



CALIFORNIA
HEALTH BENEFITS REVIEW PROGRAM

Analysis of Assembly Bill 754: Durable Medical Equipment

A Report to the 2009-2010 California Legislature
June 24, 2010

CHBRP 10-10



The California Health Benefits Review Program (CHBRP) responds to requests from the State Legislature to provide independent analyses of the medical, financial, and public health impacts of proposed health insurance benefit mandates and proposed repeals of health insurance benefit mandates. CHBRP was established in 2002 by statute (California Health and Safety Code, Section 127660, et seq). The program was reauthorized in 2006 and again in 2009. CHBRP's authorizing statute defines legislation proposing to mandate or proposing to repeal an existing health insurance benefit as a proposal that would mandate or repeal a requirement that a health care service plan or health insurer (1) permit covered individuals 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; or (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.

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PREFACE

This report provides an analysis of the medical, financial, and public health impacts of Assembly Bill 754, a bill to mandate the coverage of durable medical equipment at parity with other benefit coverage. In response to a request from the California Senate Committee on Health on April 23, 2010, the California Health Benefits Review Program (CHBRP) undertook this analysis pursuant to the program's authorizing statute.

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CHBRP gratefully acknowledges all of these contributions but assumes full responsibility for all of the report and its contents. Please direct any questions concerning this report to:

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EXECUTIVE SUMMARY

California Health Benefits Review Program Analysis of Assembly Bill 754

The California Senate Committee on Health requested on April 23, 2010, that the California Health Benefits Review Program (CHBRP) conduct an evidence-based assessment of the medical, financial, and public health impacts of Assembly Bill (AB) 754, a bill that would impose a health benefit mandate on health insurance regulated by the California Department of Managed Care (DMHC)¹ or the California Department of Insurance (CDI). AB 754 would require DMHC-regulated health plans and CDI-regulated insurers² to provide coverage for durable medical equipment (DME) and provide it in parity with coverage for other health benefits.

Potential Effects of Health Care Reform

On March 23, 2010, the federal government enacted the Federal Patient Protection and Affordable Care Act (PPACA), which was amended by the Health Care and Education Reconciliation Act (H.R.4872) that President Obama signed into law on March 30, 2010. There are provisions in PPACA that go into effect by 2014 that would affect the California health insurance market and its regulatory environment. For example, the law would establish state-based health insurance exchanges, with minimum benefit standards, for the small-group and individual markets. How these provisions are implemented in California would largely depend on regulations to be promulgated by Federal agencies, and statutory and regulatory actions to be undertaken by the California State government.

There are also provisions in PPACA that go into effect within the short term (e.g., within 6 months of enactment), that would expand the number of Californians obtaining health insurance and potentially affect their sources of insurance. For example, one provision would allow children to enroll in their parent's health plan or policy until they turn 26 years of age (effective 6 months following enactment). This may decrease the number of uninsured and/or potentially shift those enrolled with individually purchased insurance to group-purchased insurance. Given the uncertainty surrounding implementation of these provisions and given that PPACA was only recently enacted, the potential effects of these short-term provisions are not taken into account in the baseline estimates presented in this report. CHBRP's analysis of specific mandate bills typically address the marginal effects of the mandate bill—specifically how the state mandate would affect coverage, utilization, costs, and the public health, holding all other factors constant. There are specific requirements under PPACA that would affect the marginal impacts of AB 754 as estimated in this report. PPACA would prohibit California plans and policies from imposing lifetime limits on coverage (effective 6 months following enactment.). Therefore, AB 754's provisions to prohibit lifetime limits would be superseded by the federal legislation and would

¹ The DMHC was established in 2000 to enforce the Knox-Keene Health Care Service Plan of 1975; see Health and Safety Code, Section 1340.

² The CDI licenses "disability insurers." Disability insurers may offer forms of insurance that are not health insurance. This report considers only the impact of the benefit mandate on health insurance policies, as defined in Insurance Code, Section 106(b) or subdivision (a) of Section 10198.6.

have no effect on cost. PPACA would prohibit California plans and policies from imposing restrictive annual limits on coverage (effective 6 months after enactment). The U.S. Secretary of the Department of Health and Human Services is to define what “restrictive” means before the effective date. Beginning in 2014, use of annual limits is prohibited for all plans. The potential effects of AB 754 as presented in this report, could be altered, depending on the level at which the Secretary determines annual limits to be “restrictive.”

Analysis of AB 754

Approximately 19.5 million Californians (51%) have health insurance that may be subject to a health benefit mandate law passed at the state level. Of the rest of the population, a portion is uninsured, and therefore not affected by health insurance benefit mandate laws. Others have health insurance not subject to health insurance benefit mandate laws. Uniquely, California has a bifurcated system of regulation for health insurance subject to state level benefit mandate law. DMHC regulates health care service plans that offer coverage for benefits to their enrollees through health care service plan contracts. CDI regulates health insurers that offer coverage for benefits to their enrollees through health insurance policies.

“DME” commonly references external, reusable items used in the treatment of a medical condition or injury or to preserve a patient’s function. Hundreds of items are commonly referred to as DME and covered through an enrollee’s health insurance, providing that the enrollee’s plan or policy includes a DME benefit.

A definition of DME in California statute or regulation does not explicitly exist.^{3, 4} AB 754 would define DME as “equipment that is used for the treatment of a medical condition or injury or to preserve the patient’s functioning and that is designed for repeated use and includes, but is not limited to, manual and motorized wheelchairs, scooters, oxygen equipment, crutches, walkers, electric beds, shower and bath seats, and mechanical patient lifts.” Broadly interpreted, this definition could include, beyond the listed nine items, many items traditionally excluded from DME benefit coverage, such as external prostheses and orthotics (such as shoe inserts), hearing aids, or eye glasses. On the other hand, a narrow interpretation could exclude items frequently covered through a DME benefit but that do not precisely fit the definition provided in AB 754, such as liquid or gaseous oxygen, enteral or parenteral formulae, or any of a host of miscellaneous supplies, such as sterile syringes or lubricants for ostomy equipment.

For this analysis, CHBRP has defined DME as the more than 1,000 codes in the Healthcare Common Procedure Coding System (HCPCS) categorized as DME. However, it should be noted alternate interpretations of the mandate language could expand or contract what is considered “DME.”

AB 754 would require that enrollees with health insurance regulated by the DMHC or CDI have DME coverage and have coverage at the same level or “at parity” with other health care benefits. DMHC-regulated health plans would be required to ensure that “the amount of the benefit for

³ Personal communication with S. Lowenstien, DMHC, June 2010.

⁴ Personal communication with B. Hinze, CDI, June 2010.

DME and services shall be no less than the annual and lifetime benefit maximums applicable to the basic health care services.”⁵ If the plan has no annual or lifetime maximum benefit limits for basic health care services, it would not be allowed to apply such limits to the DME benefit. DMHC-regulated plans would also be required to ensure that cost sharing (copayments, coinsurance, deductibles, and maximum out-of-pocket amounts) be no more than the most common amounts applied by the plan for basic health care services. CDI-regulated policies would be required to ensure that benefit limits are no less than the “annual and lifetime benefit maximums applicable to all benefits in the policy.” In addition, these policies would be required to provide DME with cost-sharing levels on par with those applied to the “most common amounts contained in the policy.”

AB 754 would not alter health plans’ and insurers’ ability to “conduct a utilization review to determine medical necessity prior to authorizing these services.” Medically necessary DME is usually considered to be equipment that treats an injury or preserves functioning. For example, equipment that would be solely used for the patient’s comfort or convenience (such as air conditioners) would not generally be considered medically necessary, but specialized wheelchair cushions to prevent pressure ulcers would be considered necessary.

Medical Effectiveness

- There are two major groups of persons who use DME:
 - Persons who use DME temporarily while being treated for an injury or illness or recovering from surgery
 - Persons who use DME on a long-term basis due to a physical disability or chronic illness
- For persons in either group, use of DME can improve health, functioning, and quality of life.
- CHBRP’s analysis of DME utilization among persons with privately funded health insurance in 2008 concluded that persons with the following diseases and conditions have the highest out-of-pocket costs for DME. Most persons with these diagnoses use DME on a long-term basis.
 - Persons with diagnoses related to physical disabilities
 - Persons with sequelae from traumatic injuries such as spinal cord injuries and head trauma

⁵ Pursuant to Section 1368.2 of the Health & Safety Code and Section 1300.67 of the California Code of Regulations, DMHC-regulated Plans 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.

- Persons with respiratory diseases and related conditions
- Persons with diagnoses related to the digestive system
- DME encompasses such a wide range of devices and products that a systematic review of the literature on the effectiveness of all of these devices and products was not feasible.
- The medical effectiveness portion of this analysis addresses the following question: “Does health insurance coverage for DME affect use of DME or health outcomes for persons with conditions for which DME is commonly used?”
- There is insufficient evidence to assess the impact of health insurance coverage for DME on use of DME and health outcomes for persons who use DME.
 - The few studies that have been conducted suggest that need is the primary factor associated with use of DME.
 - No studies were found that specifically address the effects of increasing annual or lifetime limits for DME coverage on DME usage or the impact of reducing deductibles, coinsurance, or copayments for DME on such usage.
 - No studies were found that address the impact of coverage for DME on health outcomes.

Utilization, Cost, and Benefit Coverage Impacts

In order to define DME for this analysis, CHBRP reviewed codes from the HCPCS categorized as DME and removed codes related to items of DME for which benefit coverage is already mandated.

Table 1 summarizes the estimated benefit coverage, utilization, and cost impacts of AB 754.

Coverage Impacts

- Total net annual expenditures are estimated to increase by \$135,933,000 annually, or 0.18%.
- *Coverage for DME:* Prior to the mandate, approximately 93.32% of enrollees with health insurance subject to the mandate have at least some coverage for DME.
 - *Coverage with annual limits:* Approximately 33.16% of enrollees who have some coverage for DME are subject to an annual benefit limit. When present, average annual benefit limits range from \$1,960 to \$3,088 among CDI-regulated policies (large group, small group, and individual markets) and from \$2,418 to \$2,751 among DMHC-regulated plans (large group, small group, and individual markets).
 - For health benefits other than DME, annual limits are uncommon and are much less restrictive when present. CHBRP estimates that 0.6% of enrollees in the group market and 0.1% of enrollees in the individual market have health insurance with annual limits for health benefits other than DME. When applicable, annual limits that

enrollees may face for other health care benefits average \$70,000 for group policies and \$100,000 for individually purchased policies.

- *Coverage with lifetime limits:* CHBRP estimates that no plans or policies currently have a lifetime maximum specific to DME. AB 754 would prohibit any plans/or policies from introducing such limits in the future.
 - Post-mandate, all of these enrollees would have DME benefits compliant with AB 754, which would frequently mean lower cost sharing levels and fewer (or much higher) annual benefit limits for DME.
- Post-mandate, the 1,301,462 (6.68%) of enrollees previously without DME coverage would gain DME benefits compliant with AB 754.

Utilization Impacts

- Post-mandate, CHBRP estimates that there would be a \$52.01 (6.99%) per DME user per year increase in DME utilization and related expenses.
 - An increase in DME utilization and related expenses is anticipated for two reasons: (1) about 1,301,462 enrollees (6.68% of current enrollees) will have new benefit coverage and so could access more DME and/or more expensive DME post-mandate; and (2) similarly, enrollees who had coverage subject to annual limits may access more DME or more expensive DME when these limits are increased or removed.
 - Such a limited increase in DME utilization and related expenses is expected for four reasons: (1) prior to the mandate, most enrollees (93.32%) have some coverage for DME; (2) content experts indicate that people in need of DME access it regardless of benefit coverage—this suggests that AB 754 would be more likely to produce cost shifts from users to plans and insurers, rather than changes in DME utilization; (3) AB 754 would not affect plans' and insurers' ability to use medical necessity criteria in making coverage determinations for DME; and (4) AB 754 would not prevent plans and insurers from altering benefit structures to make DME more frequently subject to coinsurance.

Cost Impacts

- *Premiums:* The mandate is estimated to increase premiums by \$276,306,000. The distribution of the impact on premiums is as follows:
 - Total premiums for private employers are estimated to increase by \$161,681,000, or 0.37%.
 - Enrollee contributions toward premiums for group insurance are estimated to increase by \$50,314,000, or 0.39%.
 - Total premiums for those with individually purchased insurance are estimated to increase by \$64,311,000, or 1.07%.
 - Total premium expenditures for CalPERS HMOs would not increase because the DME coverage is already compliant with the mandate.

- *Expenditures:* State expenditures for Medi-Cal HMOs and the Healthy Families program would not increase because the DME coverage is already compliant with AB 754.
- In terms of per member per month (PMPM) costs, total premiums are expected to increase by \$0.50 and \$1.01 (large groups), \$0.96 and \$2.94 (small groups), and \$1.13 and \$5.13 (individually purchased insurance) for CDI-regulated policies and DMHC-regulated plans, respectively.
 - Post-mandate, many enrollees using DME would see a decrease in expenses.
 - Enrollees with DME coverage that became compliant with AB 754 would see a decrease in out-of-pocket expenses for covered benefits of \$113,769,000 due to required reductions in cost sharing and removal of annual DME benefit limits.
 - Enrollees who gained DME coverage would see a decrease in expenses of \$26,604,000.

Indirect Impacts

- *Shift of costs resulting from a lack of coverage:* enrollees in DMHC-regulated plans and CDI-regulated policies may have alternate sources for items of DME or additional sources of coverage for DME.
 - Some enrollees may be provided some items of DME by private or public programs, such as a charitable foundation or the California Department of Rehabilitation (CDOR). CHBRP is unable to estimate the extent to which distribution of DME items to enrollees may occur and so is unable to estimate the scope of cost reduction that could be expected. However, should AB 754 require an expansion of DME coverage, some cost reduction would be expected for programs providing items of DME.
 - Some enrollees may have DME coverage from a “secondary payer” for expenses related to medically necessary DME items and services. For example, a Department of Health Care Services (DHCS) summary received by CHBRP indicated that \$5,929,485.12 in DME-related expenses were paid in 2008 for Medi-Cal Fee for Service (FFS) beneficiaries who also had privately funded health insurance. DHCS was unable to identify what portion of the privately funded health insurance was regulated by the DMHC or CDI (as opposed to health insurance subject only to federal regulation). Therefore, CHBRP is unable to estimate the scope of cost reduction that could be expected for DHCS. However, some reduction would be expected for DHCS and other programs acting as “secondary” payers, should AB 754 require an expansion of DME coverage.
- *Impact on the uninsured:* The 1.41% premium increases among DMHC-regulated individual market plans estimated as a result of AB 754 may result in approximately 1,214 newly uninsured persons.

Public Health Impacts

- The health outcomes associated with the use of DME vary according to the type of DME that is being used. Some health outcomes include increased independence, mobility, functionality, survival, and decreased morbidity.
- AB 754 is not expected to affect the number of DME users, but is expected to increase the amount of DME used by each current DME user. The impact on health outcomes of this increase is unknown. There will be a reduction in administrative and financial burden for 72,000 newly covered DME users as well as for the 556,000 DME users with an increase in their scope of DME coverage.
- Existing data on utilization of DME and DME-related expenses indicate that there are no significant differences by gender or race/ethnicity. Therefore, AB 754 is not expected to have an impact on gender or racial disparities in health status.
- Although some types of DME, such as home oxygen equipment and parenteral nutrition (IV nutrition), are necessary for survival, AB 754 is not expected to affect the utilization of these types of DME. Therefore, AB 754 is not expected to lead to a reduction in premature death.
- Researchers have estimated that many of the health conditions associated with DME utilization have substantial societal costs. The impact of AB 754 on the economic loss associated with all DME-related diseases and conditions is unknown.

Table 1. AB 754 Impacts on Benefit Coverage, Utilization, and Cost, 2010

	Before Mandate	After Mandate	Increase/ Decrease	Change After Mandate
Benefit Coverage				
Total enrollees with health insurance subject to state-level benefit mandates (a)	19,487,000	19,487,000	0	0.00%
Total enrollees with health insurance subject to AB 754	19,487,000	19,487,000	0	0.00%
Percentage of enrollees in plans/policies with coverage for DME				
AB 754-compliant (b)	40.50%	100.00%	59.50%	146.94%
Non-AB 754-compliant (c)	52.83%	0.00%	-52.83%	-100.00%
Total with DME coverage	93.32%	100.00%	6.68%	7.16%
Percentage of enrollees in plans/policies with no coverage for DME				
Total without DME coverage	6.68%	0.00%	-6.68%	-100.00%
Total	100.00%	100.00%	0.00%	0.00%
Number of enrollees in plans/policies with coverage for DME				
AB 754-compliant	7,891,401	19,487,000	11,595,599	146.94%
Non-AB 754-compliant	10,294,137	0	-10,294,137	-100.00%
Total with DME coverage	18,185,538	19,487,000	1,301,462	7.16%
Number of enrollees in plans/policies with no coverage for DME				
Total without DME coverage	1,301,462	0	-1,301,462	-100.00%
Total	19,487,000	19,487,000	0	0.00%
Utilization and Cost				
Estimated DME users per 1,000 enrollees per year	55	55	0	0.00%
Estimated average cost per DME user per year	\$743.56	\$795.57	\$52.01	6.99%
DME Benefit Provisions				
Average DME coinsurance rate	13.61%	3.24%	-10.37%	-76.18%
% of enrollees with DME coverage subject to annual benefit limit	33.16%	0.00%	-33.16%	-100.00%
Average annual benefit limit in non-AB 754-compliant plans/policies	\$3,187	N/A		
% of enrollees in non-AB 754-compliant plans/policies with enrollee expenses in excess of DME annual benefit limit	0.15%	0.00%	-0.15%	-100.00%
% of DME users in non-AB 754-compliant plans/policies with enrollee expenses in excess of DME annual benefit limit	2.73%	0.00%	-2.73%	-100.00%
Number of DME users in non-AB 754-compliant plans/policies with enrollee expenses in excess of DME annual benefit limit	15,453	0	-15,453	-100.00%

Table 1. AB 754 Impacts on Benefit Coverage, Utilization, and Cost, 2010 (Cont'd)

	Before Mandate	After Mandate	Increase/ Decrease	Change After Mandate
Expenditures				
Premium expenditures by private employers for group insurance	\$43,519,324,000	\$43,681,005,000	\$161,681,000	0.37%
Premium expenditures for individually purchased insurance	\$5,992,795,000	\$6,057,106,000	\$64,311,000	1.07%
Premium expenditures by persons with group insurance, CalPERS, Healthy Families, AIM or MRMIP (d)	\$12,820,614,000	\$12,870,928,000	\$50,314,000	0.39%
CalPERS HMO employer expenditures (e)	\$3,267,842,000	\$3,267,842,000	\$0	0.00%
Medi-Cal HMOs state expenditures	\$4,015,596,000	\$4,015,596,000	\$0	0.00%
Healthy Families Program state expenditures (f)	\$910,306,000	\$910,306,000	\$0	0.00%
Enrollees' out-of-pocket expenses for covered benefits (deductibles, copayments, etc.)	\$5,961,186,000	\$5,847,417,000	-\$113,769,000	-1.91%
Enrollees expenses for noncovered benefits (g)	\$26,604,000	\$0	-\$26,604,000	-100.00%
Total annual expenditures	\$76,514,267,000	\$76,650,200,000	\$135,933,000	0.18%

Source: California Health Benefits Review Program, 2010.

Notes: Small discrepancies in numbers among Tables 1, 5, and 6 are due to rounding.

(a) This population includes privately insured (group and individual) and publicly insured (e.g., CalPERS HMOs, Medi-Cal HMOs, Healthy Families Program, AIM, MRMIP) enrolled in health insurance products regulated by the DMHC or CDI. Population includes enrollees aged 0-64 years and enrollees 65 years or older covered by employment-sponsored insurance.

(b) AB 754-compliant plans have *no* annual benefit limits and *no* different cost sharing for DME benefits than for other health care benefits.

(c) Non-AB 754-compliant plans/policies do have differential benefit limits and/or do have different cost sharing for DME benefits than for other health care benefits.

(d) Premium expenditures by individuals include employee contributions to employer-sponsored health insurance and member contributions to public insurance.

(e) Of the CalPERS HMO employer expenditures, about 59% would be state expenditures for CalPERS members who are state employees, however CHBRP estimates no impact because CalPERS HMO is already compliant with the mandate.

(f) Healthy Families Program state expenditures include expenditures for 7,000 covered by the MRMIP and 7,000 covered by the AIM program.

(g) Some portion of these expenses may have been covered, prior to the mandate, by a state or federal program. For example, some enrollees in DMHC-regulated plans and CDI-regulated policies may also be beneficiaries of Medi-Cal, which could be a secondary payer for DME and related health services. Although CHBRP is unable to estimate a dollar figure, AB 754's expansion of DME coverage could result in a shift of some costs from such programs to plans and insurers.

Key: AIM=Access for Infants and Mothers; CalPERS HMOs=California Public Employees' Retirement System Health Maintenance Organizations; MRMIP=Major Risk Medical Insurance Program; CDI=California Department of Insurance; DMHC=Department of Managed Health Care.

INTRODUCTION

Assembly Bill (AB) 754 would require health plans and insurers regulated by the Department of Managed Health Care (DMHC) and the California Department of Insurance (CDI) to provide coverage for durable medical equipment (DME) and to provide the same level of coverage as for other health care benefits. The California Health Benefits Review Program (CHBRP) undertook the analysis of amendments to AB 754 in response to a request from the Assembly Committee on Health on April 23, 2010, pursuant to the program's authorizing statute.

Potential Effects of Health Care Reform

On March 23, 2010, the federal government enacted the Federal Patient Protection and Affordable Care Act (PPACA), which was amended by the Health Care and Education Reconciliation Act (H.R.4872) that the President signed into law on March 30, 2010. These laws are referred to in this report as PPACA.

Provisions that go into effect by 2014 or after

There are provisions in PPACA that go into effect by 2014 that would affect the California health insurance market and its regulatory environment. These major long-term provisions of PPACA would require that most U.S. citizens and qualified legal residents have health insurance and that large employers offer health insurance coverage or a tax-free credit to their employees. It would establish state-based health insurance exchanges, with minimum benefit standards, for the small group and individual markets. Subsidies for low-income persons would be available to purchase into the exchanges. How these provisions are implemented in California would largely depend on regulations to be promulgated by federal agencies, and statutory and regulatory actions to be undertaken by the California state government.

PPACA contains provisions that would interact with state mandates that set minimum benefit floors. Specifically, "essential health benefits" would be required to be covered by qualified health plans that provide health insurance in the small-group and individual markets through the state-based insurance exchanges, effective 2014. Section 1302 defines essential health benefits as emergency services, hospitalization, maternity and newborn care, mental health and substance use disorder services, prescription drugs, preventive and wellness services and chronic disease management, and pediatric services, including oral and vision care. Some aspects of these essential health benefits may include DME. PPACA would also require that the scope of the essential health benefits be equal to the scope of benefits provided under a typical employer plan. Therefore, it is possible that effects of AB 754, following 2014, would be diminished by the PPACA requirements. However, as noted, the effects are dependent on the details of pending federal regulations and state statutory and regulatory actions.

Provisions that go into effect in less than 1 year

There are also provisions in PPACA that go into effect within the short term or within 6 months of enactment that would potentially expand the number of Californians obtaining health insurance and their sources of health insurance. For example:

- Children and young adults up to age 26 years of age would be allowed to enroll in their parent's health plan or policy (effective 6 months following enactment). This provision may decrease the number of uninsured and/or potentially shift those enrolled with individually purchased insurance to group-purchased insurance.
- A temporary high-risk pool for those with pre-existing conditions would be established (effective 90 days following enactment). How California chooses to implement this provision would have implications for health insurance coverage for those high-risk persons currently without health insurance and/or are on California's Major Risk Medical Insurance Program (MRMIP).

Given the uncertainty surrounding implementation of these provisions and given that PPACA was only recently enacted, the potential effects of these short-term provisions are not taken into account in the baseline estimates presented in this report.

CHBRP's analysis of specific mandate bills typically address the marginal effects of the mandate bill—specifically how the state mandate would affect coverage, utilization, costs, and the public health, holding all other factors constant. There are specific requirements under PPACA that would affect the marginal impacts of AB 754 as estimated in this report:

- PPACA would prohibit California plans and policies from imposing lifetime limits on coverage (effective 6 months following enactment). Therefore AB 754's provisions to prohibit lifetime limits would be superseded by the federal legislation and would have no effect on cost. Further, as discussed in the *Utilization, Cost, and Benefit Coverage Impacts* section, CHBRP estimated that that provision would have no measurable effect since this limit is rarely reached. So, PPACA would not alter the conclusion regarding the effects of prohibiting lifetime limits.
- PPACA would prohibit California plans and policies from imposing restrictive annual limits on coverage (effective 6 months after enactment). The U.S. Secretary of the Department of Health and Human Services is to define what "restrictive" means before the effective date. Beginning 2014, use of annual limits is prohibited for all plans. The potential effects of AB 754 as presented in this report, could be altered, depending on the level at which the Secretary determines annual limits to be "restrictive."

Analysis of AB 754

The full text of AB 754 can be found in *Appendix A* of this report.

Approximately 19.5 million Californians (51%) have health insurance that may be subject to a health benefit mandate law passed at the state level (CHBRP, 2010). Of the rest of the population, a portion is uninsured, and therefore not affected by health insurance benefit mandate laws. Others have health insurance not subject to health insurance benefit mandate laws. Uniquely, California has a bifurcated system of regulation for health insurance subject to state level benefit mandate law. DMHC⁶ regulates health care service plans that offer coverage for benefits to their enrollees through health care service plan contracts. CDI regulates health insurers⁷ that offer coverage for benefits to their enrollees through health insurance policies.

Defining Durable Medical Equipment (DME)

The phrase DME commonly references external, reusable items used in the treatment of a medical condition or injury or to preserve a patient's function. Hundreds of items are commonly referred to as DME and covered through an enrollee's health insurance, providing that the enrollee's plan or policy includes a DME benefit.

A definition of DME in California statute or regulation does not explicitly exist.^{8,9} AB 754 would define DME as "equipment that is used for the treatment of a medical condition or injury or to preserve the patient's functioning and that is designed for repeated use and includes, but is not limited to, manual and motorized wheelchairs, scooters, oxygen equipment, crutches, walkers, electric beds, shower and bath seats, and mechanical patient lifts." Broadly interpreted, this definition could include, beyond the listed nine items, many items traditionally excluded from DME benefit coverage, such as external prostheses and orthotics (such as shoe inserts), hearing aids, or eye glasses. On the other hand, a narrow interpretation could exclude items frequently covered through a DME benefit but that do not precisely fit the definition provided in AB 754, such as liquid or gaseous oxygen, enteral or parenteral formulae, or any of a host of miscellaneous supplies, such as sterile syringes or lubricants for ostomy equipment.

For this analysis, CHBRP has defined DME as the more than 1,000 codes in the Healthcare Common Procedure Coding System (HCPCS) (NATAP, 2008) categorized as DME. A list of the codes used appears in *Appendix D*. Alternate interpretations of the mandate language could expand or contract what is considered "DME."

Coverage at parity

AB 754 would require that limits and cost sharing for DME coverage be at parity with limits and cost sharing for other benefit coverage.

⁶ The DMHC was established in 2000 to enforce the Knox-Keene Health Care Service Plan of 1975; see Health and Safety Code, Section 1340.

⁷ The CDI licenses "disability insurers." Disability insurers may offer forms of insurance that are not health insurance. This report considers only the impact of the benefit mandate on health insurance policies, as defined in Insurance Code, Section 106(b) or subdivision (a) of Section 10198.6.

⁸ Personal communication with S. Lowenstien, DMHC, June 2010.

⁹ Personal communication with B. Hinze, CDI, June 2010.

- Annual benefit limits: DMHC-regulated plans would be required to ensure that “the amount of the benefit for DME and services shall be no less than the annual and lifetime benefit maximums applicable to basic health care services required to be provided under Section 1367. If the contract does not include any annual or lifetime benefit maximums applicable to basic health care services, the amount of the benefit for DME and services shall not be subject to an annual or lifetime maximum benefit level.” Because plans do not typically place any annual or lifetime benefit maximums on basic health care services¹⁰, any benefit limits for DME would be required to be lifted. CDI-regulated policies would be required to ensure that benefit limits are not less than the “annual and lifetime benefit maximums applicable to all benefits in the policy.” Any benefit limits specifically for DME would be required to be lifted.
- Cost sharing: DMHC-regulated plans would be required to ensure that “any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and services shall be no more than the most common amounts applied to the basic health care services required to be provided under Section 1367.” Plans and regulators would need to determine the meaning of the phrase “most common amounts applied to basic health care services” since basic health care services include services such as preventive screening, hospitalization, and home health care, each associated with its own copayment or coinsurance levels. CDI-regulated policies would be required to provide DME with cost-sharing levels on par with cost sharing applied to the “most common amounts contained in the policy.” Again, insurers and regulators would need to determine what these most common amounts for benefits are for services typically covered in health insurance policies.

Utilization review

AB 754 would not alter plans’ and insurers’ ability to “conduct a utilization review to determine medical necessity prior to authorizing these services.” Medically necessary DME is usually considered equipment that treats an injury or preserves functioning. For example, equipment that would be solely used for the patient’s comfort or convenience (such as air conditioners) would not generally be considered medically necessary, but specialized wheelchair cushions to prevent pressure ulcers would be considered necessary.

Other provisions in AB 754

AB 754 would require that DME be covered when it is “prescribed by a physician and surgeon or doctor of podiatric medicine acting within the scope of his or her license, or is ordered by a licensed health care provider acting within the scope of his or her license.” Physicians, podiatrists, and physical and occupational therapists are the providers who typically prescribe or order DME.

¹⁰ Pursuant to Section 1368.2 of the Health & Safety Code and Section 1300.67 of the California Code of Regulations, DMHC-regulated plans 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.

AB 754 requires that plans and insurers “communicate the availability” of the DME coverage after the contract or policy is amended to become compliant in its provisions.

Existing California Requirements

Currently there are no requirements in California laws or regulations related to health insurance regulated by DMHC or CDI that specifically address DME benefits. However, there are existing mandates that require health plans or insurers to cover particular types of DME used for the treatment and management of specific conditions:

- Pediatric asthma management and treatment: only DMHC-regulated plans are required to cover inhaler spacers, nebulizers, and peak flow meters. (H&S Section 1367.0611)
- Diabetes benefits: both DMHC-regulated plans and CDI-regulated policies are required to cover equipment and supplies related to diabetes treatment and management. (H&S Section 1367.1 and Insurance Code Section 10123.7)
- For the purposes of analysis, CHBRP assumes that because these items are required to be covered under existing law, AB 754 would not directly affect coverage of these items.

There are also several mandates that require coverage of items, supplies, and services not considered “durable medical equipment,” but which may sometimes be combined with the DME benefit. These include:

- Orthotic and prosthetic (O&P) devices and services: both DMHC-regulated plans and CDI-regulated policies are required to *offer* coverage (not required to provide coverage in all contracts) for O&P devices at parity levels. (H&S Section 1367.18 and Insurance Code, Section 10123.7)¹²
- Special footwear for persons suffering from foot disfigurement: both DMHC-regulated plans and CDI-regulated policies are required to cover specialized footwear for persons with disfigurements from conditions such as cerebral palsy, arthritis, and diabetes, and foot disfigurement caused by a developmental disability. (H&S Section 1367.19 and Insurance Code Section 10123.141)
- Prosthetic device benefits for laryngectomy: both DMHC-regulated plans and CDI-regulated policies are required to cover this prosthetic device. (H&S Section 1367.61 and Insurance Code 10123.82)
- Reconstructive surgery: both DMHC-regulated plans and CDI-regulated policies are required to cover medically necessary reconstructive surgery. Medically necessary prosthetic devices that are part of the reconstruction would be required to be covered. (H&S Section 1367.63 and Insurance Code 10123.88)

¹¹ CHBRP conducted an analysis of this mandate while it was proposed legislation, AB 2185 (2004). Please see: http://www.chbrp.org/completed_analyses/index.php for the complete report.

¹² CHBRP conducted an analysis of this mandate while it was proposed legislation, AB 2012 (2006). Please see: http://www.chbrp.org/completed_analyses/index.php for the complete report.

- These devices and supplies that are not considered DME are already mandated to be covered under current law, and would not be affected by AB 754. In this analysis, CHBRP has not addressed coverage or utilization of these devices and supplies.

Requirements in Other States

No other states currently have a mandate requiring insurers to provide DME coverage or provide *parity* in coverage for DME (BCBSA, 2009). New Hampshire has a parity requirement that coverage for *prosthetic devices* be under the same terms and conditions as apply to other durable medical equipment, also mandating that amounts paid for prosthetic devices apply only to aggregate annual or lifetime maximums under the policy.¹³ In March 2010, the state of Washington passed a law requiring that health insurance covering durable medical equipment include reimbursement for the sales tax paid by the enrollee for such equipment.¹⁴

¹³ New Hampshire Code Section 415:6-j

¹⁴ Washington Substitute Senate Bill 6273 (2010)

MEDICAL EFFECTIVENESS

As indicated in the *Introduction*, durable medical equipment (DME) items are usually external, reusable equipment used for the treatment of a medical condition or injury or to preserve the patient's functioning. DME encompasses such a wide range of devices and products that a systematic review of the literature on the effectiveness of all of these devices and products was not feasible. Instead, the medical effectiveness section describes the major groups of persons who use DME, the likely impact of DME on persons with high expenses for DME, and the impact of health insurance on use of DME.

Major Groups of Persons Who Use DME

Many persons use DME in conjunction with medical care to improve their health, functioning, and quality of life. Use of DME can also help people return to work or school sooner than might otherwise be possible.

Persons who use DME can be divided into two major groups: those who need it on a long-term basis and those for whom its use is temporary. The first group consists of persons who use DME on a long-term basis to treat a chronic illness or cope with a physical disability or the physical consequences of treatment for a disease. The second group of persons using DME is composed of persons who use it on a temporary basis while recovering from an injury or surgery or while obtaining treatment for an acute illness.

Persons with High Expenses for DME

CHBRP analyzed claims data from the MarketScan database to identify the diseases and conditions associated with the highest out-of-pocket costs for DME in 2008. The paragraphs below describe these diseases and conditions, the types of DME these persons use, and the likely effects of DME on their functional status and quality of life. Most persons with these diagnoses use DME on a long-term basis.

Persons with diagnoses related to physical disabilities. Many of the diagnoses associated with high utilization of DME are for diseases and conditions that typically lead to physical disability, including infantile cerebral palsy, muscular dystrophy and other myopathies, multiple sclerosis, spina bifida, brain disorders, arthritis, other musculoskeletal conditions, and paralytic syndromes. Although the range of severity of conditions is broad, both within and across diagnoses, many persons with physical disabilities use wheelchairs, walkers, electric beds, shower and bath seats, and mechanical lifts. These devices improve mobility, which enhances a person's ability to self-care (e.g., bathing, dressing, toileting, preparing meals, shopping for groceries). They can also help people to engage in work and social activities that may improve their quality of life.

Persons with sequelae from traumatic injuries such as spinal cord injuries and head trauma. Another group of persons with physical disabilities that may benefit from AB 754 are those who have suffered traumatic injuries, such as spinal cord injuries and head trauma. Persons in this category often require the use of wheelchairs, transfer benches, and shower and bath seats to perform self-care and to participate in work and social activities.

Persons with respiratory diseases and related conditions. Another important group of diagnoses for high DME users are those with respiratory diseases and conditions such as chronic airway obstruction, chronic obstructive pulmonary disease, and other lung diseases. Individuals with these conditions often use home oxygen equipment. Persons with heart conditions are also users of home oxygen equipment. Use of oxygen can improve sleep, mood, and capacity for physical activity. Other respiratory conditions for which DME is used include sleep apnea and other organic sleep disorders. Sleep apnea is a disorder in which a person stops breathing or breathes shallowly in his or her sleep multiple times per night, which often leads to excessive sleepiness during the day. If left untreated, sleep apnea can increase a person's risk of motor vehicle accidents, work-related accidents, cardiovascular disease, and other medical conditions. Many persons with sleep apnea use a continuous positive airway pressure (CPAP) machine that generates mild air pressure to keep a person's airways open during sleep.

Persons with diagnoses related to the digestive system. A fourth group of high-volume DME users are those with diagnoses related to gastrointestinal problems, such as symptoms of poor nutrition, metabolism, development, and intestinal malabsorption. Persons with these conditions sometimes rely on parenteral nutrition (IV nutrition) and formulas administered via a feeding tube, as well as the supplies related to these forms of nutrition. Use of DME enables persons with these diagnoses to obtain the nutrition necessary for their bodies to function properly. Other persons who use DME due to diseases of the digestive system include persons who have had a colostomy (had all or part of their bowel removed) due to colorectal cancer, ulcerative colitis, or another condition. During surgery to remove the bowel, an ostomy (an artificial opening) is created to which a disposable colostomy bag is attached to collect feces eliminated by the body.

Literature Review Methods

As noted above, DME encompasses such a wide range of devices and products that a systematic review of the literature on the effectiveness of all of these devices and products was not feasible. In light of the wide range of conditions and types of devices to which AB 754 would apply and the fact that AB 754 addresses the structure of DME benefits, CHBRP focused the medical effectiveness review for this bill on the impact of health insurance coverage for DME. The literature search encompassed articles and reports on the impact of having health insurance versus no insurance for DME, as well as the literature on the effect of having more generous coverage for DME (e.g., larger annual or lifetime maximum, or lower deductibles, copayments, or coinsurance). Literature retrieved for CHBRP's analysis of AB 214, a bill on DME coverage introduced in 2009, was combined with literature CHBRP retrieved for its analysis of SB 1198, a similar bill introduced in 2008. A literature search was completed for AB 754; however, no new studies were identified.

Outcomes Assessed

Studies that examined the impact of health insurance coverage on use of DME or perceptions regarding access to DME were included in the literature review.

Study Findings

CHBRP identified six studies that address the effects of health insurance on use of DME. No studies of effects of coverage for DME on health outcomes were identified. None of the six studies directly address the effects of the sorts of changes in coverage for DME proposed in AB 754. The studies asked respondents only if they had health insurance and did not ask them specifically whether they had coverage for DME. The studies also did not assess whether cost sharing for DME was similar to or different from cost sharing for other health care services. Thus, these studies do not provide any information about the effects of differences in coverage levels or cost sharing for DME on use of DME, difficulty obtaining DME, or health outcomes.

Nevertheless, the studies provide some insights into the effects of having health insurance on use of DME that may be useful for assessing the impact of the bill on persons enrolled in DMHC- and CDI-regulated health plans and health insurance policies that do not currently provide coverage for DME.

Studies of persons with privately funded health insurance

Only three studies examined the impact of privately funded health insurance on use of DME or perceived access to DME among persons whose primary form of health insurance is privately funded health insurance.

Agree and colleagues (2004) analyzed responses of adults in the United States aged 50 years or older to a national survey. The authors examined the effect of having privately funded health insurance as either a primary payer or a secondary payer¹⁵ on use of types of DME that assist with mobility (e.g., canes, walkers, wheelchairs) among persons aged 50 years or older who had difficulty transferring (e.g., getting out of bed), walking, or going outside. They compared persons who had privately funded health insurance to persons who had no health insurance or only had Medicare (i.e., had Medicare Part A, or Part A and Part B, but did not have Medigap coverage). The results were analyzed for use of mobility aids alone, mobility aids plus informal caregiving, and mobility aids plus formal caregiving. The authors found no statistically significant differences between the two groups in utilization of mobility aids alone or in combination with either type of caregiving. The authors also compared persons who had privately funded health insurance to persons who were enrolled in Medicaid or dually eligible for Medicaid and Medicare. They found no differences between the two groups in use of mobility aids alone or mobility aids plus informal caregiving. However, persons dually eligible for Medicaid and Medicare were more likely to use both mobility aids and formal caregiving, most likely because Medicaid provides more generous benefits for formal caregiving than privately funded health plans and policies. In all analyses, persons' underlying health needs were the factors most strongly associated with using mobility aids and/or obtaining assistance from caregivers.

¹⁵ This study included some persons who were age 65 years or older for whom Medicare was their primary form of health insurance. Some of these persons had privately funded supplemental insurance (i.e., Medigap policies). Among subjects who were age 50 to 64 years, some subjects had privately funded health insurance as their primary form of health insurance. Others were enrolled in Medicare or Medicaid due to their disability or were uninsured.

Resnik and Allen (2006) analyzed data from the same survey as Agree and colleagues (2004) but studied a somewhat different group of respondents with mobility problems. Whereas Agree and colleagues (2004) examined responses from persons aged 50 years or older who had difficulty transferring, walking, or going outside, Resnik and Allen (2006) assessed responses from adults of all ages (≥ 18 years) who had difficulty walking. They also categorized the types of health insurance that respondents had somewhat differently. Persons with privately funded health insurance as either a primary payer or a secondary payer were compared to persons who were uninsured, enrolled in Medicaid, or enrolled in any other publicly funded health insurance program. The authors reported that persons with privately funded health insurance were more likely to use any type of mobility aid than persons who were uninsured. Comparing across insurance types, they found no statistically significant difference in the likelihood of mobility aid use between persons with privately funded health insurance and persons enrolled in Medicaid and between persons with privately funded health insurance and those enrolled in publicly funded health insurance programs. Consistent with Agree and colleagues' (2004) study, Resnik and Allen found that respondents' health needs were the strongest predictors of use of mobility aids.

Litaker and Cebul (2003) reported findings from a survey of adults in Ohio regarding the relationship between health insurance status and difficulties obtaining needed medical equipment, supplies, or prescription drugs. Respondents were divided into three groups based on health insurance status: persons who were continuously insured for 1 year, persons who were intermittently insured, and persons who were continuously uninsured for 1 year. The percentage of persons who were continuously insured who reported difficulty obtaining medical equipment, supplies, or prescription drugs was lower than the percentages of persons who were intermittently insured or continuously uninsured (1%, 4%, and 6%, respectively). Results of statistical tests to determine whether these findings were statistically significant were not reported.

These three studies are only somewhat generalizable to AB 754, both because they address health insurance generally versus coverage of DME and because they included persons age 65 years or older. The vast majority of persons in this age group receive primary health insurance coverage from Medicare. They may or may not choose to purchase privately funded supplemental health insurance. Findings for persons enrolled in Medicare may not generalize to children and nonelderly working adults for several reasons. As the findings from CHBRP's survey of health plans and health insurers regulated by the DMHC or CDI indicate (see *Current Coverage of Mandated Benefit in Utilization, Cost, and Benefit Coverage Impacts*), privately funded health insurers often impose annual or lifetime limits on coverage for DME, whereas Medicare does not. In addition, older adults are more likely than younger persons to have chronic illnesses or major physical disabilities that necessitate long-term use of DME, especially expensive devices. In contrast, many younger persons use DME only temporarily while recovering from an injury, an acute illness, or surgery.

Studies of persons with publicly funded health insurance

Three articles on the use of DME by persons enrolled in Medicare or Medicaid were identified. The findings of these studies are summarized briefly but are not fully generalizable to AB 754,

because the bill only affects coverage for persons for whom privately funded health insurance is the primary payer.

One article assessed the impact of having privately funded supplemental health insurance (i.e., Medigap) on use of DME by persons enrolled in Medicare. Mathieson and colleagues (2002) found that Medicare enrollees who also had privately funded supplemental health insurance were more likely to use two or more mobility aids than enrollees who only had Medicare coverage.

Two articles compared access to DME for persons with special health care needs who were enrolled in two different types of Medicaid plans: (1) fee-for-service Medicaid plans, and (2) partially capitated case management programs in which a primary care provider coordinated services for enrollees. One study conducted in Ohio reported that implementation of the partially capitated case management program was associated with a reduction in claims and costs for DME for children and adults under age 65 years who had disabilities (Cebul et al., 2000). A study conducted in Washington, DC, found that parents and other caregivers of children with special health care needs who were enrolled in a partially capitated case management program were less likely to report unmet need for DME than parents and other caregivers whose children were enrolled in fee-for-service Medicaid (Mitchell and Gaskin, 2004).

Conclusion

There is insufficient evidence to determine whether health insurance coverage for DME affects use of DME or health outcomes for persons who use DME. The few studies that have been published on this topic are not generalizable to AB 754. They assess the impact of having health insurance versus no health insurance and not the impact of having coverage for DME specifically. They also do not examine the effects of having more versus less generous coverage for DME (e.g., differences in annual or lifetime maximums, deductibles, copayments, or coinsurance). In addition, most of the populations studied included large proportions of Medicare beneficiaries, who would not be subject to the benefit mandate, and for whom the likelihood of needing DME and the amounts and types of DME used are likely to differ from that of children and non-elderly adults.

UTILIZATION, COST, AND BENEFIT COVERAGE IMPACTS

AB 754 would require health plans regulated by the Department of Managed Care (DMHC) and policies regulated by the California Department of Insurance (CDI) to provide coverage for durable medical equipment (DME) and to ensure that DME coverage is at parity with other covered benefits in terms of annual/lifetime maximums and cost sharing.

As noted in the *Introduction*, there is no standard definition of DME. For this analysis, CHBRP reviewed codes from the Healthcare Common Procedure Coding System (HCPCS) (NATAP, 2008) categorized as DME and removed codes related to items of DME for which benefit coverage is already mandated. A list of the codes used appears in *Appendix D*.

For DMHC-regulated plans, the bill specifies that the amount of the benefit for DME and services shall be no less than the most common amounts applied to the basic health care services¹⁶ while any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and related services be no more than the most common cost sharing applied to the basic health care services. CDI-regulated policies would be prohibited from applying differential annual and lifetime benefit maximums and cost sharing of DME and services compared to all other benefits in the policy; any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefits for DME and services would be no more than the most common amounts contained in the policy.

This section will present the current, or baseline, costs and benefit coverage related to DME, and then detail the estimated utilization, cost, and benefit coverage impacts of AB 754. For further details on the underlying data sources and methods, please see *Appendix D* at the end of this document.

Present Baseline Cost and Benefit Coverage

Current Coverage of Mandated Benefit

Approximately 19,487,000 enrollees in DMHC-regulated plans and CDI-regulated policies have health insurance that would be subject to AB 754 (Table 1). The mandate would place requirements on plans and policies in both the group and individual markets. CHBRP surveyed the seven largest major health plans and insurers in California regarding DME coverage and the scope of provided DME benefits. Responses represented 82.37% of enrollees in CDI-regulated policies and 92.03% of enrollees in DMHC-regulated plans. Combined, responses to this survey represented 90.45% of enrollees with privately funded health insurance.

¹⁶ Pursuant to Section 1368.2 of the Health & Safety Code and Section 1300.67 of the California Code of Regulations, DMHC-regulated plans 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.

CHBRP estimates a total of the 19,487,000 enrollees have health insurance subject to state level benefit mandates and so would be subject to AB 754. CHBRP estimates that DME coverage among this group is as follows.

- 18,185,538 (93.32%) enrollees have some coverage for DME. However, 10,294,137 (52.83%) enrollees have coverage for DME *not* currently in compliance with AB 754 because they face higher coinsurance or copayments for DME and services than for other medical benefits, or because they face annual DME benefit limits, or both.
 - Over 33.16% of enrollees who have some coverage for DME have annual benefit limits. Average annual benefit limits (Table 4) range from \$1,960 to \$3,088 among CDI-regulated policies (large group, small group and individual market) and from \$2,418 to \$2,751 among DMHC-regulated plans (large group, small group and individual market).
 - Typical average cost-sharing levels for DME range by market segment from 21% to 30% among non-AB 754-compliant plans and policies. In contrast, DME average cost sharing among the already compliant range by market segment from 0% to 29%.
- 1,301,462 (6.68%) enrollees are without coverage for DME, which is *not* currently in compliance with AB 754.

For other health benefits, the large majority of plans and policies either have no annual limit, or have very high limits (\$1-\$5 million) that affect a very small number of insured persons. Previously, CHBRP has estimated that more restrictive annual limits are only applicable for about 0.6% of enrollees in the group market and 0.1% of enrollees in the individual market. When present, such limits average \$70,000 for group policies and \$100,000 for individually purchased policies

The cost and utilization impacts presented in this report concern only *annual* DME specific benefit maximums because CHBRP estimates that no enrollees in DMHC-regulated plans or CDI-regulated policies are currently subject to *lifetime* DME specific limits.

Some public programs purchase for some portion of their beneficiaries health insurance subject to state-level mandates. California Public Employees' Retirement System (CalPERS) purchases DMHC-regulated plans for its Health Maintenance Organization (HMO) option. However, CalPERS HMO cover DME and services with no cost sharing and no annual or lifetime benefit limits, so the CalPERS HMO option is already in compliance with AB 754. The Department of Health Care Services (DHCS) and Major Risk Medical Insurance Board (MRMIB) act as group purchasers (respectively) for some Medi-Cal beneficiaries (those enrolled in Medi-Cal HMOs or "Medi-Cal Managed Care") and for Healthy Family beneficiaries. However, neither Medi-Cal HMOs nor Healthy Families HMOs have an annual or lifetime benefit limit, and both cover DME at no charge. Therefore, these plans are already in compliance with AB 754.

Table 2. Current Coverage of DME Benefits by Market Segment, California, 2010

	DMHC-Regulated							CDI-Regulated		
	Privately Funded			CalPERS HMOs	Medi-Cal HMOs		Healthy Families Program HMOs	Privately Funded		
	Large Group	Small Group	Individual		65 and Over	Under 65		Large Group	Small Group	Individual
Percentage of enrollees with coverage for DME										
AB 754-compliant plans	36%	3%	0%	100%	100%	100%	100%	0%	1%	0%
Non-AB 754-compliant plans	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percentage of enrollees without coverage for DME										
	61%	74%	49%	0%	0%	0%	0%	100%	99%	97%
Total	97%	77%	49%	100%	100%	100%	100%	100%	100%	97%
Number of enrollees with coverage for DME										
AB 754-compliant plans	3,398,916	59,974	177	820,000	175,000	2,616,000	814,000	535	6,799	0
Non-AB 754-compliant plans	0	0	0	0	0	0	0	0	0	0
Number of enrollees without coverage for DME										
	5,733,994	1,780,876	382,644	0	0	0	0	323,465	928,201	1,144,957
Total	9,132,909	1,840,850	382,821	820,000	175,000	2,616,000	814,000	324,000	935,000	1,144,957

Source: California Health Benefits Review Program, 2010

Note: Figures may exceed 100% due to rounding. The population includes employees and dependents covered by employer-sponsored insurance (including CalPERS).

Key: CalPERS=California Public Employees' Retirement System; CDI=California Department of Insurance; DME=durable medical equipment; DMHC=Department of Managed Health Care.

Inclusion/Exclusion of Select Items from DME Benefit Coverage

As previously noted, CHBRP has defined DME, for this analysis, as a set of more than 1,000 HCPCS codes related to DME items and services. CHBRP did, in its bill specific survey of health plans and insurers, inquire as to whether the nine items specified in AB 754 were currently considered to be covered. According to the responses given, 100% of enrollees with DME benefit coverage have coverage for eight of the items specified in AB 754: manual and motorized wheelchairs, scooters, oxygen equipment, crutches, walkers, electric beds, and mechanical patient lifts. However, only 13.2 to 47.4% (ranging by market segment) of enrollees in the surveyed plans had coverage for the ninth item specified by AB 754, shower and bath seats.

Current Utilization Levels and Costs of the Mandated Benefit

As noted in the *Introduction* and in *Appendix D*, there are a very limited number of existing benefit mandates that require health plans or policies to cover a very limited set of equipment and supplies used for the treatment and management of diabetes and asthma. These items have been excluded in this analysis since those mandates would remain in law regardless of whether AB 754 is passed into law.

Current utilization levels and unit price

Based on CHBRP's analysis of 2008 national claims data (that exclude procedure codes relating to previously mandated DME, such as diabetic shoes, fitting, and modifications, and prosthetic procedures – prosthetic implants), CHBRP estimates that there are 55 users of DME items per year per 1,000 enrollees. The estimated average annual cost per DME user is \$743.56 (Table 1).

Current distribution of annual costs and utilization per DME users

About 50.46% of DME users are estimated to have annual costs less than \$100. Another 42.59% of users have costs between \$101 and \$2,000, and only 6.95% incur costs greater than the current common annual benefit limit for DME of \$2,000/year (Table 3). These costs include amounts paid by the plan or insurer and any applicable cost sharing paid by the patient.

Table 3. Distribution of Annual Cost per User, 2008

Cost per User	No. of Patients (a)	Total Annual Cost (b)	Distribution of Patients	Distribution of Cost
<\$100	653,891	17,082,766	50.46%	2.29%
\$100–\$200	145,084	21,004,159	11.20%	2.81%
\$200–\$300	76,802	18,738,044	5.93%	2.51%
\$300–\$400	54,057	18,649,593	4.17%	2.50%
\$400–\$500	39,756	17,809,840	3.07%	2.39%
\$500–\$600	30,310	16,582,513	2.34%	2.22%
\$600–\$700	25,776	16,696,191	1.99%	2.24%
\$700–\$800	23,272	17,446,393	1.80%	2.34%
\$800–\$900	19,325	16,377,617	1.49%	2.19%
\$900–\$1,000	18,001	17,062,570	1.39%	2.29%
\$1,000–\$2,000	119,491	169,649,178	9.22%	22.73%
\$2,000–\$3,000	45,402	109,229,087	3.50%	14.63%
\$3,000–\$4,000	19,113	65,310,247	1.48%	8.75%
\$4,000–\$5,000	7,935	35,372,918	0.61%	4.74%
\$5,000–\$6,000	4,735	25,830,860	0.37%	3.46%
\$6,000–\$7,000	3,009	19,442,186	0.23%	2.60%
\$7,000–\$8,000	2,038	15,211,994	0.16%	2.04%
\$8,000–\$9,000	1,370	11,609,592	0.11%	1.56%
\$9,000–\$10,000	1,027	9,725,559	0.08%	1.30%
\$10,000–\$15,000	2,677	32,265,554	0.21%	4.32%
\$15,000–\$20,000	1,075	18,439,566	0.08%	2.47%
\$20,000–\$25,000	595	13,205,804	0.05%	1.77%
>\$25,000	1,046	43,780,235	0.08%	5.86%
Total	1,295,787	\$746,522,468	100.00%	100.00%

Source: California Health Benefits Review Program, 2010

(a) The data was drawn from the 2008 outpatient claims data of MedStat and is based on about 415 million commercial member months. The patient distribution excludes HCPCS codes for already mandated benefits (e.g., diabetic shoes, fitting, and modifications, and prosthetic procedures – prosthetic implants).

(b) Total annual cost represents the total amounts paid for each code under the contract between the health plan and the provider. It includes amounts paid by the insurer, plus cost sharing paid by the patient.

For enrollees having more than \$5,000 in expenses, the DME with the highest annual cost included orthopedic devices, oxygen and related respiratory equipment, enteral formulae and enteral medical supplies, wheelchairs, parental nutritional supplies, and incontinence appliances and care supplies (see *Appendix D* for annual costs for these and other select DME items). The diagnosis with the highest utilization for these enrollees (>\$5,000 DME expenses), included chronic airway obstruction, infantile cerebral palsy, organic disorders, paralytic disorders, diseases of the lung, symptoms involving urinary system, nutrition, metabolism, and development, muscular dystrophies, diabetes mellitus and multiple sclerosis; the foregoing are listed in descending order of annual cost and utilization.

The Extent to Which Costs Resulting From Lack of Coverage Are Shifted to Other Payers, Including Both Public and Private Entities

Enrollees in DMHC-regulated plans and CDI-regulated policies may have alternate sources for items of DME or secondary sources of coverage for DME.

Some enrollees may be provided some items of DME by private or public programs, such as a charitable foundation or the California Department of Rehabilitation (CDOR). CHBRP is unable to estimate the extent to which distribution of DME items to enrollees may occur and so is unable to estimate the scope of cost reduction that could be expected. However, should AB 754 require an expansion of DME coverage, some cost reduction would be expected for programs providing items of DME.

Some enrollees may have DME coverage from a “secondary payer” for expenses related to medically necessary DME items and services. For example, a Department of Health Care Services (DHCS) summary received by CHBRP indicated that \$5,929,485.12 in DME-related expenses were paid in 2008 for Medi-Cal Fee for Service (FFS) beneficiaries who also had privately funded health insurance (see *Appendix E*). DHCS was unable to identify what portion of the privately funded health insurance was regulated by the DMHC or CDI (as opposed to health insurance subject only to federal regulation). Therefore, CHBRP is unable to estimate the scope of cost reduction that could be expected for DHCS. However, some reduction would be expected for DHCS and other programs acting as “secondary” payers, should AB 754 require an expansion of DME coverage.

Public Demand for Coverage

As a way to determine whether public demand exists for the proposed mandate (based on criteria specified under CHBRP’s authorizing statute), CHBRP reports on the extent to which collective bargaining entities negotiate for, and the extent to which self-insured plans (not regulated by the DMHC or CDI and so not subject to state-level mandates) currently have coverage for the benefits specified under the proposed mandate.

Currently, the largest public self-insured plans are the PPO plans offered by CalPERS. These plans provide coverage and benefits similar to those offered in the group health insurance market subject to the mandate. Evidence of coverage (EOC) documents indicate no DME-specific annual or lifetime maximums and applicable coinsurance of 10-20% for DME from preferred providers, depending on the plan. Applicable coinsurance for DME from non-preferred providers can range up to 40%.

To further investigate public demand, CHBRP also utilized the mandate-specific health plan and insurer survey to ask carriers administering plans or policies for other (non-CalPERS) self-insured group health insurance programs whether the relevant coverage and benefits differed from what is offered in the commercial markets. Responses indicated that there were no substantive differences, again suggesting that the market is meeting public demand.

On the basis of conversations with the largest collective bargaining agents in California, CHBRP concluded that unions currently do not include coverage or scope of coverage for DME in their health insurance policy negotiations. In general, unions negotiate for broader contract provisions such as coverage for dependents, premiums, deductibles, and broad coinsurance levels.¹⁷

Impacts of Mandated Coverage

How Would Changes in Coverage Related to the Mandate Affect the Benefit of the Newly Covered Service and the Per-Unit Cost?

Impact on per-unit cost

CHBRP estimates no effect on the price for specific DME items or the *per-unit cost* of DME since provisions of AB 754 do not specify any conditions regarding price or per-unit cost of DME; this indicates there is no direct impact of AB 754 on price or per-unit cost of DME items. However, CHBRP estimates an increase in the *average cost per user* of DME benefits. This is because the decrease in the amount of coinsurance and removal of annual benefit limits would cause an increase in the use of more expensive, higher-technology equipment and possibly an increase in the number of DME items used as well as length of time the DME is used by both enrollees with expanded scope of coverage and enrollees with new coverage. For example, the price of a standard wheelchair may not change post-mandate; however, newly covered enrollees and enrollees with expanded scope of DME coverage may shift to higher-priced wheelchairs.

- CHBRP estimates the shift to more-expensive, higher-technology equipment would be limited since AB 754 states “every plan[policy] shall have the right to conduct a utilization review to determine medical necessity prior to authorizing these services.” Hence, health plans and insurers would continue to influence the choice of DME through their determination of medical necessity during the preauthorization, utilization, or medical review process. Additionally, enrollees with expanded scope of DME coverage, whose potential change in benefit structure from one with an annual benefit limit to a benefit with no limit but a coinsurance rate (such as 20%) or deductible, may maintain a disincentive to upgrade a DME device.

Post-mandate coverage

Approximately 19,487,000 enrollees in DMHC-regulated plans and CDI-regulated policies have health insurance that would be subject to AB 754. For this analysis, CHBRP assumes that all non-compliant health plans or policies would be revised to become compliant with AB 754. These changes would reduce DME cost sharing to the same level as the plan’s or policy’s cost sharing for other medical benefits, and remove any DME-specific annual benefit limit. Based on CHBRP’s survey of health plans and insurers, CHBRP estimated the average post-mandate DME cost sharing—which includes coinsurance, deductibles, and copayments (for each type of individually purchased health insurance and group plan or policy)—by applying to DME item and services the average pre-mandate cost sharing for other medical services (Table 4). Post-mandate, CHBRP assumed each type of plan or policy would be amended to drop the DME coinsurance rate to equal the average coinsurance rate for medical services current for that type of plan or policy. CHBRP projects that the typical average cost sharing levels would be 0% to

¹⁷ Personal communication with the California Labor Federation and member organizations, January 2009.

29% among DMHC-regulated plans and CDI-regulated policies. Similarly, based on the survey, CHBRP estimated the percentage of members with an annual DME benefit limit, and the average amount of those limits for each type of individually purchased health insurance and group plan or policy. Post-mandate, CHBRP assumed each type of plan or policy would be amended to remove any DME benefit limits.

For the estimated 1,301,462 (or 6.68%) enrollees with new DME coverage, CHBRP assumed plans and insurers would cover DME at the same cost sharing levels that apply to other medical services with no annual DME benefit limit.

Table 4. Average Cost Sharing and Average Benefit Limits: Current and Post-mandate Levels

		Baseline (Current)								
		DMHC-Regulated			Large Group		Small Group		Individual	
Plan Type	Benefit Characteristic	CalPERS HMOs	Medi-Cal HMOs	Healthy Families Program HMOs	DMHC-Regulated	CDI-Regulated	DMHC-Regulated	CDI-Regulated	DMHC-Regulated	CDI-Regulated
DME Benefit complies with AB 754	Average Cost Sharing (a)	0%	0%	0%	0%	29%	0%	23%	0%	27%
	Average Benefit Maximum	None	None	None	None	None	None	None	None	None
DME Benefit does not comply with AB 754	Average Cost Sharing (a)	NA	NA	NA	21%	30%	27%	28%	23%	29%
	Average Benefit Maximum	NA	NA	NA	\$2,418	\$3,088	\$2,751	\$1,960	\$2,614	\$2,022
		Post-mandate								
		DMHC-Regulated			Large Group		Small Group		Individual	
Plan Type	Benefit Characteristic	CalPERS HMOs	Medi-Cal HMOs	Healthy Families Program	DMHC-Regulated	CDI-Regulated	DMHC-Regulated	CDI-Regulated	DMHC-Regulated	CDI-Regulated
DME Benefit complies with AB 754	Average Cost Sharing (a)	0%	0%	0%	0%	29%	0%	23%	0%	27%
	Average Benefit Maximum	None	None	None	None	None	None	None	None	None

Source: California Health Benefits Review Program, 2010

Key: CDI=California Department of Insurance; DMHC=Department of Managed Health Care; DME=durable medical equipment.

(a) Cost sharing includes coinsurance, deductibles, and copayments.

Changes in coverage as a result of premium increases

It is possible that AB 754 will cause some enrollees to become uninsured as a result of an increase in premiums. CHBRP estimates an impact on the number of insured when the premium increase (or decrease) faced by any segment of the population is at least 1%.¹⁸ The greatest impact on premiums will be in the individually purchased, DMHC-regulated plans (1.41% (Table 6). These premium increases will be largely offset by reductions in out-of-pocket expenditures. However, the estimated premium increases in the DMHC-regulated individual market may result in approximately 1,214 newly uninsured persons.

How Would Utilization Change as a Result of the Mandate?

Since AB 754 expands the scope of DME coverage to provide parity in coverage for medical services for members with DME coverage, utilization of units of DME and/or utilization of more expensive DME among existing users is expected to increase as a result of the mandate. Post-mandate, \$26,604,000 in expenses incurred by enrollees with new DME benefits and services would be shifted to health plans and insurers. In making this estimate, CHBRP assumed that the prices paid currently by enrollees with new DME coverage are similar to the prices negotiated by health plans with DME providers. Enrollees with expanded scope of DME benefits and services would incur a reduction of \$113,769,000 in out-of-pocket expenses due to required reductions in member cost sharing and removal of benefit maximums. As with other health benefits, CHBRP recognizes that a decrease in out-of-pocket expenditures may cause patients to use more items or demand more expensive equipment regardless of their medical effectiveness. Additionally, CHBRP recognizes there may be DME supplier-induced demand based on the experience of the Medicare program with DME (Federal Register, 2005). However, given that the target population is relatively young, health plans and insurers are not barred from implementing utilization control measures, and other mitigating factors discussed below, CHBRP assumes AB 754 would lead to a slight increase in DME utilization. The estimated increase in utilization and related expenses is about \$52.01 per DME user per year, or 6.99%, in response to reduced cost sharing and lifting of annual and lifetime expenditure limits. This value was calculated based on CHBRP's analysis on the impact of cost sharing and benefit limits on DME utilization. CHBRP's analysis does not identify how much of this increase would be due to an increase in the number of users versus an increase in the units of DME or utilization of more expensive DME among existing users. For this report, CHBRP has attributed all of the increase to an increase in the units of DME and/or utilization of more expensive DME among existing users.

- CHBRP estimates an increase in DME utilization, in terms of increase in the units of DME and/or utilization of more expensive DME among existing users, and related expenses may occur since:
 - 6.68% of enrollees (1,301,462) gain benefit coverage for DME and so could access more DME and/or more expensive DME.

¹⁸ See http://www.chbrp.org/analysis_methodology/cost_impact_analysis.php for more information on CHBRP's methods for calculating the number of uninsured as a result of premium changes.

- Enrollees with expanded scope of DME coverage subject to annual limits may access more DME and/or more expensive DME when these limits are increased or removed.
- CHBRP estimates that this increase in DME utilization and related expenses would be limited because:
 - 93.32% of enrollees with health insurance subject to the mandate already have some coverage for DME.
 - CHBRP assumes the number of users of DME will not change post-mandate: Based on conversations with content experts, people in need of DME use some or all of the their physician-recommended DME regardless of benefit coverage, which indicates that to some extent a cost shift would be anticipated rather than a change in utilization of DME. This is expected to occur since there three possible responses of enrollees to benefit limits:
 - Enrollees may (1) continue use at the physician-recommended rate but pay out-of-pocket, (2) reduce DME use in order to postpone reaching the benefit limit or to mitigate out-of-pocket expenses once the annual benefit is exhausted, or (3) discontinue use once the benefit is exhausted. To the extent that patients are paying out-of-pocket once the annual benefit is exhausted, there would be a cost shift rather than a utilization increase. To the extent that they are reducing or discontinuing DME use, there would be a per user utilization increase. The estimated rate of users per 1,000 members per year would not change.
 - AB 754 would not affect plans' and insurers' determination of medical necessity of DME choices through preauthorization, utilization, or a medical review processes. As mentioned in the *Medical Effectiveness* section, there is some evidence from a small number of studies that utilization management reduces use of some types of DME. A previous study has shown that denials of coverage are particularly common for DME (23% at one medical group and 15% at another medical group) (Kapur et al., 2003). From January 2001 to May 2010, there were 738 Independent Medical Review (IMR)-adjudicated cases that concerned denials of certain DME items; 287 (39%) of these cases were overturned in the favor of the members; in the remaining 451 cases (61%), the plans' original determination was upheld. DME is a benefit that comes under dispute more often than other type of benefit because an enrollee may demand an item for the purpose of "convenience" that is not considered "medically necessary." For example, electric wheelchairs were under dispute for 46 of the cases identified: 38 cases (83%) were upheld in the favor of the plan and 8 (17%) were overturned in the favor of the member. But given the heterogeneity of DME as a category, disputes for some DME items have higher overturn rates. Cases for continuous passive motion machines (CPM) were found in favor of the member in 48% of cases (of 71 total cases), and similarly for insulin pumps the overturn rate was 53% (of 34 total cases). Other commonly disputed items include electric scooters (44), braces (37), wheelchairs (30), and C-Pap machines (23). According to the DMHC, an IMR decision is found in the favor of the member in half of all cases for all benefits. As noted, for all DME cases, less than 40% are found in the favor of the member.

- AB 754 would not prevent plans and insurers from altering their benefit structures to make DME more frequently subject to coinsurance.

To What Extent Would the Mandate Affect Administrative and Other Expenses?

Health care plans and policies include a component for administration and profit in their premiums. In estimating the impact of this mandate on premiums, CHBRP assumed that health plans and policies will apply their existing administration and profit loads to the increase in health care costs produced by the mandate. Therefore, although there may be administrative costs associated with the mandate, administrative costs as a portion of premium were assumed to not change. For example, health plans and policies may implement administrative changes as to how the DME benefit is offered—moving it from a rider¹⁹ to the base plan. In addition, AB 754 would require the plans and policies to notify members and applicants of their DME coverage changes. Health plans and policies may also need to increase staff specialized in utilization management. These administrative changes were assumed to be reflected in the standard administrative cost load associated with premiums.

Impact of the Mandate on Total Health Care Costs

CHBRP estimates that total net expenditures (including total premiums and out-of-pocket expenditures) for DME and services are estimated to increase by \$135,933,000, or 0.18%, as a result of AB 754 (Table 1).

Impacts (Costs or Savings) for Each Category of Payer Resulting From the Benefit Mandate

Changes in total expenditure and PMPM amounts by payer category

The impact is higher for DMHC-regulated plans than for CDI-regulated policies. The increases in expenditures by market result in an annual increase of \$135,933,000 (or 0.18%) in total health care costs in California (Table 1). Across all markets, including those that are unaffected by AB 754 because they already cover DME at parity, premiums are expected to increase by \$276,306,000 or 0.39% (Table 6). The following summarize estimated percent increase in total expenditures and premiums by market segment, post-mandate of AB 754:

- 0.099% or \$1.01 PMPM increase in the large-group DMHC-regulated plans;
- 0.022% or \$0.50 PMPM increase in large-group CDI-regulated policies;
- 0.480% or \$2.94 PMPM increase in the small-group DMHC-regulated plans;
- 0.066% or \$0.96 PMPM increase in the small-group CDI regulated policies;
- 0.846% or \$5.13 PMPM increase in the individual DMHC-regulated plans;

¹⁹ A rider is an endorsement to an insurance policy that modifies provisions of the policy, often adding or excluding coverage. In the case of a DME rider, it could add coverage for one or more items that are excluded in the base policy, or it could modify the member's cost sharing for an already covered item.

- 0.241% or \$1.13 PMPM increase in the individual CDI-regulated policies.

The reason that impacts are greater in the DMHC-regulated plans than for CDI-regulated policies is that to become compliant with AB 754, most CDI-regulated policies would need to make minor reductions to their DME cost sharing to match the cost sharing for other medical benefits. DMHC-regulated plans, conversely, will have to reduce DME cost sharing to \$0, since their cost sharing for other medical benefits is usually expressed as a copayment or a small dollar amount, such as \$20 for an office visit. That is, DMHC-regulated plans would have to transition from coinsurance to copayments to align DME coverage with coverage for other health care services and benefits. Table 4 shows the average estimated changes in annual benefit limits and cost-sharing levels that would likely occur as a result of the mandate.

Though AB 754 is expected to increase the premiums paid by both employer and employee, it would cause a decrease in expenses for covered benefits paid by enrollees (deductibles, copayments, etc.). Total premiums for employers are estimated to increase by \$161,681,000, or 0.37%. Enrollee contributions toward premiums for group insurance are estimated to increase by \$50,314,000, or 0.39%. Total premiums for those with individually purchased insurance are estimated to increase by \$64,311,000, or 1.07%. The average portion of the premium paid by the employer would increase between \$0.38 (CDI-regulated large group market) and \$2.09 (DMHC-regulated small group market) PMPM, and the average portion of the premium paid by enrollees would increase between \$0.12 (CDI-regulated large group market) and \$5.13 (DMHC-regulated individual market) PMPM. However, enrollee expenses for covered benefits (deductibles, copayments, etc.) would decrease between \$0.39 (CDI-regulated large group market) and \$0.91 (DMHC-regulated small group market) PMPM. Thus, total premiums would increase by \$276,306,000, but enrollee out-of-pocket expenses for covered benefits would decrease by \$113,769,000 and enrollee expenses for non-covered benefits would decrease by \$26,604,000.

Impact on public programs

CalPERS HMOs, Medi-Cal HMOs, and the Healthy Families program HMOs are all subject to AB 754 because they are regulated by the DMHC. However, all provide full coverage for DME, with no cost sharing and no annual limits, which is aligned with the mandated benefit offering required under AB 754. Therefore, none are expected to be affected if AB 754 is enacted.

Impact on Long-Term Costs

Longer-term impacts on health care costs as a result of the mandate are unknown but likely to be minimal.

Impact on Access and Health Service Availability

CHBRP expects that there would be minimal impacts on the access to and availability of DME and services as a result of AB 754. To the extent that cost sharing will be reduced and limits will be removed, access would be expected to increase for the small number of enrollees who seek equipment in excess of the annual benefit limit. Nonetheless, utilization review and medical management are expected to mediate the response of the health plans and policies to this increase in demand.

Impact on the Number of Uninsured

The greatest impact on premiums will be in the individually purchased plans (1.41%) of the DMHC-regulated market. Although these premium increases will be largely offset by reductions in out-of-pocket expenditures, the estimated premium increases may result in approximately 1,214 newly uninsured persons.

Table 5. Baseline (Pre-mandate) Per Member Per Month Premium and Total Expenditures by Market Segment, California, 2010

	DMHC-Regulated							CDI-Regulated			Total Amount
	Privately Funded			CalPERS HMOs (b)	Medi-Cal HMOs		Healthy Families Program HMOs (d)	Privately Funded			
	Large Group	Small Group	Individual		65 and Over (c)	Under 65		Large Group	Small Group	Individual	
Total enrollees in plans/policies subject to state Mandates (a)	9,445,000	2,394,000	785,000	820,000	175,000	2,616,000	814,000	324,000	935,000	1,179,000	19,487,000
Total enrollees in plans/policies subject to AB 754	9,445,000	2,394,000	785,000	820,000	175,000	2,616,000	814,000	324,000	935,000	1,179,000	19,487,000
Average portion of premium paid by employer	\$290.96	\$223.84	\$0.00	\$332.10	\$223.00	\$113.00	\$93.19	\$346.40	\$246.40	\$0.00	\$51,713,067,000
Average portion of premium paid by employee	\$72.11	\$92.31	\$364.68	\$58.61	\$0.00	\$0.00	\$11.78	\$105.37	\$79.68	\$180.77	\$18,813,408,000
Total premium	\$363.07	\$316.14	\$364.68	\$390.70	\$223.00	\$113.00	\$104.97	\$451.77	\$326.08	\$180.77	\$70,526,476,000
Enrollee expenses for covered benefits (deductibles, copays, etc.)	\$19.77	\$25.74	\$64.43	\$20.15	\$0.00	\$0.00	\$1.52	\$58.78	\$116.51	\$44.19	\$5,961,186,000
Enrollee expenses for benefits not covered	\$0.06	\$0.39	\$0.87	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.05	\$26,604,000
Total expenditures	\$382.90	\$342.28	\$429.98	\$410.85	\$223.00	\$113.00	\$106.50	\$510.56	\$442.59	\$225.01	\$76,514,266,000

Source: California Health Benefits Review Program, 2010.

Notes: Small discrepancies in numbers among Tables 1, 5, and 6 are due to rounding.

(a) The population includes persons insured with private funds (group and individual) and insured with public funds (e.g., CalPERS HMOs, Medi-cal HMOs, Healthy Families Program, AIM, MRMIP) enrolled in health plans or policies 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 58% or 475,600 are state employees.

(c) Medi-Cal state expenditures for members over 65 years of age include those who also have Medicare coverage.

(d) Healthy Families Program state expenditures include expenditures for the Major Risk Medical Insurance Program (MRMIP) and the Access for Infants and Mothers (AIM) program.

Key: AIM=Access for Infants and Mothers; CalPERS HMOs=California Public Employees' Retirement System Health Maintenance Organizations; MRMIP=Major Risk Medical Insurance Program; CDI=California Department of Insurance; DMHC=Department of Managed Health Care.

Table 6. Impacts of the Mandate on Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2010

	DMHC-Regulated							CDI-Regulated			Total Amount
	Privately Funded			CalPERS HMOs (b)	Medi-Cal HMOs		Healthy Families Program HMOs (d)	Privately Funded			
	Large Group	Small Group	Individual		65 and Over (c)	Under 65		Large Group	Small Group	Individual	
Total enrollees in plans/policies subject to state mandates (a)	9,445,000	2,394,000	785,000	820,000	175,000	2,616,000	814,000	324,000	935,000	1,179,000	19,487,000
Total enrollees in plans/policies subject to AB 754	9,445,000	2,394,000	785,000	820,000	175,000	2,616,000	814,000	324,000	935,000	1,179,000	19,487,000
Average portion of premium paid by employer	\$0.8106	\$2.0933	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.3846	\$0.7286	\$0.0000	\$161,681,000
Average portion of premium paid by employee	\$0.2009	\$0.8511	\$5.1258	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.1170	\$0.2351	\$1.1327	\$114,625,000
Total premium	\$1.0115	\$2.9444	\$5.1258	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.5016	\$0.9637	\$1.1327	\$276,306,000
Enrollee expenses for covered benefits (deductibles, copays, etc)	-\$0.5746	-\$0.9092	-\$0.6151	\$0.0000	\$0.0000	\$0.0000	\$0.0000	-\$0.3914	-\$0.6737	-\$0.5404	-\$113,768,000
Enrollee expenses for benefits not covered	-\$0.0563	-\$0.3936	-\$0.8727	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	-\$0.0492	-\$26,604,000
Total expenditures	\$0.3806	\$1.6416	\$3.6379	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.1101	\$0.2900	\$0.5431	\$135,933,000
Percentage Impact of Mandate											
Insured premiums	0.2786%	0.9314%	1.4056%	0.0000%	0.0000%	0.0000%	0.0000%	0.1110%	0.2955%	0.6266%	0.3918%
Total expenditures	0.0994%	0.4796%	0.8461%	0.0000%	0.0000%	0.0000%	0.0000%	0.0216%	0.0655%	0.2414%	0.1777%

Source: California Health Benefits Review Program, 2010.

Notes: Small discrepancies in numbers among Tables 1, 5, and 6 are due to rounding.

(a) The population includes persons insured with private funds (group and individual) and insured with public funds (e.g., CalPERS HMOs, Medi-cal HMOs, Healthy Families Program, AIM, MRMIP) enrolled in health plans or policies 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 58% or 475,600 are state employees.

(c) Medi-Cal state expenditures for members over 65 years of age include those who also have Medicare coverage.

(d) Healthy Families Program state expenditures include expenditures for the Major Risk Medical Insurance Program (MRMIP) and the Access for Infants and Mothers (AIM) program.

Key: AIM=Access for Infants and Mothers; CalPERS HMOs=California Public Employees' Retirement System Health Maintenance Organizations; MRMIP=Major Risk Medical Insurance Program; CDI=California Department of Insurance; DMHC=Department of Managed Health Care.

PUBLIC HEALTH IMPACTS

AB 754 mandates coverage for durable medical equipment (DME). As described in the *Medical Effectiveness* section, the population most likely to be affected by AB 754 is persons with large DME-related expenses. Many people with large DME-related expenses are in the following categories: persons with diagnoses related to physical disabilities such as musculoskeletal disorders, persons with sequelae from traumatic injuries such as spinal cord injuries and head trauma, persons with respiratory diseases and related conditions needing home oxygen equipment, and persons with diagnoses related to complications of the digestive system.

This section presents the overall public health impact of passage of AB 754, followed by analysis of the potential for reduction in gender and racial/ethnic disparities in health outcomes, and the potential for the mandate to reduce premature death and societal economic losses as a result of DME use and related conditions.

Impact of the Proposed Mandate on the Public's Health

CHBRP estimates that 5.5% of the population in plans subject to AB 754 will use DME each year. As presented in the *Utilization, Cost, and Benefit Coverage Impacts* section, AB 754 is not estimated to result in any additional people newly using DME. Among the current users of DME, it is possible that AB 754 may result in an increased utilization of DME because decreased annual limits and coinsurance could result in some individuals receiving more DME, more expensive DME items, and more frequent replacement of existing DME items. The health benefits associated with this increased utilization as a result of AB 754 are unknown. The *Medical Effectiveness* literature review did not focus on individual types of DME, on the health outcomes of increased utilization of currently used DME, or on more expensive DME. It is possible that some individuals may benefit from some of the amenities of more expensive DME items or from more DME, but CHBRP is not able to estimate this impact. Therefore, the impact on health outcomes is unknown.

As presented in the *Utilization, Cost, and Benefit Coverage Impacts* section, it is estimated that there are nearly 72,000 DME users who currently have \$26.6 million in expenses for noncovered benefits. AB 754 would extend coverage for DME to these users and shift the financial burden for paying for DME from the patient to the insurer. In addition, there are 556,000 DME users whose expanded scope of DME coverage would reduce their out-of-pocket expenses. Pre-mandate, the average annual DME-related out-of-pocket expense among the insured population is \$110—ranging from \$6.50 to \$6,500 per user. Approximately 61.7% of DME users have annual out-of-pocket expenses between \$0 and \$50, 10.1% have annual out-of-pocket expenses between \$51 and \$100, 10.7% have annual out-of-pocket expenses between \$101 and \$200, 13.5% have annual out-of-pocket expenses between \$201 and \$500, and 4.1% of DME claimants have annual DME-related out-of-pocket expenses of more than \$500. It is estimated that post-mandate, this population of DME users would see a reduction in their financial burden of \$114 million.

AB 754 is expected to increase the amount of DME used by each current DME user, but the impact on health outcomes of this increase is unknown. There will be a reduction in administrative and financial burden for 72,000 newly covered DME users as well as for the 556,000 DME users with an increase in their scope of DME coverage.

Impact on the Health of the Community Where Gender and Racial Disparities Exist

Several competing definitions of “health disparities” exist. CHBRP relies on the following definition 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.”

CHBRP investigated the effect that AB 754 would have on health disparities by gender, race, and ethnicity. Evaluating the impact on racial and ethnic disparities is particularly important because racial and ethnic minorities report having poorer health status and worse health indicators (KFF, 2007). One important contributor to racial and ethnic health disparities is differential insurance rates, where minorities are more likely than whites to be uninsured; however, disparities still exist within the insured population (Kirby et al., 2006; Lillie-Blanton and Hoffman, 2005). Since AB 754 would only affect the insured population, a literature review was conducted to determine whether there are gender, racial, or ethnic disparities associated with the prevalence, treatment, and outcomes for utilization of DME outside of disparities in obtaining health insurance coverage.

Freedman et al. (2004) examined socioeconomic disparities in the use of DME in the Medicare Managed Care population and did not find statistically significant differences between genders and races. Another study found that females over age 65 years were more likely to use mobility-related DME compared to men over 65 (Mathieson et al., 2002). Another study of individuals aged 65 and over found that minorities use mobility devices in accordance with their underlying need (Cornman and Freedman, 2008). AB 754, however, applies primarily to the non-Medicare population. The 2001 California Health Interview Survey (CHIS) data and the 2007 Medical Expenditure Panel Survey (MEPS) data contain information on DME utilization by gender and race for the population specific to AB 754.

Gender

According to the CHIS data, there were no statistically significant gender differences among insured Californian adults under 65 years reporting having a health problem that required special equipment (CHIS, 2001). CHBRP’s analysis of Milliman’s national claims database found that males and females use DME at similar rates. The national MEPS data found that out-of-pocket costs, total expenses, and average expenses were similar for males and females (MEPS, 2007). Based on these data, AB 754 is not expected to have an impact on overall gender disparities in health.

Race

Among insured Californian adults under 65 years, Native Americans and African-Americans reported higher rates of having a health problem that require special equipment compared to

other racial or ethnic groups (CHIS, 2001). The national MEPS data found that out-of-pocket costs, total expenses, and average expenses were similar across different racial and ethnic groups (MEPS, 2007). A literature search identified studies that found disparities in the receipt of DME, with minority veterans less likely to obtain DME compared to non-Latino whites, minorities with traumatic spinal cord injuries less likely to have customized wheelchairs compared to non-Latino whites, and minorities less likely to use high-tech assistive technology devices compared to non-Latino whites (Hunt et al., 2004; Kaye et al., 2008; Weaver et al., 1999). The extent to which greater access to customized, higher-tech DME improves health outcomes is unknown.

Existing data on utilization of DME and DME-related expenses indicate that there are no significant differences by gender or race/ethnicity. Therefore, AB 754 is not expected to have an impact on gender or racial disparities in health status.

The Extent to Which the Proposed Service Reduces Premature Death and the Economic Loss Associated With Disease

Both premature death and economic loss associated with disease are two measures used by economists and public health experts as a way to assess the impact of a condition or disease. Premature death, often defined as death before the age of 75 (Cox, 2006), can be measured in years of potential life lost (YPLL) (Cox, 2006; Gardner and Sanborn, 1990). Economic loss associated with disease is generally an estimation of the value of the YPLL in dollar amount (i.e., valuation of years of work life lost from premature death or lost productivity due to disease or condition).

Premature Death

For some people, the provision of DME is a necessity for survival, particularly for those dependent on home oxygen equipment and parenteral IV nutrition. However, it is not expected that AB 754 will result in more people using these forms of DME and therefore is not expected to reduce premature death.

Economic Loss

Although the economic costs associated with the broad spectrum of diseases and conditions related to DME are unknown, researchers have estimated that many of the health conditions associated with DME utilization have substantial economic costs. For example, cerebral palsy was estimated to cost \$921,000 per person with the condition over their lifetime (CDC, 2004), and chronic obstructive pulmonary disease was estimated to cost the United States \$38.8 billion annually (Foster et al., 2006). One study estimated that adults aged 18 to 64 years with disabilities (including both physical and cognitive disabilities) have substantially lower employment rates and earn less compared to nondisabled (Yelin et al., 2006).

No literature was identified that examined the impact of utilization of DME on increased productivity. In addition, this analysis does not assume that there will be any new users of DME as a result of AB 754. The increases in costs per DME user that is included as part of the *Utilization, Cost, and Benefit Coverage Impacts* section assumes that current DME users will either use more DME or will use more expensive DME in response to a reduction in out-of-

pocket costs for DME. The *Medical Effectiveness* section did not identify any literature that discussed the health outcomes of using more units of DME or more expensive DME.

Although previous research has estimated that many of the health conditions associated with DME utilization have substantial societal costs, the impact of AB 754 on the economic loss associated with DME-related diseases and conditions is unknown.

Long-Term Public Health Impacts

As presented in the *Utilization, Cost, and Benefit Coverage Impacts* section AB 754 is expected to increase premiums in the DMHC-regulated individual market by 1.41%, thus increasing the number of uninsured by approximately 1,214 people. Research has shown that having health insurance is associated with increased health care consumption and better health. 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 (Freeman et al., 2008; Hadley et al., 2003). One study found that children without health insurance had a significantly increased risk of in-hospital mortality compared to children with insurance (Abdullah et al., 2009). A recent systematic review reported that the health benefits of health insurance coverage has been robustly demonstrated for those with acute or chronic illnesses such as hypertension, coronary heart disease, congestive heart failure, cerebrovascular disease, diabetes, HIV infection, depressive symptoms, acute myocardial infarction, and acute respiratory conditions (McWilliams, 2009).

According to the California Health Insurance Survey, individuals who are currently insured are statistically significantly more likely to be in good health compared to those who are not insured (CHIS, 2007). 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 problems emerge (Lave et al., 1998).

APPENDICES

Appendix A: Text of Bill Analyzed

On April 23, 2010, the Senate Committee on Health requested CHBRP to analyze the following submitted text for AB 754. Below is the bill as introduced. Following is the text of the bill as will be amended as indicated by the Bill Author.

ASSEMBLY BILL No. 754

Introduced by Assembly Member Chesbro

An act to add Section 1367.28 to the Health and Safety Code, and to add Section 10123.24 to the Insurance Code, relating to health care coverage.

SECTION 1. Section 1367.28 is added to the Health and Safety Code, to read:

1367.28. (a) Every health care service plan, except a specialized health care service plan, that covers hospital, medical, or surgical expenses on a group or individual basis that is issued, amended, received, or delivered on or after January 1, 2011, shall provide coverage for durable medical equipment (DME) and services under the terms and conditions that may be agreed upon between the subscriber and the plan. Every plan shall communicate the availability of that coverage to all group or individual contractholders and to all prospective group or individual contractholders with whom it is negotiating. Coverage for DME shall provide for coverage when the equipment, including original and replacement devices, is prescribed by a physician and surgeon or doctor of podiatric medicine acting within the scope of his or her license, or is ordered by a licensed health care provider acting within the scope of his or her license. Every plan shall have the right to conduct a utilization review to determine medical necessity prior to authorizing these services.

(b) The amount of the benefit for DME and services shall be no less than the annual and lifetime benefit maximums applicable to the basic health care services required to be provided under Section 1367. If the contract does not include any annual or lifetime benefit maximums applicable to basic health care services, the amount of the benefit for DME and services shall not be subject to an annual or lifetime maximum benefit level. Any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and services shall be no more than the most common amounts applied to the basic health care services required to be provided under Section 1367.

(c) "Durable medical equipment" consists of equipment that is used for the treatment of a medical condition or injury or to preserve the patient's functioning and that is designed for repeated use and includes, but is not limited to, manual and motorized wheelchairs, scooters, oxygen equipment, crutches, walkers, electric beds, shower and bath seats, and mechanical patient lifts.

SEC. 2. Section 10123.24 is added to the Insurance Code, to read:

10123.24. (a) On and after January 1, 2011, every insurer issuing group or individual health insurance shall provide coverage for durable medical equipment (DME) and services under the terms and conditions that may be agreed upon between

the policyholder and the insurer. Every insurer shall communicate the availability of that coverage to all group or individual policyholders and to all prospective group or individual policyholders with whom it is negotiating. Coverage for DME shall provide for coverage when the equipment, including original and replacement devices, is prescribed by a physician and surgeon or doctor of podiatric medicine acting within the scope of his or her license, or is ordered by a licensed health care provider acting within the scope of his or her license. Every insurer shall have the right to conduct a utilization review to determine medical necessity prior to authorizing these services.

(b) The amount of the benefit for DME and services shall be no less than the annual and lifetime benefit maximums applicable to all benefits in the policy. Any copayment, coinsurance, deductible, and maximum out-of-pocket amount applied to the benefit for DME and services shall be no more than the most common amounts contained in the policy.

(c) "Durable medical equipment" consists of equipment that is used for the treatment of a medical condition or injury or to preserve the patient's functioning and that is designed for repeated use and includes, but is not limited to, manual and motorized wheelchairs, scooters, oxygen equipment, crutches, walkers, electric beds, shower and bath seats, and mechanical patient lifts.

(d) This section shall not apply to specialized health insurance, Medicare supplement, short term limited duration health insurance, CHAMPUS supplement insurance, TRICARE supplement, or to hospital indemnity, accident only, or specified disease insurance.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

Appendix B: Literature Review Methods

Appendix B describes methods used in the medical effectiveness literature review for AB 754, a bill that would require health plans to provide coverage for durable medical equipment (DME) at parity with coverage for medical services.

DME encompasses such a wide range of devices and products that a systematic review of the literature on the effectiveness of all of these devices and products was not feasible nor relevant to the intent of AB 754. Instead, CHBRP focused the literature review for this bill on the impact of coverage for DME. The literature search encompassed articles and reports on the impact of having insurance versus no insurance for DME, as well as the literature on the effect of having more generous coverage for DME (e.g., larger annual or lifetime maximum, or lower deductibles, copayments, or coinsurance).

For all topics, the literature search was limited to articles published in English. The search encompassed all pertinent studies published from January 2009 to present because CHBRP conducted searches for literature published prior to that time for its reports on SB 1198, and AB 214, two bills regarding DME coverage that were introduced in 2008 and 2009, respectively. PubMed, the Cumulative Index of Nursing and Allied Health Literature, the Web of Science, the Cochrane Register of Controlled Clinical Trials, EconLit, and Business Source Complete were searched. Web sites maintained by the following organizations were also searched: the Agency for Healthcare Research and Quality, the American Academy of Actuaries, America's Health Insurance Plans, the California Health Care Foundation, the Center for Studying Health System Change, the Commonwealth Fund, the Congressional Budget Office, the Employee Benefits Research Institute, the Kaiser Family Foundation, the National Association of Health Underwriters, the National Bureau of Economic Research, the National Health Service Centre for Reviews and Dissemination, the National Institute for Health and Clinical Excellence, the New America Foundation, RAND, the Robert Wood Johnson Foundation, the Society of Actuaries, the Urban Institute, Disability Rights California, Californians for Disability Rights, Inc., and Disability Rights Education and Defense Fund. The results of this literature search were combined with literature retrieved for CHBRP's analyses of SB 1198 and AB 214.

The literature search yielded a total of 296 abstracts regarding DME. At least two reviewers screened the title and abstract of each citation returned by the literature search to determine eligibility for inclusion. The reviewers obtained the full text of articles that appeared to be eligible for inclusion in the review and reapplied the initial eligibility criteria. No studies met the inclusion criteria. The AB 754 medical effectiveness review included seven articles that were in the medical effectiveness review for SB 1198 and one additional article included in the review for AB 214.

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

The grading system also contains an overall conclusion that encompasses findings in these five domains. 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 used to characterize the body of evidence regarding an outcome.

- Clear and convincing evidence
- Preponderance of evidence
- 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 are well-implemented, randomized controlled trials (RCTs) and report statistically significant and clinically meaningful findings that favor the intervention.

The conclusion characterizes the evidence as “preponderance of evidence” that an intervention has a favorable effect if most but not all five criteria are met. For example, for some interventions, the only evidence available is from nonrandomized studies or from small RCTs with weak research designs. If most such studies that assess an outcome have statistically and clinically significant findings that are in a favorable direction and enroll populations similar to those covered by a mandate, the evidence would be classified as a “preponderance of evidence favoring the intervention.” In some cases, the preponderance of evidence may indicate that an intervention has no effect or has an unfavorable effect.

The evidence is presented as “ambiguous/conflicting” if their findings 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 indicates that available evidence is not sufficient to determine whether or not a health care service is effective. It is used when no research studies have been completed or when only a small number of poorly designed studies are available. It is not the same as “evidence of no effect.” A health care service for which there is insufficient evidence might or might not be found to be effective if more evidence were available.

Search Terms

The search terms used to locate studies relevant to AB 754 were as follows.

MeSH Terms Used to Search PubMed and CINAHL²⁰

MeSH Terms Used to Search PubMed

Activities of Daily Living
Atmosphere Exposure Chambers/Economics
Atmosphere Exposure Chambers/Statistics And Numerical Data
Atmosphere Exposure Chambers/Supply And Distribution
Atmosphere Exposure Chambers/Trends
Atmosphere Exposure Chambers/Utilization
Bandages/Economics
Bandages/Statistics And Numerical Data
Bandages/Supply And Distribution
Bandages/Trends
Bandages/Utilization
Catheters, Indwelling/Economics
Catheters, Indwelling/Statistics And Numerical Data
Catheters, Indwelling/Supply And Distribution
Catheters, Indwelling/Trends
Catheters, Indwelling/Utilization
Contraceptive Devices/Economics
Contraceptive Devices/Statistics And Numerical Data
Contraceptive Devices/Supply And Distribution
Contraceptive Devices/Trends
Contraceptive Devices/Utilization
Cost Savings
Costs And Cost Analysis
Costs And Cost Analysis
Diagnostic Equipment/Economics
Diagnostic Equipment/Statistics And Numerical Data
Diagnostic Equipment/Supply And Distribution
Diagnostic Equipment/Trends
Diagnostic Equipment/Utilization
Durable Medical Equipment
Durable Medical Equipment
Durable Medical Equipment/Classification
Durable Medical Equipment/Economics
Durable Medical Equipment/Standards
Durable Medical Equipment/Statistics And Numerical Data
Durable Medical Equipment/Supply And Distribution

²⁰ CINAHL = Cumulative Index of Nursing and Allied Health Literature

Durable Medical Equipment/Trends
Durable Medical Equipment/Utilization
Employees
Employment
Equipment And Supplies
Equipment And Supplies/Economics
Equipment And Supplies, Hospital/Economics
Equipment And Supplies, Hospital/Statistics And Numerical Data
Equipment And Supplies, Hospital/Supply And Distribution
Equipment And Supplies, Hospital/Trends
Equipment And Supplies, Hospital/Utilization
Equipment And Supplies/Supply And Distribution
Equipment And Supplies/Trends
Equipment And Supplies/Utilization
Evaluation Studies As Topic
Gastric Balloon/Economics
Gastric Balloon/Statistics And Numerical Data
Gravity Suits/Economics
Gravity Suits/Statistics And Numerical Data
Gravity Suits/Supply And Distribution
Gravity Suits/Utilization
Health Care
Health Care Costs
Health Expenditures
Healthcare Costs
Healthcare Disparities
Incubators/Economics
Incubators/Trends
Infant Equipment/Economics
Infant Equipment/Statistics And Numerical Data
Infant Equipment/Supply And Distribution
Infant Equipment/Trends
Infant Equipment/Utilization
Infusion Pumps/Economics
Infusion Pumps/Statistics And Numerical Data
Infusion Pumps/Supply And Distribution
Infusion Pumps/Trends
Infusion Pumps/Utilization
Insurance Claim Review
Insurance Coverage
Insurance, Health
Insurance, Health, Reimbursement
Intermittent Pneumatic Compression Devices/Economics
Intermittent Pneumatic Compression Devices/Statistics And Numerical Data
Intermittent Pneumatic Compression Devices/Supply And Distribution
Intermittent Pneumatic Compression Devices/Trends

Intermittent Pneumatic Compression Devices/Utilization
Rehabilitation
Sickness Impact Profile
Social Class
Socioeconomic Factors
Utilization Review

MeSH terms used to search CINAHL

Attitude Of Health Personnel
Costs And Cost Analysis
Decision Making, Clinical
Economic Aspects Of Illness
Equipment And Supplies
Equipment And Supplies
Health Personnel
Health Personnel
Healthcare Disparities
Insurance Coverage
Insurance, Health
Insurance, Health, Reimbursement
Outcome Assessment
Outcomes (Health Care)
Quality Of Life

Keywords used to search PubMed, Cochrane Library, Econlit, Web of Science, and relevant websites

Ability to Return to Work
Ability to Work
African-American
Anesthesiology Equipment Industry
Annual Maximum Benefit
Arch Support
Arch Supports
Bed sore Treatment Equipment Industry
Biomedical Transducer Industry
Braces
Break-Even Analysis
Burn Treatment Equipment Industry
Cancer Treatment Equipment Industry
Canes
Cardiovascular Equipment Industry
Cerebrovascular Equipment

Change in Utilization
Changes in Utilization
Coinsurance
Comparative Effectiveness
Contracting Out -- Economic Aspects
Copayment*
Cost Analyses
Cost Analysis
Cost Control
Cost Effective
Cost Effectiveness
Cost Estimates
Cost Shifting
Cost To Society
Coverage
Crutches
Decubitus Care
Deductible*
Deductibles Dental Instruments & Apparatus Industry
Dental Insurance
Diabetes Treatment Equipment Industry
Diabetic Shoe*
Disparit*
Disparities
Disparity
DME
Dmpos
Durable Medical Device
Durable Medical Devices
Durable Medical Equipment
Durable Medical Equipment, Prosthetics, Orthotics, Supplies
Employee*
Employer-Sponsored Health Insurance
Employment
Enteral Pump
Enteral Pumps
Equipment
Ethnicity
Evaluation Studies
Expenditures Invested
Expenditures Per Quality Adjusted Life Year Gained
Expenditures Saved
Gender
Glucometer
Group Health Insurance
Health Care

Health Insurance
Health Spending Schema
Hispanic
Hospital Bed
Inability to Return To Work
Inability to Work
Incontinence Appliances
Incontinence Supplies
Industry
Indwelling Catheters
Infusion Pumps
Insulin Infusion
Insurance
Insurance Claim Review
Insurance Coverage
Insurance Coverage (Insurance Same (Utilization))
Insurance, Major Medical
Intermittent Pneumatic Compression Devices
Intermittent Positive-Pressure
Intermittent Positive-Pressure Breathing
Ipcd
Ippb
Knee Orthosis
Level Of Coverage
Lifetime Maximum Benefit
Managed Care Plans Medical Care
Managed Competition
Mechanical Ventilators
Medicaid
Medical Instruments & Apparatus Industry
Medical Payments Insurance
Medicare
Mental Health Insurance
Monitoring Equipment
National Health Insurance
Nebulizers
Needs Assessment
Neuromuscular Electrical Nerve Stimulators
Optometric Services Insurance
Orthopedic Device
Orthopedic Devices
Orthopedic Equipment
Orthopedic Inserts
Orthopedic Shoes
Orthoses
Orthosis

Ostomy
Outcome Assessment
Oxygen Inhalation Therapy
Oxygenators
Parenteral Nutrition
Parenteral Pump
Parenteral Pumps
Parity
Patient Lift
Patient Lifts
Pharmaceutical Services Insurance
Poor
Productivity
Productivity Costs
Race
Racial
Racial Disparit*
Reimbursement
Resource Allocation
Return to School
Rib Belt
Rollabout Chair
Rollabout Chairs
Self-Help Devices
Sex Differences
Shadow Prices
Shoe Lift
Shoe Lifts
Sickness Impact Profile
Single-Payer Health Care
Societal
Societal Cost
Societal Costs
Society
Target Costing
Technological Innovations -- Economic Aspects
Transcutaneous Electric Nerve Stimulation
Transducers
Trusses
Utilisation
Utilization
Utilization Review
Value Analysis Cost Control
Vaporizers
Voluntary Employees' Beneficiary Associations
Walker

Wheelchairs

Publication Types

Comparative Study

Controlled Clinical Trial

Evaluation Studies

Meta-Analysis

Practice Guideline

Randomized Controlled Trial

Review

Validation Studies

Appendix C: Summary Findings on Medical Effectiveness

Appendix C describes the studies on the effects of health insurance on use of durable medical equipment (DME) that were analyzed by the medical effectiveness team. Tables C-1 and C-2 include information about two studies on the effects of health insurance on use of DME that were reviewed for the report CHBRP issued on SB 1198, a similar bill introduced in 2008, and a single study that was added for the medical effectiveness review for AB 214 in 2009. The literature search for AB 754 identified no new studies. For each study, Table C-1 presents the citation and information about the type of study, relationship(s) assessed, population studied, and location at which a study was conducted. Table C-2 summarizes findings from these studies.

Table C-1. Characteristics of Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment

Citation	Type of Trial ²¹	Relationship Assessed	Population Studied	Location
Agree et al., 2004	Level III—Cross-sectional survey	Impact of privately funded insurance (either primary carrier or Medicare supplemental carrier) ²² on use of durable medical equipment alone or in combination with informal or formal personal care services	5,792 adults age 50 yrs or older who have difficulty transferring (e.g., getting out of bed), walking, or going outside	United States—national sample
Litaker and Cebul, 2003	Level III—Cross-sectional survey	Impact of being continuously insured on difficulty obtaining medical equipment/supplies or prescription medications	15,613 adults aged 18 to 98 yrs	Ohio

²¹ Level I=Well-implemented RCTs and cluster RCTs, Level II=RCTs and cluster RCTs with major weaknesses, Level III=Nonrandomized studies that include an intervention group and one or more comparison group, time series analyses, and cross-sectional surveys, Level IV=Case series and case reports, Level V=Clinical/practice guidelines based on consensus or opinion.

²² This study included some persons who were age 65 years or older for whom Medicare was their primary form of health insurance. Some of these persons had privately funded supplemental insurance (i.e., Medigap policies). Among subjects who were age 50 to 64 years, some subjects had privately funded insurance as their primary form of health insurance. Others were enrolled in Medicare or Medicaid due to their disability or were uninsured.

Table C-1. Characteristics of Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment (Cont'd)

Citation	Type of Trial	Relationship Assessed	Population Studied	Location
Resnik and Allen, 2006	Level III—Cross-sectional survey	Impact of being privately insured on use of any assistive device to improve mobility (i.e., cane, crutches, walker, wheelchair, electric wheelchair, motorized scooter)	7,148 adults who had difficulty walking	United States—national sample

Table C-2. Findings from Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment

Continuously Insured versus Intermittently Insured versus Uninsured

Citation	Outcome	Research Design ²³	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Litaker and Cebul, 2003	Difficulty obtaining medical equipment/supplies or prescription medications	Level III—Cross-sectional survey	<ul style="list-style-type: none"> No formal test of statistical significance performed 	<ul style="list-style-type: none"> % persons reporting difficulty was lower for continuously insured persons than for intermittently insured or uninsured persons 	<ul style="list-style-type: none"> Continuously insured=1% Intermittently insured=4% Uninsured=6% 	<ul style="list-style-type: none"> This study is only somewhat generalizable to the population that would be affected by AB 754 because it included persons enrolled in Medicare, a group to whom AB 754 would not apply. In addition, the findings are not fully generalizable because the authors asked respondents about both medical equipment/supplies and prescription medication, whereas AB 754 applies only to durable medical equipment.

Key: DME=durable medical equipment.

²³ Level I=Well-implemented RCTs and cluster RCTs Level II=RCTs and cluster RCTs with major weaknesses, Level III=Nonrandomized studies that include an intervention group and one or more comparison group, time series analyses, and cross-sectional surveys, Level IV=Case series and case reports, Level V=Clinical/practice guidelines based on consensus or opinion.

Table C-2. Findings from Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment (Cont'd)

Privately Funded Health Insurance (Primary or Supplemental) versus No Insurance or Only Medicare

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Agree et al., 2004	Use of durable medical equipment for mobility a. Alone b. With informal care c. With formal care	Level III— Cross-sectional survey	a. Not statistically significant b. Not statistically significant c. Not statistically significant	a. No difference b. No difference c. No difference	a. No difference b. No difference c. No difference	<ul style="list-style-type: none"> This study is only somewhat generalizable to the population that would be affected by AB 754 because it included persons enrolled in Medicare, a group to whom AB 754 would not apply.

Privately Funded Health Insurance (Primary or Supplemental) versus Medicaid Only or Dual Medicare-Medicaid Coverage

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Agree et al., 2004	Use of durable medical equipment for mobility a. Alone b. With informal care c. With formal care	Level III— Cross-sectional survey	a. Not statistically significant b. Not statistically significant c. Statistically significant	a. No difference b. No difference c. Persons on Medicaid or Dually-Eligible for Medicare and Medicaid were more likely to use	a. No difference b. No difference c. OR=2.42 (p<0.01)	<ul style="list-style-type: none"> This study is only somewhat generalizable to the population that would be affected by AB 754 because it included persons enrolled in Medicare, a group to whom AB 754 would not apply.

Key: OR=odds ratio.

Table C-2. Findings from Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment (Cont'd)

Privately Funded Health Insurance (Primary or Supplemental) versus No Insurance

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Resnik and Allen, 2006	Use of any assistive device to improve mobility (i.e., cane, crutches, walker, wheelchair, electric wheelchair, motorized scooter)	Level III— Cross-sectional survey	<ul style="list-style-type: none"> Statistically significant 	<ul style="list-style-type: none"> Persons who did not have insurance were less likely to use mobility devices 	<ul style="list-style-type: none"> OR=0.59 (0.42-0.84) 	<ul style="list-style-type: none"> This study is only somewhat generalizable to the population that would be affected by AB 754 because it included persons enrolled in Medicare, a group to whom AB 754 would not apply.

Key: OR=odds ratio.

Privately Funded Health Insurance (Primary or Supplemental) versus Medicaid

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Resnik and Allen, 2006	Use of any assistive device to improve mobility	Level III— Cross-sectional survey	<ul style="list-style-type: none"> Not statistically significant 	<ul style="list-style-type: none"> No difference 	<ul style="list-style-type: none"> OR=1.00 (0.84-1.10) 	<ul style="list-style-type: none"> This study is only somewhat generalizable to the population that would be affected by AB 754 because it included persons enrolled in Medicare, a group to whom AB 754 would not apply.

Key: OR=odds ratio.

Table C-2. Findings from Published Studies on the Impact of Health Insurance on Use of Durable Medical Equipment (Cont'd)

Privately Funded Health Insurance (Primary or Supplemental) versus Any Publicly Funded Insurance Other than Medicaid

Citation	Outcome	Research Design	Statistical Significance	Direction of Effect	Size of Effect	Generalizability
Resnik and Allen, 2006	Use of any assistive device to improve mobility	Level III— Cross-sectional survey	<ul style="list-style-type: none"> • Not statistically significant 	<ul style="list-style-type: none"> • No difference 	<ul style="list-style-type: none"> • OR=1.10 (0.84-1.20) 	<ul style="list-style-type: none"> • This study is only somewhat generalizable to the population that would be affected by AB 754 because it included persons enrolled in Medicare, a group to whom AB 754 would not apply.

Key: OR=odds ratio

Appendix D: Cost Impact Analysis: Data Sources, Caveats, and Assumptions

This appendix describes data sources, as well as general and mandate-specific caveats and assumptions used in conducting the cost impact analysis. For additional information on the cost model and underlying methodology, please refer to the CHBRP Web site at http://www.chbrp.org/analysis_methodology/cost_impact_analysis.php.

The cost analysis in this report was prepared by the Cost Team, which consists of CHBRP task force members and staff, specifically from the University of California, Los Angeles, and Milliman Inc. (Milliman). Milliman is an actuarial firm that provides data and analyses per the provisions of CHBRP's authorizing legislation.

Data Sources

In preparing cost estimates, the Cost Team relies on a variety of data sources as described below.

Health Insurance

1. The latest (2007) California Health Interview Survey (CHIS), which is used to estimate health insurance for California's population and distribution by payer (i.e., employment-based, individually purchased, or publicly financed). The biannual CHIS is the largest state health survey conducted in the United States, collecting information from over approximately 53,000 households. More information on CHIS is available at www.chis.ucla.edu. The population estimates for both adults and children from 2007 were adjusted to reflect the following trends as of 2009 from the data sources listed: 1) the increase in the total non-institutionalized population in California, from the California Department of Finance; 2) the decrease in private market coverage (both group- and individual-level), from the CHBRP Annual Premium and Enrollment Survey, and 3) the increase in all types of public coverage, from enrollment data available from the Centers for Medicare & Medicaid Services, the California Medical Statistics Section, and the Managed Risk Medical Insurance Board. The residual population after accounting for these trends was assumed to be uninsured.
2. The latest (2009) California Employer Health Benefits Survey is used to estimate:
 - size of firm,
 - percentage of firms that are purchased/underwritten (versus self-insured),
 - premiums for health care service plans regulated by the Department of Managed Health Care (DMHC) (primarily health maintenance organizations [HMOs] and Point of Service Plans [POS]),
 - premiums for health insurance policies regulated by the California Department of Insurance (CDI) (primarily preferred provider organizations [PPOs] and fee-for-service plans [FFS]), and

- premiums for high deductible health plans (HDHPs) for the California population with employment-based health insurance.
3. This annual survey is currently released by the California Health Care Foundation/National Opinion Research Center (CHCF/NORC) and is similar to the national employer survey released annually by the Kaiser Family Foundation and the Health Research and Educational Trust. Information on the CHCF/NORC data is available at:
<http://www.chcf.org/topics/healthinsurance/index.cfm?itemID=133543>. Milliman data sources are relied on to estimate the premium impact of mandates. Milliman's projections derive from the Milliman Health Cost Guidelines (HCGs). The HCGs are a health care pricing tool used by many of the major health plans in the United States. See www.milliman.com/expertise/healthcare/products-tools/milliman-care-guidelines/index.php. Most of the data sources underlying the HCGs are claims databases from commercial health insurance plans. The data are supplied by health insurance companies, Blues plans, HMOs, self-funded employers, and private data vendors. The data are mostly from loosely managed healthcare plans, generally those characterized as preferred provider plans or PPOs. The HCGs currently include claims drawn from plans covering 4.6 million members. In addition to the Milliman HCGs, CHBRP's utilization and cost estimates draw on other data, including the following:
- The MarketScan Database, which includes demographic information and claim detail data for approximately 13 million members of self-insured and insured group health plans.
 - An annual survey of HMO and PPO pricing and claim experience. The most recent survey (2008 Group Health Insurance Survey) contains data from seven major California health plans regarding their 2007 experience.
 - Ingenix MDR Charge Payment System, which includes information about professional fees paid for healthcare services, based upon approximately 800 million claims from commercial insurance companies, HMOs, and self-insured health plans.
 - These data are reviewed for applicability by an extended group of experts within Milliman but are not audited externally.
4. An annual survey by CHBRP of the seven largest providers of health insurance in California (Aetna, Anthem Blue Cross of California, Blue Shield of California, CIGNA, Health Net, Kaiser Foundation Health Plan, and PacifiCare) to obtain estimates of baseline enrollment by purchaser (i.e., large and small group and individual), type of plan (i.e., DMHC or CDI-regulated), cost sharing arrangements with enrollees, and average premiums. Enrollment in plans or policies offered by these seven firms represents 95.9% of the persons with privately funded health insurance subject to state mandates. This figure represents 98.0% of enrollees in full service (non-specialty), privately funded DMHC-regulated health plan contracts and 85.3% of enrollees in full service (non-specialty), privately funded CDI-regulated policies.

Publicly funded insurance subject to state benefit mandates

5. Premiums and enrollment in DMHC-regulated health plans and CDI-regulated policies by self-insured status and firm size are obtained annually from CalPERS for active state and local government public employees and their dependents who receive their benefits through CalPERS. Enrollment information is provided for DMHC-regulated health care service plans covering non-Medicare beneficiaries—about 74% of CalPERS total enrollment. CalPERS self-funded plans—approximately 26% of enrollment—are not subject to state mandates. In addition, CHBRP obtains information on current scope of benefits from evidence of coverage (EOCs) documents publicly available at www.calpers.ca.gov.
6. Enrollment in Medi-Cal Managed Care (DMHC-regulated health plans) is estimated based on CHIS and data maintained by the Department of Health Care Services (DHCS). DHCS supplies CHBRP with the statewide average premiums negotiated for the Two-Plan Model, as well as generic contracts that summarize the current scope of benefits. CHBRP assesses enrollment information online at <http://www.dhcs.ca.gov/dataandstats/statistics/Pages/BeneficiaryDataFiles.aspx>.
7. Enrollment data for other public programs—Healthy Families Program (HFP), Access for Infants and Mothers (AIM), and the Major Risk Medical Insurance Program (MRMIP)—are estimated based on CHIS and data maintained by the Managed Risk Medical Insurance Board (MRMIB). The basic minimum scope of benefits offered by participating health plans under these programs must comply with all requirements for DMHC-regulated health plans, and thus these plans are affected by state-level benefit mandates. CHBRP does not include enrollment in the Post-MRMIP Guaranteed-Issue Coverage Products as these persons are already included in the enrollment for individual market health insurance offered by DMHC-regulated plans or CDI-regulated insurers. Enrollment figures for AIM and MRMIP are included with enrollment for Medi-Cal in presentation of premium impacts. Enrollment information is obtained online at www.mrmib.ca.gov/. Average statewide premium information is provided to CHBRP by MRMIB staff.

General Caveats and Assumptions

The projected cost estimates are estimates of the costs that would result if a certain set of assumptions were exactly realized. Actual costs will differ from these estimates for a wide variety of reasons, including:

- Prevalence of mandated benefits before and after the mandate may be different from CHBRP assumptions.
- Utilization of mandated benefits (and, therefore, the services covered by the benefit) before and after the mandate may be different from CHBRP assumptions.
- Random fluctuations in the utilization and cost of health care services may occur.

Additional assumptions that underlie the cost estimates presented in this report are:

- Cost impacts are shown only for plans and policies subject to state benefit mandate laws.
- Cost impacts are only for the first year after enactment of the proposed mandate
- Employers and employees will share proportionately (on a percentage basis) in premium rate increases resulting from the mandate. In other words, the distribution of premium paid by the subscriber (or employee) and the employer will be unaffected by the mandate.
- For state-sponsored programs for the uninsured, the state share will continue to be equal to the absolute dollar amount of funds dedicated to the program.
- When cost savings are estimated, they reflect savings realized for one year. Potential long-term cost savings or impacts are estimated if existing data and literature sources are available and provide adequate detail for estimating long-term impacts. For more information on CHBRP's criteria for estimating long-term impacts please see: http://www.chbrp.org/analysis_methodology/cost_impact_analysis.php.
- Several recent studies have examined the effect of private insurance premium increases on the number of uninsured (Chernew, et al., 2005; Hadley 2006; Glied and Jack 2003). 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 persons (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 persons 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. For more information on CHBRP's criteria for estimating impacts on the uninsured please see: http://www.chbrp.org/analysis_methodology/cost_impact_analysis.php.

There are other variables that may affect costs, but which CHBRP did not consider in the cost projections presented in this report. Such variables include, but are not limited to:

- Population shifts by type of health insurance: If a mandate increases health insurance costs, some employer groups and persons may elect to drop their health insurance. Employers may also switch to self-funding to avoid having to comply with the mandate.
- Changes in benefit plans: To help offset the premium increase resulting from a mandate, subscribers/policyholders may elect to increase their overall plan deductibles or copayments. Such changes would have a direct impact on the distribution of costs between the health plan and policies and enrollees, and may also result in utilization reductions (i.e., high levels of patient cost sharing result in lower utilization of health care

services). CHBRP did not include the effects of such potential benefit changes in its analysis.

- Adverse selection: Theoretically, persons or employer groups who had previously foregone health insurance may now elect to enroll in a health plan or policy, post-mandate, because they perceive that it is to their economic benefit to do so.
- Medical management: Health plans and insurers may react to the mandate by tightening medical management of the mandated benefit. This would tend to dampen the CHBRP cost estimates. The dampening would be more pronounced on the plan types that previously had the least effective medical management (i.e., PPO plans).
- Geographic and delivery systems variation: Variation in existing utilization and costs, and in the impact of the mandate, by geographic area and delivery system models: Even within the health insurance types CHBRP modeled (HMO—including HMO and point of service (POS) plans—and non-HMO—including PPO and fee for service (FFS) policies), there are likely variations in utilization and costs by type. Utilization also differs within California due to differences in the health status of the local population, provider practice patterns, and the level of managed care available in each community. The average cost per service would also vary due to different underlying cost levels experienced by providers throughout California and the market dynamic in negotiations between providers and health plans or insurers. Both the baseline costs prior to the mandate and the estimated cost impact of the mandate could vary within the state due to geographic and delivery system differences. For purposes of this analysis, however, CHBRP has estimated the impact on a statewide level.
- Compliance with the mandate: For estimating the post-mandate coverage levels, CHBRP typically assumes that plans and policies subject to the mandate will be in compliance with the coverage requirements of the bill. Therefore, the typical post-mandate coverage rates for populations subject to the mandate are assumed to be 100%.

Bill Analysis-Specific Caveats and Assumptions

This year, one very large plan did not respond to CHBRP's annual carrier survey of the seven largest providers of health insurance in California used to obtain estimates of baseline enrollment by purchaser, type of plan, cost sharing arrangements with enrollees, and average premiums. This plan responded to last year's carrier survey designed for an analysis of a similar bill, AB 214 (CHBRP, 2009). CHBRP assumed the experience of this plan did not change from 2009 to 2010 and given the essentially same goals and analytical frameworks of AB 754 and AB 214, CHBRP used the 2009 response for this plan for modeling of estimates for AB 754.

DME items already covered in existing law

- Currently there are existing mandates that require health plans or insurers to cover equipment used for the treatment and management of specific conditions. These are already mandated to be covered under current law, and existing law would not be affected by the passage of AB 754. CHBRP has excluded these items in its current utilization and impact analyses. CHBRP specifically excluded these items because inclusion would have overstated the potential impacts of AB 754. The specifics of exclusions are as follows:

- Pediatric asthma management and treatment: DMHC-regulated plans are required to cover inhaler and spacers. (H&S Section 1367.06)
- Diabetes benefits: DMHC- and CDI-regulated plans are required to cover equipment and supplies related to diabetes treatment and management. (H&S Section 1367.1 and Insurance Code Section 10123.7)

In addition to these, there are mandates that require coverage for other items, supplies, and services that are not considered “durable medical equipment,” but may sometimes be combined with the DME benefit. These include:

- Orthotic and prosthetic (O&P) devices and services: DMHC- and CDI-regulated plans are required to offer coverage for O&P devices and do so at parity levels. (H&S Section 1367.18 and Insurance Code, Section 10123.7)²⁴
- Special footwear for persons suffering from foot disfigurement: DMHC- and CDI-regulated plans are required to cover specialized footwear for persons with disfigurements from conditions such as cerebral palsy, arthritis, diabetes, and foot disfigurement caused by a developmental disability. (H&S Section 1367.19 and Insurance Code Section 10123.141)
- Prosthetic device benefits for laryngectomy: Both DMHC- and CDI-regulated plans are required to cover this prosthetic device. (H&S Section 1367.61 and Insurance Code 10123.82)
- Reconstructive surgery: Both DMHC- and CDI-regulated plans are required to cover medically necessary reconstructive surgery. Medically necessary prosthetic devices that are part of the reconstruction would be required to be covered. (H&S Section 1367.63 and Insurance Code 10123.88)

As part of CHBRP’s analyses of AB 754, a DME analysis was conducted using 2008 outpatient claims data of MedStat and Healthcare Common Procedure Coding System (HCPCS). These data, based on about 415 million commercial enrollee months, were used to produce utilization estimates as summarized in Table 3. CHBRP reviewed codes from the HCPCS categorized as DME and then removed codes related to items of DME for which benefit coverage is already mandated (e.g., diabetic shoes, fitting, and modifications, and prosthetic procedures – prosthetic implants). DME was then defined as the remaining list of more than 1,000 HCPCS codes for DME-related items and services. Since CHBRP is unable to individually address the more than 1,000 DME-related items and services identified in HCPCS codes, the HCPCS codes were used to construct a “unit of DME” to project cost impacts for this report. The following HCPCS codes were used for this analysis:

- Durable Medical Equipment HCPCS Codes: A4206-A4259, A4262-A4265, A4270-A4640, A5051-A5513, A6550-A8004, A9275-A9279, A9900-A9999, B4034-B9999, E0100-E1406, E1700-E8002, J7607-J7799, K0001-K0899, L0112-L4398, Q0480-Q0505, Q4001-Q4051, Q4080, S0142-S0143, S1015-S1016, S1030-S1040, S5035-

²⁴ CHBRP conducted an analysis of this mandate while it was proposed legislation, AB 2012. Please see: http://www.chbrp.org/completed_analyses/index.php for the complete report.

S5036, S5497-S5521, S5550-S5571, S8096-S8101, S8120-S8490, S8999-S9007, S9061, V2600-V2615, V5336.

Organized by total annual cost, Table D-1 displays, by DME item or group, utilization and cost for enrollees with more than \$5,000 in annual DME expenses (excluding HCPCS codes for already mandated benefits) in 2008.

Table D-1. DME Utilization and Cost for Enrollees with more than \$5,000 in DME Costs in 2008

DME Item or Group	Utilization (a)	Total Annual Cost (b)	Average Total Annual Cost per User
Other Orthopedic Devices	26,884	\$27,374,065	\$1,018.23
Oxygen and Related Respiratory Equipment	72,052	\$23,748,838	\$329.61
Wheelchair	23,683	\$22,017,434	\$929.67
Enteral Formulae and Enteral Medical Supplies	70,887	\$19,272,186	\$271.87
Additional Oxygen Related Equipment	47,150	\$13,939,796	\$295.65
Parenteral Nutrition Solutions and Supplies	18,282	\$11,805,042	\$645.72
Incontinence Appliances and Care Supplies	24,099	\$9,568,623	\$397.05
Trapeze Equipment, Fracture Frame, and Other Orthopedic Devices	15,836	\$7,261,386	\$458.54
Pneumatic Compressor and Appliances	2,687	\$5,530,987	\$2,058.42
Hospital Beds and Accessories	10,180	\$3,376,539	\$331.68
Enteral And Parenteral Pumps	18,699	\$3,187,147	\$170.44
Transcutaneous and/or Neuromuscular Electrical Nerve Stimulators-Tens	1,545	\$2,953,975	\$1,911.96
Suction Pump/Room Vaporizers	11,788	\$2,551,009	\$216.41
Inhalation Solutions	4,017	\$2,363,863	\$588.46
Supplies for Oxygen and Related Respiratory Equipment	17,847	\$2,278,849	\$127.69
Dressings	5,211	\$2,262,611	\$434.20
Ostomy Supplies	23,596	\$2,114,713	\$89.62
Q Codes (Temporary)	318	\$1,937,451	\$6,092.61
Vascular Catheters	6,478	\$1,929,888	\$297.91
Temporary National Codes (Non-Medicare)	7,631	\$1,803,444	\$236.33

Table D-1. Utilization and Cost for Enrollees with more than \$5,000 in DME Costs in 2008 (Cont'd)

DME Group	Utilization (a)	Total Annual Cost (b)	PMPM	Average Total Annual Cost per User
Infusion Supplies	7,666	\$1,762,929	\$0.01	\$229.97
Administrative, Miscellaneous & Investigational	1,238	\$1,356,641	\$0.00	\$1,095.83
Humidifiers/Compressors/Nebulizers For Use With Oxygen IPPB Equipment	8,607	\$1,056,291	\$0.00	\$122.72
Decubitus Care Equipment	1,559	\$923,876	\$0.00	\$592.61
Patient Lifts	2,567	\$837,706	\$0.00	\$326.34
Pacemaker Monitor	1,381	\$367,165	\$0.00	\$265.87
Crutches	1,532	\$320,242	\$0.00	\$209.04
Repairs and Replacement Supplies	2,762	\$283,756	\$0.00	\$102.74
Bath and Toilet Aids	110	\$57,588	\$0.00	\$523.52

Source: California Health Benefits Review Program, 2010

(a) The data was drawn from the 2008 outpatient claims data of MedStat and is based on about 415 million commercial member months. The patient distribution excludes HCPCS codes for already mandated benefits (e.g., diabetic shoes, fitting, and modifications, and prosthetic procedures – prosthetic implants).

(b) Total annual cost represents the total amounts paid for each code under the contract between the health plan and the provider. It includes amounts paid by the insurer, plus cost sharing paid by the patient.

Appendix E: Information Submitted by Outside Parties

In accordance with CHBRP policy to analyze information submitted by outside parties during the first two weeks of the CHBRP review, the following parties chose to submit information. For information on the processes for submitting information to CHBRP for review and consideration please visit: http://www.chbrp.org/recent_requests/index.php.

Submission by Disability Rights California of “Data from DHCS of DME Payment by Medi-Cal and Other Sources of Payors”, December 18, 2009.

Submission available upon request.

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California Health Benefits Review Program Committees and Staff

A group of faculty and staff undertakes most of the analysis that informs reports by the California Health Benefits Review Program (CHBRP). The CHBRP **Faculty Task Force** comprises rotating representatives from six University of California (UC) campuses and three private universities in California. In addition to these representatives, there are other ongoing contributors to CHBRP from UC. This larger group provides advice to the CHBRP staff on the overall administration of the program and conducts much of the analysis. The **CHBRP staff** coordinates the efforts of the Faculty Task Force, works with Task Force members in preparing parts of the analysis, and coordinates all external communications, including those with the California Legislature. The level of involvement of members of the CHBRP Faculty Task Force and staff varies on each report, with individual participants more closely involved in the preparation of some reports and less involved in others. As required by CHBRP's authorizing legislation, UC contracts with a certified actuary, Milliman Inc., to assist in assessing the financial impact of each legislative proposal mandating or repealing a health insurance benefit. Milliman also helped with the initial development of CHBRP methods for assessing that impact.

The **National Advisory Council** provides expert reviews of draft analyses and offers general guidance on the program to CHBRP staff and the Faculty Task Force. CHBRP is grateful for the valuable assistance and thoughtful critiques provided by the members of the National Advisory Council. However, the Council does not necessarily approve or disapprove of or endorse this report. CHBRP assumes full responsibility for the report and the accuracy of its contents.

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