responses, and the take-up rate by the individual or employee. Therefore, to model cost impacts for repeal bills, CHBRP chose to develop hypothetical scenarios that would provide a range of potential cost impacts, given the range of possible market responses. For example, in its analysis of AB 1214 (Emmerson, 2007)²⁶, CHBRP determined that the number of possible combinations of the 44 benefit mandates that insurers might offer, if they were no longer mandated, was practically limitless. For the cost impact analysis of AB 1214, CHBRP employed a simplifying assumption regarding the expected design of health plan benefits after the hypothetical enactment of AB 1214. The assumption was that insurers would all offer three prototypes of the limited-mandate plans for four market segments: one for the DMHC-regulated group and individual markets, one for the CDI-regulated group market, and one for the CDI-regulated individual market. CHBRP's analysis modeled the possible maximum short-term savings using the following two scenarios:

- Scenario 1 (High Impact)—Substitution of all current health insurance products with the three prototype limited-mandate plans. This scenario assumes all insurers would offer these limited-mandate plans in every market, and all currently insured Californians would purchase these limited-mandate plans instead of their current health insurance products.

²⁵ Personal communication with Patricia Butler, January 3, 2007.

²⁶ CHBRP took a similar analytic approach when examining certain provisions of SB 92 (Aanestad, 2009).

- Scenario 2 (Low Impact)—Substitution of all HDHPs currently available in the market with limited-mandate HDHPs. This scenario assumes that only those who currently have lower-premium plans (i.e., HDHPs) would be interested in purchasing health insurance products with limited mandates, and that all persons currently with an HDHP would purchase a less-expensive HDHP with limited mandates. Additionally, this scenario models the likely substitution of some full-benefit products for limited-benefit HDHPs due to the change in relative prices (i.e., premiums) of HDHPs vis-à-vis full-benefit plans.

CHBRP acknowledged in its AB 1214 analysis that both scenarios overstate the impact of the bill because not everyone would switch from their current plans to limited-mandate plans. The scenarios were offered as short-term upper bounds rather than an actual estimate of how the market might respond to AB 1214. They were considered useful because they show the maximum short-term savings that might be possible if there was broad acceptance of these policies. In its analysis of AB 1214, CHBRP also estimated the short-term impacts on those currently uninsured in California if AB 1214 were to pass and limited-mandate plans were to become available in the market. Finally, potential long-term impacts on the market, such as risk segmentation and impacts on public programs, were qualitatively addressed.

Public health impact analytic questions and approach

The public health impact analytic questions for repeal analysis are essentially equivalent to CHBRP's standard mandate analysis: (1) what is the impact on the health of community, (2) what is the impact on disparities, and (3) what is the extent to which premature death and economic loss are impacted? Given the scope of repeal bills analyzed to date and the approach necessitated for the cost impact analysis, the public health impact analysis also uses multiple-scenario analysis to determine what the population impacts would be *if* a specific benefit were to be dropped or certain product types were taken up in the market. For CHBRP's analysis of AB 1214, for example, the public health impact analysis provided estimates of the scope of the population that would be affected by a health condition related to a mandated benefit. The report offers general conclusions regarding the public health impact of waiving a particular benefit mandate based on the medical effectiveness of the benefit or service and the number of insured Californians that may be affected by the relevant health condition.

FUTURE DIRECTIONS IN THE NATIONAL AND STATE CONTEXT

Trends in Mandate and Repeal Bills

Given that California currently has 44 benefit mandates in the Health and Safety Code and 41 in the Insurance Code, the number of mandates that require coverage of a new benefit or service are most likely to be (1) those for new technologies, (2) those that clarify or specifically carve out a benefit or service that is already considered to be covered under an existing mandate, (3) those that clarify or alter the way in which a currently covered benefit is administered or delivered, or (4) those that broadly affect product and benefit designs. (See Appendix 20 for a list of mandates in current California Law.) This section describes past trends and draws some inferences for future implications for mandate and repeal bills.

Individual market reform

There have been several bills in the last few legislative sessions that have attempted to reform or make substantial changes to the individual market. These bills dealt with a wide range of issues such as rescissions of individual health insurance policies, disclosure requirements regarding benefits and out-of-pocket costs, requirements on health insurance applications, and restrictions on underwriting processes. Recent attention has focused on the individual market because of concerns about increasing costs for these products, concerns about the drop in employer-sponsored coverage resulting from the economic crisis, and the increased unemployment rate. Discussions surrounding health care reform at the state level in 2007 and at the national level in 2009 have also drawn attention to characteristics that are specific to the individual market. For example, people with preexisting health conditions may not have access to individual health insurance, and premiums are often more expensive and benefits are more limited than those offered in the group market. A national study found that 89% of working-age adults who sought coverage in the individual market between 2003 and 2006 never ended up buying a health insurance policy. A majority (58%) found it very difficult or impossible to find affordable coverage. One-fifth (21%) of those who sought to buy coverage were turned down, were charged a higher price because of a preexisting condition, or had a health problem excluded from coverage (Collins et al., 2006). Due to gender-rating and exclusion of maternity service, a recent study found that “comprehensive, affordable” policies in the individual market were difficult for women to find (NWLC, 2007).

CHBRP has striven to provide relevant information to the California Legislature when requested to analyze a bill that would fall under its purview. CHBRP provided a background issue analysis of AB 786 (Jones, 2009) and SB 1522 (Steinberg, 2008), bills that sought to standardize products available in the individual market, as well as standardize information to facilitate informed consumer decision-making. In addition, CHBRP has analyzed four bills that have attempted to mandate coverage of maternity services, particularly focused upon the individual market.²⁷ (These bills primarily would have affected the individual market since group purchasers are required to cover maternity services under federal law.) Finally, all the repeal bills CHBRP has analyzed to date would have also directly impacted the products available in the individual market and the premiums associated with those

²⁷ AB 98 (De La Torre, 2009), AB 1962 (De La Torre, 2008), SB 1555 (Speier, 2004), and SB 897 (Speier, 2003).

products. In the absence of health care reform, it is possible that in future legislative sessions bills would continue to be introduced that attempt to affect marginal changes in the individual market in terms of benefits, cost sharing, out-of-pocket costs, and underwriting practices. Repeal bills may also continue to be introduced that would seek to allow low-cost, “mandate-lite” products to be sold in the individual market.

Drug Benefits

A number of factors may contribute to a growing demand for specific prescription drugs to be covered by the commercial insurance market, and for legislators to introduce prescription drug–related benefit mandate bills in future years: (1) Prescription drugs are the fastest-growing component of health care costs; (2) a number of biotech therapies and oral chemotherapy medications are under development; (3) the federal government, under Medicare Part D, has become a payer for prescription drugs in recent years; and (4) drug manufacturers use direct-to-consumer advertising to stimulate demand for new and more expensive drug products.

In response to rising costs and increasing demand for newer technologies, health plans have developed formularies or contracted with pharmacy benefit management companies for formulary management. As state mandate benefits were in part a reaction to tightly managed care, there may be an analogous increase in drug-specific mandate bills in reaction to tightened pharmaceutical benefit management.

AB 1144 (Price, 2009) is one example of a bill that sought to address pharmaceutical benefit management by prohibiting step therapy for pain management drugs. SB 161 (Wright, 2009) is an example of a drug-specific bill that focused on the cost-sharing requirements for a class of drugs. It proposed to mandate that health plan contracts and health insurance policies provide coverage for oral anticancer medications in a fashion “no less favorable” than the coverage provided for intravenous and injectable anticancer medications. A stated intent of the bill’s author (a purpose further specified in later amendments to the bill’s language) was to lower the out-of-pocket expenses incurred by patients taking oral anticancer drugs. It was the perception of the bill’s sponsors that patient out-of-pocket costs were higher when the prescribed drug was formulated for oral consumption. CHBRP’s analysis verified that if “no less favorable” were interpreted to mean “patients pay no more for an oral anticancer medication than for an intravenous or injected drug,” then patients would (on average) pay less than they were currently paying for anticancer medications.

Utilization Management and Medical Management

CHBRP has received requests to analyze a number of bills that seek to affect the utilization management controls that health plans may use. If a mandate bill changes the delivery of a certain service by defining standards of care or restricting utilization controls, CHBRP researchers make every effort to indicate whether and how such delivery changes will alter practice patterns or utilization.

AB 1774 (Lieber, 2008) is an example of a bill that proposed to restrict utilization controls. The bill sought to ensure that health plan contracts and health insurance policies cover testing for gynecological cancers (primarily uterine or endometrial, ovarian, and cervical cancers). Current law

requires health plans and insurers to cover all generally medically accepted cancer screening tests, an annual cervical cancer screening test (including the conventional Pap test and the HPV screening test), and diagnostic services. Based on conversations with the DMHC and the CDI, as well as legal input, CHBRP ultimately modeled the interpretation of the bill language that reflected the legislative intent to move the power of discretion over whether a test is needed (and therefore is considered a covered benefit) from the health insurance carrier to the individual medical provider. CHBRP assumed that a subset of insured women would receive tests that were considered both appropriate and inappropriate by current standards and then modeled the subsequent utilization, cost, and public health impacts associated with the use of the bundle of services.

AB 2234 (Portantino, 2008) is one example of a bill that proposed to define standards of care by referencing national guidelines, a definition which proved complex to interpret. The bill sought to ensure that health plan contracts and health insurance policies cover tests necessary to screen for or diagnose breast cancer. The bill defined necessary tests as “those consistent with national guidelines.” Reference to national guidelines proposed to establish a new and difficult-to-define standard of care. A key difficulty lay in parsing which guidelines should be considered. Many national guidelines exist. Some are sponsored by public agencies and others are produced by manufacturers of medical equipment. Guidelines may be evidence-based, drawn from a consensus of professionals asked to consider an issue, or developed in some other manner. To complete its analysis within the required timeframe, CHBRP’s review considered six evidence-based guidelines promulgated by prominent national entities. However, CHBRP’s report noted that other “national guidelines” exist. On the whole, the six considered by CHBRP were fairly consistent. However, one differed markedly, recommending breast magnetic resonance imaging (BMRI) for some women. Based on the other five, the current standard of care may not include BMRI. However, based on conversations with the DMHC and the CDI, CHBRP based its analysis on the assumption that the mandate would change the current standard to include BMRI for some women. Therefore, CHBRP assumed that a subset of insured women would receive BMRI tests and then modeled the subsequent utilization, cost, and public health impacts associated with the broadened standard of care created by the mandate’s reference to national guidelines.

It is likely that bills that seek to limit plans’ ability to manage utilization will be introduced in future legislative sessions. CHBRP’s prior experience with conducting analyses of these types of bills has led it to develop more systematic methods to assess clinical guidelines, existing standards of care, and, when needed, incorporate the applicability of those guidelines to project practice patterns and utilization rates.

Federal Initiatives

The federal American Recovery and Reinvestment Act of 2009 (ARRA) has created opportunities for researchers and institutions to develop and implement comparative effectiveness research (CER). In addition, if proposed national health care reform initiatives were to be enacted into law within the next year, there are real implications for the California health insurance market, including the effects of those reforms on the state’s group and individual markets, its publicly insured populations, and the uninsured.

Comparative Effectiveness Research

ARRA allotted \$1.1 billion to support comparative effectiveness research, which is defined as “the generation and synthesis of evidence that compares the benefits and harms of alternative methods to prevent, diagnose, treat, and monitor a clinical condition, or to improve the delivery of care. The purpose of CER is to assist consumers, clinicians, purchasers, and policymakers to make informed decisions that will improve health care at both the individual and population levels.” (IOM, 2009) In order to provide a framework for the nation’s activities on CER, the Institute of Medicine’s Committee on Comparative Effectiveness Research Prioritization was charged with developing a priority list of research areas. In its June 2009 report, *Initial National Priorities for Comparative Effectiveness Research*, it listed 29 research areas and cited the value of “systematic literature reviews for studying many research topics.” CHBRP’s system for evaluating the literature based on a hierarchy of evidence may be valuable in designing CERs. In addition, CHBRP’s experience in expedited, systematic reviews of the medical literature—as well as providing evidence-based conclusions on the medical effectiveness of specific interventions, services, or benefits—may inform the national debate on the current possibilities and limitations of available evidence.

Health Care Reform

Current health care reform proposals would require that qualified health benefits plans include coverage for an “essential benefits package.” The House Leadership Bill, the Affordable Health Care for America Act (H.R. 3962) would require that the essential benefits package include comprehensive coverage and that it cover 70% of the actuarial value of the covered benefit. It would also establish the Health Benefits Advisory Council, whose role it would be to make recommendations on specific services to be covered by the essential benefits package. The Senate Leadership Bill, the Patient Protection and Affordable Care Act (H.R. 3590) would require that the essential benefits package cover 60% of the actuarial value of the covered benefits, that annual cost-sharing be limited to current limits on applicable plans that are eligible for health savings accounts (\$5,950/individual and \$11,900/family in 2010), and that it be no more comprehensive in coverage than the typical employer plan. It would also require the Secretary of Health and Human Services to determine which services ought to be included in the essential benefits package.

CHBRP’s experience in evaluating benefits in the context of insurance coverage and benefit design could inform the implementation of any federal reform proposals that seek to establish a minimum benefit level or seek to establish an infrastructure to systematically evaluate benefits and services for inclusion in an essential benefit package. Once such national entities (e.g., a commission or a council) are created and implemented, however, it will be up to the California Legislature to determine whether CHBRP’s functions will be duplicative with federal efforts or whether the program’s role should be adapted to fill analytic needs specific to California. If, for example, California wished to add to the essential benefits package as defined by a national health care reform law (and if states were not prohibited in doing so) CHBRP could continue to analyze benefit mandates that sought to expand the essential benefit package. To effectively model the various health care reform provisions and potential implementation scenarios, microsimulation models would need to be developed to project the impact on premiums, health care expenditures, employer-based coverage and shifts to public programs.

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APPENDICES

Appendix 1:	Authorizing Legislation
Appendix 2:	CHBRP List of Reports, Letters, and Products, 2006-Present
Appendix 3:	Task Force Membership List
Appendix 4:	NAC Review Criteria and Guidelines
Appendix 5:	National Advisory Council Membership List
Appendix 6:	CHBRP Staff List
Appendix 7:	CHBRP Actuaries
Appendix 8:	CHBRP Librarians
Appendix 9:	Content Expert Identification, Screening, and Selection Protocol
Appendix 10:	CHBRP Conflict-of-Interest Policies: General Disclosure Form and NAC Disclosure Form
Appendix 11:	60-Day Timeline of the Analytic Process
Appendix 12:	<i>Medical Effectiveness Analysis Research Approach</i>
Appendix 13:	<i>The California Cost and Coverage Model: An Analytic Tool for Examining the Financial Impacts of Benefit Mandates</i>
Appendix 14:	<i>Assessing the Public Health Impact of State Health Benefit Mandates Including Guidelines for Estimating Impacts of Benefit Mandates on Gender and Racial Disparities</i>
Appendix 15:	<i>Criteria and Guidelines for the Analysis of Long-Term Impacts on Healthcare Costs and Public Health</i>
Appendix 16:	Clarification of Bill Language and Legislative Intent [Bill Author Questionnaire]
Appendix 17:	Health Care Service Plans' and Health Insurers' Proprietary Data Retention Destruction Policy
Appendix 18:	Summary of CHBRP Completed Reports on Mandate Bills, 2006-2009
Appendix 19:	Media Citations of CHBRP or Its Work
Appendix 20:	Existing Mandates in California Law
Appendix 21:	List of Work Stemming from CHBRP Reports
Appendix 22:	Other States' Health Benefit Review Programs, 2009
Appendix 23:	CHBRP Budget and Operating Costs

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Additional free copies of this and other CHBRP bill analyses and publications may be obtained by visiting CHBRP's Web site at www.chbrp.org.



Appendix 1: Authorizing Legislation

Assembly Bill 1996 (2002)

On February 15, 2002, Assembly Bill (AB) 1996 was introduced by author Assembly Member Helen Thomson. On September 22, 2002, Governor Davis signed AB 1996 (Chapter 795, Statutes of 2002).

Senate Bill 1704 (2006)

On February 24, 2006, Senate Bill (SB) 1704 was introduced by author Senator Sheila Kuehl. On September 29, 2006, Governor Schwarzenegger signed SB 1704 (Chapter 684, Statutes of 2006).

Assembly Bill 1540 (2009)

On March 4, 2009, AB 1540 was introduced by the Assembly Committee on Health: Dave Jones (Chair), Anthony Adams, Tom Ammiano, Marty Block, Wilmer Carter, Hector De La Torre, Isadore Hall, Mary Hayashi, Edward Hernandez, Bonnie Lowenthal, Pedro Nava, V. Manuel Perez, and Mary Salas. On October 11, 2009, Governor Schwarzenegger signed AB 1540 (Chapter 298, Statutes of 2009).

The chaptered bills and the relevant language follow.

Assembly Bill No. 1996

CHAPTER 795

An act to add and repeal Chapter 7 (commencing with Section 127660) of Part 2 of Division 107 of the Health and Safety Code, relating to health care.

[Approved by Governor September 22, 2002. Filed with Secretary of State September 22, 2002.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1996, Thomson. University of California: analysis of legislation mandating health care benefits and services.

Existing law regulates the provision of health care benefits by a health care service plan and by a health insurer.

This bill would request the University of California to assess legislation proposing mandated health care benefits to be provided by health care service plans and health insurers, and to prepare a written analysis in accordance with specified criteria.

This bill would request the University of California to develop and implement conflict-of-interest provisions that would prohibit a person from participating in any analysis in which he or she knows or has reason to know he or she has a material financial interest.

This bill would provide funding for the University of California's work from fees imposed upon health care service plans and health insurers, which would not exceed a total of \$2,000,000. The fees would be deposited in the Health Care Benefits Fund, which would be created by the bill. Initial startup funding would be loaned to the Health Care Benefits Fund from the Managed Care Fund and the Insurance Fund.

This bill would request the University of California to submit a report to the Governor and the Legislature by January 1, 2006, on the implementation of the bill's provisions.

The bill's provisions would remain in effect until January 1, 2007.

The people of the State of California do enact as follows:

SECTION 1. The intent of the Legislature in enacting this act is:

(a) To promote the public interest to assure that all residents of this state have reasonable access to quality health care.

(b) To analyze the clinical efficacy and cost-effectiveness of legislative proposals for expanded health care benefits using clear criteria for evaluating each proposal.



(c) To facilitate the provision of quality, cost-effective health services by providing current, accurate data and information to the Governor and the Legislature for the purpose of determining health-related programs and policies in connection with proposed legislation.

(d) That the University of California publish a written analysis of the clinical efficacy and cost-effectiveness of each legislative proposal, including supporting expert data.

(e) The Legislature finds that there is an increasing number of proposals that mandate that certain health benefits be provided by health care service plans and health insurers as components of individual and group contracts. The Legislature further finds that many of these would potentially result in better health outcomes that would be in the public interest. However, the Legislature also recognizes that mandated benefits may contribute to the cost and affordability of health insurance premiums. Therefore, it is the intent of the Legislature that the University of California conduct a systematic review of proposed mandated or mandatorily offered health benefit mandates. This review will assist the Legislature in determining whether mandating a particular coverage is in the public interest.

SEC. 2. Chapter 7 (commencing with Section 127660) is added to Part 2 of Division 107 of the Health and Safety Code, to read:

CHAPTER 7. UNIVERSITY OF CALIFORNIA ASSESSMENT ON
LEGISLATION PROPOSING MANDATED BENEFITS OR SERVICES

127660. (a) The Legislature hereby requests the University of California to assess legislation proposing a mandated benefit or service, as defined in subdivision (d), and to prepare a written analysis with relevant data on the following:

(1) Public health impacts, including, but not limited to, all of the following:

(A) The impact on the health of the community, including the reduction of communicable disease and the benefits of prevention such as those provided by childhood immunizations and prenatal care.

(B) The impact on the health of the community, including diseases and conditions where gender and racial disparities in outcomes are established in peer-reviewed scientific and medical literature.

(C) The extent to which the proposed service reduces premature death and the economic loss associated with disease.

(2) Medical impacts, including, but not limited to, all of the following:

(A) The extent to which the benefit or service is generally recognized by the medical community as being effective in the screening, diagnosis,



or treatment of a condition or disease, as demonstrated by a review of scientific and peer reviewed medical literature.

(B) The extent to which the benefit or service is generally available and utilized by treating physicians.

(C) The contribution of the benefit or service to the health status of the population, including the results of any research demonstrating the efficacy of the benefit or service compared to alternatives, including not providing the benefit or service.

(D) The extent to which the proposed services do not diminish or eliminate access to currently available health care services.

(3) Financial impacts, including, but not limited to, all of the following:

(A) The extent to which the coverage will increase or decrease the benefit or cost of the service.

(B) The extent to which the coverage will increase the utilization of the benefit or service, or will be a substitute for, or affect the cost of, alternative services.

(C) The extent to which the coverage will increase or decrease the administrative expenses of health care service plans and health insurers and the premium and expenses of subscribers, enrollees, and policyholders.

(D) The impact of this coverage on the total cost of health care.

(E) The potential cost or savings to the private sector, including the impact on small employers as defined in paragraph (1) of subdivision (l) of Section 1357, the Public Employees' Retirement System, other retirement systems funded by the state or by a local government, individuals purchasing individual health insurance, and publicly funded state health insurance programs, including the Medi-Cal program and the Healthy Families Program.

(F) The extent to which costs resulting from lack of coverage are shifted to other payers, including both public and private entities.

(G) The extent to which the proposed benefit or service does not diminish or eliminate access to currently available health care services.

(H) The extent to which the benefit or service is generally utilized by a significant portion of the population.

(I) The extent to which health care coverage for the benefit or service is already generally available.

(J) The level of public demand for health care coverage for the benefit or service, including the level of interest of collective bargaining agents in negotiating privately for inclusion of this coverage in group contracts, and the extent to which the mandated benefit or service is covered by self-funded employer groups.



(K) In assessing and preparing a written analysis of the financial impact of a mandated benefit pursuant to this paragraph, the Legislature requests the University of California to use a certified actuary or other person with relevant knowledge and expertise to determine the financial impact.

(b) The Legislature requests that the University of California provide every analysis to the appropriate policy and fiscal committees of the Legislature not later than 60 days after receiving a request made pursuant to Section 127661. In addition, the Legislature requests that the university post every analysis on the Internet and make every analysis available to the public upon request.

(c) The Legislature requests that the University of California first analyze any of the following benefit mandates proposed in the 2001–02 Legislative Session, if introduced or proposed to be introduced at the start of the 2003–04 Legislative Session, and a request for an analysis is made by the author or the relevant policy committee chair:

- (1) Bone marrow testing for prospective donors.
- (2) Infertility treatment.
- (3) Specified ovarian cancer screening and diagnostic tests.
- (4) Medically necessary prescription drugs.
- (5) Wigs for patients who have undergone chemotherapy.
- (6) Bone mineral density testing for osteoporosis.
- (7) Hearing aids.
- (8) Hyperbaric oxygen therapy for an acute or chronic brain condition.
- (9) Substance-related disorders.
- (10) Genetic disease tests for certain populations.

(d) As used in this section, “mandated benefit or service” means a proposed statute that requires a health care service plan or a health insurer, or both, to do any of the following:

- (1) Permit a person insured or covered under the policy or contract to obtain health care treatment or services from a particular type of health care provider.
- (2) Offer or provide coverage for the screening, diagnosis, or treatment of a particular disease or condition.
- (3) Offer or provide coverage of a particular type of health care treatment or service, or of medical equipment, medical supplies, or drugs used in connection with a health care treatment or service.

127661. A request pursuant to this chapter may be made by an appropriate policy or fiscal committee chairperson, the Speaker of the Assembly, or the President pro Tempore of the Senate, who shall forward the introduced bill to the University of California for assessment.



127662. (a) In order to effectively support the University of California and its work in implementing this chapter, there is hereby established in the State Treasury, the Health Care Benefits Fund. The university's work in providing the bill analyses shall be supported from the fund.

(b) For fiscal years 2002–03 to 2005–06, inclusive, each health care service plan, except a specialized health care service plan, and each health insurer, as defined in Section 106 of the Insurance Code, shall be assessed an annual fee in an amount determined through regulation. The amount of the fee shall be determined by the Department of Managed Health Care and the Department of Insurance in consultation with the university and shall be limited to the amount necessary to fund the actual and necessary expenses of the university and its work in implementing this chapter. The total annual assessment on health care service plans and health insurers shall not exceed two million dollars (\$2,000,000).

(c) The Department of Managed Health Care and the Department of Insurance, in coordination with the university, shall assess the health care service plans and health insurers, respectively, for the costs required to fund the university's activities pursuant to subdivision (b).

(1) Health care service plans shall be notified of the assessment on or before June 15 of each year with the annual assessment notice issued pursuant to Section 1356. The assessment pursuant to this section is separate and independent of the assessments in Section 1356.

(2) Health insurers shall be noticed of the assessment in accordance with the notice for the annual assessment or quarterly premium tax revenues.

(3) The assessed fees required pursuant to subdivision (b) shall be paid on an annual basis no later than August 1 of each year. The Department of Managed Health Care and the Department of Insurance shall forward the assessed fees to the Controller for deposit in the Health Care Benefits Fund immediately following their receipt.

(4) "Health insurance," as used in this subdivision, does not include Medicare supplement, vision-only, dental-only, or CHAMPUS supplement insurance, or hospital indemnity, accident-only, or specified disease insurance that does not pay benefits on a fixed benefit, cash payment only basis.

127663. In order to avoid conflicts of interest, the Legislature requests the University of California to develop and implement conflict-of-interest provisions to prohibit a person from participating in any analysis in which the person knows or has reason to know he or she has a material financial interest, including, but not limited to, a person who has a consulting or other agreement with a person or organization that would be affected by the legislation.



127664. The Legislature requests the University of California to submit a report to the Governor and the Legislature no later than January 1, 2006, regarding the implementation of this chapter. Initial startup funding for the university shall be loaned to the Health Care Benefits Fund from the Managed Care Fund created pursuant to Section 1341.4 and the Insurance Fund created pursuant to Section 12975.8 of the Insurance Code. The Health Care Benefits Fund shall reimburse the Managed Care Fund and the Insurance Fund by September 30, 2003, from the 2003–04 fiscal year assessments received under subdivision (b) of Section 127662. The annual fee for the 2002–03 fiscal year shall be collected at the time the 2003–04 fiscal year assessments are made.

127665. This chapter shall remain in effect until January 1, 2007, and shall be repealed as of that date, unless a later enacted statute that becomes operative on or before January 1, 2007, deletes or extends that date.



Senate Bill No. 1704

CHAPTER 684

An act to amend Sections 127660, 127662, 127664, and 127665 of the Health and Safety Code, relating to public health.

[Approved by Governor September 29, 2006. Filed with
Secretary of State September 29, 2006.]

LEGISLATIVE COUNSEL'S DIGEST

SB 1704, Kuehl. Health care benefits.

Existing law requests the University of California to assess legislation proposing a mandated health benefit or service, as defined, to be provided by health care service plans and health insurers, and to prepare a written analysis in accordance with specified criteria.

This bill would, instead, request the University of California to establish the California Health Benefit Review Program to assess legislation proposing to mandate a benefit or service, as defined, and legislation proposing to repeal a mandated service or benefit, as defined, that, if enacted, would become effective on or after January 1, 2008, and to prepare a written analysis in accordance with specified criteria.

Existing law further requests the University of California to develop and implement conflict-of-interest provisions that would prohibit a person from participating in any analysis in which he or she knows or has reason to know he or she has a material financial interest.

Existing law requests the University of California to submit a report to the Governor and the Legislature no later than January 1, 2006, regarding the implementation of the aforementioned provisions.

This bill would request the University of California to submit another such report to the Governor and the Legislature by January 1, 2010.

Existing law provides funding for the University of California's implementation of these provisions from fees imposed upon health care service plans and health insurers, which would not exceed a total of \$2,000,000, and are to be deposited in the Health Care Benefits Fund.

This bill would extend to January 1, 2011, the repeal date of those provisions, and would authorize the continued imposition of that fee through the 2009–10 fiscal year.

The people of the State of California do enact as follows:

SECTION 1. Section 127660 of the Health and Safety Code is amended to read:

127660. (a) The Legislature hereby requests the University of California to establish the California Health Benefit Review Program to assess legislation proposing to mandate a benefit or service, as defined in subdivision (c), and legislation proposing to repeal a mandated benefit or service, as defined in subdivision (d), and to prepare a written analysis with relevant data on the following:

(1) Public health impacts, including, but not limited to, all of the following:

(A) The impact on the health of the community, including the reduction of communicable disease and the benefits of prevention such as those provided by childhood immunizations and prenatal care.

(B) The impact on the health of the community, including diseases and conditions where gender and racial disparities in outcomes are established in peer-reviewed scientific and medical literature.

(C) The extent to which the benefit or service reduces premature death and the economic loss associated with disease.

(2) Medical impacts, including, but not limited to, all of the following:

(A) The extent to which the benefit or service is generally recognized by the medical community as being effective in the screening, diagnosis, or treatment of a condition or disease, as demonstrated by a review of scientific and peer reviewed medical literature.

(B) The extent to which the benefit or service is generally available and utilized by treating physicians.

(C) The contribution of the benefit or service to the health status of the population, including the results of any research demonstrating the efficacy of the benefit or service compared to alternatives, including not providing the benefit or service.

(D) The extent to which mandating or repealing the benefits or services would not diminish or eliminate access to currently available health care benefits or services.

(3) Financial impacts, including, but not limited to, all of the following:

(A) The extent to which the coverage or repeal of coverage will increase or decrease the benefit or cost of the benefit or service.

(B) The extent to which the coverage or repeal of coverage will increase the utilization of the benefit or service, or will be a substitute for, or affect the cost of, alternative benefits or services.

(C) The extent to which the coverage or repeal of coverage will increase or decrease the administrative expenses of health care service plans and health insurers and the premium and expenses of subscribers, enrollees, and policyholders.

(D) The impact of this coverage or repeal of coverage on the total cost of health care.

(E) The potential cost or savings to the private sector, including the impact on small employers as defined in paragraph (1) of subdivision (l) of Section 1357, the Public Employees' Retirement System, other retirement systems funded by the state or by a local government, individuals purchasing individual health insurance, and publicly funded state health

insurance programs, including the Medi-Cal program and the Healthy Families Program.

(F) The extent to which costs resulting from lack of coverage or repeal of coverage are or would be shifted to other payers, including both public and private entities.

(G) The extent to which mandating or repealing the proposed benefit or service would not diminish or eliminate access to currently available health care benefits or services.

(H) The extent to which the benefit or service is generally utilized by a significant portion of the population.

(I) The extent to which health care coverage for the benefit or service is already generally available.

(J) The level of public demand for health care coverage for the benefit or service, including the level of interest of collective bargaining agents in negotiating privately for inclusion of this coverage in group contracts, and the extent to which the mandated benefit or service is covered by self-funded employer groups.

(K) In assessing and preparing a written analysis of the financial impact of legislation proposing to mandate a benefit or service and legislation proposing to repeal a mandated benefit or service pursuant to this paragraph, the Legislature requests the University of California to use a certified actuary or other person with relevant knowledge and expertise to determine the financial impact.

(b) The Legislature requests that the University of California provide every analysis to the appropriate policy and fiscal committees of the Legislature not later than 60 days after receiving a request made pursuant to Section 127661. In addition, the Legislature requests that the university post every analysis on the Internet and make every analysis available to the public upon request.

(c) As used in this section, “legislation proposing to mandate a benefit or service” means a proposed statute that requires a health care service plan or a health insurer, or both, to do any of the following:

(1) Permit a person insured or covered under the policy or contract to obtain health care treatment or services from a particular type of health care provider.

(2) Offer or provide coverage for the screening, diagnosis, or treatment of a particular disease or condition.

(3) Offer or provide coverage of a particular type of health care treatment or service, or of medical equipment, medical supplies, or drugs used in connection with a health care treatment or service.

(d) As used in this section, “legislation proposing to repeal a mandated benefit or service” means a proposed statute that, if enacted, would become operative on or after January 1, 2008, and would repeal an existing requirement that a health care service plan or a health insurer, or both, do any of the following:

(1) Permit a person insured or covered under the policy or contract to obtain health care treatment or services from a particular type of health care provider.

(2) Offer or provide coverage for the screening, diagnosis, or treatment of a particular disease or condition.

(3) Offer or provide coverage of a particular type of health care treatment or service, or of medical equipment, medical supplies, or drugs used in connection with a health care treatment or service.

SEC. 2. Section 127662 of the Health and Safety Code is amended to read:

127662. (a) In order to effectively support the University of California and its work in implementing this chapter, there is hereby established in the State Treasury, the Health Care Benefits Fund. The university's work in providing the bill analyses shall be supported from the fund.

(b) For fiscal years 2006–07 to 2009–10, inclusive, each health care service plan, except a specialized health care service plan, and each health insurer, as defined in Section 106 of the Insurance Code, shall be assessed an annual fee in an amount determined through regulation. The amount of the fee shall be determined by the Department of Managed Health Care and the Department of Insurance in consultation with the university and shall be limited to the amount necessary to fund the actual and necessary expenses of the university and its work in implementing this chapter. The total annual assessment on health care service plans and health insurers shall not exceed two million dollars (\$2,000,000).

(c) The Department of Managed Health Care and the Department of Insurance, in coordination with the university, shall assess the health care service plans and health insurers, respectively, for the costs required to fund the university's activities pursuant to subdivision (b).

(1) Health care service plans shall be notified of the assessment on or before June 15 of each year with the annual assessment notice issued pursuant to Section 1356. The assessment pursuant to this section is separate and independent of the assessments in Section 1356.

(2) Health insurers shall be noticed of the assessment in accordance with the notice for the annual assessment or quarterly premium tax revenues.

(3) The assessed fees required pursuant to subdivision (b) shall be paid on an annual basis no later than August 1 of each year. The Department of Managed Health Care and the Department of Insurance shall forward the assessed fees to the Controller for deposit in the Health Care Benefits Fund immediately following their receipt.

(4) "Health insurance," as used in this subdivision, does not include Medicare supplement, vision-only, dental-only, or CHAMPUS supplement insurance, or hospital indemnity, accident-only, or specified disease insurance that does not pay benefits on a fixed benefit, cash payment only basis.

SEC. 3. Section 127664 of the Health and Safety Code is amended to read:

127664. The Legislature requests the University of California to submit a report to the Governor and the Legislature by January 1, 2010, regarding the implementation of this chapter.

SEC. 4. Section 127665 of the Health and Safety Code is amended to read:

127665. This chapter shall remain in effect until January 1, 2011, and shall be repealed as of that date, unless a later enacted statute that becomes operative on or before January 1, 2011, deletes or extends that date.

This bill would change the repeal date to January 1, 2013.

(8) Existing law establishes the Local Education Agency Medi-Cal Recovery Account in the Special Deposit Fund, to be used only to support the department in meeting the requirements of the above provisions, and specifies a formula for funding and staffing activities provided for under these provisions.

Existing law provides that as of January 1, 2010, unless the Legislature enacts a new statute or extends the date beyond January 1, 2010, all funds in the Local Education Agency Medi-Cal Recovery Account shall be returned proportionately to all local education agencies whose federal Medicaid funds were used to create the account.

This bill would rename the account the Local Educational Agency Medi-Cal Recovery Fund.

This bill would also provide that, as of January 1, 2013, unless the Legislature enacts a new statute or extends the repeal date, all funds in the Local Educational Agency Medi-Cal Recovery Fund shall be returned proportionally to all local educational agencies whose federal Medicaid funds were used to create the fund.

(9) Existing law, until January 1, 2011, requests the University of California to establish the California Health Benefit Review Program to assess legislation proposing a mandated health benefit or service, as defined, to be provided by health care service plans and health insurers, and to prepare a written analysis in accordance with specified criteria.

This bill would extend the repeal date of the above provisions to June 30, 2015.

(10) Existing law requests the University of California to submit a report to the Governor and the Legislature no later than January 1, 2010, regarding the implementation of the above provisions.

This bill would, instead, request the University of California to submit a report no later than January 1, 2014.

(11) Existing law, for fiscal years 2006–07 to 2009–10, inclusive, provides funding for the University of California's implementation of the above provisions from a fee imposed upon health care service plans and health insurers, which would not exceed a total of \$2,000,000, and is to be deposited in the Health Care Benefits Fund.

This bill, instead, provides for the imposition of that fee for fiscal years 2010–11 to 2014–15, inclusive.

(12) Existing law requires the State Department of Public Health to maintain a program for the control of tuberculosis. Existing law, until January 1, 2011, requires a local health department that elects to participate in the program to provide for certification for one year, by the local health officer, of tuberculin skin test technicians.

This bill would delete the repeal date of these provisions, thereby extending the operation of these provisions indefinitely.

(13) This bill would incorporate additional changes to Section 6276.24 of the Government Code proposed by SB 359, that would become operative only if SB 359 and this bill are both chaptered and become effective on or

(2) Practical instruction, under the supervision of a licensed physician or registered nurse at the local health department, including the successful placement and correct measurement of 10 tuberculin skin tests, at least five of which are deemed positive by the licensed physician or registered nurse supervising the practical instruction.

(h) The local health officer or the tuberculosis controller may deny or revoke the certification of a tuberculin skin test technician if the local health officer or the tuberculosis controller finds that the technician is not in compliance with this section.

(i) Each county or city participating in the program under this section using tuberculin skin test technicians, that elects to participate on or after January 1, 2005, shall submit to the CTCA a survey and an evaluation of its findings, including a review of the aggregate report, by July 1, 2006, and by July 1 of each year thereafter to, and including, July 1, 2011. The report shall include the following:

(1) The number of persons trained and certified as tuberculin skin test technicians in that city or county.

(2) The estimated number of tuberculin skin tests placed by tuberculin skin test technicians in that city or county.

(j) By July 1, 2008, the CTCA shall submit a summary of barriers to implementing the tuberculosis technician program in the state to the department and to the appropriate policy and fiscal committees of the Legislature.

(k) The local health officer of each participating city or county shall report to the Tuberculosis Control Branch within the department any adverse event that he or she determines has resulted from improper tuberculin skin test technician training or performance.

SEC. 20. Section 127662 of the Health and Safety Code is amended to read:

127662. (a) In order to effectively support the University of California and its work in implementing this chapter, there is hereby established in the State Treasury, the Health Care Benefits Fund. The university's work in providing the bill analyses shall be supported from the fund.

(b) For fiscal years 2010–11 to 2014–15, inclusive, each health care service plan, except a specialized health care service plan, and each health insurer, as defined in Section 106 of the Insurance Code, shall be assessed an annual fee in an amount determined through regulation. The amount of the fee shall be determined by the Department of Managed Health Care and the Department of Insurance in consultation with the university and shall be limited to the amount necessary to fund the actual and necessary expenses of the university and its work in implementing this chapter. The total annual assessment on health care service plans and health insurers shall not exceed two million dollars (\$2,000,000).

(c) The Department of Managed Health Care and the Department of Insurance, in coordination with the university, shall assess the health care service plans and health insurers, respectively, for the costs required to fund the university's activities pursuant to subdivision (b).

(1) Health care service plans shall be notified of the assessment on or before June 15 of each year with the annual assessment notice issued pursuant to Section 1356. The assessment pursuant to this section is separate and independent of the assessments in Section 1356.

(2) Health insurers shall be noticed of the assessment in accordance with the notice for the annual assessment or quarterly premium tax revenues.

(3) The assessed fees required pursuant to subdivision (b) shall be paid on an annual basis no later than August 1 of each year. The Department of Managed Health Care and the Department of Insurance shall forward the assessed fees to the Controller for deposit in the Health Care Benefits Fund immediately following their receipt.

(4) "Health insurance," as used in this subdivision, does not include Medicare supplement, vision-only, dental-only, or CHAMPUS supplement insurance, or hospital indemnity, accident-only, or specified disease insurance that does not pay benefits on a fixed benefit, cash payment only basis.

SEC. 21. Section 127664 of the Health and Safety Code is amended to read:

127664. The Legislature requests the University of California to submit a report to the Governor and the Legislature by January 1, 2014, regarding the implementation of this chapter.

SEC. 22. Section 127665 of the Health and Safety Code is amended to read:

127665. This chapter shall remain in effect until June 30, 2015, and shall be repealed as of that date, unless a later enacted statute that becomes operative on or before June 30, 2015, deletes or extends that date.

SEC. 23. Section 128730 of the Health and Safety Code is amended to read:

128730. (a) Effective January 1, 1986, the office shall be the single state agency designated to collect the following health facility or clinic data for use by all state agencies:

(1) That data required by the office pursuant to Section 127285.

(2) That data required in the Medi-Cal cost reports pursuant to Section 14170 of the Welfare and Institutions Code.

(3) Those data items formerly required by the California Health Facilities Commission that are listed in Sections 128735 and 128740. Information collected pursuant to subdivision (g) of Section 128735 and Sections 128736 and 128737 shall be made available to the State Department of Health Care Services and the State Department of Public Health. The departments shall ensure that the patient's rights to confidentiality shall not be violated in any manner. The departments shall comply with all applicable policies and requirements involving review and oversight by the State Committee for the Protection of Human Subjects.

(b) The office shall consolidate any and all of the reports listed under this section or Sections 128735 and 128740, to the extent feasible, to minimize the reporting burdens on, provided, however, that the office shall neither add nor delete data items from the Hospital Discharge Abstract Data



Appendix 2: CHBRP List of Reports, Letters, and Products, 2006-2009

2006

California Health Benefits Review Program (CHBRP). (2006). *Analysis of Senate Bill 1508: Use of Propofol for Colonoscopies*. Report to California State Legislature. Oakland, CA: CHBRP. 06-05. Available at: http://www.chbrp.org/documents/sb_1508fnlrpt.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2006). *Analysis of Senate Bill 1245: Health Care Coverage: Cervical Cancer Screening Test*. Report to California State Legislature. Oakland, CA: CHBRP. 06-04. Available at: http://www.chbrp.org/documents/sb_1245final.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2006). *Analysis of Senate Bill 1223: Hearing Aids for Children*. Report to California State Legislature. Oakland, CA: CHBRP. 06-03. Available at: http://www.chbrp.org/documents/sb_1223fnl.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2006). *Analysis of Assembly Bill 2281: High Deductible Health Care Coverage*. Report to California State Legislature. Oakland, CA: CHBRP. 06-07. Available at: http://www.chbrp.org/documents/ab_2281final.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2006). *Analysis of Assembly Bill 2012-Amended: Orthotic and Prosthetic Devices*. Report to California State Legislature. Oakland, CA: CHBRP. 06-09. Available at: http://www.chbrp.org/documents/ab_2012final_amended.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2006). *Analysis of Assembly Bill 2012: Orthotic and Prosthetic Devices*. Report to California State Legislature. Oakland, CA: CHBRP. 06-06. Available at: http://www.chbrp.org/documents/ab_2012final.pdf.

California Health Benefits Review Program (CHBRP). (2006). *Analysis of Assembly Bill 264-Amended: Pediatric Asthma Self-Management Training and Education Services for Children at High Risk*. Letter to California State Legislature. Oakland, CA. Available at: http://www.chbrp.org/documents/ab_264fnljhtranslr60806.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2006). *Analysis of Assembly Bill 264-Amended: Pediatric Self-Management Training and Education Services for Children at High Risk*. Report to California State Legislature. Oakland, CA: CHBRP. 06-08. Available at: http://www.chbrp.org/documents/ab_264fnlegis.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2006). *Analysis of Assembly Bill 264: Pediatric Self-Management Training and Education Services*. Report to California State Legislature. Oakland, CA: CHBRP. 06-02. Available at: http://www.chbrp.org/documents/ab_264rpt030306fnl.pdf. Accessed on October 30, 2009.

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California Health Benefits Review Program (CHBRP). (2007). *Analysis of the Potential Impacts of Senate Bill 365: Out-of-State Carriers*. Report to California State Legislature. Oakland, CA: CHBRP. 07-06. Available at: http://www.chbrp.org/documents/sb_365_final_leg.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2007). *Analysis of Senate Bill 24: Tobacco Cessation*. Report to California State Legislature. Oakland, CA: CHBRP. 07-04. Available at: http://www.chbrp.org/documents/sb_24leg.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2007). *Analysis of Assembly Bill 1461: Alcohol and Drug Abuse Exclusion*. Report to California State Legislature. Oakland, CA: CHBRP. CHBRP 07-05. Available at: http://www.chbrp.org/documents/ab_1461_final_leg.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2007). *Analysis of Assembly Bill 1429 (Evans), Human Papillomavirus Vaccination*. Letter to California State Legislature. Oakland, CA: CHBRP 07-05. Available at: http://www.chbrp.org/documents/ab_1429folfnl.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2007). *Analysis of Assembly Bill 1429: Human Papillomavirus Vaccination*. Report to California State Legislature. Oakland, CA: CHBRP. 07-02. Available at: http://www.chbrp.org/documents/ab_1429_final_leg.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2007). *Analysis of Assembly Bill 1214: Waiver of Benefits*. Report to California State Legislature. Oakland, CA: CHBRP. 07-09. Available at: http://www.chbrp.org/documents/ab_1214_report.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2007). *Analysis of Assembly Bill 423: Health Care Coverage: Mental Health Services*. Report to California State Legislature. Oakland, CA: CHBRP. 07-03. Available at: http://www.chbrp.org/documents/ab_423fnl.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2007). *Analysis of Assembly Bill 368: Mandate to Offer Coverage for Hearing Aids for Children*. Report to California State Legislature. Oakland, CA: CHBRP. 07-01. Available at: http://www.chbrp.org/documents/ab_368_report_leg.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2007). *Analysis of Assembly Bill 54: Healthcare Coverage: Acupuncture*. Report to California State Legislature. Oakland, CA: CHBRP. 07-07. Available at: http://www.chbrp.org/documents/ab_54leg.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2007). *Analysis of Assembly Bill 30: Health Coverage: Inborn Errors of Metabolism*. Report to California State Legislature. Oakland, CA: CHBRP. 07-08. Available at: http://www.chbrp.org/documents/ab_30_final_legis.pdf. Accessed on October 30, 2009.

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California Health Benefits Review Program (CHBRP). *Financial Impact Analysis*. Public Presentation; January, 2007; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Medical Effectiveness Review*. Public Presentation; January, 2007; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Public Health Impact Analysis*. Public Presentation; January, 2007; Sacramento, CA.

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California Health Benefits Review Program (CHBRP). (2008). *Policy Considerations Relevant to Senate Bill 1522: Coverage Choice Categories*. Issue Brief. Oakland, CA. Available at: http://www.chbrp.org/documents/sb_1522fnl.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2008). *Analysis of Senate Bill 1198: Health Care Coverage: Durable Medical Equipment*. Report to California State Legislature. Oakland, CA: CHBRP. 08-02. Available at: http://www.chbrp.org/documents/sb_1198_report.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2008) *Analysis of Assembly Bill 2234: Health Care Coverage: Breast Conditions*. Report to California State Legislature. Oakland, CA: CHBRP. 08-01. Available at: http://www.chbrp.org/documents/ab_2234_report.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2008). *Analysis of Assembly Bill 2174: Coverage for Amino Acid–Based Elemental Formulas*. Report to California State Legislature. Oakland, CA: CHBRP. 08-06. Available at: http://www.chbrp.org/documents/ab_2174_report.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2008). *Analysis of Assembly Bill 1962: Maternity Services*. Report to California State Legislature. Oakland, CA: CHBRP. 08-03. Available at: http://www.chbrp.org/documents/ab_1962_report.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2008). *Analysis of Assembly Bill 1894: HIV Testing*. Report to California State Legislature. Oakland, CA: CHBRP. 08-04. Available at: http://www.chbrp.org/documents/ab_1894fnl.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2008). *Analysis of Assembly Bill 1887: Health Care Coverage: Mental Health Services*. Report to California State Legislature. Oakland, CA: CHBRP. 08-07. Available at: http://www.chbrp.org/documents/ab_1887_report.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2008). *Analysis of Assembly Bill 1774: Health Care Coverage: Gynecological Cancer Screening Tests*. Report to California State Legislature. Oakland, CA: CHBRP. 08-05. Available at: http://www.chbrp.org/documents/ab_1774fnl.pdf. Accessed on October 30, 2009.

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California Health Benefits Review Program (CHBRP). *The California Health Benefits Review Program's Approach to Evaluating Legislative Proposals: General Overview*. Public Presentation; January, 2008; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Financial Impact Analysis*. Public Presentation; January, 2008; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Medical Effectiveness Review*. Public Presentation; January, 2008; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Public Health Impact Analysis*. Public Presentation; January, 2008; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *California Health Benefits Review Program General Overview*. Public Presentation; October, 2008; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Health Insurance Benefit Mandates and Regulation*. Public Presentation; October, 2008; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Is it Lack of Coverage or How Care Is Delivered for a Covered Benefit?* Public Presentation; October, 2008; Sacramento, CA.

2009

California Health Benefits Review Program (CHBRP). (2009). *Analysis of Senate Bill 161: Health Care Coverage: Chemotherapy Treatment*. Report to California State Legislature. Oakland, CA: CHBRP. 09-07. Available at: http://www.chbrp.org/documents/sb_161final.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2009). *Analysis of Senate Bill 158: Human Papillomavirus Vaccination*. Report to California State Legislature. Oakland, CA: CHBRP. 09-05. Available at: http://www.chbrp.org/documents/sb_158_rpt.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2009). *Analysis of Senate Bill 92: Health Care Reform*. Report to California State Legislature. Oakland, CA: CHBRP. 09-06. Available at: http://www.chbrp.org/documents/sb_92_rptfnl.pdf. Accessed on October 30, 2009.

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California Health Benefits Review Program (CHBRP). (2009). *Policy Considerations Relevant to Assembly Bill 786*. Issue Analysis. Oakland, CA. Available at: http://www.chbrp.org/documents/ab_786final.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2009). *Analysis of Assembly Bill 513, Health Care Coverage: Breast-Feeding*. Report to California State Legislature. Oakland, CA: CHBRP. 09-11. Available at: http://www.chbrp.org/documents/ab_513final.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2009). *Analysis of Assembly Bill 259: Certified Nurse Midwives: Direct Access*. Report to California State Legislature. Oakland, CA: CHBRP. 09-08. Available at: http://www.chbrp.org/documents/ab_259final.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2009). *Analysis of Assembly Bill 244: Health Care Coverage: Mental Health Services*. Report to California State Legislature. Oakland, CA: CHBRP. 09-09. Available at: http://www.chbrp.org/documents/ab_244final.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2009). *Analysis of Assembly Bill 214, Health Care Coverage: Durable Medical Equipment*. Report to California State Legislature. Oakland, CA: CHBRP. 09-04. Available at: http://www.chbrp.org/documents/ab_214fml.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2009). *Analysis of Assembly Bill 163: Amino Acid-Based Elemental Formulas*. Report to California State Legislature. Oakland, CA: CHBRP. 09-03. Available at: http://www.chbrp.org/documents/ab_163leg.pdf. Accessed on October 30, 2009.

California Health Benefits Review Program (CHBRP). (2009). *Analysis of Assembly Bill 98: Maternity Services*. Report to California State Legislature. Oakland, CA: CHBRP. 09-02. Available at: http://www.chbrp.org/documents/ab_98toleg.pdf. Accessed on October 30, 2009.

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California Health Benefits Review Program (CHBRP). *Medical Effectiveness Analysis*. Public Presentation; January, 2009; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Projecting Cost and Public Health Impacts*. Public Presentation; January, 2009; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Background: Health Insurance in California*. Public Presentation; November, 2009; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Benefit Mandates*. Public Presentation; November, 2009; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Key Features of Health Insurance Coverage*. Public Presentation; November, 2009; Sacramento, CA.

California Health Benefits Review Program (CHBRP). *Review: A Benefit Mandate Bill from a Prior Session*. Public Presentation; November, 2009; Sacramento, CA.



Appendix 3: Task Force Membership List

Task Force Members	Task Force Contributors	
<p>Helen Halpin, ScM, PhD <i>Vice Chair, Public Health,</i> University of California, Berkeley</p>	<p>Wade Aubry, MD University of California, San Francisco</p>	<p>Shana Lavarreda, PhD, MPP University of California, Los Angeles</p>
<p>Robert Kaplan, PhD <i>Vice Chair, Cost,</i> University of California, Los Angeles</p>	<p>Yair Babad, PhD Professor Emeritus, University of Illinois, University of California, Los Angeles</p>	<p>Stephen McCurdy, MD, MPH University of California, Davis</p>
<p>Ed Yelin, PhD <i>Vice Chair, Medical Effectiveness,</i> University of California, San Francisco</p>	<p>Tanya Bentley, PhD University of California, Los Angeles</p>	<p>Sara McMenamin, PhD University of California, Berkeley</p>
<p>Wayne Dysinger, MD, MPH Loma Linda Medical Center</p>	<p>Nicole Bellows, PhD University of California, Berkeley</p>	<p>Ying-Ying Meng, DrPh University of California, Los Angeles</p>
<p>Theodore Ganiats, MD University of California, San Diego</p>	<p>Dasha Cherepanov, PhD University of California, Los Angeles</p>	<p>Alexis Munoz, MPH University of California, San Diego</p>
<p>Sheldon Greenfield, MD University of California, Irvine</p>	<p>Janet Coffman, PhD University of California, San Francisco</p>	<p>Dominique Ritley, MPH University of California, Davis</p>
<p>Kathleen Johnson, PharmD, MPH, PhD University of Southern California</p>	<p>Mi-Kyung Hong, MPH University of California, San Francisco</p>	<p>Lori Uyeno, MD University of California, Los Angeles</p>
<p>Thomas MaCurdy, PhD Stanford University</p>		
<p>Joy Melnikow, MD, MPH University of California, Davis</p>		



Appendix 4: NAC Review Criteria and Guidelines

A National Advisory Council (NAC) reviews the California Health Benefits Review Program's (CHBRP's) analyses for quality and objectivity before they are transmitted to the Legislature. This document provides the criteria and guidelines used for these reviews.

Guidelines for NAC Review of Draft Bill Analyses

Purpose of the review: To help assure the accuracy, responsiveness, completeness, and clarity of CHBRP analyses of proposed health insurance benefit mandates and repeals undertaken for the California legislature.

Structure of bill analyses: The bill analyses are structured around specific issues mentioned in CHBRP's authorizing statute, which asks the University of California to address the medical impacts of mandated services, as well as the estimated financial and public health impacts, of each bill. When a particular piece of legislation would mandate something other than the coverage of services (e.g., access to certain types of providers), CHBRP may decide to modify the structure of the written report. To provide the Legislature with other information it deems more relevant to the bill's potential impacts.

Audience: CHBRP's primary audience is the California State Legislature; CHBRP submits each report to the committee that requested it (either the Assembly Committee on Health or the Senate Committee on Health) as well as to the author(s) of the legislation analyzed. Other members and committees of the Legislature, as well as California state government agencies such as the Office of the Governor, the Departments of Managed Health Care and Insurance, and the California Public Employees Retirement System (CalPERS), may also be interested in our analyses. CHBRP's authorizing statute further requests CHBRP to make its written analyses available to the public on its website, www.chbrp.org. There may be additional interest in CHBRP reports both in California and nationally.

Review Criteria: CHBRP asks the Peer reviewer to comment on the extent to which the report meets the criteria of 1) accuracy and objectivity 2) responsiveness to the legislative request 3) completeness, and 4) clarity of presentation using the specific questions on the review form as a guide to the extent they are helpful.

Review of CHBRP Draft Bill Analysis

Date:

Reviewer Name:

Bill Number or Name of Draft Report:

Using as much space as you need, please comment in the boxes below on the extent to which the draft report meets each of the following criteria using the specific questions as a guide to the extent they are helpful. There is space at the bottom of the form for other general comments or mention of specific parts of the text about which you have comments. **When possible please indicate whether your comment might fall into the following categories 1) suggestions 2) issues or items that you identify that you want to make sure the authors are aware of or are considering 3) serious concerns that must be addressed.**

Accuracy and Objectivity:

- Are conclusions adequately supported with objective evidence?
 - Does the analysis adequately discuss situations for which evidence does not exist and discuss the implications of this lack of evidence?
 - Does the analysis avoid perceptions of bias, for instance, by noting when cited studies are conducted by interested parties or by properly framing findings that may have resulted from biased research or reporting?
 - Are potentially politically-sensitive issues handled appropriately, using neutral language?
-

Responsiveness:

- Are the analyses, findings and conclusions relevant to the bill in question?
-

Completeness:

- Does the analysis adequately address each of the issues of medical, financial, and public health impacts specified in CHBRP's authorizing statute? If not, does the text or appendices offer an explanation? *(See attached Check list)*
 - To the best of your knowledge, does the report exclude any high-quality evidence that would alter the findings or conclusions of the report?
-

Clarity:

- Does the executive summary concisely and clearly summarize the findings described in the analysis?
 - Are the findings clearly and concisely stated in understandable language?
 - Is supporting evidence described in sufficient detail?
 - Upon first mention, are technical terms defined appropriately for an interested lay audience?
 - Is the organization of the report easy to follow and appropriate for the topic?
-

Other Comments:

The California Health Benefits Review Program: National Advisory Council Review Criteria

Issues to be Addressed in CHBRP Analyses (Source: California Health and Safety Code at Section 127660 et. seq.)

<p>(1) Public health impacts, including, but not limited to, all of the following:</p>	<p>(A) The impact on the health of the community, including the reduction of communicable disease and the benefits of prevention such as those provided by childhood immunizations and prenatal care.</p> <p>(B) The impact on the health of the community, including diseases and conditions where gender and racial disparities in outcomes are established in peer-reviewed scientific and medical literature.</p> <p>(C) The extent to which the proposed service or repeal of existing services impacts premature death and the economic loss associated with disease.</p>
<p>(2) Medical impacts, including, but not limited to, all of the following:</p>	<p>(A) The extent to which the benefit or service is generally recognized by the medical community as being effective in the screening, diagnosis, or treatment of a condition or disease, as demonstrated by a review of scientific and peer-reviewed medical literature.</p> <p>(B) The extent to which the benefit or service is generally available and utilized by treating physicians.</p> <p>(C) The contribution of the benefit or service to the health status of the population, including the results of any research demonstrating the efficacy of the benefit or service compared to alternatives, including not providing the benefit or service. <i>[Note that this is addressed in the Public Health Impacts section since the criterion is similar to (A).]</i></p> <p>(D) The extent to which the proposed services do not diminish or eliminate access to currently available health care services. <i>[Note that this is addressed in the Financial Impacts section since the criterion is similar to (G).]</i></p>
<p>(3) Financial impacts, including, but not limited to, all of the following:</p>	<p>(A) The extent to which the coverage, or repeal of coverage will increase or decrease the benefit or cost of the service.</p> <p>(B) The extent to which the coverage, or repeal of coverage will increase the utilization of the benefit or service, or will be a substitute for, or affect the cost of, alternative services.</p>

- (C) The extent to which the coverage, or repeal of coverage will increase or decrease the administrative expenses of health care service plans and health insurers and the premium and expenses of subscribers, enrollees, and policyholders.
- (D) The impact of this coverage, or repeal of coverage on the total cost of health care.
- (E) The potential cost or savings to the private sector, including the impact on small employers as defined in paragraph (1) of subdivision (I) of Section 1357, the Public Employees' Retirement System, other retirement systems funded by the state or by a local government, individuals purchasing individual health insurance, and publicly funded state health insurance programs, including the Medi-Cal program[¶] and the Healthy Families Program.[§]
- (F) The extent to which costs resulting from lack of coverage or repeal of coverage are shifted to other payers, including both public and private entities.
- (G) The extent to which mandating or repealing the proposed benefit or service does not diminish or eliminate access to currently available health care services.
- (H) The extent to which the benefit or service is generally utilized by a significant portion of the population.
- (I) The extent to which health care coverage for the benefit or service is already generally available.
- (J) The level of public demand for health care coverage for the benefit or service, including the level of interest of collective bargaining agents in negotiating privately for inclusion of this coverage in group contracts, and the extent to which the mandated benefit or service is covered by self-funded employer groups.
- (K) In assessing and preparing a written analysis of the financial impact of a mandated benefit or legislation proposing to repeal a mandated benefit or service pursuant to this paragraph, the Legislature requests the University of California to use a certified actuary or other person with relevant knowledge and expertise to determine the financial impact.

[¶] Medi-Cal is California's Medicaid program. [§] Healthy Families is California's State Children's Health Insurance Program.



Appendix 5: National Advisory Council Membership List

Lauren LeRoy, PhD, Chair
President and CEO
Grantmakers In Health
Washington, DC

John Bertko, FSA, MAAA
Former Vice President and Chief Actuary
Humana Inc.
Flagstaff, AZ

Deborah Chollet, PhD
Senior Fellow
Mathematica Policy Research
Washington, DC

Michael Connelly, JD
President and CEO
Catholic Healthcare Partners
Cincinnati, OH

Maureen Cotter, ASA
Founder and Owner
Maureen Cotter & Associates, Inc.
Dearborn, MI

Susan Dentzer
Editor-In-Chief
Health-Affairs
Bethesda, MD

Joe Ditre, JD
Executive Director
Consumers for Affordable Health Care
Augusta, ME

Allen D. Feezor
President and CEO
NC Foundation for Advanced Health Programs
Raleigh, NC

Charles "Chip" Kahn, MPH
President and CEO
Federation of American Hospitals
Washington, DC

Jeffrey Lerner, PhD
President and CEO
ECRI Institute Headquarters
Plymouth Meeting, PA 19462

Trudy Lieberman
Director, Health and Medicine Reporting Program
Graduate School of Journalism, CUNY
New York, NY

Marilyn Moon, PhD
Vice President and Director, Health Program
American Institutes for Research
Silver Spring, MD

Carolyn Pare
CEO
Buyers Health Care Action Group
Bloomington, MN

Michael Pollard
Consultant, Federal Policy Regulation
Medco Health Solutions
Washington, DC

Karen Pollitz, MPP
Project Director
Georgetown University Health Policy Institute
Washington, DC

Christopher Queram
President and Chief Executive Officer
Wisconsin Collaborative for Healthcare Quality
Madison, WI

Richard Roberts, MD, JD
Professor of Family Medicine
University of Wisconsin-Madison
Madison, WI

Frank Samuel, LLB
Former Science and Technology Advisor
State of Ohio
Columbus, OH

Patricia Smith
President and CEO
Alliance of Community Health Plans
Washington, DC

Prentiss Taylor, MD
Regional Center Medical Director
Advocate Health Centers
Advocate Health Care
Chicago, IL



Appendix 6: CHBRP Staff List

Susan Philip, MPP

Director

John Lewis, MPA

Principal Analyst

David Guarino

Assistant Analyst

Karla Wood

Program Specialist

Mailing Address:

California Health Benefits Review Program
University of California, Office of the President
Office of Health Sciences and Services
1111 Franklin St., 11th Floor
Oakland, CA 94607-5200

CHBRP Main Line: (510) 287-3876

Fax: (510) 763-4253

Email: chbrpinfo@chbrp.org

Web site: www.chbrp.org



Appendix 7: CHBRP Actuaries

The California Health Benefits Review Program's (CHBRP's) authorizing statute requires the University of California (UC) to use a certified actuary or other person with relevant knowledge and expertise to determine the financial impact of proposed health insurance benefit mandates. Specifically, California Health and Safety Code Section 12766 (a)(3) (K) states, "In assessing and preparing a written analysis of the financial impact of legislation proposing to mandate a benefit or service and legislation proposing to repeal a mandated benefit or service pursuant to this paragraph, the Legislature requests the University of California to use a certified actuary or other person with relevant knowledge and expertise to determine the financial impact."

CHBRP originally retained Milliman, Inc., to serve this function in 2003. In 2007, UC issued a request for proposals and competitively re-bid the contract. This was awarded to Milliman, Inc.

The actuarial firm has made a commitment for a senior actuary to conduct internal peer review and provide analytic services if needed.

Senior consulting actuaries on CHBRP projects are:

Bob Cosway, FSA-MAAA

Milliman, Inc.

9255 Towne Center Drive, Suite 900

San Diego, CA 92121

Susan Pantely, FSA, MAA

Milliman, Inc.

650 California Street, 17th Floor

San Francisco, CA 94108

Jay Rips, FSA, MAA

Milliman, Inc.

650 California Street, 17th Floor

San Francisco, CA 94108

Information on Milliman is available at:

<http://www.milliman.com>



Appendix 8: CHBRP Librarians

Bruce Abbott, MLS

Reference Librarian
Health Sciences Library
University of California, Davis

Stephen Clancy, MLS, AHIP

Health Sciences Librarian
Science Library
University of California, Irvine

Penny Coppernoll-Blach, MLIS

Reference Coordinator
Biomedical Library
University of California, San Diego

Min-Lin Fang, MLIS

Education Information Consultant
Library and Center for Knowledge Management
University of California, San Francisco



Appendix 9: Content Expert Identification, Screening, and Selection Protocol

This document clarifies the process and serves as a guideline by which the California Health Benefits Review Program (CHBRP) identifies, screens, selects, and compensates content experts for each bill analysis.

This process should be undertaken as early as possible—preferably one week before the Legislature’s request for the CHBRP bill analysis. If that is not possible, then this process should occur during days 0 to 4 of the 60-day time period.

Not all bill analyses require the use of a content expert. For example, for a bill that may have a small number of providers (e.g., transplant centers that conduct surgeries for HIV+ patients), the need for a content expert might be filled by conducting a survey of those providers, making use of in-house expertise or a combination of the above. This determination will be made on a case-by-case basis.

I. Criteria for Selecting the Content Expert

1. In general, content experts need clinical and/or health services research experience in order to:
 - Advise the medical effectiveness team and other members of the analytic team on:
 - Key literature to facilitate literature review and analysis to determine whether mandated benefit/service/treatment is clinically effective (e.g., state-of-the-art research, research specific to California, summary of evidence on effectiveness)
 - Search criteria for literature review (e.g., medical conditions and outcomes) to assure that the team is using the appropriate search terms to identify key articles
 - Research in progress that could affect the final conclusions of the effectiveness analysis
 - Clinical care management, controversies in practice, and knowledge of specialty society positions and guidelines
 - Advise the cost and public health teams on:
 - Incidence and prevalence rates of medical condition(s) addressed by the mandate
 - Bundle of services utilized, and the associated CPT codes, ICD-9 codes, pharmaceuticals, and devices
 - Will those newly covered by the mandate be likely to change utilization?
 - How would the mandate change physician practice patterns?
 - Will utilization of mandated benefit/service produce offsets in current or future utilization? In other words, does mandated benefit/service replace old interventions or become add-ons, complements, or substitute? Is there an associated time-horizon for those cost offsets (i.e., how long would it take for the health care system to realize the cost of those savings—1 year, 5 years, etc.)?

2. Content experts need to be interested in and willing to work in what may be a controversial area. CHBRP reports are sometimes used in an adversarial context. CHBRP needs to treat both sides of an issue in a balanced and fair manner in its reports.
 - Are they clearly identified with one side or another? It does not necessarily disqualify them but CHBRP may want to get a second reviewer identified with the other side.
 - How comfortable would they be if they were criticized by advocates on one side or another?
3. Content experts need to be available for consultation during the full 60-day analytic timeframe.
4. Content experts need to be available for at total of a least two working days during the first three weeks of the analytic timeframe.
5. Content experts must not have a financial, business, or professional conflict of interest. (See section below for Conflict-of-Interest Screening Questions.)

II. Process for Identifying Potential Content Experts

CHBRP staff will initiate the search for content experts by taking the following steps as needed:

1. Query full Faculty Task Force for recommendations
2. Query other research centers (e.g., Public Health Institute, RAND)
3. Query Milliman for suggestions
4. Identify NIH grant recipients in subject area
5. Identify those who may be affiliated with an Agency for Healthcare Research and Quality (AHRQ) Evidence-based Practice Center conducting related research
6. Work with librarian to search for most frequent and/or most recent authors of articles on subject, especially those who have been involved in Cochrane Collaboration reviews or have participated in the development of clinical guidelines
7. Solicit help from state and national specialty societies
8. Search Academy Health's expertise directory

III. Process for Screening Potential Content Experts' Qualifications, Interests, Availability

1. Initial Screening: CHBRP staff will conduct initial screening of content experts based on:
 - Clinical and/or health services research experience
 - Strengths and weaknesses of potential expert and how/whether best to use him/her. For example, if he/she would not be a good clinical expert but may be knowledgeable about insurance, access, and the health services research as it relates to the mandate, CHBRP may consider him/her as a potential reviewer.
 - Interest and willingness to work in a potentially controversial area
 - Availability in general but particularly during the first 3 or 4 days after CHBRP request and for review of draft report
 - Potential conflicts-of-interest (see following section)
2. Staff will follow-up with fax/e-mail if a written explanation is requested by content expert's assistant.
3. CHBRP staff may interview several potential content experts.
4. CHBRP staff will forward CVs and pertinent information about potential content experts to medical effectiveness, public health, and cost teams for consideration.

5. Once a potential content expert is identified and the analytic teams agree that the content expert meets criteria, CHBRP staff will forward questions to the content expert. A standard set of questions is below.

Standard Content Expert Questions to Support Literature Review, Cost & Utilization Baseline Analysis, and Public Health Baseline Analysis

- a. What medical condition(s) related to this mandated benefit, service, treatment have the highest prevalence?
- b. What is your view of the clinical effectiveness of this mandated benefit, service, or treatment for this condition(s)?
- c. What is your view of the cost effectiveness of this mandated benefit, service, or treatment for this condition(s)?
- d. Are there alternatives that are already generally covered services?
- e. What key literature will help facilitate literature review and analysis document evidence of the effectiveness of the mandated benefit/service/treatment (e.g., state of the art research, research in progress, research specific to California)?
- f. What are search criteria for literature review (e.g., conditions and outcomes) and search terms?
- g. What research in progress could affect the final conclusions of the effectiveness analysis?
- h. What are the clinical care management standards or practices associated with the mandate?
- i. What are the controversies in practice associated with this mandate?
- j. What are the specialty societies related to this mandated benefit and do they have positions or guidelines regarding the mandated benefit?
- k. Can you provide CHBRP with the names of any professional or trade journals that are specific to the medical condition or profession involved in delivering the treatment/service that may not be included in databases such as PubMed?
- l. What are the incidence and prevalence rates of the medical condition addressed by the mandate? What is the population used in the denominator to calculate these rates (entire population, women ages 50+, etc.)?
- m. Are there losses in productivity or economic losses associated with the medical condition?
- n. Based on your knowledge of the evidence, are you aware of disparities in the health status and outcomes for subpopulations (e.g., uninsured versus the insured, by gender, race, language, or socioeconomic status)?
- o. Are you aware of access issues to care for this benefit or service and if so, what do you see as the major barriers to access?
- p. Who are current users of care for the medical condition addressed by the mandate (e.g., women ages 50+)? What bundle of services do they utilize, and the associated CPT codes, ICD-9 codes, pharmaceuticals, devices, etc.?
- q. Who will be newly covered by the mandate? Specifically, how will utilization change as a result of the mandate? Will there be more users (change in utilization rates per 1,000), a different mix of services among current users (change in intensity of care per user), or both?
- r. Will utilization of the mandated benefit produce offsets in current or future utilization?

- s. Are you aware of any studies that look at the long-term benefits (i.e., greater than one year timeframe) for those who have received this benefit?

IV. Process for Screening Potential Content Experts' Potential Conflicts of Interest

The questions below are designed to prod the potential content expert to think of and flag potential conflicts of interest (COI) before they undergo the formal written COI review process. CHBRP staff will bring any issues that could potentially prohibit an individual from participating as an expert (but are not obvious grounds for recusal) to the CHBRP Director's (or the designee's) attention immediately.

1. Do you have any financial interest in the proposed mandated benefit?
 - Examples of financial conflicts: investments in pharmaceutical companies or medical device manufacturers; relations with drug company with products related to mandate, research funding or own investments related to this mandate?
2. Do you have an interest from an insurance perspective in the proposed mandated benefit?
 - Examples: Have they acted as expert witness, if so, for one or both sides? Member of a task force that has voted on benefit being mandated, testified or taken a public position on mandate?
3. Could your existing research create a perception of bias as it pertains to the proposed mandate?
 - This might arise if a content expert authored research that included recommendations that are substantially similar to or directly oppose the proposed mandate. CHBRP would not want to place a content expert in the position of having to objectively evaluate their own research. This is to limit the possibility that outside observers could perceive that our experts may have a documentable, preexisting bias that the outcome of the CHBRP review be consistent with their own research finding and prior recommendations. Since they are a content expert, it is likely that their name will come up in literature search; however, their work would need to be evaluated to determine whether there is potential for bias.

V. Selecting the Content Expert

1. If the content expert candidate indicates his/her ability, interest, willingness, availability to answer questions, then CHBRP staff will provide a COI form to complete and sign.
2. The content expert candidate completes the COI form and forwards it to CHBRP staff.
3. The COI application is reviewed by CHBRP's Director and, if necessary, legal staff at the University of California, Office of the President (UCOP).
4. CHBRP staff notifies the content expert candidate, and the CHBRP analytic teams of COI status.
5. A content expert candidate whose COI disclosures are cleared is eligible to provide his/her services. The final selection decision will be made in consensus with the analytic teams with greatest emphasis on the preferences of the medical effectiveness team.



Appendix 10: CHBRP's Conflict-of-Interest Policies: General Disclosure Form and NAC Disclosure Form

In order to avoid conflicts of interest, the Legislature requested the University of California to develop and implement conflict-of-interest provisions to prohibit a person from participating in any analysis in which the person knows or has reason to know he or she has a material financial interest, including but not limited to a person who has a consulting or other agreement with a person or organization that would be affected by the legislation.

CHBRP's authorizing statute includes the following provision:

Section 127663. In order to avoid conflicts of interest, the Legislature requests the University of California to develop and implement conflict-of-interest provisions to prohibit a person from participating in any analysis in which the person knows or has reason to know he or she has a material financial interest, including, but not limited to, a person who has a consulting or other agreement with a person or organization that would be affected by the legislation.

The following clarifies the process by which the California Health Benefits Review Program (CHBRP) implements this provision.

General request for conflict-of-interest (COI) form completion process:

- When a new CHBRP staff or faculty member is hired or designated to work on CHBRP analyses, the CHBRP Director sends them the standard form letter requesting them to complete a COI form. This letter contains instructions and the due date.
- The same applies for content experts or special reviewers requested to conduct analyses-specific work. However, the lead analyst may also send a request letter. In addition, the lead analyst and/or the lead from the CHBRP medical effectiveness team should initially screen the potential content expert by querying him/her about any potential conflicts of interest. (See Appendix 9: Content Expert Identification, Screening, and Selection Protocol)
- The CHBRP Program Specialist, and the CHBRP Director and the lead CHBRP analyst (if specific to a bill) should be carbon copied on the COI request e-mail.

General submission process:

- When a new or revised COI form is submitted, the original goes to the CHBRP Program Specialist, who will provide it to the CHBRP Director.
- The CHBRP Director will update the tracking database with the new information, and contact the person submitting the COI form to clarify any questions, if necessary.
- The CHBRP Director will consult the Academic Affairs, Director of Research Policy Development if there are any potential conflicts that require further vetting.

Ongoing Review of potential conflicts– reviewing and tracking:

- *Bill-specific conflicts of interest:* When the Legislature requests a new bill analysis, as part of the initial Faculty Task Force conference calls, CHBRP staff will ask potential team members for the bill analysis to assess potential conflicts of interest, and update their file, if necessary, before the analysis starts. Files can be updated with an e-mail providing information about the conflict. Both potential conflicts and recusals from a specific bill analysis should be documented in the file. The CHBRP Director will notify CHBRP staff (and sometimes the Faculty Task Force) when a conflict has been identified and when a recusal is confirmed. If a recusal applies for a specific bill analysis, the lead analyst is responsible to ensure that the appropriate recusal notations are made in the preface or back matter of the final report.
- *Ongoing tracking:* The CHBRP Program Specialist and the CHBRP Director are to check the database regularly to identify any missing forms or individuals that need follow up. They are to identify who must submit a form and keep track of who has/has not submitted their form. Appropriate follow up will be done to ensure completed and updated COI forms are maintained.
- *Annual Updates of COI forms:* Updates of all COI forms occur on an annual basis.
 1. The CHBRP Director will review the current form and determine whether updates need to be made.
 2. The CHBRP Program Specialist and CHBRP Director will work together to complete an update request to all CHBRP affiliated faculty and staff during the last quarter of the calendar year. If the information that was submitted the previous year is the same, individuals may check a box that stated “same as last year” and return it with their signature page.
 3. CHBRP Program Specialist will e-mail to faculty, CHBRP staff, NAC members, and other affiliated researchers and contractors a request to update and return all COI forms by the end of the calendar year.
 4. CHBRP Director will complete a review of all updates by the beginning of the Legislative session, or no later than January 30 of each year.

Forms:

- All CHBRP staff, faculty, affiliated researchers, analyst, actuaries, librarians, and content experts will complete the Standard COI Disclosure form (Attachment 1)
- All NAC members will complete NAC COI Disclosure form (Attachment 2).

Attachment 1: STANDARD COI DISCLOSURE FORM

**University of California (UC)
Form for Obtaining Background Information and Conflict of Interest Disclosure for
Activities Related to the California Health Benefits Review Program¹**

NAME: _____

TELEPHONE: _____

ADDRESS: _____

E-MAIL ADDRESS: _____

CURRENT
EMPLOYER: _____

THE DECLARATIONS IN THE ATTACHED FORM APPLY TO DECLARANT'S CONFLICTS OF INTERESTS IN REGARD TO HEALTH INSURANCE BENEFIT MANDATE REVIEWS CONDUCTED UNDER THE AUSPICES OF THE CALIFORNIA HEALTH BENEFITS REVIEW PROGRAM (CHBRP) BEGINNING JANUARY 1, 2009 AND ENDING DECEMBER 31, 2009.

There are two parts to this form, Part I -- Background Information, and Part II -- Conflict of Interest Disclosure. Please complete both parts, **sign** and **date** this form on the last page, and return the form to the CHBRP administrator who requested your participation in the activity to which this form applies. **Please retain a copy for your records.**

If some or all of the requested information is contained in a previously submitted copy of this form, you may revise and resubmit your previously submitted form, including additional responses or comments below as necessary and supplemented by a copy of your curriculum vitae.

You may opt to submit a copy of your curriculum vitae as your response, or to update your response, to Questions I-V, which follow on the next page.

IF YOUR INFORMATION HAS NOT CHANGED SINCE YOU LAST SUBMITTED A CONFLICT OF INTEREST DISCLOSURE FORM TO CHBRP, PLEASE SEE THE SIMPLIFIED SUBMISSION INSTRUCTIONS ON THE LAST PAGE OF THIS DOCUMENT.

¹ This form was modeled closely on a background and conflict of interest disclosure form designed by the National Academies of Sciences (NAS) for use with respect to studies relating to government regulation. The University of California and CHBRP are grateful to the NAS for extending its permission to use the NAS form. This CHBRP form may be subject to change. A substantially similar version of this form, "*For Activities Related to Government Regulation*", is to be used for members of scientific advisory panels that UC convenes at the request of the State and for UC-recommended experts whose reports and/or advice are to be provided to the state for official use in a government regulatory process. CHBRP is grateful also to the UC Office of Research for its assistance in developing this form.

This form and the information provided by you therein may be disclosable to the public under applicable state laws and regulations.

PART I -- BACKGROUND INFORMATION

Instructions

Please provide the information requested below regarding **relevant** organizational affiliations, government service, public statements and positions, research support, and additional information (if any). Information is "relevant" if it is related to -- and might reasonably be of interest to others concerning -- your knowledge, experience, and personal perspectives regarding the subject matter and issues to be addressed by the activity (e.g., service as a health insurance benefits mandate evaluator) for which this form is being prepared.

I. ORGANIZATIONAL AFFILIATIONS. Report your *relevant* business relationships (as an employee, owner, officer, director, consultant, etc.) and your relevant remunerated or volunteer non-business relationships (e.g., professional organizations, trade associations, public interest or civic groups, etc.).

II. GOVERNMENT SERVICE. Report your *relevant* service (full-time or part-time) with federal, state, or local government in the United States (including elected or appointed positions, employment, advisory board memberships, military service, etc.).

III. RESEARCH SUPPORT. Report *relevant* information regarding both public and private sources of research support (other than your present employer), including sources of funding, equipment, facilities, etc.

IV. PUBLIC STATEMENTS AND POSITIONS. List your *relevant* articles, testimony, speeches, etc., by date, title, and publication (if any) in which they appeared, or provide relevant representative examples if numerous. Provide a brief description of relevant positions of any organizations or groups with which you are closely identified or associated.

V. ADDITIONAL INFORMATION. If there are *relevant* aspects of your background or present circumstances not addressed above that might reasonably be construed by others as affecting your judgment in matters within the assigned task of the committee or other activity in which you have been invited to participate, and therefore might constitute an actual or potential source of bias, please describe them briefly.

PART II -- CONFLICT OF INTEREST DISCLOSURE

Instructions

When the State of California requests the University of California's assistance in convening scientific advisory committees, such as the California Health Benefits Review Program, (CHBRP) or asks UC for recommendations of scientific experts to produce reports, such as CHBRP's evaluations of health insurance mandates, for the purpose of providing expert advice intended to be used by the State in formulating state laws or regulations, it is essential that the work of the participants in such activities not be compromised by any significant conflict of interest.

For this purpose, **the term "conflict of interest" means any financial or other interest which conflicts with the service of the individual because it (1) could significantly impair the individual's objectivity or (2) could create an unfair competitive advantage for any person or organization.**

Except for those situations in which UC and/or the government agency requesting UC's and CHBRP's assistance determines that a conflict of interest is unavoidable and publicly discloses the conflict of interest, no individual can be appointed to serve (or continue to serve) on a UC-convened scientific advisory committee, such as CHBRP, or serve as a UC- or CHBRP-recommended expert evaluator when the report(s) developed by such service are intended to be used by the State as part of the official process for developing government laws or regulations, if the individual has a conflict of interest that is relevant to the functions to be performed.

The term "conflict of interest" means something more than individual bias. There must be an *interest*, ordinarily financial, that could be directly affected by the work of CHBRP or the UC- or CHBRP-recommended expert evaluator.

Conflict of interest requirements are *objective* and *prophylactic*. They are not an assessment of one's actual behavior or character, one's ability to act objectively despite the conflicting interest, or one's relative insensitivity to particular dollar amounts of specific assets because of one's personal wealth. Conflict of interest requirements are objective standards designed to eliminate certain specific, potentially compromising situations from arising, and thereby to protect the individual, the other members of the committee, the institution, and the public interest. The individual, the committee, and the institution should not be placed in a situation where others could reasonably question, and perhaps discount or dismiss, the work of the committee simply because of the existence of conflicting interests.

The term "conflict of interest" applies only to *current interests*. It does not apply to past interests that have expired, no longer exist, and cannot reasonably affect current behavior. Nor does it apply to possible interests that may arise in the future but do not currently exist, because such future interests are inherently speculative and uncertain. For example,

a pending formal or informal application for a particular job is a current interest, but the mere possibility that one might apply for such a job in the future is **not** a current interest.

The term "conflict of interest" applies not only to the personal interests of the individual but also to the *interests of others* with whom the individual has substantial common financial interests if these interests are relevant to the functions to be performed. Thus, in assessing an individual's potential conflicts of interest, consideration must be given not only to the interests of the individual but also to the interests of the individual's spouse and dependent children, the individual's employer, the individual's business partners, and others with whom the individual has substantial common financial interests.

Consideration must also be given to the interests of those for whom one is acting in a fiduciary or similar capacity (e.g., being an officer or director of a corporation, whether profit or nonprofit, or serving as a trustee).

This disclosure form is used for members of CHBRP, an entity that UC has convened at the request of the state, and for CHBRP-recommended experts whose reports and/or advice are to be provided to a state agency or to the Legislature for official use to evaluate proposed health insurance benefit mandates legislation. For such activities, *the focus of the conflict of interest inquiry is on the identification and assessment of any interests that may be directly affected by the use of such reports in the regulatory process.*

For example, if CHBRP or the CHBRP-recommended expert evaluator were conducting a study of a proposed health insurance benefit mandate requiring coverage for a particular medical technology, the focus of the conflict of interest inquiry would be on the identification and assessment of any interests that would be directly affected by that regulatory process if the report were to provide the basis for regulatory action or inaction. The concern is that if an individual (or others with whom the individual has substantial common financial interests) has specific interests that could be directly affected by the regulatory process, the individual's objectivity could be impaired.

Such interests could include an individual's significant stock holdings in a potentially affected medical technology company or being an officer, director, or employee of the company. Serving as a consultant to the company could constitute such an interest if the consulting relationship with the company could be directly affected or is directly related to the subject matter of the regulatory process.

An individual's other possible interests might include, for example, relevant patents and other forms of intellectual property, serving as an expert witness in litigation directly related to the subject matter of the regulatory process, or receiving research funding from a party that would be directly affected by the regulatory process if the research funding could be directly affected or is directly related to the subject matter of the regulatory process and the right to independently conduct and publish the results of this research is limited by the sponsor. Consideration would also need to be given to the interests of

others with whom the individual has substantial common financial interests -- particularly spouses, employers, clients, and business or research partners.

The following questions are designed to elicit information from you concerning possible conflicts of interest that may be relevant to the function(s) you have been asked to serve in regard to CHBRP's evaluation of proposed health insurance mandates.

1. EMPLOYMENT. (a) If the reports resulting from CHBRP's health insurance benefit mandate evaluations were to provide the basis for government regulatory action or inaction with respect to the matters addressed in the reports --

(i) if you are employed or self-employed, could your current employment or self-employment (or the current employment or self-employment of your spouse or dependent children) be directly affected?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(ii) to the best of your knowledge, could any financial interests of your (or your spouse's or dependent children's) employer or, if self-employed, your (or your spouse's or dependent children's) clients and/or business partners be directly affected?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(iii) if you are an officer, director or trustee of any corporation or other legal entity, could the financial interests of that corporation or legal entity be directly affected?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(iv) if you are a consultant (whether full-time or part-time), could there be a direct effect on any of your current consulting relationships?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(v) Regardless of the potential effect on the consulting relationship, do you have any current or continuing consulting relationships (including, for example, commercial and professional consulting and service arrangements, scientific and technical advisory board memberships,

serving as an expert witness in litigation, or providing services in exchange for honorariums and travel expense reimbursements, but excluding consulting relationships for which you received less than \$10,000 in fees, honorariums, reimbursements or other compensation) that are directly related to the subject matter of the possible government regulatory action or inaction?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(b) If you are or have ever been a government employee (either civilian or military), to the best of your knowledge are there any federal or state conflict of interest restrictions that may be applicable to your service in connection with your activities on behalf of CHBRP?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(c) If you are a government employee, are you currently employed by a state or federal agency that is sponsoring proposed health insurance benefit mandates? If you are not a government employee, are you an employee of any other sponsor (e.g., advocacy group, private foundation, etc.) of proposed health insurance benefit mandates?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

2. INVESTMENT INTERESTS. Taking into account stocks, bonds, and other financial instruments and investments including partnerships, excluding broadly diversified mutual funds and any investment or financial interest valued either at less than \$10,000 or at less than a 5% equity interest, if the reports resulting from CHBRP's health insurance benefit mandate evaluations were to provide the basis for government regulatory action or inaction with respect to the matters addressed in the reports –

(a) do you or your spouse or dependent children own directly or indirectly (e.g., through a trust or an individual account in a pension or profit-sharing plan) any stocks, bonds or other financial instruments or investments that could be affected, either directly or by a direct effect on the business enterprise or activities underlying the investments?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(b) do you have any other significant financial investments or interests such as commercial business interests (e.g., sole proprietorships), investment interests (e.g., stock options), or personal investment relationships (e.g., involving parents or grandchildren) that could be affected, either directly or by a direct effect on the business enterprise or activities underlying the investments?

YES **NO** **NOT APPLICABLE**

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

3. PROPERTY INTERESTS. Taking into account real estate and other tangible property interests, as well as intellectual property (patents, copyrights, etc.) interests, if the reports resulting from CHBRP's health insurance benefit mandate evaluations were to provide the basis for government regulatory action or inaction with respect to the matters addressed in the reports

—

(a) do you or your spouse or dependent children own directly or indirectly any such property interests that could be directly affected?

YES **NO** **NOT APPLICABLE**

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(b) to the best of your knowledge, do any others with whom you have substantial common financial interests (e.g., employer, business partners, etc.) own directly or indirectly any such property interests that could be directly affected?

YES **NO** **NOT APPLICABLE**

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

4. RESEARCH FUNDING AND OTHER INTERESTS. (a) Taking into account your research funding (including gifts, if used for research, grants and contracts) and other research support (e.g., equipment, facilities, industry partnerships, research Program Specialists and other research personnel, etc.), if the reports resulting from CHBRP's health insurance benefit mandate evaluations were to provide the basis for government regulatory action or inaction with respect to the matters addressed in the reports --

(i) could the research funding and support for you or your close research colleagues and collaborators be directly affected, **or**

YES **NO** **NOT APPLICABLE**

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(ii) if you have any research agreements for current or continuing research funding (including gifts, grants and contracts) or support from any party whose financial interests could be directly affected, and such funding or support is directly related to the subject matter of the regulatory process, do such agreements significantly limit your ability to independently conduct and publish the results of your research (other than for reasonable delays in publication, as defined by UC policy or, if you are not UC faculty, 30 days, in order to file patent applications)?

YES **NO** **NOT APPLICABLE**

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(b) Is the central purpose of CHBRP's health insurance benefit mandate evaluations for which this disclosure form is being prepared a critical review and evaluation of your own work or that of your employer?

YES **NO** **NOT APPLICABLE**

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(c) Do you have any existing professional obligations (e.g., as an officer of a scientific or engineering society) that effectively require you to publicly defend a previously established position on an issue that is relevant to the functions to be performed in CHBRP's health insurance benefit mandate evaluations?

YES **NO** **NOT APPLICABLE**

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(d) To the best of your knowledge, will your participation in CHBRP's health insurance benefit mandate evaluations enable you to obtain access to a competitor's or potential competitor's confidential proprietary information?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(e) Could your participation in CHBRP's health insurance benefit mandate evaluations create a specific financial or commercial competitive advantage for you or others with whom you have substantial common financial interests?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(f) If the CHBRP health insurance benefit mandate evaluations for which this form is being prepared involve reviews of specific applications and proposals for contract, grant, fellowship, etc. awards to be made by sponsors, do you or others with whom you have substantial common financial interests, or a familial or substantial professional relationship, have an interest in receiving or being considered for awards that are currently the subject of the reviews that are being conducted?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(g) If CHBRP's health insurance benefit mandate evaluations for which this form is being prepared involve developing requests for proposals, work statements, and/or specifications, etc., are you interested in seeking an award under the program for which the committee on which you have been invited to serve is developing the request for proposals, work statement, and/or specifications -- or, are you employed in any capacity by, or do you have a financial interest in or other economic relationship with, any person or organization that to the best of your knowledge is interested in seeking an award under this program?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

FURTHER EXPLANATION OF "YES" RESPONSES:

IF YOUR CONFLICT OF INTEREST DISCLOSURE INFORMATION HAS NOT CHANGED SINCE YOU LAST SUBMITTED THIS FORM:

Check this box, sign and date your signature below to affirm that ALL of the information requested in this *Form for Obtaining Background Information and Conflict of Interest Disclosure for Activities Related to the California Health Benefits Review Program* is in the form you submitted previously on _____ .

[Date previous form submitted]

*During your period of service, **January 1, 2009 through December 31, 2009**, for which the preceding disclosures apply, any changes in the information reported, or any new information that needs to be reported, must be reported promptly by written or electronic communication to the responsible CHBRP administrator.*

SIGNATURE

DATE

PRINT NAME

Reviewed by: _____

Responsible California Health
Benefits Review Program Administrator

DATE

Attachment 1: NAC COI DISCLOSURE FORM
University of California (UC)
Form for Obtaining Background Information and Conflict of Interest Disclosure for
National Advisory Committee Members' Activities
Related to the California Health Benefits Mandate Review Program¹

NAME: _____

TELEPHONE: _____

E-MAIL ADDRESS: _____

ADDRESS: _____

CURRENT
EMPLOYER: _____

THE DECLARATIONS IN THE ATTACHED FORM APPLY TO DECLARANT'S CONFLICTS OF INTERESTS IN REGARD TO HEALTH INSURANCE BENEFIT MANDATE REVIEWS CONDUCTED UNDER THE AUSPICES OF THE CALIFORNIA HEALTH BENEFITS REVIEW PROGRAM (CHBRP) BEGINNING January 1, 2009 AND ENDING DECEMBER 31, 2009.

There are two parts to this form, Part I -- Background Information, and Part II -- Conflict of Interest Disclosure. Please complete both parts, **sign** and **date** this form on the last page, and return the form to the CHBRP administrator who requested your participation in the activity to which this form applies. **Please retain a copy for your records.**

If some or all of the requested information is contained in a previously submitted copy of this form, you may revise and resubmit your previously submitted form, including additional responses or comments below as necessary and supplemented by a copy of your curriculum vitae.

You may opt to submit a copy of your curriculum vitae as your response, or to update your response, to Questions I-V, which follow on the next page.

IF YOUR INFORMATION HAS NOT CHANGED SINCE YOU LAST SUBMITTED A CONFLICT OF INTEREST DISCLOSURE FORM TO CHBRP, please see the instructions on the last page of this document.

¹ This form was modeled closely on a background and conflict of interest disclosure form designed by the National Academies of Sciences (NAS) for use with respect to studies relating to government regulation. The University of California and CHBRP are grateful to the NAS for extending its permission to use the NAS form. This CHBRP form may be subject to change. A substantially similar version of this form, "*For Activities Related to Government Regulation*", is to be used for members of scientific advisory panels that UC convenes at the request of the State and for UC-recommended experts whose reports and/or advice are to be provided to the state for official use in a government regulatory process. CHBRP is grateful also to the UC Office of Research for its assistance in developing this form.

This form and the information provided by you therein may be disclosable to the public under applicable state laws and regulations.

PART I -- BACKGROUND INFORMATION

Instructions

I. ORGANIZATIONAL AFFILIATIONS. Report your *relevant* business relationships (as an employee, owner, officer, director, consultant, etc.) and your relevant remunerated or volunteer non-business relationships (e.g., professional organizations, trade associations, public interest or civic groups, etc.).

II. GOVERNMENT SERVICE. Report your *relevant* service (full-time or part-time) with federal, state, or local government in the United States (including elected or appointed positions, employment, advisory board memberships, military service, etc.).

III. RESEARCH SUPPORT. Report *relevant* information regarding both public and private sources of research support (other than your present employer), including sources of funding, equipment, facilities, etc.

IV. PUBLIC STATEMENTS AND POSITIONS. List your *relevant* articles, testimony, speeches, etc., by date, title, and publication (if any) in which they appeared, or provide relevant representative examples if numerous. Provide a brief description of relevant positions of any organizations or groups with which you are closely identified or associated.

V. ADDITIONAL INFORMATION. If there are *relevant* aspects of your background or present circumstances not addressed above that might reasonably be construed by others as affecting your judgment in matters within the assigned task of the committee or other activity in which you have been invited to participate, and therefore might constitute an actual or potential source of bias, please describe them briefly.

PART II -- CONFLICT OF INTEREST DISCLOSURE

When the State of California requests the University of California's assistance in convening scientific advisory committees, such as the California Health Benefits Review Program, (CHBRP) or recommending scientific experts to produce reports, such as CHBRP's evaluations of health insurance mandates, for the purpose of providing expert advice intended to be used by

the State in formulating state laws or regulations, it is essential that the work of the participants in such activities not be compromised by any significant conflict of interest.

For this purpose, **the term "conflict of interest" means any financial or other interest which conflicts with the service of the individual because it (1) could significantly impair the individual's objectivity or (2) could create an unfair competitive advantage for any person or organization.**

We anticipate that most, if not all, members of the National Advisory Committee (NAC) of CHBRP will report potential conflicts of interest because the NAC membership is comprised explicitly to include advice from a balanced group of interested and expert stakeholders. UC and/or the California government agency requesting UC's and CHBRP's assistance has determined that conflicts of interest are unavoidable for National Advisory Committee members and will not, in most cases, disqualify them from participating on the Committee. In affirmation of NAC's advisory, non-decision making role in the CHBRP process, all CHBRP reports will contain the disclaimer: "*CHBRP appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the National Advisory Committee members. The National Advisory Committee does not, however, necessarily approve, disapprove, or endorse this report. CHBRP assumes full responsibility for the report and the accuracy of its contents.*" Nevertheless, National Advisory Committee members must publicly disclose those conflicts of interest.

The term "conflict of interest" means something more than individual bias. There must be an *interest*, ordinarily financial, that could be directly affected by the work of CHBRP, UC, or the National Advisory Committee member.

Conflict of interest requirements are *objective* and *prophylactic*. They are not an assessment of one's actual behavior or character, one's ability to act objectively despite the conflicting interest, or one's relative insensitivity to particular dollar amounts of specific assets because of one's personal wealth. Conflict of interest requirements are objective standards designed to eliminate certain specific, potentially compromising situations from arising, and thereby to protect the individual, the other members of the committee, the institution, and the public interest. The individual, the committee, and the institution should not be placed in a situation where others could reasonably question, and perhaps discount or dismiss, the work of the committee simply because of the existence of conflicting interests.

The term "conflict of interest" applies only to *current interests*. It does not apply to past interests that have expired, no longer exist, and cannot reasonably affect current behavior. Nor does it apply to possible interests that may arise in the future but do not currently exist, because such future interests are inherently speculative and uncertain. For example, a pending formal or informal application for a particular job is a current interest, but the mere possibility that one might apply for such a job in the future is **not** a current interest.

The term "conflict of interest" applies not only to the personal interests of the individual but also to the *interests of others* with whom the individual has substantial common financial interests if these interests are relevant to the functions to be performed. Thus, in assessing an individual's

potential conflicts of interest, consideration must be given not only to the interests of the individual but also to the interests of the individual's spouse and dependent children, the individual's employer, the individual's business partners, and others with whom the individual has substantial common financial interests.

Consideration must also be given to the interests of those for whom one is acting in a fiduciary or similar capacity (e.g., being an officer or director of a corporation, whether profit or nonprofit, or serving as a trustee).

This disclosure form is used for members of CHBRP's National Advisory Committee, an entity that UC has convened at the request of the state whose advice is to be provided to CHBRP and ultimately to a state agency or to the Legislature for official use to evaluate proposed health insurance benefit mandates legislation. For such activities, *the focus of the conflict of interest inquiry is on the identification and assessment of any interests that may be directly affected by the use of such reports in the regulatory process.*

For example, if CHBRP or the CHBRP-recommended expert evaluator were conducting a study of a proposed health insurance benefit mandate requiring coverage for a particular medical technology, the focus of the conflict of interest inquiry would be on the identification and assessment of any interests that would be directly affected by that regulatory process if the report were to provide the basis for regulatory action or inaction.

Such interests could include an individual's significant stock holdings in a potentially affected medical technology company or being an officer, director, or employee of the company. Serving as a consultant to the company could constitute such an interest if the consulting relationship with the company could be directly affected or is directly related to the subject matter of the regulatory process.

An individual's other possible interests might include, for example, relevant patents and other forms of intellectual property, serving as an expert witness in litigation directly related to the subject matter of the regulatory process, or receiving research funding from a party that would be directly affected by the regulatory process if the research funding could be directly affected or is directly related to the subject matter of the regulatory process and the right to independently conduct and publish the results of this research is limited by the sponsor. Consideration would also need to be given to the interests of others with whom the individual has substantial common financial interests -- particularly spouses, employers, clients, and business or research partners. The following questions are designed to elicit information from you concerning possible conflicts of interest that are relevant to the functions of the CHBRP National Advisory Committee upon which you have been asked to serve.

1. EMPLOYMENT. (a) If the reports resulting from health insurance benefit mandate evaluations were to provide the basis for government regulatory action or inaction with respect to the matters addressed in the reports --

(i) if you are employed or self-employed, could your current employment or self-employment (or the current employment or self-employment of your spouse or dependent children) be directly affected?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(ii) to the best of your knowledge, could any financial interests of your (or your spouse's or dependent children's) employer or, if self-employed, your (or your spouse's or dependent children's) clients and/or business partners be directly affected?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(iii) if you are an officer, director or trustee of any corporation or other legal entity, could the financial interests of that corporation or legal entity be directly affected?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(iv) if you are a consultant (whether full-time or part-time), could there be a direct effect on any of your current consulting relationships?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(v) Regardless of the potential effect on the consulting relationship, do you have any current or continuing consulting relationships (including, for example, commercial and professional consulting and service arrangements, scientific and technical advisory board memberships, serving as an expert witness in litigation, or providing services in exchange for honorariums and travel expense reimbursements, but excluding consulting relationships for which you received less than \$10,000 in fees, honorariums, reimbursements or other compensation) that are directly related to the subject matter of the possible government regulatory action or inaction?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(b) If you are or have ever been a government employee (either civilian or military), to the best of your knowledge are there any federal or state conflict of interest restrictions that may be applicable to your service in connection with this CHBRP activity?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(c) If you are a government employee, are you currently employed by a state or federal agency that is sponsoring proposed health insurance benefit mandates? If you are not a government employee, are you an employee of any other sponsor (e.g., advocacy group, private foundation, etc.) of proposed health insurance benefit mandates?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

2. INVESTMENT INTERESTS. Taking into account stocks, bonds, and other financial instruments and investments including partnerships, excluding broadly diversified mutual funds and any investment or financial interest valued either at less than \$10,000 or at less than a 5% equity interest, if the reports resulting from CHBRP's health insurance benefit mandate evaluations were to provide the basis for government regulatory action or inaction with respect to the matters addressed in the reports –

(a) do you or your spouse or dependent children own directly or indirectly (e.g., through a trust or an individual account in a pension or profit-sharing plan) any stocks, bonds or other financial instruments or investments that could be affected, either directly or by a direct effect on the business enterprise or activities underlying the investments?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(b) Do you have any other significant financial investments or interests such as commercial business interests (e.g., sole proprietorships), investment interests (e.g., stock options), or personal investment relationships (e.g., involving parents or grandchildren) that could be affected, either directly or by a direct effect on the business enterprise or activities underlying the investments?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

3. PROPERTY INTERESTS. Taking into account real estate and other tangible property interests, as well as intellectual property (patents, copyrights, etc.) interests, if the reports resulting from CHBRP's health insurance benefit mandate evaluations were to provide the basis for government regulatory action or inaction with respect to the matters addressed in the reports

—
(a) do you or your spouse or dependent children own directly or indirectly any such property interests that could be directly affected?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(b) to the best of your knowledge, do any others with whom you have substantial common financial interests (e.g., employer, business partners, etc.) own directly or indirectly any such property interests that could be directly affected?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

4. RESEARCH FUNDING AND OTHER INTERESTS.

(a) Taking into account your research funding (including gifts, if used for research, grants and contracts) and other research support (e.g., equipment, facilities, industry partnerships, research Program Specialists and other research personnel, etc.), if the reports resulting from CHBRP's health insurance benefit mandate evaluations were to provide the basis for government regulatory action or inaction with respect to the matters addressed in the reports --

(i) could the research funding and support for you or your close research colleagues and collaborators be directly affected, **or**

(ii) if you have any research agreements for current or continuing research funding (including gifts, grants and contracts) or support from any party whose financial interests could be directly affected, and such funding or support is directly related to the subject matter of the regulatory process, do such agreements significantly limit your ability to independently conduct and publish the results of your research (other than for reasonable delays in publication, as defined by UC policy or, if you are not UC faculty, 30 days, in order to file patent applications)?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(b) Is the central purpose of CHBRP's health insurance benefit mandate evaluations for which this disclosure form is being prepared a critical review and evaluation of your own work or that of your employer?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(c) Do you have any existing professional obligations (e.g., as an officer of a scientific or engineering society) that effectively require you to publicly defend a previously established position on an issue that is relevant to the functions to be performed in CHBRP's health insurance benefit mandate evaluations?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(d) To the best of your knowledge, will your participation in CHBRP's health insurance benefit mandate evaluations enable you to obtain access to a competitor's or potential competitor's confidential proprietary information?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(e) Could your participation in CHBRP's health insurance benefit mandate evaluations create a specific financial or commercial competitive advantage for you or others with whom you have substantial common financial interests?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(f) If the health insurance benefit mandate evaluations for which this form is being prepared involve reviews of specific applications and proposals for contract, grant, fellowship, etc. awards to be made by sponsors, do you or others with whom you have substantial common financial interests, or a familial or substantial professional relationship, have an interest in receiving or being considered for awards that are currently the subject of CHBRP's health insurance mandate reviews?

YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

(g) If the health insurance benefit mandate evaluations for which this form is being prepared involve developing requests for proposals, work statements, and/or specifications, etc., are you interested in seeking an award under the program for which the committee on which you have been invited to serve is developing the request for proposals, work statement, and/or specifications -- or, are you employed in any capacity by, or do you have a financial interest in or other economic relationship with, any person or organization that to the best of your knowledge is interested in seeking an award under this program?

 YES NO NOT APPLICABLE

If "Yes," briefly describe the circumstances here (continuing on the last page of the form if necessary).

FURTHER EXPLANATION OF "YES" RESPONSES:

IF YOUR CONFLICT OF INTEREST DISCLOSURE INFORMATION HAS NOT CHANGED SINCE YOU LAST SUBMITTED THIS FORM:

Check this box, sign and date your signature below to affirm that ALL of the information requested in this *Form for Obtaining Background Information and Conflict of Interest Disclosure for Activities Related to the California Health Benefits Mandate Review Program* is in the form you submitted previously on _____.

[Date previous form submitted]

During your period of service, January 1, 2009 through December 31, 2009, for which the preceding disclosures apply, any changes in the information reported, or any new information that needs to be reported, must be reported promptly by written or electronic communication to the responsible CHBRP administrator.

SIGNATURE

DATE

PRINT NAME

Reviewed by: _____

Responsible California Health
Benefits Review Program Administrator

DATE



Appendix 11: CHBRP 60-Day Timeline of the Analytical Process

CHBRP's authorizing statute requires that CHBRP provide the Legislature with its analysis within 60 days of having received a request from the referring committee. To meet this deadline, a timeline was developed to coordinate the various analytical processes. Below is an abbreviated version of the CHBRP 60-day timeline that describes in broad terms the steps taken to produce a report.

Days 0-3	
CHBRP Staff	<p>CHBRP staff work with faculty to:</p> <ol style="list-style-type: none"> 1. Identify and screen content expert per protocol 2. Convene conference call so that all potential faculty/staff recusals can be identified 3. Post analysis request on Web site (including solicitation for information from interested parties by day 19) 4. Work with faculty and with bill author's office to clarify intent of the bill
Vice Chairs, Task Force Members, Leads	<p>Task Force conference call to:</p> <ol style="list-style-type: none"> 1. Establish leads 2. Select peer faculty reviewer 3. Discuss bill and issues particular to the analysis including content expert 4. Identify areas of draft bill warranting clarification from bill author's office 5. Discuss conflicts and potential recusals
Cost Team/Actuaries	<ol style="list-style-type: none"> 1. Discuss with internal faculty/staff any potential conflicts so recusals can be identified 2. Confer with content expert and others on call about scope, strategy, and search terms for cost literature review 3. Provide to ME team any mandate-specific questions to add as part of literature review/effectiveness analysis
Medical Effectiveness (ME) Team	<ol style="list-style-type: none"> 1. Work with faculty-staff leads to contact content expert and conduct initial (verbal) conflict-of-interest (COI) screening and complete COI form 2. Discuss with internal faculty/staff any potential conflicts so recusals can be identified 3. Begin to identify search terms 4. In consultation with clinical/content expert, provide librarians with essential bibliography and determine scope of search, search terms, and strategies for librarians 5. Develop a diagram of likely effects of the mandate (e.g., increase in use of treatment vs. increased screening, true and false positives, possible treatment, etc.)
Public Health (PH) Team	<ol style="list-style-type: none"> 1. Discuss with internal faculty/staff any potential conflicts so recusals can be identified 2. Confer with content expert and others on call about scope, strategy, and search terms for public health literature review 3. Provide questions to the ME team regarding literature needed for PH analysis (e.g., prevalence, incidence, racial disparities)
Librarians	<p>Conduct literature search iteratively under direction of ME team with input from content expert (days 0-4)</p>

Days 4-6	
CHBRP Staff	<ol style="list-style-type: none"> 1. Send information regarding subject background, bill intent, and clarifying language to all teams 2. Consult with faculty lead, ME team, content expert, cost team, PH team, and actuaries on health plan/insurer bill-specific coverage survey
Vice Chairs, Task Force Members, Leads	<ol style="list-style-type: none"> 1. Review and comment on health plan/insurer bill-specific coverage survey 2. Suggest any additional (beyond National Advisory Council [NAC]) external reviewers if bill requires specific types of reviewers
Cost Team/Actuaries	<p>► Launch cost literature search:</p> <ol style="list-style-type: none"> 1. Conduct cost literature review (days 4-7) 2. Review and comment on health plan/insurer bill-specific coverage survey
ME Team	<p>► Essential bibliography due:</p> <ol style="list-style-type: none"> 1. Provide UCSF librarians with essential bibliography (key, seminal research) 2. Identify types of services and outcomes to be examined; review search results with content expert and provide feedback to librarian on any additions/modifications needed
PH Team	<p>► Launch public health literature search:</p> <ol style="list-style-type: none"> 1. Conduct public health impact literature review (days 4-7)

Days 7-10	
CHBRP Staff	<ol style="list-style-type: none"> 1. Send bill-specific coverage survey to health plans/insurers 2. Contact NAC reviewers 3. Collect coverage information from available sources and send to cost team/actuaries 4. Compile benefit coverage information for public programs subject to the mandate (such as managed care options offered by CalPERS, Healthy Families, and Medi-Cal) 5. Compile information regarding labor groups' negotiations and CalPERS PPO benefit coverage to assess public demand
Vice Chairs, Leads	Faculty to review benefit coverage information sent by CHBRP staff
Cost Team/Actuaries	<ol style="list-style-type: none"> 1. Decide on strategy for projecting post-mandate utilization 2. Review coverage information sent by CHBRP team
ME Team	<ol style="list-style-type: none"> 1. Identify articles that clinical content expert wants to read in full text 2. Report on search and key literature 3. Continue to collect, review, and synthesize literature for medical impacts (days 10-13)
PH Team	Collect baseline data (e.g., prevalence, incidence, racial disparities, etc.) (days 10-14); provide actuaries information on how data should be cut to meet PH team's needs for analysis
Librarians	<p>► Refined bibliography due:</p> <ol style="list-style-type: none"> 1. Provide ME team and content expert with refined bibliography 2. Provide PH teams and cost team literature search findings per request

Days 11-14	
CHBRP Staff	Health plan/insurer benefit coverage data due; ensure all proprietary information is masked, aggregated, and sent to analysis teams
Vice Chairs, Leads	Review health plan/insurer responses to bill-specific coverage survey
Cost Team/Actuaries	<ol style="list-style-type: none"> 1. Provides utilization data 2. Review health plan/insurer responses to bill-specific coverage survey and identify any gaps 3. Provide PH team with coverage and utilization impacts
ME Team	Prepare draft medical effectiveness analysis tables of key findings including info needed by cost and public health teams.
PH Team	Prepare draft public health tables with baseline information.

Days 15-20	
CHBRP Staff	<ol style="list-style-type: none"> 1. Review information submitted by interested parties and highlight any that would need to be considered by any team(s) in particular 2. Review public health and cost tables from actuaries; provide comments/questions
Vice Chairs, Leads	<ol style="list-style-type: none"> 1. Review information submitted by interested parties and highlight any that would need to be considered by any team(s) 2. Review and comment on draft introduction/background 3. Review public health and cost tables from actuaries; provide comments/questions
Cost Team/Actuaries	<ol style="list-style-type: none"> 1. Review information submitted by interested parties 2. Draft cost tables due from actuaries to cost team/CHBRP staff/faculty 3. Draft tables/data pulls due to PH team/CHBRP staff/faculty 4. Compile information from cost literature (e.g., offsets, substitution effects, shifts to other programs) 5. Draft cost section with placeholders for final cost tables and final cost estimates
ME Team	Review information submitted by interested parties
PH Team	<ol style="list-style-type: none"> 1. Review information submitted by interested parties 2. Decide parameters for public health impact estimate (e.g., outcome measures) 3. Review the public health data pulls and tables; consult with actuaries on proposed revisions

	Days 21-25
CHBRP Staff	1. Review and comment on draft effectiveness section 2. Check for consistency with cost tables; provide comments to ME team
Vice Chairs, Leads	1. Review and comment on draft effectiveness section 2. Check for consistency with cost tables; provide comment to staff lead to compile
Cost Team/Actuaries	FINAL cost tables due from actuaries to cost team/CHBRP staff/faculty FINAL tables/data pulls due to PH team/CHBRP staff/faculty ▶ 1st draft cost section due
ME Team	▶ 1st draft medical effectiveness section due
PH Team	▶ 1st draft public health impact section due

	Days 26-31
CHBRP Staff	1. Check for consistency and content between cost tables and text, and underlying assumptions, as well as consistency among effectiveness, public health, and cost sections 2. Prepare full integrated draft with executive summary and introduction
Vice Chairs, Leads	Check for consistency and content between cost tables and text, and underlying assumptions, as well as consistency among effectiveness, public health, and cost sections
Cost Team/Actuaries	▶ Revised cost impact section due
ME Team	▶ Revised medical effectiveness section due
PH Team	▶ Revised public health impact section due

	Days 32-40
CHBRP Staff	▶ Full draft due 1. Send to content expert, full task force, peer faculty reviewer 2. Revise based on comments from task force, content expert, cost team/actuaries
Vice Chairs, Leads	Review and send comments to CHBRP staff to compile integrated draft report
Cost Team/Actuaries	Review and send comments to CHBRP staff to compile integrated draft report

	Days 41-45
CHBRP Staff	▶ Revised full draft sent to NAC, editor, and any other external expert reviewer. Send NAC review version to faculty lead and analytic team. Editor's review will happen concurrently with NAC review, with a final proofread by the editor on Day 50

	Days 46-49
CHBRP Staff	<ol style="list-style-type: none"> 1. Comments received by NAC, editor, designated task force members, other external reviewers 2. Forward comments to faculty lead, Vice Chairs, teams, and actuaries
Vice Chairs, Leads	<ol style="list-style-type: none"> 1. Faculty lead to review NAC and editor comments and work with teams to ensure all comments are addressed
Cost Team/Actuaries	<p>► Final revised cost section due:</p> <ol style="list-style-type: none"> 1. Work with CHBRP staff and faculty to revise in response to reflect NAC and editor comments 2. Send final revised section to CHBRP staff by day 49
ME Team	<p>► Final revised cost section due:</p> <ol style="list-style-type: none"> 1. Work with CHBRP staff and faculty to revise in response to reflect NAC and editor comments 2. Send final revised section to CHBRP staff by day 49
PH Team	<p>► Final revised cost section due:</p> <ol style="list-style-type: none"> 1. Work with CHBRP staff and faculty to revise in response to reflect NAC and editor comments 2. Send final revised section to CHBRP staff by day 49
	Days 50-54
CHBRP Staff	<p>Report editing, layout, and production</p> <ol style="list-style-type: none"> 1. Send draft to editor for final proofread 2. CHBRP staff sends draft to faculty lead and vice chairs with editor's final proofread comments
Vice Chairs, Leads	Review and sign-off on revised, edited report or specify remaining changes
	Days 55-59
CHBRP Staff	<ol style="list-style-type: none"> 1. Revisions to incorporate final Vice Chair changes 2. Provide final version to Provost, SVP of Health Sciences and Services; final formatting and proofing and any changes in response to SVP's review
	Day 60
CHBRP Staff	<p>► Final report sent to State Legislature:</p> <ol style="list-style-type: none"> 1. Electronic version of report (.PDF format) transmitted to bill authors, to requesting committees by e-mail, and posted on Web site 2. CHBRP mailing list notified



Appendix 12: Medical Effectiveness Analysis Research Approach¹

California Health Benefits Review Program (CHBRP) reports present three types of information about proposed health insurance benefit mandates or repeals: (1) the medical effectiveness of screening, diagnostic, treatment, and other health services addressed in the legislation; (2) the financial impacts of the legislation; and (3) the impact on public health. This document describes the seven steps in the process used to analyze medical effectiveness.

- Preparing to conduct the literature search
- Conducting the literature search
- Deciding whether to retrieve articles
- Selecting articles for inclusion in the review
- Reviewing the literature
- Making a qualitative “call” on evidence of effectiveness in the literature
- Summarizing the quantifiable evidence for specific outcome

I. Preparing to Conduct the Literature Search

- A. CHBRP staff at the University of California, Office of the President (UCOP) receive a request from the California State Legislature to analyze a bill that would establish or repeal a health insurance benefit mandate. An electronic copy of the bill is made available to all CHBRP faculty and staff.
- B. CHBRP staff at UCOP work with CHBRP faculty and staff at University of California (UC) campuses to determine who will work on the medical effectiveness, cost, and public health analyses.
- C. CHBRP staff at UCOP complete a telephone call with the bill author’s staff (and sometimes the bill sponsor) to clarify the bill author’s intent. The items discussed in the telephone call are derived from a bill author questionnaire that contains standard questions as well as questions specific to the bill that have been posed by CHBRP faculty and staff. The medical effectiveness

¹ Prepared by Janet M. Coffman, PhD; Mi-Kyung Hong, MPH; Wade M. Aubry, MD; Chris Tonner, MPH; Patricia E. Franks; and Edward H. Yelin, PhD.

team reviews the responses to the bill author questionnaire and uses them to refine the specifications for the literature search.

- D. The medical effectiveness team, in consultation with other CHBRP faculty and staff, identifies a content expert for the bill. This person is an expert in a relevant clinical specialty who is knowledgeable about current clinical practice, as well as clinical controversies associated with the proposed mandate or repeal. The content expert is also usually familiar with clinical epidemiology, health services research, or evidence-based medicine.
- E. The content expert reviews the bill and assists the medical effectiveness team in clarifying the meaning of the clinical terms used in the proposed mandate or repeal. For example, in reviewing the literature pertaining to the analysis of Assembly Bill (AB) 1549 (2003), which addressed management of childhood asthma, the content expert explained what physicians mean by “treatment action plans” and the differences between types of action plans (i.e., peak flow-based vs. symptom-based).
- F. The medical effectiveness team, in consultation with the content expert and the medical librarian, defines the scope of the literature search and develops a plan for analyzing the literature. A literature search specifications memo is prepared and submitted to the librarian to guide the search.
 1. The team identifies the type of intervention(s) the bill addresses (e.g., is the intervention a screening, diagnostic, or monitoring test, a procedure, or a treatment?) and the literature needed to analyze the impact of the bill on patient outcomes and utilization of health care services.
 2. The team identifies the types of studies that contain information pertinent to the intervention(s). For example, if the mandate or repeal were about osteoporosis treatment, studies about the effectiveness of osteoporosis treatments would be included, but studies of the effects of primary prevention of osteoporosis would be excluded.
 3. The team, in consultation with the content expert, identifies the outcomes that the literature review will assess. If the language of a bill references specific outcomes, these outcomes will be included in the review. If the bill does not mention specific outcomes, the team and the content expert will identify outcomes most relevant to the proposed mandate or repeal. There is a preference for outcomes that are meaningful to consumers, including patient-reported outcomes, over physiological outcomes. Outcomes of particular interest to CHBRP include mortality, quality of life, ability to perform everyday activities, and absences from school and work due to illness.
 4. The medical effectiveness team, in consultation with the medical librarian and content expert, uses the following general inclusion/exclusion criteria:
 - a. Include only studies for which an abstract has been published. The tight time frame for production of CHBRP reports (60 days from legislative request to completed report) compels the team to rely on abstracts as a screen to determine whether articles should be included in a literature review. Although some articles that do not have abstracts present research findings, most are commentaries, editorials, and letters to the editor that do not present the results of medical effectiveness studies and, thus, are not included in CHBRP’s literature reviews.
 - b. Include only abstracts in English. The time frame for CHBRP reviews is too short to obtain translations of medical literature published in other languages.

- c. Limit the search to the population affected by the proposed mandate or repeal. For example, for the analysis of AB 1549 (2003), which concerned management of childhood asthma, “children” were defined as persons aged 0 to 18 years and studies in which a large proportion of the subjects were older than 18 years were excluded.
 - d. Limit the search to the past 20 years. The team may shorten the time period, if there is a large body of literature on the topic and/or if the content expert has indicated that treatment has changed considerably over the past 20 years. The team may lengthen the time period if there are few published studies.
 - e. In cases in which CHBRP is asked to analyze a bill that is similar to a bill on which the program has previously issued a report, the search is limited to literature published since the previous report was issued.²
5. The team, in consultation with the medical librarian and the content expert, determines the databases to be searched.

a. Peer-reviewed literature

The following databases that index peer-reviewed literature are typically searched: The Cochrane Library, MEDLINE (PubMed), and Web of Science. EMBASE, a database that primarily contains international studies, is searched if searches of the aforementioned databases retrieve little literature. Other specialized databases of peer-reviewed literature, such as CINAHL, International Pharmaceutical Abstracts, PsycINFO, are searched if they are likely to contain articles relevant to the proposed mandate or repeal.³

Cochrane reviews are authoritative, peer-reviewed systematic reviews that can be treated as a “gold standard” with regard to the rigor of the methods used to review the medical literature. Cochrane reviews are often narrow in focus and, thus, most helpful for analyses of bills that address a limited set of services. For more general bills, Cochrane reviews are used to supplement systematic reviews that address broader ranges of services, such as those conducted by the National Institute for Health and Clinical Excellence (NICE)⁴ and the Agency for Healthcare Research and Quality’s Evidence-based Practice Centers (AHRQ EPCs).

b. Grey literature

² For example, in 2009 CHBRP was asked to analyze a bill (SB 158) that would mandate coverage for the human papillomavirus (HPV) vaccine. This bill was identical to a bill (AB 1429) CHBRP had analyzed in 2007. Because CHBRP had conducted a comprehensive search of literature published through 2006 for AB 1429, the search for SB 158 was limited to literature published from January 2007 through March 2009.

³ Some material published in peer-reviewed journals has not been peer reviewed. In particular, journals may publish guidelines issued by organizations whose work is of interest to their readers without peer review. For example, *Obstetrics & Gynecology* publishes guidelines issued by the American College of Obstetrics and Gynecology, and *CA: A Cancer Journal for Clinicians* publishes American Cancer Society guidelines. Some of these guidelines are based on opinion and may provide weaker evidence than peer-reviewed journal articles and some documents in the grey literature. As discussed in Section IV. C., the medical effectiveness team applies the same hierarchy of evidence to all literature regardless of whether it appears in peer-reviewed journals or the grey literature. In addition, the medical effectiveness team and the content expert apply their knowledge of pertinent guidelines, journals, etc., when selecting literature for inclusion in the literature reviews.

⁴ NICE commissions other organizations, such as the National Collaborating Centre for Women’s and Children’s Health, to produce evidence-based guidelines on some topics.

CHBRP also searches the grey literature, which consists of material that is not published commercially or indexed systematically in bibliographic databases. The grey literature is primarily composed of technical reports, working papers, dissertations, theses, business documents, and conference proceedings. The CHBRP medical effectiveness team draws upon grey literature from government agencies, scientific research groups, and professional societies for its reviews. Systematic reviews are among the types of grey literature most frequently analyzed for CHBRP reviews.

The medical effectiveness team has grouped the sources of grey literature into two hierarchical tiers based on the strength of the evidence.

First tier of the grey literature

The first tier of the grey literature includes systematic reviews and meta-analyses issued by authoritative organizations whose primary mission is to conduct objective analyses of the effectiveness of medical interventions that are used to develop evidence-based clinical practice guidelines. NICE and the US Preventive Services Task Force (USPSTF) are two of the most useful sources in this category, because these organizations commission systematic reviews that explicitly state their research questions, use standardized methods to assess the strength of evidence, and distill detailed findings into a small number of major conclusions. Other sources in this category include the AHRQ EPCs, the Centers for Disease Control and Prevention Advisory Committee on Immunization Practices (CDC ACIP), the International Network of Agencies for Health Technology Assessment (INAHTA), the National Institutes of Health (NIH), the Scottish Intercollegiate Guidelines Network (SIGN), and the World Health Organization (WHO). These sources are always searched if they address the diseases or conditions covered by a bill (e.g., always search the USPSTF website when analyzing bills on screening tests). Systematic reviews and meta-analyses issued by these organizations will be incorporated into CHBRP's literature review as described in Section IV. C. below. CHBRP will rely most heavily on literature syntheses that present major findings from rigorous analyses of the evidence in a clear and concise manner.

Second tier of the grey literature

The second tier of grey literature consists of clinical practice guidelines issued by medical and scientific societies. They are often based on expert opinion, although some are evidence-based. The merit of these guidelines stems from the authoritative reputation of the societies. Such guidelines include those issued by the American Association of Clinical Endocrinologists (AAACE), the American Academy of Pediatrics (AAP), the American Academy of Pediatric Dentistry (AAPD), the American College of Obstetricians and Gynecologists (ACOG), the American Diabetes Association (ADA), the American Psychiatric Association (APA), and the National Comprehensive Cancer Network (NCCN). Decisions about searches of professional society Web sites for guidelines will be made on a case-by-case basis. Decisions will be based on the following criteria: knowledge of the medical effectiveness team and content expert regarding guidelines issued by pertinent professional societies, the strength of evidence available from other sources, and whether the bill explicitly references guidelines or is derived from a guideline.

c. Clinical practice guidelines

CHBRP has developed the following criteria to determine whether and how clinical practice guidelines should be incorporated into its medical effectiveness reviews.

Bills that reference clinical or national practice guidelines

In the cases where a bill may mandate coverage for an intervention that is:

- “consistent with national guidelines,” or
- a guideline is an obvious source of bill language, or
- a guideline is specified in the bill,

the medical effectiveness team will select studies for inclusion per CHBRP’s hierarchy of evidence (discussed in Section IV.A., below) and also will assess relevant guidelines.

Bills that DO NOT reference clinical practice guidelines

The medical effectiveness team will follow CHBRP’s hierarchy of evidence, which ranks practice guidelines below other sources of evidence regarding medical effectiveness. Systematic reviews and meta-analyses that are part of a guideline may be reviewed separately per the hierarchy of evidence. If a guideline appears to be evidence-based and relevant to the issue, the medical effectiveness team may reference it in the text. In a case where little or conflicting information about the issue is available, the medical effectiveness team may cite guidelines with appropriate caveats noted (i.e., strength of evidence, guideline author, etc.).

For bills for which the medical effectiveness team determines that clinical practice guidelines should be reviewed, the National Guideline Clearinghouse (NGC) is always searched to identify pertinent guidelines. The medical effectiveness team uses NGC’s summaries to screen guidelines and retrieves the full text of guidelines it selects for inclusion in the literature review.

Web sites maintained by organizations that issue clinical practice guidelines are also searched, because NGC has several important limitations. NGC relies on voluntary submissions and, as a consequence, does not index all guidelines. Some of the most authoritative guidelines are not indexed by NGC. In addition, the quality of the evidence presented in guidelines indexed by NGC varies. Some guidelines are based on systematic reviews of peer-reviewed literature, whereas others are based on expert opinion. In addition, NGC’s summaries of guidelines are not as authoritative or as exhaustive as the full guidelines.

G. The medical effectiveness team, content expert, and medical librarian take into account both the literal meaning and intent of the proposed mandate or repeal when developing the strategy for the literature search.

1. Some mandates and repeals address coverage for multiple types of services (e.g., medical treatment, medical supplies, physical therapy, and counseling). In such cases, the literature search will be designed to retrieve literature on all types of services to which a mandate or repeal would apply.
2. For some bills, the medical literature may be assessed in segments because it addresses a wide range of diseases and conditions. For example, if a proposed mandate or repeal

addressed cancer screening, the team would need to obtain and separately analyze literature on screening of multiple types of cancer (e.g., breast, colorectal, lung, and prostate).

3. Screening, diagnostic, monitoring, and treatment interventions require different analytic approaches. For example, a treatment is typically designed to cure a disease or improve function, and designing trials to assess how well the treatment works may be relatively straightforward. On the other hand, a screening test might indicate an increased risk of a disease. This may lead to recommendations for one or more types of preventive interventions. The interventions may vary in their effectiveness, and the disease, which may or may not occur even if the result of the screening test is positive, may be treated in various ways.⁵ Thus, an effectiveness assessment of an intervention will have to be built upon information available from various parts of the “evidence chain.” To assess each of these links, information needs to be collected over a long period of time. Testing and treatment options continually change over time, and studies that directly address all effectiveness questions pertinent to a bill may not exist.
4. Some bills may concern parity in coverage for different types of services rather than coverage for individual health care services per se. For example, SB 572 (2005) addressed parity in coverage of physical and mental health services. In such cases, the medical effectiveness analysis focuses on evidence of the effects of parity, such as reduction in cost sharing for the services addressed by a mandate or repeal or repeal, and does not address evidence of the effectiveness of treatment for each type of mental health condition for which parity in coverage would be mandated.

⁵ For example, a screening test may indicate that a person has high cholesterol. Based on this result, his or her physician may recommend exercise, dietary changes, and/or medication. These preventive interventions may or may not lower the person’s cholesterol or prevent him or her from developing heart disease. If he or she develops heart disease, his or her physician may recommend one of several treatments which may or may not be successful.

II. Conducting the Literature Search

- A. The medical librarian conducts the search and contacts the medical effectiveness team and the content expert regarding questions as they arise.
- B. The medical librarian provides the initial search results to the team in EndNote to the maximum extent feasible. All citations to peer-reviewed literature should be included in the EndNote file. Ideally, citations to the grey literature should be included as well, but this may not be feasible in cases in which the number of citations to the grey literature is large.
- C. The medical librarian records all search terms, including Medical Subject Headings (MeSH) terms and keywords.
- D. The team and the content expert assess the extent to which the results of the literature search address the questions and issues underlying the proposed mandate or repeal. If the initial literature search returns few results, the search criteria will be reexamined, and the medical librarian will run additional or modified searches, or the lead analyst on the medical effectiveness team will search articles from the reference lists of articles that have already been retrieved to determine if they contain any additional articles pertinent to the bill.

III. Deciding Whether to Retrieve Articles

- A. At least two medical effectiveness team members review all abstracts returned by the search to identify articles for which the full text will be retrieved.⁶ Criteria for excluding articles may include (1) duplicate studies, (2) study subjects who are not representative of Californians who would be affected by the mandate or repeal, and (3) articles that describe interventions but do not assess their effectiveness.
- B. For utilization outcomes, only studies conducted in the United States are selected. When an outcome is likely to depend on specific aspects of the U.S. health care system, such as the effect of pediatric asthma education on emergency department visits, the results may be affected by policies and norms of “usual care” that differ in other countries. However, if the outcome of interest concerns health status, international studies are included.
- C. The team retrieves full-text articles available on the Internet through the University of California libraries. If an article is not available online, but is available in hard copy at the UCSF library, a team member retrieves the article from the library.
- D. If an article is not available at UCSF, the team requests the article through interlibrary loan, from the journal’s Web site, or a commercial document delivery service.
- E. Once a full-text article is retrieved, the team reapplies the initial inclusion/exclusion criteria to ensure the study is relevant to the proposed mandate or repeal.
- F. There may be instances in which the full text of an article cannot be retrieved quickly enough to meet the timeline for a CHBRP review. In these instances, the team relies on the published abstract. Reliance on an abstract may omit information relevant to a CHBRP review, including some of the study’s results and information about the characteristics of the study population.

⁶ This approach risks excluding useful articles based on their abstracts. This risk is necessary, given the short time frame for CHBRP reports. However, abstracts often overstate, rather than understate, authors’ findings.

The team keeps a log of articles that appear relevant, but for which full text was not available in time for inclusion in the draft report circulated for review. If articles arrive after the due date for the draft report, they will be examined to determine whether they would substantively alter the team's conclusions. If the conclusions would change, the report is revised accordingly.

IV. Selecting Studies for Inclusion in the Literature Review

A. Hierarchy of Evidence

In general, the medical effectiveness team faculty and staff adhere to the following hierarchy of evidence when determining which articles to include in a review.

1. High-quality meta-analyses⁷—particularly those included in the Cochrane Library
2. Systematic reviews—particularly those performed by authoritative organizations, such as the AHRQ, USPSTF, and other government agencies (e.g., NIH, CDC, and the Centers for Medicare & Medicaid Services)
3. Well-designed randomized controlled trials (RCTs) and cluster RCTs⁸
4. RCTs and cluster RCTs with major weaknesses
5. Nonrandomized studies with comparison groups and time series analyses
6. Case series and case reports
7. Clinical practice guidelines and narrative reviews (i.e., “grey beard reviews”)⁹

⁷ “High-quality” meta-analyses are meta-analyses that have clear objectives and hypotheses, apply appropriate inclusion/exclusion criteria, assess meaningful outcomes, and use sound methods to find, select, and evaluate studies and to generate pooled estimates of an intervention's effects. In general, results of meta-analyses of randomized controlled trials (RCTs) are likely to produce more valid estimates than meta-analyses of observational studies, because randomization of subjects reduces the risk of selection bias. In addition, meta-analyses with large numbers of observations (i.e., where the sum of observations from all studies included in a review is large) are likely to yield more valid estimates than meta-analyses with small numbers of observations because they have greater power to detect effects. *Cochrane Handbook for Systematic Reviews of Interventions* 4.2.5, Chichester, UK: John Wiley & Sons, 2005, p. 97-99; Egger M, Schneider M, Smith GD. Meta-analysis: Spurious precision? Meta-analysis of observational studies. *British Medical Journal* 1998;316:140-144; Egger M, Smith GD, Phillips AN. Meta-analysis: Principles and procedures. *British Medical Journal* 1997;315:1533-1537; Flather MD, Farkouh ME, Pogue JM, Yusuf S. Strengths and limitations of meta-analysis: Larger studies may be more reliable. *Controlled Clinical Trials*. 1997;18:568-579.

⁸ “Cluster RCTs” are studies in which subjects are randomized in groups rather than as individuals. This research design is typically used in situations in which the intervention is administered to groups of subjects or in which randomization at the individual level may lead to contamination of the control group (i.e., inadvertent exposure to the intervention).

⁹ Clinical practice guidelines are ranked below other sources of evidence because strength of the evidence on which they are based varies widely. Some guidelines contain recommendations that are based on meta-analyses, systematic reviews, or multiple RCTs, whereas others are based solely on expert opinion. This wide variation exists across organizations that issue guidelines and among guidelines issued by individual organizations. For example, a recent study of guidelines issued by the American College of Cardiology and the American Heart Association found that most recommendations contained in these guidelines were based on expert opinion and only that 11% were based on evidence from meta-analyses or multiple RCTs. Tricoci P, Allen JM, Kramer JM, Califf RM, Smith SC. Scientific evidence underlying the ACC/AHA clinical practice guidelines. *Journal of the American Medical Association*. 2009; 301:831-841.

B. Implementing the Hierarchy of Evidence

1. If published meta-analyses and/or systematic reviews are available, the team generally uses them as the principal source of information for the review. The remainder of the review is then limited to individual studies published after the articles included in the meta-analyses and/or systematic reviews. For example, if a meta-analysis was published in June 2001 and included studies published up to December 1, 2000, the team would focus on individual studies published on or after December 1, 2000.
2. The team reviews published meta-analyses and/or systematic reviews for consistency. If there are several meta-analyses and/or systematic reviews that reach different conclusions, the team will consult with the content expert to identify possible explanations (e.g., the inclusion/exclusion criteria of the meta-analyses and/or systematic reviews vary, one or more meta-analyses and/or systematic reviews do not use rigorous methods). In some cases, the results of one or more meta-analyses and/or systematic reviews may be discounted. The rationale for discounting is discussed in the report.
3. If no applicable meta-analyses and/or systematic reviews are available, the medical effectiveness team proceeds down the hierarchy of evidence.
4. Where meta-analyses and/or systematic reviews are available, narrative (unsystematic) reviews are excluded from CHBRP's medical effectiveness reviews. However, when literature regarding a disease and intervention is sparse, the medical effectiveness team includes narrative reviews (e.g., bill on amino-acid based elemental formula; bill on inborn errors of metabolism).
5. Strict adherence to the hierarchy of evidence may not be possible or advisable in all cases. For example, if a mandate or repeal addresses coverage for a new screening test and there are meta-analyses of the sensitivity and specificity of the test, but only nonrandomized studies of the test's effects on utilization and clinical outcomes, the meta-analyses cannot fully substitute for the nonrandomized studies. The rigor of the former studies must be balanced against the relevance of the latter.¹⁰

¹⁰ CHBRP's analysis of AB 259 (Skinner, 2009), a bill that would allow women to obtain services from a certified nurse midwife (CNM) directly without a physician's referral, illustrates the trade-off between rigor and relevance. Most RCTs on the effectiveness of midwives that have been conducted in developed countries were carried out in Australia, Canada, New Zealand, and the United Kingdom. Midwives in these countries work within health care systems that are quite different from that of the United States. The level and type of education mandated for midwifery practice in these countries also differs from that required of CNMs in the United States. The medical effectiveness team decided that its literature review for this bill should go beyond RCTs to also include observational studies with comparison groups that were conducted in the United States (CHBRP 2009e). Although the observational studies are weaker methodologically (in particular, they may be subject to selection bias), their findings are more generalizable to the providers to which the bill would apply (i.e., CNMs) than non-U.S. studies.

C. Use of Grey Literature

1. The hierarchy of evidence is applied in a consistent fashion to both the peer-reviewed literature and the grey literature. Systematic reviews and clinical practice guidelines are the most frequently cited types of grey literature.
2. The medical librarians conduct literature searches jointly for grey literature and peer-reviewed literature, and are instructed to search for those sources of grey literature most likely to publish high-quality literature syntheses. For further discussion of literature search methods, see Section II: *Conducting the Literature Search*.
3. Grey literature and peer-reviewed literature about the medical effectiveness of an intervention may contain varying levels of detail. For example, some organizations that develop clinical practice guidelines, such as the USPSTF, publish summaries in peer-reviewed journals and the full guidelines and associated systematic reviews as grey literature. In such cases, the grey literature version of the guideline is reviewed to obtain additional detail not found in the peer-reviewed version.

V. Reviewing the Literature

- A. The medical effectiveness team will generally not have time to undertake as detailed a review of the methods and quality of individual studies as the authors of a meta-analysis can.
- B. Once articles have been selected for inclusion in the review, the team prepares a table that records information from each article regarding the study's research design, the population studied, the location in which the study was conducted, and the intervention and comparison groups. This table appears in an appendix to the report. Table 1 presents an example of the information recorded for studies of pediatric asthma self-management.
- C. Some of the full-text articles retrieved may ultimately be excluded from the review if the medical effectiveness team, in consultation with the content expert, determines that the study is not relevant to the proposed mandate or repeal, is not generalizable to the population addressed by the mandate or repeal, or has major methodological problems that affect the validity of its findings.

Table 1. Summary of Published Studies on the Effectiveness of Pediatric Asthma Self-Management and Training Interventions

Citation	Type of Trial	Intervention vs. Comparison Group	Population Studied	Location
Huss et al., 2003	OS	Education and computer-based instructional asthma game vs. education alone	Inner-city children	Baltimore, MD
Krishna et al., 2003	RCT	Internet-enabled, interactive multi-media asthma education, conventional education, and asthma action plans vs. conventional education and asthma action plans	Children who visited a pediatric pulmonary clinic	St. Louis, MO
LeBaron et al., 1985	RCT	Education vs. usual care	Children treated at private pediatric allergy practices whose families had a wide range of incomes	San Antonio, TX

Key: OS=observational study; RCT=randomized controlled trial

D. As indicated in Section I.F., above, in the cases where (1) a bill may mandate coverage for an intervention that is “consistent with national guidelines”, (2) a guideline is an obvious source of bill language, or (3) a guideline is specified in the bill, the medical effectiveness team will select studies for inclusion per CHBRP’s hierarchy of evidence and also will assess relevant guidelines. The medical effectiveness team will also construct a table that summarizes and rates pertinent guidelines according to CHBRP criteria.

The rating system is under development and will be tested during the 2010 analytic season. CHBRP will review the Institute of Medicine’s Committee on Standards for Developing Trustworthy Clinical Practice Guidelines report (expected release, fall 2010) and incorporate relevant recommendations into the finalized approach to using clinical practice guidelines. Based on the rating system, the medical effectiveness team may include a discussion of the consistency of the medical effectiveness review’s conclusions with guidelines.

VI. Making a Qualitative “Call” on Evidence of Effectiveness in the Literature

- A. In a conference call or group meeting, the medical effectiveness team and the content expert review the results of relevant studies for each outcome and decide collectively, based on the weight of the evidence available, on the effectiveness of the intervention across five dimensions.
- B. In making a “call” for each outcome measure, the team and the content expert consider the number of studies as well the strength of the evidence. To grade the evidence for each outcome measured, the team uses a grading system that has the following categories:
 - Research design

- Statistical significance
- Direction of effect
- Size of effect
- Generalizability of findings

Each of these categories is described below along with the criteria that are used to classify studies within each category. Once studies have been classified within categories, a conclusion about the medical effectiveness of an intervention can be made. The language that is used to describe the medical effectiveness team's overall conclusion regarding the medical effectiveness of the intervention is also discussed.

1. Research Design

This category contains information about the strength of the research designs of individual studies that evaluate an intervention's effect on an outcome of interest. Studies are assigned to one of five levels adapted from ranking systems developed by the American College of Chest Physicians and the North American Spine Society.¹¹ ***The levels refer to the strength of the research designs of individual studies. They do not refer to the overall strength of the evidence regarding an intervention's effect on an outcome.*** Level I studies have the strongest research designs and Level V studies have the weakest research designs. The five levels are as follows:

- Level I: Well-implemented RCTs and cluster RCTs (Strong RCTs)
- Level II: RCTs and cluster RCTs with major weaknesses (Weak RCTs)
- Level III: Nonrandomized studies that include an intervention group and one or more comparison groups and time series analyses
- Level IV: Case series and case reports
- Level V: Clinical practice guidelines and narrative reviews

Level I groups RCTs and cluster RCTs because either research design may be more or less appropriate than the other depending on the intervention studied. The RCT design is more appropriate than the cluster RCT design when an intervention is delivered to individuals and is provided in such a manner that the control or comparison group is unlikely to be inadvertently exposed to the intervention. Conversely, the cluster RCT design is more

¹¹ Cook DJ, Guyatt GH, Laupacis A, Sackett DL. Rules of Evidence and Clinical Recommendations on Use of Antithrombotic Agents (Third ACCP Consensus Conference on Antithrombotic Therapy). *Chest*. 1992;102(4):305S-311S. North American Spine Society. Levels of evidence for primary research question. www.spine.org/forms/LevelsofEvidenceFinal.pdf. Accessed on October 4, 2006.

appropriate when an intervention is delivered to groups of individuals or in situations in which the control or comparison group could be contaminated.¹²

“Well-implemented RCTs and cluster RCTs” are defined as studies that have (1) sample sizes that are sufficiently large to detect statistically significant differences between the intervention and control groups (100 or more subjects), (2) low attrition rates (less than 20%) or use intent-to-treat methods,¹³ and (3) intervention and control groups that are statistically equivalent prior to the intervention with respect to baseline measures of the outcome and important factors associated with the outcome. To be considered well-implemented, a cluster RCT must also use appropriate statistical methods to determine whether observations are clustered at the level at which randomization occurs and, if so, to adjust for clustering. Such adjustment is necessary to ensure that the statistical significance of findings is not overstated.

Level II includes RCTs and cluster RCTs that have major weaknesses, such as small sample sizes, high attrition rates without use of intent-to-treat methods, or intervention and control groups that are not statistically equivalent at baseline and, in the case of cluster RCTs, do not test for clustering of observations and adjust for clustering if it is present.

Levels III through V are used to classify studies in which subjects are not randomly assigned to either an intervention or a comparison group. Studies that do not randomize subjects are not as well designed as RCTs for assessing the efficacy of an intervention (i.e., detecting causal inference), because they do not control for selection bias.¹⁴

Level III encompasses time series analyses and nonrandomized studies that have intervention and comparison groups. Time series studies analyze multiple observations on subjects before and after exposure to an intervention, which enables researchers to separate the effects of interventions from other factors that influence trends in outcomes over time. Nonrandomized studies with comparison groups include quasi-experimental studies, cohort studies, and case-control studies. In cases in which most studies of an outcome are nonrandomized studies with comparison groups, the effectiveness team will parse these studies to distinguish studies with stronger and weaker research designs.

¹² For example, the RCT design can be easily used for studies of pharmaceuticals because drugs are dispensed to individuals and because drugs and placebos can be made to appear identical. However, the RCT design is problematic for health education classes taught to children in schools, because children who receive the intervention and their teachers may interact with children in the control group and their teachers. Such interaction could involve sharing of knowledge about asthma self-management that might lead to changes in self-care behavior among children in the control group, which would limit the study’s ability to discern differences between the intervention and control groups. In such cases, a cluster RCT design under which schools rather than children are randomized would be more appropriate than an RCT design.

¹³ Intent-to-treat analysis addresses the problem of attrition bias. If a study has a high rate of attrition, the persons in the intervention group who receive the full treatment may be systematically different from persons who drop out of the study. For example, persons who believe the treatment is not helpful may be more likely to drop out. In such cases, analyzing data only for those persons who completed the study could lead researchers to overestimate the effectiveness of the treatment. Intent-to-treat analysis eliminates this bias because all subjects are included in the groups to which they were randomized regardless of whether they received the full treatment. Some experts in intent-to-treat analysis believe it is sufficient to analyze data only for those subjects for whom complete data are available, whereas others believe that data should be imputed for subjects for whom data are missing (Cochrane Collaboration. *Cochrane Handbook for Systematic Reviews of Interventions Version 4.2.5*. Oxford, UK: The Cochrane Collaboration, 2005.).

¹⁴ Selection bias is a formal term used to characterize situations in which the intervention and control groups are not equivalent except for exposure to the intervention, due to some consistent factor that is not measured.

Level IV studies are those without comparison groups. This level encompasses studies that assess a single group of subjects before and after exposure to an intervention, cross-sectional studies of a single group of subjects exposed to an intervention, and case reports on individual subjects exposed to an intervention.

Level V consists of clinical practice guidelines and narrative reviews.

Meta-analyses and systematic reviews are assigned to the research design level to which most of the studies reviewed correspond. For example, the meta-analyses included in the effectiveness review on Alzheimer's drugs for SB 415 (2004) would be classified as Level I, because most of the studies synthesized in these meta-analyses were well-implemented RCTs. In contrast, a systematic review of multiple types of prosthetic ankle-foot mechanisms that was examined for the report on AB 2012 (2006) would be classified as Level IV, because most studies included in that review were cross-over studies that compared the effects of two or more prosthetic ankle-foot mechanisms on a single group of subjects.

A research design level is assigned to each article included in a medical effectiveness review for a CHBRP report. The articles are aggregated by level for each outcome assessed and the aggregate results are reported in a summary table that appears in the effectiveness section of the text of the report.

The numbers of studies at each level reflect the studies included in a medical effectiveness review and not necessarily the totality of studies on the topic. For some bills, CHBRP relies primarily on meta-analyses, systematic reviews, RCTs, or cluster RCTs, and does not consider studies lower in the hierarchy.

2. Statistical Significance

Statistical significance is another important consideration in assessing the effectiveness of an intervention. If a finding is statistically significant, one has greater confidence that it did not occur by chance. CHBRP considers a finding to be statistically significant if there is a 95% or greater probability that a difference in outcomes between the intervention and control or comparison groups did not occur by chance (i.e., if the p value is 0.05 or less). The 95% confidence interval is a conventional threshold for determining statistical significance. Most studies report the results of formal tests of statistical significance, although some case reports and studies with very small samples do not.

Each study that assesses an outcome will be assigned to one of three categories:

- Finding was statistically significant
- Finding was not statistically significant
- Results of a test of statistical significance were not reported

The studies are then grouped by the three categories and the numbers of studies in each category are reported in the summary table that appears in the effectiveness section of the text of the report.

In cases in which most studies of an outcome report have strong research designs and report the 95% confidence intervals around point estimates of effects, the medical effectiveness

team also examines the 95% confidence intervals to determine how similar the results are across studies.

3. Direction of Effect

The direction of the relationship between an outcome and an intervention indicates whether the intervention has a favorable effect on the outcome. A favorable effect may be an increase or a decrease in an outcome depending on the nature of the outcome and the intended effect of the intervention. For example, one would expect a drug for Alzheimer's disease to improve cognitive outcomes, whereas one would expect a biological medication for rheumatic disease to reduce joint pain and swelling. In some cases, there may be no relationship between an outcome and an intervention.

For each outcome, studies that address the outcome are categorized into three groups based on the direction of the effect.

- Intervention associated with better outcomes for the intervention group
- Intervention had no effect or negligible effect
- Intervention associated with poorer outcomes for the intervention group

The “no effect or negligible effect” category includes studies in which the intervention had no effect on the outcome and studies in which the effect was very small, regardless of whether it was statistically significant. Examples of negligible effects found in studies previously reviewed by CHBRP include a 1% difference in severity of asthma symptoms, a 2% difference in scores on an instrument measuring cognitive functioning of persons with Alzheimer's disease, and a 0.7% difference in the performance of hearing aids.

Once individual studies have been coded they are grouped by the three categories. The numbers of studies in each category (i.e., better outcomes, no or negligible effect, and poorer outcomes) are reported in the summary table that appears in the effectiveness section of the report.

4. Size of Effect/Clinical Significance

Policymakers need to know whether an intervention's effect on an outcome is large enough to be meaningful to patients and/or their caregivers.¹⁵ The minimum clinically meaningful effect depends on the disease or condition addressed in a bill, the outcome of interest, and the manner in which the outcome is measured. In general, the minimum clinically meaningful effect is greater for diseases and conditions for which effective treatments are widely available than for terminal or severely debilitating illnesses for which no other treatments exist. With respect to measurement, a difference of two points may be very meaningful for an outcome measured by a single question on a five-point Likert scale, but probably is not meaningful for an outcome measured by an instrument that has multiple items and a maximum score of 100 points. For all outcomes assessed, the medical effectiveness team consults the content expert to determine whether minimum clinically meaningful effects have been established through research or expert opinion.¹⁶

The measures used to assess clinical significance vary across outcomes depending on the availability of research on minimum meaningful differences and the measures used in studies of the intervention in question. These measures include effect sizes and percentage changes, among others.

Once the minimum meaningful effect on an outcome has been determined for all studies included in a review, the studies are grouped into at least three categories:

- Studies that find an increase in an outcome that meets or exceeds the minimum clinically meaningful effect
- Studies that find no clinically meaningful effect
- Studies that find a decrease in an outcome that meets or exceeds the minimum clinically meaningful effect

The order of the categories depends on the expected direction of the outcome. Studies that find an increase or decrease may be subdivided into categories of large and small effects, if there are a large number of studies on an outcome or a large variation in the size of effects reported. The numbers of studies in each category are reported in the summary table that appears in the effectiveness section of the report.

The medical effectiveness team's conclusions regarding the statistical significance, direction, and size of effects are based on findings reported in studies published in peer-reviewed publications. These conclusions may be overstated in cases in which there is bias in the

¹⁵ Statistical significance and the size of an effect are related, but not synonymous. For example, the apparent effect in a diet study may be large, e.g., a 20-pound weight reduction, but measured with such imprecision due to small sample size that it could also be a weight increase. Perhaps more importantly, a very large study might show statistically significant effects that are not meaningful. For example, with a sufficient number of cases, a new diet might show convincingly that it achieves an average weight reduction of one pound—perhaps statistically significant, but not a meaningful effect.

¹⁶ An example of a research-based approach to determining minimum meaningful effects is the American College of Rheumatology (ACR) Response Rate clinical scoring system that was used in many of the studies synthesized in CHBRP's report on SB 913 (Simitian, 2005), which would have mandated coverage for biological medications for rheumatic disease. Under the ACR-20 instrument used in many of these studies, a medication was determined to have a meaningful effect if patients experienced a 20% reduction in the number of tender joints, the number of swollen joints, laboratory test results, and patient and physician assessment of severity of disease.

reporting of research findings. Forms of bias include publication bias, multiple publication bias, citation bias, and language bias. Studies have found that some journal editors are more likely to accept studies with statistically significant and favorable findings, and that some researchers are more likely to submit statistically significant findings for publication. Multiple publication bias arises when researchers publish findings for a group of patients multiple times, as was the case in the literature CHBRP analyzed on transplantation services for persons with human immunodeficiency virus (AB 228, 2005). Citation bias occurs when studies with statistically significant findings are cited more frequently than studies with nonsignificant findings and, thus, more easily retrieved when searching for studies. Language bias is an especially important challenge for CHBRP, because CHBRP reviews are limited to studies published in English. Studies conducted in countries in which English is not the primary language are more likely to be published in English-language journals if their findings are statistically significant.¹⁷

The extent and nature of bias probably vary across topics. The problem is probably greatest where most studies are funded by industry and where most studies have weak research designs. However, except for the few topics on which empirical studies have been published, the magnitude and consequences of bias are unknown. The 60-day time frame for CHBRP reports precludes the team from undertaking its own research to determine whether unpublished studies (i.e., studies not published by commercial publishers or issued by government agencies, professional associations, or other organizations) exist and assess their impact on the team's conclusions.

The team inserts a brief paragraph in every CHBRP report that states that our conclusions are based on the best available evidence from peer-reviewed and grey literature. The paragraph also indicates that unpublished studies are not reviewed because the results of such studies, if they exist, cannot be obtained within the 60-day timeframe for CHBRP reports.

5. Generalizability

Generalizability refers to the extent to which a study's findings can be generalized to a population of interest. For CHBRP, the population of interest is the segment of California's diverse population to which a proposed mandate or repeal would apply. Although some studies enroll persons who are very similar to the population addressed by a proposed mandate or repeal, others enroll different populations (e.g., adults vs. children) or populations with different health care needs than many persons to whom an intervention is typically provided (e.g., persons who are less severely ill or do not have co-morbidities). Findings from studies that enroll persons who are different from the population to which a mandate or repeal would apply are less useful in determining whether a mandate or repeal would benefit Californians, even if the studies are well-designed and report statistically and clinically significant findings that favor the intervention. However, concerns about

¹⁷ The information presented in this paragraph was derived from the following sources: Cochrane Collaboration. *Cochrane Handbook for Systematic Reviews of Interventions Version 4.2.5*. Oxford, UK: The Cochrane Collaboration, 2005; Lee KP, Boyd EA, Holroyd-Leduc JM, Bacchetti P, Bero LA. Predictors of publication: characteristics of submitted manuscripts associated with acceptance at major biomedical journals. *Medical Journal of Australia*. 2006; 184:621-626; Sutton AJ, Abrams KR, Jones DR, Sheldon TA, Song F. *Methods for Meta-Analysis in Medical Research*. Chichester, UK: John Wiley & Sons, LTD, 2000; Sutton AJ, Duval SJ, Tweedie RL, Abrams KR, Jones DR. Empirical assessment of effect on publication bias on meta-analyses. *British Medical Journal*. 2000; 320:1574-1577.

generalizability must be balanced against the need to provide information about medical effectiveness to the Legislature. It is unrealistic to restrict literature reviews only to studies that enroll Californians similar to persons to whom the mandate or repeal would apply because doing so could lead to an undersampling of studies of a treatment or technology.

The medical effectiveness team addresses generalizability in two ways. First, the team selects studies for inclusion in reviews that are most likely to be generalizable to the population to which a mandate or repeal would apply. To the extent possible, the parameters for the literature search are set to retrieve studies that enroll persons similar to those to which a proposed mandate or repeal would apply. For example, the search for AB 264 (Chan, 2006), a bill on pediatric asthma education, was limited to studies that enrolled children. Once the literature search is completed, the team takes generalizability into account when selecting studies for inclusion in the review. For AB 264, the team included only studies conducted in the U.S., because several of the most important outcomes concerned use of health care services.

Once studies are selected for inclusion in a review, the team screens them to assess the degree of generalizability to the population to whom a mandate or repeal would apply. Each study is categorized into one of two groups:

- Highly generalizable to the population that would be affected by the mandate or repeal
- Somewhat generalizable to the population that would be affected by the mandate or repeal

Studies are considered “highly generalizable” if they were conducted in the U.S. and enrolled racially/ethnically diverse males and females in the age group to which the proposed mandate or repeal would apply and whose health status is similar to that of persons who typically receive the intervention. It is unlikely that a review would include studies that are not at all generalizable to the population that would be affected by a mandate or repeal, because such studies would have been excluded from the review.

6. Conclusion

The last step in evaluating the evidence of medical effectiveness involves making an overall conclusion regarding the strength and consistency of the evidence based on the five above dimensions (research design, statistical significance, direction of effect, size of effect, and generalizability). The following terms are used to characterize the body of evidence regarding the medical effectiveness of the intervention on the outcome.

- Clear and convincing evidence
 - Favorable effect
 - No effect
 - Unfavorable effect
- Preponderance of evidence
 - Favorable effect
 - No effect
 - Unfavorable effect
- Ambiguous/conflicting evidence
- Insufficient evidence

The conclusion states that there is “clear and convincing” evidence that an intervention has a favorable effect on an outcome, if most of the studies included in a review have strong research designs and report statistically significant and clinically meaningful findings that favor the intervention. In rare cases, there may be clear and convincing evidence that an intervention has no effect on an outcome or an unfavorable effect.

The conclusion characterizes the evidence as “preponderance of evidence” that an intervention has a favorable effect if the majority of studies meet the five criteria. For example, for some interventions a majority of studies report statistically significant findings favoring an intervention that are large enough to be clinically meaningful, but some studies find no difference. In such cases, the medical effectiveness team would conclude that there is a “preponderance of evidence” favoring the intervention, unless the studies with favorable effects were so much more rigorous than the studies that found no difference that the results of the latter should be discounted. In some case the preponderance of evidence may indicate that an intervention has no effect or an unfavorable effect.

The evidence is presented as “ambiguous/conflicting” if the findings of studies included in the review vary widely with regard to the direction, statistical significance, and clinical significance/size of the effect.

The category “insufficient evidence” of an intervention’s effect is used where there is little if any evidence of an intervention’s effect. In some cases, the only studies published regarding the effectiveness of an intervention have small sample sizes and weak research designs (e.g., case studies and case series). In other cases, clinical practice guidelines based on expert opinion are the only source of information regarding effectiveness. These sources of evidence are not sufficiently rigorous for the medical effectiveness team to make a determination as to whether an intervention is effective.

One way to understand these groupings is to imagine that after the assessment was completed a new well-designed RCT was published with findings contrary to those of the report. Such a single contradictory study would do little to change the overall assessment of findings labeled as “clear and convincing,” but might call into question findings previously

labeled as “preponderance,” and might become the basis for reevaluating findings previously labeled “ambiguous/conflicting.”

Table 2 provides an example of a table that appears at the end of the medical effectiveness section of the report that presents findings regarding the five dimensions assessed and the medical effectiveness team’s conclusions regarding an intervention’s effects on pertinent outcomes.

Table 2. Studies that Examined the Effectiveness of Different Numbers of Prenatal Visits

Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability	Conclusion
Low birth weight	1 meta-analysis and 1 systematic review of Level II studies	<ul style="list-style-type: none"> No statistically significant difference 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Somewhat generalizable—includes pregnant women from both developed and developing countries 	<ul style="list-style-type: none"> The preponderance of evidence suggests that changing the number of prenatal visits does not affect the odds of having a low-birth weight infant
Preterm birth	1 meta-analysis and 1 systematic review of Level II studies	<ul style="list-style-type: none"> No statistically significant difference 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Somewhat generalizable—includes pregnant women from both developed and developing countries 	<ul style="list-style-type: none"> The preponderance of evidence suggests that changing the number of prenatal visits does not affect the odds of giving birth preterm
Admission to neonatal intensive care unit	1 meta-analysis and 1 systematic review of Level II studies	<ul style="list-style-type: none"> No statistically significant difference 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> No effect 	<ul style="list-style-type: none"> Somewhat generalizable—includes pregnant women from both developed and developing countries 	<ul style="list-style-type: none"> The preponderance of evidence suggests that changing the number of prenatal visits does not affect the odds that a newborn will be admitted to a neonatal intensive care unit

VII. Summarizing the Quantifiable Evidence for Specific Outcomes

- A. The medical effectiveness team also reports pooled estimates of the effects of the intervention on select medical effectiveness outcomes. These estimates may be used by the cost and public health teams to assess a proposed mandate or repeal's impact on utilization of health care services and its effect on public health.
- B. In some cases, the medical effectiveness team reports quantitative estimates from meta-analyses or individual studies.
 1. Quantitative estimates from recent high-quality meta-analyses are used whenever possible, because the authors of meta-analyses may have greater expertise and more time to thoroughly review the pertinent literature than the team, and may use more sophisticated statistical methods to generate quantitative estimates of effects.¹⁸ In cases in which a meta-analysis has been published, the team asks the content expert to assess whether the meta-analysis adequately addresses current practice in the prevention, diagnosis, or treatment of the disease(s) or condition(s) to which the bill would apply.
 - a. Many meta-analyses (particularly those included in the Cochrane Library) report their results as standardized mean differences (SMDs), which is a unitless measure. To obtain values in meaningful units consistent with those assessed in individual studies, such as the number of physician visits, the team extracts data from the individual studies included in a meta-analysis.
 2. In some cases, a single study may be much more rigorous¹⁹ than other studies that analyze an outcome.²⁰ The point estimate from such a study is likely to be more accurate than a point estimate derived from pooling this study with less rigorous studies. When deciding whether to use the point estimate from a single study, the medical effectiveness team also considers whether the study enrolled persons who are representative of the population to which the proposed mandate or repeal would apply.
- C. The medical effectiveness team generates its own new quantitative estimate of an intervention's effect on an outcome if the following conditions are met:

¹⁸ Findings from systematic reviews would not be used because, unlike meta-analyses, systematic reviews do not typically report quantitative estimates of an intervention's effects.

¹⁹ "Rigorous" can encompass a variety of characteristics of a study such as selecting a sample that is sufficiently large to provide adequate power to detect differences between the intervention and control or comparison groups, designing the sampling procedure to maximize the likelihood that the intervention and control or comparison groups are equivalent at baseline, using appropriate statistical methods to adjust for lack of equivalence, implementing procedures to prevent contamination of the intervention and control groups, and concealing allocation to the intervention and control groups to the maximum extent feasible. The assessment of "rigor" in this case is considered within the context of studies that address the questions needed for the review. Thus, a methodologically rigorous study that focused only on a narrow subset of the population to whom the mandate or repeal would be applied would not necessarily "trump" other studies.

²⁰ For example, CHBRP relied on a single study in its analysis of the literature on the effect of high-deductible health plans on use of preventive services (AB 2281, 2006). The medical effectiveness team found that the literature consisted of one, large, rigorous RCT, the RAND Health Insurance Experiment (HIE), a few small RCTs, and a number of retrospective observational studies. The RAND HIE was a highly generalizable study that enrolled children and non-elderly adults with low or moderate household incomes from six urban and rural communities across the United States into various types of health plans, including a high deductible plan.

1. **The outcome is relevant to consumers and policymakers.** For all proposed mandates or repeals, the team determines which outcomes will be assessed in consultation with the members of the analytic team for the bill, the content expert, and State Legislature staff responsible for a bill.
 2. **There are no recent high-quality meta-analyses on the topic or the findings of the most recent studies differ significantly from findings of studies synthesized in meta-analyses.**
 3. **There is not a single large, well-executed RCT that is much more rigorous than other studies that assess an outcome and that analyzes subjects who are representative of the population to which the proposed mandate or repeal would apply.**
 4. **The studies that measure the outcome are methodologically rigorous.** RCTs generally provide the best estimates of a proposed mandate or repeal's effect on an outcome, because they provide the greatest assurance that a change in the outcome is due to the intervention and not some other factor. If the majority of studies of an outcome are RCTs or cluster RCTs, the team pools only estimates from RCTs. If a majority of the relevant studies are observational studies, a biostatistician is consulted to assess the appropriateness of pooling the observational studies with one another and with RCTs that assess the outcome. Quantitative estimates are not generated if the only pertinent studies do not randomize subjects, have very small samples, and/or do not include control groups.
- D. If the criteria for a quantitative estimate are met, the medical effectiveness team uses the following procedure to calculate these estimates.
1. In general, pool results only from studies in which similar comparisons are made. There are two major types of medical effectiveness studies: (1) studies that compare a group of subjects who receive an intervention to a group that receives either no intervention or a placebo, and (2) studies that compare groups of subjects who receive different interventions (e.g., two different drugs used to treat persons with Alzheimer's disease, chiropractic services vs. surgery for low back pain) or receive the same intervention at different intensities (e.g., different dosage, different number of visits). Estimates from studies that make these two different types of comparisons should not be combined, because combining them is likely to generate pooled results that reflect neither an intervention's effectiveness relative to no intervention nor its effectiveness relative to a different intervention. The team consults with the content expert if its members have difficulty making such distinctions. The team always calculates pooled estimates for studies that compare an intervention group to a group that receives a placebo or no intervention. Studies that compare two different interventions may be pooled, if there are multiple studies that compare the same two interventions.
 2. For all studies, review pre-intervention data on the outcome of interest to ascertain whether the intervention and control or comparison groups are equivalent at baseline. Estimates should be pooled only if both pre- and post-intervention data are reported and appropriate multivariate methods are used to adjust for significant baseline differences between the intervention and control groups.²¹ If the intervention and control or comparison groups are

²¹ Use of multivariate methods mitigates selection bias only if the additional variables added to an analysis are the only factors other than the intervention that are likely to affect the outcome of interest. This method does not eliminate the

not equivalent, differences in outcomes may be due to differences between the two groups prior to exposure to the intervention rather than to the intervention. Randomization does not necessarily produce equivalent intervention and control groups, particularly when the sample size is small.²² Observational studies are even more vulnerable to selection bias, especially if researchers do not use multivariate analytic methods to adjust for baseline differences between the intervention and comparison groups.

3. If a study reports an overall “adjusted” effect of an intervention that takes into account important differences that may exist between the intervention and comparison groups, that estimate is used to calculate the pooled estimate of effects across studies.
4. If a study does not report an overall “adjusted” measure of the effect, the medical effectiveness team calculates the proportionate effect attributable to the intervention and then applies it to the overall study population (intervention plus comparison group).
 - a. Raw data from the study are inserted into a spreadsheet. A sample calculation for Krishna and colleagues’ study appears in Table 3 below. This study assessed the effects of an asthma education intervention on a variety of outcomes, including the number of days children with asthma were absent from school.
 - b. Baseline data, if available, and post-intervention data for the study appear in Table 3. In this instance, the intervention group had a somewhat higher rate of school absences (7.90) at baseline than the control group (6.40). The difference for the intervention group (-6.50) equals the post-intervention rate (1.40) minus the baseline rate (7.90).
 - c. Baseline data for the intervention and comparison groups (7.15) are averaged. (Implicitly, averaging assumes that the two groups are the same, as they would be if randomization were successful, and that any observed differences are due to chance variation.) If the study reports the numbers of cases in each group, they are used as weights. If not, the two groups are assumed to be of equal size.

possibility that there may be unmeasured variables that are associated with the outcome but not correlated with any of the other variables included in the analysis. However, studies that make an effort to adjust for baseline differences are preferable to studies that ignore them.

²² Randomization of subjects only produces equivalent groups if the trial is repeated many times or if the sample is very large. Well-executed RCTs with small samples may have non-equivalent intervention and control groups just by chance.

Table 3. Calculating the Overall Effectiveness of an Intervention: Proportionate Reduction in School Absences

Trial		Intervention Group	Control Group	Average
Krishna et al., 2003	Baseline	7.90	6.40	7.15
	Post-intervention	1.40	5.40	
	Difference	-6.50	-1.00	
	% difference	-82.3%	-15.6%	
	Expected difference	-5.88	-1.12	
	Expected reduction in days absent			-4.77
	Expected days absent in the control group			6.03
	Proportionate reduction in days absent in intervention group			-79.0%

- The % difference (-82.3%) = difference (-6.50)/baseline (7.90). This is the observed percentage reduction in the intervention group.
 - Expected difference (-5.88) = % reduction in the intervention group (-82.3) times the baseline average for all subjects (7.15)
 - Expected reduction in days absent (-4.77) = the expected difference in the intervention group (-5.88) – the expected difference in the control group (-1.12)
 - Expected days absent in the control group (6.03) = baseline average (7.15) + expected difference in the control group (-1.12).
 - Proportionate reduction in days absent in intervention group (-79.0%) = expected reduction in days absent (-4.77)/expected days absent in the control group (6.03). This last calculation compares the results for the intervention and control groups. Even if the intervention group experiences a reduction in days absent, this calculation may appear to indicate an increase in the number of absences in the intervention group, if the control group experiences a greater reduction in absences than the intervention group.
- d. For studies that publish only post-intervention data, the proportionate reduction = (control – intervention)/control (see Table 4).

Table 4. Calculating Proportionate Reduction in School Absences with Post-Intervention Results Only

Trial		Intervention Group	Control Group	Difference
Fireman et al., 1981	Post-intervention	0.5	4.6	-89.1%

- e. Next, a weighted average calculation is made to estimate the overall proportionate reduction in days absent for the intervention groups in the studies being pooled. The results for each study are weighted by sample size so that results from studies with more subjects will be weighted more heavily. Table 5 illustrates the weighted average for the effect of asthma education on school absences.

Table 5. Calculating the Weighted Average to Find the Overall Proportionate Reduction in School Absences

Trial	Total Subjects	% Reduction	(Weighted)
Clark, 2004	835	0.0%	0
Christiansen et al., 1997	42	-19.8%	-0.3
Evans et al., 1987	204	-3.8%	-0.3
Fireman et al., 1981	26	-89.1%	-1.0
Horner, 2004	44	18.3%	0.3
Morgan, 2004	937	-50.1%	-19.6
Perrin et al., 1992	56	-79.1%	-1.8
Persaud et al., 1996	36	-15.8%	-0.2
Rubin et al., 1986	54	-0.9	0.0
Velsor-Friedrich 2004	102	-28.0%	-1.2
Wilson et al., 1996	59	-60.0%	-5.0
Total	2395		-25.7%

5. After a new, pooled estimate of the effect of an intervention on an outcome has been completed, a sensitivity analysis is conducted to determine whether the pooled estimate is highly sensitive to the results of one or two studies. If one or two studies have samples that are much larger than those of other studies with which they are pooled, the pooled estimate will be dominated by the results of those studies. Pooled estimates may also be sensitive to studies with anomalous results, regardless of sample size, particularly if the total number of studies pooled is small.²³ Sensitivity analyses are performed by omitting each study sequentially, repeatedly recalculating the pooled estimate, and comparing the pooled estimate obtained when all studies are included to the pooled estimate obtained when a study is omitted. If one or two studies to which a pooled estimate is highly sensitive are large, well-implemented RCTs, the medical effectiveness team may choose to rely on estimates reported

²³ For example, in the analysis of AB 264 the pooled estimate of the effect of pediatric asthma self-management education on mean hospitalizations for asthma is highly sensitive to the results of the one study of this outcome that found no association between the intervention and the outcome. All other studies found a reduction in mean hospitalizations. If the study with anomalous results were omitted from the pooled estimate, the estimated size of the effect would be 15 percentage points greater.

in these studies rather than on the pooled estimate from the larger group of studies. If the studies in question are not large, well-implemented RCTs, the team reports the pooled estimate but also reports the results of the sensitivity analysis.



Appendix 13: The California Cost and Coverage Model An Analytic Tool for Examining the Financial Impacts of Benefit Mandates ¹

Introduction

In the legislation that created the California Health Benefits Review Program (CHBRP), California legislators identified two major types of financial effects they were interested in understanding regarding proposed mandates: (1) the present (baseline) coverage of the benefit, existing utilization, and costs of the benefit; and (2) projected (post-mandate) changes in coverage, utilization, and costs in the year after the enactment of a proposed mandate. The baseline and post-mandate financial questions that must be addressed are delineated below, in Table 1.

Table 1. Utilization, Cost, and Coverage Issues Mandated for Examination under CHBRP’s Authorizing Statute

A. Baseline Utilization, Costs, and Coverage
<p>A1. What are the current utilization levels and costs of the mandated benefit? A2. How widespread is the current coverage of the mandated benefit? A3. How much public demand is there for expanding the coverage of this service? A4. What are the current costs borne by payers (both public and private entities) in the absence of the mandated benefit?</p>
B. Projected Changes in Utilization, Costs, and Coverage
<p>B1. How will utilization change as a result of the mandate? B2. How will changes in coverage required by the mandate affect the cost of the affected services? B3. To what extent does the mandate affect administrative and other expenses? B4. What will be the impact of the mandate on total health care costs? B5. What costs or savings for each category of insurer are expected to result from the mandate? B6. How will the mandate impact access and health service availability?</p>

In order to fulfill its charge, CHBRP developed the California Cost and Coverage Model (CCCM), an actuarial forecasting tool. The purpose of this document is to explain the methods and databases

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employed in developing and using the CCCM in order to provide analyses of health insurance benefit mandate bills being considered by the California Legislature.

The following sections of this introduction define key terms and identify the uses of CCCM in answering the questions specified in Table 1.

Definition of Terms

In order to conduct an analysis, certain terms must be defined. In order to estimate the impacts of a health insurance benefit mandate bill, three key terms are coverage, utilization, and cost. The CCCM, and CHBRP analyses in general, use the following definitions.

Coverage: The extent to which the mandated benefits are covered by insurance.

Utilization: The frequency or volume of use of a mandated benefit. This is the product of the number of health plan members who use the mandated benefit and the average number of mandated benefits they use per calendar period.

Cost: Because of the presence of insurance, it is important to identify the cost to whom—i.e., insurer, employer, employee, patient, or society in general. As defined in the CCCM, cost represents the aggregate expenditures, or the prices paid, for health care services. The rationale for this definition of cost is that legislators are ultimately interested in evaluating the financial impact of mandates on each of the major payers for health care services in the state.

The elements of cost included in the CCCM are:

1. **Insurance Premiums:** the amounts paid to a health insurer or a health care service plan (commonly referred to as an HMO) by the purchaser of health insurance. In the group market, CHBRP analyses identify the projected effects of the mandate legislation on the premium amounts paid by employers, by employees, and by employers and employees in total. The change in premium includes actuarial estimates of the changes in utilization rates for each mandated benefit multiplied by the expected payment per unit of service, plus estimated administrative costs and profit associated with the mandated benefit. In the individual market, CHBRP analyses identify the projected effects of the mandate legislation on the premium amounts paid by individuals using the same method as described for the group market.
2. **Member Cost-Sharing:** a provision of a health insurance policy that requires the member (or policyholder) to pay some portion of medical expenses to providers or health insurers, that is, amounts of coinsurance, deductibles, co-payments, etc.
3. **Total Cost of Covered Benefits:** the sum of premiums paid to a health insurer plus member cost-sharing amounts. Item (3) = Item (1) + Item (2).
4. **Cost of Benefits Not Covered:** the amounts paid entirely out-of-pocket by members who have insurance for whom the mandated benefit is not currently covered. The effect of mandates that require coverage of a benefit not currently covered by insurance is to shift costs from Item (4) to Item (3). Such a change has no net effect on total expenditures—Item (5) below.

5. Total Expenditures for Health Insurance and Uncovered Mandated Benefits: the sum of amounts paid for insurance plus the amounts paid for such benefits not covered by insurance. Item (5) = Item (3) + Item (4).

The elements of cost described above do not include definitions of costs typically employed by economists—which would typically include the production costs of individual units of services or opportunity costs of resources employed in the production of health care services. These definitions of cost, while conceptually relevant, are difficult to estimate using most commonly available data sets and ignore an important component of health care expenditures, namely that insurers and purchasers of health care services usually pay prices that are substantially different from the underlying costs of production. Therefore, CHBRP analyses use prices paid for health care services in lieu of the underlying cost to produce the services.

Use of the California Cost and Coverage Model (CCCM)

The CCCM has been used by CHBRP to address most of the baseline and post-mandate financial impacts as described in Table 1. The two exceptions are items A3 and B6. The public demand for expanding coverage (A3) is addressed by CHBRP through interviews with key groups (self-insured plans and unions) to determine the breadth of demand for each proposed mandate (see Attachment A for further details). The impacts of mandates on access and availability (B6) require assumptions about whether there are serious supply constraints that might affect the cost or availability of a service if demand substantially increased in response to a mandate. To date, none of the mandates reviewed by CHBRP have suggested that demand for the service would far exceed the ability of providers to supply the service. In the event that CHBRP reviews a mandate that could result in excess demand, at least in the short-term, these supply constraints can be factored into the per-unit costs of delivering the service (B2) or into the projected changes in utilization rates (B1), or both.

The CCCM does address the other eight items listed in Table 1. To document the present coverage of the benefit, the California Cost and Coverage Model (CCCM) includes information on the current utilization and cost of providing a benefit (A1); existing coverage of the service in the current insurance market (A2); public demand for expanding coverage (A3); and the current costs borne by insurers (A4). To project changes in utilization and costs, the CCCM calculates the change in the number covered for the benefit and the per-unit cost of providing the service (B1); utilization changes (B2); the administrative cost and premium costs (B3); the impact of the mandate on total health care costs (B4); the costs or savings for different types of payers (B5); and the impact of the mandate on access and availability of services (B6). Each of these impacts was identified specifically by the legislature in CHBRP's authorizing statute as areas that must be addressed in assessing the financial impacts of a proposed mandate (Table 1).

As is the case for any analytic approach, there are limits and considerations that should be kept in mind. The CCCM is primarily an actuarial forecasting model. Such models are particularly appropriate when substantial behavioral changes in response to mandates are likely to be limited in the short run. For example, a mandate requiring osteoporosis screening for all insured women aged 50-64 is unlikely to have an impact on the decision of employers to offer insurance, the rate of take-up of insurance by employees, or employer decisions about who is eligible for insurance in their firms, because the overall financial impact of such mandatory screening is likely to be small. Therefore, to the extent that mandates have a small impact on health insurance premiums and

overall health care expenditures, behavioral changes do not need to be modeled and an actuarial forecast should produce a reliable approximation of a mandate’s financial impact.

Construction of the Baseline Model: Estimates of California Population by Insurance Category

Each year, the CCCM is constructed to reflect the current state of California’s health insurance market based on most recently available data. The following sections describe the sources of data and the methods CHBRP uses. Following a discussion of data sources and methods, Table 3 provides an example of the CCCM’s estimates of health insurance, as estimated for 2009.

Data Items and Sources

The first step in creating the CCCM is to divide California’s population by insurance segment, utilizing data from a number of sources. These sources are summarized in Table 2 and described in the paragraphs that follow.

Table 2. Population and cost model data sources and data items

Data source	Items
California Health Interview Survey (CHIS), conducted biennially	- Insurance coverage (employment-based, privately purchased, Medicare, Medi-Cal, HF, other public) by age (0-17, 18-64, 65+) - Medi-Cal enrollment in County Organized Health Systems (not subject to DMHC-regulation) by age (0-17, 18-64, 65+)
California Employer Health Benefits Survey (CEHBS), conducted annually	- HMO/POS vs. PPO/indemnity by Self-insured vs. fully insured - Premiums (not self-insured) by size of firm (3-25 as small group and 25+ as large group) and family vs. single and HMO/POS vs. PPO/indemnity vs. HDHP and employer vs. employer premium share
CHIS benchmarked to DHCS administrative data for the Medi-Cal program, annually as of end of September	- HMO vs. fee-for-service (FFS) distribution by age (0-17, 18-64, 65+) - Premiums
CHIS benchmarked to CMS administrative data for the Medicare program, annually (if available) as of end of September	- HMO vs. FFS distribution for those 65+ (non institutionalized)
CalPERS data, annually as of end of September	- HMO vs. PPO (self-insured in this program) by age (0-17, 18-64, 65+) and by size of firm (3-25 as small group and 25+ as large group) - HMO Premiums (not self-insured)
CHIS benchmarked with MRMIB administrative data for the Healthy Families program, annually as of end of September	- Distribution of enrollment by age (0-17, 18) - Premiums
MRMIB administrative data for the AIM program, annually as of end of September	- Enrollment (women ages 18-64) - Premiums
MRMIB administrative data for the MRMIP	- Enrollment by age (0-17, 18-64, 65+)

program, annually as of end of September	-Premiums
CHBRP enrollment survey of the seven largest health plans in California, annually as of end of September	-Enrollment by size of firm (3-25 as small group and 25+ as large group), DMHC vs. CDI regulated, and HDHP vs. not -Premiums for individual policies by DMHC vs. CDI regulated and HDHP vs. not
Department of Finance population projections, for intermediate CHIS years	-Projected civilian, non-institutionalized CA population by age (0-17, 18-64, 65+)

Key:

- HMO: Health Maintenance Organization
- POS: Point of Service Plan
- PPO: Preferred Provider Organization
- HDHP: High Deductible Health Plan
- HF: Healthy Families, California's State Children's Health Insurance Program
- DMHC: Department of Managed Health Care
- CalPERS: California Public Employees' Retirement System
- CEHBS: California Employer Health Benefits Survey
- CHIS: California Health Interview Survey
- CMS: Centers for Medicare and Medicaid Services
- DHCS: Department of Health Care Services
- MRMIB: Managed Risk Medical Insurance Board
- MRMIP: Major Risk Medical Insurance Program
- AIM: Access for Infants and Mothers
- CDI: California Department of Insurance

The California Health Interview Survey (CHIS) is used to identify demographic characteristics and estimate the insurance coverage of the population in the state. CHIS is a random telephone survey of over 53,000 households conducted in multiple languages by the UCLA Center for Health Policy Research. CHIS is the first state-level survey of its kind to provide detailed information on demographics and health insurance coverage as well as health status and access to care, including representative samples of non-English speaking populations. This survey allows CHBRP to estimate the number of people with individual insurance coverage and to estimate the number with employer-sponsored insurance coverage.

The California Employer Health Benefits Survey (CEHBS), conducted by the National Opinion Research Center and funded by the California HealthCare is used to obtain estimates of the characteristics of the employment-based market, including firm size, plan type, self-insured status, and premiums. The CEHBS survey, collected annually since 2000, is based on a representative sample of California's employers.

CalPERS premiums and enrollment are obtained annually from CalPERS for active state and local government public employees and their family members who receive their benefits through CalPERS. Enrollment information is provided for fully funded, Knox-Keene licensed health care service plans covering non-Medicare beneficiaries, which comprise about 75% of CalPERS total enrollment. CalPERS self-funded plans—approximately 25% of enrollment—are not subject to state mandates. Information on the current scope of benefits for CalPERS health insurance products is obtained from health plans' evidence of coverage, available publicly online. In the absence of online information on coverage of a specific benefit, CHBRP directly contacts CalPERS to confirm coverage of the proposed mandated benefit.

Department of Health Care Services (DHCS) supplies CHBRP with a summary of the benefits as well as the statewide average premiums negotiated for the Medi-Cal Managed Care Two-Plan Model and generic contracts with health plans participating in Medi-Cal Managed Care program. In

addition to Medi-Cal Managed Care, enrollment data for other public programs—Healthy Families, Access for Infants and Mothers (AIM), and the Major Risk Medical Insurance Program (MRMIP)—are estimated based on data maintained by the Managed Risk Medical Insurance Board (MRMIB) and CHIS. Healthy Families enrollment is based on CHIS and distribution by age is obtained from MRMIB. Each program has a basic minimum scope of benefits according to regulations. All programs administered by MRMIB must comply with the scope of benefits imposed by California’s Department of Managed Health Care (DMHC) on Knox-Keene licensed health plans and thus are affected by legislative proposals to amend the California Health and Safety Code. MRMIB supplies CHBRP with the statewide average premiums used for the MRMIP program as a proxy for all their programs. CHBRP does not include enrollment in the Post-MRMIP Guaranteed-Issue Coverage Program, as these individuals are already included in the enrollment for individual health insurance products offered by private carriers. The enrollment numbers for AIM and MRMIP are included with enrollment for Medi-Cal in presentation of premium impacts. Administrative data for the Medicare program is obtained online from Center for Medicare and Medicaid (CMS).

CHBRP conducts the Annual Enrollment and Premium Survey of the seven largest health plans in California: Aetna, Anthem Blue Cross, Blue Shield of California, CIGNA, Health Net, Kaiser Foundation Health Plan, and PacifiCare, in order to determine baseline enrollment in the non-group or individual market.

The baseline model divides the health insurance products (and their respective enrollment) according to whether the DMHC or the California Department of Insurance (CDI) has regulatory authority over the health insurance product. Each proposed legislative mandate may target the products under one or both regulatory agencies’ jurisdiction. DMHC regulates Knox-Keene licensed health care service plans, commonly HMOs (including Point of Service Plans), along with Blue Shield PPOs and two Blue Cross/Anthem PPO plans under authority of the California Health and Safety Code. CDI regulates non-Knox-Keene licensed plans, typically PPO and indemnity or fee-for-service (FFS) plans, under authority of the California Insurance Code.

Plan types vary in terms of the benefit structure, the limitations on choice of providers (i.e., physicians and hospitals), and the level of managed care restrictions imposed by the health insurer. Standard descriptions of these plan types are as follows:

- HMO—A health maintenance organization is a “closed-panel” plan that limits coverage to those providers in a designated panel (other than in emergency situations). The plan member is typically required to select one of the panel’s primary care physicians, who serve as the referral point to specialty care. The primary care physician, by agreeing to participate in the HMO’s network, agrees to abide by the utilization management requirements and the capitation, fee schedules, or other reimbursement approaches specified by the HMO. HMO coverage is broader than fee-for-service coverage, meaning it has lower member cost sharing and includes certain preventive care services that are not generally covered under a FFS or PPO plan. The model HMO plan used in this analysis is assumed to be moderately managed in terms of the degree of managed care, meaning that the plan uses some management protocols and standards, with moderate conformity to such standards. These plans are typically regulated under DMHC.
- PPO—A preferred provider organization uses a fee-for-service approach to paying providers. The plan designates a preferred network of providers; members must use providers in the network in order to receive the highest level of benefit coverage. If a member chooses to use a non-network provider, the services are covered but the member must pay a substantially greater level of cost

sharing. The model PPO plan used in this analysis is assumed to be loosely managed with respect to all services. These plans are typically regulated under the CDI; however, the DMHC regulates a substantial portion of the CDI group market offered by Anthem Blue Cross and Blue Shield of California.

- POS—A point-of-service plan has a closed panel that is similar to an HMO plan, but it also allows members to go outside the panel, subject to paying a significantly higher level of cost sharing. The level of coverage for “in-network” benefits, meaning services within the closed panel, is similar to HMO coverage and has the same primary care physician role. The model POS plan used for this analysis is assumed to be moderately managed with respect to in-network coverage and loosely managed for out-of-network coverage. These plans are typically regulated by the DMHC.
- Fee-for-service (FFS)—The FFS plan is a traditional indemnity plan with minimal focus on managed care (referred to as “loosely managed”). Members can seek care from the providers of their choice. These plans are typically regulated by the CDI.

Methods

The steps to divide the California population by insurance category are as follows.

1. The California population is divided into several insurance categories using CHIS data. Insurance categories include employment-based, privately purchased, Medi-Cal, Medicare and Medi-Cal, Medicare exclusive of Medi-Cal, Healthy Families, and other public coverage.
2. Among other publicly insured, those with AIM and MRMIP are further separated from the “other public coverage” category using enrollment data from MRMIB. Both programs are included in the DMHC-regulated category in the baseline model.
3. Each category of insurance is further distributed by age group (0-17, 18-64, and 65+). Age breakdowns for Medi-Cal, Healthy Families, and MRMIP are based on DHCS and MRMIB administrative data.
4. The category of Medicare exclusive of Medi-Cal is further distributed into HMO vs. FFS groups, using CMS administrative data. HMO vs. FFS breakdowns are assumed to parallel the “DMHC-Regulated” and “CDI-Regulated” categories in other markets.
5. The categories of Medi-Cal and dually eligible for Medicare and Medi-Cal are further distributed into HMO vs. FFS using Medi-Cal administrative data. HMO vs. FFS breakdowns are assumed to parallel the “DMHC-Regulated” and “CDI-Regulated” categories in other markets.
6. The percentage of Medi-Cal beneficiaries enrolled in County Organized Health Systems (COHS) not regulated by the DMHC are identified by age (0-17, 18-64, 65+) from CHIS data. These individuals are separated from the Medi-Cal insurance category because they would not be subject to legislation amending the Health and Safety Code. (and therefore affect DMHC-regulated plans). The current COHS counties not regulated by the DMHC are Monterey, Napa, Orange, Santa Barbara, Santa Cruz, Solano, and Yolo. The Health Plan of San Mateo is the only COHS with a Knox-Keene license for its Medi-Cal insurance product.

7. The insurance category of individually purchased (non-group market) is further distributed by age group using CHIS data. This category is further distributed into DMHC- vs. CDI-regulated, as well as high-deductible health plan (HDHP) vs. not HDHP policies using the CHBRP Annual Enrollment and Premium Survey of the largest health plans in California.
8. The employment-based category is divided into those enrolled in CalPERS vs. “Others” using CHIS and CalPERS enrollment data. In other words, CalPERS members are deducted from CHIS population estimates.
9. CalPERS population is distributed by age (0-17, 18-64, 65+), size of firm (less than 25 as small group and 25+ as large group), and DMHC- vs. CDI-regulated policies. All CalPERS CDI-regulated plans are self-insured and are thus separated from the CalPERS category into the self-insured category in the population and cost model.
10. The employment-based insurance category exclusive of CalPERS is distributed into self-insured vs. fully insured using the CHBRP Annual Enrollment and Premium Survey. The self-insured category is separated from the rest and is generally excluded from all CHBRP cost analyses since such plans are not subject to state benefit mandates.
11. The fully insured employment-based population, exclusive of CalPERS, is further distributed by size of firm (3-25 as small group and 25+ as large group), and DMHC- vs. CDI-regulated, and HDHP vs. not HDHP policies using the CHBRP Annual Enrollment and Premium Survey.
12. The employment-based population is further distributed by age (0-17, 18-64, 65+) using CHIS data.
13. The overall size of the population in California is obtained from CHIS, which in turn is based on population projections obtained from the California Department of Finance (DOF). However, CHIS surveys are conducted every other year leading to lower population estimates in those years. This limitation of the data is addressed by an inflation of CHIS population numbers using the comparable DOF population projections for California’s non-institutionalized population. The DOF projections are distributed by age (0-17, 18-64, 65+) using CHIS age distributions. These population estimates are then used to inflate each age category in the population and cost model to represent the overall size of the California population in the year without new CHIS data. The estimates of AIM and MRMIP populations are not adjusted since they are based on actual administrative data.

Table 3. Health Insurance in California, 2009

Type of Coverage	Age					Total
Uninsured						
	0-17					560,000
	18-64					4,256,000
	65+					31,000
Publicly Insured						
		DMHC-Regulated Plans¹		Other Coverage²		
Medi-Cal (not Medicare)	0-17	1,524,000		717,000		2,241,000
	18-64	828,000		1,097,000		1,925,000
	65+	7,000		32,000		39,000
Medi-Cal COHS (including dual)	0-17	0		316,000		316,000
	18-64	0		232,000		232,000
	65+	0		80,000		80,000
Healthy Families ³	0-17	686,000		0		686,000
	18-64	29,000		0		29,000
MRMIP	0-17	1,000		0		1,000
	18-64	6,000		0		6,000
	65+	0		0		0
AIM	0-17	0		0		0
	18-64	7,000		0		7,000
Other Public (non Medi-Cal, HF, Medicare, AIM, MRMIP)	All					575,000
Dually eligible-Medicare & Medi-Cal	All	152,000		798,000		950,000
Medicare (non Medi-Cal)	All	1,089,000		2,023,000		3,112,000
CalPERS, Small Firm	0-17	1,000		0		1,000
	18-64	3,000		2,000		5,000
	65+	0		0		0
CalPERS, Large Firm	0-17	215,000		59,000		274,000
	18-64	586,000		210,000		796,000
	65+	15,000		9,000		24,000
Privately Insured						
		DMHC-Regulated Plans¹		CDI-Regulated Policies³		
		HDHP	Not HDHP	HDHP	Not HDHP	
Individually purchased	0-17	97,000	119,000	149,000	83,000	448,000
	18-64	334,000	408,000	511,000	286,000	1,539,000
	65+	4,000	4,000	6,000	3,000	17,000
Self-Insured	All					3,360,000
Employment-based underwritten, Small Group	0-17	82,000	721,000	156,000	107,000	1,066,000
	18-64	205,000	1,817,000	394,000	268,000	2,684,000
	65+	2,000	17,000	4,000	3,000	26,000
Employment-based underwritten, Large Group	0-17	5,000	3,127,000	11,000	102,000	3,245,000
	18-64	14,000	7,879,000	27,000	258,000	8,178,000
	65+	0	75,000	0	2,000	77,000
All Insured & Uninsured						
California's population total						36,786,000

Sources: CHBRP, 2009: Analysis of 2007 California Health Interview Survey (CHIS); 2008 California Health Care Foundation/National Opinion Research Center, California Employer Health Benefits Survey (CEHBS); 2008 CHBRP Carrier Enrollment Survey; 2008 CalPERS Enrollment Data; Centers for Medicare and Medicaid Services 2006 data for Medicare; Managed Risk Medical Insurance Board (MRMIB) 2008 data for the Major Risk Medical Insurance Program (MRMIP), Access for Infants and Mothers (AIM), and Healthy Families Program HFP; Department of Health Care Services 2008 data for Medi-Cal.

Key: HDHP= High Deductible Health Plan (deductible \$1150 and over). AIM= Aid for Infants and Mothers. CalPERS= California Public Employees' Retirement System. Medi-Cal COHS= Medi-Cal County Organized Health System. MRMIP= Major Risk Medical Insurance Program.

¹ Knox-Keene Plans include HMO, POS and certain PPO health plans subject to the Knox-Keene Act requirements which are regulated by the Department of Managed Health Care (DMHC).

² Plans and policies under "Other Coverage" are not subject to state-level regulation by either the California Department of Insurance (CDI) or the Department of Managed Health Care (DMHC).

³ Insurance Policies include PPOs and FFS health insurance products subject to the California Insurance Code which are regulated by the California Department of Insurance (CDI).

³ Healthy Families 18-64-year-old category only includes those who are aged 18 years and less because those over 18 are not eligible.

Utilization and Expenditures

The utilization and expenditure data for the CCCM are drawn primarily from the Milliman's Health Cost Guidelines (HCGs). The HCGs are a health care pricing tool used by actuaries in many of the major health plans in the United States. They provide a flexible but consistent basis for estimating health care costs for a wide variety of commercial health insurance plans. The HCGs are licensed and used by several California HMOs and insurance companies, including at least five of the largest plans. It is likely that these organizations would use the HCGs, among other tools, to determine the initial premium impact of any new mandate. Thus, in addition to producing what CHBRP believes are accurate estimates of the costs of a mandate, the HCG-based values should also be good estimates of the premium impact as estimated by the HMOs and insurance companies.

The HCGs are produced through Milliman's continuing research on health care costs. First developed in 1954, the HCGs have been updated and expanded annually since then. The HCGs are produced through a cooperative effort of Milliman's health care actuaries, and represent a combination of their experience, research, and judgment. An extensive amount of data is used in producing the HCGs, including published and unpublished data. In most instances, utilization and cost assumptions are based on Milliman's evaluation of several data sources.

Most of the data sources underlying the HCGs are claims databases from commercial health insurance plans. In particular, the data come from health insurance companies, Blues plans, HMOs, self-funded employers, and from private data vendors. Most of the data are from loosely managed health care plans, such as traditional indemnity style plans and PPO plans. Specific examples of these data sets include:

- Nationwide commercial claims data for approximately 4 million members, purchased from a commercial vendor (MEDSTAT);
- Claims data from Milliman clients who agree to the use of their blinded data for research, consisting of about 8 million members;
- All commercial, Medicaid, and Medicare inpatient claims from approximately 24 states that release this information, including data on all hospital discharges in California. These data are purchased

directly from the states, but are also available through the Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project (HCUP).

Because most of the data used by Milliman to develop the HCGs represent "loosely" managed care organizations from throughout the U.S., all the baseline analyses performed by Milliman start with PPOs in the large-group market, and then make adjustments to these baseline data to account for differences by type of insurance, size of market, and geographic location. The CHBRP model uses adjustment factors based on HCG research to tailor the utilization and unit cost data specifically to the state of California. These adjustments reflect the health status of California members, the regional physician and hospital practice patterns, the managed care methods in place, the typical plan designs, and the typical contracts between health plans and providers. The resulting cost estimates were then compared to the average premium rate information for the State of California from Milliman's most recent annual HMO Intercompany Rate Survey (the 2008 Survey was used for the 2009 Model), and to the premium rate information in the CEHBS to ensure the reasonableness of the overall health care cost and premium levels. Milliman performs the Milliman HMO Intercompany Rate Survey annually through a detailed questionnaire mailed to HMOs. The 2008 survey results were based on responses received from about 170 HMOs and 250 PPOs.

The process of starting with data from the large-group PPO market and then applying adjustments to arrive at estimates of baseline utilization and expenditures in each of the six combinations of market segment and plan type is described in more detail below. This process provided a valuable validity check for the Milliman HCG data relative to the CEHBS data, which was treated as both an external benchmark for calibrating Milliman's HCGs and a "gold standard" for actual premiums paid by employers in California.

To determine baseline coverage for a mandated benefit, CHBRP conducts a Bill-Specific Coverage Survey of the seven largest California health insurers—Aetna, Anthem Blue Cross, Blue Shield of California, CIGNA, Health Net, Kaiser Foundation Health Plan, and PacifiCare. As of December 2008, these seven firms represent 96% of the privately insured market: 98% of privately insured members in full-service health plans regulated by the DMHC and 82% of lives in privately insured health insurance products regulated by the CDI. Enrollment and coverage estimates from these insurers varied across assessments because some mandates are limited to HMOs, or to the CDI-regulated products. While this information is reflected in the modeling, each of these carriers offers a range of plan options, and it is impractical to summarize actual current coverage levels in detail.

Construction and Validation of the Baseline Model: Expenditures

The estimation methodology for the California population by insurance category is described above in the section entitled, *Construction of the Baseline Model: California Population by Insurance Category*. The key values of the baseline model for expenditures are estimates of the following per member per month (PMPM) values for each of these insurance categories:

- Insurance Premiums PMPM
- Gross Claims Costs PMPM
- Member Cost-Sharing PMPM
- Health care Costs Paid by the Health Plan

For each plan type, CHBRP first obtained an estimate of the Insurance Premium PMPM from the sources described in more detail below. The remaining three values were then estimated by the following formulas:

- Health care Costs Paid by the Health Plan = Insurance Premiums PMPM * (1 - Profit and Administration Load)
- Gross Claims Costs PMPM = Health care Costs Paid by the Health Plan / Percentage of Health Care Costs Paid by Health Plan
- Member Cost-Sharing PMPM = Gross Claims Costs * (1 - Percentage Paid by Health Plan)

In the above formulas, the quantity “Profit and Administration Load” is the assumed percentage of a typical premium that is allocated to the Health Plan’s administration and profit. These values vary by insurance category, and were estimated based on Milliman’s knowledge of the health care market.

In the above formulas, the quantity “Percentage Paid by Health Plan” is the assumed percentage of gross health care costs that are paid by the Health Plan, as opposed to the amount paid by member cost sharing (deductibles, copays, etc.). These values vary by insurance category. For each insurance category, Milliman estimated the member cost sharing for the average or typical plan in that category. Milliman then priced these plans using the Milliman HCGs to estimate the percentage of gross health care costs that are paid by the carrier.

These key values for the CHBRP baseline model are summarized in Table 4. The starting values are the 2009 PMPM premiums shown in Column 5. CHBRP used the most recent available estimates from surveys and other sources, and trend if necessary to 2009. For the large group and small group markets, the most recent available survey data was the 2008 California Employer Health Benefits Survey. For the individual market, CHBRP obtained 2008 premiums from a CHBRP Annual Enrollment and Premium Survey of large individual carriers in California. 2009 group premiums were estimated to be 110% of 2008 premiums, where the 10% trend rate was based on Milliman’s research on medical trends. For CalPERS, CHBRP obtained the 2009 California statewide HMO rates for the two Knox-Keene plans offered to CalPERS members. Medi-Cal HMO premium rates for 2009 were estimated based on premium expenditure data for the Two Plan Model counties, as reported by the Department of Health Services. Healthy Families premium rates for 2008 were obtained from MRMIB. The remaining columns of Table 4 are calculated from the formulas and assumptions described above.

Table 4. Summary of Development of Baseline Model of Per Member Per Month (PMPM) Expenditures for Each Market Segment and Type of Plan (1)

	(1)	(2)	(3)		(4)	(5)
Market Segment and Plan Type	Estimated 2009 Gross Claims Costs	Percentage Paid By Health Plan	Estimated 2009 Net Claims Costs	Administration/ Profit Load (PMPM)	Administration / Profit Load	Estimated 2009 Premiums
Large Group CDI Regulated	\$493	76%	\$373	\$66	15%	\$439
Large Group DMHC Regulated	\$369	84%	\$310	\$40	12%	\$350
Small Group CDI Regulated	\$467	56%	\$263	\$79	23%	\$342
Small Group DMHC Regulated	\$343	75%	\$257	\$61	19%	\$318
Individual CDI Regulated	\$211	54%	\$113	\$56	33%	\$169
Individual DMHC Regulated	\$385	59%	\$226	\$105	32%	\$331
CalPERS HMO	\$397	81%	\$321	\$57	15%	\$378
MediCal HMO 65 and Over	\$239	100%	\$239	\$0	0%	\$239
MediCal HMO Under 65	\$129	100%	\$129	\$0	0%	\$129
Healthy Families	\$88	86%	\$75	\$10	12%	\$85

Notes: (1) The commercial group and individual market segments of the baseline model are developed separately for high-deductible health plans (HDHPs) and non-HDHPs. Estimates for HDHPs and non-HDHPs are combined for each commercial segment shown in Table 4.

In summary, for each of the ten model plans and market segments, the baseline model is used to produce estimates of current coverage and costs that are presented in each report. For each of these market segments, CHBRP reports present the following elements of baseline coverage and current costs:

1. Total population in plans subject to state regulation
2. Total population in plans subject to the mandate
3. Average Portion of Premiums Paid By Employers (PMPM and Total Annual)
4. Average Portion of Premiums Paid By Employees (PMPM and Total Annual)
5. Total Premiums (PMPM and Total Annual)
6. Enrollee expenses for covered benefits: deductibles, cost-sharing, copays, etc (PMPM and Total Annual)
7. Member Expenses for Benefits Not Covered (PMPM and Total Annual)
8. Total Expenditures (PMPM and Total Annual)

Estimates of the PMPM expenditures for mandated services not currently covered are based on utilization and cost per unit of service estimates obtained from Milliman's claims data or other published sources where appropriate and available.

As a result of the above validation exercise, CHBRP is then able to estimate the impact of mandates on PMPM premiums starting with the premiums obtained from the latest California Employer Benefits survey trended forward to current dollars. Then, using baseline estimates of the eight dimensions of coverage and expenditures identified above, CHBRP uses the baseline Cost and Coverage model and information from published studies to estimate changes in each of these eight dimensions resulting from the proposed mandate.

Estimating the Impact of a Proposed Benefit Mandate: Post-Mandate Model

In general, mandated benefits fall into one of four general categories of benefits expansion, in which the mandate benefit is:

1. already covered for a portion of the insured population, so the mandate is expanding existing coverage to a broader population;
2. partially covered for a portion of the insured population, so the mandate would enrich the existing coverage for the same population.
3. currently available as a noncovered (i.e., noninsured) service, so the mandate is expanding coverage to a service that is currently paid out-of-pocket or by publicly funded insurance, other publicly funded programs, or by nonprofit entities.
4. a newly available service, so the mandate is expanding coverage to a service not previously available.

In the first three cases, existing data can likely be used to establish baseline utilization rates, whereas there is no baseline utilization in the fourth case. Changes in utilization resulting from the mandate can be estimated using claims data in the first three cases, but in all four cases, expert judgment based on previously published studies or professional experience are likely necessary to estimate how utilization levels will change in the post-mandate period. The remainder of this section discusses the general framework CHBRP employs to estimate the impact of proposed mandates.

Estimate the Change in the Number of Enrollees Covered by the Mandated Benefit

The first step is to estimate the current level of coverage for the proposed mandated benefit. CHBRP conducts Bill-Specific Coverage Survey of the largest health plans in California (usually seven) for each mandate to determine the average percentage of members already covered by the proposed mandate in the large and small group markets by type of health plan. Expanded coverage resulting from the mandate is thus assumed to produce a change equal to:

$$\Delta \text{ in \% covered} = (100\% - \% \text{ with baseline coverage}) \quad \text{Eq. 1}$$

$$\Delta \text{ in members covered} = (\Delta \% \text{ covered}) \times (\text{total insured members}) \quad \text{Eq. 2}$$

Each of these changes is calculated separately for all health plan types and market segments defined earlier.

For many mandates, this change in coverage is calculated for a specific subpopulation. For example, osteoporosis screening focuses on women aged 50-64 aged, while asthma education focuses on children aged 0-17 years. However, in later calculations of the impact on total PMPM expenditures,

for group health the impact of this subpopulation is averaged over the entire insured population within each type of health plan and market segment, because insurance premiums in the group market are not generally rated by age categories. Only the individual insurance market requires an estimate of the age groups affected by a proposed mandate, since premiums generally vary by age category in that market segment.

Estimate the Change in Utilization and Costs Covered by Insurance

For mandated services, CHBRP first determines the PMPM cost if the service is already covered and being paid under some insurance plans. These are the total costs for insured benefits, including the amounts paid by the insurer and amounts paid by the member through cost sharing, but excluding any amounts for insurer administration or profit. These costs are added to the post-mandate estimates later. (In this discussion, the term “cost” reflects the amount paid to providers for the services rendered plus the administrative and profit load retained by the insurer. This measure of cost is not the same as the “economic cost” of production, income to providers, or the charges quoted by providers, as discussed previously). For a given plan type and market, baseline PMPM insured health care costs are calculated as follows:

$$\begin{aligned} \text{Baseline PMPM insured health care costs} = & \text{Eq. 3} \\ (\% \text{ with coverage for the service}) * & \\ (\% \text{ current members with any expected utilization}) * & \\ (\text{total insured health care cost per user of the service}) & \end{aligned}$$

Next, CHBRP determines the PMPM cost of the mandated service covered by insurance plans after the mandate. For a given plan type, this is calculated as follows:

$$\begin{aligned} \text{Post-mandate PMPM insured health care costs} = & \text{Eq. 4} \\ (\% \text{ members covered for the service (assumed to be 100\%)}) * & \\ (\% \text{ of current and newly covered members with expected utilization}) * & \\ (\text{total insured health care cost per user of the service}) & \end{aligned}$$

$$\begin{aligned} \Delta \text{ PMPM insured health care costs} = & \text{Eq. 5} \\ (\text{post-mandate PMPM costs—baseline PMPM costs}) & \end{aligned}$$

The difference between the PMPM insured health care costs of newly mandated services before and after the mandate is the change in the *direct* health care costs covered by insurance (i.e., Equation 5).

In some cases, the increase in cost due to the newly covered services is accompanied by a decrease in the cost for other health care services, known as a “cost offset.” The total change in health care costs covered by insurance is equal to the change in the *direct* health care costs covered by insurance less the value of the offset due to decreases in other health care costs. CHBRP includes only short-term offsets. Thus, expanding coverage for service A may result in a reduction in the use of service B, for which it substitutes, or for which effectiveness measures indicate a clear short-term response. For example, better control of asthma symptoms attributable to improved outpatient management may result in lower use of emergency departments and fewer hospitalizations. These short-term reductions in use generate cost savings. On the other hand, because long-term studies have not been undertaken, it is speculative whether improved asthma management in one year leads to reductions

in utilization over extended periods unless the improved management is continued. Thus, long-term “downstream” effects are not included in the cost estimates.

The costs in this part of the analysis are adjusted to reflect current year expenditures and California utilization rates and costs per unit of service, as explained above in the construction of the baseline model.

Estimate Changes in the Amounts Paid by Member Cost Sharing and Amounts Paid by the Insurer

The portion of post-mandate PMPM costs paid by the insurer is estimated based on column 2 in Table 4. Member cost-sharing is imputed from this and is further modified if the impact of the mandate is to modify the cost-sharing provisions directly or indirectly. The modification, if any, varies by mandate. These analyses assume that the remaining portion of post-mandate PMPM costs not paid by member cost sharing is borne by employers.

$$\Delta \text{ in member cost-sharing} = (\% \text{ paid by members}) * \Delta \text{ in PMPM costs} \quad \text{Eq. 5}$$

$$\Delta \text{ in employer cost} = (\Delta \text{ in PMPM costs}) - (\Delta \text{ in member cost-sharing}) \quad \text{Eq. 6}$$

Estimate the Change in Premium Price

The change in insured premiums is equal to the increase in the PMPM costs borne by the employer, plus the increase in the administrative expenses and profits of the insurers. The administration and profit portion of the increase in insured premiums is based on column 4 of Table 4, “Administrative Load.” The total increase in the health care costs and administrative/profit components of premium is added to the baseline PMPM premiums to determine PMPM premiums after the mandate.

$$\Delta \text{ in premiums} = \Delta \text{ in employer cost} * (1 + \text{administrative load}) \quad \text{Eq. 7}$$

Allocate the Change in Premium Amounts Paid by the Employer and by the Employee

The PMPM premium after the mandate is allocated between the portions paid by the employer and employee by assuming employers will continue to pay the same percentage of health care costs as before the mandate. CHBRP applies the employer/employee shares obtained from the latest California Employer Benefits Survey.

$$\Delta \text{ in employer premium expenditures} = (\Delta \text{ in premiums}) * (\text{employer share of premiums}) \quad \text{Eq. 8}$$

$$\Delta \text{ in employee premium expenditures} = (\Delta \text{ in premiums}) * (\text{employee share of premiums}) \quad \text{Eq. 9}$$

Estimate the Costs for Newly Mandated Services Currently Paid Out-of-Pocket by Individuals Because the Benefit is Not Currently Covered

The impact of mandates also requires an estimate of the PMPM cost of services that are newly required by the mandate but that are not currently covered by insurance (i.e., those costs currently being paid entirely out-of-pocket by individuals). For a given plan type, this is calculated as follows:

$$\begin{aligned} \text{Current out-of-pocket expenditures for noncovered benefits} = & \hspace{15em} \text{Eq. 11} \\ & (\% \text{ members currently not covered for the service}) \times \\ & (\% \text{ currently not-covered members with expected utilization}) \times \\ & (\text{cost per user of the service}) \end{aligned}$$

Estimate the Costs for Newly Mandated Services Paid by Individuals Due to Lack of Insurance Coverage after the Mandate

This value is assumed to be zero for individuals covered by the mandate. Therefore, the change in out-of-pocket expenditures for noncovered benefits is equal to:

$$\begin{aligned} \Delta \text{ in out-of-pocket expenditures for noncovered benefits} = & \hspace{15em} \text{Eq. 12} \\ & 0 - \text{current out-of-pocket expenditures for noncovered benefits} \end{aligned}$$

Therefore, this amount represents a cost offset, since the cost of mandated services previously paid for out of pocket will be included in the insurance premium after the mandate.

Estimate the Impact on Total Expenditures for the Insured Population

The impact on total expenditures is equal to the total change in insured premiums plus the change in member cost sharing plus the change in the benefits on covered.

$$\begin{aligned} \Delta \text{ in PMPM total expenditures} = & (\Delta \text{ in premiums}) + & \hspace{15em} \text{Eq. 13} \\ & (\Delta \text{ in member cost-sharing}) - (\Delta \text{ in current out-of-pocket expenditures for noncovered benefits}) \end{aligned}$$

Note that this amount is typically less than the impact on premiums, because of savings related to a reduction in out-of-pocket expenditures for services previously not covered by insurance.

This change in PMPM expenditures is CHBRP's best summary measure of the financial impact of a proposed mandate. Although some analysts may want to focus on changes in typical insurance premiums, for example changes in average premiums for single or family coverage, insurance premiums alone do not reflect the total change in health care expenditures related to a mandate. Furthermore, the percentage change in PMPM premiums reported by CHBRP are applicable to changes in standard group health insurance premiums, since insurers generally calculate PMPM premiums first, then apply standard multipliers to translate those PMPM premiums into premiums for single and family coverage.

Presentation of Post-Mandate Impacts or Changes in CHBRP Reports

The following two table shells are typically used in CHBRP reports to present the key changes to coverage, utilization and costs. Table 5 presents summary information that would be found in the Executive Summary. Table 6 presents detailed information about the PMPM and total annual impacts by market segment.

Table 5. Summary of Coverage, Utilization, and Cost Impacts of SB/AB XXX

	Before Mandate	After Mandate	Increase/Decrease	Change After Mandate
Coverage				
Total population in plans/policies subject to state Regulation (a)				
Total population in plans/policies subject to SB/AB XXX				
Percentage of enrollees with coverage				
Coverage similar to mandated levels				
Partial coverage (NOTE: Only if relevant)				
No coverage				
Number of enrollees with coverage				
Coverage similar to mandated levels				
Partial coverage (NOTE: Only if relevant)				
No coverage				
Utilization and Cost				
Number of enrollees using benefit				
Coverage similar to mandated levels				
No coverage				
Average per unit cost				
Expenditures				
Premium expenditures by private employers for group insurance				
Premium expenditures for individually purchased insurance				
Premium expenditures by enrollees with group insurance, CalPERS HMOs, Healthy Families, AIM or MRMIP (b)				
CalPERS HMO employer expenditures(c)				
Medi-Cal HMOs state expenditures (d)				
Healthy Families state expenditures				
Enrollees' expenses for covered benefits (deductibles, copayments, etc.)				
Enrollees expenses for for non-covered benefits				
Total Annual Expenditures				

Source: California Health Benefits Review Program, 200X.

Notes: (a) This population includes privately insured (group and individual) and publicly insured (e.g., CalPERS, Medi-Cal, Healthy Families, AIM, MRMIP) individuals enrolled in health insurance products regulated by DMHC or CDI. Population includes enrollees aged 0-64 years and enrollees 65 years or older covered by employment sponsored insurance.

(b) Premium expenditures by individuals include employee contributions to employer-sponsored health insurance and member contributions to public insurance.

(c) Of the CalPERS employer expenditures, about X% or \$ X,XXX would be state expenditures for CalPERS members who are state employees.

(d) State expenditures for Medi-Cal HMO members under 65 years of age include expenditures for X newly covered by the Major Risk Medical Insurance Program (MRMIP) and x r newly covered by the Access for Infants and Mothers (AIM) program.

Key: CalPERS = California Public Employees' Retirement System.

Table 6. Baseline (Pre-Mandate) Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 200X

	DMHC-Regulated							CDI-Regulated			Total Annual
	Large Group	Small Group	Individual	CalPERS HMOs(b)	Medi-Cal HMOs(c)		Healthy Families	Large Group	Small Group	Individual	
				HMO	65 and Over	Under 65					
Total population in plans/policies subject to state regulation (a)											
Total population in plans/policies subject to AB/SB XXX											
Average portion of premium paid by Employer											
Average portion of premium paid by Employee											
Total Premium											
Enrollee expenses for covered benefits (Deductibles, copays, etc)											
Enrollee expenses for benefits not covered											
Total Expenditures											

Source: California Health Benefits Review Program, 2009.

Note: (a) This population includes privately insured (group and individual) and publicly insured (e.g., CalPERS, Medi-Cal, Healthy Families, AIM, MRMIP) individuals enrolled in health insurance products regulated by DMHC or CDI. Population includes enrollees aged 0-64 years and enrollees 65 years or older covered by employment sponsored insurance.

(b) Of these CalPERS HMO members, about X% or xxx,xxx are state employees.

(c) Medi-Cal state expenditures for members under 65 years of age include expenditures for the Major Risk Medical Insurance Program (MRMIP) and the Access for Infants and Mothers (AIM) program. Medi-Cal HMO state expenditures for members over 65 years of age include those with Medicare coverage.

DISCUSSION AND KEY LIMITATIONS OF THE MODEL

The CCCM developed by CHBRP is based on a widely used actuarial model of national HCGs developed by Milliman, Inc., augmented with two California-specific databases that represent “gold standards” for understanding the distribution of California’s population by insurance status (i.e., CHIS) and the level of premiums paid by California employers and employees (CEHBS). The existence of these databases provided CHBRP with the ability to develop a California-specific model to estimate the impacts of proposed mandates in a very timely fashion, thus providing legislators with more detailed and specific information than is generally available to legislative bodies for their deliberations. There are several limitations of the CHBRP model that merit discussion, however.

Short-Term Supply Constraints

The original legislation that created CHBRP requested estimates of the change in volume and price of mandated services based on the changes in utilization from the mandate. This legislative concern deals with the potential supply and demand effects of mandates, where a sudden increase in coverage may create excess demand (at least in the short-term) and thus affect the unit price. Making these estimates is complicated by the limited existing literature and data sources on the actual costs or economic impact of mandating coverage or expanding benefits provided by insurers.

Long-Term Costs

Economists generally assume that government regulation of the private sector increases costs for businesses by reducing their flexibility and ability to respond to changes in the market. Not all regulation, however, are necessarily to be cost increasing. For example, regulation that sets uniform standards may reduce private costs for measurement or contract negotiation enough to offset the costs of reduced flexibility. Benefit mandates are likely to raise premiums because the marginal cost of providing the benefit is added to the cost of providing insurance. Although legislators may often expect long-term savings in health care costs from mandates of preventive services due to the reduction in the need for other services, the short-term effect on premiums is usually an increase. Accordingly, CHBRP’s model generally projects increased insurance premiums based on actuarial assumptions.

Some benefit mandates analyzed by CHBRP involve diseases or conditions with significant long-term health consequences and often costs for these are well-documented in the literature—screening and other preventive and disease management services are good examples. Ignoring these long-term consequences because of time constraints may result in analyses that substantially underreport the health benefits and possible cost savings associated with a proposed mandate. Therefore, the following guidelines are used when examining the potential long-term impacts of a proposed mandate:

1. During the initial assessment of a proposed mandate, the cost team will determine if there are likely to be long-term health impacts and cost savings based on consultation with the appropriate content experts identified to assist in the analysis of that mandate.
2. The faculty lead for the mandate analysis will work with the medical effectiveness, public health, and cost teams, and the medical librarian to determine search terms and parameters that will help identify key literature on the possible long-term cost and public health impacts of the proposed mandate, including cost-effectiveness studies, which typically analyze lifetime health benefits and costs, as well as longitudinal epidemiological cohort studies. The medical

effectiveness team will provide a summary of the long-term costs and health benefits associated with the proposed mandate to the public health and cost teams.

3. Per the provision of CHBRP's authorizing legislation, the public health section is to address the "economic loss associated with the disease." Therefore, the public health team lead independently conducts a literature review to summarize existing studies. To the extent that this literature search yields articles on the long-term cost and long-term health impacts of a specific mandate, the public health team will share those with the cost team.
4. The cost team lead will work to review relevant literature, including cost-effectiveness studies that may have modeled long-term costs. The literature on cost-effectiveness analysis will be summarized to inform the reader as to what the costs associated with a life saved (or a "quality-adjusted life year" saved) are. Where other measures, such as morbidity, are available, those will also be summarized.
5. The public health team lead will quantify the effect of a mandate on lifetime morbidity and mortality, if data are available. As mentioned, if sufficient information is not available to quantify impacts, then available qualitative information will be presented.
6. The cost-effectiveness literature usually considers both the long-term costs and benefits of services. Where relevant, the cost team will summarize the findings from the cost-effectiveness literature regarding these long-term effects.

Modeling the Dynamics of the Private Market for Health Insurance

When the price of insurance (i.e., premium) increases, the amount of insurance demanded is likely to decrease. Demand for insurance in the group market is observed at two levels: at the firm level and at the individual employee level. From the employer's perspective, the cost of a worker is the sum of wages and benefits, including health insurance premiums paid by the employer. As the price of coverage increases, employers face a decision as to increasing their contribution (which is essentially an increase in the cost of compensation) or passing the increase on to their employees. Most economists agree that in the aggregate and over time, the costs of increased coverage are passed on to workers either through wages that are lower than they otherwise would have been or through increase out-of-pocket premium costs. In the short run, however, union contracts and other "frictions" in the market may result in some costs being absorbed by employers (or sometimes insurers). Other complicating factors are that eligibility for coverage is often "lumpy" with contributions being offered to full-time or half-time workers, but not part-time workers. Thus, employers may respond to the increased cost of compensation by shifting more of their workforce into categories not eligible for coverage.

Employees usually have the choice of taking coverage if offered by the employer. If the out-of-pocket premium cost is too high, some eligible workers will forgo coverage, and these are likely to be those who anticipate not benefiting as much from health insurance. If such "low-cost" members drop out of the employer's covered pool, the premium for the remaining members is likely to further increase (aside from the effects of the mandate per se). This selective disenrollment (known as adverse selection) may eventually lead to employer to drop coverage entirely. Under conditions of increased premiums, mandates impact access to health care (Table 1, B6). Depending on the magnitude of the premium increase, the number of employers offering insurance in the group market may go down, or employers may absorb the premium increase. If employers no longer offer insurance, employees face several choices. Employees may become uninsured, may switch to spousal coverage if available, may enroll in a public insurance program if eligible, or may buy individual

coverage. Individuals already purchasing insurance may drop coverage altogether if they cannot afford the new premium.

The impact on public programs is mainly observed in the low-income population. This population is most affected by price changes and is more likely to be eligible for income-tested benefits. In general, low-income individuals tend not to buy insurance even at very low prices (Chernew et al., 1997). The loss of private coverage and increase in public insurance participation is considered a crowd-out effect. There is some controversy about how large crowd-out effects are. In general, though, employees who are eligible for public insurance take up employer-provided insurance less frequently than employees not eligible for public insurance (Cutler and Gruber, 1996).

Mandates do not raise health insurance costs for everyone; they affect different sized employers and individuals with insurance in different ways. The decision to offer insurance by employers is a function of worker demand, labor market conditions, and establishments' costs (price) of coverage along with firm level characteristics, competition in the market, and the size of other firms in the market (Hadley and Reschovsky, 2002). Firm size is the most commonly measured factor determining whether firms offer insurance. In 2008, 96.5% of firms with 50 or more employees offered health insurance whereas only 43.2% of firms with less than 50 employees offered insurance (AHRQ, 2008). Moreover, the size of the firm affects the number of insurance plans employees are offered (Moran et al., 2001).

The literature on the price elasticity of demand for health insurance is summarized in Attachment C. The estimates of employer *offer rates* of insurance do not include the possible impact on *take-up rates* by employees among firms that continue to offer insurance. The Lewin Group has developed estimates as part of its Health Benefits Simulation Model that incorporate both these effects, and find that the overall average elasticity of demand for insurance is -0.34 (Lewin Group, 2002). This elasticity varies from -0.55 for individuals with \$10,000 annual income to -0.09 for individuals with annual income of \$100,000. Because the Lewin estimates include the total impact of premium increases on employee insurance status, CHBRP uses these estimates in assessing whether the change in premiums of a particular mandate will have an impact on the rate of uninsurance, and thus on other public programs and payers.

For mandates that have a large impact on premiums relative to average annual increases in California health insurance premiums, CHBRP analyses will include discussion of the possible impacts on the number of Californians who might become uninsured as a result of premium price increases based on Lewin's estimated elasticity of demand. For a detailed description of this process and calculation, please refer to Attachment C. Nevertheless, CHBRP's model does not include the dynamic aspects of the private insurance market and thus does not estimate the behavioral responses by employers or employees in response to premium price changes. Furthermore, CHBRP's model does not attempt to estimate the response of insurers to changes in their underlying costs. The model assumes that cost changes get passed on directly, whereas in competitive markets changes in underlying costs may or may not be passed on to employers.

Availability and Quality of Data for Individual Insurance Market

In contrast to the CEHBS, the survey of California employers, no independent and reliable survey data exist for the non-group or individual insurance market in California. To fill this void, CHBRP's Annual Enrollment and Premium Survey of the largest California health plans is used for estimates

of premiums and plan types. Thus, these estimates may be subject to more bias than data obtained from a representative population-based survey of the individual market.

Estimate the Costs for Newly Mandated Services Currently Paid Out of Pocket by Individuals Because the Benefit Is Not Currently Covered

All CHBRP reports include baseline and post-mandate estimates of the cost of “Out-of-pocket expenditures for noncovered services.” These are the costs associated with people that have insurance coverage, but whose coverage excludes or limits some services that are required by the particular mandate.

This value does not affect the estimated impact of a bill on premiums, but it does affect the estimated impact on total expenditures.

In the past two years CHBRP has assumed non-zero baseline costs for noncovered services for the following mandates:

- Maternity
- Elemental Formula
- Breast Conditions
- Cleft Palate
- DME
- HPV Vaccine
- Chemo Therapy
- Lactation Consulting

Conversely, during this period CHBRP assumed zero baseline costs for noncovered services for the following mandates:

- Mental Illness/Substance Abuse Parity
- HIV Testing
- Mammography
- Certified Nurse Midwife

Criteria for Deciding Whether or Not to Value Uncovered Costs Pre-Mandate

CHBRP doesn’t have formal criteria for deciding whether or not to value this cost pre-mandate. Also, in the cases where the amount is shown as zero, this does not mean CHBRP estimates the costs to be exactly zero, just that it costs is below rounding errors or immaterial relative to the overall impacts.

The following are possible considerations for this decision:

1. Are there alternative services covered by insurance that address the same condition? If so, it is less likely that people are currently paying out of pocket for the newly mandated service. For example, pregnant women don’t have real options other than to go to a hospital to deliver a baby.
2. Are the newly mandated services expensive? If so, it is less likely that people are currently paying out of pocket for the newly mandated services.

3. Are the newly mandated services commonly known to be provided on an out-of-pocket basis? For example, chiropractic and acupuncture care are both commonly provided on a relatively inexpensive basis to people without insurance.
4. How serious is the underlying condition? If it is serious, and the newly mandated service is critical to the health of the patient, it is more likely that that people are currently paying out-of-pocket for the newly mandated services. For example, if a formula is critical to the health and development of an infant with a condition, it is likely that the parents will buy the formula out of pocket.

Method for Valuing Uncovered Costs at the Baseline

There are several reasons why estimating the baseline cost for out-of-pocket expenditures for noncovered services is difficult. First, these costs are not included in insurance claim data, as they are the result of cash purchases by individuals.

Absent claims-like data, another approach is to estimate the number of individuals who might need a particular uncovered service, and how many of these would elect to actually pay for the service out of pocket. This is complicated by the fact that several alternatives exist, such as forgoing the service completely, or utilizing an alternative service for the same condition that is covered by their insurance.

The primary method CHBRP has used in the past is:

1. Estimate the % of the insured population that would utilize the newly mandated service if it was covered. CHBRP measures this based on claims data for people for whom the service is covered.
2. Estimate what % of these people would still utilize the service if it is not covered. For more critical services, such as maternity deliveries and critical formulas, CHBRP assumed 100%. For less critical services, CHBRP has assumed about 50%, based in part on the RAND Health Insurance Experiment (Newhouse, 2003)².

Uncovered Costs Post-Mandate

For most mandates, CHBRP assumes no uncovered costs post-mandate, as it is usually the stated intent of the bill to require coverage of services that are currently uncovered. (Bills that effectively repeal one or more existing mandates are an exception. For these, CHBRP has estimated that some services would still be covered by the market, regardless of whether it no longer required by law. However, some newly uncovered services would still be utilized and paid for out-of-pocket by the patient.

² The RAND Health Insurance Experiment (HIE) was a randomized controlled trial conducted in the late 1970s and early 1980s. The RAND HIE found that consumers enrolled in fee-for-service plans who paid a larger share of costs were less likely to use health care services and used smaller amounts of services than consumers who paid a smaller share of costs.

ATTACHMENT A

Public Demand: Research Approach

CHBRP's authorizing statute (California Health and Safety Code, Section 127660, et seq.) includes a provision for the analysis of:

The level of public demand for health care coverage for the benefit or service, including the level of interest of collective bargaining agents in negotiating privately for inclusion of this coverage in group contracts, and the extent to which the mandated benefit or service is covered by self-funded employer groups.

The purpose of this document is to outline the method used to determine the level of public demand, the level of interest of collective bargaining agents, and the extent to which the mandate is covered by self-funded employer groups.

The Level of Interest of Collective Bargaining Agents³

To determine the “level of interest of collective bargaining agents in negotiating privately for inclusion of this coverage in group contracts,” CHBRP will query specific organizations within California that act as collective bargaining agents, specifically labor unions. These unions would ideally have a state-wide base, but may have significant regional presences.

The organizations CHBRP will query are:

- California Labor Federation (CLF), AFL-CIO: Labor unions. Per its website, CLF represents approximately 1,200 affiliate local unions in negotiating labor contracts with employers. This includes 24 Central Labor Councils (who are responsible for coordinating activities at the local level) and approximately 2.1 million union members. (www.calaborfed.org/about/index.html)
- The Service Employees International Union (SEIU), AFL-CIO: Labor unions. Per its website, “with over 500,000 members, SEIU is the largest union in state and local government, health care, social services, building service, and horse racing. SEIU also represents a substantial number of classified school and community college employees, law enforcement, corrections, probation, and court employees.” (www.seiucal.org/calreport.html)

The general questions to ask the listed unions for each mandate analysis include:

- Does your membership currently have coverage for the [proposed mandate]?
- Do you currently negotiate privately for this proposed mandate? Would you be interested in negotiating privately for this benefit?
- Has your membership been successful in negotiating for inclusion of this benefit in collective bargaining agreements?

³ To gauge the level of interest of collective bargaining agents, the Maryland Health Care Commission contracts with Mercer Human Resources Consulting to conduct “a telephone survey of Maryland collective bargaining agents.” Their sample includes “groups such as the AFL/CIO, Laborers International, AFSCME, Building and Construction Trades, and United Food and Commercial Workers. The survey assesses their level of interest in negotiating for coverage and their support for or opposition to the proposed mandates. While they consider some mandates socially desirable, monetary constraints may affect their willingness to negotiate for the coverage.” (Maryland Health Care Commission, *Annual Mandated Health Insurance Services Evaluation*, Dec. 2003)

Extent to Which Mandate Is Covered by Self-Funded Employer Groups⁴

To determine the “extent to which the mandated benefit or service is covered by self-funded employer groups,” CHBRP will query the following:

- CalPERS: CalPERS health program covers 1.3 million active and retired state and local government public employees and their families (www.calpers.org/eip-docs/about/facts/general.pdf). Approximately one-quarter of their members are covered through CalPERS self-funded PPO plans: PERS Select, PERSCare and PERS Choice.
- Carriers routinely surveyed by CHBRP that serve as third party administrators to self-insured groups: Beginning with the 2009-2010 legislative session, CHBRP will include the following questions to each of its mandate-specific carrier surveys:
 1. Questions x-y above, ask you to exclude enrollees in self-insured plans and products from your answers. If you do offer plans or products to self-insured groups, please answer the following questions:
 - a. Describe how the covered benefits differ (if at all) from those offered in fully insured products.
 - b. Describe how the terms and conditions (cost sharing, etc.) differ (if at all) from those offered in fully insured products.

Process and 60-Day Timeline

In general, the goal is to ask relevant organizations for minimum and pertinent information in order to obtain responses as early as possible within the 60-day analysis period (e.g., days 0-11) to incorporate the responses into the CHBRP reports.

In the event a bill proposes coverage for a benefit that is a requirement under federal law, CHBRP will forego querying collective bargaining agents and self-funded employer groups, since in those cases, the fact that they cover a benefit is a product of a mandate and not necessarily demand for the benefit. Instead it would be appropriate to substitute discussion regarding demand for the benefit within the fully insured market based on how prevalent the benefit is among insurance products

⁴ For the purposes of analysis, “self-funded employer groups” or a self-insured plan is defined as: *ERISA plans that bear insurance risk directly rather than contracting to transfer that risk to an insurer, such as an HMO, Blue Cross plan, or indemnity carrier or other insuring organization (sometimes called a “self-funded” plan, although few ERISA plans set aside a fund from which health benefits are paid). Self-insured plans may be administered by the employer or employee organization directly or by an “administrative services only:” (“ASO”) agreement with an insurer or by another third-party administrator (“TPA”). Federal law does not define what constitutes a self-insured plan, and some state attempts to do so have been challenged as preempted by ERISA.* (From ERISA Preemption Manual for State Health Policy Makers by Patricia Butler, JD, DrPH, January 2000, <http://www.statecoverage.net/pdf/erisa2000.pdf>).

ATTACHMENT B

Large Group PPO Baseline Cost and Utilization Model

The baseline cost and utilization model is illustrated in Table B1. This table shows utilization and costs for all categories of service that are typically covered by commercial health insurance plans. This particular table is for one particular combination of Type of Health Plan and Market Segment, namely the Large Group Non-High Deductible plans regulated by the California Department of Managed Health Care (DMHC). Similar exhibits can be prepared for the other combinations of Type of Health Plan and Market Segment that are included in the Cost and Coverage Model.

Once the total PMPM premiums for all Type of Health Plan and Market Segment combinations are estimated, as defined previously in this appendix, Milliman creates a cost model based on underlying utilization and unit costs that are consistent with the observed average premiums. Because Milliman's databases contain underlying utilization and unit cost data at the detailed procedure and /or diagnosis group level, CHBRP is able to estimate how much of current insured costs are related to the services covered by a particular mandate, in the context of a model consistent with current premium levels.

This cost model, as illustrated in Table B1, shows utilization and costs for all categories of service that are typically covered by commercial health insurance plans. The PPO cost models include services by contracting and non-contracting providers.

The following pages provide descriptions of every service category shown in Table B1. At the end of this attachment is a listing of services that are not included in Table B1 because they are generally not covered by commercial health plans.

The following is a brief description of each column in Table B1:

- Column A – Admissions per 1,000. This column shows the annual number of inpatient hospital or SNF (skilled nursing facility) admissions per 1,000 covered lives.
- Column B – Length of Stay. This column shows the average length of stay per inpatient stay expressed in number of days. A length of stay of 1.000 means that a patient was admitted on one day, and discharged the next.
- Column C – Utilization per 1,000. This column shows annual utilization rates for every service category, measured in terms of various units, such as inpatient days, outpatient hospital cases or procedures, physician visits or procedures, or prescription drug scripts.
- Column D – Allowed Average Charge. The average unit “costs” are our estimates of allowed charge levels for an average commercial plan in California in calendar year 2009. Allowed charges equal the total payments to healthcare providers from all sources, including patients and third party payers.
- Column E – Per Member Per Month (PMPM) Claim Cost. This column is calculated as follows: $(\text{Column C}) \times (\text{Column D}) / 12,000$. It describes the expected healthcare cost per covered person per month, before application of any patient cost sharing features (e.g., deductibles, copays, and coinsurance).

- Column F – Copay Utilization. Where fixed-dollar copays apply, this column shows the frequency with which copays are assessed. In general, the frequencies in this column are equal to those in Column C. For some service categories (e.g., allergy testing, physical therapy), the copay utilization differs from Column C because the copay is assessed on a per-encounter basis rather than a per-procedure basis, whereas utilization in Column C is on a per-procedure basis.
- Column G – Copay. This column shows the average patient fixed-dollar copay per service. For some service categories the copay amount is a blend of several copay levels.
- Column H – Per Member Per Month Cost Sharing Value. This column is calculated as follows: $(\text{Column F}) \times (\text{Column G}) / 12,000$.
- Column I – Net Per Member Per Month Claim Cost. This column is calculated as follows: $(\text{Column E}) - (\text{Column H})$. It reflects the net benefit cost to the health plan or other third party payer.

At the bottom of Table B1 are some additional rows that adjust for the following effects:

1. Utilization impact of plan deductible and coinsurance. In general, higher patient cost sharing (e.g., higher deductibles) will result in less utilization. The insured cost reductions from this effect are projected using factors published in the Milliman HCGs.
2. Value of deductible, coinsurance, out-of-pocket maximum, and overall annual benefit maximum. These values are calculated using a claims probability distribution (CPD) that has been adjusted to reflect characteristics of the particular benefit plans being evaluated. The underlying CPDs are published in the Milliman HCGs.
3. Administrative expenses. Costs of administering a typical health plan are included.

Further Detail within Service Category Rows

Often a mandate will only affect a portion of the services included in a row of the cost model. Milliman can provide further detail for each row. For example, for Inpatient Hospital services, implicit in the model is a set of utilization and cost per day values for each Diagnosis Related Group (DRG).

For Physician Services, utilization and costs can be modeled separately for each Current Procedural Terminology (CPT) and Healthcare Common Procedural Coding System (HCPCS) code. This detailed utilization can be further split by type of physician (e.g., general internal medicine, pediatrician, orthopedist), if the mandate requires it.

Description of Service Categories and Excluded Services

The cost models described in this section are consistent with the following benefit descriptions. In general, only medically necessary services are included. Benefits subject to limitations have the limitations detailed in the description.

Service classification may also be dependent on criteria such as site of service and procedure code modifier. Cost modifications are required where material differences exist in covered benefits.

Commercial Benefit Descriptions

Inpatient Facility—Non-Maternity

This benefit provides for daily semi-private room and board and ancillary services in short-term community hospitals. Ancillary services include use of surgical and intensive care facilities, inpatient nursing care, pathology and radiology procedures, drugs, and supplies. Costs include facility charges only and do not include professional charges unless performed by staff of the facility and billed on a UB-92 (hospital) claim form. Maternity confinements and related well newborn care, psychiatric, and alcohol and drug abuse confinements in excess of 60 days, and nursing or custodial care confinements are not included.

1. **Medical:** A medical confinement includes non-psychiatric confinements that are assigned to a medical diagnosis group using the CMS diagnosis related group (DRG) coding system. The presence of a medical DRG does not preclude a surgical procedure during the confinement.
2. **Medical—Other Newborn:** Includes medical confinement charges associated with premature births or other non-routine neonatal care. This benefit does not include charges associated with the birth of a healthy baby which are included in the Maternity - Well Newborn confinement costs.
3. **Surgical:** A surgical confinement includes non-psychiatric confinements that are assigned to a surgical diagnosis group using CMS's DRG coding system. Surgical confinements may include more than one surgical procedure, and the performance of a surgical procedure does not necessarily result in the assignment of a surgical DRG.
4. **Psychiatric:** A psychiatric confinement includes confinements that are assigned to a mental health diagnosis group using CMS's DRG coding system. This benefit is subject to an annual maximum of sixty days.
5. **Alcohol and Drug Abuse:** An alcohol and drug abuse confinement includes both detoxification and rehabilitation confinements that are assigned to a substance abuse diagnosis group using CMS's DRG coding system. This benefit is subject to an annual maximum of 60 days.

Inpatient Facility—Maternity

This benefit provides for inpatient facility room and board and ancillary services in short-term community hospitals for normal and cesarean deliveries as well as for non-deliveries.

1. **Mother—Normal Deliveries:** Includes charges associated with the mother in maternity cases where there is a normal delivery.
2. **Mother—Cesarean Deliveries:** Includes charges associated with the mother in maternity cases where there is a cesarean delivery.
3. **Well Newborn:** Includes charges associated with the birth of a healthy baby. This benefit does not include charges associated with premature births or other non-routine neonatal care, which are included in the Medical - Other Newborn confinement costs.
4. **Non-Deliveries:** Includes inpatient facility room and board and ancillary services in short-term community hospitals for complications of pregnancy and pregnancies that do not result in a delivery due to miscarriage or therapeutic abortion.

Skilled Nursing Facility

This benefit provides for daily room and board and ancillary services in an approved skilled nursing facility. The care could be provided in either a skilled nursing bed in a community hospital or an independent skilled nursing facility. Confinements must be medically necessary; confinements related solely to custodial care are not included. Ancillary services include inpatient nursing care, pathology and radiology procedures, drugs, and supplies.

Outpatient Facility

This benefit provides for services in an outpatient facility setting. Costs include facility charges only and do not include professional charges unless performed by staff of the facility and billed on a UB-92 (hospital) claim form. HCPCS codes C1079–C9899 can be used to report drugs, biologicals, and devices eligible for transitional pass-through payments and for items classified in CMS's Ambulatory Payment Classification (APC) coding system. For all outpatient facility categories, the utilization in Table B1 represents the number of outpatient facility cases.

1. **Emergency Room:** This benefit provides for services for emergency accident and medical care performed in the emergency area of a hospital outpatient facility for cases that do not result in an inpatient admission. The average charge includes the cost of emergency room services as well as other services (e.g., radiology, pathology, etc.) provided during an emergency room case.
2. **Surgery:** This benefit provides for outpatient services for surgery, including surgery performed in a hospital outpatient facility or a freestanding surgical facility. The average charge includes facility charges for surgical services as well as other services (e.g., radiology, pathology, etc.) provided during an outpatient surgery case.
3. **Radiology:** This benefit provides for the technical component of radiology services performed by a hospital outpatient department or a freestanding facility.

4. Pathology: This benefit provides for the technical component of pathology and laboratory services performed by a hospital outpatient department or a freestanding facility.
5. Pharmacy and Blood: This benefit provides for drugs and blood products ordered and provided in a hospital outpatient department or a freestanding facility.
6. Cardiovascular: This benefit provides for cardiovascular services, such as EKG tests and cardiac stress tests, performed in a hospital outpatient department or a freestanding facility.
7. PT/OT/ST: This benefit provides for physical therapy, occupational therapy, and speech therapy services provided in a hospital outpatient department or a freestanding facility.
8. Other: This benefit provides for facility outpatient services other than emergency room, surgery, radiology, pathology, pharmacy and blood, cardiovascular, and PT/OT/ST, such as dialysis, chemotherapy, neurology, observation care, and other diagnostic services.

Professional—Inpatient Surgery—Non-Maternity

1. Primary Surgeon:

This benefit provides for surgery by a primary surgeon performed on an inpatient basis. The annual utilization in Table B1 represents the number of inpatient surgical procedures and not the number of surgical admissions. Cost levels provide for normal pre-surgical and post-surgical encounters with the surgeon.

2. Assistant Surgeon:

This benefit provides for services by an assistant surgeon performed on an inpatient basis. The annual utilization in Table B1 represents the number of surgical procedures involving an assistant surgeon.

3. Anesthesia:

This benefit provides for services by an anesthesiologist or anesthesiologist for non-maternity inpatient surgeries. Cost levels provide for normal pre-surgical and post-surgical encounters and the usual monitoring procedures.

Professional—Maternity

1. Normal Deliveries:

This benefit provides for professional obstetrical care for normal deliveries. Obstetrical care includes delivery care, anesthesia, and standard pre-natal and postnatal visits. The annual utilization in Table B1 represents the number of maternity cases that result in a normal delivery.

2. Cesarean Deliveries:

This benefit provides for professional obstetrical care for cesarean deliveries. Obstetrical care includes delivery care, anesthesia and standard pre-natal and postnatal visits. The annual utilization in Table B1 represents the number of maternity cases that result in a cesarean delivery.

3. Non-Deliveries:

This benefit provides for delivery-related diagnostic services and professional obstetrical care for pregnancies that do not result in a delivery due to a complication, miscarriage, or therapeutic abortion. This benefit does not include costs for elective abortions. Obstetrical care includes surgical care, anesthesia, and standard prenatal visits. The annual utilization in Table B1 represents the number of non-delivery maternity cases, including procedures such as fetal monitoring and amniocentesis for delivery cases.

Professional—Outpatient Surgery

1. Outpatient Facility:

This benefit provides for surgery by a physician in a hospital outpatient department or a freestanding surgical facility. Cost levels provide for normal pre-surgical and post-surgical encounters with the surgeon. The annual utilization in Table B1 represents the number of outpatient surgical procedures and not the number of outpatient surgical encounters.

2. Office:

This benefit provides for surgery by a physician in the physician's office. Cost levels provide for normal pre-surgical and post-surgical encounters with the physician. The annual utilization in Table B1 represents the number of office surgical procedures and not the number of office surgical encounters.

3. Anesthesia:

This benefit provides for services by an anesthesiologist or anesthesiologist for non-maternity outpatient surgeries. Cost levels provide for normal pre-surgical and post-surgical encounters.

Professional—Inpatient Visits

1. This benefit provides for visits to a hospital or skilled nursing facility by a physician. This benefit also provides for the care of critically ill patients in a variety of medical emergencies that require the constant attention of the physician (e.g., cardiac arrest, shock, bleeding, respiratory failure, etc.). Critical care is usually, but not always, given in a critical care area, such as the coronary care unit, intensive care unit, respiratory care unit, or an emergency care facility. Physician visits by the surgeon in the case of a surgery are included in the surgery benefit.

Professional—Office Visits and Miscellaneous Services

1. Office/Home Visits:

This benefit provides for visits to a physician's or other professional's office, visits to the insured's home or custodial facility, and some professional case management services. Costs include charges of the primary professional or the referral professional. Cost levels provide only for the professional's time; thus the cost of pathology or radiology procedures performed in the professional's office and medications have been included elsewhere. This benefit excludes physical exams, well baby exams, and any pre-surgical or post-surgical visits.

2. Urgent Care Visits:

This benefit provides for visits to an urgent care center. Costs include professional charges of the physician or other professional. Cost levels provide only for the physician's time; thus the cost of pathology, radiology, or surgical procedures performed in the urgent care center have been included elsewhere.

3. Therapeutic Injections:

This benefit provides for professional services and materials (serum, syringes, etc.) associated with therapeutic injections when administered by the staff of the attending physician. The annual utilization in Table B1 represents the number of administration CPT-4 codes and supply HCPCS codes.

4. Allergy Testing:

This benefit provides for professional services and materials associated with allergy tests when administered by the staff of the attending physician. The annual utilization in Table B1 represents the number of tests performed.

5. Allergy Immunotherapy:

This benefit provides for professional services and materials (serum, syringes, etc.) associated with allergy immunotherapy when administered by the staff of the attending physician. The annual utilization in Table B1 represents the number of administration and supply CPT-4 codes.

6. Miscellaneous Medical:

This benefit provides for the following medically necessary professional services: biofeedback, central nervous system tests, chemotherapy, dermatology, dialysis, gastroenterology, medical nutrition therapy, neurology, non-invasive vascular diagnostic studies, ophthalmology, otorhinolaryngology, photodynamic therapy, prescription drugs not dispensed through a conventional pharmacy (i.e., physician office, hospital pharmacy, etc.), pulmonology, vestibular function tests, and other miscellaneous services.

Professional—Preventive Services

1. Immunizations:

This benefit provides for the professional services and materials (serum, syringes, etc.) associated with administering immunizations. The annual utilization in Table B1 represents the number of administration and supply CPT-4 and HCPCS codes.

2. Well Baby Exams:

This benefit provides for normal periodic examinations of well children under 2 years of age.

3. Physical Exams:

This benefit provides for routine examinations of adults and children aged 2 and over. This benefit includes the cost of laboratory and radiology services associated with the exam.

4. Vision Exams:

This benefit provides for eye exams conducted by a licensed ophthalmologist or optometrist. The utilization in Table B1 is representative of coverage limited to one exam per year.

5. Hearing/Speech Exams:

This benefit provides for hearing and speech exams.

Professional—Other Physician Services

1. Emergency Room Visits:

This benefit provides for visits to the emergency and observation care areas of a hospital outpatient facility by either a primary care physician or a hospital staff physician (when billed separately). Costs include professional charges of the primary care or hospital staff physician. Facility costs are included in the outpatient facility benefit.

2. Consults:

This benefit provides for specialist consultations and presumes the primary care physician has due cause to seek consultation. A consultation includes services rendered by a physician or other appropriate professional for the further evaluation and/or management of the patient. When the consulting professional assumes responsibility for the continuing care of the patient, any subsequent service rendered by the professional will cease to be a consultation. Consultations can be provided for either inpatient or outpatient care.

3. Physical Therapy:

This benefit provides for physical therapy and occupational therapy when ordered by the attending physician. Table B1 utilization reflects all services and modalities (e.g., cold packs).

4. Cardiovascular:

This benefit provides for therapeutic services (e.g., CPR), cardiography (e.g., EKGs), and other cardiovascular services performed by a physician or qualified professional.

5. Radiology:

Two subcategories for Radiology used: General and CT/MRI/PET. Place of service determines the inpatient, outpatient, and office classification.

a. Inpatient (Professional Only):

This benefit provides for professional services when the radiology services are performed on an inpatient basis. The technical component of radiology services is included in the inpatient facility benefit.

b. Outpatient (Professional Only):

This benefit provides for professional services when the radiology services are performed in a hospital outpatient department, freestanding facility, or the office. This benefit includes only those professional charges that are billed separately from the technical component.

c. Office (Combined Professional and Technical):

This benefit provides for both the professional and technical component of radiology services when these components are billed together. These charges will only be generated when the radiology service is performed in an office or clinic setting.

6. Pathology:

a. Inpatient (Professional Only):

This benefit provides for professional services when the pathology services are performed on an inpatient basis. The technical component of inpatient pathology services is included in the inpatient facility benefit.

b. Outpatient (Professional Only):

This benefit provides for professional services when the pathology services are performed in a hospital outpatient department, freestanding facility, or the office. This benefit includes only those professional charges that are billed separately from the technical component.

c. Office (Combined Professional and Technical):

This benefit provides for both the professional and technical component of pathology and laboratory services when these components are billed together. These charges will only be generated when the pathology and laboratory services are performed in an office or clinic setting. This category also includes routine venipunctures.

7. Chiropractor:

This benefit provides for visits to a licensed chiropractor's office including those visits involving manipulations. This benefit does not include radiology services provided in the chiropractor's office.

8. Outpatient Psychiatric:

This benefit provides for psychiatric treatment by a qualified professional performed on an outpatient basis, including both therapy visits and medication management visits. Charge levels in Table B1 are 100% of reasonable and customary charges, but the annual utilization in Table B1 reflects a restrictive plan of benefits, such as 50% coinsurance with an annual maximum of 20 visits.

9. Outpatient Alcohol and Drug Abuse:

This benefit provides for outpatient treatment of alcohol and/or drug abuse by a qualified professional. Charge levels in Table B1 are 100% of reasonable and customary charges, but the annual utilization reflects a restrictive plan of benefits, such as 50% coinsurance with an annual maximum of 20 visits.

Other

1. Prescription Drugs:

This benefit provides for all outpatient prescriptions ordered by an attending physician and dispensed by a pharmacist, and includes the dispensing fee. Oral contraceptives are included.

2. Private Duty Nursing/Home Health:

This benefit provides for private duty nursing and home visits by a home health professional if prescribed by the attending physician and not representing custodial care. See Section 5F.

3. Ambulance:

This benefit provides for all ambulance services.

4. Durable Medical Equipment (DME):

This benefit provides for the following examples of appliances and equipment: Braces (orthotics), canes, crutches, glucometer, diabetic supplies, ostomy supplies, intermittent positive pressure machines, rib belt for treatment of an accident or illness, walker, wheel chairs, etc. This benefit also includes glucosan, enteral and parenteral nutrition, and other solutions administered through DME. All covered services must be medically necessary.

5. Prosthetics:

This benefit provides for prosthetics and includes artificial parts that replace a missing body part or improve a body function (e.g., artificial limb, heart valve, medically necessary reconstruction, etc.).

Additional Benefits

1. Glasses/Contacts:

This benefit provides for glasses or contacts, but not both. The utilization in Table B1 is representative of coverage limited to one occurrence per year, with an annual maximum benefit of \$350.

Excluded Benefits

The benefits described above are intended to include those benefits most commonly covered under commercial group medical policies. Common exclusions to these benefits include, but may not be limited to, the following benefits:

- Non-medically necessary services
- Physicals related to employment, education, or insurance
- Experimental procedures
- Custodial care
- Day care and foster care
- Personal comfort or beautification/cosmetic services and supplies
- Hearing aids
- Safety glasses, athletic glasses, and sunglasses
- LASIK and similar surgery
- Treatment for obesity (food, diet or exercise programs, surgery, etc.)
 - Treatment for eating disorders (food, diet or exercise programs, surgery, etc.)
- Vitamins, food supplements, and over-the-counter medicines
- Wellness benefits (exercise classes, health club membership, smoking cessation products, etc.)
- Elective abortions

- In vitro fertilization
- Gamete or zygote intrafallopian transfer (GIFT or ZIFT)
- Artificial insemination
- Reversal of voluntary sterilization
- Transsexual surgery
- Treatment of sexual dysfunction
- Ear piercing
- Acupuncture
- Viagra
- Non-oral contraceptives

Table B1:
CHBRP Sample Actuarial Cost Model
Estimated Medical Cost as of July 1, 2009
Population and Plan Type: Large Group, DMHC-Regulated, non-High Deductible Plan

Benefit	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
	Admissions Per 1,000	Length of Stay	Utilization Per 1,000	Allowed Average Charge	Per Member Per Month Claim Cost	Copay Utilization	Copay	Per Member Per Month Cost Sharing Value	Net Per Member Per Month Claim Cost
Inpatient Facility									
Medical									
IP Facility Medical	21.5	Admits	3.91	84.1	Days	\$2,683.97		\$18.81	\$18.81
Maternity Non-Deliveries	0.6	Admits	2.63	1.6	Days	1,874.80		0.25	0.25
Surgical									
Psychiatric	1.8	Admits	7.71	13.9	Days	775.32		0.90	0.90
Alcohol & Drug Abuse	1.3	Admits	5.95	7.7	Days	462.94		0.30	0.30
Maternity	8.0	Admits	2.11	16.8	Days	2,608.60		3.66	3.66
Skilled Nursing Care	1.5	Admits	16.23	24.4	Days	1,686.10		3.42	3.42
	53.2	Admits	4.21	224.2	Days			\$61.79	\$61.79
Outpatient Facility									
Emergency Room				118	Cases	\$1,346.12		\$13.24	\$12.75
Surgery				88	Cases	3,770.75	118	\$50.00	\$27.65
Radiology									
Radiology - General				237	Cases	402.22		7.94	7.94
Radiology - CT / MRI / PET				51	Cases	1,651.12		7.02	7.02
Pathology				279	Cases	190.14		4.42	4.42
Pharmacy and Blood				64	Cases	867.56		4.63	4.63

Misc. Medical	376	Proced.	109.45	3.43				3.43
Immunizations	1,388	Services	27.72	3.21				3.21
Well Baby Exams	101	Exams	91.45	0.77				0.77
Physical Exams								
Professional	444	Exams	112.69	4.17				4.17
X-Ray	9	Proced.	76.56	0.06				0.06
Lab	542	Proced.	15.69	0.71				0.71
Vision, Hearing, and Speech Exams								
Vision Exams	341	Exams	85.99	2.44	341	\$15.00	0.43	2.01
Hearing/Speech Exams	74	Exams	43.32	0.27	74	\$15.00	0.09	0.18
Emergency Room Visits	121	Visits	122.16	1.23				1.23
Consults	198	Consults	178.36	2.94	158	\$15.00	0.20	2.74
Physical Therapy	750	Services	44.95	2.81	250	\$15.00	0.31	2.50
Cardiovascular	302	Proced.	64.62	1.63				1.63
Radiology								
IP (Professional)	87	Proced.	39.96	0.29				0.29
OP (Professional)								
Outpatient - General	414	Proced.	27.62	0.95				0.95
Outpatient - CT / MRI / PET	106	Proced.	78.65	0.69				0.69
Office (Combined)								
Office - General	576	Proced.	98.23	4.72				4.72
Office - CT / MRI / PET	58	Proced.	623.39	3.01				3.01
Pathology								
IP (Professional)	38	Proced.	36.96	0.12				0.12
OP (Professional)	82	Proced.	39.96	0.27				0.27
Office (Combined)	3,298	Proced.	19.12	5.25				5.25
Chiropractor	0	Visits	33.32	0.00		\$15.00		0.00
Outpatient Psychiatric	342	Visits	107.09	3.05	342	\$15.00	0.43	2.62
Outpatient Alcohol & Drug Abuse	20	Visits	70.29	0.12	20	\$15.00	0.03	0.09
				\$89.66			\$6.22	\$83.44

Other								
Prescription Drugs	11,183	Scripts	\$90.52	\$84.36	11,183	\$12.96	\$12.08	\$72.28
Private Duty Nursing/Home Health	98	Units	563.00	4.60				4.60
Ambulance	54	Runs	567.23	2.55				2.55
DME/Prosthetics								
Durable Medical Equipment	170	Units	314.10	4.45				4.45
Prosthetics	5	Units	1,105.40	0.46				0.46
Glasses/Contacts	180	Services	256.78	3.85				3.85
Other Benefit #1				0.00				0.00
Other Benefit #2				0.00				0.00
				\$100.27			\$12.08	\$88.19
Total Medical Cost				\$328.49			\$18.79	\$309.70
Utilization Adjustment Value								\$0.00
Value of \$0 Deductible								0.00
Value of 0% Coinsurance								0.00
Value of \$1,500 Out-of-Pocket Maximum								0.00
Value of Annual Maximum								0.00
Total Medical Cost After Deductible and Coinsurance								\$309.70
Retention (12% of Premium)								\$40.24
Retention - Fixed PMPM								0.00
Total Premium								\$349.94

ATTACHMENT C

Criteria and Methods for Estimating the Impact of Mandates on the Number of Individuals Who Become Uninsured in Response to Premium Increases

By statute, CHBRP is requested to report on the financial impacts of proposed legislation, including “the extent to which mandating or repealing the proposed benefit or service would not diminish or eliminate access to currently available health care benefits or services;” and “the extent to which costs resulting from lack of coverage or repeal of coverage are or would be shifted to other payers, including both public and private entities” (SB 1704, Chapter 684, Statute 2006).

Some mandates have been purported to potentially increase premiums to such an extent that they would lead to a reduction in the number of individuals who could afford to purchase insurance and/or in the number of employers who could afford to offer insurance to their employees. Mandates have the potential to impact access to affordable insurance thus increasing the number of uninsured or increasing the number of individuals eligible for public health insurance programs.

This paper describes (1) the factors that underlie employer and individual reactions to premium increases; (2) the criteria that CHBRP uses to determine whether premium increases for a particular mandate would be substantial enough to impact the number of those enrolled in the privately insured market; and (3) the method used by CHBRP to produce these estimates.

Factors that Affect Reactions to Premium Increases

Increases in insurance premiums can generate reactions in the employer-sponsored and individual health insurance market that in turn affect the number of insured employees and individuals. In the employer-sponsored insurance (ESI) market (i.e., group market), premium increases can affect the: (1) *offer rate*, that is, the percentage of employers who offer health insurance to their employees; (2) *eligibility rate*, that is, the percentage of employees in firms offering health insurance who are eligible for that benefit; and (3) *take-up rate*, that is, among employees in firms offering health insurance who are eligible, the percentage who decide to accept the employer’s health insurance benefit. In the individual market, premiums directly affect the take-up rate, as individuals respond directly to premium changes. Because of these fundamental differences in the group and individual markets, it is important to consider the impacts on these markets separately.

Employer-Sponsored Insurance Market

Health insurance premiums in the group market have been increasing at double-digit rates for most of this decade, far exceeding the rate of inflation. For example, based on information from the California Employer Health Benefits Survey, group premiums rose by 8.3% in 2007, in 2008 by 8.3%, and in 2009 by 7.5%. From 2002-2009, premiums have more than doubled. These large ongoing premium increases suggest that premium increases attributable to a specific health benefit mandate are likely to be overshadowed by the secular trend of rapidly increasing premiums.

Furthermore, the number of uninsured Californians has not been growing despite these rapidly increasing insurance premiums, suggesting that some forces in the market are offsetting the impact of rising premiums on the number of uninsured. From 2003 to 2005, the rate of uninsurance in California (defined as those without insurance for part or all of the year) dropped slightly from 21.0% to 20.2%; the rate of employment-sponsored insurance rose slightly from 53.8% to 54.3% and the rate of non-group (individual) insurance rose slightly from 5.4% to 5.5%. Coverage rates in Medi-Cal or Healthy Families also rose slightly from 15.5% to 15.8% (Yoon et al., 2006).

Employer Offer Rate

Studies suggest that employers typically do not stop offering health insurance when premiums increase. Literature on employers' incentives to offer insurance indicates a negative, albeit low price elasticity of demand. Elasticity of demand is a way of gauging responsiveness to price changes. The greater the elasticity, the more responsive the employer would be to a given change in insurance prices. When the elasticity is less negative (or more *inelastic*), employers would be less sensitive to changes in price. Employers' price elasticities generally fall in the range between -0.05 and -0.07, meaning that an increase of 1% in the price of insurance will reduce coverage by 0.05% to 0.07%. (Gruber and Lettau, 2000; Hadley and Reschovsky, 2002; Marquis and Long, 2001; Royalty and Hagens 2005).

Studies focusing on the insurance behavior of small firms (or small groups) suggest that elasticity is more negative than for the health insurance market in general because small firms are more responsive to changes in the price of insurance (Blumberg et al., 1999; Feldman et al., 1997; Jensen and Gabel, 1992).

The use of health benefits to attract the best workers is one explanation given for the reluctance of employers to discontinue group health benefits.

Employee Eligibility Rate

Research has demonstrated that rising health insurance premiums are associated with lower wage growth (Cutler, 1998), decreased contribution to other benefits (Goldman et al., 2005), and changes in the composition of employment (Baicker and Chandra, 2005); that is, employers may respond to increased premiums by shifting employment to part-time employees with limited benefits in order to avoid increased health care costs. Because changes in employment are associated with only a small rise in uninsurance, eligibility rates are not considered a prime determinant in uninsurance (Hadley, 2006).

Employee Take-Up Rate

Much of the literature on the effects of premium increases on insurance coverage has dealt with the impact of employee out-of-pocket premium expenditures or "net premiums" (defined as the total premium minus the employer's share of the premium) on take-up rates (Polsky et al., 2005). These studies do not necessarily measure employer response to rising premiums; specifically, what portion of premium increases to pass onto employees. Instead, they focus on measuring the direct response of employees to increases in their out-of-pocket expenditures for premiums, which may occur because of higher premiums, or a higher share of premiums being passed on by the employer, or both. CHBRP therefore employs a simplifying assumption that the share of premiums paid by employers does not change in respond to a specific mandate.

Elasticity of demand for employees or individuals is a way of gauging responsiveness to price or premium changes. The more negative the elasticity, the more responsive the employee or individual would be to smaller changes in premiums. The less negative the elasticity (or more *inelastic*), the less sensitive employees would be to changes in price. Chernew and colleagues found a very low elasticity of demand of -0.033 among low-income workers in small firms (25 or fewer employees) when net premiums ranged between 0 and 25% of total premiums (Chernew et al., 1997). They state that the low elasticity reflects the high probability of baseline participation (that is, most are likely to opt to take-up insurance in the first place).

Cooper and Vistnes found that net premiums had a significant effect on employees who enrolled in single coverage, but not on those who enrolled in family coverage (Cooper and Vistnes, 2003). They did not calculate price elasticities, but conducted simulation modeling, which indicated that a \$500 increase in annual net premiums would produce a decline in take-up rates among employees electing single coverage ranging from 2.31 to 9.44%, depending on the proportion of low-wage employees in the firm. Although these studies examine the impact of net premiums on take-up rates, they fail to take into consideration other possible sources of insurance available to many employees. Abraham and Royalty (2005) and Cooper and Schone (1997) found that many workers who decline coverage from their employer are eligible for and obtain insurance through a spouse. Polsky and colleagues found that higher net premiums increase the probability of employees being uninsured for both family and single coverage, although the effect was greater for those enrolling in single coverage (Polsky et al., 2005). They estimate that reducing the net premium to zero (from a starting point ranging from \$17 to \$24 PMPM) would increase the percentage of insured employees with family coverage by 0.5% and with single coverage by 4.9%, for an overall total of 2.2%.

Individual (Non-Group) Market

The literature on price elasticities in the individual, non-group market is quite limited. This body of research also generally finds relatively low price elasticities, less than -0.5. (Gruber and Lettau, 2000; Hadley and Reschovsky, 2002; Marquis and Long, 2001; Royalty and Hagens 2005) In contrast to the group market, premiums vary by individual and can vary substantially by insurer for the same individual. In addition, surveys of the individual market generally do not include information on the actuarial value of policies (Cooper and Schone, 1997). Marquis and Long (1995) estimated elasticities ranging from -0.3 to -0.4, but this study predated a number of state regulations affecting underwriting practices. Marquis and colleagues estimated elasticities in the California individual market for family coverage ranging from -0.2 to -0.4 (Marquis et al., 2004). Auerbach and Ohri (2006) found accounting for health status and the effect of state-level premium rating regulations produced a higher estimated elasticity of -0.59 for individuals purchasing single coverage, with greater elasticity for poorer individuals and less elasticity among those with poorer health.

CHBRP Criteria and Methodology

As discussed above, the empirical research supports the finding that employers do not change their offer rates or eligibility rates in response to premium increases associated with proposed mandates. Therefore, CHBRP focuses its analyses of mandate impacts on the number of uninsured on their impact on employee and individual take-up rates, and employs a simplifying

assumption that offer and eligibility rates would remain the same. Furthermore, CHBRP employs a simplifying assumption that the impact of premium increases is the same in the large-group, small-group, and individual markets.

During the 2004 through 2006 legislative session, CHBRP employed the findings from the Lewin Group's Health Benefits Simulation Model (HBSM), a microsimulation model that has been widely used to estimate the impact of health insurance reform proposals throughout the U.S. The HBSM includes an estimated price elasticity of demand for health insurance in the group market of -0.34 (Lewin Group, 2002). This estimate ranges from -0.09 for those with incomes of \$100,000 or more to -0.55 for those with incomes of \$10,000 or less. Although Lewin's elasticity estimates were used in a 2002 report on the costs of health care reform options in California, the data used to produce these elasticities were not identified in the report. Lewin's elasticity estimates were used, where appropriate, for analyses conducted through the end of the 2006 legislative session.

Several recent studies have examined the effect of private insurance premium increases on the number of uninsured (Chernew et al., 2005; Glied and Jack, 2003; Hadley, 2006). In contrast to the estimated elasticity of -0.34 from the Lewin HBSM, these studies suggest a much lower price elasticity of demand for private health insurance. Chernew et al. estimate that a 10% increase in private premiums results in a 0.74 to 0.92 percentage point decrease in the number of insured, while Hadley (2006) and Glied and Jack (2003) estimate that a 10% increase in private premiums produces a 0.88 and 0.84 percentage point decrease in the number of insured, respectively.

The price elasticity of demand for insurance can be calculated from these studies in the following way. First, take the average percentage point decrease in the number of insured reported in these studies in response to a 1% increase in premiums (about -0.088), divided by the average percentage of insured individuals (about 80%), multiplied by 100%, i.e., $\{[-0.088/80] \times 100\} = -0.11$. This elasticity converts the *percentage point* decrease in the number of insured into a *percentage* decrease in the number of insured for every 1% increase in premiums. Because each of these studies reported results for the large-group, small-group, and individual insurance markets combined, CHBRP employs the simplifying assumption that the elasticity is the same across different types of markets.

Based on these more recent studies, CHBRP will assume an average price elasticity of demand for private health insurance of -0.11 (i.e., a 10% increase in premiums produces a 1.1% decrease in the number of insured) for analyses conducted in the 2007 legislative session and going forward. This figure is based on the simple average of the elasticities calculated from the three studies cited above, using the high estimate from the Chernew et al. (2005) study.

Hadley (2006) also provides data showing that low-income individuals (those with family incomes up to 400% of the federal poverty level) are much more price sensitive than high-income individuals (-0.18 versus -0.03). Therefore, where possible, CHBRP will provide separate estimates of the number of low-income individuals and high-income individuals who become uninsured in response to premium increases, and will employ the elasticities from Hadley's study for low-income individuals and high-income individuals. Estimates on the income distribution within the large-group, small-group, and individual insurance markets will be obtained from the California Health Interview Survey (CHIS) data.

Because of the difficulty in estimating the independent effect of premium increases on the number of insured, CHBRP has established a minimum threshold increase of 1% in PMPM premiums before it will produce estimates of a proposed mandate's impact on the number of uninsured. When a proposed mandate has an impact of greater than 1% on PMPM commercial insurance premiums—including an impact of greater than 1% for an identifiable subgroup of the insured, even if the overall impact on PMPM premiums is less than 1%—CHBRP will employ the following simplifying assumption. Using the average price elasticity of demand of -0.11 described above, CHBRP assumes that for each 1%- increase in PMPM premiums, the number of insured individuals who will drop coverage will be 0.11% (.0011) multiplied by the number of insured individuals facing the premium increase. For example, if CHBRP determines that 200,000 individuals face a potential 20% premium increase resulting from a proposed mandate, the number of insured would decrease by 4,400 (.0011 x 20 x 200,000). Note that this example does not account for possible difference in premium increases or in the distribution of income levels across the three types of markets (large group, small group, and individual).

CHBRP employs the same price elasticity estimate for the group and individual market, because of the absence of reliable estimates of price elasticity of demand for both family and single insurance coverage in the individual market.

When an analysis of a proposed mandate indicates that premiums will exceed the minimum threshold of 1%, CHBRP estimates the proportion of those individuals who would drop their group or individual coverage and would then become eligible for public programs including Medi-Cal or Healthy Families. CHBRP calculates this number based on the data from the California Health Interview Survey (CHIS) and employs an algorithm, developed at the UCLA Center for Health Policy Research (CHPR). This algorithm provides estimates on the proportion of the newly uninsured population that would meet eligibility requirements for Medi-Cal and Healthy Families, based on family income, age, family structure, and other relevant eligibility criteria for eligibility.

The newly uninsured population is identified in CHIS based on population characteristics determined by the specific mandate being analyzed. For example, a mandate may only apply to the individual insurance market and CHBRP's analysis determined that the impact on insurance premiums was limited to those in the 19-29 age category. CHBRP would use CHIS data to identify those aged 19-29 years with insurance in the individual market. Then, CHBRP would use the UCLA algorithm to determine what portion of those aged 19-29 years in the individual market would be eligible for public insurance if they dropped their private insurance. CHBRP would then apply this proportion (for example 10%) to the number of newly uninsured based on CHBRP analysis (for example 50,000). Finally, CHBRP would estimate the number of individuals who are likely to enroll in public programs by multiplying the proportion who would be eligible by the proportion of current eligibles who are likely to drop their private insurance ($10\% \times 50,000 = 5,000$).

Examples from CHBRP Reports

Two examples of how CHBRP has applied these criteria in previous reports, using the Lewin price elasticity of demand estimate of -0.34 for evaluating the impact of benefit mandates on the number of uninsured are included below.

From SB 897 (Speier, 2003) Analysis

“Premium increases of the magnitude discussed previously for those without maternity coverage (presently 12% of the individual market, or 192,000 people) may lead people to drop their coverage. Using a model that predicts the size of this effect, it is estimated that 4.3% of the individually insured may drop their insurance coverage if premiums rise by 13% (Lewin Group, 2002). This is a lower-bound estimate because Californians aged 25-39 years in the individual market are slightly more likely to have incomes less than or equal to 200% of the Federal poverty level, thus they are slightly more likely to become uninsured (CHIS, 2003). Based on [CHBRP’s] previous estimate of about 192,000 individuals without maternity benefits in the individual market, and the assumption... that 23% of these individuals fall within the 25-39 age category, the mandate could increase the number of uninsured by as many as 1,900 ($192,000 \times 0.23 \times 0.043$).”

From AB 2281 (High Deductible Health Plans) Analysis

“When estimating the premiums and cost impacts, CHBRP assumes that the number of insured in each market segment remains stable. However, [CHBRP considers] the secondary impact of increases in premiums on the number of insured dropping coverage when premium increases exceed 1%. For most market segments, no measurable change in the number of uninsured is projected to occur as result of AB 2281 because *on average*, premiums are not estimated to increase by more than 1%. However, some subgroups within the individual insurance market who have purchased low-cost policies (e.g., young adults, low-income self-employed) may experience premium increases greater than 1%. CHBRP is unable to provide more detailed estimates of these impacts within the individual market due to a lack of sufficient data on subgroups within the individual insurance market.”

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Appendix 14: Assessing the Public Health Impact of State Health Benefit Mandates, *Including* Guidelines for Estimating Impacts of Benefit Mandates on Gender and Racial Disparities

These papers summarize the methods by which the California Health Benefits Review Program (CHBRP) assesses the impact of benefit mandates on the public health of the state's population.

The first paper, "Assessing the Public Health Impact of State Health Benefit Mandates," was published in a special issue of *Health Services Research* in June, 2006, and remains an accurate summary of CHBRP's public health impact approach.

The second paper, "Guidelines for Estimating Impacts of Benefit Mandates on Gender and Racial Disparities," specifically describes CHBRP's approach to analyzing the impact of proposed benefit mandate on health disparities across gender and racial/ethnic groups.

Assessing the Public Health Impact of State Health Benefit Mandates

Sara B. McMenamin, Helen A. Halpin, and Theodore G. Ganiats

Objective. To document the process used in assessing the public health impact of proposed health insurance benefit mandates in California as part of the California Health Benefits Review Program (CHBRP) to serve as a guide for other states interested in incorporating a public health impact analysis into their state mandated benefit review process.

Background. As of September 2004, of the 26 states that require reviews of mandated benefit legislation, 25 required an assessment of the cost impact, 12 required an assessment of the medical efficacy, and only 6 had language requiring an assessment of the public health impact.

Methodology. This paper presents the methodology used to calculate the overall public health impact of each mandate. This includes a discussion of data sources, required data elements, and the methods used to quantify the impact of a mandated health insurance benefit on: overall public health, on gender and racial disparities in health outcomes, on premature death, and on the economic loss associated with disease. In addition we identify the limitations of this type of analysis.

Conclusions. The approach that California has adopted to review proposed health benefit mandates represents a leap forward in its consideration of the impact of such mandates on the health of the population. The approach is unique in its specific requirements to address public health impacts as well as the attempt to quantify these impacts by the CHBRP team. The requirement to make available this information to the state government has the potential, ultimately, to increase the availability of health insurance products in California that will maximize public health.

Key Words. Mandated benefits, health insurance policy, public health impacts

In the early 1990s, when the U.S. was considering comprehensive health care reform legislation under the Clinton Administration, public health professionals rallied to demand that the public's health be a key consideration in the redesign of the system (APHA 1993; Partnership for Prevention 1993; Warner and Warner 1993; Schauffler et al. 1994). The issues and concerns of the public health community ranged from securing adequate resources to perform basic public health functions, to collecting more comprehensive data to monitor

changes in the public's health, to obtaining comprehensive coverage for preventive care to promote the public's health. The common refrain at the time was, "Where is the health in health care reform?" (Fielding and Halfon 1994).

Concerns about access and the costs of care dominated the public policy debate leaving little room for questions about the effectiveness or quality of care and little to no discussion of how the proposed reforms might affect the health of the American people. While public health advocates were successful in getting many of their proposed reforms into the health care reform bills that were considered on the floor of the U.S. Senate and House of Representatives in 1994, ultimately no comprehensive health care reform legislation was enacted (Schauffler 1997). Since this time, very little attention has been given to questions of how proposed health care reforms might affect the health of the population at the state or national level.

The enactment of state mandated benefit review laws has provided an opportunity to integrate measures of public health impacts into health care reforms. Unfortunately, few states have included comprehensive requirements to assess the impact of state benefit mandates on the public's health. Of the 26 states that require reviews of mandated benefit legislation, 25 require an assessment of the cost impact, 12 require an assessment of the medical efficacy, and only six have language requiring an assessment of the public health impact (Bellows, Halpin, and McMenamain 2006). Table 1 presents the specific requirements of these six states to address public health impacts in preparing a mandated benefit review—additional requirements to address cost and medical efficacy are not discussed in this paper. In reference to public health impacts, the Minnesota law states that the review must include the "public health impacts" of the proposed mandate, but gives no further information as to how these impacts should be defined (Minnesota Statutes, Chapter 62J, Section 26). Three of the other states (Maine, Massachusetts, and Washington) are similarly vague, requiring that the review examine the impact on the "health status" of the population (Maine Revised Statutes, Title 24A, Chapter 33, Section 2752; General Laws of Massachusetts, Title 1, Chapter 3, Section 38C; Revised Code of Washington, Title 48, Chapter 48.47,

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Table 1: Specific Language Used in Mandate Benefit Review Laws in States Where Public Health Impact Is Addressed

<i>State</i>	<i>Reference</i>	<i>Specific Language Regarding Public Health Impacts</i>	<i>Quantify PH Impact in Review</i>
CA	California Law. Health and Safety Code 127660–127665	(1) The impact on the health of the community, including the reduction of communicable disease and the benefits of prevention such as those provided by childhood immunizations and prenatal care, (2) the impact on the health of the community, including diseases and conditions where gender and racial disparities in outcomes are established in peer-reviewed scientific and medical literature, and (3) the extent to which the proposed service reduces premature death and the economic loss associated with disease	Yes
HI	Hawaii Revised Statutes. Chapter 23, Sections 51–52	(1) The social impact (including) (H). The impact of providing coverage for the treatment or service (such as morbidity, mortality, quality of care, change in practice patterns, provider competition, or related items)	No
ME	Maine Revised Statutes. Title 24A, Chapter 33, Section 2752	(C) The medical efficacy of mandating the benefit, including (1) the contribution of the benefit to the quality of patient care and the health status of the population . . .	No
MA	Massachusetts General Laws of Massachusetts. Title 1, Chapter 3, Section 38C	(2) The medical efficacy of mandating the benefit, including the impact of the benefit to the quality of patient care and the health status of the population . . .	No
MN	Minnesota Statutes. Chapter 62J, Section 26	The evaluation must include . . . public health, economic, and fiscal impacts of the proposed mandate	No reviews have been conducted
WA	Revised Code of Washington. Title 48, Chapter 48.47, Sections 005–900	(C) Evidence of health care service efficacy: (iii) To what extent will the mandated benefit enhance the general health status of the state residents?	No

Note: These are only portions of the codes that refer specifically to either the public health impacts or health status of the population. This does not imply anything on the remaining requirements of a review such as cost or medical efficacy impacts.

Sections 005–900). Hawaii requires that the review include the impact of the mandate on “morbidity, mortality, or quality of care” (Hawaii Revised Statutes, Chapter 23, Sections 51–52). A review of the completed reviews produced by these states revealed that none of them produced a public health impact analysis that attempted to translate medical efficacy into population-based outcomes.

The level of detail required for the public health impact analysis in California’s statute, Assembly Bill (AB) 1996, is much more comprehensive compared with the five approaches mentioned above. AB 1996 specifies that these reports include an analysis of the public health impacts of proposed health benefit mandates including (a) the impact on the health of the community, including the reduction of communicable disease and the benefits of prevention such as those provided by childhood immunizations and prenatal care, (b) the impact on the health of the community, including diseases, and conditions where gender and racial disparities in outcomes are established in peer-reviewed scientific and medical literature, and (c) the extent to which the proposed service reduces premature death and the economic loss associated with disease. As shown in Table 1, only the reviews conducted in California have attempted to quantify the public health impacts as part of their standard MBR process.

The goal of this paper is to describe the methods used by the California Health Benefits Review Program (CHBRP) in conducting the public health impact analysis. This will serve as a guide for other states interested in incorporating a public health impact analysis into their state mandated benefit review process. This will include a discussion of data sources, required data elements, and the methods used to quantify the impact of a mandated health benefit on: overall public health, on gender and racial disparities in health outcomes, on premature death, and on the economic loss associated with disease. In addition this paper will identify the limitations of the public health impact analysis conducted by the CHBRP program. Finally, we will conclude with a discussion of the role that a public health impact analysis can play in the health policy making process and political debate (Table 2).

METHODS

AB 1996 did not specify the methods by which any of the three analyses (cost, medical effectiveness, or public health) are to be conducted, instead relying on the researchers in the University of California schools of medicine and public

Table 2: Calculated Public Health Impact of Osteoporosis Legislation on Hip Fractures

<i>Calculated 1 Year Postmandate</i>	
Target population: privately insured women ages 50–64	1.8 million
Newly covered (89% of target pop not currently covered)	1.6 million
Rate of screening among newly covered	30%
Newly screened (#)	480,000
Number of hip fractures prevented (1 prevented/3,750 screened)	128

Source: California Health Benefits Review Program. Analysis of Assembly Bill 438: Osteoporosis Screening. A report to the 2003–2004 California Legislature, February 2004.

health to develop the appropriate methods. After conducting the first 12 reviews in 2004, the public health team drafted a template based on this experience to be used as a starting point for all of the public health impact analyses. The five components of the public health impact section of the reviews (baseline health outcomes, impact on overall community health, impact on community health where gender and racial disparities exist, and reduction of premature death and the economic loss associated with disease) are described in detail below.

Present Baseline Health Outcomes

This first section of the public health impact analysis, “Present Baseline Health Outcomes,” describes (1) the baseline prevalence and incidence of the disease and related conditions, (2) the health outcomes related to the disease or condition such as morbidity, mortality, disability, and quality of life, and (3) the health care utilization related to the disease or condition such as physician visits, hospital visits, emergency department visits, and pharmaceutical use.

A three-tiered hierarchy is used to prioritize sources of incidence and prevalence data: Tier 1, state maintained registry (i.e., census of all persons with the disease of interest); Tier 2, California-specific estimates from population-based surveys; and Tier 3, national estimates from population-based surveys (where Tier 1 is the most preferred). State-level registries are the preferred source for prevalence and incidence data as they represent the entire population of persons with a disease or condition in the state. Unfortunately, statewide registries are limited to a small number of diseases and conditions. Of the CHBRP reviews conducted in 2004 and 2005, there have been two in which state-maintained registry data have been used to estimate the incidence

and prevalence of diseases: Autism Diagnosis (SB 749) and Ovarian Cancer Screening (AB 547). Autism data were obtained from regional center intake files that were used as a proxy for a registry of persons with autism in California (CHBRP 2005a). To estimate the rates of ovarian cancer in California, the California Cancer Registry data on the prevalence and incidence of specific cancers diagnosed in California each year were used (CHBRP 2004a).

Once it has been determined that no state-level registry exists, California-specific estimates from population-based surveys (Tier 2 data) are explored. The main source of California-specific estimates of health conditions and illnesses is the California Health Interview Survey (CHIS).¹ The CHIS is conducted every 2 years by the UCLA Center for Health Policy Research and it includes questions addressing the health status, health-related behaviors, insurance coverage, access to health care, and use of health care services of California children, adolescents, and adults. In 2001 and 2003, data were collected from approximately 55,000 randomly selected households in California. Data from CHIS can be stratified by gender, age, race, and ethnicity. To the extent that CHIS does not cover a specific health outcome of interest the annual California Behavioral Risk Factor Survey (BRFS) is used.² The BRFS dataset is much smaller (based on approximately 4,000 randomly selected adults), but it contains more specific information regarding health-related behaviors that directly relate to disease and injury. BRFS data can be stratified by gender, age, race, and ethnicity. The California BRFS is conducted annually by the Survey Research Group (SRG) under the California Department of Health Services Cancer Surveillance Section. When data on a specific illness or disease are not available in either the CHIS or BRFS datasets, literature reviews are conducted to find California-specific incidence and prevalence data in peer-reviewed journals.

National data are used for conditions or illnesses where no California-specific data exist. Datasets maintained by the National Center for Health Statistics such as the National Health Interview Survey, National Health and Nutrition Examination Survey, and National Vital Statistics System are consulted for applicable data. In addition, the Centers for Disease Control and Prevention (CDC) website is searched for potential sources of data, as are websites of national associations affiliated with the disease or condition of interest. Literature searches are also conducted to find studies of national incidence and prevalence rates published in peer-reviewed journals.

The section of the CHBRP report on baseline health outcomes also presents data on health outcomes associated with the disease such as morbidity and mortality. In consultation with the medical effectiveness team and a

clinical expert, a list of relevant health outcomes for each disease is developed. Morbidity data are searched using the same procedure outlined above for incidence and prevalence data. Data on mortality rates are available through the WONDER database query system, maintained by the CDC.³ This database contains mortality data from all death certificates filed in the United States for the years 1979 through 2002. Annual data on the number of deaths and death rates are available by underlying cause of death and can be stratified by state, age, race, and gender.

In addition to baseline data on disease-specific morbidity and mortality, health care utilization data are also presented. Health care utilization data such as rates of physician visits, emergency department visits, inpatient admissions and length of stay, and prescription drug use stratified by age, gender, condition, and type of health insurance are obtained from the Milliman U.S.A. Health Cost Guidelines database.⁴ Most of these data are from traditional indemnity-style plans and PPO plans. Adjustments to account for differences in California by type of insurance, market size, and geographic location are made by Milliman U.S.A., a national actuarial firm. In addition, the CHBRP model adjusts for differences in member demographics, regional physician and hospital practice patterns, and managed care effects specific to the California health care system. Details on the methodology used to make these adjustments can be found elsewhere in this issue (Kominski et al. 2006).

Impact of the Proposed Mandate on Public Health

The four data elements needed to conduct the public health impact analysis on the overall impact on the health of the community are: baseline health status, coverage impacts of the mandate, utilization impacts of the mandate, and the medical impact of the benefit. Once these four pieces of data have been collected, the overall impact on the health of the community can be calculated using the steps outlined below. We illustrate these steps using the CHBRP analyses of Assembly Bill 438 (AB 438) on osteoporosis screening and Senate Bill 576 (SB 576) on tobacco cessation services as examples (CHBRP 2004b, 2005b).

Coverage Impacts. The first step in the analysis is to obtain the coverage impacts from the team working on the cost section of the report. To determine the coverage impacts, the population that will be directly affected by the mandate, including those who are currently covered for the benefit and the number of Californians who will be newly covered for the benefit as a result of

the mandate, are identified. The affected population may vary as a function of age, gender, prevalence of the targeted condition, and type of health insurance coverage that will be subject to the mandate, as specified in the bill. For example, legislation could apply only to enrollees in HMOs, those with all forms of private health insurance, or all covered lives in the state including those with Medicaid and Healthy Families. For each proposed benefit mandate these factors will vary. More information regarding the methods used to derive the coverage impacts can be found elsewhere in this issue (Kominski et al. 2006).

Utilization Impacts. The second step in this analysis is to calculate the number of people who will utilize the benefit as a result of the mandate. The cost team estimates the utilization impacts separately for insured Californians who are presently covered for the proposed benefit and those who will be newly covered for the benefit, postmandate. For persons newly covered by the mandate, an assumption is made about their utilization of the new benefit based on current use for those with existing coverage, as well as use of similar kinds of services for the affected population (more information regarding the methods used to derive utilization impacts can be found in Kominski et al. [2006]). For persons with current coverage of the benefit, an estimate is made regarding any potential for this utilization to change as a result of the mandate. The total number of new persons expected to utilize a benefit postmandate is calculated as follows: $(\# \text{ newly covered} \times \text{change in utilization rate}) + (\# \text{ previously covered} \times \text{change in utilization rate})$. This accounts for two factors: one, that there could be some baseline utilization rate in the population without coverage at baseline that was paid for out-of-pocket and two, that as a result of the passing of the mandate, changes in utilization could also occur in the population with current coverage.

Health Impacts. The third and final step in this analysis is to assess the overall change in health outcomes in the affected population using the estimates of changes in utilization combined with the rates of effectiveness derived from the medical impact literature review. Based on the findings from the literature review on medical effectiveness, estimates are made on the impact of utilization of the benefit on health outcomes by the medical effectiveness team. The results for each health outcome are compiled to produce an overall mean estimate that can be used to calculate the health effects of the benefit mandate. The methods used to conduct the literature search are presented in

a separate paper in this issue (Luft et al. 2006). For each specific health outcome reviewed in the literature for which there are baseline data available and a mean effect calculated, the estimated impact on each health outcome is applied to the population of new utilizers to determine the overall change in outcomes resulting from the mandate.

Example 1: Impact of Osteoporosis Screening Mandate on the Reduction of Hip Fractures

Assembly Bill 438, introduced in 2004, mandated coverage for “osteoporosis screening” in postmenopausal women in California between the ages of 50 and 64 years in private insurance plans regulated by the Department of Insurance and Department of Managed Care. The steps taken to calculate the public health impact of this mandate 1 year after implementation are shown using one health outcome of osteoporosis, hip fracture.

Step 1. Calculate the coverage impacts: the target population under the proposed osteoporosis-screening mandate (AB 438) is women ages 50–64 with private health insurance ($n = 1.8$ million). To calculate the number of newly covered individuals, the number of women in this target population was multiplied by the percentage of privately insured women ages 50–64, who currently lack coverage for the proposed benefit or treatment (89 percent). This results in 1.6 million women newly covered for screening under this mandate.

Step 2. Calculate the utilization impacts: based on the utilization data provided in the cost impact section, it was assumed that 30 percent of the newly covered women (1.6 million) would be screened for osteoporosis within the first year of implementation, for a total of 480,000 women (CHBRP 2004b). We also assumed that there would be no increase in the utilization rate for women with current coverage for osteoporosis screening. Thus, we estimated that a total of 480,000 privately insured women ages 50–64 would be newly screened for osteoporosis in the first year of passage of the benefit mandate.

Step 3. Calculate the health impacts: the review of the literature assessing the medical effectiveness of osteoporosis screening for women ages 50–64 found that for every 3,750 women screened, one hip fracture was prevented. Therefore, we estimated that osteoporosis screening in the newly covered population of 480,000 women would prevent approximately 128 hip fractures ($480,000/3,750$) among women ages 50–64 with private health insurance in California in the first year after passage of the mandate.

Table 3: Calculated Public Health Impact of Smoking Legislation on Low-Birthweight Births

<i>Calculated 1 Year Postmandate</i>	
Target population: insured pregnant smokers	40,000
Pregnant smokers newly covered for smoking cessation (30%)	12,000
Difference in quit rates between insured and uninsured	22 – 14% = 8%
New quitters = difference in quit rates × newly covered	1,000
Number of low-birthweight (LBW) births prevented = (smoker LBW rate (12%) non-smoker LBW rate (6%)) × number of new quitters (1,000)	60

Source: California Health Benefits Review Program. Analysis of Senate Bill 576: Tobacco Cessation Services. A report to the 2005–2006 California Legislature, April 2005.

Example 2: Impact of Smoking Cessation Mandate on the Reduction of Low-Birthweight Births

Senate Bill 576, introduced in 2005, mandated coverage for tobacco cessation services in public and private insurance plans regulated by the Department of Insurance and Department of Managed Care in California including smoking cessation counseling and all FDA-approved smoking cessation pharmacotherapies. The steps taken to calculate the public health impact of this mandate are shown using one health outcome of tobacco use, low-birthweight births.

Step 1. Calculate the coverage impacts: it is estimated that there are 40,000 pregnant smokers with health insurance coverage in California and that 30 percent (12,000) of these would gain coverage for smoking cessation benefits as a result of the mandate.

Step 2. Calculate the utilization impacts: based on research published in tobacco control literature it was assumed that pregnant smokers without coverage had quit rates of 14 percent and that this rate would increase to 22 percent with coverage for smoking cessation treatments—for a difference of 8 percent. This means that in the population of 12,000 pregnant smokers who would gain coverage for smoking cessation treatments, an additional 1,000 (12,000* 8 percent) would quit as a result of the mandate.

Step 3. Calculate public health impacts using medical impacts: the review of the literature assessing the medical effectiveness of quitting smoking on low-birthweight births found that among nonsmokers the rate of low-birthweight births was 6 percent compared with 12 percent among smokers (a difference of 6 percent). Thus, we estimate there will be approximately 60 fewer low-birthweight babies (1,000* 6 percent) in the first year after passage of the mandate (Table 3).

Impact on Community Health Where Gender and Racial Disparities Exist

The overall impact on the health of the community with respect to gender or racial disparities of the proposed benefit mandate is also addressed in the public health impact analysis. The first step is to conduct a literature search to determine whether the proposed mandate covers a health condition for which gender and racial disparities in outcomes are known to exist. In order to quantify the effect of the proposed mandate on gender and racial disparities the following information is needed: (1) baseline incidence or prevalence of the condition by gender and race, (2) coverage impacts by gender and race, (3) utilization impacts by gender and race, and (4) medical impacts by gender and race. Once it has been established that there is a gender or racial disparity in health outcomes and the four pieces of information mentioned above have been collected, the impact on community health can be calculated using the same steps as outlined previously for osteoporosis screening and smoking cessation services. In most cases it is not possible to obtain all four pieces of information and thus we were not able to present the impact on gender or racial disparities in a quantitative way in analyses conducted in 2004 and 2005.

For reviews where it is not possible to calculate the impact on gender and racial disparities, qualitative information is presented instead. For example, in the CHBRP review of SB 749, autism screening, it was found that there is evidence that blacks were more likely to have a diagnosis of autism compared with whites. In addition, evidence was found that indicated that blacks are diagnosed and treated for autism later compared with whites. Therefore, the review concluded that to the extent that the mandate results in earlier diagnosis and treatment for autism, this could reduce the disparities between whites and blacks in outcomes associated with later diagnosis and treatment (CHBRP 2005a).

Reduction of Premature Death and the Economic Loss Associated with Disease

The extent to which the proposed service reduces premature death and the economic loss associated with disease is also addressed in the public health impact analysis. In order to quantify the reduction in premature death the following information is needed: (1) baseline mortality data on the disease or condition of interest, (2) coverage impacts of the mandate, (3) utilization impacts of the mandate, and (4) medical impacts of the mandate where mortality is a relevant health outcome. In order to carry out a calculation of the mortality impact the following must be true: (1) mortality must be a relevant health outcome, (2) the mandate would increase coverage or utilization of the benefit, and (3) the mortality impact of the benefit has been established in the medical

effectiveness literature. In the case where it is determined that premature death is a relevant health outcome, mortality data are reviewed to determine the baseline magnitude of the problem. In addition, to the extent that reduced mortality is a health outcome reported in the medical effectiveness literature, an impact of the mandate on premature death is conducted using the methodology described previously. It has not yet been possible, in the 22 reviews that have been conducted in 2004 and 2005, to quantify the reduction of premature death. In each case the report contains an explanation of why a mortality impact was not calculated.

In order to present an estimate of the economic loss associated with disease, a literature review on the societal costs of illness is conducted. This is separate from the cost analysis, which calculates the direct cost of expanding coverage. Owing to the time constraints of the CHBRP analysis (60 days), it is not possible for the CHBRP team to quantify the indirect costs of disease for each mandate. In lieu of this, a literature review on lost productivity, absenteeism, and quality of life is conducted. In cases where the indirect cost of illness has been estimated for California, these data are presented in the report, if not, national data are presented. Where data on the economic loss associated with a disease have not been published, this is noted in the report.

In order to carry out a calculation of the reduction of the economic loss associated with disease the following must be true: (1) the mandate would increase coverage or utilization of the benefit and (2) the economic loss associated with disease has been calculated either in California or nationally. It has not yet been possible, in the 22 reviews that have been conducted in 2004 and 2005, to quantify the reduction in economic loss associated with disease, aside from mandates where we conclude that there would be no reduction in the economic loss associated with disease owing to the mandate not impacting coverage or utilization. For example in the analysis of Assembly Bill 228, which mandated coverage for organ transplants to HIV+ patients, we concluded that the bill would not result in an increase in the number of organ transplants (CHBRP 2005c). Therefore, although there was evidence that end-stage organ disease is associated with significant economic loss through lost productivity, CHBRP concluded that AB 228 would not reduce these economic losses.

LIMITATIONS

It is not always possible to present the required information to satisfy each of the elements of the public health impact analysis as mandated by AB 1996. In

instances where there is insufficient evidence, i.e., the evidence in the literature is conflicting or is not robust, this is noted in the review. In cases where no research has been published on a particular area (gender racial disparities, economic loss, etc.) this is also noted in the review. Common limitations to each of the sections in the public health impact analysis (public health impact, impact on gender and racial disparities, and economic loss, and premature death associated with the disease) are noted below.

It is not always possible to quantify the overall impact on the health of the community owing to methodological limitations of the medical effectiveness literature. These limitations include a lack of consensus within the literature on the clinical definition of the disease, lack of standards of care for treatment, inconsistent inclusion or exclusion criteria across studies, and inconsistency in the measurements of outcomes across studies. Without a quantification of the overall impact of a certain treatment or service, it is impossible to translate the impact of the treatment or service in terms of the health of the community.

In addition, the extent to which the effects of the benefit or treatment that are observed in the literature can be translated to the real world is another limitation to the calculation of the impact on the health of the community. Most of the estimated rates of medical effectiveness used in the public health impact analysis are based on the results of randomized clinical trials, where the populations participating in these trials are rarely broadly representative of the underlying populations with a specific condition. Furthermore, the study population has voluntarily elected to participate in the study and have agreed to receive the treatment. Finally, study participants are often limited to the patients receiving care in a few treatment centers or limited to a specific geographic region, and all of the treating physicians are asked to follow a standardized protocol for delivering treatment. Thus, the treatment in the trials is provided in a relatively controlled environment that does not necessarily represent the way care is usually provided in the community.

Another limitation is the lack of information on differences in treatment or outcomes of a disease by race and ethnicity. While baseline health outcome measures in California can be reported by race and ethnicity, it is rarely possible to translate the health effects that result from utilization of mandated services into population health impacts by race and ethnicity, without knowing how health care utilization, treatment practices, and medical efficacy rates vary by race and ethnicity. However, all baseline health data, where there are differences in health outcomes by race and ethnicity in California, are included in the reports prepared for the legislature. As a result, the existing

disparities are presented, even if the extent to which the disparities may be reduced as a result of the mandate cannot be assessed.

Finally, it is not always possible to present an analysis of the economic loss associated with disease. It is beyond the scope of the analysis, with a 60-day timeframe, to conduct an analysis of lost productivity and other measures of economic loss of a disease not directly related to treatment. Instead, we rely on previously published studies of lost productivity or other measures of economic loss associated with the disease. In cases where there has been no previous research estimating the economic loss associated with a particular disease, we are unable to report this information in the review.

DISCUSSION

The findings from the public health impact analysis are presented in each CHBRP report as summarized key findings in the executive summary as well as in one of the three main sections of the report (medical effectiveness, cost, and public health impacts). In addition, public health impact data and estimates are presented in tabular form at the end of each report. While the findings of the public health impact analyses of benefit mandate bills have not generated any controversy in the political debate and policy discussion over any of the 22 health benefit mandates review laws completed by CHBRP as of August 2005, the public health findings are often referred to in the legislative hearings on the bills, particularly on the part of public health advocates and consumer groups. In fact, even groups who routinely oppose all mandate bills on principle, such as the Association of California Life and Health Insurance Companies and the California Chamber of Commerce, often bow to the potential benefits of the mandated treatment or service on the affected population. In addition, the public health impacts are also often included in the bill analyses prepared by legislative staff, sometimes with entire sections of the CHBRP reports quoted in the analysis.

The only debate that has arisen from these estimates relates to the fact that projected impacts are only made for 1 year following the bill. Public health groups, in particular, have expressed concern that many health outcomes are not realized after only 1 year, specifically for many preventive services, where the health benefits are often long term. An effort will be made in future analyses to express in qualitative terms, what the long-term health benefits associated with a mandate might be.

One issue that has been a challenge for the CHBRP analyses is how to present outcomes in such a way that does not make them appear too precise

without confusing legislators and their staff. From an academic perspective, the point estimates as presented in the reports have the appearance of precision, when they are simply estimates around which there is a great deal of uncertainty. In a scientific report, one would report that uncertainty in the form of a confidence interval that illustrates the range of findings that are likely not to have occurred by chance. However, most legislators do not understand the underlying statistical analyses and how to interpret confidence intervals. Policy makers prefer point estimates, and will most likely disregard any confidence intervals presented in the report. To compensate for this, numbers presented in the public health section have been rounded so that they do not appear too precise.

To conclude, the approach that California has adopted to review proposed health benefit mandates represents a leap forward in its consideration of the impact of such mandates on the health of the population. The approach is unique in its specific requirement to address public health impacts as well as the attempt to quantify these impacts by the CHBRP team. Even though there are limitations to the analysis in this regard, the reports that are submitted to the legislature on each bill do highlight the need for these kinds of data for a more effective policy-making process. While limitations in the availability of public health and health services data constrain our ability to conduct the analyses, the work being carried out in California is important in its intent and objectives. Requiring the assessment of public health effects of health benefit mandates suggests that the California legislature, through its enactment of AB 1996, has adopted health improvement as an explicit goal for California's health care system. The requirement to make available this information to the state government has the potential ultimately to increase the availability of health insurance products in California that will maximize public health.

NOTES

1. Data can be found at www.askchis.com
2. Data can be found at www.surveymethods.com
3. Data is located at <http://wonder.cdc.gov>
4. More information on the Milliman USA Health Cost Guideline database can be found at http://www.millimanusa.com/tools_products/health_cost.aspx

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Guidelines for Estimating Impacts of Benefit Mandates on Gender and Racial Disparities

CHBRP's authorizing statute specifically requests that CHBRP assess the extent to which a mandated benefit would have an "impact on the health of the community, including diseases and conditions where gender and racial disparities in outcomes are established in peer-reviewed and scientific literature."

Health disparities include racial and gender differences in health status, mortality rates, disease prevalence, and receipt of health services. Policymakers in the United States have sought to address health inequalities and improve the health of the overall population.

This document reviews the process used by CHBRP to examine gender and racial disparities in reports to the legislature on proposed mandated health insurance benefits. A summary of CHBRP conclusions from reports through 2009 can be found in Table 1 below.

Definitions and Approach to Investigating Disparities

Several competing definitions of "health disparities" exist. CHBRP relies on the definition proposed by Braveman (2006):

"A health disparity/inequality is a particular type of difference in health or in the most important influences of health that could potentially be shaped by policies; it is a difference in which disadvantaged social groups (such as the poor, racial/ethnic minorities, women, or other groups that have persistently experienced social disadvantage or discrimination) systematically experience worse health or greater health risks than more advantaged groups."

Because health insurance benefit mandates primarily affect the insured population, it is important to examine whether there are health disparities within the insured population. Insurance status has been found to be an important factor in health disparities, particularly in explaining racial health disparities (Kirby et al., 2006; Lillie-Blanton and Hoffman, 2005).

Among the insured population aged 18 to 64 in California in 2007, blacks, Hispanics, and other minorities reported worse overall health status compared to non-Hispanic whites (CHIS, 2007). This finding is consistent with much of the academic literature and policy reports that document racial and ethnic disparities in overall health status and disparities within specific health conditions (e.g., CDC, 2007; Ren and Amick, 1996).

In contrast to racial and ethnic disparities, no major gender differences in self-reported health status were found among the California insured adult population (CHIS, 2007). Of course, some diseases and conditions primarily affect only one gender (e.g., breast cancer, prostate cancer) and others have a greater prevalence in one gender (e.g., lupus is more common among females).

When possible, CHBRP reports detail differences in disease prevalence, health services utilization, and health outcomes by gender and race/ethnicity. This baseline information can help legislators assess the potential for differential impact of a mandate bill across different groups.

Four steps are used to assess whether disparities exist and whether the proposed mandate would have an impact on gender and/or racial disparities.

Step 1: Conduct Literature Review

In establishing baseline information, the first step is reviewing the peer-reviewed literature for evidence of gender and racial disparities related to the mandate. The specific keywords used for the literature search will vary according to the characteristics of the particular mandate. Using the keywords, the academic literature is searched for gender and racial/ethnic differences by (1) prevalence of relevant health conditions or diseases, (2) utilization of relevant health services, and (3) relevant health outcomes.

Using AB 8 (2004)—a bill that would have required a minimum length of stay after a mastectomy or lymph node dissection for the treatment of breast cancer—as an example, the sample keywords used for the literature review were:

- Breast cancer + prevalence + race
- Breast cancer + prevalence + gender
- Breast cancer + prevalence + ethnicity
- Breast cancer + race + outcomes
- Breast cancer + race + mortality
- Mammography + race
- Mastectomy + disparities + race
- Mastectomy + race
- Mastectomy + ethnicity
- Mastectomy + length of stay
- Mastectomy + length of stay + race
- Mastectomy + race + inpatient
- Mastectomy + race + outpatient
- Mastectomy + coverage + race
- Lymph node dissection + race

In addition to conducting this review of the literature, the medical effectiveness literature review is also reviewed for any articles that have information on gender or racial disparities.

Step 2: Review Data Sources

The next step in establishing baseline disparities is to identify data sources that will allow for the examination of relevant prevalence, health utilization, and outcomes measures by gender and race/ethnicity. California-specific data are preferred; however, when California data are not available, national data sources are used. The following data sources are reviewed for this information:

- California state maintained registries
- California Health Interview Survey
- California Behavioral Risk Factor Survey

- National Health Interview Survey
- National Health and Nutrition Examination Survey
- National Vital Statistics System
- WONDER database maintained by CDC

In addition to these data sources, CHBRP attempts to identify any other relevant data sources. The content expert is also consulted for this purpose.

Step 3: Determine Whether a Qualitative Assessment Regarding Disparities Can Be Stated

Frequently, steps 1 and 2 identify disparities with regards to the health conditions and outcomes related to the proposed mandate; however, there is not always information on disparities with respect to the specific elements of the proposed mandate. For example, in analyzing the mandate on the pediatric asthma education bill Assembly Bill (AB) 264 (Chan, 2006), the literature and data sources revealed that minority children have more severe asthma symptoms and receive fewer preventive medications compared with white children. No racial disparities were identified, however, with regards to asthma education services that would be required under AB 264. As a result, the AB 264 CHBRP report concluded that the mandate would not impact racial disparities.

There are three main conclusions regarding the potential for mandates to impact gender or racial disparities: (1) no evidence to suggest that the mandate would result in a decrease in disparities, (2) the mandate may result in a decrease in disparities, and (3) CHBRP cannot conclude whether the mandate would result in a decrease in disparities.

The following scenarios are ones where CHBRP states that there is *no evidence to suggest* that the mandate would result in a decrease in disparities:

- No gender and/or racial disparities are reported in the literature or found in relevant data sources.
- The mandate is not expected to result in any changes in utilization.
- The medical effectiveness review does not suggest that an increase in utilization of the benefit would result in improved health outcomes.

The following scenarios are ones where the mandate *may* result in a decrease in disparities:

- There is a documented disparity in prevalence and/or utilization, the benefit is considered effective in improving health outcomes, and the benefit is expected to result in increased utilization
- The benefit is more effective for traditionally disadvantaged gender and/or racial groups or is deemed effective and more acceptable by disadvantaged groups.

The following scenario is one where CHBRP *cannot conclude* whether the mandate would result in a decrease in disparities:

- There state of the medical effectiveness literature is not of the necessary caliber to make conclusions with regards to the effectiveness of the mandated benefit. An example of this scenario is the analysis of the chiropractic care bill, AB 1185 (Koretz, 2005).
- The proposed legislation does not lend itself to a typical CHBRP analysis and therefore the medical effectiveness or utilization sections cannot be used to determine the possible impact of the mandate on health disparities. Previous examples include the CHBRP reports on mental health parity (AB 244, 2009) and high-deductible health plans (AB 2281, 2006).

Step 4: Determine Whether a Change in Disparities Can Be Quantified

Ideally, when a reduction in disparities is deemed possible, CHBRP reports would be able to quantify the effect of the proposed mandate on gender and racial disparities. In order to accomplish this, the following information is needed:

- Baseline incidence or prevalence of a condition by gender and/or race within the insured population
- Coverage impacts by gender and/or race—the gender and/or racial breakdown of the population affected by the specific mandate
- Utilization impacts by gender and/or race—the gender and/or racial breakdown of increased use of the benefit due to the mandate
- Medical impacts by gender and/or race—gender- and/or race-specific calculations of the effectiveness of the benefit in improving health outcomes

In most cases, it is not possible to obtain the necessary information to quantify the impact of a proposed mandate on gender or racial disparities. For example, the CHBRP review of SB 749, which required coverage for autism screening, found that blacks were more likely to have a diagnosis of autism and were treated for autism later compared to whites. Therefore, the review concluded that to the extent that the mandate results in earlier diagnosis and treatment for autism, this bill could reduce the disparities between whites and blacks associated with later diagnoses and treatment. The potential benefits, however, could not be quantified because it was not possible to examine the diagnosis and outcomes of autism by race within the insured population.

Table 1. Summary of CHBRP Conclusions Regarding Gender and Racial Disparities

CHBRP report	Conclusion	Justification
2005		
AB 8: Mastectomies and Lymph Node Dissections (Cohn)	No effect	Lack of evidence on effectiveness of longer stays on health outcomes.
AB 213: Health Care Coverage for Lymphedema (Liu)	No effect	No baseline data or literature on gender and race.
AB 228: Transplantation Services: Human Immunodeficiency Virus (Koretz)	No effect	Mandate not expected to increase number of transplants to HIV+ persons.
SB 573: Prohibiting Health Insurance Policies from Excluding Coverage of Losses Sustained While Insured Individuals Are Intoxicated or Under the Influence of Controlled Substances (Romero)	No effect	No problem identified.
SB 415: Prescription Drugs for Alzheimer's Drugs (Alquist)	No effect	No anticipated increase in utilization of AD drugs due to mandate.
SB 572: Mental Health Benefits (Perata)	Cannot conclude	Analysis restricted to summary due to nature of the bill.
SB 749: Diagnosis of Autism (Speier)	Possible reduction in racial disparities	Disparities identified; cannot quantify due to lack of estimates within insured population.
SB 913: Biological Medications for Rheumatic Diseases (Simitian)	No effect	No expected increases in utilization of drugs.
AB 1185: Chiropractic Services (Koretz)	Cannot conclude	The quality of the examined studies was not sufficient to make a medical effectiveness determination.
2006		
AB 264: Pediatric Asthma Self-Management Training and Education Services (Chan)	No effect	No evidence of differences regarding receipt of education services.
SB 1223: Hearing Aids for Children (Scott)	No effect	No evidence of differences regarding receipt of hearing aids.
SB 1508: Use of Propofol for Colonoscopies (Bowen)	No effect	No expected changes in utilization in colonoscopies or screening.
SB 1245: Cervical Cancer Screening Test (Figueroa)	No effect	Mandate not expected to change utilization of screening.
SB 2012: Orthotic and Prosthetic Devices	No effect	No impact on health outcomes.

(Emmerson)		
AB 2281: High Deductible Health Care Coverage (Chan)	Cannot conclude	Impact on utilization is unknown.
2007		
AB 30: Health Coverage: Inborn Errors of Metabolism (Evans)	No effect	Mandate not expected to increase utilization of medical nutrition therapy.
AB 54: Acupuncture (Dymally)	Possible reduction in racial disparities	Women and Asians are more likely to use acupuncture and would benefit from a reduced financial burden of paying for acupuncture out-of-pocket.
AB 368: Mandate to Offer Coverage for Hearing Aids for Children (Carter)	Cannot conclude	Although male children and Hispanic children have higher prevalence of hearing problems compared to females and non-Hispanics respectively, no literature was found to indicate that they receive hearing aids at different rates.
AB 423: Mental Health Services (Beall)	Cannot conclude	The mandate has the potential to reduce gender and racial disparities in mental health treatment, but the exact impact is unknown.
AB 1429: Human Papillomavirus Vaccination (Evans)	Cannot conclude	Blacks and Hispanics have higher mortality rates from cervical cancer compared to other racial/ethnic groups. Providing coverage for vaccination may be one way to reduce these racial and ethnic disparities. It is unknown, however, the extent to which this mandate would reduce these disparities.
AB 1461: Alcohol and Drug Abuse Exclusion (Krekorian)	No effect	Mandate not expected to change physician practice patterns in terms of screening and counseling for alcohol and substance abuse or treatment for illness and injuries sustained in conjunction with alcohol or substance abuse.
SB 24: Tobacco Cessation (Torlakson)	Cannot conclude	Racial and ethnic disparities in smoking prevalence are also apparent in California. The extent to which SB 24 would modify these disparities is unknown.
2008		
AB 1774: Gynecological Cancer Screening Tests (Lieber)	No effect	Mandate not expected to increase utilization of effective screening tests.
AB 1887: Mental Health Services (Beall)	No effect	There is no evidence that AB 1887 would reduce gender and racial disparities in mental health treatment.
AB 1894: HIV testing (Krekorian)	No effect	Mandate not expected to alter coverage or utilization of HIV testing.
AB 1962: Maternity Services (De La Torre)	No effect	There is no evidence that AB 1962 would make an impact on prenatal care utilization rates among black women to reduce disparities in health outcomes among babies born to black women.
AB 2174: Amino Acid–Based Elemental Formulas (Laird)	No effect	Mandate not expected to increase utilization of amino acid-based elemental formula.
AB 2234: Breast Conditions	Cannot	The quality of the examined studies on

(Portantino)	conclude	BMRI was not sufficient to make a medical effectiveness determination.
SB 1198: Durable Medical Equipment (Kuehl)	No effect	Mandate not expected to impact utilization of DME.
SB 1634: Cleft Palates (Steinberg)	Cannot conclude	There is insufficient evidence to determine if SB 1634 would impact differences in gender or racial disparities in the use of orthodontia in the treatment of oral clefts.
2009		
AB 56: Mammography (Portantino)	Possible reduction in racial disparities	To the extent that notification increases mammography screening among non-white women, there is the potential for AB 56 to reduce the racial/ethnic disparities in screening rates and health outcomes associated with breast cancer.
AB 98: Maternity Services (De La Torre)	No effect	There is no evidence that AB 98 would make an impact on prenatal care utilization rates among black women to reduce the disparities in health outcomes among babies born to black women.
AB 163: Amino Acid–Based Elemental Formula (Emmerson)	No effect	Mandate not expected to impact utilization of amino acid-based elemental formula for EGID.
AB 214: Durable Medical Equipment (Chesbro)	No effect	Mandate not expected to impact racial and ethnic health disparities.
AB 244: Mental Health Services (Beall)	No effect	Mandate not expected to impact gender and racial disparities in mental health treatment.
AB 513: Breast-Feeding (de Leon)	No effect	Mandate not expected to impact utilization of lactation consultations or use of electric breast pumps.
SB 158: Human Papillomavirus Vaccination (Wiggins)	Cannot conclude	Over time as researchers are able to assess differences in the vaccination rates across racial and ethnic groups, the potential for the HPV vaccine to reduce disparities in health outcomes related to HPV infection will be clearer.
SB 161: Chemotherapy Treatment (Wright)	Possible reduction in racial disparities	To the extent that the mandate reduces out-of-pocket costs, there is a potential to reduce the financial burden faced by groups with higher rates of cancer such as women being treated for breast cancer and non-Hispanic black cancer patients.

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Appendix 15: Criteria and Guidelines for the Analysis of Long-Term Impacts on Healthcare Costs and Public Health

The California Health Benefits Review Program (CHBRP) must report on the cost and public health impacts of health benefits mandate legislation, per provisions included in statute (California Health and Safety Code, Section 127660). However, the statute does not specify a time-period for considering these impact analyses.

The reports produced by CHBRP during 2003-2008 produced cost and public health estimates with a one-year time horizon post-mandate. In certain circumstances, when a specific health insurance mandate has clear long-term public health and cost impacts, CHBRP has summarized the literature to provide the legislature context on these potential impacts.

For example, in analyzing Senate Bill 576 (Ortiz, 2005), a bill that would have mandated coverage of Tobacco Cessation treatment, CHBRP recognized that while there are a few effects that can be realized within one year (e.g., reduction in low-birthweight babies of pregnant women who quit smoking, reduction in the risk of myocardial infarction), many of the impacts affecting lung disease, cancer and premature death are realized over a much longer period of time. To address this important point, CHBRP reported that:

“Medical care makes up the largest proportion of the direct costs of smoking. The CDC reports that men who smoke incur \$15,800 (in 2002 dollars) more in lifetime medical expenses than non-smokers, and women who smoke incur \$17,500 more than non-smokers (Fellows et al, 2002). According to the California Department of Health Services, in 1999, the state spent [in thousands:] \$8,564,623 in total health care costs directly attributable to smoking, including \$4,016,568 in hospital care, \$2,060,234 in outpatient care, and \$1,133,432 for prescriptions (Max et al, 2002). A 1995 study by Wagner and colleagues estimates that tobacco cessation resulted in significant decreases in use of outpatient and inpatient health care services (Wagner et al, 1995).”

“Due to the multiple effects of smoking on the body, a significant proportion of the death and disease burden of smoking will not be evident until many years after smoking is initiated. Indirect costs in terms of loss of productivity, quality of life, and life years lost are difficult to estimate for outcomes that may develop over a 30-year time period. California’s Department of Health Services reports that in 1999, 12.4 years of potential life were lost due to smoking-related disease, with an associated [in thousands:] \$5,175,678 in lost productivity for men and \$2,019,478 in lost productivity for women (Max et al, 2002). A recent study by Mulder and colleagues estimates that smokers who successfully quit report improved quality of life relative to current smokers (Mulder et al, 2001). Another study, by Taylor and colleagues, estimates the life extension achieved by tobacco cessation. Cessation at an early age (35 years

old) resulted in an additional seven to eight years of life for men and an additional six to seven years of life for women. Cessation at a later age (65 years old), although resulting in significantly fewer life years gained, one to two for men and two to three for women, illustrates the benefits of cessation at any age.

Short-Term Analysis

CHBRP has limited its post-mandate cost and public health impact analysis to one-year time horizon in the past for several reasons:

1. The CHBRP cost impacts model for premium and total expenditure estimates mimics most insurers' internal processes for determining premium changes in a given year. In general, insurers would determine what benefit design changes (resulting from market, statutory or regulatory forces) would occur in the next contract year and how these changes would affect utilization, costs, and the resulting effect on premium rates for their various large group, small group, and individual product lines. The premium and expenditure information reported in CHBRP reports, therefore, provides the legislature the "real world" perspective on how decisions would be made by health insurers.
2. CHBRP has limited capacity for modeling the long-term cost and health consequences of benefit mandates. To conduct such analyses usually requires sophisticated, disease-specific simulation models that permit analysis of the progression of a disease over the course of individual lifetimes and allow for individual variability in disease progression, health outcomes, and subsequent costs. Studies reporting on the cost-effectiveness of medical interventions commonly utilize such models to analyze the lifetime costs and benefits of specific technologies, including devices, surgical procedures, pharmaceuticals, and diagnostic tests. However, it is essentially impossible to construct such models within the 60-day time frame allotted for CHBRP analyses by the legislature.
3. Given the specific nature of most mandates analyzed by CHBRP, the long-term cost impacts or public health impacts that are *a result of the mandate* are not necessarily addressed in the literature. In addition, the longer the time horizon, the greater the uncertainty due to compounding factors including changing technology, changing demographics, changes in the economy, and changes in the practice, organization and delivery of medical. In order for CHBRP to estimate the long-term cost implications for a mandate, for example, the literature would need to provide the following information:
 - whether and the extent to which a mandated benefit or services affects mortality/morbidity and the time frame for realizing specific health outcomes.
 - the associated services (e.g. substitute services, services that may be avoided due to increased use of the mandated benefit or service, or additional services incurred due to increased use of the mandated benefit or service).
 - the costs and cost-savings associated with avoided or newly-incurred services (or the frequency/volume and per-unit cost of these services so that CHBRP can estimate the costs or cost-savings).

All of these data elements may not be addressed in the literature and therefore limit CHBRP's ability to make long-term quantitative estimates of cost impacts.

Long-term Analysis

Nevertheless, some benefit mandates analyzed by CHBRP involve diseases or conditions with significant long-term health consequences and costs that are well-documented in the literature—screening and other preventive or disease management services are good examples. Ignoring these long-term consequences because of time constraints may result in analyses that substantially underreport the health benefits and possible cost savings associated with a proposed mandate. Therefore, CHBRP now follows these guidelines and criteria when examining the potential long-term impacts of a proposed mandate:

1. During the initial assessment of a proposed mandate, the CHBRP analytic team will determine if there are likely to be long-term health impacts and cost savings based on consultation with the appropriate content experts identified to assist in the analysis.
2. The faculty lead for the mandate analysis will work with the medical effectiveness, public health and cost teams, as well as the medical librarian, to determine search terms and parameters that will help identify key literature on the possible long-term cost and public health impacts of the proposed mandate, including cost-effectiveness studies, which typically analyze lifetime health benefits and costs, as well as longitudinal epidemiological cohort studies. The medical effectiveness team will provide a summary of the long-term costs and health benefits associated with the proposed mandate to the public health and cost teams.
3. Per the provisions of CHBRP’s authorizing legislation, the public health section is to address the “economic loss associated with the disease.” Therefore, the public health team lead independently conducts a literature review to summarize existing studies. To the extent that this literature search yields articles on the long-term cost and long-term health impacts of a specific mandate, the public health team will share those with the analytic team.
4. The cost team lead will work to review relevant literature, including cost-effectiveness studies that may have modeled long-term costs. The literature on cost-effectiveness analysis will be summarized to inform the reader as to what are the costs associated with a life saved (or a ‘quality-adjusted life year’ saved).
5. The public health team lead will quantify the effect of a mandate on lifetime morbidity and mortality, if data are available. As mentioned, if sufficient information is not available to quantify impacts, then available qualitative information will be presented.

Additional Examples of Long-term Impact Analyses in CHBRP Reports

CHBRP analyzed the long-term cost and health outcomes for Senate Bill 1245 (Figueroa, 2006), a bill enacted in September, 2006. This bill requires insurers and health plans to cover the test for the human papilloma virus (HPV) for cervical cancer screening. While CHBRP did not estimate any cost or public health impact specifically as a result of the mandate, the analysis offered an alternative scenario in the case that the mandate would spur increased utilization (by 1 percentage point) as a result of a public awareness campaign and providers continued to adopt the new guidelines regarding HPV testing and Pap screenings.

Based on existing cost-effectiveness models, CHBRP was able to report the following:

“It is estimated that 7.6 million women are in health insurance plans affected by this mandate. Therefore, a hypothesized 1 percentage point increase in HPV triage screening would result in 76,000 more women shifting from lifetime conventional Pap tests to lifetime HPV triage screening. A shift from lifetime conventional Pap screening to HPV triage would result in a 29% reduction in lifetime cervical cancer risk and a 9% increase in lifetime costs. In this scenario, for each increase by 1 percentage point in the rate of women screened for cervical cancer using the HPV triage screening strategy (compared to lifetime conventional Pap tests), over the lifetime of the 76,000 women newly subject to this screening strategy, this would result in a reduction in cervical cancer cases from 290 to 205 with an associated cost increase of 14.3 million dollars.

It is estimated that 6.0 million women age 30 or older are in health plans affected by this mandate. Therefore, a hypothesized 1 percentage point increase in HPV primary screening would result in 60,000 more women shifting from lifetime conventional Pap tests to HPV/Pap primary screen at age 30 and older. A shift in the rate of HPV/Pap primary screening in women ages 30 and older (compared to lifetime conventional Pap tests) would result in a 39% reduction in lifetime cervical cancer risk and a 45% increase in lifetime costs. For each increase by 1 percentage point in the rate of women screened for cervical cancer with Pap and HPV concurrent screening (compared to lifetime conventional Pap tests) over the lifetime of the 60,000 women newly subject to this screening strategy, this would result in a reduction in cervical cancer cases from 224 to 137 with an associated cost increase of 57.6 million dollars.”

Taking the total lifetime projected costs, a present day value was calculated and included in an alternative estimate on impacts to premiums and total expenditures. This was presented in a table that may be found in Appendix C of *Analysis of Senate Bill 1245: Health Care Coverage: Cervical Cancer Screening Test*.

CHBRP also considered long-term costs and health outcomes in its report on Assembly Bill 1429 (Evans, 2007), a bill that passed the Legislature and was vetoed by the Governor in 2008. In that analysis, CHBRP provided the following information regarding long-term costs and benefits:

“HPV vaccination will likely produce several important health benefits, including reductions in CIN 2 and 3 [pre-cancerous lesions], cases of cervical cancer, and cervical cancer deaths. Several cost-effectiveness studies have been published recently examining both the long-term costs of vaccination as well as the long-term savings associated with reductions in these adverse health events (Sanders and Taira, 2003; Goldie et al., 2004). These studies found that the lifetime costs and benefits of HPV vaccination for a hypothetical cohort of females aged 12 years, where the vaccine is most effective, produces incremental cost-effectiveness ratios (ICERs) of \$22,755 and \$20,600 per quality-adjusted life-year (QALY) saved. These estimates mean that the net cost, after accounting for all savings associated with the reductions in adverse health events, ranges from about \$20,600 to \$22,755 per additional QALY saved, using different assumptions on length of immunity and other such details. Although there is no consensus about the most appropriate threshold, policy makers have routinely accepted technologies with estimated ICERs much higher than these.”

In addition, CHBRP estimated that the new mandate would add coverage for a subset of the insured population and

“...approximately 1,000 cases of HPV could be averted over the lifetime of the women impacted by AB 1429, thereby preventing almost 30 cases of cervical cancer and 10 cervical cancer-related deaths.”

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Appendix 16: Clarification of Bill Language and Legislative Intent [Bill Author Questionnaire]

For each analysis, the California Health Benefits Review Program (CHBRP) conducts an interview with the bill author's staff. Shortly after each bill request is received, CHBRP staff use this standardized questionnaire to confirm with the bill author's staff a mutual understanding of both the intent of the bill and the likely interpretations of the bill as written.

Health Insurance Mandate or Repeal Bill Questionnaire:
For Bills Referred to the *California Health Benefits Review Program*

[Bill Number, (Author) and Introduction Date] (Please use additional pages)

Date:

Prepared by:

- I. What issue or problem does the bill address?
- Please describe the issue or problem.
 - What is your sense of the scope of the problem? What groups in particular might be affected?
 - How did you obtain this information (for example, particular constituent, stakeholders, opinion polls, focus groups, etc)?
 - In your view, what need does the [mandate/repeal] fill? Why is there a gap between the needs of persons with insurance and available services? For example:
 - Is there is lack of coverage for specific populations or under certain types of insurance?
 - Is a new or available technology not widely used?
 - Is there is a discrepancy between current medical practice and evidenced-based standards of care?
 - Are costs for persons with insurance prohibitive even if the service is covered?
 - Are there other barriers to access?
 - Are any legal requirements related to the benefit already in place? (Please provide references to citations in the Insurance Code, Health and Safety Code, Business and Professions Code, Welfare and Institutions Code, California Code of Regulations).
- II. What would the proposed [mandate/repeal] do?
- What service(s) or treatment(s) would be mandated as a covered benefit?
 - Which providers would be authorized to be reimbursed for providing the service (e.g., if the service falls within the scope of practice of multiple providers)?
 - Are there any limits on the service/benefit (e.g., whether health plans can apply their own utilization review criteria for determining eligibility or length of treatment)?
 - Would it affect the share of costs that are borne by the member for the service/benefit? Would there be any limitations on deductibles, copayments, coinsurance, or annual dollar limits?
- III. Does the bill have sponsors? If so, who are they? Can we contact them for additional information, if necessary? (Please provide contact information.)
- IV. Are you aware of any published medical standards of care for treatment of this condition? Do you know of any clinical benchmarks of acceptable medical care, such as published clinical guidelines or statements by medical societies?
- V. Has a similar [mandate/repeal] been proposed previously in California or in other states? (If so, please provide Bill Number and Legislative Session.)

VI. Is this bill intended to affect multiple segments of the health insurance market? Is it intended to affect both privately purchased health plans regulated by the Department of Managed Health Care (DMHC) and health insurance policies regulated by the California Department of Insurance (CDI)? Is it intended to affect publicly purchased plans regulated by DMHC? Please indicate all market segments the bill is intended to affect by the inserting an X in the appropriate cells in the tables below.

A. DMHC-Regulated Health Plans—purchased from the commercial market with **PRIVATE** funds

Private, Full-Service, Knox-Keene Health Plans			Private, Specialized Knox-Keene Health Plans ¹
Large Group Purchaser	Small Group Purchaser	Individual Purchaser	

¹ Includes plans such as vision-only, dental-only, or behavioral health-only insurance.

B. CDI-Regulated Health Insurance—purchased from the commercial market with **PRIVATE** funds

Private, Full-Service Health Insurance			Private, Specialized Health Insurance ¹	Private, “Non-Health” Disability Insurance ²
Large Group Purchaser	Small Group Purchaser	Individual Purchaser		

¹ Includes policies such as vision-only, dental-only, or behavioral health-only insurance.

² “Non-health disability insurance” includes policies such as Medicare supplement, hospital indemnity, TriCare (formerly known as CHAMPUS) supplement, specified disease insurance that does not pay benefits on a fixed-benefit or a fixed-cash-only basis, etc. “Health insurance” is defined per California Insurance Code Section 106(a)-(c), for statutes that become effective after 2002, and refers to forms of disability insurance that provide coverage for hospital, medical, or surgical benefits.

C. DMHC-Regulated Health Plans—purchased from the commercial market with **PUBLIC** funds

Public, Full-Service, Knox-Keene Health Plans				
CalPERS	Medi-Cal Managed Care	MRMIB ¹		
		Healthy Families Program	Major Risk Medical Insurance Program (MRMIP)	Access for Infants and Mothers (AIM) Program

¹ Major Risk Medical Insurance Board

VII. Who are anticipated supporters, opponents?

VIII. Are there any plans to amend the bill? If so, can you provide information on what the amendment will be?

IX. Mandate- or repeal-specific questions: [Add here]



Appendix 17: Health Care Service Plans' and Health Insurers' Proprietary Data Retention and Destruction Policy

The California Health Benefits Review Program (CHBRP) acknowledges its responsibility to preserve information relating to litigation, audits, and investigations. It is a crime to alter, cover up, falsify, or destroy any document to prevent its use in an official proceeding. Failure on the part of employees to follow this policy can result in possible civil and criminal sanctions against CHBRP and the University of California and its employees, and possible disciplinary action against responsible individuals (up to and including termination of employment). Each employee has an obligation to contact the CHBRP Director of a potential or actual litigation, external audit, investigation, or similar proceeding involving CHBRP that may have an impact as well on the approved records retention and document destruction schedule.

Documents covered under this policy. This policy covers “proprietary data,” that is, all records and documents that may associate data with a specific health care service plan or health insurer, as referenced in Health and Safety Code Section 127662, that have been received by CHBRP from Health Plans in connection with CHBRP’s analytical activities under Health and Safety Code Sections 127660 -127664.

Document retention and destruction. CHBRP shall retain documents for the period of their immediate or current use. CHBRP is responsible for the ongoing process of identifying its records of proprietary data that have met a maximum retention period of 30 days after the relevant report is submitted to the legislature, and overseeing their destruction. Destruction of the proprietary data may be accomplished by shredding, burning, or sending them to the landfill.

Electronic documents. Electronic documents that reveal proprietary data shall be retained as if they were paper documents. Therefore, any electronic files that contain proprietary data shall be scheduled to be destroyed by the end of the maximum retention period. Destruction of electronic documents may be accomplished by deleting proprietary data from CHBRP’s electronic files. Data that has been de-identified by removing the health plan’s or health insurer’s name may be retained beyond the maximum retention period noted above.

Suspending document destruction. Upon any indication of an official investigation of CHBRP related to any legal proceeding or by any governmental entity, document destruction shall be suspended immediately. Destruction shall be reinstated upon conclusion of such proceeding.

Use of documents. CHBRP staff shall remove health plan or insurer identifiers prior to circulating it outside of the University of California, Office of the President (UCOP), including CHBRP-affiliated faculty and contracted actuaries.

Effective date of policy: 12/31/05



Appendix 18: Summary of CHBRP Completed Reports on Mandate Bills, 2006-2009

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
2006							
AB 264: Pediatric Asthma Self-Management Training and Education Services (Chan) (3/3/2006)	<p>Asthma self-management training and education programs increase children's self-efficacy and knowledge about asthma, leading to better self-management behaviors and have favorable effects on health and utilization outcomes for asthmatic children including reducing the (1) number of days of asthma symptoms (2) nights of nocturnal asthma (3) number of asthma exacerbations and (4) severity of asthma symptoms, (5) school absences, (6) emergency room visits, and (7) hospitalizations.</p> <p>Evidence is <i>ambiguous</i> whether asthma self-management training and education affects the number of physician visits for asthma care.</p>	<p># of children insured children aged 1-17 with coverage for mandated benefit, Before: 5,340,000 After: 5,340,000 (No change)</p> <p># of covered children aged 1-17 in CA with symptomatic asthma: 503,000</p>	<p>This utilization is estimated to increase by approximately 10 percentage points (from 55.6% to 65.6%)</p>	<p>\$5 million (0.01%)</p>	<p>PRIVATE Employers (+ 0.01%) Enrollees in group plans (+0.01%). Individually purchased insurance (+0.01%). PUBLIC CalPERS (+0.01%) Medi-Cal (+0.03%) HFP (NA) Members out-of-pocket expenses³: Co-payment (0.01) Direct payment (NA)</p>	<p>9.4% of insured children in CA have symptomatic asthma</p>	<ul style="list-style-type: none"> • There would be a total reduction of approximately 40,500 days of missed school per year; 8,900 fewer children would report their physical activity is limited due to asthma; 500 fewer children with asthma would visit the emergency department; and 80 fewer children would be hospitalized for asthma-related conditions. • AB 264 is not expected to affect gender or racial disparities in asthma management. • Mortality is a rare occurrence among children with asthma, therefore CHBRP is not able to determine whether AB 264 would impact premature death associated with childhood asthma. • The reduction in 40,500 missed school days per year would likely lead to productivity gains in California through a decrease in lost workdays of caregivers.

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
AB 264 (amended): Pediatric Asthma Self-Management Training and Education Services (Chan) (5/25/2006)	<p>Same findings regarding the effectiveness of asthma self-management and education as AB 264 as introduced.</p> <p>No evidence suggests that providing asthma self-management training and education in any single type of setting yields better outcomes than providing training in other settings.</p>	<p># of children insured children aged 1-17 with coverage for mandated benefit, Before: 5,340,000 After: 5,340,000 (No change)</p> <p># of covered children aged 1-17 in CA with high-risk asthma: 134,000</p>	<p>Utilization is estimated to increase by approximately 10 percentage points (from 63.2% to 73.2%) for children already covered.</p>	<p>\$1 million (less than 0.01%)</p>	<p>PRIVATE Employers (+less than 0.01%) Enrollees in group plans (+less than 0.01%). Individually purchased insurance (+less than 0.01%). PUBLIC CalPERS (+less than 0.01%) Medi-Cal (+less than 0.01%) HFP (0.02%) Members out-of-pocket expenses: Co-payment (+less than 0.01%) Direct payment (NA)</p>	<p>2.5% of insured children in CA have high-risk asthma</p>	<ul style="list-style-type: none"> • There would be a total reduction of approximately 36,000 days of missed school per year among children with "high-risk" asthma; 2,000 fewer children would report their physical activity is limited due to asthma; 300 fewer children with asthma would visit the emergency department; and 160 fewer children would be hospitalized for asthma-related conditions. • AB 264 is not expected to affect gender or racial disparities in asthma management. • Mortality is a rare occurrence among children with asthma, therefore CHBRP is not able to determine whether AB 264 would impact premature death associated with childhood asthma. • The reduction in 36,000 missed school days per year would likely lead to productivity gains in California through a decrease in lost workdays of caregivers.
AB 2012: Orthotic and Prosthetic Devices (Emmerson) (4/11/2006)	<p>There is a lack of information about the quality of care associated with the prescribing of orthotic and prosthetic (O&P) devices by physicians vs. podiatrists.</p>	<p>Coverage varies across plans and policies; some have no annual limits, but for those with a limit, typically \$2,000; Copayments vary, can range from 20 to 50%</p>	<p>CHBRP estimates no change in the utilization rates postmandate</p>	<p>None</p>	<p>None</p>	<p>6.8 million O&P devices were used by the insured population— 40.4 procedures per 1,000 persons</p>	<ul style="list-style-type: none"> • There is no evidence to suggest that AB 2012 would impact utilization of O&P devices, therefore there is no evidence that there would be an impact on the public's health. • There is no evidence that AB 2012 would impact racial and ethnic health disparities. • There is no evidence that AB 2012 would impact premature death. • There is no evidence that AB 2012 would impact economic loss associated with the conditions related to the use of O&P devices.

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<p>AB 2012 (amended): Orthotic and Prosthetic Devices (Emmerson) (6/15/2006)</p>	<p>There is a lack of information about the quality of care associated with the prescribing of orthotic and prosthetic (O&P) devices by physicians vs. podiatrists.</p> <p>No studies were found that evaluated the impact of cost sharing on the use of O&P devices.</p> <p>There is weak evidence that newer technologies for lower limb prostheses benefit non-elderly adults who are healthy and active.</p> <p>There is insufficient evidence regarding the effects of new technologies used in upper limb prostheses and spinal orthoses.</p>	<p># of insured individuals in compliant O&P plans, Before: 5,244,862 After: 13,692,321 Change: 8,447,459 (161% increase)</p>	<p>CHBRP estimates no change in the utilization rates postmandate</p>	<p>\$4.6 million (+0.01%)</p>	<p>PRIVATE Employers (+0.06%) Enrollees in group plans (+0.06%). Individually purchased insurance (NA). PUBLIC CalPERS (+0.0%) Medi-Cal (NA) HFP (NA) Members out-of-pocket expenses: Co-payment (-0.07%) Direct payment (0)</p>	<p>6.8 million O&P devices were used by the insured population—40.4 procedures per 1,000 persons</p>	<ul style="list-style-type: none"> • There is no evidence to suggest that AB 2012 would impact utilization of O&P devices, therefore there is no evidence that there would be an impact on the public's health. • There is no evidence that AB 2012 would impact racial and ethnic health disparities. • There is no evidence that AB 2012 would impact premature death. • There is no evidence that AB 2012 would impact economic loss associated with the conditions related to the use of O&P devices.

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<p>AB 2281: High Deductible Health Care Coverage (Chan)</p> <p>(4/18/2006)</p>	<p>Evidence suggests that many clinical preventive services improve health and well-being.</p> <p>No studies of high-deductible health plans (HDHPs) as they exist currently have examined direct effects of HDHPs on use of preventive services.</p> <p>Most studies of cost sharing in conventional types of health plans (e.g., HMOs) have found that lower cost sharing is associated with greater use of preventive services.</p>	<p># of insured in CA with commercial insurance: 15,886,000</p> <p># of insured in HDHPs in CA with coverage subject to AB 2281: 1,746,000</p> <p>(Analysis does not show change)</p>	<p>Change in utilization of a variety of preventive services by enrollees in HDHPs (ranges are by largest magnitude change for any service):</p> <p>Scenario 1 Range: No change to +3.5%</p> <p>Scenario 2 Range: -0.8% to +2.1%</p>	<p>All insured: Scenario 1 +0.004% Scenario 2 +0.000%</p> <p>HDHPs: Scenario 1 +0.05% Scenario 2 +0.03%</p>	<p>All insured: Scenario 1 PRIVATE Enrollees in group plans (+0.002%). Individually purchased insurance (+0.079%). Members out-of-pocket expenses: Copayment/deductible (-0.084%) Non-covered services (0)</p> <p>Scenario 2 PRIVATE Enrollees in group plans (+0.00%). Individually purchased insurance (+0.04%). Members out-of-pocket expenses: Copayment/deductible (-0.10%) Non-covered services (+13.61%)</p> <p>HDHPs: Scenario 1 PRIVATE Employers (+0.11%) Enrollees in group plans (+0.08%). Individually purchased insurance (+0.19). Members out-of-pocket expenses: Co-payment (-0.71%) Non-covered services (0)</p> <p>Scenario 2 PRIVATE Employers (+0.07%) Enrollees in group plans (+0.05%). Individually purchased insurance (+0.09%). Members out-of-pocket expenses: Co-payment (-0.81%) Non-covered services (+13.61%)</p>	<p>1,746,000 enrollees in HDHP plans in CA</p>	<ul style="list-style-type: none"> The overall effect on the public's health is dependent on how insurance companies respond to AB 2281. If HDHPs continue to cover effective clinical preventive services no longer subject to the deductible, utilization of these services and corresponding health outcomes would improve. If HDHPs dropped coverage, utilization of preventive services and related health outcomes would decline. Therefore the public health impact of AB 2281 is unknown. The impact on gender and racial disparities is unknown. The impact on premature death is unknown. The impact on economic loss associated with disease is unknown.

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SB 1223: Hearing Aids for Children (Scott) (4/3/2006)	<p>Speech and language development of children whose hearing loss is diagnosed and treated prior to 6 months of age is similar to that of children with normal hearing, and is better than that of children whose hearing loss is diagnosed after age 6 months.</p> <p>Evidence of the effects of early diagnosis and treatment on personal and social development is <i>ambiguous</i>.</p> <p>Some newer hearing aid technologies are associated with better hearing outcomes than older technologies.</p>	# of insured children with hearing impairments in CA with coverage for hearing aids similar to or better than mandated levels, <i>Before:</i> 57,000 <i>After:</i> 108,000 <i>Change:</i> 51,000 (89.5% increase)	400 newly covered children to use hearing aids post-mandate	\$3.4 Million (0.01%)	PRIVATE Employers (+0.01%) Enrollees in group plans (+0.01%). Individually purchased insurance (+0.04%). PUBLIC CalPERS (+0.0%) Medi-Cal (0.0) HFP (0.0) Members out-of-pocket expenses: Co-payment (0.65%) Direct payment (-100%)	1.7% of children in the U.S. are affected by hearing loss; 56.1% of children with hearing loss in California use hearing aids	<ul style="list-style-type: none"> • SB 1223 would likely contribute to better speech and language outcomes for the 400 additional children receiving hearing aids as a result of the mandate. • There is no evidence to suggest that SB 1223 will have a substantial impact on gender or racial disparities in hearing loss. • The acquisition of hearing aids does not impact mortality outcomes. Therefore, there is no impact on premature death. • Estimates on the lifetime costs associated with hearing loss typically focus on those with severe or profound hearing loss and costs vary from \$297,000 per person in one study to \$417,000 per person in another. It is possible that SB 1223 could contribute to decreased special education and productivity costs associated with hearing loss.
SB 1245: Cervical Cancer Screening Test (Figueroa) (4/7/2006)	Evidence suggests that the use of HPV testing as an adjunct to the Pap test increases the accuracy of the test and improves the efficiency of screening programs.	# of insured women aged 18-64 in CA with coverage for mandated benefit, <i>Before:</i> 7,627,000 (100%)	None	None	None	Prevalence rate of HPV is 14.3%; 7% of those will progress to CIN III or cervical cancer.	<ul style="list-style-type: none"> • SB 1245 will not increase utilization of the HPV screening test, therefore there would be no impact on the number of cervical cancer cases. • There will be no impact on racial disparities in cervical cancer screening or treatment. • There will be no impact on premature death from cervical cancer. • There will be no impact on economic loss associated with cervical cancer.

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SB 1508: Propofol for Colonoscopies (Bowen) (4/7/2006)	<p>The available evidence does not indicate whether propofol is associated with better or worse health outcomes than traditional sedation methods.</p> <p>Evidence shows favorable results as to the use of propofol versus traditional sedation methods for:</p> <p>(1) procedural outcomes and (2) post-procedure outcomes.</p> <p>The safety outcomes associated with the use of propofol appear to be similar to those associated with the use of other sedative and analgesic agents.</p>	<p># of insured individuals with coverage for the benefit, <i>Before</i>: 20,144,000 (100%)</p>	<p>The utilization of colonoscopies is not expected to increase. However, the utilization rate for propofol with anesthetic service for colonoscopy is estimated to increase by 2 percentage points (from the current rate of 14% to 16%), for an additional 6,248 members aged 50 to 65 years who would receive propofol for colonoscopies per year. This 2–percentage point increase of propofol would result in the decrease in the use of moderate sedation for the purpose of colonoscopy by 2% (from 86% to 84%).</p>	<p>\$3.378 million or 0.01%</p>	<p>PRIVATE Employers (+0.01%) Enrollees in group plans (+0.01%). Individually purchased insurance (+0.01%). PUBLIC CalPERS (+0.01%) Medi-Cal (+0.01%) HFP (0.0%) Members out-of-pocket expenses: Co-payment (+0.01%) Direct payment (NA)</p>	<p>14,345 new cases of colorectal cancer and 4,425 colorectal cancer deaths occur in CA annually.</p>	<ul style="list-style-type: none"> • SB 1508 will not increase the utilization of colonoscopy. Therefore there would be no impact on the number of colorectal cancer cases. SB 1508 will result in 6,248 more patients using propofol during their colonoscopy—which is expected to save 1,770 hours of procedure time and 1,562 hours of recovery time annually. • There will be no impact on racial disparities in colorectal cancer screening or treatment. • There will be no impact on premature death from colorectal cancer. • There will be no impact on economic loss associated with colorectal cancer.

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2007							
AB 30: Inborn Errors of Metabolism (Evans) (8/24/2007)	<p>With the exception of phenylketonuria (PKU), the literature on treatment of Inborn Errors of Metabolism (IEM) disorders is relatively sparse.</p> <p>Literature indicates that appropriate long-term treatment can extend life and greatly enhance quality of life for many persons with IEM disorders.</p> <p>There are no controlled studies on the efficacy of special formulas and special food products for non-PKU IEM disorders.</p> <p>The lack of controlled studies is not as great a concern for IEM disorders as for many other conditions because these disorders are single-cause conditions for which the scientific basis and rationale for treatment are strong.</p>	<p># of individuals with coverage for medical nutrition therapy,</p> <p><i>Before:</i> 8,096,100</p> <p><i>After:</i> 20,687,000</p> <p><i>Change:</i> 12,590,900 (156% increase)</p>	CHBRP estimates no change in the utilization rates postmandate	\$415,000 (+less than 0.01%)	<p>PRIVATE Employers (+less than 0.01%) Enrollees in group plans (+less than 0.01%). Individually purchased insurance (+less than 0.01%).</p> <p>PUBLIC CalPERS (+0.01%) Medi-Cal (0.0 HFP (0.0%) Members out-of-pocket expenses: Co-payment (+less than 0.01%) Direct payment (-100%)</p>	Occurs in approximately 1 in 5,000 newborns in CA—more than 100 births per year.	<ul style="list-style-type: none"> AB 30 would not increase utilization of medical nutrition therapy, therefore no impact on health outcomes are expected. Insurance coverage for this benefit will increase for 386 individuals with a non-PKU IEM disorder and therefore will likely reduce the administrative burden and financial hardship associated with these disorders for those families. AB 30 is not expected to have an impact on gender, racial, or ethnic disparities in health. AB 30 is not expected to have an impact on premature death of children with non-PKU IEM disorders. AB 30 is not expected to reduce economic loss associated with non-PKU IEM disorders.

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<p>AB 54: Acupuncture (Dymally) (6/22/2007)</p>	<p>Needle acupuncture vs. no treatment or sham acupuncture</p> <p>Evidence suggests that needle acupuncture is (1) more effective than no treatment for certain musculoskeletal and chronic headache, (2) more effective than sham acupuncture for certain musculoskeletal conditions and for postoperative nausea and vomiting.</p> <p>Needle acupuncture vs. other treatments</p> <p>Evidence suggests that needle acupuncture is more effective than medication or education for osteoarthritis of the knee, more effective than physical therapy for pelvic pain associated with pregnancy, and more effective than medication for chronic headache.</p> <p>Evidence suggests that needle acupuncture is as effective as other treatments for temporomandibular joint dysfunction, smoking cessation and postoperative nausea and vomiting</p> <p>Acupuncture needling used as an adjuvant treatment</p> <p>Evidence suggests that needle acupuncture is an effective adjuvant to other treatments for chronic low back pain, pelvic pain, stroke, and chemotherapy-induced vomiting.</p>	<p># of individuals with coverage, <i>Before:</i> 10,436,600 <i>After:</i> 12,095,000 <i>Change:</i> 1,658,400 (15.9% increase)</p>	<p>No overall increase in utilization of acupuncture is expected as a result of the mandate.</p>	<p>\$2.44 Million (.004%)</p>	<p>PRIVATE Employers (+0.025%) Enrollees in group plans (+0.029%). Individually purchased insurance (+0.0%). PUBLIC CalPERS (0.102%) Medi-Cal (0.0) HFP (0.0%) Members out-of-pocket expenses: Copayment (+0.075%) Direct Payment (-100%)</p>	<p>One-third of adults report having lower back pain, neck pain, or migraines in the past 3 months. 2.4% of insured adults used acupuncture in the past year in CA.</p>	<ul style="list-style-type: none"> • AB 54 is not expected to result in an overall increase in utilization of acupuncture in the 1-year time frame used in this analysis, but the mandate would decrease out-of-pocket costs for current users who would face a decrease in financial burden. • Women and Asians are more likely to use acupuncture and will benefit from a reduced financial burden of paying for acupuncture out-of-pocket. • There is no expected reduction in premature death as a result of AB 54. • There is no expected reduction in economic loss associated with conditions related to acupuncture use.

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<p>AB 368: Mandate to Offer Coverage of Hearing Aids for Children (Carter) (4/16/2007)</p>	<p>Speech and language development of children whose hearing loss is diagnosed and treated prior to 6 months of age is similar to that of children with normal hearing, and is better than that of children whose hearing loss is diagnosed after age 6 months.</p> <p>Evidence of the effects of early diagnosis and treatment on personal and social development is ambiguous.</p> <p>Some newer hearing aid technologies are associated with better hearing outcomes than older technologies.</p>	<p># of insured hearing-impaired children aged 0-17 years with coverage for hearing aids, similar to or above mandated levels, <i>Before:</i> 60,000 <i>After:</i> 87,000 Change: 27,000 (45% increase)</p> <p># remaining without coverage, post-mandate: 31,000</p>	<p>Approximately 270 additional children will receive hearing aids each year as a result of AB 368. Utilization of hearing aids by children currently without coverage (54%) is expected to increase by approximately four percentage points to the same level of utilization by children who currently have coverage (58%). The utilization rate among those with current coverage is expected to remain the same.</p>	<p>\$2.29 million (+less than 0.01%)</p>	<p>PRIVATE Employers (+0.01% Enrollees in group plans (+0.1%). Individually purchased insurance (+0.41%). PUBLIC CalPERS (0.0%) Medi-Cal (0.0 HFP (0.0%) Members out-of-pocket expenses: Copayment (+.22%) Direct Payment (-46.36%)</p>	<p>1.7% of children in the U.S. are affected by hearing loss; 56.1% of children with hearing loss in California use hearing aids</p>	<ul style="list-style-type: none"> • AB 368 would likely contribute to better speech and language outcomes for the 270 additional children receiving hearing aids as a result of the mandate, as well as for the 15,000 children receiving a more sophisticated hearing aid and the 1,800 children who could receive a cochlear implant in their opposite ear. • Male children and Hispanic children have higher prevalence of hearing problems compared to females and non-Hispanics respectively. • The acquisition of hearing aids does not impact mortality outcomes. Therefore, there is no impact on premature death. • Estimates on the lifetime costs associated with hearing loss typically focus on those with severe or profound hearing loss and costs vary from \$297,000 per person in one study to \$417,000 per person in another. It is possible that AB 368 could contribute to decreased special education and productivity costs associated with hearing loss.

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AB 423: Mental Health Services (Beall) (4/20/2007)	Findings suggest that when parity in coverage is implemented in conjunction with intensive management of mental health and substance abuse (MH/SA) services and provided to persons who already have some coverage for these services: (1) consumers' out-of-pocket costs for MH/SA services decrease (2) rates of growth in the use and cost of MH/SA services decrease (3) utilization of mental health services and psychotropic medications does not increase, but utilization of substance abuse services increases slightly.	<p># of individuals with full parity coverage of:</p> <p><i>Non-SMI disorders,</i> <i>Before:</i> 0 <i>After:</i> 18,033,000 <i>Change:</i> 18,033,000</p> <p><i>Substance use disorders,</i> <i>Before:</i> 0 <i>After:</i> 18,033,000 <i>Change:</i> 18,033,000</p>	Utilization of MH/SA services (including prescription drugs for smoking cessation) would increase as a result of the mandate, e.g., by 24.5 outpatient mental health visits per 1,000 members per year	\$109.93 million (+0.16%).	PRIVATE Employers (+0.19% Enrollees in group plans (+0.17%). Individually purchased insurance (+0.41%). PUBLIC CalPERS (+0.17%) Medi-Cal (-0.01 HFP (+0.02%)) Members out-of-pocket expenses: Copayment (-0.37%) Direct Payment (NA)	28% of adults in the U.S. have a mental or addiction disorder	<ul style="list-style-type: none"> Although it is likely that AB 423 will also have positive health outcomes such as reduced suicides, reduced inpatient psychiatric care, reduced symptomatic distress, improved quality of life for some people, CHBRP is unable to estimate these benefits and therefore the impacts of the mandate on outcomes are unknown. Although the lifetime prevalence for mental disorders is similar for males and females, gender differences exist with regard to specific mental disorder diagnoses. There is substantial variation both across and within racial groups with respect to the prevalence of and treatment for MH/SA disorders. AB 423 has the potential to reduce gender and racial disparities in mental health treatment, but the exact impact is unknown. Mental and substance abuse disorders are a substantial cause of mortality and disability in the U.S, but the impact of AB 423 on premature death is unknown. There are sizeable economic costs associated with mental and substance abuse disorders with an estimated \$147.8 billion in 1990 associated with mental disorders and \$428.1 billion in 1995 related to substance abuse. The impact of AB 423 on these costs is unknown.

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<p>AB 1429: Human Papillomavirus Vaccination (Evans) (4/17/2007)</p>	<p>Among females who complete all three doses of the quadrivalent HPV vaccine (Gardasil) and who were not previously exposed to HPV 6, 11, 16 and 18, the vaccine provides for a 95% or higher level of protection against HPV infection, anogenital warts, and precancerous lesions associated with these types of HPV.</p> <p>The vaccine is less effective among females who have not completed all three doses of the vaccine and/or were exposed to HPV prior to vaccination.</p> <p>Evidence suggests the vaccine does not have a statistically significant effect on the occurrence of the cervical intraepithelial neoplasia 3 and adenocarcinoma in situ associated with types of HPV other than the four toward which the vaccine is targeted (i.e., types 5, 11, 16, & 18).</p> <p>The quadrivalent vaccine appears safe at 5 years postvaccination. Duration of protection is unknown beyond five years.</p>	<p># of individuals with coverage for HPV vaccine, <i>Before:</i> 3,355,200 <i>After:</i> 3,382,600 <i>Change:</i> 27,400 (0.8% increase)</p>	<p>The 2008 vaccination rate for females aged 11 to 26 years is estimated to be approximately 43.3% for those newly covered for the vaccine. Approximately 23.7%, or 6,500 of the 27,400 females aged 11 to 26 years currently without coverage for HPV vaccination are estimated to receive HPV vaccination in the first year following passage of AB 1429.</p>	<p>\$4.6 Million (+0.006%)</p>	<p>PRIVATE Employers (+ 0.004%) Enrollees in group plans (+0.003%). Individually purchased insurance (+0.067%). PUBLIC CalPERS (+0.0%) Medi-Cal (0.0) HFP (0.0) Members out-of-pocket expenses: Co-payment (0.026%) Direct payment (-100%)</p>	<p>27% of females aged 14-59 are infected with HPV</p>	<ul style="list-style-type: none"> Assuming 6,500 additional women get vaccinated in the first year after passage of the mandate, over 1,000 cases of HPV could be averted over the lifetimes of these women, thereby preventing almost 30 cases of cervical cancer and 10 cervical cancer-related deaths. Blacks and Hispanics have higher mortality rates from cervical cancer compared to other racial/ethnic groups. Providing coverage for vaccination may be one way to reduce these racial and ethnic disparities. It is unknown, however, the extent to which this mandate will reduce these disparities. Approximately 10 deaths could be prevented over the lifetime of women vaccinated in the first year. AB 1429 could result in a total savings of nearly 300 person-years, valued at approximately \$3.5 million in productivity.

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AB 1461: Alcohol and Drug Abuse Exclusion (Krekorian) (4/19/2007)	<p>No studies were identified that assessed whether excluding coverage for illnesses and injuries associated with alcohol or substance abuse affects health or access to care.</p> <p>Evidence from interviews suggest that decisions about screening and treatment for alcohol and substance abuse are not driven by physicians' knowledge of the uniform accident and sickness policy provision law (UPPL) exclusion or of patients' insurance status.</p>	<p># of individuals with coverage (policies without UPPL exclusion), <i>Before:</i> 20,626,000 <i>After:</i> 20,694,000 <i>Change:</i> 68,000 (0.3% increase)</p>	<p>None</p>	<p>\$0 (0.0%)</p>	<p>PRIVATE Employers (0.0%) Enrollees in group plans (0.0%). Individually purchased insurance (+0.005%). PUBLIC CalPERS (N/A) Medi-Cal (N/A) HFP (N/A) Members out-of-pocket expenses: Copayment (+0.002%) Direct Payment (-100%)</p>	<p>7.9% of all ED visits are alcohol-related and 1.3% of ED visits are due to drug abuse or misuse.</p>	<ul style="list-style-type: none"> No evidence that AB 1461 would change physician practice patterns in terms of screening and counseling for alcohol and substance abuse or treatment for illness and injuries sustained in conjunction with alcohol or substance abuse. Therefore, we conclude that this mandate would have no impact on overall public health outcomes. AB 1461 is not expected to have an impact on gender, racial, or ethnic disparities in health outcomes. AB 1461 is not expected to have an impact on premature death related to alcohol or drug use. AB 1461 is not expected to reduce economic loss associated with to alcohol or drug use.

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
SB 24: Tobacco Cessation (Torlakson) (4/20/2007)	<p>Counseling</p> <p>A large body of evidence suggests that counseling and brief advice by physicians and other health professionals increase abstinence from smoking.</p> <p>Pharmacotherapy</p> <p>Among first-line pharmacological agents (those used in initial attempts to quit smoking), nicotine replacement therapy and bupropion are effective treatments.</p> <p>Among second-line agents (those used when initial attempts to quit have not been successful), Varenicline, other forms of cytisine, clonidine, and nortriptyline increase smoking cessation.</p> <p>Coverage for tobacco cessation services</p> <p>Full coverage for tobacco cessation counseling and pharmacotherapy is associated with improved abstinence from smoking relative to no coverage.</p> <p>The evidence of the effect of full coverage for tobacco cessation counseling and pharmacotherapy relative to partial coverage on abstinence from smoking is ambiguous.</p>	<p># of insured individuals in CA with coverage for:</p> <p><i>NRT,</i> <i>Before:</i> 8,430,000 <i>After:</i> 19,557,000 <i>Change:</i> 11,127,000 (132% increase)</p> <p><i>Counseling,</i> <i>Before:</i> 12,607,000 <i>After:</i> 19,557,000 <i>Change:</i> 6,950,000 (55% increase)</p> <p><i>Antidepressant,</i> <i>Before:</i> 11,623,000 <i>After:</i> 19,557,000 <i>Change:</i> 7,934,000 (68% increase)</p>	<p>Enrollees 18 years and older who smoke <i>with</i> partial/full covered benefit and utilize NRT, counseling, or antidepressant: Increase of +25%</p> <p>Enrollees 18 years and older who smoke <i>without</i> covered benefit and who use NRT, counseling, or antidepressant: Increase of +122%</p>	<p>\$70 million (+0.10%)</p>	<p>PRIVATE Employers (+0.17%) Enrollees in group plans (+0.16%). Individually purchased insurance (+0.34%). PUBLIC CalPERS (+0.09%) Medi-Cal (0%) HFP (+0.01%) Members out-of-pocket expenses: Co-payment (-0.19%) Direct Payment (-100%)</p>	<p>15% of California adults are smokers</p>	<ul style="list-style-type: none"> Approximately 31,716 smokers will quit due to SB 24 each year. During the first year after implementation, this mandate is estimated to result in 22 fewer cases of AMI or stroke and 35 fewer low birth-weight deliveries each year. Racial and ethnic disparities in smoking prevalence are also apparent in California. The extent to which SB 24 will modify these disparities is unknown. For each quitter, between 7.0 and 12.4 years of life is gained due to prevention of premature death from smoking-related illnesses. This adds up to a total of 222,012 to 393,278 years of potential life gained across the state each year.

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2008							
AB 1774: Gynecological Cancer Screening Tests (Lieber) (4/7/2008)	<p>Cervical Cancer Among asymptomatic women at average risk who are sexually active and have not had a hysterectomy, screening with the Pap test reduces the incidence of cervical cancer.</p> <p>Among asymptomatic women at high risk, the HPV DNA test and Pap test are equally accurate for identifying women with abnormal cytology who should receive further testing.</p> <p>Among both average risk and high risk women, evidence of the relative accuracy of screening with the Pap test alone vs. multimodal screening with both the Pap test and the HPV DNA test is ambiguous.</p> <p>Ovarian Cancer Evidence is insufficient to determine the effectiveness of genetic testing to identify mutations associated with increased cancer risk among women without a hereditary risk for ovarian cancer.</p> <p>Although screening asymptomatic women at average risk for ovarian cancer with transvaginal ultrasound and/or the CA-125 blood test can detect ovarian cancer at an earlier stage, there is insufficient evidence to determine whether screening reduces morbidity and mortality.</p> <p>Evidence suggests that annual screening with transvaginal ultrasound is accurate among asymptomatic women at increased risk and could increase survival over the short term.</p> <p>Endometrial Cancer No studies were found that addressed screening tests for endometrial</p>	<p># of individuals affected by mandate—women aged 18-64 years: 8,433,000</p> <p>Percentage of individuals with coverage for:</p> <p><i>Cervical cancer tests:</i> 100% (diagnostic testing for symptomatic women, routine screening for high-risk women, and routing screening for average-risk women)</p> <p><i>Ovarian cancer tests:</i> 100% (diagnostic for symptomatic, and routing for high-risk), 0% (routine screening for average-risk)</p> <p><i>Endometrial cancer tests:</i> 100% (diagnostic for symptomatic, and routing for high-risk), 0% (routine)</p>	<p>Under this scenario, utilization of screening tests in the first year post-mandate would increase by about 1,565,000 for transvaginal ultrasound, 945,000 for endometrial biopsy, 232,000 for BRCA1/2 genetic mutation tests, and 244,000 for HNPCC genetic mutation tests. Other selected screening tests would experience lower utilization increases.</p>	\$2.72 billion, or 3.43%,	<p>PRIVATE Employers (+3.46%) Enrollees in group plans (+3.41%). Individually purchased insurance (+4.67%). PUBLIC CalPERS (3.07%) Medi-Cal (1.90%) HFP (+0.0%) Members out-of-pocket expenses: Co-payment (+3.6%) Direct Payment (NA)</p>	4,700 cases and 1,100 deaths from gynecological cancers in CA each year.	<ul style="list-style-type: none"> AB 1774 is expected to result in the detection of early-stage ovarian cancer for 470 women over 3 years. But it is also expected to result in more than 30,000 false-positive results for the initial screen, and another 6,600 unnecessary surgeries due to increased screenings. It is also expected to result in an increase in 4,600 false positive results for HPV, without any increase in the number of cases of cervical cancer found early. AB 1774 is not expected to have an impact on racial disparities related to gynecological cancers. Since insurers typically cover the gynecological tests that have been found to be medically effective, AB 1774 is not expected to substantially reduce premature death among women. However, for the 470 women expected to have early-stage ovarian cancer detected due to AB 1774, this could potentially improve survival. Overall, at present, there are over \$500 million in indirect costs associated with gynecological cancers in California. AB 1774 could potentially decrease lost productivity costs by increasing survival for women with earlier detected ovarian cancer.

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	cancer.	screening for average-risk)					

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
AB 1887: Mental Health Services (Beall) (4/8/2008)	Findings suggest that when parity in coverage is implemented with intensive management of mental health and substance abuse (MH/SA) services and provided to persons with some coverage for these services: (1) consumers' out-of-pocket costs for MH/SA services decrease (2) rates of growth in the use and cost of MH/SA services decrease, and (3) utilization of MH/SA increases slightly among persons with substance abuse disorders and persons with moderate levels of symptoms of mood and anxiety disorders.	# of insured individuals with full parity coverage of: <i>Non-SMI disorders,</i> <i>Before: 0</i> <i>After: 18,859,000</i> <i>Change: 18,859,000</i> <i>Substance use disorders,</i> <i>Before: 0</i> <i>After: 18,859,000</i> <i>Change: 18,859,000</i>	About 18 million individuals would be affected by the mandate. None of these individuals currently have coverage at levels achieving full MH/SA parity with medical care, as would be mandated under AB 1887 for non-severe mental illnesses (SMI) and substance use disorders. Utilization would increase by 23.9 outpatient mental health visits (12.03%) and 9.0 outpatient substance abuse visits (27.41%) per 1,000 members per year. Annual inpatient days per 1,000 members would increase by 0.1 (4.36%) for mental health and by 1.1 (17.05%) for substance abuse.	\$104 million (+0.14%)	PRIVATE Employers (+ 0.17%) Enrollees in group plans (+0.23%). Individually purchased insurance (+0.36%). PUBLIC CalPERS (0.0%) Medi-Cal (NA) AIM&MRMIP (-0.01%) HFP (+0.02%) Members out-of-pocket expenses: Co-payment (-0.36%) Direct Payment (NA)	28% of adults in the U.S. have a mental or addiction disorder	<ul style="list-style-type: none"> Although it is likely that AB 1887 will also have positive health outcomes such as reduced suicides, reduced inpatient psychiatric care, reduced symptomatic distress, improved quality of life for some people, CHBRP is unable to estimate these benefits and therefore the impacts of the mandate on outcomes are unknown. Although the lifetime prevalence for mental disorders is similar for males and females, gender differences exist with regard to specific mental disorder diagnoses. There is substantial variation both across and within racial groups with respect to the prevalence of and treatment for MH/SA disorders. There is no evidence that AB 1887 would reduce gender and racial disparities in mental health treatment. Mental and substance abuse disorders are a substantial cause of mortality and disability in the U.S, but there is no evidence that AB 1887 would result in a reduction in premature death. There are sizeable economic costs associated with mental and substance abuse disorders with an estimated \$147.8 billion in 1990 associated with mental disorders and \$428.1 billion in 1995 related to substance abuse. The impact of AB 1887 on these costs is unknown.

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AB 1894: HIV testing (Krekorian) (4/7/2008)	<p>Indirect evidence shows that screening for HIV is effective.</p> <p>Evidence shows that tests for HIV are highly accurate.</p> <p>Evidence shows that the following treatments for HIV reduce the risk of clinical progression, opportunistic infection, and death.</p> <p>Acceptance rates for HIV testing among asymptomatic persons vary widely.</p>	<p># of individuals with coverage, <i>Before:</i> 22,190,000 (100%)</p>	<p>No estimated overall increase in utilization</p>	<p>+ \$554,000 (0.00%)</p>	<p>PRIVATE Employers (+0.00%) Individuals w/group insurance (+0.00%) Individuals w/individual coverage (+0.00%) PUBLIC CalPERS (0.00%) Medi-Cal (0.00%) HFP (0.00%) Members' out-of-pocket expenditures³ Copayment (+0.00%) Direct payment (-0.00%)</p>	<p>Between 6,700-9,000 new infections occur annually in California</p>	<ul style="list-style-type: none"> • AB 1894 is not expected to alter coverage or utilization of HIV testing and is therefore not expected to have an impact on overall public health. • Men are infected with HIV at a rate 10 times that of women and the AIDS incidence rates for blacks are almost four times greater than for Hispanics or whites. AB 1894 is not expected to change utilization of HIV testing and therefore is not expected to impact gender or racial/ethnic disparities. • AB 1894 is not expected to reduce premature death due to AIDS. • AB 1894 is not expected to reduce economic loss associated with AIDS.
AB 1962: Maternity Services (De La Torre) (4/10/2008)	<p>Evidence shows that there is no difference in birth outcomes for infants or mothers in association with numbers of prenatal visits.</p> <p>Evidence suggests that some prenatal care services are effective (i.e., counseling; screening tests; diagnostic and preventive services; supplements).</p>	<p># of individuals with coverage for maternity services (subject to mandate, i.e. in large-group, small-group, or individual plans), <i>Before:</i> 1,281,000 <i>After:</i> 1,882,000 <i>Change:</i> 600,800 (47% increase)</p>	<p>No increase in utilization of maternity services including prenatal care services</p>	<p>\$24 Million (0.32%)</p>	<p>PRIVATE Employers (0.0%) Employees covered by group insurance (0.0%). Individually purchased insurance (+4.75%). PUBLIC CalPERS (N/A) Medi-Cal (N/A) HFP (N/A) Members out-of-pocket expenses: Copayment (1.28%) Direct Payment (-100%)</p>	<p>550,000 births occur annually in California.</p>	<ul style="list-style-type: none"> • The extent to which AB 1962 would result in increased utilization of effective prenatal care services is unknown. Therefore the public health impacts of the mandate are unknown. • Babies born to black women are more likely to be born prematurely and have higher mortality rates. There is no evidence that AB 1962 would make an impact on prenatal care utilization rates among black women to reduce these disparities in health outcomes. • The impact of AB 1962 on premature death is unknown. • The impact of AB 1962 on the economic loss associated with disease is unknown.

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<p>AB 2174: Amino acid-based elemental formulas (Laird) (4/8/2008)</p>	<p>The medical effectiveness analysis examined the effectiveness of elemental formula for diagnosis and treatment of the two disorders addressed in AB 2174 for which literature on the effectiveness of formula was available: eosinophilic esophagitis (EE) and short bowel syndrome (SBS). No literature on the effectiveness of amino acid-based elemental formula was found for any other eosinophilic disorder.</p> <p>Evidence from studies suggests that amino acid-based elemental formula and elimination diets are both effective strategies to treat eosinophilic esophagitis. The evidence does not indicate which regimen is more effective.</p> <p>Three uncontrolled studies report that elemental formula is effective in improving symptoms associated with short bowel syndrome (SBS).</p>	<p># of individuals with coverage for formula used without a feeding tube, <i>Before:</i> 8,019,300 <i>After:</i> 22,362,000 <i>Change:</i> 14,342,700 (179% increase)</p>	<p>Of the insured population who would gain coverage, approximately 31,000 are estimated to have either an eosinophilic disorder or SBS. Of these 31,000 people, approximately 900 would access coverage for formula taken orally or with a feeding tube. CHBRP estimates no change in the utilization rates postmandate</p>	<p>+\$1.7 million (less than 0.01%)</p>	<p>PRIVATE Employers (+ 0.02%) Enrollees in group plans (+0.02%). Individually purchased insurance (+0.02%). PUBLIC CalPERS (0.02%) Medi-Cal (0.00%) HFP (0.00%) Members out-of-pocket expenditures: Copayment (0.02%) Direct Payment (-100%)</p>	<p>EE occurs in approximately 4.3/10,000 children and 2.3/10,000 adults; SBS occurs in approximately 3/1,000,000 children and 4/ 1,000,000 adults.</p>	<ul style="list-style-type: none"> • AB 2174 would not increase utilization of amino acid-based elemental formula, therefore no impact on health outcomes are expected. Insurance coverage for this benefit will increase for and out-of-pocket costs will decrease for approximately 900 individuals and therefore will likely reduce the administrative burden and financial hardship associated with these disorders for those families. • AB 2174 is not expected to have an impact on gender, racial, or ethnic disparities in health outcomes. • AB 2174 is not expected to have an impact on premature death. • AB 2174 is not expected to reduce economic loss associated with eosinophilic disorders and SBS.

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<p>AB 2234: Breast Conditions (Portantino) (4/3/2008)</p>	<p>There is insufficient evidence that digital mammography, BMRI screening, or ultrasound decreases breast cancer mortality or improves health outcomes when compared with standard mammography screening.</p> <p>Harms associated with screening are due to false-positive readings that result in a higher rate of benign biopsies.</p> <p>Evidence shows that notifying women about routine mammography screening improves the overall mammography screening rate.</p>	<p># of women aged 30-64 years enrolled in plans or policies affected by mandate, with coverage for:</p> <p><i>Mammogram and ultrasound tests:</i> 6,775,000 (100%)</p> <p><i>BMRI tests:</i> <i>Before:</i> 1,608,000 <i>After:</i> 6,775,000 <i>Change:</i> 5,167,000 (321% increase)</p>	<p>Mammogram and ultrasound tests +0.32% BMRI tests +335.90%</p>	<p>+ \$252 million (0.32%)</p>	<p>PRIVATE Employers (+0.32%) Individuals w/group insurance (+0.31%) Individuals w/individual coverage (+0.40%) PUBLIC CalPERS (0.22%) Medi-Cal (0.55%) HFP (0.00%) Members' out-of-pocket expenditures³ Copayment (+0.24%) Direct payment (-100.00%)</p>	<p>One in nine women in California will be diagnosed with breast cancer in her lifetime.</p>	<ul style="list-style-type: none"> • There is insufficient evidence to draw a conclusion as to the potential public health benefit of AB 2234, whereas some evidence exists as to the potential harms associated with increases in false positives and benign biopsies resulting from the additional 131,000 BMRI screenings. The notification aspect of AB 2234 is expected to increase the number of women who receive mammograms each year by 19,000, leading to a reduction in breast cancer mortality. • Breast cancer affects predominantly women, with non-Hispanic white women having the highest rates. There is insufficient evidence to determine whether AB 2234 would impact these disparities. • Due to increased mammography screening, AB 2234 is expected to prevent approximately 16 deaths per year from breast cancer. • AB 2234 is expected to save 366 life years and 4.4 million dollars in lost productivity.

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SB 1198: Durable Medical Equipment (Kuehl) (4/3/2008)	<p>Persons with a wide range of diseases and conditions use durable medical equipment (DME) to improve health, functioning, quality of life, and productivity.</p> <p>There is little evidence of the effectiveness of having private health insurance coverage for DME on use of DME.</p>	<p># of insured individuals with coverage for DME in:</p> <p>Base plan only, <i>Before:</i> 8,817,864 <i>After:</i> 7,333,883 <i>Change:</i> - 1,483,980 (17% decrease)</p> <p>Base plan/rider combination, <i>Before:</i> 8,044,136 <i>After:</i> 9,528,117 <i>Change:</i> 1,483,980 (18.4% increase)</p>	<p>SB 1198 would not increase the number of users of DME. There would be a slight increase in the units of DME or utilization of more-expensive DME among existing DME users in response to reduced cost sharing and lifting of annual and lifetime expenditure limits. The increase in utilization and related expenses are minimal (\$25.58 per DME user per year or 4.1%)</p>	<p>+\$42.96 Million (0.52%)</p>	<p>PRIVATE Employers (+0.00%) Individuals w/group insurance (+0.00%) Individuals w/individual coverage (+0.00%) PUBLIC CalPERS (0.00%) Medi-Cal (0.00%) HFP (0.00%) Members' out-of-pocket expenditures³ Copayment (-0.00%) Direct payment (-100.00%)</p>	<p>2.4% privately insured Californians aged 18-64 reported having a health problem that required the use of special equipment</p>	<ul style="list-style-type: none"> • There is no evidence to suggest that SB 1198 would impact utilization of DME, therefore there is no evidence that there would be an impact on the public's health. There will be a decrease in out-of-pocket spending for approximately 11,000 enrollees using DME in excess of their annual benefit limit and may result in a reduction of financial hardship associated with their condition. • There is no evidence that SB 1198 would impact racial and ethnic health disparities. • There is no evidence that SB 1198 would impact premature death. • There is no evidence that SB 1198 would impact economic loss associated with the conditions related to the use of DME.

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SB 1634: Cleft Palates (Steinberg) (4/11/2008)	<p>Orthodontic services are coordinated with surgeries as standard care for treatment of oral clefts. Teams of experts, including orthodontists, provide coordinated care. The orthodontic services involved in oral cleft repair begin in the first weeks after birth and continue over the following years as the treatments proceed.</p> <p>Expert consensus for treatment of oral clefts is that teams of experts provide care, with all elements of the care coordinated within the team.</p> <p>Although there is no evidence with respect to the added benefit of orthodontic services or to the effect of team care, this in no way implies that such services are not effective. <i>No evidence of effects</i> not the same as <i>evidence of no effect</i>.</p>	<p># of individuals with coverage, <i>Before:</i> 14,506,000 <i>After:</i> 18,973,000 <i>Change:</i> 4,467,000 (31% increase)</p>	<p>Orthodontic services for oral cleft repair +0%</p>	<p>+ \$146,000 (0.00%)</p>	<p>PRIVATE Employers (+0.25%) Individuals w/group insurance (+0.25%) Individuals w/individual coverage (0.00%) PUBLIC CalPERS (0.00%) Medi-Cal (0.00%) HFP (0.00%) Members' out-of-pocket expenditures: Copayment (-1.98%) Direct payment (0.00%)</p>	<p>Approximately 300 children in health plans affected by SB 1634 are diagnosed with oral clefts.</p>	<ul style="list-style-type: none"> To the extent that lack of coverage results in a delay in getting the orthodontia and the subsequent surgeries needed to repair the oral cleft, health outcomes such as speech may be affected. Reduced delays in surgery may result in improvements in the health of children with oral clefts. In addition, SB 1634 would likely reduce the administrative burden and financial hardship faced by families with children with oral clefts. There is insufficient evidence to determine if SB 1634 would impact differences in gender or racial disparities in the use of orthodontia in the treatment of oral clefts. SB 1634 is not expected to impact mortality associated with oral clefts. An estimated 11.7% of those with oral clefts are unable to work. An additional 17.2% are limited in their ability work. To the extent delays in surgery are reduced, thereby improving health outcomes, there is a potential for improvement in the health of children with oral clefts and a corresponding reduction in morbidity and lost productivity.

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2009							
AB 56: Mammography (Portantino) (3/16/2009)	<p>Evidence shows that among women aged 40 years and older, mammography screening reduces breast cancer mortality by (1) 15-26% after 7 to 9 years of follow-up for women aged 50 years and older, and (2) 15%-17% after 10 to 14 years of follow-up for women aged 40-49 years.</p> <p>Harms associated with mammography screening are primarily false-positive findings that result in additional outpatient visits, additional diagnostic imaging, and biopsies.</p> <p>Evidence shows that notifying women through written notice about routine mammography screening can increase the overall mammography screening rate by one third.</p>	<p># of individuals with mandated coverage for mammograms (similar to mandated level, women in CDI-regulated plans), 1,185,000 (100%)</p> <p># turning 40 who receive mandated written notification by CDI- and DMHC-regulated plans, <i>Before:</i> 35,000 <i>After:</i> 160,000 <i>Change:</i> 125,000 (357% increase)</p>	Due to increased notification an increase of approximately 20,000 (0.38%) in total # of mammograms among women with coverage after AB 56 implementation.	+ \$3.8 million	PRIVATE Employers (+0.01%) Individuals w/individual coverage (+0.01%) PUBLIC CalPERS (+0.01%) Medi-Cal (+0.01%) HFP (+0%) Members' out-of-pocket expenditures ³ Copayment (+0.01%) Direct payment (+0%)	One in nine women in California will be diagnosed with breast cancer in her lifetime.	<ul style="list-style-type: none"> • Due to increased notification, this mandate is expected to increase the number of women who receive mammograms each year by 20,000. A reduction in mortality is expected with the prevention of approximately 16 deaths from breast cancer per year, beginning approximately 14 years after implementation of AB 56. • To the extent that notification increases mammography screening among non-white women, there is the potential for AB 56 to reduce the racial/ethnic disparities in screening rates and health outcomes associated with breast cancer. • An estimated reduction in 16 premature deaths each year is expected due to AB 56. • AB 56 is expected to save 366 life-years and \$5.2 million in productivity.

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<p>AB 98: Maternity Services (De La Torre)</p> <p>(3/16/2009)</p>	<p>Evidence shows that there is no difference in birth outcomes for infants or mothers in association with numbers of prenatal visits.</p> <p>Evidence suggests that some prenatal care services are effective (i.e., counseling; screening tests; diagnostic and preventive services; supplements).</p>	<p># of individuals in CDI-regulated plans with maternity coverage, in:</p> <p><i>Large- and small-group plans,</i> <i>Before:</i> 1,132,000 (100%)</p> <p><i>Individual plans,</i> <i>Before:</i> 233,000 <i>After:</i> 1,038,000 <i>Change:</i> 805,000 (345% increase)</p> <p><i>All CDI-regulated plans (total),</i> <i>Before:</i> 1,565,000 <i>After:</i> 2,370,000 <i>Change:</i> 805,000 (51% increase)</p>	<p>No increase in utilization of maternity services including prenatal care services</p>	<p>\$29 Million (0.04%)</p>	<p>PRIVATE Employers (0.0%) Employees covered by group insurance (0.0%). Individually purchased insurance (+1.50%). PUBLIC CalPERS (N/A) Medi-Cal (N/A) HFP (N/A) Members out-of-pocket expenses: Copyment (0.34%) Direct Payment (- 100%)</p>	<p>Approximately 550,000 births occur annually in California.</p>	<ul style="list-style-type: none"> • CHBRP is unable to estimate what the impact of AB 98 will be on the utilization of prenatal care. A lower bound estimate would assume that there will be no increase in the utilization of effective prenatal care services because these pregnant women will likely still face high out-of-pocket costs. An upper bound estimate would assume that all 7,100 newly covered pregnancies would have financial barriers to prenatal care removed and thus an increase in the utilization of effective prenatal care services, and corresponding health outcomes would be expected. To the extent that AB 98 increases the utilization of effective prenatal care that can reduce outcomes such as preterm births and related infant mortality, there is a potential to reduce morbidity and mortality and the associated societal costs. • Babies born to black women are more likely to be born prematurely and have higher mortality rates. There is no evidence that AB 98 would make an impact on prenatal care utilization rates among black women to reduce these disparities in health outcomes. • To the extent that AB 98 increases the utilization of effective prenatal care, there is a potential to reduce preterm births and related infant mortality. • To the extent that AB 98 increases the utilization of effective prenatal care, there is a potential to reduce economic loss associated with preterm births and related mortality.

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
<p>AB 163: Amino Acid-Based Elemental Formula (Emmerson) (3/30/2009)</p>	<p>Literature on the effectiveness of amino acid–based elemental formula was found for only two eosinophilic eosinophilic gastrointestinal disorders (EGID) —eosinophilic esophagitis and eosinophilic gastroenteritis</p> <p>Evidence from studies suggests that amino acid–based elemental formula and elimination diets are both effective strategies to treat eosinophilic esophagitis. The evidence does not indicate which regimen is more effective.</p> <p>A single case report suggests that elemental formula is effective in improving symptoms associated with eosinophilic gastroenteritis (EG).</p>	<p># of individuals with coverage for formula used:</p> <p><i>With a feeding tube,</i> <i>Before:</i> 21,161,800 <i>After:</i> 21,340,000 <i>Change:</i> 178,200 (0.8% increase)</p> <p><i>Without a feeding tube,</i> <i>Before:</i> 7,553,800 <i>After:</i> 21,340,000 <i>Change:</i> 13,786,200 (183% increase)</p>	<p>Of the insured population who would be affected by the bill, approximately 4 per 10,000 individuals—for a total of 8,500—are estimated to have EGID. Of these 8,500 people, approximately 615 would access coverage for formula taken orally or with a feeding tube. CHBRP estimates no change in the utilization rates post-mandate.</p>	<p>\$1.3 million (less than .01%) annually, solely due to the additional administrative costs associated with providing coverage for persons who do not currently have this benefit.</p>	<p>PRIVATE Employers (+ 0.01%) Employees covered by group insurance (+0.01%). Individually purchased insurance (+4.75%). PUBLIC CalPERS (0.01%) Medi-Cal (0.00%) HFP (0.00%) Members out-of-pocket expenses: Copayment (1.28%) Direct Payment (-100%)</p>	<p>EE occurs in approximately 4.3/10,000 children and 2.3/10,000 adults.</p>	<ul style="list-style-type: none"> • AB 163 would not increase utilization of amino acid-based elemental formula, therefore no impact on health outcomes are expected. Insurance coverage for this benefit will increase for and out-of-pocket costs will decrease for approximately 615 individuals and therefore will likely reduce the administrative burden and financial hardship associated with these disorders for those families. • AB 163 is not expected to have an impact on gender, racial, or ethnic disparities in health outcomes. • AB 163 is not expected to have an impact on premature death. • AB 163 is not expected to reduce economic loss associated with EGID.
<p>AB 214: Durable Medical Equipment (Chesbro) (4/9/2009)</p>	<p>Persons with a wide range of diseases and conditions use durable medical equipment (DME) to improve health, functioning, quality of life, and productivity.</p> <p>There is little evidence of the effectiveness of having private health insurance coverage for DME on use of DME.</p> <p>Some evidence shows that utilization management reduces use of some types of DME.</p>	<p># of insured individuals with coverage for DME compliant with AB 214, <i>Before:</i> 8,248,000 <i>After:</i> 21,340,000 <i>Change:</i> 13,092,000 (159% increase)</p>	<p>No impact on the number of DME users; +4.03% per user/per year increase in average DME costs</p>	<p>\$72.9 million including (+0.09%)</p>	<p>PRIVATE Employers (+0.29%) Individuals w/group insurance (+0.28%) Individuals w/individual coverage (+0.59%) PUBLIC CalPERS (0.00%) Medi-Cal (0.00%) HFP (0.00%) Members' out-of-pocket expenditures³ Copayment (-2.28%) Direct payment (-100%)</p>	<p>2.4% privately insured Californians aged 18-64 reported having a health problem that required the use of special equipment</p>	<ul style="list-style-type: none"> • Among the current users of DME, AB 214 is expected to result in an increased utilization because increased annual limits and coinsurance are expected to lead to some persons receiving more DME, more expensive DME items, and more-frequent replacement of existing DME items. The health benefits associated with this increased utilization are unknown. • There is no evidence that AB 214 would impact racial and ethnic health disparities. • AB 214 will have no impact on premature death • The impact that AB 214 would have on economic loss associated with the conditions related to the use of DME is unknown.

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
AB 244: Mental Health Services (Beall) (4/17/2009)	Coverage for mental health and substance use disorders at parity with other physical illnesses is associated with the following outcomes: (1) consumers' out-of-pocket costs for MH/SA services decrease; (2) persons with mental health needs that insurance coverage and access to care have improved; (3) utilization of MH/SA services increases slightly among persons with substance use disorders, persons with moderate symptoms of mood and anxiety disorders, and low-income persons employed by small firms.	# of insured individuals with full parity coverage of: <i>Non-SMI disorders,</i> <i>Before:</i> 11,500,000 <i>After:</i> 18,009,000 <i>Change:</i> 6,506,000 (57% increase) <i>Substance use disorders,</i> <i>Before:</i> 11,500,000 <i>After:</i> 18,009,000 <i>Change:</i> 6,509,000 (57% increase)	CHBRP estimates that among individuals in policies subject to AB 244, utilization would increase by 18.6 outpatient mental health visits (8.76%) and 5.4 outpatient substance abuse visits (30.83%) per 1,000 members per year as a result of the mandate. Annual inpatient days per 1,000 members would increase by 0.01 (4.33%) for mental health and by 1.5 (25.34%) for substance abuse.	\$80.6 million, or 0.10%.	PRIVATE Employers (+10%) Enrollee premium contributions (+9%) Individually purchased insurance (+0.38 %) PUBLIC CalPERS (0.0%) Medi-Cal (NA), AIM & MRMIP -(less than 0.01%) HFP (+0.02%) Members out-of-pocket expenses: Copayment (-0.12) Direct Payment (NA)	Approximately 28% of adults in the U.S. have a mental or addiction disorder	<ul style="list-style-type: none"> Although it is likely that AB 244 will also have positive health outcomes such as reduced suicides, reduced inpatient psychiatric care, reduced symptomatic distress, improved quality of life for some people, CHBRP is unable to estimate these benefits and therefore the impacts of the mandate on outcomes are unknown. AB 244 will alleviate a financial burden for some users of MH/SA treatment. The exception is for tobacco use disorders, where the increased utilization of tobacco cessation pharmaceuticals is expected to result in 1,137 persons quitting tobacco use. Although the lifetime prevalence for mental disorders is similar for males and females, gender differences exist with regard to specific mental disorder diagnoses. There is substantial variation both across and within racial groups with respect to the prevalence of and treatment for MH/SA disorders. There is no evidence that AB 244 would reduce gender and racial disparities in mental health treatment. Mental and substance abuse disorders are a substantial cause of mortality and disability in the U.S, but there is no evidence that AB 1887 would result in a reduction in premature death with the exception of the 1,137 persons expected to quit tobacco use, yielding an additional 7,800 years of life gained.

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
AB 259: Certified Nurse Midwives: Direct Access (Skinner) (4/17/2009)	Evidence from studies that compare care provided by certified nurse midwives (CNMs) and physicians indicate that: (1) health outcomes do not differ for newborns delivered by CNMs and physicians; (2) maternal health outcomes do not differ for mothers cared for by either provider; (3) mothers cared for by CNMs are (a) more likely to have a spontaneous vaginal birth, (b) less likely to use analgesia/anesthesia, (c) less likely to have an episiotomy, (d) less likely to have deliveries in which forceps or vacuum extraction were used, (4) mothers cared for by CNMs have lower rates of prenatal hospitalizations and higher rates of initiating breastfeeding.	# of individuals with certified nurse-midwife coverage, <i>Before:</i> 20,913,000 <i>After:</i> 21,340,000 <i>Change:</i> 427,000 (2% increase) # of individuals with direct access to CNWs, <i>Before:</i> 14,277,800 <i>After:</i> 21,340,000 <i>Change:</i> 7,042,200 (49% increase)	No evidence to indicate that there would be an increase in use of CNMs as a result of removing the referral requirement	None	None	CNMs currently preside over ~34,000 (8%) of 427,000 live deliveries in CA for women enrolled in plans subject to mandate	<ul style="list-style-type: none"> • Unable to estimate a public health impact, as this would be contingent upon the bill increasing the number of women choosing CNMs over physician care, for which there is no evidence. • Content experts' input suggests some women may receive prenatal care earlier. • There may be long-term impacts, presently unquantifiable, if the bill increases CNM-attended births. CHBRP conducted such a scenario-analysis, with caveats, that suggested an increase in spontaneous vaginal deliveries, recognized as the ideal outcome for low-risk pregnancies.

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
AB 513: Breast-Feeding (de Leon) (4/17/2009)	<p>Multiple guidelines recommend lactation consultation and use of breast pumps as means of supporting breast-feeding, which is recommended as a means of reducing morbidity and improving health outcomes.</p> <p>Evidence from studies that compared extra lactation to standard breast-feeding indicate that: (1) the effectiveness of extra lactation on cessation of any breast-feeding is ambiguous; (2) receipt of extra lactation consultation does not affect cessation of exclusive breast-feeding before 4-6 weeks post delivery; (3) extra lactation consultation does not affect GI or respiratory tract health outcomes for infants.</p> <p>Evidence from two RCTs suggests that use of an electric vs. a manual breast pump reduces the amount of time required for pumping but does not affect the volume of milk expressed or breast-feeding rates at 6 months.</p> <p>One nonrandomized study suggested that low-income women who had immediate or delayed access to breast pumps had greater odds of not feeding formula to their infants than women who did not receive breast pumps.</p>	<p># of individuals with coverage for:</p> <p><i>Lactation consulting during delivery admission,</i> <i>Before:</i> 20,535,000 (100%)</p> <p><i>Outpatient lactation consulting,</i> <i>Before:</i> 10,482,000 <i>After:</i> 18,970,000 <i>Change:</i> 8,488,000 (81% increase)</p> <p><i>Breast pump rental,</i> <i>Before:</i> 17,750,000 <i>After:</i> 20,535,000 <i>Change:</i> 2,785,000 (16% increase)</p>	Lactation Consultation + 0% Breast Pumps +50%	+\$2.4 million (+0.0028%)	PRIVATE Employers (+0.01%) Individuals w/group insurance (+0.01%) Individuals w/individual coverage (+0.01%) PUBLIC CalPERS (0.01%) Medi-Cal (0.20%) HFP (0.00%) Members' out-of-pocket expenditures ³ Copayment (-0.04%) Direct payment (-94.35%)	Approximately 416,000 delivering women	<ul style="list-style-type: none"> • Since utilization of lactation consulting or electric breast pumps is not estimated to increase in response to AB 513, there is no projected increased health benefits from the bill, but it is expected to decrease out-of-pocket costs for 6,000 women (in the case of consultations) and 2,000 women (for electric pumps). • Racial and ethnic minorities have lower rates of breast-feeding initiation than whites, but given no utilization impact, AB 513 is not expected to decrease this disparity. • Similarly, given no change in utilization, bill is unlikely to result in either a reduction of economic loss associated with conditions possibly prevented by breast feeding or accrual of long-term health benefits.

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
<p>SB 158: Human Papillomavirus Vaccination (Wiggins) (4/14/2009)</p>	<p>Among females who complete all three doses of the quadrivalent HPV vaccine (Gardasil) and who were not previously exposed to HPV 16 or 18, the vaccine provides for a 98% reduction in pre-cancerous cervical lesions caused by HPV types 16 and 18.</p> <p>The vaccine is less effective among females who have not completed all three doses of the vaccine and/or were exposed to HPV prior to vaccination.</p> <p>Evidence suggests the vaccine does not have a statistically significant effect on the occurrence of the cervical intraepithelial neoplasia 3 and adenocarcinoma in situ associated with types of HPV other than the four toward which the vaccine is targeted (i.e., types 5, 11, 16, & 18).</p> <p>The quadrivalent vaccine appears safe at 5 years postvaccination. Duration of protection is unknown beyond five years.</p>	<p># of females aged 11 to 26 in plans subject to mandate with coverage for the benefit, <i>Before:</i> 3,331,000 <i>After:</i> 3,348,000 <i>Change:</i> 17,000 (0.5% increase)</p>	<p>Change in # of females aged 11-26 vaccinated annually + 1.4% (2,500)</p>	<p>+ \$1.6 million (+0.0019%)</p>	<p>PRIVATE Employers (+0.0002%) Individuals w/group insurance (+0.0002%) Individuals w/individual coverage (+0.0228%) PUBLIC CalPERS (0%) Medi-Cal (0%) HFP (0%) Enrollees' out-of-pocket expenditures³ Copayment (+0.0054%) Direct payment (-100%)</p>	<p>27% of females aged 14-59 are infected with HPV</p>	<ul style="list-style-type: none"> Assuming 2,500 additional females get vaccinated in the first year after passage, 8 to 13 cases of cervical cancer could be prevented. After catch-up vaccinations are complete, the number of additional females receiving vaccinations due to the mandate falls to ~350, preventing 1 to 2 cases of cervical cancer over the lifetime of these females. Additional possible reductions in cases of anal, vulvar, vaginal, penile, or oral cavity and phalanx cancer due to increased HPV vaccination. Blacks and Hispanics have higher mortality rates from cervical cancer compared to other racial/ethnic groups, but the impact this mandate would have on these disparities is unknown. CHBRP estimates that the mandate would result in 3 to 5 deaths being prevented from the first-year vaccinations, yielding a total savings of 80 to 140 person years, valued at an amount between \$1.3 and \$2.2 million.

Bills Analyzed	Medical Effectiveness of a Mandated Service or Treatment	Coverage	Estimated Utilization Impact of Mandate	Estimated Cost Impact in Terms of Total Health Care Expenditures (1)	Estimated Cost Impact in Terms of % Premium Changes by Payer (2)	Burden of Disease	Estimated Public Health Impact
SB 161: Chemotherapy Treatment (Wright) (4/17/2009)	<p>CHBRP did not conduct a standard medical effectiveness review for this bill due to the large number of drugs and cancers addressed.</p> <p>At the point the analysis was completed, 38 oral anticancer medications approved by the FDA were used to treat 52 different types of cancer. Specific uses vary across medications and types of cancer.</p> <p>Some oral anticancer medications are used alone. Some are used either alone or in combination with other anticancer medications (oral, intravenous, or injectable) depending on the type and stage of cancer being treated.</p> <p>There are no intravenous or injected substitutes for many oral anticancer medications.</p>	<p>Enrollees with coverage for oral anticancer medications,</p> <p><i>Before:</i> 20,868,000</p> <p><i>After:</i> 21,340,000</p> <p><i>Change:</i> 472,000 (2% increase)</p>	<p>Oral anticancer medication + 0%</p>	<p>+\$5 million (+0.01%)</p>	<p>PRIVATE Employers (+0.01%) Individuals w/group insurance (+0.01%) Individuals w/individual coverage (+0.18%) PUBLIC CalPERS (0.01%) Medi-Cal (0.00%) HFP (0.00%)</p> <p>Members' out-of-pocket expenditures³ Copayment (-0.10%) Direct payment (-100.00%)</p>	<p>An estimated 140,000 cases of cancer each year; one in two Californians born today will develop cancer at some point in their lifetime</p>	<ul style="list-style-type: none"> The potential public health impact as a result of SB 161 is a reduction in out-of-pocket costs for oral anticancer medications. This could reduce the financial burden and related health consequences faced by cancer patients. Breast cancer is the most prevalent cancer in California, almost exclusively affecting women. Sixty-five percent of the prescriptions and 33% of the total cost for oral anticancer medications are for drugs used to treat breast cancer. There is a potential to reduce the financial burden faced by women undergoing treatment for breast cancer. After breast cancer, the next three most common cancers in California are colorectal, prostate, and lung cancer. Blacks in California have higher rates of diagnoses of these three cancers compared to all other racial and ethnic groups. These three cancers are all treated using oral anticancer medications, therefore, blacks could face a reduced financial burden.

NOTES:

1 Total expenditures include total premiums and out-of-pocket spending for copayments and non-covered benefits.

2 Percentages differ from those in published reports due to rounding to second decimal.

3 Members' out-of-pocket expenditures refer to privately insured members' out-of-pocket expenditures, copayments, and direct payments for services not covered under the benefit.



Appendix 19: Media Citations of CHBRP or its Work

This appendix includes a compilation of publicly available news articles, reports, or other media that cites or references CHBRP or its work since 2006.

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Appendix 20: Existing Mandates in California Law

This document (current as of November 3, 2009) has been prepared by the California Health Benefits Review Program (CHBRP). CHBRP responds to requests from the California Legislature to provide independent analysis of the medical, financial, and public health impacts of proposed health insurance benefit mandates and repeals. Annual updates of this list, as well as additional information about CHBRP, can be found at www.chbrp.org.

Purpose of this list: This list is intended to alert interested parties of existing state legislation that may relate to the subject or purpose of a health insurance benefit mandate or repeal bill.

Benefit Mandates listed: Listed in Table 1 are “health insurance benefit mandates,” as defined by CHBRP’s enabling legislation (California Health and Safety Code Section 127660 et seq.) current in California law. The listed mandates fall into “categories of mandates” that (a) affect coverage for the screening, diagnosis, or treatment of specific diseases or conditions; (b) affect coverage for types of health care treatments or services, including coverage of medical equipment, supplies, or drugs used in a treatment or service; or (c) affect coverage permitting treatment or services from a specific type of health care provider. The list also includes mandates that (d) specify terms (limits, timeframes, copayments, deductibles, coinsurance, etc.) for any of the other categories.

Information included for listed mandates: Table 1 identifies relevant statutes and specifies whether the law mandates *coverage* for the benefit or mandates *an offer* of coverage for the benefit. The table also identifies which portions of the insurance market are impacted. Explanations of these terms are provided in Attachment A.

Other important information:

- Not all health insurance is subject to state-level health insurance benefit mandate law.
- California has a bifurcated legal and regulatory system for health insurance products. The Department of Managed Health Care (DMHC) regulates health care service plan contracts, which are subject to the Health and Safety Code. The California Department of Insurance (CDI) regulates health insurance policies, which are subject to the California Insurance Code. DMHC-regulated plan contracts and CDI-regulated policies may be subject to state-level benefit mandate laws, depending upon the exact wording of the law.
- Federal benefit mandate laws may interact or overlap with state benefit mandate laws. Some relevant federal laws are noted in the footnotes for Table 1.

- DMHC-regulated health plans are subject to “minimum benefit” laws and regulations, which may interact or overlap with state benefit mandate laws. The Basic Health Care Services requirement for DMHC-regulated health plans is noted in Table 1 and further explained in Attachment B.
- Although CHBRP assesses the impacts of bills, not existing laws, CHBRP’s analysis of Assembly Bill 1214 (2007) required a review and discussion of mandate laws current at that time. That report and all other CHBRP analyses may be accessed at <http://chbrp.org/analyses.html>.

Table 1. California Health Insurance Benefit Mandates (by Topic)

#	Topic	Health & Safety Code (DMHC)	California Insurance Code (CDI)	Mandate to Cover or Mandate to Offer	Markets Subject to the Mandate	Mandate Category
DMHC-Regulated Health Care Service Plan "Minimum Benefits"						
0	Health Plans regulated by the Department of Managed Care (DMHC) are required to cover medically necessary basic health care services, including: (1) Physician services; (2) Hospital inpatient services and ambulatory care services; (3) Diagnostic laboratory and diagnostic and therapeutic radiologic services; (4) Home health services; (5) Preventive health services; (6) Emergency health care services, including ambulance and ambulance transport services, out-of-area coverage and ambulance transport services provided through the "911" emergency response system; (7) Hospice care. See Attachment B for further details.	Multiple Sections— See Attachment B	N/A ¹	<i>Not a mandate but ...</i> Coverage	<i>Not a mandate but ...</i> Group and Individual	<i>Not a mandate</i>
Cancer Benefit Mandates						
1	Breast cancer testing and treatment	1367.6	10123.8	Coverage	N/S ²	a
2	Cancer screening tests	1367.665	10123.2	Coverage	Group and Individual	b
3	Cervical cancer screening	1367.66	10123.18	Coverage	Group and Individual	a
4	Mammography	1367.65	10123.81	Coverage	N/S	a
5	Mastectomy and lymph node dissection—length of stay	1367.635	10123.86	Coverage	Group and Individual	c
6	Patient care related to clinical trials for cancer	1370.6	10145.4	Coverage	N/S	c
7	Prostate cancer screening	1367.64	10123.83	Coverage	Group and Individual	a
Chronic Conditions Benefit Mandates						
8	Diabetes management and treatment	1367.51	10176.61	Coverage	N/S	a
9	HIV/AIDS, AIDS vaccine	1367.45	10145.2	Coverage	Group and Individual	a
10	HIV/AIDS, HIV Testing	1367.46	10123.91	Coverage	Group and Individual	a
11	HIV/AIDS, Transplantation services for persons with HIV	1374.17	10123.21	Coverage	N/S	c
12	Osteoporosis	1367.67	10123.185	Coverage	N/S	a
13	Phenylketonuria	1374.56	10123.89	Coverage	N/S	a
Hospice & Home Health Care Benefit Mandates						
14	Home health care	N/A	10123.10	Offer	Group	b
15	Hospice care	1368.2	N/A	Coverage	Group	b
Mental Health Benefit Mandates						

¹ N/A indicates that mandate does not apply to products governed under that code.

² An N/S indicates that the language of the law does not specify which market is affected.

#	Topic	Health & Safety Code (DMHC)	California Insurance Code (CDI)	Mandate to Cover or Mandate to Offer	Markets Subject to the Mandate	Mandate Category
16	Alcohol and drug exclusion	N/A	10369.12	Coverage	Group	c
17	Alcoholism treatment	1367.2(a)	10123.6	Offer	Group	a
18	Coverage and premiums for persons with physical or mental impairment	1367.8	10122.1	Coverage	Group and Individual	c
19	Coverage for mental and nervous disorders	N/A	10125	Offer	Group	a
20	Nicotine treatment in licensed chemical dependency facilities	1367.2(b)	10123.14 10123.6	Coverage	N/S	b
21	Coverage for severe mental illnesses (in parity with coverage for other medical conditions) ³	1374.72	10123.15 (10144.5)	Coverage	N/S	c
Orthotics & Prosthetics Benefit Mandates						
22	Orthotic and prosthetic devices and services	1367.18	10123.7	Offer	Group	b
23	Prosthetic devices for laryngectomy	1367.61	10123.82	Coverage	N/S	b
24	Special footwear for persons suffering from foot disfigurement	1367.19	10123.141	Offer	N/S	a
Pain Management Benefit Mandates						
25	Acupuncture	N/A	10127.3	Offer	Group	d
26	General anesthesia for dental procedures	1367.71	10119.9	Coverage	N/S	b
27	Pain management medication for terminally ill	1367.215	N/A	Coverage	N/S	b
Pediatric Care Benefit Mandates						
28	Asthma management	1367.06	N/A	Coverage	N/S	a
29	Comprehensive preventive care for children aged 16 years or younger	1367.35	10123.5	Coverage	Group	b
30	Comprehensive preventive care for children aged 17 or 18 years	1367.3	10123.55	Offer	Group	b
31	Coverage for the effects of diethylstilbestrol	1367.9	10119.7	Coverage	N/S	a
32	Screening children for blood lead levels	1367.3 (b)(2)(D)	10119.8	Coverage	Group and Individual	b
Provider Reimbursement Mandates						
33	Emergency 911 transportation	1371.5	10126.6	Coverage	N/S	d
34	Medical transportation services—direct reimbursement	1367.11	10126.6	Coverage	N/S	d
35	OB-GYNs as primary care providers	1367.69	10123.83	Coverage	N/S	d

³ In addition to these state-level benefit mandates, the federal Mental Health Parity and Addition Equity Act of 2008 requires that *if* a group plan or policy covers mental health, it must do so at parity with coverage for medical and surgical benefits.

#	Topic	Health & Safety Code (DMHC)	California Insurance Code (CDI)	Mandate to Cover or Mandate to Offer	Markets Subject to the Mandate	Mandate Category
36	Pharmacists—compensation for services within their scope of practice	1368.5	N/A	Coverage	N/S	d
Reproduction Benefit Mandates						
37	Contraceptive devices requiring a prescription	1367.25	10123.196	Coverage	N/S	b
38	Expanded alpha fetoprotein	1367.54	10123.184	Coverage	Group and Individual	a
39	Infertility treatments	1374.55	10119.6	Offer	Group	a
40	Maternity—minimum length of stay ⁴	1367.62	10123.87	Coverage	Group and Individual	c
41	Maternity—amount of copayment or deductible for inpatient services	1373.4	10119.5	Coverage	N/S	c
42	Prenatal diagnosis of genetic disorders	1367.7	10123.9	Offer	Group	b
Surgery Benefit Mandates						
43	Jawbone or associated bone joints	1367.68	10123.21	Coverage	N/S	a
44	Reconstructive surgery ⁵	1367.63	10123.88	Coverage	Group and Individual	b
Terms & Conditions of Coverage Benefit Mandates						
45	Authorization for nonformulary prescription drugs	1367.24	N/A	Coverage	N/S	c
46	Blindness or partial blindness	1367.4	N/A	Coverage	Group and Individual	c
47	Prescription drugs: coverage for previously prescribed drugs	1367.22	N/A	Coverage	N/S	c
48	Prescription drugs: coverage of “off-label” use	1367.21	10123.195	Coverage	N/S	c

⁴ The federal Newborns’ and Mothers’ Health Protection Act of 1996 requires coverage for a minimum length of stay in a hospital after delivery *if* the plan covers maternity services.

⁵ The federal Women’s Health and Cancer Rights Act of 1998 requires coverage for post-mastectomy reconstructive surgery.

Attachment A: Terms and Categories for Table 1

Code—A health insurance benefit mandate is a law requiring health insurance products (plans and policies) to provide, or in specified cases simply to offer, coverage for specified benefits or services. Because California has a bifurcated regulatory system for health insurance products, a benefit mandate law may appear in either of two codes or in both:

- Health and Safety Code: The California Department of Managed Health Care (DMHC) regulates and licenses health care services plans as per the California Health and Safety Code.
- Insurance Code: The California Department of Insurance (CDI) licenses disability insurance carriers and regulates disability insurance, which includes health insurance policies, per the California Insurance Code.

Mandated Coverage or Mandated Offer of Coverage—In the language of either code section, the law may mandate coverage of benefits or may mandate that coverage for the benefits be offered.

- “Mandate to cover” means that all health insurance subject to the law must cover the benefit.
“Mandate to offer” means all health care service plans and health insurers selling health insurance subject to the mandate are required to offer coverage for the benefit for purchase. The health plan or insurer may comply with the mandate either by including the benefit as standard in its health insurance products, or by offering coverage for the benefit separately at an additional cost (e.g., a rider).

Markets Subject to the Mandate—In the language of either code section, the law may (or may not) specify which market or markets are subject to the mandate.

- The “group” market includes health insurance products issued to employers (or other entities) to provide coverage for employees (or other persons) and/or their dependents.
- The “individual” market includes health insurance products issued to an individual to provide coverage for a person and/or his/her dependants.

Mandate Category—As per CHBRP’s enabling legislation (California Health and Safety Code Section 127660 et seq.), the listed mandates fall into one or more types. A particular mandate law can require that subject health insurance do one or more of the following:

- a. Offer or provide coverage of a particular type of health care treatment or service, or of medical equipment, medical supplies, or drugs used in connection with a health care treatment or service. An example of a mandate to cover screening tests would be a mandate to cover prostate cancer screening.
- b. Offer or provide coverage for the screening, diagnosis, or treatment of a particular disease or condition. An example of a mandate to cover a set of services for treatment of condition is the mandate that requires coverage for all services to screen and treat breast cancer.
- c. Offer or provide coverage for services from a specified type of health provider that fall within the provider’s scope of practice. An example would be a mandate that requires coverage for services provided by a licensed acupuncturist.
- d. Offer or provide any of the forms of coverage listed above per specific terms and conditions. For example, the mental health parity law requires coverage for serious mental health conditions to be *on par* with other medical conditions, so that mental health benefits and other benefits are subject to the same copayments, limits, etc.

Attachment B: Basic Health Care Services for DMHC-Regulated Health Care Service Plans*

The California Department of Managed Health Care (DMHC) regulates health care service plans, which are subject to the California Health and Safety Code. The Knox-Keene Health Care Service Plan Act of 1975 (Knox-Keene Act) requires all health care service plans, except specialized health care service plans, to provide coverage for all medically necessary basic health care services.

This requirement is based on several sections of the Knox-Keene Act rather than one straightforward provision, and so is not technically a Health Insurance Benefit Mandate. Specifically, subdivision (b) of Section 1345 defines the term "basic health care services" to mean all of the following: (1) Physician services, including consultation and referral; (2) Hospital inpatient services and ambulatory care services; (3) Diagnostic laboratory and diagnostic and therapeutic radiologic services; (4) Home health services; (5) Preventive health services; (6) Emergency health care services, including ambulance and ambulance transport services and out-of-area coverage and ambulance transport services provided through the "911" emergency response system; (7) Hospice care pursuant to Section 1368.2. "Basic health care services" are also further defined in Section 1300.67 of the California Code of Regulations.

In addition, subdivision (i) of Section 1367 of the Health and Safety Code provides the following: (i) A health care service plan contract shall provide to subscribers and enrollees all of the basic health care services included in subdivision (b) of Section 1345, except that the director may, for good cause, by rule or order exempt a plan contract or any class of plan contracts from that requirement. The director shall by rule define the scope of each basic health care service that health care service plans are required to provide as a minimum for licensure under this chapter. Nothing in this chapter shall prohibit a health care service plan from charging subscribers or enrollees a copayment or a deductible for a basic health care service or from setting forth, by contract, limitations on maximum coverage of basic health care services, provided that the copayments, deductibles, or limitations are reported to, and held unobjectionable by, the director and set forth to the subscriber or enrollee pursuant to the disclosure provisions of Section 1363.

Although the Act does not explicitly state that "basic health care services" means all "medically necessary" basic health care services, there are numerous provisions within the act that reference "medical necessity" and that place requirements on plans in terms of what they must do when denying, delaying, or modifying coverage based on a decision for medical necessity. (Section 1367.01) In addition, Section 1300.67 of Title 28 of the California Code of Regulation, which further defines "basic health care services" does further clarify that "the basic health care services required to be provided by a health care service plan to its enrollees shall include, where medically necessary, subject to any co-payment, deductible, or limitation of which the Director may approve..."

The entire Knox-Keene Act and the applicable regulations can be accessed online on the DMHC's Web site at <http://www.dmhc.ca.gov>.

* The text in this attachment was adapted from a document prepared by a representative of the Department of Managed Health Care (S. Lowenstien) and distributed at CHBRP's 2008 October Workshop.

Attachment C: California Mandates (by Health and Safety Code Section)

The following table is presented to allow easy comparison with other lists of mandates.

# of Mandate in Table 1	Health and Safety Code (DMHC)	California Insurance Code (CDI)
14	N/A ⁶	10123.10
16	N/A	10369.12
19	N/A	10125
25	N/A	10127.3
28	1367.06	N/A
34	1367.11	10126.6
22	1367.18	10123.7
24	1367.19	10123.141
17	1367.2(a)	10123.6
20	1367.2(b)	10123.14 10123.6
48	1367.21	10123.195
27	1367.215	N/A
47	1367.22	N/A
45	1367.24	N/A
37	1367.25	10123.196
30	1367.3	10123.55
32	1367.3 (b)(2)(D)	10119.8
29	1367.35	10123.5
46	1367.4	N/A
9	1367.45	10145.2
10	1367.46	10123.91
8	1367.51	10176.61
38	1367.54	10123.184
1	1367.6	10123.8
23	1367.61	10123.82
40	1367.62	10123.87

# of Mandate in Table 1	Health and Safety Code (DMHC)	California Insurance Code (CDI)
44	1367.63	10123.88
5	1367.635	10123.86
7	1367.64	10123.83
4	1367.65	10123.81
3	1367.66	10123.18
2	1367.665	10123.2
12	1367.67	10123.185
43	1367.68	10123.21
35	1367.69	10123.83
42	1367.7	10123.9
26	1367.71	10119.9
18	1367.8	10122.1
31	1367.9	10119.7
15	1368.2	N/A
36	1368.5	N/A
6	1370.6	10145.4
33	1371.5	10126.6
41	1373.4	10119.5
11	1374.17	10123.21
39	1374.55	10119.6
13	1374.56	10123.89
21	1374.72	10123.15 (10144.5)

⁶ An N/A in either the Health and Safety Code column or the California Insurance Code column indicates that a mandate does not apply to products covered under that code.

Attachment D: California Mandates (by Insurance Code Section)

The following table is presented to allow easy comparison with other lists of mandates.

# of Mandate in Table 1	Health and Safety Code (DMHC)	California Insurance Code (CDI)
28	1367.06	N/A ⁷
27	1367.215	N/A
47	1367.22	N/A
45	1367.24	N/A
46	1367.4	N/A
15	1368.2	N/A
36	1368.5	N/A
21	1374.72	10123.15 (10144.5)
41	1373.4	10119.5
39	1374.55	10119.6
31	1367.9	10119.7
32	1367.3 (b)(2)(D)	10119.8
26	1367.71	10119.9
18	1367.8	10122.1
14	N/A	10123.10
20	1367.2(b)	10123.14 10123.6
24	1367.19	10123.141
3	1367.66	10123.18
38	1367.54	10123.184
12	1367.67	10123.185
48	1367.21	10123.195
37	1367.25	10123.196
2	1367.665	10123.2
43	1367.68	10123.21
11	1374.17	10123.21

⁷ An N/A in either the Health & Safety Code column or the California Insurance Code column indicates that a mandate does not apply to products covered under that code.

# of Mandate in Table 1	Health and Safety Code (DMHC)	California Insurance Code (CDI)
29	1367.35	10123.5
30	1367.3	10123.55
17	1367.2(a)	10123.6
22	1367.18	10123.7
1	1367.6	10123.8
4	1367.65	10123.81
23	1367.61	10123.82
7	1367.64	10123.83
35	1367.69	10123.83
5	1367.635	10123.86
40	1367.62	10123.87
44	1367.63	10123.88
13	1374.56	10123.89
42	1367.7	10123.9
10	1367.46	10123.91
19	N/A	10125
34	1367.11	10126.6
33	1371.5	10126.6
25	N/A	10127.3
9	1367.45	10145.2
6	1370.6	10145.4
8	1367.51	10176.61
16	N/A	10369.12



Appendix 21: List of Work Stemming from CHBRP Reports

- Bellows NM, Halpin HA, McMenamin SB. State-Mandated Benefit Review Laws. 1104-1123. *Health Services Research*. 2006;41:3, Part II:1081-1103.
- Coffman JM. "How the California Health Benefits Review Program Assesses Medical Effectiveness." Presentation at Academy Health Annual Research Meeting, 2009.
- Coffman JM. "Do School-based Asthma Education Programs Improve Self-Management and Health Outcomes: A Systematic Review." Presentation at the American Thoracic Society International Conference, 2009.
- Coffman JM, Cabana MD, Yelin EH. Do School-based Asthma Education Programs Improve Self-Management and Health Outcomes? *Pediatrics*. 2009;124:2, 729-742.
- Coffman JM, Hong MK, Aubry WM, Luft HS, Yellin EH. Translating Medical Effectiveness Research into Policy: Lessons from the California Health Benefits Review Program. *The Milbank Quarterly*. 2009;87:4, 863-902.
- Coffman JM, Cabana MD, Halpin HA, Yelin EH. Effects of Asthma Education on Children's Use of Acute Care Services: A Meta-Analysis. *Pediatrics*. 2008;121:3, 575-586.
- Coffman JM. "Do School-based Asthma Education Programs Improve Self-Management and Health Outcomes: A Systematic Review." Presentation at American Public Health Association Annual Meeting, 2008.
- Coffman JM. "Do School-based Asthma Education Programs Improve Self-Management and Health Outcomes: A Systematic Review." Poster at Academy Health Annual Research Meeting, 2008.
- Coffman JM. "Do School-based Asthma Education Programs Improve Self-Management and Health Outcomes: A Systematic Review." Poster at Pediatric Academic Societies Annual Meeting, 2008.
- Coffman JM. "The California Health Benefits Review Program's Approach to Medical Effectiveness Review." Presentation at America's Health Insurance Plans Medical Leadership Forum, 2007.
- Coffman JM. "Effects of Pediatric Asthma Education on Emergency Department Visits and Hospitalizations: A Meta-Analysis." Presentation at the Academy Health Annual Research Meeting, 2007.
- Coffman JM. "Effects of Pediatric Asthma Education on Emergency Department Visits and Hospitalizations: A Meta-Analysis." Presentation at the American Thoracic Society International Conference, 2007.
- Coffman JM. "Effects of Pediatric Asthma Education on Emergency Department Visits and Hospitalizations: A Meta-Analysis." Presentation at the Pediatric Academic Societies Annual Meeting, 2007.
- Fang ML, Coffman J. "The Promises and Challenges of Supporting Evidence-Based Health Policy Practice." Presentation at Medical Library Group of Southern California and Arizona Annual Meeting, 2008.

- Fang ML, Coffman J. "Library Support of Evidence-Based Practice in Health Policy." Presentation at 4th International Evidence Based Library and Information Practice Conference, 2007.
- Halpin HA, McMenemy SF, Pourat N, Yelin E. An Analysis of California Assembly Bill 2185: Mandating Coverage of Pediatric Asthma Self-Management Training and Education. 1061-1080. *Health Services Research*. 2006;41:3, Part II:1081-1103.
- Kominski GF, Ripps JC, Laugesen MJ, Cosway RG, Pourat N. The California Cost and Coverage Model: Analyses of the Financial Impacts of Benefit Mandates for the California Legislature. 1027-1044. *Health Services Research*. 2006;41:3, Part II:1081-1103.
- Kominski G. "Assessing the Financial Impacts of State Health Benefit Mandates: Evidence from the California Health Benefits Review Program." Presentation at Academy Health Annual Research Meeting, 2009.
- Kominski G, Cosway R. "The Impacts of Mandates – Lessons from the California Health Benefits Review Program." Presentation at the Society of Actuaries Meeting, 2006.
- LeRoy L. "Real-Time Policy Analysis and Research Translation for the California State Legislature." Presentation at Academy Health Annual Research Meeting, 2009.
- Lewis, J. "CHBRP – Analysis of Health Insurance Benefit Mandate/Repeal Bills." Presentation at National Conference of Insurance Legislators, 2009.
- Luft HL, Rappaport KM, Yelin EH, Aubry WM. Evaluating Medical Effectiveness for the California Health Benefits Review Program. 1007-1026. *Health Services Research*. 2006;41:3, Part II:1081-1103.
- Laugesen MJ, Paul RR, Luft HS, Aubry W, Ganiats TG. A Comparative Analysis of Mandated Benefit Laws, 1949–2002. *Health Services Research*. 2006;41:3, Part II:1081-1103.
- McMenemy SB, Halpin HA, Ganiats TG. Assessing the Public Health Impact of State Health Benefit Mandates. 1045-1060. *Health Services Research*. 2006;41:3, Part II:1081-1103.
- Meng YY, Coffman JM, Ripps JC, Lee C, Kominski GF. "What is the Impact of a New Law Requiring HMOs and Health Insurers to Cover HIV Testing Regardless of a Primary Diagnosis?" Poster at Academy Health Annual Research Meeting, 2009.
- Oliver TR, Friedman SR. Health Services Research As a Source of Legislative Analysis and Input: The Role of the California Health Benefits Review Program. 1124-1158. *Health Services Research*. 2006;41:3, Part II:1081-1103.
- Philip S. "The Impacts of the California Health Benefits Review Program on Legislative Decision-Making." Presentation at Academy Health Annual Research Meeting, 2009.
- Philip S. "A State-Mandated Technology Review Program in California, USA." Presentation at Health Technology Assessment International Annual Meeting, 2008.
- Pourat N, McMenemy S. "MRI Screening of Women at High Risk for Breast Cancer." Presentation at American Public Health Association Annual Meeting, 2009.
- Ritley D. "The Role of Public Health in Evaluating State Health Benefit Mandates." Presentation at Academy Health Annual Research Meeting, 2009.



Appendix 22: Other States' Health Benefit Review Programs, 2009

During the spring and summer months of 2009, CHBRP staff contacted every state and the District of Columbia to determine what organizations, processes, or requirements other states had in place to evaluate health insurance benefit mandates. CHBRP initially conducted this review in 2004; the 2009 update ensures that CHBRP's information is current. This document presents the project's objectives, methods, and key findings.

OBJECTIVES

The objective of this project is to gather and synthesize information about other states' programs that analyze health insurance benefit mandates. Information collected will update the findings compiled in 2004.

This information is to be used for three main, primarily operational, purposes:

1. To establish ongoing relationships with similar organizations in other states
2. To identify other states' analyses of benefit mandates
3. To provide an overview of other states' activities to analyze health insurance benefit mandates
4. To better understand the gaps between authorizing legislation and the implementation of benefit review processes.

METHODS

Overview

- CHBRP used "key informant interviews" to update 2004 information. The lack of published analytical literature about the activities related to mandate evaluation programs necessitated this method.
- Several states' programs have comprehensive Web sites; where available, CHBRP drew information from these sources to update 2004 information.
- Where available, staff conducted a review of examples of completed mandate evaluations.
- While the 2004 survey methods included data gathering via review of programs' enabling statutes and other information voluntarily provided by the state, the 2009 process did not review such documents.

Identifying Key Informants

- CHBRP contacted key informants interviewed in 2004.
- In many cases, 2004 key informants had left their roles or organizations. In this case, staff contacted their successor. If no successor could be located, staff identified a key informant by contacting:
 - The state department/bureau of insurance (generally, first)
 - Other state agencies (e.g. department of health)
 - Interest groups that appeared to track health insurance mandates within their state (e.g., small business associations, chambers of commerce) to see whether they knew of an existing program and which state agency or office we should contact
- If the initial contact was not knowledgeable, staff pursued other sources as listed above.

Interview Design

- Interview questions were designed to update specific information about each state's systems or processes to conduct mandate evaluations, including:
 - whether a particular state had a systematic evaluation process or formal program in place;
 - how each program came into being;
 - the institutional structure of existing programs;
 - the scope, process, report format, and dissemination methods for completed analysis.
- Interview questions consisted of a subset of CHBRP's 2004 interview questions; emphasis was placed on examining mandate evaluation programs' analytical process and content.

TABLE 1: INTERVIEW QUESTIONS TO KEY INFORMANTS IN OTHER STATES

<i>Basic contact</i>	
1	Organization name, Contact's name, address, phone numbers, email, website
<i>History</i>	
2	How were you established (e.g. legislation? charged by Governor? charged by State Insurance Commissioner?)
<i>Organizational Structure</i>	
3	What is your charge/mission/organizational goal (with respect to benefit mandates)?
4	Where does the organization fit within the state's governmental framework? (related: Is it independent?)
<i>Analytical Content</i>	
5	What type of analyses do you perform (i.e. actuarial, public health, medical effectiveness, other)? Do you have specific criteria for assessing the effectiveness and/or a process for determining the hierarchy of evidence?
6	Do you study proposed legislation and/or passed legislation? Do you examine cumulative impacts?
7	Do you make recommendations? (related: Are there any constraints on reporting of findings?)
8	Are you required to examine mandates' effects on other state programs such as Medicaid, SCHIP, etc.? Do you examine transfer or secondary effects (e.g. private sector to Medicaid or private sector to uninsured?)
9	How many assessments have been completed to date?
10	For which current legislation are you working on analyses? (List current topics that CHBRP has issued reports on -- HPV, CNM, Oral Chemo, Mental Health, etc.)
<i>Analytical Process</i>	
11	What are the steps involved in completing the analysis? a. What fields of expertise do you have represented on staff? Do you employ independent consultants? b. Do you use assessments performed by other groups or organizations?
12	What is the trigger to perform an assessment? Is it only by request? If by request, when does this have to be received?
13	What is your analysis review process? Is it sent to external parties (e.g. non-authors and/or those who do not have a direct stake in the outcome of the mandate)?
14	What is the format of your output? (e.g. reports, testimony)
15	Are the findings of your assessments publicly available? Is there a Web location where they are housed?
16	How are your assessments used and by whom?
<i>Other</i>	
17	Have you heard of the California Health Benefits Review Program (CHBRP)? If so, have you used or referenced any of its publications?
18	If there have been other changes to your organization's structure, scope of work, or analytical process that we have not yet addressed, please discuss.

Interviews and information collection

- The key information interview format was a conversation between the CHBRP staff and the state representative identified as a knowledgeable source. The interview questions acted as conversation guides.
- Key informants in states with any form of established program were asked the complete set of interview questions with probing questions as necessary (e.g. Analysis that was publicly available.)
- Those in states with no program were asked additional probing questions about proposals that were to set up mandate evaluation programs or process.
- Staff documented interview responses in a database.
- A contact tracking log was maintained during the scheduling and interview phases.

FINDINGS

In the summer and fall of 2009, CHBRP contacted all of the 49 other states and the District of Columbia to update records on their processes for evaluating health insurance benefit mandates. These are the findings (inclusive of California):

1. 27 states have some form of systematic process or program in place, defined as follows:
 - a. program/process must at least evaluate the financial (beyond fiscal) impact of a mandate. This may include proposed mandates in bill form or retrospective analyses of existing mandates on private insurers and/or insured;
 - b. process must be “regular” in that 1) those who are responsible for conducting the evaluations do so per the provisions of state law (if applicable), 2) the process is automatically triggered by the nature of the legislative process (e.g., when bill is proposed; when bill gets a 2nd hearing; when it is being heard in committee with jurisdiction), or 3) the process is triggered by request of the state legislature or a state agency or 4) the process occurs at some regular interval defined by policies or law (e.g. annually, every 5 years, etc.)
2. 32 states have passed legislation that requires or authorizes some form of systematic process or program in place to evaluate health insurance benefit mandates. The majority of these states has either established a program specifically for this purpose (e.g., a commission) or has assigned the responsibility to existing staff. A few require the bills’ sponsors to submit an evaluation of the mandate’s probable impact as part of the analysis for legislative hearings (See Table 2 for a summary of these programs and where they are housed in each state).
3. Differences between laws that authorize mandate evaluation processes and programs and the actual processes implemented occur frequently because:
 - a. The laws do not always explicitly dictate the criteria and steps for mandate evaluations. Therefore the implementation of such laws and policies are subject to interpretation and can vary (for example, with changes in administration).

- b. State governments and their various departments do not always uniformly implement laws related to mandate evaluation programs or processes even when criteria and steps for evaluations may be explicitly defined. This may occur for several reasons, including limits on data availability, limits on staff and funding resources, or the political climate in the state.
 - c. When the mandate evaluation law places the onus of conducting the evaluation on the sponsor of the legislation, it is difficult for any one state entity to enforce—the responsibility to enforce the law becomes diffuse.
- 4. Two states – Connecticut and Oklahoma – passed legislation in 2009 to establish mandate review processes that would constitute formal programs under our criteria. However, because these programs have not been fully established, they are excluded from the counts to maintain consistency with the definition of a “formal program” as currently operational in practice, and not merely in statute. The counter-example is New York, whose program legislated in 2007 has not been established to meet our criteria. CT and OK are included in Table 2 for illustrative purposes.
- 5. The steps involved in performing the analyses vary considerably in 2 main regards:
 - a. Independent research, contracted services, information from interested parties
 - b. Nature of questions addressed
- 6. 9 states are permitted or requested to make recommendations.
- 7. The following fall within the scope of states’ analysis:
 - a. 27 (all states with a systematic process/program) analyze cost impact: defined as analyzing impact on the private health insurance sector, as opposed to the fiscal impact on state budget
 - b. 5 analyze public health: defined as reporting on the impact of the mandate on the health of the population
 - c. 15 analyze medical effectiveness: defined broadly as reviewing and reporting on the medical literature
 - d. 17 analyze “social impact”: defined impacts on coverage and utilization levels (See Table 3 for further detail)
- 8. Observations on Cost:
 - a. Defined as analyzing impact on the private health insurance sector, as opposed to the fiscal impact on state budget
 - i. For example, if a state were to estimate only the cost impact of mandates on insurance provided to state employees then this would be excluded
 - b. Many appear to analyze the total cost of the benefit versus the marginal cost of mandating the benefit.
 - c. Focus of most states’ cost analysis tends to emphasize the mandate’s potential effect on premiums and costs to the state.
 - d. Most states analyze the mandate’s potential effect on coverage and utilization levels (which is also sometimes called “social impact”).

9. Observations on Medical Effectiveness:
 - a. Defined broadly as reviewing and reporting on the medical literature.
 - b. Wide variation in whether/how states routinely analyze medical effectiveness.
 - c. No states report having express criteria for analyzing the literature. Note: As some contract for medical analytic services, the systematic nature of their approach is difficult to assess.
 - d. Some states noted the difficulty of conducting such analyses without appropriate content expertise represented on staff.

10. Observations on Public Health:
 - a. Defined broadly as reporting on the impact of the mandate on the health of the population. None appear to systematically quantify public health outcomes based on the medical literature and analysis on changes in utilization.
 - b. “Social impacts” typically include coverage and utilization criteria.
 - c. Very few states perform public health impact analysis; only 5 were identified at the time of this update.

11. All states with a systematic process/program for performing mandate evaluations said that their records are publicly available. The manner of availability varies widely from “available upon request” to posting on public Web sites.
 - a. One state reported that its findings had to be released by the Committee chair to become public, but also noted this was consistently done.

12. Significant changes in states’ processes/programs since 2004:
 - a. Key informants’ dominant perspective was that their states’ mandate evaluation processes/programs had not changed substantively in the past 5 years. This represents a shift in the environment around the health insurance benefit mandate evaluation issue in 2004, when a significant number of states had just recently established mandate evaluation processes and programs.
 - b. Four cases stand as notable exceptions:
 - i. *Arkansas*: A 2003 law that established the Arkansas Advisory Commission on Mandated Health Insurance Benefits was repealed in 2007. The state now lacks a systematic mandate evaluation process.
 - ii. *New York*: In 2007, the state legislature passed a law creating the New York State Health Care Quality and Cost Containment Commission. While this body has among its responsibilities the analysis of the costs and quality of health insurance mandates, several Commission seats remain vacant and has not yet met as of June, 2009.
 - iii. *Connecticut*: In 2009, the Connecticut General Assembly passed into law the establishment of a program modeled partly on California’s experience. The Insurance Commissioner is to contract with the University of Connecticut, and the program is funded by a fee assessed on the insurance industry. By the end of 2009, the program is tasked with producing both a retrospective analysis as well an evaluation of current proposals.

- iv. *South Carolina*: In 2002, the state established a Task Force to retrospectively analyze all mandates to date, in combination with a moratorium on new mandates. Despite a final recommendation to continue the moratorium, both the Task Force and the moratorium sunsetted in 2005. Now, ad-hoc analyses are conducted by the Department of Insurance.
- c. Of the states lacking a systematic mandate evaluation process/program, several (such as Rhode Island and Idaho) report that legislation to create such a system is routinely introduced, but that it “consistently dies” in the legislative process.

2004 Survey Notes

This section presents notes on methods and conclusions from the initial 2004 survey which were not used or updated in this iteration of the survey.

- When possible, information collected and documented in 2004 was emailed to the interviewee for review prior to the interview; staff also used information provided in 2004 as a tool to guide the conversation.
- Following the 2004 interviews, CHBRP conducted a validation process in which staff compared responses to other sources and key informants verified CHBRP’s documentation of their responses.
- Nearly all programs were funded by the respective state’s general funds as of 2004. California and Colorado were unique in that the programs are funded through assessing fees on health insurers.
- No other states appeared to expressly address conflict of interest issues, however, most did not consider this question applicable since analyses are conducted by state employees or their contractors (and are thereby bound by state codes). Programs that are commission-based were generally designed to represent various and balanced interest of stakeholders.

**TABLE 2: STATES' HEALTH BENEFIT MANDATE REVIEW PROGRAMS,
INSTITUTIONAL STRUCTURE**

STATE (1)	Commission (2)	Department of Insurance (3)	Legislative Services (4)	Sponsors (5)	Other State Agency (6)	University
Arizona				√		
California						√
Colorado (7)	√			√		
Connecticut (8)						√
Florida				√		
Georgia		√				
Hawaii (9)			√			
Indiana (10)	√	√				
Kansas					√	
Kentucky		√				
Louisiana		√	√			
Maine		√				
Maryland	√					
Massachusetts					√	
Minnesota					√	
Nevada			√			
New Hampshire		√				
New Jersey	√					
North Dakota			√			
Ohio			√			
Oklahoma (8)	√					
Oregon				√		
Pennsylvania	√					
Tennessee			√			
Texas		√				
Utah		√				
Virginia	√					
Washington					√	
Wisconsin		√				

Notes:

(1) States listed here have a formal mandate evaluation program or process; or they have a law requiring evaluation of health insurance mandate bills by sponsors of a bill.

(2) Commission-based programs usually consist of individuals appointed by the executive branch, the legislative branch and represent different industry and consumer interests. Commissions that evaluate health insurance benefits often conduct other types of analysis related to health care programs in the state.

(3) "Department of Insurance" programs include the "Insurance Commissioner," "Office of Insurance" or the equivalent agency in that respective state. These are housed in the executive branch of the state government.

(4) "Legislative Services" programs include those that are housed at the departments or agencies designed to support the state legislature.

- (5) The requirement for conducting evaluations falls primarily on the bill sponsors. Sponsors may mean a member of the state legislature but usually mean an outside organization or association advocating for passage of the bill.
- (6) "Other State Agency" programs include those that are housed at another agency under the executive branch besides the Department of Insurance
- (7) Colorado has two separate laws: One creates a mandate evaluation commission that is to sunset in May 2005 and another law requires any sponsor of a legislation to provide a "social" and "financial" impact analysis of the proposal to the legislative committee with jurisdiction.
- (8) Connecticut and Oklahoma passed a law establishing mandate evaluation programs in 2009. Because this survey examined current practice as opposed to statutes, these states have been excluded from the final counts, but are included here for reference.
- (9) Hawaii's mandate evaluation is conducted by the State Auditor, who reports to and is considered part of the legislative branch.
- (10) Indiana has a "Mandate Health Benefit Task Force" whose members are appointed by the Governor and is staffed by the Insurance Commissioner.

TABLE 3: STATES' HEALTH BENEFIT MANDATE REVIEW PROGRAMS, ANALYTICAL DIMENSIONS

STATE (1)	Financial/ Cost Impact	Medical Effectiveness	Social Impact	Public Health Impact
Arizona	√	√	√	
California	√	√	√	√
Colorado	√	√	√	
Connecticut (2)	√	√	√	
Florida	√		√	
Georgia	√			
Hawaii	√		√	
Indiana	√	√	√	
Kansas	√		√	
Kentucky	√			
Louisiana	√			
Maine	√	√	√	
Maryland	√	√	√	√
Massachusetts	√	√		
Minnesota	√	√		√
Nevada	√			
New Hampshire	√	√	√	
New Jersey	√	√	√	
North Dakota	√			
Ohio	√		√	
Oklahoma (2)	√	√		
Oregon	√	√	√	
Pennsylvania	√	√	√	
Tennessee	√			
Texas	√			
Utah	√	√		√
Virginia	√	√	√	
Washington	√	√	√	√
Wisconsin	√			

Notes:

(1) States listed here have a formal mandate evaluation program or process; or they have a law requiring evaluation of health insurance mandate bills by sponsors of a bill.

(2) Connecticut and Oklahoma passed a law establishing mandate evaluation programs in 2009. Because this survey examined current practice as opposed to statutes, these states have been excluded from the final counts, but are included here for reference.



Appendix 23: CHBRP Funding Process and Operating Costs

In order to effectively support CHBRP, Section 127662 of the Health and Safety Code provides that:

- The Health Care Benefits Fund be established in the State Treasury.
- For fiscal years 2006–07 to 2009–10, each health plan and each health insurer be assessed an annual fee for which the total annual assessment not exceed \$2 million.
- The California Department of Managed Health Care (DMHC) assess health plans.
- Health plans be notified of the assessment on or before June 15 of each year
- The California Department of Insurance (CDI) assess health insurers.
- Health insurers shall be notified of the assessment in accordance with the notice for the annual assessment or quarterly premium tax revenues.
- Assessed fees be paid on an annual basis no later than August 1 of each year.
- DMHC and CDI forward the assessed fees to the Controller for deposit in the Health Care Benefits Fund following their receipt.

This Appendix details the process by which DMHC and CDI determine the amount to assess health plans and insurers for a given fiscal year. The annual amounts transferred into the Health Care Benefits Fund (HCBF) are equal to the total assessments less whatever amount was not collected by DMHC or CDI. This appendix also provides a summary of the actual funding provided under the HCBF since CHBRP's inception and details of the 2006-07 through 2009-10 fiscal years (FY).

DMHC and CDI Processes to Determine Amounts to Assess and to Transfer into the Health Care Benefits Fund (HCBF)

1. During the spring, CHBRP provides the following pieces of information to DMHC:
 - a. Actual expenditures for the previous fiscal year
 - b. Projected expenditures for the remainder of that fiscal year
 - c. Projected budget for the next fiscal year

For example in June, 2008, CHBRP provided DMHC, actual expenditures for FY06-07; projected expenditures for FY07-08 and the budget for FY08-09.

2. Based on the information provided in step #1, in the spring, DMHC determines the total amount to be transferred to the HCBF for the next FY. For example they completed this calculation in June, 2008 for FY08-09. DMHC determines the total amount to be transferred to the HCBF for the next fiscal year by:

- a. Subtracting the projected expenditures for that FY from the amount transferred to HCBF for that FY.
 - b. Adjusting the difference by the actual amounts of expenditure for the previous FY.
 - c. Applying these differences to the next FY
 - d. Adjusting for small differences in amount calculated to be transferred versus the amount actually collected and transferred from the previous FY.
3. Simultaneously, DMHC calculates the percentage share it and CDI are required to collect and transfer to the HCBF.
- a. The CDI and DMHC percentage shares are based on the market shares of the privately insured population enrolled in health plans regulated by DMHC versus the privately insured population enrolled in preferred provider organizations or fee-for-services insurance policies regulated by CDI.
 - b. The market shares were determined in 2002 and are set at: 87.6% for DMHC and 12.4% for CDI. For example, if the total amount CHBRP may receive by law is \$2 Million, the maximum both Departments would be required to assess and transfer into the HCBF would be calculated as follows:

ASSESSMENT SHARES (example)

DMHC portion	87.6%	\$1,752,000
CDI portion	12.4%	\$248,000
Total	100%	\$2,000,000

4. DMHC notifies health plans of the amount they will be assess, usually by mid-June.
5. CDI notifies health insurers of the amounts they will be assessed, usually by October.
6. DMHC transfers collected funds to the HCBF, usually by September. CDI transfers collected funds to the HCBF , usually in December and in March. For example, for FY08-09, DMHC transferred collected funds into the HCBF in October, 2008 while CDI transferred the first installment in December, 2008, and the 2nd in March, 2009.

Summary of Actual Funding to Support CHBRP Operations

The following tables provide a summary of the actual funding provided to CHBRP since the program's inception and then provide detail for the 2006-07 through 2009-10 fiscal years (FY). Please note the 09-10 FY details are projected expenditures.

Table 1. CHBRP Operating Costs: Summary of FY02-03 through FY09-10

Fiscal Year	Operating Costs	Actual Transferred (a)		
		DMHC Share	CDI Share (b)	Total
2002-03	\$15,200.95	\$500,000.00	\$10,686.25	\$510,686.25 (c)
2003-04	\$1,181,619.66	\$1,248,054.19	\$210,447.96	\$1,458,502.15
2004-05	\$1,536,330.00	\$917,513.74	\$128,165.92	\$1,045,679.66
2005-06	\$1,586,295.00	\$1,385,298.59	\$181,371.12	\$1,566,669.71
2006-07	\$1,662,839.00	\$1,418,896.41	\$245,019.31	\$1,663,915.72
2007-08	\$1,680,015.00	\$1,483,042.85	\$208,338.52	\$1,691,381.37
2008-09	\$1,618,683.00	\$1,451,272.52	\$204,478.99	\$1,655,751.51
2009-10	\$1,919,900.00 (d)	\$1,407,894.87	\$200,401.37	\$1,608,296.24

Notes:

- (a) These amounts reflect the actual amounts transferred into the HCBF, not the actual amounts assessed on plans and insurers by DMHC and CDI. Slight differences in the amount assessed and the amount transferred are due to differences in the amounts assessed and actually collected by DMHC and CDI.
- (b) The CDI and DMHC percentage shares are based on the market shares of the privately insured population enrolled in health plans regulated by DMHC versus the privately insured population enrolled in preferred provider organizations or fee-for-services insurance policies regulated by the CDI. The market shares were determined in 2002 and are set at: 87.6% for DMHC and 12.4% for CDI.
- (c) During CHBRP's first fiscal year of operation, DMHC authorized a transfer of \$500K. Minimal costs were expected since the bill establishing the program was not passed until late September 2002 and program startup did not occur until even later into the FY.
- (d) The 2009-10 FY is a projection and will be likely reduced based on the actual work conducted and operating costs in 09-10.

Table 2. CHBRP Expenditures: FY06-07 through FY09-10 (a)

Category	2006-2007	2007-2008	2008-2009	2009-2010 (b)
Salary, Wages, Benefits (c)	\$376,412	\$343,651	\$389,135	\$455,900
Actuarial Services (d)	\$275,313	\$423,472	\$323,599	\$425,000
Payments to Campuses (e)	\$727,759	\$790,810	\$801,810	\$855,700
Other (f)	\$283,355	\$122,082	\$104,139	\$183,300
Total	\$1,662,839	\$1,680,015	\$1,618,683	\$1,919,900

Notes:

- (a) These figures correspond to the most recent reports to DMHC and CDI on 05/12/09 and were used by those agencies to determine the assessments and funds to be transferred for the current fiscal year.
- (b) The 2009-10 FY is a projection and will be likely reduced based on the actual work conducted and operating costs in 09-10.
- (c) Salaries, Wages, and Benefits for central offices operations.
- (d) CHBRP's authorizing statute requires use of actuarial services to conduct the cost impact analyses.
- (e) Campus payments are for services provided by the faculty and researchers to conduct the medical effectiveness, cost impact and public health impact analyses.
- (f) This includes payments for travel, workshops, advisory council services, content expert services, librarian services, editorial services, supplies and equipment, and other vendor payments.