

# California Health Benefits Review Program

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## Analysis of California Assembly Bill 85 Social Determinants of Health: Screening and Outreach

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A Report to the 2023–2024 California State Legislature

March 11, 2023

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# Key Findings

## Analysis of California Assembly Bill 85 Social Determinants of Health: Screening and Outreach

Summary to the 2023–2024 California State Legislature, March 11, 2023



### SUMMARY

The version of California Assembly Bill (AB) 85 analyzed by the California Health Benefits Review Program (CHBRP) would require coverage and reimbursement of social determinants of health (SDOH) screening and would require insurers to provide “primary care providers with adequate access to community health workers...and inform primary care providers of how to access these community health workers.”

In 2024, the 24.9 million Californians enrolled in state-regulated health insurance would have insurance subject to AB 85. This includes commercial and California Public Employees' Retirement System (CalPERS) enrollees, as well as Medi-Cal beneficiaries enrolled in Department of Managed Health Care (DMHC)-regulated Medi-Cal managed care plans and county organized health systems (COHS).

**Benefit Coverage:** Approximately 60% of commercial and CalPERS enrollees and 100% of Medi-Cal beneficiaries have coverage for SDOH screening at baseline. Postmandate, 100% of enrollees would have coverage for SDOH screening. AB 85 would not exceed essential health benefits (EHBs).

**Medical Effectiveness:** There is *limited evidence* that SDOH screening in a clinical setting increases referrals to community health workers, or is associated with improved use of social services, improved social outcomes, or changes in health outcomes. There is *inconclusive evidence* that SDOH screening in a clinical setting is associated with changes in health care utilization. Medical Effectiveness evidence is limited by a lack of studies that examine SDOH screening in a clinical setting with control groups.

**Cost and Health Impacts<sup>1</sup>:** In 2024, AB 85 would result in 211,000 additional enrollees receiving SDOH screenings, for an additional \$9,926,000 in

annual expenditures (0.01%). The public health impact of AB 85 on improved health (or socioeconomic) status and outcomes is unknown.

### CONTEXT

#### Social Determinants of Health

Social determinants of health (SDOH) are nonmedical underlying structural factors that influence health status and health outcomes.<sup>2</sup> These social determinants, also referred to as social drivers,<sup>3</sup> of health, are modifiable conditions, meaning they are fluid and can change during the lifetime. There are multiple definitions of SDOH, but it is commonly defined as “the conditions in which people are born, grow, work, live, and age” in which a “wider set of forces and systems shape the conditions of daily life” and “affect health, functioning, and quality-of-life outcomes and risks.” The determinants themselves are neutral concepts (housing, education, food access) that can positively or negatively influence every person’s health status, longevity, and quality of life depending on their access to and the quality of these determinants (e.g., good or bad education; un/reliable transportation; un/safe, un/affordable housing). SDOH are part of the upstream effects that influence downstream effects including health care and health outcomes.

SDOH are primary drivers of health disparities, which are noticeable and preventable differences between groups of people. Disparities in SDOH such as education, housing, safety, and community development can contribute to up to 20 years difference in longevity, even among individuals who live within a few miles of each other. Moreover, research also demonstrates that discrimination (e.g., racism, ageism, sexism, ableism) prevents equal access to social and economic resources (e.g., housing, education, transportation, wealth, and employment with living wage or better) thereby creating social and health disparities.

<sup>1</sup> Similar cost and health impacts could be expected for the following year.

<sup>2</sup> Refer to CHBRP’s full report for full citations and references.

<sup>3</sup> In the SDOH term, some substitute “determinant” with “driver” to avoid the “finality” or intractability that “determinant” may

connote. Social driver of health, especially in the context of health equity, communicates the ability for an individual, community, or society to change a circumstance. For the purposes of this report, CHBRP will use determinant to comport with the language in AB 85.

SDOH are estimated to account for about 80% of health outcomes while health care accounts for about 20%.

## SDOH Screening Tools

The intention behind using SDOH screening tools in clinical practice is to identify information about social and/or economic risks of patients that was previously unknown to the health care team. That information ideally leads clinical teams to link patients with community resources and/or discussions about changing patient treatment plans to mitigate the social need(s) to improve health outcomes. Screening tools vary widely in the number, classification, and labeling of categories and their specific questions within the categories. They can focus on one category or multiple categories. There is no consensus about the “best” or most appropriate tool. Commonly included domains of social risk include economic stability, social and community context, and neighborhood and physical environment.

## Process of Linking Patients with Social Needs to Social Care/Resources

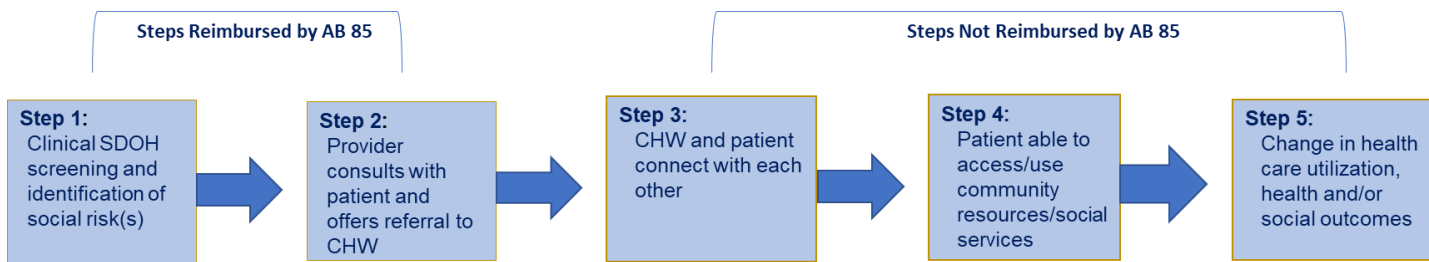
A primary goal of screening for SDOH is to identify unmet social needs and link patients to appropriate nonmedical resources to ultimately improve or maintain

their health. Such information can also inform clinician treatment choices such as using the information about housing security to avoid refrigerated medications.

Figure A maps an idealized process of care from SDOH screening through community health workers (CHWs) to social service acquisition and change in patient health status or outcomes. AB 85 focuses on Step 1 by mandating SDOH screening as a covered benefit, and Step 2 by requiring insurance carriers to provide clinicians adequate access to CHWs to enable referrals to CHWs for interested patients with social need(s).

Steps 3, 4, and 5 fall outside of the AB 85 requirements. Step 3 relates to the CHW and patient connecting (regardless of who initiates contact — the patient or the CHW). Step 3 represents work CHWs do to establish and maintain relationships with patients and with a diverse set of social programs whether publicly funded or nonprofits. Once the patient-to-CHW connection is made, the patient must be able to access the needed services (Step 4). Barriers to obtaining services include incomplete patient hand-off from CHW to agency, lack of eligibility for services due to patient’s income level, and inadequate agency bandwidth or funding to respond to need. Making successful community resource connections (Step 4) are required to achieving changes in social or health outcomes (Step 5).

**Figure A. Process of Care Linking Patients with Social Needs to Social Care/Resources**



Source: California Health Benefits Review Program, 2023.

Key: CHW = community health worker; SDOH = social determinants of health.

## BILL SUMMARY

AB 85 would require coverage and reimbursement of SDOH screening for 24,853,000 California enrollees (64% of all Californians). This represents those who have commercial or CalPERS health insurance regulated by DMHC and CDI and Medi-Cal beneficiaries enrolled in DMHC-regulated plans or county organized health system (COHS). Additionally, for DMHC-regulated plans and CDI-regulated policies (does not apply to plans only subject to the Welfare and Institutions Code), the insurer would be required to provide “primary care providers with adequate access to community health

workers...and inform primary care providers of how to access these community health workers.” The bill defines SDOH as “the conditions under which people are born, grow, live, work, and age, including housing, food, transportation, utilities, and personal safety.”

The bill language of AB 85 does not define the terms “SDOH screening,” “adequate,” and “access.” Therefore, CHBRP assumes interpretation and definition of these terms would be made by clinicians, insurers, and regulators and may vary. CHBRP provides a broad overview of SDOH screening in this analysis, and a range of possibilities regarding the interpretation of

“adequate” and “access.” CHBRP discusses multidomain SDOH screening tools, although single-domain screening tools exist and since the bill does not clarify eligible tools, may qualify as eligible under AB 85 (see more information in the *Background on Screening for Social Determinants of Health* section). Frequency of screening is also not defined so will depend on clinical resources, individual clinician decisions, and possibly the characteristics of the patient or patient population, but CHBRP generally assumed screening would occur annually in a clinical setting. Additionally, providing adequate information about and access to CHWs may include information available to clinicians within a directory-type format, telephone or email handoffs between clinicians/CHWs and externally employed CHWs, or handoffs to CHWs who are employed in the clinical setting or employed by an insurer.

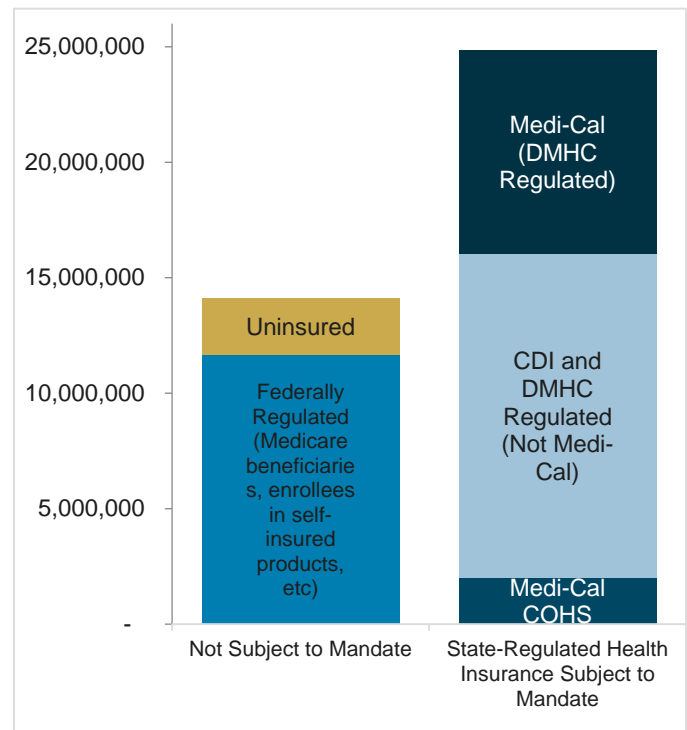
## Policy Context

There are several existing or forthcoming requirements around SDOH screening for plans and policies in California.

- Medi-Cal currently requires that Medi-Cal plans identify and manage social risks and needs of Medi-Cal beneficiaries using whole person care approaches to mitigate adverse SDOH (e.g., lack of stable housing or food) as part of CalAIM’s Population Health Management component. New Medi-Cal managed care contracts require plans to identify and track “social drivers of health” and develop partnerships with local agencies to support community needs, including supports like housing and other non-health-related programs.
- Assembly Bill 133 (2021) requires that DMHC-regulated plans and Medi-Cal managed care plans obtain National Committee for Quality Assurance (NCQA) Health Plan Accreditation by January 1, 2026. Beginning in 2023, the NCQA accreditation requires plans to report the number of enrollees who were screened, using prespecified instruments, at least once during the measurement period and received a corresponding intervention within 30 days if they screened positive for at least one food, housing, or transportation need.
- Covered California requires insurers that offer plans and policies through the Marketplace to obtain or maintain NCQA Health Plan Accreditation by the end of 2024.

Figure B notes how many Californians have health insurance that would be subject to AB 85.

**Figure B. Health Insurance in CA and AB 85**



Source: California Health Benefits Review Program, 2023.

Key: CDI = California Department of Insurance; COHS = County Organized Health System; DMHC = Department of Managed Health Care.

## IMPACTS

### Benefit Coverage, Utilization, and Cost

#### Analytic Approach and Key Assumptions

CHBRP assumes AB 85 would allow for reimbursement of one SDOH screening per year as part of typical preventive and wellness care visit. Therefore the additional cost would be reimbursed by the health plan or health insurance policy, but no cost sharing would be collected due to the Affordable Care Act’s preventive services provisions.

AB 85 allows insurance carriers to determine criteria for coverage of SDOH screening and allows clinicians to be reimbursed for medically necessary screening. CHBRP assumes the voluntary nature of screening for both patients and clinicians would not result in universal screening. Instead, the use of screening by clinicians would vary across patient populations. CHBRP estimates that 3.2% of employer-sponsored and CalPERS commercial enrollees would obtain an annual SDOH screening, while 6.4% of individual insurance

market enrollees, and 20% of Medi-Cal enrollees would use the service.

Despite other state policy efforts to link SDOH screening with care management and coordination activities to address high-cost, high-need populations, AB 85 does not require enrollment or reimbursement for those activities by a plan or clinician. Therefore, the impact of AB 85 is limited to the new utilization of SDOH screening itself and the resulting reimbursement for screenings due to new benefit coverage and use of SDOH screening.

## Benefit Coverage

At baseline, 75% (or 17,202,000) of the 22,842,000 enrollees with health insurance regulated by DMHC or CDI already have coverage for SDOH screening. As a result of AB 85, 5,640,000 enrollees (25% of the enrollees with state-regulated health insurance) would gain coverage for SDOH screening, representing a 32.79% increase in benefit coverage postmandate. All of the enrollees who would gain SDOH screening coverage have commercial insurance or insurance through CalPERS; this group represents 40% of the commercial and CalPERS population.

## Utilization

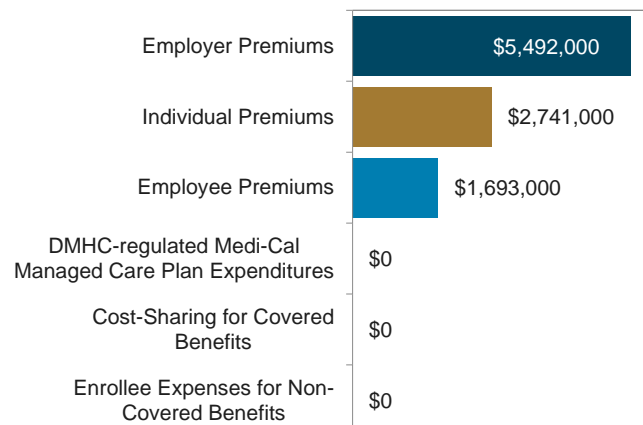
At baseline, 325,700 enrollees in the large-group, small-group, CalPERS, and individual insurance market with existing coverage received SDOH screening. Approximately 1,763,400 Medi-Cal enrollees received SDOH screening.

Postmandate, based on 25% of the state-regulated enrollee population gaining coverage for SDOH screening, CHBRP estimates that use of SDOH screening would increase by 210,949 among enrollees with commercial or CalPERS insurance (a 64.77% increase). There is no increase in the Medi-Cal managed care or COHS market because of existing coverage.

## Expenditures

AB 85 would increase total net annual expenditures by \$9,926,000 or 0.01% for enrollees in state-regulated insurance. For most commercial market segments, this would translate to increasing premiums by 0.01%. However, enrollees with insurance purchased outside of Covered California would experience the largest proportional increase in enrollee premiums (0.03%) due to lower levels of benefit coverage at baseline.

**Figure C. Expenditure Impacts of AB 85**



Source: California Health Benefits Review Program, 2023.

Key: DMHC = Department of Managed Health Care.

## Covered California – Individually Purchased

Premiums for enrollees in individual plans purchased through Covered California would increase by \$0.05 per member per month (0.01%).

## Medi-Cal

Because all Medi-Cal plans reported providing and paying for SDOH screening at baseline, no increase is estimated due to AB 85. Due to the combination of Medi-Cal contracting requirements, NCQA accreditation requirement changes, and the upcoming CalAIM Medicaid Waiver, CHBRP estimates that AB 85 would not result in new benefit coverage or increased use of SDOH screening in Medi-Cal managed care plans.

## CalPERS

For enrollees associated with CalPERS in DMHC-regulated plans, premiums would increase by 0.01% (\$0.04 per member per month, \$415,000 total increase in expenditures).

## Number of Uninsured in California

Because the change in average premiums does not exceed 1% for any market segment, CHBRP projects no measurable change in the number of uninsured persons due to the enactment of AB 85.

## Postmandate Administrative Expenses and Other Expenses

The additional requirement of AB 85 for health plans and insurance policies to ensure adequate information about and access to community health workers could vary in



terms of implementation, and because there is no requirement to create a new contracted network or reimburse community health workers for visits related to SDOH screening, CHBRP does not estimate additional administrative costs beyond the percentage already built into the CHBRP Cost and Coverage Model.

## Other Considerations for Policy Makers

AB 85 would reimburse clinicians for SDOH screening and require insurers to provide referring clinicians with access to CHWs. However, AB 85 does not mandate reimbursement for or coverage of social services that patients with social needs would be linked to through CHWs. It is possible that SDOH screening and identification of social needs would result in referrals to publicly financed housing, homeless shelters, foods stamps, food banks, WIC, and other social supports that and are not paid for by insurance carriers and therefore are beyond the scope of this analysis. Public and community-based social resource organizations may see an increase in utilization and associated costs. Although the California Department of Health Care Access and Information is convening a workgroup to develop recommendations around licensure and reimbursement for CHWs, AB 85 does not require reimbursement for CHWs or social services that CHWs may refer to.

## Medical Effectiveness

The medical effectiveness review summarizes findings from 2019 to present on the evidence that multi-domain clinical screening for SDOH leads to referrals to CHWs or other social service navigators, to use of social services, and to changes in social outcomes, health care utilization, or health outcomes. CHBRP also reviewed evidence of harms of SDOH screening in a clinical setting.

Studies on screening for SDOH in a clinical setting were limited in number and quality; there were few RCTs and the observational studies lacked control arms. It is hard to generalize the findings of this research across studies because of the variety of populations included in studies, the various social needs, the variety of SDOH screening tools, and the variety of referral interventions used in the studies. Therefore, taken together, the evidence on the effectiveness of screening for SDOH in a clinical setting, referral to navigators/social services, and downstream

<sup>4</sup> *Limited evidence* indicates that the studies have limited generalizability to the population of interest and/or the studies have a fatal flaw in research design or implementation.

<sup>5</sup> *Inconclusive evidence* indicates that although some studies included in the medical effectiveness review find that a treatment is effective, a similar number of studies of equal quality suggest the treatment is not effective.

outcomes after screening is a mixture of limited, inconclusive, and insufficient. The lack of evidence due to limited research literature is not evidence of lack of effect.

The medical effectiveness review was structured based on the idealized steps included in Figure A above. Identified literature did not address the effectiveness of each step.

## Steps 1 and 2

CHBRP found *limited evidence*<sup>4</sup> that SDOH screenings in a clinical setting increase referrals to community health workers/navigators/social services.

## Step 4

CHBRP found that there is *limited evidence* that SDOH screening in a clinical setting is associated with improved use of social services.

## Step 5

CHBRP found *inconclusive evidence*<sup>5</sup> that SDOH screening in a clinical setting is associated with changes in health care utilization.

CHBRP found *limited evidence* that SDOH screening in a clinical is associated with improvements in social outcomes or with changes in health outcomes.

## Harms

CHBRP found *insufficient evidence*<sup>6</sup> on harms to patients, families, and clinicians of using any SDOH screening tool in a clinical setting.

## Public Health

The public health impact of AB 85 on improved health (or socioeconomic) status and outcomes is unknown. Although CHBRP estimates that an additional ~211,000 commercially insured enrollees would receive SDOH screening in a clinical setting; and of those, ~25,000 are likely to screen positive for  $\geq 1$  social need; and of those, ~7,300 might connect with a CHW, *it is unknown*:

- If the supply of CHWs in California is sufficient;

<sup>6</sup> *Insufficient evidence* indicates that there is not enough evidence available to know whether or not a treatment is effective, either because there are too few studies of the treatment or because the available studies are not of high quality. It does not indicate that a treatment is not effective.

- If CHWs can successfully connect patients to  $\geq 1$  needed social resources;
- If social services/community-based organizations have adequate resources to meet increased needs;
- If these commercially insured enrollees would qualify for social services or community-based resources, most of which are income tested;
- If these commercially insured enrollees, if eligible for social services, would be able to use them (e.g., geographic, time, transportation or other barriers to their use);
- Whether health outcomes would improve within 12 months and to what extent; and
- If and to what extent new social needs would develop and be addressed.

To the extent that some screened enrollees would be linked to and use social resource(s), real changes in *individual* health status and outcomes could occur during the first year postmandate.

CHBRP finds *inconclusive evidence* of harms associated with SDOH screening in a clinical setting and referral to CHWs; therefore, harms associated with AB 85 postmandate are unknown. However, CHBRP does not project serious problems arising from clinicians administering SDOH screening tools or referring patients to CHWs, whether the referrals are successful or not, based on one review that found general acceptance of SDOH screening and CHW referrals among clinicians and patients.

The impact of AB 85 on health disparities is unknown. Because AB 85 does not alter baseline coverage or utilization of SDOH screening among Medi-Cal beneficiaries, and it is projected to increase screening for ~211,000 newly covered enrollees with commercial insurance or coverage through CalPERS, it is unlikely that this bill would reduce disparities by race, ethnicity, and income. This bill would increase utilization of SDOH screening among commercially insured people of which an estimated 12% would screen positive for social risks, and an estimated 33% would express interest in CHW assistance in obtaining social resources. However, the racial/ethnic distribution of the newly screened is unknown. Moreover, the number of social resources available to the commercially insured population is less than those available to Medi-Cal beneficiaries (who already have coverage for SDOH screening). Because eligibility for social services (WIC, Section 8 housing, CalFresh, etc.) is often limited to lower-income people, many commercially insured people might not qualify. This may pose challenges to linking them with services that can sustainably address their social needs.

## Long-Term Impacts

Because AB 85 only reimburses for screening, CHBRP predicts that AB 85 would not contribute to long-term changes in health care utilization partly due to the unknown mechanism for establishing a reliable clinician-CHW network system for patient referral. Additionally, multiple policy changes mitigate the potential effect of AB 85 including recent changes in Medi-Cal (new Medi-Cal managed care contracts and CalAIM activities), state-mandated NCQA accreditation of health insurance plans, and other clinician-led initiatives to address social needs through SDOH screening. These factors are likely to increase SDOH screening without passage of AB 85. In addition, the California Department of Health Care Access and Information (HCAI) is convening a workgroup on licensure and reimbursement for CHWs that could change the use of and payment for CHW services in the long-term. However, that workgroup is focused on Medi-Cal coverage to create a mechanism for billing for CHW services and will not directly affect the commercial insurance market unless separate legislation or decisions to require coverage for CHW-related services are adopted in the commercial market.

For reasons similar to CHBRP's unknown short-term public health impact finding, there is also an unknown long-term public health impact finding. Although screening is projected to increase among a concentrated group of commercially insured enrollees (Medi-Cal beneficiaries have baseline benefit coverage), outstanding questions remain about clinician decisions to screen and refer patients, the type and quality of CHW referrals and networks established (including the definition of "adequate" and "access" to CHWs by clinician), and whether there are adequate social resources available for the new influx of commercially insured enrollees with unmet social needs.

However, AB 85 does require a workgroup to issue a report to the legislature by January 1, 2025, that creates a standardized model to connect patients with community resources. Depending on the outcome of that report and subsequent legislative and regulatory changes, AB 85 could have a larger impact on mitigating social needs among the newly covered commercially insured with unmet social needs. Workgroup outcomes could provide more answers and direction to the unknown factors in Steps 3-5 (Figure A). CHBRP acknowledges that, even without Workgroup recommendations or CHW or community resource involvement, SDOH screening could improve patient health status by increasing the information available to clinical teams about patients' social risk, which might then be used to influence treatment plans for patients experiencing social needs. For example, a clinician learns about housing insecurity, which leads to a

different medication. Over time, broadening the clinical care approach to routinely incorporate social data could become standard. However, the magnitude of this type of change is unknown.

## **Essential Health Benefits and the Affordable Care Act**

AB 85 does not exceed the definition of EHBs in California because screenings are a preventive service and are therefore included in the definition of EHBs.



# A Report to the California State Legislature

## Analysis of California Assembly Bill 85 Social Determinants of Health: Screening and Outreach

March 11, 2023

**California Health Benefits Review Program**  
**MC 3116; Berkeley, CA 94720-3116**  
**[www.chbrp.org](http://www.chbrp.org)**

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The California Health Benefits Review Program (CHBRP) was established in 2002. As per its authorizing statute, CHBRP provides the California Legislature with independent analysis of the medical, financial, and public health impacts of proposed health insurance benefit-related legislation. The state funds CHBRP through an annual assessment on health plans and insurers in California.

An analytic staff based at the University of California, Berkeley, supports a task force of faculty and research staff from multiple University of California campuses to complete each CHBRP analysis. A strict conflict-of-interest policy ensures that the analyses are undertaken without bias. A certified, independent actuary helps to estimate the financial impact. Content experts with comprehensive subject-matter expertise are consulted to provide essential background and input on the analytic approach for each report.

More detailed information on CHBRP's analysis methodology, authorizing statute, as well as all CHBRP reports and other publications, are available at [www.chbrp.org](http://www.chbrp.org).

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**Table 1. Impacts of AB 85 on Benefit Coverage, Utilization, and Cost, 2024**

	Baseline (2024)	Postmandate Year 1 (2024)	Increase/Decrease	Change Postmandate
<b>Benefit coverage</b>				
Total enrollees with health insurance subject to state-level benefit mandates (a)	22,842,000	22,842,000	0	0.00%
Total enrollees with health insurance subject to AB 85	22,842,000	22,842,000	0	0.00%
Percentage of enrollees with coverage for mandated benefit	75%	100%	25%	32.79%
Number of enrollees with fully compliant coverage for mandated benefit	17,201,924	22,842,000	5,640,076	32.79%
<b>Utilization and cost of screenings for SDOH</b>				
Number of members receiving screening (commercial)	325,701	536,650	210,949	64.77%
Number of members receiving screening (Medi-Cal)	1,763,400	1,763,400	-	0.00%
Average cost per screening (commercial)	\$39	\$39	-	0.00%
Average cost per screening (Medi-Cal)	\$10	\$10	-	0.00%
<b>Expenditures</b>				
<i>Premiums</i>				
Employer-sponsored (b)	\$57,647,993,000	\$57,653,070,000	\$5,077,000	0.01%
CalPERS employer (c)	\$6,158,262,000	\$6,158,677,000	\$415,000	0.01%
Medi-Cal (excludes COHS) (d)	\$29,618,383,000	\$29,618,383,000	\$0	0.00%
<i>Enrollee premiums (expenditures)</i>				
Enrollees, individually purchased insurance	\$21,229,233,000	\$21,231,974,000	\$2,741,000	0.01%
Outside Covered California	\$4,867,955,000	\$4,869,228,000	\$1,273,000	0.03%
Through Covered California	\$16,361,278,000	\$16,362,746,000	\$1,468,000	0.01%
Enrollees, group insurance (e)	\$18,263,775,000	\$18,265,468,000	\$1,693,000	0.01%
<i>Enrollee out-of-pocket expenses</i>				
Cost sharing for covered benefits (deductibles, copayments, etc.)	\$13,857,141,000	\$13,857,141,000	\$0	0.00%
Expenses for noncovered benefits (f) (g)	\$0	\$0	\$0	0.00%
<b>Total expenditures</b>	<b>\$146,774,787,000</b>	<b>\$146,784,713,000</b>	<b>\$9,926,000</b>	<b>0.01%</b>

Source: California Health Benefits Review Program, 2023.

Notes: (a) Enrollees in plans and policies regulated by DMHC or CDI. Includes those associated with Covered California, CalPERS, and Medi-Cal. Does not include COHS beneficiaries.

(b) In some cases, a union or other organization. Excludes CalPERS.

(c) Includes only CalPERS enrollees in DMHC-regulated plans. Approximately 51.1% are state retirees, state employees, or their dependents. About one in five (22.5%) of these enrollees has a pharmacy benefit not subject to DMHC. CHBRP has projected no impact for those enrollees. However, CalPERS could, postmandate, require equivalent coverage for all its members (which could increase the total impact on CalPERS).

(d) Includes only Medi-Cal beneficiaries enrolled in DMHC-regulated plans. In addition, CHBRP is estimating that there would be no increase for Medi-Cal beneficiaries enrolled in COHS managed care.



(e) Enrollee premium expenditures include contributions by enrollees to employer (or union or other organization)-sponsored health insurance, health insurance purchased through Covered California, and any contributions to enrollment through Medi-Cal to a DMHC-regulated plan.

(f) Includes only expenses paid directly by enrollees (or other sources) to providers for services related to the mandated benefit that are not covered by insurance at baseline. This only includes those expenses that will be newly covered postmandate. Other components of expenditures in this table include all health care services covered by insurance.

(g) For covered benefits, such expenses would be eliminated, although enrollees with newly compliant benefit coverage might pay some expenses if benefit coverage is denied (through utilization management review).

Key: CalPERS = California Public Employees' Retirement System; CDI = California Department of Insurance; COHS = County Organized Health System; DMHC = Department of Managed Health; SDOH = Social Determinants of Health.

## POLICY CONTEXT

The California Assembly Committee on Health has requested that the California Health Benefits Review Program (CHBRP)<sup>7</sup> conduct an evidence-based assessment of the medical, financial, and public health impacts of Assembly Bill (AB) 85, Social Determinants of Health: Screening and Outreach.

### Bill-Specific Analysis of AB 85, Social Determinants of Health: Screening and Outreach

#### Bill Language and Relevant Population

AB 85 would require coverage and reimbursement of social determinants of health (SDOH) screening for 24,853,000 California enrollees (64% of all Californians) (see Table 2). This represents those who have commercial or CalPERS health insurance regulated by DMHC and CDI and Medi-Cal beneficiaries enrolled in DMHC-regulated plans or county organized health systems (COHS). Additionally, for DMHC-regulated plans and CDI-regulated policies, the insurer would be required to provide “primary care providers with adequate access to community health workers...and inform primary care providers of how to access these community health workers.”

**California Regulating Agencies**

**DMHC:** California Department of Managed Health Care  
**CDI:** California Department of Insurance  
**DHCS:** Department of Health Care Services, which administers Medi-Cal

The bill defines SDOH as “the conditions under which people are born, grow, live, work, and age, including housing, food, transportation, utilities, and personal safety.”

AB 85 states that DMHC and CDI may adopt guidance for plans and policies to implement the above language.

Additionally, AB 85 directs DMHC to convene a working group to create a standardized model and procedures for connecting patients with community resources, to assess the need for a centralized list of accredited community providers, and determine gaps in research and data to inform policies on system changes to address SDOH. The working group would submit a report to the Legislature on or before January 1, 2025.

The full text of AB 85 can be found in Appendix A.

**Table 2. Californians with State-Regulated Health Insurance Subject to AB 85**

Type of Health Insurance	# of Enrollees in CA
Commercial plans regulated by DMHC and policies regulated by CDI	13,143,000
CalPERS plans regulated by DMHC	882,000
DMHC-regulated Medi-Cal managed care plans	8,817,000
Medi-Cal county organized health systems	2,010,000

Source: California Health Benefits Review Program, 2023.

Key: CDI = California Department of Insurance; DMHC = Department of Managed Health Care.

<sup>7</sup> CHBRP’s authorizing statute is available at [www.chbrp.org/about\\_chbrp/faqs/index.php](http://www.chbrp.org/about_chbrp/faqs/index.php).

## Interaction With Existing Federal and State Requirements and Initiatives

Health benefit mandates may interact and align with the following federal and state mandates or provisions. Additionally, there are similar initiatives at the federal and state level to develop and implement SDOH screening, several of which are discussed below.

### Federal Policy Landscape

#### *Centers for Medicare and Medicaid Services (CMS)*

The Centers for Medicare and Medicaid Services (CMS) published the Fiscal Year 2023 Medicare Hospital Inpatient Prospective Payment Systems (IPPS) final rule that includes mandated reporting to the Inpatient Quality Reporting program of two new measures, “Social Drivers of Health” 1 and 2 (see more information in the *Background on Screening for Social Determinants of Health* section about the use of “drivers” versus “determinants”).<sup>8</sup> These measures are voluntary for 2023 and will be mandatory in 2024. One measure requires screening for social drivers of health and the other requires reporting of the “screen positive rate.” Hospitals are required to collect and report this information for all patients aged 18 and older. In this program, social drivers of health screening includes five domains: food insecurity, housing instability, transportation needs, utility difficulties, and interpersonal safety. These domains were identified, in part, because they are not routinely or systematically addressed by health care clinicians.

CMS also released guidance in 2021 that describes how states can leverage existing flexibilities under federal law to tackle adverse health outcomes that can be impacted by SDOH and supports states with designing programs, benefits, and services that can more effectively improve population health (CMS, 2021a). Included in the guidance are overarching principals that states are required to adhere to within their Medicaid programs in the context of providing services to address SDOH, including that services must be provided to Medicaid beneficiaries based on assessments of need, rather than take a one size-fits-all approach (CMS, 2021b).

In 2017, CMS launched the Accountable Health Communities (AHC) Model test focused on evaluating health-related social needs (HRSN) screening, referral, and navigation (Johnson et al., 2022).<sup>9</sup> The now-concluded model was implemented by 28 organizations and included community-based organizations, payers, health information exchanges, hospitals, integrated health systems, and others, and was present in 328 counties in 21 states. Organizations and clinical partners used the AHC HRSN Screening Tool to universally screen Medicare and Medicaid beneficiaries who accessed health care services for food insecurity, housing instability, transportation problems, utility difficulties, and interpersonal violence. Screening occurred across various clinical settings such as emergency rooms, physician practices, and behavioral health clinics, and involved different types of staff, data platforms, and modalities. Most sites used a combination of existing staff and newly hired screening staff, including community health workers (CHWs).

#### *National Committee for Quality Assurance (NCQA)*

National Committee for Quality Assurance (NCQA) provides voluntary health plan accreditation and is a comprehensive evaluation that uses results of clinical performance and consumer experience measures (NCQA, 2020). Several types of accreditation are available to health plans. In 2018, NCQA created a new category of Population Health Management within the “Health Plan Accreditation,” which includes requirements for population-level assessments of SDOH. Health plans must assess the characteristics and needs of their member population, including SDOH, and review community resources for integration into program offerings to address member needs. In 2022, NCQA released new quality measures for health plans in the Healthcare Effectiveness Data and Information Set (HEDIS) measurement for 2023 (NCQA, 2022). These updates included a focus on health equity, including the social need screening and

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<sup>8</sup> 87 FR 28491 through 29535

<sup>9</sup> This demonstration was under Section 3021 of the Affordable Care Act.

intervention (SNS-E) measure. The measure assesses members who were screened, using prespecified instruments,<sup>10</sup> at least once during the measurement period and who received a corresponding intervention within 30 days if they screened positive for at least one food, housing, or transportation need.

### *Affordable Care Act and Essential Health Benefits<sup>11</sup>*

In California, nongrandfathered<sup>12</sup> individual and small-group health insurance is generally required to cover essential health benefits (EHBs).<sup>13</sup> In 2024, approximately 12.1% of all Californians will be enrolled in a plan or policy that must cover EHBs.<sup>14</sup> AB 85 does not exceed the definition of EHBs in California because screenings are a preventive service and are therefore included in the definition of EHBs.

## **California Policy Landscape**

### *California law*

In 2021, Governor Newsom signed Assembly Bill 133, a budget trailer bill, which included the requirement that DMHC-regulated plans and Medi-Cal managed care plans obtain NCQA Health Plan Accreditation by January 1, 2026 (NCQA, 2021).<sup>15</sup>

### *Covered California*

Covered California, California's health insurance marketplace, requires insurers that offer plans and policies through the marketplace<sup>16</sup> to obtain or maintain NCQA Health Plan Accreditation by the end of 2024 (Covered California, 2022a; Covered California, 2022b). For insurers who are not yet NCQA accredited, Covered California requires insurers to submit a separate Population Health Management plan that includes the process for at least annually assessing characteristics and needs, including health-related social needs of enrollees.

### *California Advancing and Innovating Medi-Cal (CalAIM)*

DHCS released the CalAIM proposal in 2019 and began implementing provisions of CalAIM in 2022, which is a multi-year program to improve health outcomes and quality of life for Medi-Cal beneficiaries through broad delivery system, program, and payment reform.<sup>17</sup> One of the components of CalAIM is Population Health Management, in which plans identify and manage social risks and needs of Medi-Cal beneficiaries using whole person care approaches to mitigate negative SDOH. CalAIM adapts several

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<sup>10</sup> Screening Instruments (Documented via LOINC): Accountable Health Communities, AAFP Social Needs Screening Tool, Health Leads Screening Panel<sup>®</sup>1, Hunger Vital Sign<sup>™</sup>, PRAPARE, Safe Environment for Every Kid (SEEK), WE CARE Survey, WellRx Questionnaire, Housing Stability Vital Signs<sup>™</sup>, Comprehensive Universal Behavior Screen (CUBS), PROMIS, and USDA Food Security Survey (NCQA, 2020).

<sup>11</sup> The ACA requires nongrandfathered small-group and individual market health insurance — including but not limited to qualified health plans sold in Covered California — to cover 10 specified categories of EHBs. Policy and issue briefs on EHBs and other ACA impacts are available on the CHBRP website: [www.chbrp.org/other\\_publications/index.php](http://www.chbrp.org/other_publications/index.php).

<sup>12</sup> A grandfathered health plan is “a group health plan that was created — or an individual health insurance policy that was purchased — on or before March 23, 2010. Plans or policies may lose their ‘grandfathered’ status if they make certain significant changes that reduce benefits or increase costs to consumers.” Available at: [www.healthcare.gov/glossary/grandfathered-health-plan](http://www.healthcare.gov/glossary/grandfathered-health-plan).

<sup>13</sup> For more detail, see CHBRP's issue brief, *California State Benefit Mandates and the Affordable Care Act's Essential Health Benefits*, available at [https://chbrp.org/other\\_publications/index.php](https://chbrp.org/other_publications/index.php).

<sup>14</sup> See CHBRP's resource, *Sources of Health Insurance in California for 2024* and CHBRP's issue brief *California State Benefit Mandates and the Affordable Care Act's Essential Health Benefits*, both available at [https://chbrp.org/other\\_publications/index.php](https://chbrp.org/other_publications/index.php).

<sup>15</sup> HSC 1399.871 and WIC 14184.203.

<sup>16</sup> Because this requirement is for plans and policies offered through Covered California, it therefore also applies to mirror plans sold outside of Covered California.

<sup>17</sup> CalAIM is being implemented under the approval of a 1115 waiver, granted by CMS.

features from the Whole Person Care Pilot, a recently concluded six-year demonstration program (see side box for description). DHCS released an All Plan Letter<sup>18</sup> in early 2022 to provide guidance for the collection of SDOH data. The letter states that DHCS expects Medi-Cal plans to develop processes to work closely with providers to promote screening and regularly report SDOH data. The guidance also emphasizes that clinicians other than a beneficiary's primary care clinician can document and code SDOH. New Medi-Cal managed care contracts require plans to identify and track SDOH and develop partnerships with local agencies to support community needs, including supports like housing and other non-health-related programs.

Also as part of CalAIM, in July 2022, Medi-Cal released an updated provider manual that included community health workers (CHW) as a covered benefit (DHCS, 2022). CHWs may include people known by a variety of job titles, including *promotores*, community health representatives, navigators, and other nonlicensed public health workers. CHWs must obtain a certificate (or can work without a certificate for up to 18 months) and must work under a supervising provider (this includes licensed clinicians, hospitals, outpatient clinics, local health jurisdictions, or community-based organization). Covered services include health education, health navigation, screenings and assessments that do not require a license, and support or advocacy. Medi-Cal covers CHW services as preventive services and on the written recommendation of a physician or other licensed practitioner for a subset of beneficiaries (those with one or more chronic conditions, exposure to violence and trauma, at risk for a chronic health condition or environmental health exposure, who face barriers to meeting their health or health-related social needs, and/or who would benefit from preventive services).

## Whole Person Care Pilot

CalAIM incorporates some of the services provided under the Whole Person Care (WPC) Pilot program, which, under Medi-Cal, coordinated medical, behavioral, and social services to improve the health and well-being of Medi-Cal beneficiaries with complex needs (Pourat et al., 2023). To determine eligibility, Pilots often used existing data, such as electronic medical records or other medical data, information provided by partners, staff assessment using standardized tools, and care coordinator assessments. Over time, Pilots reported successfully enrolling more eligible beneficiaries by employing solutions that were often directly the result of policy and procedure changes, including increasing staffing capacity and improving program processes such as formalizing contracts with community partners and utilizing warm handoffs.

### *Department of Health Care Access and Information (HCAI)*

HCAI is working with stakeholders to develop standards for certifying CHWs and training programs (HCAI, 2023). HCAI is also developing plans for the certification process and training new CHWs.

### **Similar requirements in other states**

CHBRP is unaware of other states that require coverage of SDOH screenings for enrollees with commercial insurance.

As of August 2021, 24 states require Medicaid managed care plans to screen enrollees for social needs, 11 require the incorporation of uniform SDOH questions within screening tools, 28 require plans to provide enrollees with referrals to social services, 5 require plans to track the outcome of the referral to social services, and 7 encourage or require clinicians to capture member SDOH data using "Z-codes" (KFF, 2021). Additionally, several state Medicaid programs are implementing programs that incorporate screenings for social needs. For example, North Carolina's Healthy Opportunities Pilots created standardized social needs screening using a nine-question screener for health clinicians to determine if patients have unaddressed social needs (Rapfogel and Rosenthal, 2022). Clinicians can then use an

<sup>18</sup> Department of Health Care Services. All Plan Letter 21-009 (Revised): Collecting Social Determinants of Health Data. Available at: <https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2021/APL21-009.pdf>. Accessed on February 16, 2023.



integrated statewide resource database and referral platform to connect the patient with an organization that provides services or to determine eligibility for the state Pilot.

Other states have implemented programs that also incorporate screening for SDOH, such as Maryland's Primary Care Program (MDPCP) (MDPCP, 2021). This voluntary program is open to all qualifying Maryland primary care providers and provides funding and support for the delivery of advanced primary care throughout the state. One aspect of this program is that practices conduct social needs screening and provide connections to community resources when indicated (MDPCP, nd). Many of these practices are working to integrate CHWs into their teams to assist in providing comprehensive care support and improving health equity in their communities (MDPCP, 2022).

## **Analytic Approach and Key Assumptions**

The bill language of AB 85 does not define the terms "SDOH screening," "adequate," and "access." Therefore, CHBRP assumes interpretation and definition of these terms would be made by providers, insurers, and regulators and may vary. CHBRP provides a broad overview of SDOH screening in this analysis, and provides a range of possibilities regarding interpretation of "adequate" and "access". CHBRP primarily discusses multidomain SDOH screening tools, although single-domain screening tools exist and may qualify as eligible under AB 85 (see more information in the *Background on Screening for Social Determinants of Health* section). Frequency of screening may vary, depending on the characteristics of the patient or patient population, but CHBRP has generally assumed screening would occur annually and would occur in a clinical setting. Additionally, adequate access to CHWs may include information available to providers within a directory-type format, handoffs between providers and externally employed CHWs, or CHWs that are employed by the provider or insurer.

CHBRP assumes that reimbursement for SDOH screening includes the referral and there is not a separate reimbursement for the referral.

AB 85 also does not provide a definition of CHWs. While a definition (see above) exists for Medi-Cal, there is not an otherwise official definition. The *Background on Screening for Social Determinants of Health* section provides an overview of CHWs, which generally includes navigators and *promotores*, because of language included in AB 85, but the *Medical Effectiveness* section includes studies in which social workers may be involved with the patient population or where a patient is referred to services without a CHW or social worker role. Social workers are not traditionally identified as CHWs and therefore may not be considered as part of the CHW workforce when interpreting the bill language.

As discussed above, there are several existing or forthcoming requirements around SDOH screening for plans and policies in California. CHBRP analyzes the marginal impact of AB 85 and therefore assumes plans and policies already complying with existing requirements would be in compliance as of implementation of AB 85. More information about changes in benefit coverage are included in Table 1 and the *Benefit Coverage, Utilization, and Cost* section. There are no current or future requirements for CDI-regulated policies not offered through Covered California to cover screenings for SDOH. Additionally, there is no current requirement for DMHC-regulated commercial or CalPERS plans to cover SDOH screenings. These plans would not be required to provide coverage as specified by NCQA until 2026, in the absence of AB 85. Therefore, the population potentially impacted by AB 85 is enrolled in DMHC-regulated plans and CDI-regulated policies not offered through Covered California.

## BACKGROUND ON SCREENING FOR SOCIAL DETERMINANTS OF HEALTH

AB 85 would require plans and policies to provide coverage and reimbursement for social determinants of health (SDOH) screening. The bill also requires insurers to provide primary care providers with adequate access to community health workers (CHWs) and provide information about how to access those CHWs. This *Background* section explains SDOH terminology, describes SDOH screening tools, and the prevalence of social needs among Californians. It also describes what CHWs do and how a referral system might function.

### What Are Social Determinants of Health?

Social determinants of health (SDOH) are nonmedical underlying structural factors that influence health status and health outcomes. These social determinants, also referred to as social drivers,<sup>19</sup> of health are modifiable conditions, meaning they are fluid and can change during the lifetime. There are multiple definitions of SDOH, but it is commonly defined as “the conditions in which people are born, grow, work, live, and age” in which a “wider set of forces and systems shape the conditions of daily life” and “affect health, functioning, and quality-of-life outcomes and risks” (WHO, 2023; USHHS, 2023). The CDC defines these forces and systems as economic policies and systems, development agendas, social norms, social policies, racism, climate change, and political systems (CDC, 2022). The determinants themselves are neutral concepts (housing, education, food access) that can positively or negatively influence every person’s health status, longevity, and quality of life depending on their access to and the quality of these determinants (e.g., good or bad education; un/reliable transportation; un/safe, un/affordable housing) (Alderwick and Gottlieb, 2019; Davidson et al., 2021). SDOH include both upstream structural drivers their manifestations in downstream social conditions, including access to health care (Whitman et al., 2022).

#### Terminology

**SDOH:** underlying structural, social, and economic factors that affect a population’s health.

**Social risk factor:** the social and economic conditions associated with health at the person level (e.g., food or housing instability).

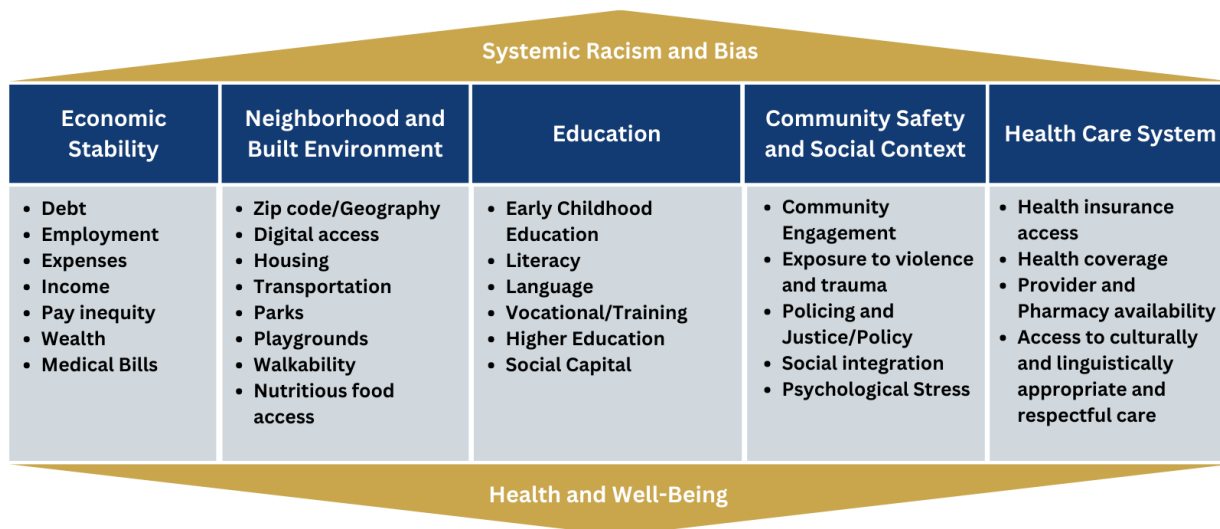
**Social needs:** an individual’s needs for food, housing, transportation, or other resources.

*Source:* Alderwick and Gottlieb, 2019.

SDOH may be grouped into five domains, as shown in Figure 1.

<sup>19</sup> In the SDOH term, some substitute “determinant” with “driver” to avoid the “finality” or intractability that “determinant” may connote. Social driver of health, especially in the context of health equity, communicates the ability for an individual, community, or society to change a circumstance. For the purposes of this report, CHBRP will use determinant to comport with the language in AB 85 (Lumpkin et al., 2021).

**Figure 1. Social Determinants of Health by Domain**



Source: Based on Anyane-Yeboah et al., 2022.

SDOH are primary drivers of health disparities,<sup>20</sup> which are noticeable and preventable differences between groups of people. Disparities in SDOH such as education, housing, safety, and community development have been shown to contribute to up to 20 years difference in longevity, even among people who live within a few miles of each other. Moreover, research also demonstrates that discrimination (e.g., racism, ageism, sexism, ableism) prevents equal access to social and economic resources (e.g., housing, education, transportation, wealth, and employment with living wage or better) thereby creating social and health disparities. For example, poverty is highly correlated with poorer health outcomes and higher risk of premature death; safe and stable housing is correlated with lower rates of preventable health care use; healthy, affordable, and convenient food choices are correlated with reductions in obesity and problematic cholesterol or blood glucose levels and improved maternal child health outcomes; and affordable and accessible transportation is also correlated with better chronic disease management leading to reductions in preventable acute care (Whitman et al., 2022).

SDOH are thought to account for up to 80% of health outcomes while health care accounts for about 20% (though estimates do vary; for example, some research attributes up to 10% of health outcomes to genetics) (CDC, 2019; CDPH, 2023; Whitman et al., 2022) (Figure 2).

<sup>20</sup> Several competing definitions of “health disparities” exist. CHBRP relies on the following definition: Health disparity is defined as the differences, whether unjust or not, in health status or outcomes within a population (Wyatt et al., 2016).

**Figure 2. Proportion of Determinants Contributing to Health Status**



Source: UCLA Health, 2023.

## Health Disparities and the Prevalence of Social Risk in California

### Health Disparities

There are persistent and pervasive health disparities experienced by subpopulations in California. For example, Black Californians have the shortest life expectancy as compared with Asian and Latinx Californians who have the longest life expectancy (75.1, 83.2, and 86.3, respectively.) Black Californians have the highest mortality rates from breast, cervical, colorectal, lung, and prostate cancers among all racial and ethnic groups. This population also experiences the highest maternal mortality rate (26.4/100,000 live births) and infant mortality rate (8.5/100,000 live births) in California (exceeding that of some developing nations). Asthma emergency department visits are three times greater for Black children (210/100,000) than Latinx children (66.2/100,000), and seven times greater than that of children in other racial/ethnic groups (ranging from 23 to 37/100,000). Opioid overdose deaths are greatest among American Indian and Alaska Native populations followed by White and Black populations (15.7, 12.6, 12.3/100,000, respectively). More Latinx Californians report delaying care due to cost than other racial/ethnic groups (Thomas and Valentine, 2021). These health disparities are preventable or modifiable through the reduction of social risks and improved SDOH.

### Prevalence of Social Risk/Need

The prevalence of social risk as it relates to health in California is unknown. The County Health Rankings provide some indicators of social risk;<sup>21</sup> however, the Ranking indicators are not correlated with health status or correlated with other (un)desirable social factors that may compound or mitigate social needs. Moreover, the overlap with insurance status is not reported. CHBRP shares these statistics to provide context regarding the social needs for Californians. For example, statewide:

<sup>21</sup> Note the limitations to these data: the margin of error in these social risk statistics are high and the years of data differed among indicators, with some dating back to 2016 (County Health Rankings, 2022).

- 26% of Californians reported severe housing problems (overcrowding, high housing costs, lack of kitchen or plumbing facilities) (range across counties = 9%–32%);
- 19% of households reported spending at least 50% of their income on housing (range across counties = 6%–24%);
- 27% of California median household income is spent on childcare (for 2 children) (range across counties = 21%–38%); and
- 15% of children live in poverty (range across counties = 6%–28%).

### Disparities in Social Risk/Needs

There are disparities in social conditions by race in California (note these statistics have the same limitations as the aforementioned County Health Rankings). Table 33 presents five categories of SDOH-related data by race from the California Health Interview Study. The economic SDOH domain is represented by food security, mortgage/rent affordability, and feelings of housing stability. The neighborhood/built environment domain is represented by feelings of safety. Finally, the education SDOH domain is represented by self-reported educational attainment. These data are derived from a different source than the County Health Rankings data quoted above and are intended to provide further context about social need by race/ethnicity in California. Similar to the limitations for the County Health Rankings, it is unknown how many people experiencing negative social conditions have unmanaged health conditions or how much assistance they are currently receiving.

**Table 3. California Health Interview Survey SDOH-Related Data by Race, 2021**

	Latino %	White %	Black or African American %	American- Indian/ Alaska Native %	Asian %	Native Hawaiian/ Pacific Islander %	Two or More Races %
<b>California Population</b>	<b>40</b>	<b>38</b>	<b>6</b>	<b>0.4</b>	<b>13</b>	<b>0.4</b>	<b>3</b>
<b>Food security</b>							
<b>Not able to afford enough food</b>	41	32	46	--	34	--	43
<b>Struggling with housing cost</b>							
<b>Very or somewhat often</b>	20	10	22	--	13	31	16
<b>From time to time</b>	27	18	20	41	26	--	22
<b>Housing situation</b>							
<b>Fairly or very unstable</b>	6	4	7	--	3	--	4
<b>Somewhat stable</b>	19	7	14	--	12	--	12
<b>Feels safe in neighborhood</b>							
<b>Some/none of the time</b>	20	6	17	--	12	--	15
<b>Education level completed</b>							
<b>Less than high school</b>	28	4	9	12	13	--	8
<b>High school</b>	28	20	27	--	12	--	19

Source: California Health Benefits Review Program, 2023, based on CHIS, 2023.  
 Note: Asterisk denotes unstable data due to small sample size.



## SDOH Screening Tools (Social Risk Screening Tools)

AB 85 requires insurers to “provide reimbursement to health care providers for social determinants of health screenings.” Screening tests are administered to asymptomatic people to identify higher risk for or presence of a condition. In the case of a SDOH screening test, the goal is to identify social and/or economic risks of patients not previously disclosed to or otherwise known to health care professionals. This knowledge could allow the health care professionals to refer patients to community resources to mitigate the social need(s) to help improve health outcomes.

Social risk screening tools vary widely in the number, classification, and labeling of categories and specific questions within the categories (Eder et al., 2021). They can focus on one category or multiple categories. There is no consensus about the “best” or most appropriate tool. The most commonly included social risk indicators among the tools CHBRP reviewed are related to economic stability, social and community context, and neighborhood and physical environment.

### Characteristics of SDOH Screening Tools

The multidomain SDOH screening tools vary in length (7 to 130 items), format (verbal, electronic, or paper), content (3 to 6 categories), setting in which they are administered (primary care, pediatrics, specialty care, inpatient), and who conducts the screening (provider or self-administered). Many tools are designed for adults or all-ages populations, while some are designed specifically to assess pediatric populations. The screening tools are generally free of charge to use, although there appears to be a growing commercial field including tools embedded in large electronic health record systems (Freij et al., 2019). A systematic review of 21 unique tools found that 13 are written at or below the 8th grade reading level, 8 are available in Spanish, and 3 are available in additional languages. Table 34 shows examples of commonly used SDOH screening tools.

Scoring or interpreting the screener results also varies by tool. Some tools do not instruct clinicians about the number of answers warranting a referral offer to social needs care. Others only need one confirmatory answer to trigger an offer of referral. A handful of tools have more complicated scoring methods that take longer to calculate. In these cases, a lower total score (but greater than 0) may not trigger an offer of referral. Henrikson et al., found that despite tools being easy to administer, clinician ability to interpret the screening results is limited, which may suggest poor directions in how to score a test, unclear score ranges or cut-off scores, or lack of instructions for handling missing data (Henrikson et al., 2019).

### Validity and reliability of SDOH screening tools

Few SDOH screening tools have been tested for their validity (accurately captures the true social risk), reliability (consistently captures the right information), or pragmatic properties (cost, length, readability, etc.) (De Marchis et al., 2022; Sullivan, 2011). Two reviews of 26 social screening tools in total found that 7 tools were tested in part for validity and reliability; however, no tool followed every step of the “gold standard” evaluation (De Marchis et al., 2022; Henriksen et al., 2019). The limited testing among these social screening tools leaves major gaps in evidence to guide screening tool selection (De Marchis et al.,

### Examples of SDOH Screening Questions by Domain

- **Economic stability:** “What is your current work situation?” <sup>a</sup>
- **Education:** “What is the highest level of school that you have finished?” <sup>a</sup>
- **Social and community context:** “How often do you feel lonely or isolated from those around you?” <sup>b</sup>
- **Health and clinical care:** “How hard is it for you to get your medications and medical supplies when you need them?” <sup>c</sup>
- **Neighborhood and physical environment:** “Which of the following best describes your current living situation?” <sup>c</sup>
- **Food:** “Within the past 12 months, you worried that your food would run out before you got money to buy more.” <sup>b</sup>

Sources: (a) PRAPARE: Protocol for Responding to and Assessing Patients’ Assets, Risks, and Experiences; (b) AHC-HRSN: Accountable Health Communities Health-Related Social Needs; (c) YCLS: Your Current Life Situation Survey

2022). In one of the reviews, De Marchis et al. found one study that considered how validity might vary by race or ethnicity (no difference was reported). Screening tools with an asterisk in Table 4 identify those with partial validity testing; the rest of the tools have no validation testing results published. (See Appendix D for more details.)

**Table 4. Examples of SDOH Screening Tools and Their Characteristics**

SDOH Screening Tool	# of Questions	# of SDOH Domains
Accountable Health Communities Health-Related Social Needs (AHC-HRSN)* (2017)	26	4
HealthBegins Upstream Risk Screening Tool (2015)	28	5
Health Leads Social Needs Screening Toolkit (2016)	7	5
Medicare Total Health Assessment Questionnaire (2014)	36	4
Institute of Medicine (IOM) (2014)	23	3
PRAPARE: Protocol for responding to and assessing patients' assets, risks and experiences* (2016)	36	5
WellRX Questionnaire (2014)	11	3
Your Current Life Situation (YCLS) Survey* (2018)	32	6
IHELP (Income, Housing, Education, Legal Status, Literacy, Personal Safety) Pediatric Social History Tool (2007)	17	5
SEEK: Safe Environment for Every Kid (2007)	20	3
Survey of Well-Being of Young Children (2010)	10	3
WE CARE Survey* (2007)	10	4
Structural Vulnerability Assessment Tool (2017)	43	4

Source: California Health Benefits Review Program, 2023, based on Eder et al., 2021; Henrikson et al., 2019; and SIREN, 2019.

\*Indicates survey tools with some validity testing conducted. Tools with no (\*) have no published validity test results.

Notes: Up to six SDOH categories are assessed in these tools: economic security; education; social and community context; health and clinical care; neighborhood and physical environment; and food security. Appendix D provides a more expansive list of tools and the categories each assesses.

Key: SDOH = social determinants of health.

## Guidelines and Recommendations for SDOH Screening

There is no consensus among guidelines for a particular SDOH screening tool, no consistent recommendations about the frequency of administering screeners to patients, and little guidance to clinicians about how to elicit patient priorities about social needs (Eder et al., 2021).

A 2019 review of 70 professional medical associations and organizations statements and guidelines found that most provide limited information about SDOH or social risk screening, with six explicitly supporting clinician engagement in social risk screening and referrals: American Academy of Family Physicians, American Academy of Pediatrics, American College of Obstetricians and Gynecologists, American College of Physicians, American Osteopathic Association, and American Diabetes Association (Eder et al., 2021).

## Prevalence, Frequency, and Acceptability of Social Risk Screening

### Prevalence

There is limited information on the prevalence of social risk screening in health care settings across the United States (Cartier and Gottlieb, 2020). It is thought to be low, with recent surveys of physician practices and hospitals reporting 2% to 24% doing any screening. Nevertheless, SDOH screening activities seem to be increasing as health care professionals recognize the role SDOH play in patient health outcomes and/or as national standards emerge that encourage screening (De Marchis et al., 2022; KFF, 2021). A recently released, nationally representative survey of 5,000 women found that 30% reported being asked about their housing situation, 20% being asked about ability to afford food, and 20% asked about access to reliable transportation. Surveyors found that women with private insurance and higher incomes were less likely to be asked these questions than women with Medicaid or low incomes (Long et al., 2023). Growing attention to social risk screening may be attributed to several factors such as innovations through federal Medicare and Medicaid pilot programs, professional society practice guidelines (see above) and new coverage of social services through Medi-Cal's CalAIM program (*Policy Context* section) (Cartier and Gottlieb, 2020; Frazee et al., 2019).

### Frequency

CHBRP found few recommendations regarding the frequency of screening. Patient social risk can change over time and frequently (e.g., changes in housing, personal safety, employment status). Survey data indicate that food insecurity can be subject to seasonal change (USDA, 2023). The Accountable Health Communities Health-Related Social Needs Screening Tool recommends that patients be screened at least once every 12 months, or more frequently as patient needs change (CMS, 2022). Another study based on survey results from 228 respondents with insurance through the Covered California exchange, concluded that screening every 6 months or longer may be effective, but asking patients about their desire for assistance more often may be a better indicator (Lewis et al., 2022).

### Acceptability

Many studies and evaluations showed clinicians and patients generally find social screening to be acceptable (although relatively little research has explored the perspectives of racially, ethnically, and linguistically diverse patient populations). A review of studies of health care clinicians reported that clinicians generally found screening for social needs to be acceptable and within their scope of practice although there were some potential concerns expressed, including about the lack of resources after screening. The authors reported that, across the studies reviewed, clinicians exposed to screening and referral programs were more likely see these programs in a favorable light and demonstrate increased SDOH screening rates (Quiñones-Rivera et al., 2021). Another study by Blue Shield of California reported high clinician (and CHW) satisfaction with a program that embedded CHWs into 10 primary and specialty care teams (Paulson et al., 2021). Brown et al. (2023) reported, across 13 studies, strong patient support for screening, especially when patients had strong relationships with clinicians and that multiple categories (beyond health care) were acceptable to discuss with clinicians. Most were also comfortable with screening results being recorded in the electronic health record. Across seven studies, a minority of patient respondents expressed concern about topics such as privacy issues, discrimination and bias, and sharing information beyond the health care setting (Brown et al., 2023). Finally, the CMS Accountable Health Communities Model project, discussed in the *Policy Context* section, found that among the more than 35% of the patients who screened positive for a social need, approximately 80% accepted navigator help (137,000) (implying screening acceptability) and 67% reported having their social need resolved through the program. Clinicians also found satisfaction with the CHW program (Johnson et al., 2022).

## Community Health Workers

AB 85 also requires health insurers to provide primary care clinicians with adequate access to CHWs in counties where the plan/policy has enrollees and provide information about how to access those community health workers. As mentioned in *Policy Context*, starting July, 1 2022, the Department of Health Care Services (DHCS) added CHW services as a covered Medi-Cal benefit in California. This section explains the role and training of community health workers.

The term community health worker is a general term that can be used to define several types of frontline public health workers (Table 5) (NASHP, 2021). CHWs are trusted members of communities and/or have deep understandings of the communities they serve, which allows them to serve as intermediaries for patients between health care and social service providers and the community (APHA, 2023). There is evidence of CHW effectiveness in improving chronic disease management and addressing unmet social needs among primary care patients (Kim et al., 2016; Kangovi et al., 2020). The 2019 California Future Health Workforce Commission noted that CHWs provide an effective and efficient bridge for patients between health care, home, and community, especially when integrated with a care team. The commission recommended that California modify reimbursement mechanisms to grow the CHW workforce to meet increasing demand for these frontline workers (CFHWC, 2019).

**Table 5. Description of Community Health Worker (CHW)**

CHW Job Titles	CHW Employers	Duties of CHWs
<ul style="list-style-type: none"> <li>Community navigators</li> <li><i>Promotores/Promotores de Salud</i></li> <li>Health, patient, or system navigators</li> <li>Health coaches</li> <li>Community health advisors</li> <li>Community health aides</li> <li>Outreach workers</li> <li>Case managers</li> <li>Care or Outreach coordinators</li> </ul>	<ul style="list-style-type: none"> <li>Federally qualified health clinics</li> <li>Provider groups</li> <li>Community based organizations</li> <li>County public health clinics or agencies</li> <li>Managed care plans/insurers</li> <li>Hospitals</li> </ul>	<ul style="list-style-type: none"> <li>Meeting patients in the community or home</li> <li>Encouraging patient activation and self-management</li> <li>Teaching preventive health care</li> <li>Teaching health literacy</li> <li>Conducting health coaching</li> <li>Co-developing care plans</li> <li>Completing health risk screenings</li> <li>Linking to community resources</li> <li>Assisting with benefit applications</li> <li>Helping patients to navigate housing</li> <li>Coordinating medication assessments</li> <li>Enhancing care transitions/ Case management/coordination/navigation</li> </ul>

Source: Chapman et al., 2022; Kelly et al., 2021.

### CHW Workforce Supply

Approximately 6,740 CHWs were employed in California in May 2021, according to the Bureau of Labor Statistics (BLS, 2022).<sup>22</sup> A 2021 survey of CHWs and promotores in California found nearly 60% (n=230) reported employment with a community-based organization, while close to 20% were employed by a federally qualified health center (FQHC). The remaining 20% were employed by faith-based organizations, managed care organizations, and agencies offering mental health or social services. As for work setting, more than half of the respondents (n=229) reported working in a community-based organization and many worked in a community clinic or a community health center. Other work settings included managed care plans, housing agencies, and long-term care/rehabilitation facilities (Chapman et al., 2022).

Average patient caseloads for CHWs may vary widely in the context of the team composition, experience of staff, and needs of the patient population. Literature suggests that optimal client caseloads for CHWs

<sup>22</sup> This estimate may be an undercount due to the widely varied job titles and a lack of licensing/certification body that might otherwise track employment of CHWs.

range between 10 and 30 clients; however, average caseloads may be around 60 clients (Whiteman et al., 2017). California stakeholders involved in the production of a resource guide for how managed care plans can integrate CHWs into their programs have reported caseload sizes ranging from 10 to 35 patients assigned to community-based CHWs (Kelly et al., 2021).

## **CHW Training**

The state of California does not require certification or licensure of CHWs although employers or payers may require CHW training and certification as a condition of employment (Chapman et al., 2022; Kelly et al., 2021). Notably, California Department of Health Care Services, which administers Medi-Cal, does require CHW certification to qualify for Medi-Cal reimbursement. See *Policy Context* section for further description.

CHW training programs vary in length, scope, content, and cost. Of the 40 certificate programs in California, 25 were active as of the publication date of a UCSF report about the CHW workforce and training (Chapman et al., 2023). Training time ranges between 10 to 816 hours depending on the type of program (college- or organization-based programs) (Miller et al., 2023).

## **Process of Linking Patients with Social Needs to Social Care/Resources**

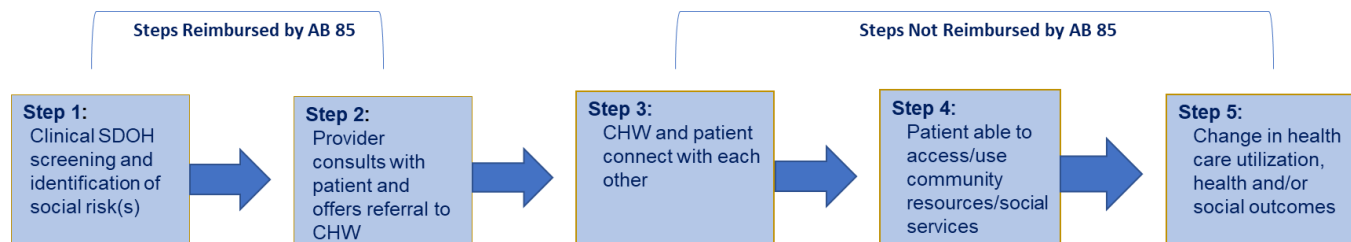
One of the primary goals of screening for SDOH is to identify unmet social needs to link patients to appropriate nonmedical resources to ultimately improve or maintain their health. Other goals include data collection to calculate prevalence of social needs to inform risk adjustment or plan social service programs. Such information can also inform clinician treatment choices such as using the information about financial security to choose less expensive medications, avoid refrigerated medications, provide point of care ultrasound, or change target blood sugar goals.

Figure 3 maps the process-of-care from SDOH screening through social service acquisition and potential change in patient health status or outcomes. Various studies and program evaluations noted potential barriers at each stage, many of which have solutions if they are anticipated prior to program implementation (AHC, 2020; Eder et al., 2021; Johnson et al., 2022; SIREN, 2019). AB 85 addresses Step 1 by mandating SDOH screening as a covered benefit and Step 2, which requires insurance carriers to provide clinicians adequate access to CHWs in counties where their enrollees reside to make referrals to CHWs for interested patients with social need(s).

Steps 3, 4, and 5 fall outside of the AB 85 requirements. Step 3 relates to the CHW and patient connecting (regardless of who initiates contact — the patient or the CHW). Making the connection can be challenging. One study showed a 50% patient-to-CHW connection rate following an average of three call attempts (range 1–13 calls) (Fiori et al., 2020). Step 3 also encompasses the work CHWs must do to establish and maintain relationships with a diverse set of social programs, whether publicly funded (e.g., WIC, CalFresh, HUD) or nonprofits with or without religious affiliation (e.g., churches, Salvation Army, food banks, homeless shelters, legal aid societies) that receive public and/or private funding. Once the patient-to-CHW connection is made, the patient must be able to access the needed services. Barrier to successful use include incomplete patient hand-off from CHW to agency, lack of eligibility for services due to patient's income level, or inadequate agency bandwidth or funding to respond to need. Step 4 must be successful and maintained to achieve changes in social or health outcomes (Step 5).



**Figure 3. Process Overview of SDOH Screening to Improve the Health Status of Patients with Health-Related Social Needs**



Source: California Health Benefits Review Program, 2023.

Note: Step 2 could also include clinician actions such as counseling, education, and adjustment to medical care such as avoiding refrigerated medications if someone doesn't have stable refrigerator access, etc.

Key: CHW = community health worker; SDOH = social determinants of health.

Table 6 describes the steps in Figure 3 in more detail and describes potential barriers that may prevent the accomplishment of a step or progression to the next step to social services care and ultimately improving health outcomes.

**Table 6. Challenges Along the SDOH Screening Process to Improved Health**

Step	Challenges to Screening: Provider Perspective	Potential Barriers to Screening: Patient Perspective
<b>Step 1:</b> Clinical SDOH Screening and Identification of Social Needs <i>(Reimbursed by AB 85)</i>	<ul style="list-style-type: none"> <li>Numerous, mostly unvalidated tools to choose from</li> <li>Concerns about inadequate availability of social services</li> <li>Office visit time constraints for administering, scoring and discussing potentially sensitive screening results</li> <li>Lack of clinician training on and knowledge of available social services</li> <li>Frustration with dropped referrals or connections to social services</li> <li>Unclear frequency of screening</li> </ul>	<ul style="list-style-type: none"> <li>Reluctance to share potentially sensitive nonmedical information</li> <li>Frustration with medical complaint not being addressed due to unexpected discussions of SDOH screening results</li> </ul>
<b>Step 2:</b> Clinician consults and offers patient referral to CHW <i>(Reimbursed by AB 85)</i>	<ul style="list-style-type: none"> <li>Concern about patient receptivity to assistance</li> <li>Concern about up-to-date CHW listings to use for referrals</li> <li>Concern about supply of CHWs to handle referrals in timely manner</li> <li>Contacting the CHW may be challenging for clinician or patient</li> <li>HIPAA concerns with sharing personal health information with nonproviders (CHWs)</li> <li>Concern about effective oversight and case planning between CHWs and licensed clinician supervisors</li> <li>Concern there will not be communication to clinician after CHW referral</li> </ul>	

Step	Challenges to Screening: Provider Perspective	Potential Barriers to Screening: Patient Perspective
<b>Step 3:</b> CHW and patient connect with each other	<ul style="list-style-type: none"> <li>• Large caseload limits time to connect with patients</li> <li>• Difficulty connecting with patients who can't or don't answer the phone (or don't have a phone) or can't see the CHW in-person</li> </ul>	<ul style="list-style-type: none"> <li>• CHW may not respond to patient or require increased patient effort to connect with the CHW</li> </ul>
<b>Step 4:</b> Patient able to access/use community resources/social services	<ul style="list-style-type: none"> <li>• Potential ineligibility for means-tested programs (e.g., WIC, CalFresh)</li> <li>• Inadequate availability of community service resources (AHC Model found that housing and transportation services were)</li> <li>• CHW and community staff turnover rates can make it hard to maintain CHW-client relationships, CHW-community resource relationships, and up-to-date databank of resources</li> <li>• Community services staff turnover</li> <li>• Slow/no responses from community service providers</li> <li>• lack of community resources for those who are ineligible for means-tested programs (e.g., WIC, CalFresh),</li> <li>• Large caseload can reduces time available to contact patients and ensure adequate use of social resources</li> </ul>	<ul style="list-style-type: none"> <li>• Time or transportation constraints in using resources (e.g., food banks too far away or only open when patient is working)</li> <li>• Not eligible for resources (e.g., income too high)</li> <li>• Resources insufficient to address concerns (e.g., inadequate housing supply, WIC allotment too small)</li> </ul>
<b>Step 5:</b> Health care utilization, health and/or social outcomes	<ul style="list-style-type: none"> <li>• Difficult to coordinate care with CHWs not embedded in provider clinic</li> <li>• Lack of documentation of patient social resources use</li> <li>• Can require linking community resources to EMR (costly, complicated)</li> <li>• HIPAA concerns communicating between medical office and community organizations</li> <li>• Health outcomes change over time and not show immediate or sustained improvement after social resource use</li> </ul>	<ul style="list-style-type: none"> <li>• Social needs can change overtime resulting in new social needs to address after initial needs are addressed (e.g., this is an ongoing process, not a single fix)</li> <li>• Concern about additional negative consequences: worsened experiences of health care, perceptions of discrimination due to social needs, feelings of "double loss" from highlighting patient social needs and not being able to fill them. These are areas in need of research.</li> </ul>

Source: California Health Benefits Review Program, 2023, based on NASEM, 2019.

## MEDICAL EFFECTIVENESS

As discussed in the *Policy Context* section, AB 85 would mandate coverage of and provide reimbursement to health care clinicians for social determinants of health (SDOH) screenings. AB 85 would also mandate that primary care clinicians have adequate access to community health workers (CHWs). Additional information on this is included in the *Background on Screening for Social Determinants of Health* section. The medical effectiveness review summarizes findings from evidence<sup>23</sup> from 2019 to present on the evidence that multidomain clinical screening for SDOH leads to referrals to CHWs or other social service navigators, to use of social services, and to changes in social outcomes, health resource utilization, or health outcomes. CHBRP also reviews evidence of harms of SDOH screening in a clinical setting.

### Research Approach and Methods

The search was limited to studies published from 2019 to present. CHBRP relied on four systematic reviews (Eder et al., 2019; Escobar et al., 2021; Sokol et al., 2019; Yan et al., 2020) for findings from and citations for studies published prior to 2019. The search was limited to abstracts of studies published in English. Of the 318 articles found in the literature review, 23 were reviewed for potential inclusion in this report on AB 85, and a total of 12 studies were included in the medical effectiveness review for this report. The other articles were eliminated because they did not focus on multidomain SDOH screening in a clinical setting, were of poor quality, or did not report findings from clinical research studies. A more thorough description of the methods used to conduct the medical effectiveness review and the process used to grade the evidence for each outcome measure is presented in Appendix B.

The conclusions below are based on the best available evidence from peer-reviewed and grey literature.<sup>24</sup> Unpublished studies are not reviewed because the results of such studies, if they exist, cannot be obtained within the 60-day timeframe for CHBRP reports.

### Key Questions

1. Is there evidence that multidomain clinical screening for SDOH:
  - a. Leads to referrals to CHWs/social service navigators or social services (or that referral to CHWs/navigators leads to referrals to social services)?
  - b. Affects use of social or health resources?
  - c. Affects social outcomes, health care utilization, or health outcomes?
2. Is there evidence of health harms of clinical screening for SDOH in a clinical setting?

CHBRP used the following process diagram (Figure 4), as previously shown in the *Background on Screening for Social Determinants of Health* section, to illustrate the potential steps between clinical screening for SDOH and health outcomes as a framework for the evidence search and Key Questions.

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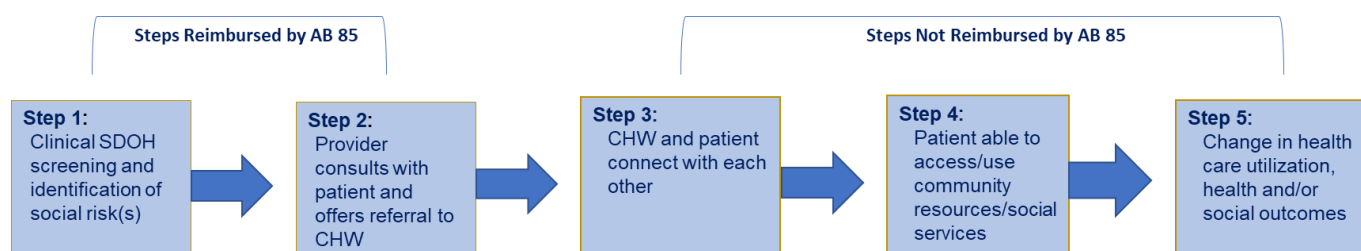
<sup>23</sup> Much of the discussion in this section is focused on reviews of available literature. However, as noted in the section on Implementing the Hierarchy of Evidence in the *Medical Effectiveness Analysis and Research Approach* document (posted at [http://chbrp.com/analysis\\_methodology/medical\\_effectiveness\\_analysis.php](http://chbrp.com/analysis_methodology/medical_effectiveness_analysis.php)), in the absence of fully applicable to the analysis peer-reviewed literature on well-designed randomized controlled trials (RCTs), CHBRP's hierarchy of evidence allows for the inclusion of other evidence.

<sup>24</sup> Grey literature consists of material that is not published commercially or indexed systematically in bibliographic databases. For more information on CHBRP's use of grey literature, visit [http://chbrp.com/analysis\\_methodology/medical\\_effectiveness\\_analysis.php](http://chbrp.com/analysis_methodology/medical_effectiveness_analysis.php).

Step 1 is the screening for SDOH in a clinical setting. If a patient screens positive for a social need, and this is confirmed in discussion with their health care professional, they can be referred to a CHW or other navigator (Step 2). The SDOH screening and access to CHWs for primary care clinicians is reimbursed by AB 85.

Beyond the services covered in AB 85, are the potential downstream effects found in Steps 3, 4, and 5. Step 3 requires the CHW/navigator to connect with the patient, and then refer the patient to the appropriate social services or community resources. The clinician also might refer the patient directly to social services after screening without the CHW (Step 1 directly to Step 4) and the patient would then need to qualify for and use appropriate social services (Step 4). Step 4 shows where the patient is able to use or access the resources and services to which they were referred. This could then lead to Step 5: improved social outcomes, health care utilization outcomes, and health outcomes.

**Figure 4. Process Overview of SDOH Screening to Improve the Health Status of Patients with Health-related Social Needs**



Source: California Health Benefits Review Program, 2023.

Key: CHW = community health worker; SDOH = social determinants of health.

## Methodological Considerations

The literature search included studies of universal SDOH screening conducted in a clinical setting. As there is no single accepted SDOH screening tool, CHBRP examined all available evidence for multidomain screening tools regardless of whether they have been validated. CHBRP only considered evidence from multidomain SDOH screening tools that assess a breadth of social risks because these tools are most relevant to the scope of the AB 85 and as described in the *Policy Context*. Single-domain screening tools (such as Screening, Brief Intervention, and Referral to Treatment [SBIRT]<sup>25</sup> screening for substance use) and general health screening tools that include SDOH items (such as the Survey for Well-being of Children development screener) are outside the scope of this analysis. Studies of screening specific target populations only (such as only screening in pregnancy) or those not in an outpatient office or ED (such as in the hospital) were excluded.

CHBRP also excluded interventions for SDOH that did not begin with clinical screening, such as studies in which social needs were identified without using SDOH screening tools in a clinical setting (e.g., through the medical history, through community screening, or through patient self-report of social needs or self-referral for social support).

CHBRP assesses the quality of evidence based in part on study rigor. RCTs and other studies with comparison groups have higher rigor than studies without comparison groups and are preferred studies in CHBRP bill analyses. For AB 85, as there are few studies available, observational studies without comparison groups were included but were not used to change the level of evidence determined by the higher quality studies.

<sup>25</sup> SBIRT is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with substance use disorders, as well as those who are at risk of developing these disorders.

## Outcomes Assessed

CHBRP assessed:

- The impact of clinical SDOH screening on referrals to CHWs or other social service navigator;
- The effectiveness of referrals on the uptake of social services;
- The impact of SDOH screening on health outcomes; and
- The potential harms of SDOH screening.

## Study Findings

This section summarizes CHBRP's findings regarding the strength of evidence for the effectiveness of clinical screening for SDOH as referred to in AB 85. Each section is accompanied by a corresponding figure. The title of the figure indicates the test, treatment, or service for which evidence is summarized. The statement in the box above the figure presents CHBRP's conclusion regarding the strength of evidence about the effect of a particular test, treatment, or service based on a specific relevant outcome and the number of studies on which CHBRP's conclusion is based. Definitions of CHBRP's grading scale terms is included in the box below, and more information is included in Appendix B.

CHBRP uses the following terms to characterize the body of evidence regarding an outcome:

*Clear and convincing evidence* indicates that there are multiple studies of a treatment and that the large majority of studies are of high quality and consistently find that the treatment is either effective or not effective.

*Preponderance of evidence* indicates that the majority of the studies reviewed are consistent in their findings that treatment is either effective or not effective.

*Limited evidence* indicates that the studies have limited generalizability to the population of interest and/or the studies have a fatal flaw in research design or implementation.

*Inconclusive evidence* indicates that although some studies included in the medical effectiveness review find that a treatment is effective, a similar number of studies of equal quality suggest the treatment is not effective.

*Insufficient evidence* indicates that there is not enough evidence available to know whether or not a treatment is effective, either because there are too few studies of the treatment or because the available studies are not of high quality. It does not indicate that a treatment is not effective.

More information is available in Appendix B.

### **Effectiveness of SDOH Screening in a Clinical Setting on Referral Rates to CHWs/Navigators or Social Services (Steps 1 and 2, Reimbursed by AB 85)**

CHBRP identified two RCTs and five observational studies about the impact of SDOH screening in a clinical setting on referral rates to CHWs/navigators or social services.

#### *RCTs*

Two RCTs examining children reported more referrals to social services after social risk screening, compared with usual care.

One RCT (Garg et al., 2007; 200 parents) compared parents in the WE CARE<sup>26,27</sup> social risk screening intervention group with a usual care control group during well child examinations. Physicians in the intervention group received WE CARE training and were to review the WE CARE survey with the parent during the visit and make a referral (hand an information sheet from the resource book) if the parent indicated that he/she wanted assistance with any psychosocial problem. The control group had handouts available, and physicians were educated about available resources (standard of care for the clinic). This study reported that more parents in the intervention group received at least one referral (51.0% vs. 11.6%;  $p < 0.001$ ), most often for employment (21.9%), graduate equivalent degree programs (15.3%), and smoking-cessation classes (14.6%). Parents in the intervention group received a significantly greater mean number of referrals than parents in the control group (1.15 vs. 0.24;  $P < 0.001$ ).

In another clustered RCT (Garg et al., 2015; 336 mothers), mothers filled out the WE CARE screening survey in the waiting room. Clinicians reviewed the survey with the mother and made a referral (provided information sheet from the resource book) if the mother indicated she wanted assistance with that need. After the well child visit, research staff provided applications to the community services to which families were referred. One month after the index visit, mothers who were screened using WE CARE screening assessment were more likely than the usual care control group to receive  $\geq 1$  referral at the index visit (70% vs. 8%; adjusted odds ratio [AOR] = 29.6; 95% CI, 14.7–59.6).

### *Observational studies without comparison groups*

CHBRP found six observational studies that report on the number of social need referrals after screening. The majority of studies are conducted at safety-net hospitals and with high-risk populations. It is important to note that these studies do not have a comparison group and therefore the effect of the SDOH screening on referral rates cannot be determined from these studies. These studies report referral rates from a single group after SDOH screening.

One observational cohort study of parents of children attending two urban pediatric clinics, Fleegler et al. (2007; 260 families) reported that of the 79% eligible families who participated in the multidomain screening, 82% reported at least one social risk and 54% reported at least two social risks. Referral need ranged from a low of 15% of intimate partner violence to a high of 44% for housing. Of 205 families who screened positive for a social need, 79 families received 115 referrals total.

In an observational portion of a difference-in-difference study of the previously validated Health Leads multidomain screening and intervention program within a primary care network, Berkowitz et al. (2017) compared those who screened positive for unmet basic needs (Health Leads group) with those who screened negative during routine primary care visits. The authors reported that of the 5,125 participants screened, 35% ( $n=1,774$ ) reported at least one unmet social need and were allocated to the Health Leads group, and 65% ( $n=3,351$ ) reported no unmet social needs and were allocated to comparison group. Of those who screened positive, 58% ( $n=1,021$ ) with a social need ended up enrolled in Health Leads<sup>28</sup>, a program to address social risks with help from an advocate. Fifteen percent of those who screened positive declined a referral to services, 18.6% declined services after initially wanting services, and 9.6%

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<sup>26</sup> Well Child Care Visit, Evaluation, Community Resources, Advocacy, Referral, Education (WE CARE). This 10-item survey assesses parental need for education, employment, childcare, and housing, in addition to screening for food insecurity, tobacco use, substance (drug or alcohol) abuse, domestic violence, and depression.

<sup>27</sup> A WE CARE Family Resource Book was developed for each community health center (CHC) by the study team and CHC staff. The book contained 1-page tear-out information sheets listing 2 to 4 free community resources available for each need. The information sheets contained the program name, a brief description, contact information, program hours, and eligibility criteria. The resource book was placed in each pediatric examination room within easy view of the clinicians.

<sup>28</sup> Health Leads (HL) is a previously documented screening and intervention that places undergraduate students in urban clinics to assist impoverished families with their social needs. This integrated care model includes (a) parents completing a brief previsit screening survey for social issues (e.g., food, housing, employment) at well-child visits, (b) providers referring to the HL desk located in the clinic, and (c) HL students connecting families to community-based resources through in-person meetings and telephone follow-up. HL students then update referring providers about outcomes (Garg et al., 2012)



had a rapid resource referral, which consisted of getting information once, at the initial visit. Those in the comparison group were not enrolled in Health Leads.

Hill et al (2022; 969 patients, 761 enrolled) conducted a retrospective cohort study of two clinics (site A and site B) to examine the association between social needs program enrollment<sup>29</sup> in pediatric primary care healthcare utilization in the subsequent 12 months. At Site A, 481 patients were referred and 81% completed a full intake and were enrolled in the social navigation program. Just over half (54.6%) of enrolled patients were successfully connected to resources. The majority of nonenrolled patients were closed due to disconnection (53.8%; compared to 13.0% of the nonenrolled), 1% (5) were given a rapid referral to social services, and 7.7% (37) were not interested in enrolling in the program. At site B, 488 patients were referred, 76% completed a full intake and were enrolled. At this site, the majority of nonenrolled patients were closed due to disconnection (72.6%) compared to 44.7% of enrolled, 2.5% (12) were given a rapid referral and 5% (20) were not interested in enrolling. Another observational cohort study at a pediatric hematology clinic in an urban, safety-net hospital (Power-Hays et al., 2020; 132 unique patients and 156 screens completed) reported that among patients undergoing SDOH screening (WE CARE), 66% were positive for at least one unmet social need. Of those, 80% were referred to a relevant community organization (noted in their after-visit summary).

Another prospective cohort study (Fiori et al., 2020; 6,584 eligible well-child visits) reported that 72% (n=4,948) were screened using Health Leads toolkit for social needs. Of those, approximately 20% (n=984) of households reported one or more unmet social need. Of households reporting social needs, 39% identified two or more social needs with the three most common social need categories reported to be housing stability and quality (40%), benefits assistance (19%), and food insecurity (15%). Thirty-three percent of households with one or more social needs requested a referral to a CHW (n=320) and 29% were able to connect with the CHW for referrals to services (n=287; “successful referrals,” 43% of all referrals). Approximately 49% of “unsuccessful” referrals were the result of the family being disconnected from the CHW.

Another cohort study of adult Medicaid beneficiaries in the emergency department (Kulie et al., 2021; 505 subjects) who completed a social needs screener, reported that 85% of participants received a referral for at least one social need and 44% received referrals to up to three different agencies. The most common needs were help with housing (70%), medical issues (51%), and finding food (42%).

**Summary of findings regarding the effectiveness of SDOH screening in a clinical setting on referral rates to CHWs/navigators or social services:** CHBRP found *limited evidence* that there is benefit from SDOH screenings in a clinical setting in obtaining referrals to community health workers/navigators/social services.

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<sup>29</sup> If the patient is reachable and opts in to enroll with the program, the patient is then “enrolled” with the program and assigned to work with an undergraduate volunteer. Patients/caregivers are contacted by the volunteer on a weekly basis until the case is closed. The HCC volunteer is trained to help families in a variety of ways, including finding specific resources, assisting with applications, providing material, in-clinic resources (such as diapers or baby clothes) and advocating for families with other social service agencies.

**Figure 5. Effectiveness of SDOH Screening in a Clinical Setting on Referral Rates to CHWs/Navigators or Social Services (Steps 1 and 2, Reimbursed by AB 85)**



**Effectiveness of SDOH Screening in a Clinical Setting on Social Resource Use (Step 4, Downstream of AB 85)**

CHBRP found two RCTs and six observational studies that reported on the effectiveness of SDOH screening in a clinical setting on social resource use.

*RCTs*

One RCT (Garg et al., 2007; 200 parents) reported that one month after WE CARE screening, more of the parents in the intervention group (WE CARE screening and then resource handout) reported contacting a community resource that had been referred versus parents in the control group (20% vs. 2.2%; OR = 17.3 [3.8–77.7], p<0.001) after controlling for child age, Medicaid status, race, educational status, and food stamps.

Another RCT, Garg et al. (2015; 336 mothers) reported that mothers who were screened using WE CARE screening assessment were more likely to be enrolled in a new community resource (39% vs. 24%; AOR = 2.1; 95% CI, 1.2–3.7), and of receiving fuel assistance (AOR = 11.9; 95% CI, 1.7–82.9).

*Observational studies without comparison groups*

Six observational studies reported on SDOH screening in a clinical setting. Again, it is important to note that these studies do not have a comparison group and therefore they do not compare patients that are screened for SDOH to patients that are not.

One study reported that after screening, identification of needs and referral, 73 of 115 referrals for 79 families had contact with the referral agency, and 82% (60 of 73) of those referred considered the referral agencies helpful (Fleegler et al., 2007; 260 parents).

Another prospective cohort study (Garg et al., 2012; 1,059 subjects) reported that 50% of families enrolled in at least one community-based resource — most often for employment, health insurance, and food — within 6 months of accessing on-site Health Leads in an urban pediatric primary care clinic.

In an observational portion of a difference-in-difference study of the Health Leads program within a primary care network, Berkowitz et al. (2017) compared those who screened positive for unmet basic needs (Health Leads group) with those who screened negative, during routine primary care visits. The authors reported that of the 5,125 participants screened, 35% (n=1,774) reported at least one unmet social need and were allocated to the Health Leads group, and 58% accepted the Health Leads referral. At median 34 months follow-up, of those who enrolled with Health Leads, 29.7% of patients said their needs were met.

An observational cohort study at a pediatric hematology clinic in an urban, safety-net hospital (Power-Hays et al., 2020; 132 unique patients and 156 screens completed) reported that among patients undergoing SDOH screening (WE CARE), 45% of patients who had needs identified through the screen and were reached with follow-up phone call had reached out to the local community organization aimed at addressing the specific needs without any additional help from the hematology clinic.

Another study (Lian et al., 2021; 501 patients) reported that 32.7% of patients screened, referred, and subsequently reached for follow-up started services with one or more of their referred resources within 4 weeks of the initial referral.

Another cohort study of adult Medicaid beneficiaries in the emergency department (Kulie et al., 2021; 505 subjects) who completed a social needs screener, reported that participants (85%) received a referral for at least one social need. Few patients reported receiving help from the referral agencies (5% for a wellness program to 15% for medical services). Referral agencies generally reported even lower assistance rates (0% for job training to 17% for medical services).

**Summary of findings regarding the effectiveness of SDOH screening in a clinical setting on social resource use:** CHBRP found that there is *limited evidence* that receiving SDOH screening in a clinical setting is associated with improved use of social services. In general, only a minority of those with a need were able to connect with resources to address these needs with a wide range of social resource use among patients/caregivers that are screened (5%–58%, from RCTs and observational studies).

**Figure 6. Effectiveness of SDOH Screening in a Clinical Setting on Social Resource Use (Step 4, Downstream from AB 85)**



### Effectiveness of SDOH Screening in a Clinical Setting on Social Outcomes (Step 5, Downstream of AB 85)

CHBRP identified two RCTs that addressed the effectiveness of SDOH screening in a clinical setting on families’ social outcomes after SDOH screening.

One RCT (Gottlieb et al., 2016; 1,809 patients) that compared the effects of written resource handouts to in-person patient navigation assistance on families’ social needs after SDOH screening at two urban pediatric clinics. At 4 months follow-up, researchers reported that parents/caregivers in the navigation intervention group reported a decrease in their number of social needs (–0.39 mean; using iScreen 14 item social needs screening tool), while caregivers in the written resource control group reported a small increase in the number of social needs (mean 0.22; between-group difference of 0.61 needs;  $p < 0.001$ ).

Another RCT, Gottlieb et al. (2020; 611 subjects) compared the effects of written resource handouts to in-person patient navigation assistance on families’ social needs after screening for SDOH at two safety-net pediatric urban clinics. At 6 months follow-up, 63.6% of caregivers in the written resource handouts group and 61.8% of caregivers in the in-person patient navigation assistance group reported that their top social risk priority area was no longer an issue, both groups showed decreased social risks (written resources, 1.28; in-person assistance, 1.74,  $p < 0.001$  both compared to baseline), and both groups showed significantly decreased missed school or camp days (written resources, –0.70 days;  $p = 0.006$ ; in-person assistance, –0.42; days;  $p = 0.048$  both compared to baseline). For caregivers’ self-reported health status outcomes at follow-up compared to baseline, researchers reported no significant difference between groups, with both groups reporting decreases in their perceived stress (written resource, –0.59;  $p < 0.001$ ; in-person assistance, –0.99;  $p < 0.001$ ).

**Summary of findings regarding the effectiveness of SDOH screening in a clinical setting on social outcomes:** CHBRP found *limited evidence* that SDOH screening and in person navigation assistance in a clinical setting and referral programs is associated with improvements in social outcomes based on two RCTs, one that demonstrated decreased social need only after in-person navigation assistance. However, the evidence is *inconclusive* about what types of intervention lead to decreases social needs. One study showed an increase in social needs after written resources were given, and one RCT that showed multiple improved social outcomes from two different social need interventions (in-person navigation assistance or written resources).

**Figure 7. Effect of SDOH Screening and Referral on Social Outcomes**



**Effectiveness of SDOH Screening in a Clinical Setting on Health Care Utilization (Step 5, Downstream of AB 85)**

CHBRP identified one RCT and one observational study without a comparison group that addressed the effectiveness of SDOH screening in a clinical setting on health care utilization.

*RCT*

In an RCT, Gottlieb et al. (2016; 1,809 caregivers) compared the effects of written resource handouts to in-person patient navigation assistance (from a trained student volunteer) to connect families’ social needs after screening for SDOH (study used iScreen; Gottlieb et al., 2014) at two safety-net pediatric urban clinics to appropriate social services. In a secondary analysis (Pantell et al., 2020; 1,300 caregivers) of this RCT, researchers reported that at 12 months follow-up, there were no significant differences in the percentage of children with at least one ED visit between the in-person assistance versus control written resources group (37.1% vs. 37.7%, respectively; hazard ratio, 0.96; 95% CI, 0.80–1.14; p = 0.81). However, the written resources (control) group was associated with increased probability of hospitalization compared with the in-person patient navigation assistance group (hazard ratio, 0.59; 95% CI, 0.38–0.94; p = 0.03), making the in-person navigation assistance group 69% less likely to be hospitalized than children in the written resources group.

*Observational study without a comparison group*

One retrospective cohort study Hill et al (2022; 969 patients, 761 enrolled) of two clinics (site A and site B) examined the association between social needs program enrollment in pediatric primary care with ED use and WCV attendance in the subsequent 12 months. At both study sites (A and B), enrolling in the program was associated with increased frequency of well child visit attendance, remaining significant after adjusting for confounders (OR: 5.83, P value: P < .001, 95% CI: 3.17–10.8, OR: 4.20, P < .001, 95% CI: 2.66–6.64, respectively). This study showed no significant difference in ED use at either clinic for enrolled or not enrolled.

**Summary of findings regarding health care utilization after SDOH screening in a clinical setting:** CHBRP found *inconclusive evidence* that SDOH screening in a clinical setting and referral to an in-person social services navigator is associated with a decrease in ED use and hospitalization based on one RCT and one retrospective cohort study that showed no difference in children’s ED utilization for in-person navigation assistance or written resource groups and decreased hospitalizations in the in-person navigation assistance group compared to the written resource group.

**Figure 8. Effect of Screening for SDOH in a Clinical Setting on Health Care Utilization (Step 5,**



**Effectiveness of SDOH Screening in a Clinical Setting on Health Outcomes (Step 5, Downstream of AB 85)**

CHBRP identified three RCTs and one quasi-experimental study that addressed the effectiveness of SDOH screening in a clinical setting on health outcomes.

In an RCT, Gottlieb et al. (2016; 1,809 subjects) compared the effects of written resource handouts to in-person patient navigation assistance on families’ social needs after screening for SDOH (iScreen; Gottlieb et al., 2014) at two pediatric urban clinics. At 4 months follow-up, researchers reported that caregivers receiving in-person assistance reported significantly greater improvement in their child’s general health<sup>30</sup> compared to the groups receiving written resource handouts (mean score change of -0.36 vs. -0.12,  $p < 0.001$ ).

In another RCT, Gottlieb et al. (2020; 611 subjects) compared the effects of written resource handouts to in-person patient navigation assistance on families’ social needs after screening for SDOH at two safety-net pediatric urban clinics (iScreen; Gottlieb et al., 2014). Researchers reported improvements for both groups and no difference between groups for both child and adult caregiver health outcomes. At 6 months follow-up, both groups showed significantly improved child general health (written resources, 0.37;  $p < 0.001$ ; in-person assistance, 0.24,  $p < 0.001$ ) and improved caregiver report of children’s emotional functioning scores (written resources, 5.82;  $p < 0.001$ ; in-person assistance, 4.35;  $p < 0.001$ ) compared to baseline. For caregivers’ self-reported health status outcomes, researchers reported no significant difference between groups, with both groups reporting significant improvement in their own general health (written resource, 0.14;  $p = 0.04$ ; in-person assistance, 0.1;  $p = 0.005$ ) and decreases in their reported depressive symptoms (written resource, -1.71;  $p < 0.001$ ; in-person assistance, -1.60;  $p < 0.001$ ) at follow-up, compared to baseline.

In an RCT examining the effectiveness of the Safe Environment for Every Kid (SEEK<sup>31</sup>) model of enhanced pediatric primary care to help reduce child maltreatment, Dubowitz et al. (2012; 1,119 mothers of children aged 0 to 5 years) randomized mothers to an intervention that included a tailored list of social resources plus a social worker in clinic and via telephone to provide support, crisis intervention and facilitate referrals, or usual care control. At 12 months follow-up, after controlling for potential confounders (mother’s education, age, marital status, family income, and child’s ethnicity), mothers in the intervention group reported less Psychological Aggression (towards their children) than controls ( $p = 0.047$ ) and fewer Minor Physical Assaults (towards their children) than controls ( $p = 0.043$ ) on the Parent-Child Conflict Tactics Scale (CTSPC), a self-reported measure of how parents resolve conflict with their child.

In a difference-in-difference evaluation of Health Leads multidomain screening program for adults with chronic health conditions, Berkowitz et al. (2017; 5,125 people screened) reported that patients enrolled in Health Leads,<sup>5</sup> a program to address social risks (with help from an advocate) showed positive changes in health outcomes at 32 to 34 months median follow-up time, compared to those who screened negative for SDOH and were not offered Health Leads program (control group). In this study, patients

<sup>30</sup> Measure was based on a question from 2011/2012 National Survey of Children’s Health that measured child mental and physical health status: “In general, would you say your child’s health is...?” on a 5-point scale, which ranged from 1 (“excellent”) to 5 (“poor”), with lower values or decreases in global health over time representing better or improved health (Gottlieb et al., 2016).

<sup>31</sup> The SEEK model included training health professionals to address targeted risk factors (e.g., maternal depression), the Parent Screening Questionnaire, parent handouts, and a social worker.



who screened positive for social needs (n=1774) were offered the Health Leads program; 57.6% (1,021) people enrolled and 14.6 (259) declined at time of screening. Health outcomes for those with unmet social needs, both the enrolled group and the declined group, were compared to the health outcomes for the group with no unmet social needs (screened negative, control group). Among patients with hypertension, those with unmet social needs who enrolled in Health Leads had a reduction in systolic blood pressure (-2.6; 95% CI, -3.5 to -1.7; p<0.001), and diastolic blood pressure (-1.4; -1.9 to -0.9; p<0.001), and low-density lipoprotein cholesterol (-6.3; -9.7 to -2.8; p<0.001) compared to patients with no unmet social needs. Patients with unmet social needs who declined Health Leads had no significant changes in systolic blood pressure, diastolic blood pressure, LDL, or A1c or compared to patients with no unmet social needs.

**Summary of findings regarding the effectiveness of SDOH screening in a clinical setting on health outcomes:** CHBRP found *limited evidence* that SDOH screening in a clinical setting is associated with changes in intermediate health outcomes.

**Figure 8. Effect of SDOH Screening in a Clinical Setting on Health Outcomes**



### Harms Associated with Using SDOHs Screening Tools in a Clinical Setting

CHBRP did not find any literature that addresses the harms of using SDOH screening tools in a clinical setting.

**Summary of findings regarding harms associated with using SDOH screening tools in a clinical setting:** CHBRP found *insufficient evidence* of potential harms on referral rates, use of social services, social outcomes, health care utilization, or health outcomes from using any SDOH screening tool in a clinical setting.

**Figure 9. Harms Associated with Using SDOH Screening Tools in a Clinical Setting**



### Summary of Findings

It is hard to generalize the findings of this research across studies, because of the variety of populations included in studies, the various social needs, the lack of standard or consensus SDOH screening tools between studies, and the variety of referral interventions used in the studies. Therefore, taken together, the evidence on the effectiveness of screening for SDOH in a clinical setting, referral to CHWs/navigators/social services and downstream outcomes after screening is mixed (*limited, inconclusive, and insufficient*). The lack of evidence, due to limited research literature, is not evidence of lack of effect.



## Steps 1 and 2

CHBRP found *limited evidence* that SDOH screenings in a clinical setting increase referrals to community health workers/navigators/social services.

## Step 4

CHBRP found *limited evidence* that SDOH screening in a clinical setting is associated with improved use of social services.

## Step 5

CHBRP found *limited evidence* that SDOH screening in a clinical is associated with improvements in social outcomes.

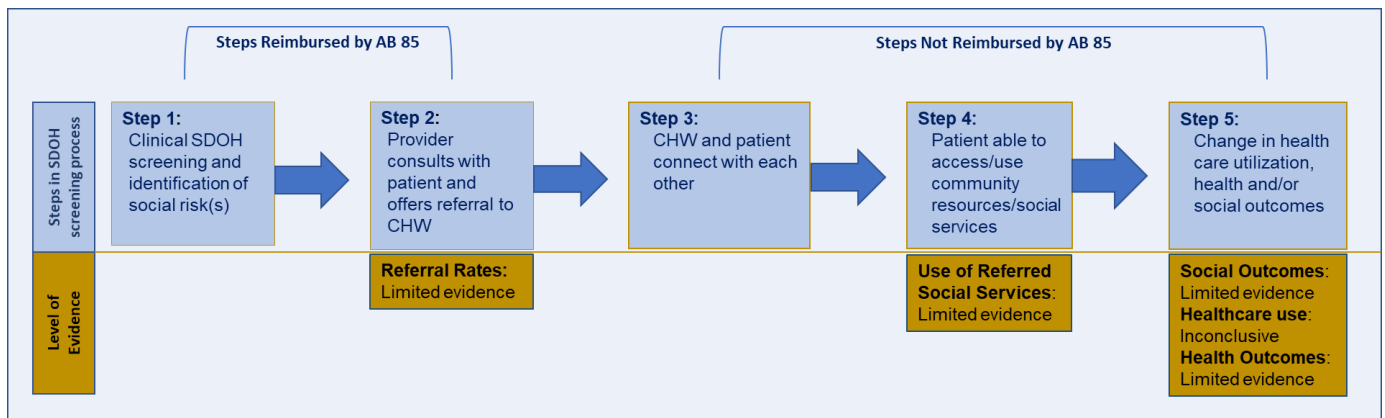
CHBRP found *inconclusive evidence* that SDOH screening in a clinical setting is associated with changes in health care utilization.

CHBRP found *limited evidence* that SDOH screening in a clinical setting is associated with changes in health outcomes.

## Harms

CHBRP found *insufficient evidence* of potential harms to patients, families, and clinicians of using any SDOH screening tool in a clinical setting.

**Figure 10. Summary of Findings for All Outcomes As They Relate to the Process Diagram of the Potential Steps in AB 85 and Downstream (Conclusions in Boxes Below Repeat of Figure 3)**



## BENEFIT COVERAGE, UTILIZATION, AND COST IMPACTS

As discussed in the *Policy Context* section, AB 85 would require health plans and health policies regulated by DMHC or CDI to provide coverage and reimbursement of social determinants of health (SDOH) screening for enrollees. AB 85 would apply to enrollees with commercial or CalPERS health insurance regulated by DMHC and CDI and Medi-Cal beneficiaries enrolled in DMHC-regulated plans or county organized health systems (COHS). Additionally, for DMHC-regulated plans and CDI-regulated policies, the insurer would be required to provide “primary care providers with adequate access to community health workers...and inform primary care providers of how to access these community health workers.” However, AB 85 does not explicitly require reimbursement for services provided by community health workers (CHWs).

In addition to commercial enrollees, more than 73% of enrollees associated with CalPERS and more than 80% of Medi-Cal beneficiaries are enrolled in DMHC-regulated plans.<sup>32</sup> As noted in the *Policy Context* section, AB 85 would impact these CalPERS enrollees’ and Medi-Cal beneficiaries’ benefit coverage.

This section reports the potential incremental impacts of AB 85 on estimated baseline benefit coverage, utilization, and overall cost.

### Analytic Approach and Key Assumptions

The coverage, utilization, and cost impacts estimated in this section rely on the following key assumptions and considerations:

- 1) AB 85 would allow for reimbursement of one SDOH screening per year and is likely to be part of a typical preventive and wellness care. Because it is similar to other preventive screenings and risk assessments that are covered under current law, the additional cost would be reimbursed by the health plan or health insurance policy, but no cost sharing would be collected due to the Affordable Care Act’s preventive services provisions.
- 2) Although the SDOH screening tools currently vary in length and content, CHBRP used other similar screening services and Milliman Consolidated Health Cost Guidelines Sources Database (CHSD) claims to estimate that the large-group, small-group, and CalPERS commercial reimbursement rate would be \$40 per screening on average, individual insurance (Covered California and the off-Exchange individual market) reimbursement would be \$36 per screening on average, and Medi-Cal would reimburse \$10 per screening on average.
- 3) AB 85 allows insurance carriers to determine criteria for coverage of SDOH screening and allows clinicians to be reimbursed for medically necessary screening. The voluntary nature of screening for both patients and clinicians would not result in universal screening for social needs. Instead, the use of screening by clinicians would vary by population. CHBRP estimates that 3.2% of employer-sponsored and CalPERS commercial enrollees would obtain an annual SDOH screening, while up to 6.4% of individual insurance market enrollees and 20% of Medi-Cal enrollees would use the service. These screening rates may be different than those published in the clinical trials and observational studies included in the *Medical Effectiveness* section, because published studies often focused on a certain population with specific eligibility criteria. CHBRP arrived at this percentage based on expert and actuarial input. It is also important to note that health plans have their own “in-house” population care management and SDOH-focused programs that might provide screening services that result in referral to services to address SDOH without any separate reimbursement.

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<sup>32</sup> For more detail, see CHBRP’s resource, *Sources of Health Insurance in California*, available at [http://chbrp.org/other\\_publications/index.php](http://chbrp.org/other_publications/index.php).

- 4) Although AB 85 requires health plans and insurance policies to ensure access to CHWs, it is unclear whether that requirement could be met through a list of CHWs for clinicians to refer to, or if more substantive requirements would be needed to comply with AB 85. CHBRP assumes that access would be facilitated by health plans and insurance carriers through physician referrals, lists, and patient navigation services, but without separate reimbursement or the creation of “billable” CHW networks.
  - a. While the *Medical Effectiveness* section found a *preponderance of evidence* that SDOH screening led to increases in referrals, AB 85 does not put in place a system to ensure referrals are completed or pay clinicians for the referred service.
- 5) Despite other efforts to link SDOH screening with care management and coordination activities to address high-cost, high-need populations, AB 85 does not require enrollment or reimbursement for those activities by a plan or provider. Therefore, the impact of AB 85 is limited to the new utilization of SDOH screening itself and the resulting reimbursement for screenings due to new coverage and use of SDOH screening. As stated in the *Medical Effectiveness* section, there is *inconclusive evidence* that SDOH screening led to increased health care utilization. Therefore, CHBRP did not estimate any additional changes health care utilization other than the increase in use of SDOH screening.
- 6) Postmandate utilization and expenditures due to AB 85 would be fully driven by increased benefit coverage, and that no new utilization would be expected if plans already reported covering and paying for SDOH screening services through their provider networks. However, if a health plan or insurance carrier reporting doing SDOH screening through the plan without physician reimbursement (e.g., via an in-house or contracted care management or care coordination program) CHBRP designated those plans or policies as having no coverage for SDOH screening delivered by physicians in their network.

For further details on the underlying data sources and methods used in this analysis, please see Appendix C.

## Baseline and Postmandate Benefit Coverage

At baseline, 75% (or 17,202,000) of the 22,842,000 enrollees with health insurance regulated by DMHC or CDI already have coverage for SDOH screening, as well as an additional 2,010,000 Medi-Cal beneficiaries in county organized health systems (COHS). As a result of AB 85, 5,640,000 enrollees would gain coverage for SDOH screening (25% of the enrollees with health insurance regulated by DMHC or CDI that would be subject to AB 85), representing a 32.79% increase in coverage postmandate (Table 1). All of these enrollees have commercial coverage or coverage through CalPERS, and represent 40% of the commercial and CalPERS population.

## Baseline and Postmandate Utilization

At baseline, 325,700 commercial enrollees in the large-group, small-group, CalPERS, and individual insurance market used SDOH screening. Approximately 1,763,400 Medi-Cal enrollees used SDOH screening. Postmandate, based on 25% of the enrollee population gaining coverage for SDOH screening, CHBRP estimates that of the number of enrollees using SDOH screening would increase by 210,949 in the commercial market (a 64.77% increase). Because all Medi-Cal plans reported providing and paying for SDOH screening at baseline, no increase is estimated due to AB 85. Due to the combination of Medi-Cal contracting requirements, NCQA accreditation requirement changes, the recent Whole Person Care model demonstration, and the upcoming CalAIM Medicaid Waiver, CHBRP estimated that AB 85 would not result in new coverage or use of SDOH screening in Medi-Cal managed care plans. In private commercial plans, new requirements due to NCQA accreditation and other regulatory changes are likely

to incentivize plans to engage in SDOH screening. However, without AB 85 it is possible health plans would choose to provide the service in a different way that did not include direct clinician reimbursement.

## **Baseline and Postmandate Per-Unit Cost**

The estimated per unit cost of SDOH screening did not change from baseline to postmandate.

## **Baseline and Postmandate Expenditures**

Table 7 and Table 8 present baseline and postmandate expenditures by market segment for DMHC-regulated plans and CDI-regulated policies. The tables present per member per month (PMPM) premiums, enrollee expenses for both covered and noncovered benefits, and total expenditures (premiums as well as enrollee expenses).

AB 85 would increase total net annual expenditures by total net annual \$9,926,000 or total net annual 0.01% for enrollees with DMHC-regulated plans and CDI-regulated policies. The increase in premiums varies by market segment, due to differences in baseline coverage for SDOH within each market segment.

### **Premiums**

Changes in premiums as a result of AB 85 would vary by market segment. Note that such changes are related to the number of enrollees (see Table 1, Table 7, and Table 8), with health insurance that would be subject to AB 85. For most commercial market segments, premiums increase by 0.01%. However, the Outside of Covered California market would experience the largest increase in enrollee premiums (0.03%) due to lower levels of benefit coverage at baseline.

For enrollees associated with CalPERS in DMHC-regulated plans, premiums would increase by 0.01%.

For Medi-Cal beneficiaries enrolled in DMHC-regulated plans and county organized health system (COHS) plans, there is no impact due to the current efforts in Medi-Cal to require and encourage SDOH identification and data collection through Medi-Cal managed care contract language and Medi-Cal waiver activities. Medi-Cal plans who responded to the carrier survey reported that 100% of their enrollees already have coverage for SDOH screening.

### **Enrollee Expenses**

CHBRP projects no change to out-of-pocket copayments or coinsurance rates from baseline and because CHBRP assumes no cost sharing would be attached to SDOH screening, there is no increase in enrollee cost sharing or out-of-pocket expenses except for the increase in enrollee premiums described above.

### **Postmandate Administrative Expenses and Other Expenses**

CHBRP estimates that the increase in administrative costs of DMHC-regulated plans and/or CDI-regulated policies would remain proportional to the increase in premiums. CHBRP assumes that if health care costs increase as a result of increased utilization or changes in unit costs, there is a corresponding proportional increase in administrative costs. CHBRP assumes that the administrative cost portion of premiums is unchanged. All health plans and insurers include a component for administration and profit in their premiums. The additional requirement of AB 85 for health plans and insurance policies to “ensure adequate access” to community health workers could vary in terms of implementation, and because there is no requirement to create a new contracted network or reimburse community health workers for visits related to SDOH screening, CHBRP does not estimate additional administrative costs beyond the

percentage already built into the CHBRP Cost and Coverage Model (where the administrative costs proportionally increase with the 0.01% premium increase in Year 1 and Year 2).

## **Other Considerations for Policymakers**

In addition to the impacts a bill may have on benefit coverage, utilization, and cost, related considerations for policymakers are discussed below.

### **Potential Cost of Exceeding Essential Health Benefits**

AB 85 would not exceed essential health benefits.

### **Postmandate Changes in the Number of Uninsured Persons**

Because the change in average premiums does not exceed 1% for any market segment (see Table 1, Table 7, and Table 8), CHBRP would expect no measurable change in the number of uninsured persons due to the enactment of AB 85.

### **Changes in Public Program Enrollment**

CHBRP estimates that the mandate would produce no measurable impact on enrollment in publicly funded insurance programs due to the enactment of AB 85.

### **How Lack of Benefit Coverage Results in Cost Shifts to Other Payers**

AB 85 would require SDOH screening and necessary referrals to CHWs, disease and case management programs, and other programs designed to address social needs with resources that are often not reimbursed or covered by health plans or health insurers. It is possible that SDOH screening and identification of social needs would result in additional referrals to public housing, homeless shelters, foods stamps, WIC, public health, behavioral health, county case management and chronic illness prevention programs, and other social supports that are not captured by this analysis and are not paid for by insurance carriers. These other social supports may see an increase in utilization and associated costs as a result.

**Table 7. Baseline Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2024**

	DMHC-Regulated						CDI-Regulated			Total
	Commercial Plans (by Market) (a)			Publicly Funded Plans			Commercial Policies (by Market) (a)			
	Large Group	Small Group	Individual	CalPERS (b)	Medi-Cal (excludes COHS) (c) Under 65	65+	Large Group	Small Group	Individual	
<b>Enrollee counts</b>										
Total enrollees in plans/policies subject to state mandates (d)	7,780,000	2,212,000	2,618,000	882,000	8,043,000	774,000	371,000	35,000	127,000	22,842,000
Total enrollees in plans/policies subject to AB 85	7,780,000	2,212,000	2,618,000	882,000	8,043,000	774,000	371,000	35,310	127,000	22,842,310
<b>Premium costs</b>										
Average portion of premium paid by employer (e)	\$473.17	\$417.10	\$0.00	\$581.85	\$254.61	\$543.16	\$490.57	\$517.32	\$0.00	\$93,424,638,000
Average portion of premium paid by enrollee	\$122.17	\$180.13	\$645.33	\$113.49	\$0.00	\$0.00	\$180.61	\$168.99	\$626.90	\$39,493,007,000
<b>Total premium</b>	<b>\$595.34</b>	<b>\$597.23</b>	<b>\$645.33</b>	<b>\$695.34</b>	<b>\$254.61</b>	<b>\$543.16</b>	<b>\$671.18</b>	<b>\$686.31</b>	<b>\$626.90</b>	<b>\$132,917,645,000</b>
<b>Enrollee expenses</b>										
Cost sharing for covered benefits (deductibles, copays, etc.)	\$40.98	\$127.06	\$168.73	\$49.17	\$0.00	\$0.00	\$99.22	\$184.48	\$208.51	\$13,857,141,000
Expenses for noncovered benefits (f)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
<b>Total expenditures</b>	<b>\$636.33</b>	<b>\$724.29</b>	<b>\$814.06</b>	<b>\$744.50</b>	<b>\$254.61</b>	<b>\$543.16</b>	<b>\$770.40</b>	<b>\$870.80</b>	<b>\$835.40</b>	<b>\$146,774,786,000</b>

Source: California Health Benefits Review Program, 2023.

Notes: (a) Includes enrollees with grandfathered and nongrandfathered health insurance acquired outside or through Covered California (the state's health insurance marketplace).

(b) Includes only CalPERS enrollees in DMHC-regulated plans. Approximately 51.7% are state retirees, state employees, or their dependents. About one in five (22.5%) of these enrollees has a pharmacy benefit not subject to DMHC. CHBRP has projected no impact for those enrollees. However, CalPERS could, postmandate, require equivalent coverage for all its members (which could increase the total impact on CalPERS).

(c) Includes only Medi-Cal beneficiaries enrolled in DMHC-regulated plans. Includes those who are also Medicare beneficiaries.

(d) Enrollees in plans and policies regulated by DMHC or CDI. Includes those associated with Covered California, CalPERS, or Medi-Cal.

(e) In some cases, a union or other organization, or Medi-Cal for its beneficiaries.



(f) Includes only those expenses that are paid directly by enrollees (or other sources) to providers for services related to the mandated benefit that are not covered by insurance at baseline. This only includes those expenses that would be newly covered, postmandate. Other components of expenditures in this table includes all health care services covered by insurance.

Key: CalPERS HMOs = California Public Employees' Retirement System Health Maintenance Organizations; CDI = California Department of Insurance; DMHC = Department of Managed Health; COHS = County Organized Health Systems.

**Table 8. Postmandate Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2024**

	DMHC-Regulated						CDI-Regulated			Total
	Commercial Plans (by Market) (a)			Publicly Funded Plans			Commercial Policies (by Market) (a)			
	Large Group	Small Group	Individual	CalPERS HMOs (b)	Under 65	Under 65	Large Group	Small Group	Individual	
<b>Enrollee counts</b>										
Total enrollees in plans/policies subject to state mandates (d)	7,780,000	2,212,000	2,618,000	882,000	8,043,000	774,000	371,000	35,000	127,000	22,842,000
Total enrollees in plans/policies subject to AB 85	7,780,000	2,212,000	2,618,000	882,000	8,043,000	774,000	371,000	35,310	127,000	22,842,310
<b>Premium costs</b>										
Average portion of premium paid by employer (e)	\$0.0339	\$0.0551	\$0.0000	\$0.0392	\$0.0000	\$0.0000	\$0.0917	\$0.1005	\$0.0000	\$5,492,000
Average portion of premium paid by enrollee	\$0.0087	\$0.0238	\$0.0756	\$0.0077	\$0.0000	\$0.0000	\$0.0338	\$0.0328	\$0.2400	\$4,435,000
<b>Total Premium</b>	<b>\$0.0426</b>	<b>\$0.0789</b>	<b>\$0.0756</b>	<b>\$0.0469</b>	<b>\$0.0000</b>	<b>\$0.0000</b>	<b>\$0.1255</b>	<b>\$0.1333</b>	<b>\$0.2400</b>	<b>\$9,927,000</b>
<b>Enrollee expenses</b>										
Cost sharing for covered benefits (deductibles, copays, etc.)	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0
Expenses for noncovered benefits (f)	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0
<b>Total expenditures</b>	<b>\$0.0426</b>	<b>\$0.0789</b>	<b>\$0.0756</b>	<b>\$0.0469</b>	<b>\$0.0000</b>	<b>\$0.0000</b>	<b>\$0.1255</b>	<b>\$0.1333</b>	<b>\$0.2400</b>	<b>\$9,928,000</b>
<b>Postmandate Percent Change</b>										
Percent change insured premiums	0.0072%	0.0132%	0.0117%	0.0067%	0.0000%	0.0000%	0.0187%	0.0194%	0.0383%	0.0075%
<b>Percent Change total expenditures</b>	<b>0.0067%</b>	<b>0.0109%</b>	<b>0.0093%</b>	<b>0.0063%</b>	<b>0.0000%</b>	<b>0.0000%</b>	<b>0.0163%</b>	<b>0.0153%</b>	<b>0.0287%</b>	<b>0.0068%</b>

*Source:* California Health Benefits Review Program, 2023.

*Notes:* (a) Includes enrollees with grandfathered and nongrandfathered health insurance acquired outside or through Covered California (the state's health insurance marketplace).

(b) Includes only CalPERS enrollees in DMHC-regulated plans. Approximately 51.7% are state retirees, state employees, or their dependents. About one in five (22.5%) of these enrollees has a pharmacy benefit not subject to DMHC. CHBRP has projected no impact for those enrollees. However, CalPERS could, postmandate, require equivalent coverage for all its members (which could increase the total impact on CalPERS).

(c) Includes only Medi-Cal beneficiaries enrolled in DMHC-regulated plans. Includes those who are also Medicare beneficiaries.

(d) Enrollees in plans and policies regulated by DMHC or CDI. Includes those associated with Covered California, CalPERS, or Medi-Cal.

(e) In some cases, a union or other organization - or Medi-Cal for its beneficiaries.

(f) Includes only those expenses that are paid directly by enrollees (or other sources) to providers for services related to the mandated benefit that are not covered by insurance at baseline. This only includes those expenses that would be newly covered, postmandate. Other components of expenditures in this table includes all health care services covered by insurance.

*Key:* CalPERS HMOs = California Public Employees' Retirement System Health Maintenance Organizations; CDI = California Department of Insurance; DMHC = Department of Managed Health; COHS = County Organized Health Systems.

## PUBLIC HEALTH IMPACTS

As discussed in the *Policy Context* section, AB 85 would require health insurers subject to state regulation “to include coverage and provide reimbursement to health care providers for social determinants of health screenings.” It would also require insurers to provide “primary care providers with adequate access to community health workers... and inform primary care providers of how to access these community health workers.”

This section estimates the short-term impact<sup>33</sup> of AB 85 on enrollee access to health and social needs care and subsequent related outcomes. See *Long-Term Impacts* for discussion of public health impacts beyond the first 12 months of bill enactment.

### Estimated Public Health Outcomes

Evidence suggests that social determinants of health (SDOH) account for about 50% of a person’s health status and outcomes — more than clinical care, health behaviors, or genetics alone (see *Background on Screening for Social Determinants of Health* section).

As presented in *Medical Effectiveness*, there is *limited evidence* that SDOH screenings in a clinical setting are associated with:

- Increased referrals to community health workers/navigators/social services;
- Increased use of social services;
- Improved social outcomes; and
- Improved health outcomes.

There is also *inconclusive evidence* that SDOH screening in a clinical setting is associated with changes in health care utilization and *insufficient evidence* of harms to patients, families, and providers of using any SDOH screening tool in a clinical setting.

As presented in *Benefit Coverage, Utilization, and Cost Impacts*, CHBRP estimates that of the 5.64 million commercial enrollees gaining coverage for SDOH screening under AB 85, 210,949 enrollees would complete an SDOH screening in a clinical setting in the first year postmandate. Because Medi-Cal already covers SDOH screening and community health workers (CHWs), CHBRP assumes no new screening would occur among Medi-Cal beneficiaries as a result of AB 85.

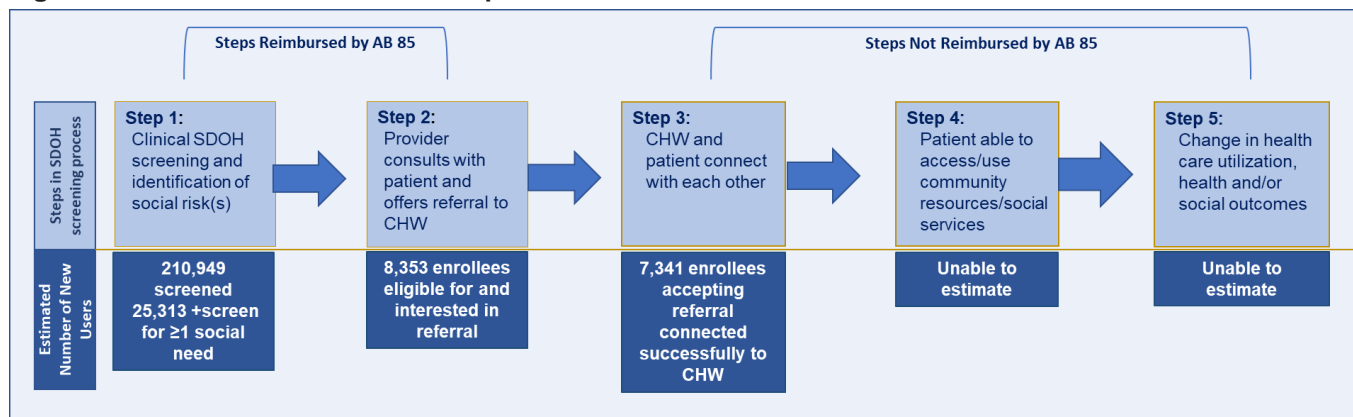
### SDOH Screening and Referral Estimates

As present in the *Background on Screening for Social Determinants of Health* section, AB 85 reimburses for screening and requires adequate access to CHWs (Steps 1 and 2 of the five-step process shown in Figure 11 below). The *Public Health* section provides a step-by-step scenario with estimates of newly covered commercial enrollees progressing through the SDOH screening and subsequent care process. Note that these estimates are for context and could increase or decrease based on actual screening rates, clinician CHW referral offers and patient acceptance rates, and availability of CHWs and local social services/community resources. Nonetheless, these numbers can provide some magnitude of effect of AB 85.

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<sup>33</sup> CHBRP defines short-term impacts as changes occurring within 12 months of bill implementation.

**Figure 11. Estimated Public Health Impact of AB 85**



Source: California Health Benefits Review Program, 2023.

Key: CHW = community health worker; SDOH = social determinants of health.

**STEP 1:** Of the 210,949 newly covered enrollees who would be screened in the first year postmandate, CHBRP projects that 12% (25,313) would demonstrate ≥1 social needs. This is based on a study of ~25,000 patients screened in primary care clinics in one health system in the Bronx who had commercial insurance (those with Medicaid were twice as likely to demonstrate ≥1 social need) (Heller et al., 2020). Other studies cited in the *Medical Effectiveness* section had higher positive screening rates, but these were among predominantly or exclusively low-income persons (Medicaid beneficiaries).

**STEP 2:** CHBRP estimates that, of the 25,313 who are newly identified with at least one social need, about 33% (8,353 enrollees) would be interested in CHW referral (based on Fiori et al., 2020).

**STEP 3:** CHBRP estimates 7,341 enrollees (29% of 25,313 with ≥1 social need on screening) would accept a referral **and** be successfully connected with a CHW (several studies show that referrals to CHWs do not always result in successful contact with CHWs or use of social services [Berkowitz et al. 2017; Fiori et al., 2020]; the Fiori et al., 2020, study found 29% of persons with ≥1 social need desired CHW assistance and subsequently were able to connect with a CHW). However, CHBRP notes that the Fiori et al. study was conducted in an urban federally qualified health center (FQHC) pediatric clinic, in which the patients might have had different social needs and CHW access than a commercially insured population. CHW availability and funding might be different for the commercially insured population.

A key component of Step 3’s successful patient-to-CHW connection also relies on the CHW workforce supply. As mentioned in the *Background on Screening for Social Determinants of Health* section, there are about 6,740 CHWs in California and CHWs’ average caseloads range between 20 and 60 clients. Applying this caseload range to the above estimate of 7,341 newly covered enrollees accepting referral, this would require an additional 122 to 367 CHWs to accommodate the new demand for services in the first 12 months.

**STEP 4:** No estimate of AB 85 impact on patient ability to use community resources/social services. Patient social needs are vast (e.g., housing, food, employment, financial, transportation, education, childcare). Services provided at the county level vary greatly by locale and domain. Most studies show patients’ greatest needs center around housing quality and food security, although choice of screening tool may bias outcomes if not all social needs categories are included (Fiori et al., 2020; Fleegler et al., 2007; Kulie et al., 2021). The *Medical Effectiveness* section cites a range of 5% to 58% of patients screened who were able to use social services (note the rate of social service use can vary based on social need domain). Successful linkage of commercially insured enrollees to social services/community-based organizations may be challenging as this group is less likely to qualify for means-tested social services that dominate the U.S. safety net. Therefore, CHBRP is unable to estimate patient use of community/social resources within the first 12 months of reimbursed SDOH screening in a clinical setting.

**STEP 5:** *No estimate of AB 85 impact on health care utilization, health, or social outcomes.* CHBRP is unable to estimate changes in health care utilization or health outcomes associated with SDOH screening in a clinical setting. Additionally, many changes in health and social outcomes would take more than 12 months to occur after SDOH screening.

**The public health impact of AB 85 on improved health (or socioeconomic) status and outcomes is unknown.**

Although CHBRP estimates that an additional ~210,949 commercially insured enrollees could receive SDOH screening in a clinical setting; and of those, ~25,313 could screen positive for  $\geq 1$  social need; and of those, ~7,341 might connect with a CHW, *it is unknown:*

- If the supply of CHWs in California is sufficient or could be made sufficient in a timely manner to carry the additional caseload;
- If the CHW can successfully connect the patient to  $\geq 1$  needed social resources;
- If the social services/community-based organizations have adequate resources to meet increased needs;
- If these commercially insured enrollees will qualify for social services or community-based resources, most of which are means tested;
- If these commercially insured enrollees, once qualified for social services, will be able to use them (i.e., not have geographic, time, transportation or other barriers to their use);
- Whether the broad swath of health outcomes will improve within 12 months and to what extent; and
- If and to what extent new social needs will develop and be able to be addressed.

To the extent that some screened enrollees will be linked to and use social resource(s), real changes in *individual* health status and outcomes could occur during the first year postmandate.

## Potential Harms from AB 85

When data are available, CHBRP estimates the marginal change in harms associated with interventions covered by the proposed mandate. In the case of AB 85, there is *insufficient evidence* of harms to patients, families, and providers using any SDOH screening tool in a clinical setting. As described in the *Medical Effectiveness* section, CHBRP did not find any evidence on harms of SDOH screening in clinical settings related to health care utilization, health, or social outcomes. Reviews of qualitative research results about the acceptability of SDOH screening by patients and clinicians were mostly positive, but some respondents across multiple studies raised questions about patient privacy, feelings of frustration and inadequacy among clinicians without proper referral resources, and concerns generally about inadequate and ineffective resources to meet the referral needs and clinician discomfort in responding to patient with positive screening results (Brown et al., 2023). Another review identified other potential unintended consequences such as patient discomfort (e.g., shame about social risks) and confidentiality issues (e.g., fear of legal repercussions such as being reported for child maltreatment due to food insecurity) (Eder et al., 2019).

CHBRP finds *inconclusive evidence* of harms associated with SDOH screening in a clinical setting and referral to CHWs; therefore, harms associated with AB 85 postmandate are unknown. However, CHBRP does not project serious problems arising from clinicians administering SDOH screening tools or referring patients to CHWs, whether the referrals are successful or not, based on one review that found general acceptance of SDOH screening and CHW referrals among clinicians and patients.



## Impact on Disparities<sup>34</sup>

The impact of AB 85 on health disparities is unknown. Because AB 85 does not alter baseline coverage or utilization of SDOH screening among Medi-Cal beneficiaries, and it is projected to increase screening for ~200,000 newly covered commercially insured people, it is unlikely that this bill would reduce disparities by race, ethnicity, and income. This bill would increase utilization of SDOH screening among commercially insured people of which an estimated 12% would screen positive for social risks, and an estimated 33% of these individuals would express interest in CHW assistance in obtaining social resources. However, the racial/ethnic distribution of the newly screened is unknown. Moreover, the number of social resources available to the commercially insured population is less than those available to Medi-Cal beneficiaries (who already have coverage for SDOH screening). Because eligibility for social services (WIC, Section 8 housing, CalFresh, etc.) is often limited to lower-income people, many commercially insured people might not qualify, which poses a challenge to link them with services that can address their social needs.

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<sup>34</sup> For details about CHBRP's methodological approach to analyzing disparities, see the *Benefit Mandate Structure and Unequal Racial/Ethnic Health Impacts* document here: [http://chbrp.com/analysis\\_methodology/public\\_health\\_impact\\_analysis.php](http://chbrp.com/analysis_methodology/public_health_impact_analysis.php).

## LONG-TERM IMPACTS

As discussed in the *Policy Context* section, AB 85 would require health insurers subject to state regulation “to include coverage and provide reimbursement to health care clinicians for social determinants of health screenings.” It would also require insurers to provide “primary care providers with adequate access to community health workers... and inform primary care providers of how to access these community health workers.”

In this section, CHBRP estimates the long-term impact of AB 85, which CHBRP defines as impacts occurring beyond the first 12 months after implementation. These estimates are qualitative and based on the existing evidence available in the literature. CHBRP does not provide quantitative estimates of long-term impacts because of unknown improvements in clinical care, changes in prices, implementation of other complementary or conflicting policies, and other unexpected factors.

### Long-Term Utilization and Cost Impacts

In the first year postmandate, CHBRP estimates that the marginal increase in social determinants of health (SDOH) screening in a clinical setting would occur among some of the 25% of newly covered enrollees with commercial insurance (~200,000 annually). CHBRP also finds that health plans and insurers can use eligibility criteria and other restrictions to limit the use of SDOH screening and referrals to community health worker (CHW) if they see fit (e.g., focusing on high-use patients or patients with multiple chronic conditions).

Although CHBRP does not model impacts beyond year one, it is possible that mandated coverage of these screenings would lead to some increased growth in utilization over the long term for several reasons. First, clinicians may consider increasing their staffing levels based upon the potential for reimbursement for these screenings. Second, AB 85 requires the California Department of Health Care Access and Information (HCAI) convene a workgroup to “create a standardized model and procedures for connecting patients with community resources, to assess the need for a centralized list of accredited community providers, and to determine gaps in research and data to inform policies on system changes to address social determinants of health.” Depending on the outcome of that workgroup, and ensuing department regulations, gaps in the process of SDOH screening and referral could be filled. This might lead to higher administrative costs for insurance carriers to meet the recommendations and regulations. HCAI will also develop recommendations around reimbursement and licensure of CHWs that may support long-term use to address social needs. While the HCAI workgroup is focused on Medi-Cal currently, their work could set the stage for other payers if a licensure process and billing process are developed as a result of their work.

However, the effect of such change may be dampened by low uptake rates by newly covered commercially insured enrollees who may be reluctant to accept a CHW referral or find themselves ineligible for means-tested social services. In the nearer term, multiple policy changes between now and 2026 could mitigate the potential effect of AB 85. For example, recent changes in Medi-Cal (new Medi-Cal managed care contracts and CalAIM activities), the impending state-mandated National Committee for Quality Assurance (NCQA) accreditation of health insurance plans, and other provider-led initiatives to address social needs through SDOH screening. These initiatives are likely to increase SDOH screening without passage of AB 85.

### Long-Term Public Health Impacts

The federal Healthy People 2030 goal to reduce the differences in conditions that put some people at higher risk for poor health outcomes notes that such changes require focusing on nonclinical resources needed to maintain health and quality of life. Examples include safe and affordable housing, high-quality education, healthy foods, and environments free of life-threatening toxins with opportunities for safe

physical activity (USHHS, 2023). Social needs are similar to chronic health conditions and require persistent management to change conditions such as food insecurity or lack of housing. Alleviating such social needs can result in long-term gains with potential generational effects.

CHBRP concludes that AB 85 would have an unknown long-term public health impact on the social and health outcomes of patients with unmet social needs, though, directionally CHBRP estimates a modest uptick in screenings and referrals to CHWs. Outstanding questions remain about clinician decisions to screen and refer patients, undefined “adequate access” to CHWs by clinicians; the type, quality, and availability of CHWs and their networks and community referrals; and whether there are adequate social resources available to address the needs of the new influx of commercially insured enrollees with unmet social needs. Questions also remain about the effect of recommendations from the AB 85 HCAI workgroup and subsequent departmental regulations.

CHBRP acknowledges that, even without Workgroup recommendations or CHW or community resource involvement, SDOH screening could improve patient health status by increasing the information available to clinical teams about patients’ social risk, which might then be used to influence treatment plans for patients experiencing social needs. For example, a clinician learns about housing insecurity, which leads to a different medication. Over time, broadening the clinical care approach to routinely incorporate social data could become standard. However, the magnitude of this type of change is unknown.

## APPENDIX A TEXT OF BILL ANALYZED

On January 10, 2023, the California Assembly Committee on Health requested that CHBRP analyze AB 85, as introduced on December 16, 2022.

**ASSEMBLY BILL**

**NO. 85**

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**Introduced by Assembly Member Weber**

**December 16, 2022**

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An act to add Section 1367.37 to, and to add Article 4 (commencing with Section 127380) to Chapter 2 of Part 2 of Division 107 of, the Health and Safety Code, to add Section 10123.52 to the Insurance Code, and to add Section 14132.14 to the Welfare and Institutions Code, relating to health.

### LEGISLATIVE COUNSEL'S DIGEST

AB 85, as introduced, Weber. Social determinants of health: screening and outreach.

Existing law, the Knox-Keene Health Care Service Plan Act of 1975, provides for the licensure and regulation of health care service plans by the Department of Managed Health Care, and makes a willful violation of the act a crime. Existing law provides for the regulation of health insurers by the Department of Insurance. Existing law requires health care service plans and health insurers to include coverage for screening for various conditions and circumstances, including adverse childhood experiences. Existing law provides for the Medi-Cal program, administered by the State Department of Health Care Services and under which qualified low-income individuals receive health care services. The Medi-Cal program is, in part, governed and funded by federal Medicaid program provisions.

This bill would require a health care service plan contract or health insurance policy issued, amended, or renewed on or after January 1, 2024, to include coverage for screenings for social determinants of health, as defined. The bill would require a health care service plan or health insurer to provide primary care providers with adequate access to community health workers in counties where the health care service plan or health insurer has enrollees or insureds, as specified. The bill would authorize the respective departments to adopt guidance to implement its provisions. Because a violation of the bill's requirements by a health care service plan would be a crime, the bill would impose a state-mandated local program. The bill would make social determinants of health screenings a covered benefit for Medi-Cal beneficiaries and would require the State Department of Health Care Services to provide reimbursement for those screenings.

Existing law establishes the Department of Health Care Access and Information, under the control of the Director of the Department of Health Care Access and Information, to administer programs relating to areas including health policy and planning.

This bill would require the department to convene a working group, with specified membership, to create a standardized model and procedures for connecting patients with community resources, to assess the need for a centralized list of accredited community providers, and to determine gaps in research and data to inform policies on system changes to address social determinants of health. The bill would require the working group, by January 1, 2025, to submit a report to the Legislature with recommendations on the topics addressed by the working group.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

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THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

**SECTION 1.** Section 1367.37 is added to the Health and Safety Code, to read:

**1367.37.** (a) A health care service plan contract, except for a specialized health care service plan, issued, amended, or renewed on or after January 1, 2024, shall include coverage and provide reimbursement to health care providers for social determinants of health screenings.

(b) For purposes of this section, “social determinants of health” means the conditions under which people are born, grow, live, work, and age, including housing, food, transportation, utilities, and personal safety.

(c) A health care service plan shall provide primary care providers with adequate access to community health workers in counties where the health care service plan has enrollees. The health care service plan shall inform primary care providers of how to access these community health workers.

(d) The department may adopt guidance for health care service plans to implement this section.

**SEC. 2.** Article 4 (commencing with Section 127380) is added to Chapter 2 of Part 2 of Division 107 of the Health and Safety Code, to read:

**Article 4. Social Determinants of Health**

**127380.** (a) The department shall convene a working group to create a standardized model and procedures for connecting patients with community resources, to assess the need for a centralized list of accredited community providers, and to determine gaps in research and data to inform

policies on system changes to address social determinants of health. For purposes of this section, “social determinants of health” means the conditions under which people are born, grow, live, work, and age, including housing, food, transportation, utilities, and personal safety.

(b) The working group shall include representatives from the California Health and Human Services Agency and Covered California, representatives of primary care physician specialties, including, but not limited to, family medicine, and representatives of health care service plans and health insurers, community-based organizations, and consumer groups. The working group may consult with other individuals, groups, or organizations for additional insight or expertise on issues under consideration by the working group.

**127381.** (a) On or before January 1, 2025, the working group shall submit a report to the Legislature with recommendations on the topics addressed in subdivision (a) of Section 127380.

(b) (1) A report submitted pursuant to subdivision (a) shall be submitted in compliance with Section 9795 of the Government Code.

(2) Pursuant to Section 10231.5 of the Government Code, the requirement to submit a report pursuant to paragraph (1) is inoperative on January 1, 2029.

**SEC. 3.** Section 10123.52 is added to the Insurance Code, to read:

**10123.52.** (a) A health insurance policy issued, amended, or renewed on or after January 1, 2024, shall include coverage and provide reimbursement to health care providers for social determinants of health screenings.

(b) For purposes of this section, “social determinants of health” means the conditions under which people are born, grow, live, work, and age, including housing, food, transportation, utilities, and personal safety.

(c) A health insurer shall provide primary care providers with adequate access to community health workers in counties where the health insurer has insureds. The health insurer shall inform primary care providers of how to access these community health workers.

(d) The department may adopt guidance for health insurers to implement this section.

**SEC. 4.** Section 14132.14 is added to the Welfare and Institutions Code, to read:

**14132.14.** (a) Social determinants of health screenings for Medi-Cal beneficiaries is a covered benefit and the department shall provide reimbursement to a Medi-Cal provider who renders this service.

(b) For purposes of this section, “social determinants of health” means the conditions under which people are born, grow, live, work, and age, including housing, food, transportation, utilities, and personal safety.



**SEC. 5.** 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

This appendix describes methods used in the literature review conducted for this report. A discussion of CHBRP's system for medical effectiveness grading evidence, as well as lists of MeSH Terms, publication types, and keywords, follows.

Studies of social determinants of health (SDOH) were identified through searches of PubMed, the Cochrane Library, Web of Science, the Cumulative Index of Nursing and Allied Health Literature (CINAHL), and PsycINFO. Websites maintained by the following organizations that produce and/or index meta-analyses and systematic reviews were also searched: US Preventive Services Task Force (USPSTF), the Agency for Healthcare Research and Quality (AHRQ), the American Academy of Pediatrics, the National Health Service (NHS) Centre for Reviews and Dissemination, the National Institute for Health and Clinical Excellence (NICE), the Scottish Intercollegiate Guideline Network, the Substance Abuse and Mental Health Services Administration, and the World Health Organization. Reviewers screened the title and abstract of each citation retrieved by the literature search to determine eligibility for inclusion. The reviewers acquired the full text of articles that were deemed eligible for inclusion in the review and reapplied the initial eligibility criteria.

### Medical Effectiveness Review

The medical effectiveness literature review returned abstracts for 318 articles, of which 23 were reviewed for inclusion in this report. A total of 12 studies were included in the medical effectiveness review for AB 85. The search was limited to studies published from 2019 to present, because CHBRP relied on previous systematic reviews.

### Medical Effectiveness Evidence Grading System

In making a "call" for each outcome measure, the medical effectiveness lead and the content expert consider the number of studies as well as the strength of the evidence. Further information about the criteria CHBRP uses to evaluate evidence of medical effectiveness can be found in CHBRP's *Medical Effectiveness Analysis Research Approach*.<sup>35</sup> 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; and
- 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;*
- *Limited evidence;*
- *Inconclusive evidence;* and
- *Insufficient evidence.*

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<sup>35</sup> Available at: [http://chbrp.com/analysis\\_methodology/medical\\_effectiveness\\_analysis.php](http://chbrp.com/analysis_methodology/medical_effectiveness_analysis.php).

A grade of *clear and convincing evidence* indicates that there are multiple studies of a treatment and that the large majority of studies are of high quality and consistently find that the treatment is either effective or not effective.

A grade of *preponderance of evidence* indicates that the majority of the studies reviewed are consistent in their findings that treatment is either effective or not effective.

A grade of *limited evidence* indicates that the studies had limited generalizability to the population of interest and/or the studies had a fatal flaw in research design or implementation.

A grade of *inconclusive evidence* indicates that although some studies included in the medical effectiveness review find that a treatment is effective, a similar number of studies of equal quality suggest the treatment is not effective.

A grade of *insufficient evidence* indicates that there is not enough evidence available to know whether or not a treatment is effective, either because there are too few studies of the treatment or because the available studies are not of high quality. It does not indicate that a treatment is not effective.

## APPENDIX C COST IMPACT ANALYSIS: DATA SOURCES, CAVEATS, AND ASSUMPTIONS

With the assistance of CHBRP's contracted actuarial firm, Milliman, Inc, the cost analysis presented in this report was prepared by the faculty and researchers connected to CHBRP's Task Force with expertise in health economics.<sup>36</sup> Information on the generally used data sources and estimation methods as well as caveats and assumptions generally applicable to CHBRP's cost impacts analyses are available at CHBRP's website.<sup>37</sup>

This appendix describes analysis-specific data sources, estimation methods, caveats, and assumptions used in preparing this cost impact analysis.

### Analysis-Specific Data Sources

Current coverage of social determinants of health (SDOH) screening for commercial enrollees was determined by a survey of the largest (by enrollment) providers of health insurance in California. Responses to this survey represent 91% of commercial enrollees with health insurance that can be subject to state benefit mandates. In addition, CalPERS, DHCS, and the four largest (by enrollment) DMHC-regulated plans enrolling Medi-Cal beneficiaries were queried regarding related benefit coverage.

### Detailed Cost Notes Regarding Analysis-Specific Caveats and Assumptions

The analytic approach and key assumptions are determined by the subject matter and language of the bill being analyzed. As a result, analytic approaches may differ between topically similar analyses, and therefore the approach and findings may not be directly comparable.

#### Assumptions for Baseline Benefit Coverage

- The population subject to the mandated offering includes individuals covered by DMHC-regulated commercial insurance plans, CDI-regulated policies, and CalPERS plans subject to the requirements of the Knox-Keene Health Care Service Plan Act.
- CHBRP conducted a carrier survey to determine the percentage of enrollees that are enrolled in plans by regulator, line of business, and deductible or metal tier.
- CHBRP conducted a carrier survey to determine the percentage of enrollees that have coverage of screenings for SDOH. We adjusted our projections to account for Health Plan (HP) 25 covering a significant percentage of the population with an integrated physician group.

#### Assumptions for Baseline Utilization and Cost

We relied on publicly available data from NORC at the University of Chicago and SIREN: State of the Science on Social Screening in Healthcare Settings to set assumptions for the percentage of enrollees that would receive screenings if fully covered. These assumptions were confirmed with guidance from CHBRP:

- Large Group 3.2%
- CalPERS HMO 3.2%
- Small Group 3.2%

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<sup>36</sup> CHBRP's authorizing statute, available at [https://chbrp.org/about\\_chbrp/index.php](https://chbrp.org/about_chbrp/index.php), requires that CHBRP use a certified actuary or "other person with relevant knowledge and expertise" to determine financial impact.

<sup>37</sup> See method documents posted at [http://chbrp.com/analysis\\_methodology/cost\\_impact\\_analysis.php](http://chbrp.com/analysis_methodology/cost_impact_analysis.php); in particular, see *2022 Cost Analyses: Data Sources, Caveats, and Assumptions*.

- Individual 6.4%
- Medi-Cal HMO 20.0%

The average unit cost of an SDOH screening was set using the following assumptions, developed using actuarial and expert input:

- Large Group \$40.00
- CalPERS HMO \$40.00
- Small Group \$40.00
- Individual \$36.00
- Medi-Cal HMO \$10.00

### Assumptions for Baseline Cost Sharing

**Self-Pay.** As discussed with CHBRP, we assume there is no “self-pay” for screenings for social determinants of health under any circumstances. Given that these screenings are designed to capture social issues such as food and housing insecurity, self-pay would not seem logical.

**Copays.** We expect baseline cost sharing for covered services to be immaterial. Given that these screenings occur concurrently with evaluation and management services, and typically do not appear to be billed separately, additional cost sharing seems unlikely.

### Assumptions for Postmandate Utilization

We assumed that postmandate utilization would be driven fully by increased benefit coverage and would reach the levels as discussed in the section “Assumptions for Baseline Utilization and Cost” above.

### Assumptions for Postmandate Cost

We assumed that the unit cost for screenings is the same as at baseline.

### Assumptions for Postmandate Cost Sharing

We assumed that the cost sharing for screenings is the same as at baseline.

## Determining Public Demand for the Proposed Mandate

CHBRP reviews public demand for benefits by comparing the benefits provided by self-insured health plans or policies (which are not regulated by the DMHC or CDI and therefore not subject to state-level mandates) with the benefits that are provided by plans or policies that would be subject to the mandate.

Among publicly funded self-insured health insurance policies, the preferred provider organization (PPO) plans offered by CalPERS have the largest number of enrollees. The CalPERS PPOs currently provide benefit coverage similar to what is available through group health insurance plans and policies that would be subject to the mandate.

To further investigate public demand, CHBRP used the bill-specific coverage survey to ask plans and insurers who act as third-party administrators for (non-CalPERS) self-insured group health insurance programs whether the relevant benefit coverage differed from what is offered in group market plans or policies that would be subject to the mandate. The responses indicated that there were no substantive differences.

## **Second-Year Impacts on Benefit Coverage, Utilization, and Cost**

CHBRP has considered whether continued implementation during the second year of the benefit coverage requirements of AB 85 would have a substantially different impact on utilization of either the tests, treatments, or services for which coverage was directly addressed, the utilization of any indirectly affected utilization, or both. CHBRP reviewed the literature and consulted content experts about the possibility of varied second-year impacts and determined the second year's impacts of AB 85 would be substantially the same as the impacts in the first year (see Table 1). Minor changes to utilization and expenditures are due to population changes between the first year postmandate and the second year postmandate.



## APPENDIX D SOCIAL RISK SCREENING TOOLS

### Screening tools included on SIREN Comparison Table (SIREN, 2019); Eder et al., 2021; and Henrikson et al., 2019:

- The Accountable Health Communities Health-Related Social Needs Screening Tool
- HealthBegins Upstream Risk Screening Tool
- Health Leads Social Needs Screening Toolkit
- Medicare Total Health Assessment Questionnaire
- NAM Domains: Institute of Medicine Social and Behavioral Domains and Measures
- PRAPARE: Protocol for responding to and assessing patients' assets, risks and experiences
- WellRX Questionnaire
- Your Current Life Situation Survey
- IHELP (Income, Housing, Education, Legal Status, Literacy, Personal Safety) Pediatric Social History Tool
- SEEK: Safe Environment for Every Kid
- Survey of Well-Being of Young Children
- WE CARE Survey

### SIREN only:

- American Academy of Family Physicians (AAFP) Social Needs Screening Tool
- AccessHealth Spartanburg Screening Tool
- Arlington Screening Tool
- Boston Medical Center-Thrive Screening Tool
- North Carolina Medicaid Screening Tool

### SIREN and Eder et al., 2021, only:

- Medical-Legal Partnership Screening Guide

### SIREN and Henrikson et al., 2019, only:

- Structural Vulnerability Assessment Tool

### Eder et al., 2021 and Henrikson et al., 2019, only:

- Social History Template
- Legal Checkup
- Social Needs Checklist
- Urban Life Stressors Scale
- Partners in Health Survey

### Henrikson et al., 2019, only:

- Women's Health Questionnaire
- HelpSteps (Online Advocate)

### 2023 CHBRP Carrier Survey Responses:

- Hunger Vital Signs
- GroundGame Health (GGH tool)
- Health Risk Assessment (HRA)
- The EveryOne Project
- The National Association of Community Health Centers (NACHC) instrument

**Table 9. Examples of SDOH Screening Tools and Their Characteristics**

SDOH Screening Tool	Year Created	Population Screened	Setting	# of Questions	SDOH Domains Assessed					
					Econ	Edu	SCC	HCC	NPE	Food
Accountable Health Communities Health-Related Social Needs (AHC-HRSN)*	2017	Medicare/Medicaid	Primary care	26	X		X		X	X
HealthBegins Upstream Risk Screening Tool	2015	All ages	Primary care	28	X	X	X		X	X
Health Leads Social Needs Screening Toolkit	2016	All ages	Primary care	7	X	X	X		X	X
Medicare Total Health Assessment Questionnaire	2014	Medicare/Medicaid	Primary care	36	X		X		X	X
Institute of Medicine (IOM)	2014	Adults	Primary care; Web-based	23	X		X		X	
PRAPARE: Protocol for responding to and assessing patients' assets, risks and experiences*	2016	Adults	Primary care; Specialty care	36	X	X	X	X	X	
WellRX Questionnaire	2014	?	Primary care	11	X				X	X
Your Current Life Situation (YCLS) Survey*	2018	All ages	Primary care	32	X	X	X	X	X	X
IHELP (Income, Housing, Education, Legal Status, Literacy, Personal Safety) Pediatric Social History Tool	2007	Children and families	Pediatrics; Inpatient; Specialty care	17	X	X	X		X	X
SEEK: Safe Environment for Every Kid	2007	Children and families	Pediatrics	20			X		X	X
Survey of Well-Being of Young Children	2010	Children and families	Pediatrics; Primary care	10		X			X	X
WE CARE Survey*	2007	Children	Pediatrics; Primary care	10	X	X			X	X
Structural Vulnerability Assessment Tool	2017	Adults	Inpatient	43	X		X		X	X

Source: California Health Benefits Program, 2023.

Note: This table expands on summary Table 4 in the *Background on Screening for Social Determinants of Health* section by providing more detail about the SDOH screening tools CHBRP reviewed for this report.

Key: SDOH = social determinants of health.

## REFERENCES

- Accountable Health Communities (AHC). AHC Model Evaluation First Evaluation Report. RTI International Contract No. HHSM-500-2014-000371. December 2020. Available at: [Accountable Health Communities \(AHC\) Model Evaluation: First Evaluation Report \(cms.gov\)](#) Accessed February 2, 2023.
- Alderwick, H, Gottlieb, LM. Meanings and Misunderstandings: A Social Determinants of Health Lexicon for Health Care Systems. *The Milbank Quarterly*. 2019;97(2): 407–419. <https://doi.org/10.1111/1468-0009.12390>
- American Public Health Association (APHA). Community Health Workers. Available at: <https://www.apha.org/apha-communities/member-sections/community-health-workers>. Accessed February 2023.
- Anyane-Yeboah, A., Quezada, S., Rubin, D. T., & Balzora, S. (2022). The Impact of the Social Determinants of Health on Disparities in Inflammatory Bowel Disease. *Clinical gastroenterology and hepatology : the official clinical practice journal of the American Gastroenterological Association*, 20(11), 2427–2434. <https://doi.org/10.1016/j.cgh.2022.03.011>
- Berkowitz SA, Hulberg AC, Hong C, et al. Addressing basic resource needs to improve primary care quality: a community collaboration programme. *BMJ Quality & Safety*. 2016;25(3):164-172.
- Brown EM, Looma V, De Marchis E, Aceves B, Molina M, Gottlieb LM. Patient and Patient Caregiver Perspectives on Social Screening: A Review of the Literature. *The Journal of the American Board of Family Medicine*. 2023;36;(1):66-78. doi:10.3122/jabfm.2022.220211R1
- Bureau of Labor Statistics (BLS), U.S. Department of Labor. Occupational Outlook Handbook, Occupational Employment and Wage Statistics. Updated March 31, 2022. Available at [https://www.bls.gov/oes/current/oes211094.htm#\(1\)](https://www.bls.gov/oes/current/oes211094.htm#(1)). Accessed February 1, 2023.
- California Department of Public Health (CDPH). Let's Get Healthy. 2023 Available at: <https://letsgethealthy.ca.gov/sdoh/>. Accessed February 1, 2023.
- Centers for Disease Control (CDC). Social Determinants of Health. Updated December, 8, 2022. Available at: <https://www.cdc.gov/about/sdoh/index.html>. Accessed February 4, 2023.
- Centers for Disease Control (CDC). [NCHHSTP Social Determinants of Health](#). Frequently Asked Questions. Available at: <https://www.cdc.gov/nchhstp/socialdeterminants/faq.html> Accessed March 3, 2023.
- California Future Health Workforce Commission (CFHWC). Meeting the Demand of Health: Final Report of the California Future Health Workforce Commission. February 2019. Available at: <https://futurehealthworkforce.org/> Accessed February 1, 2023.
- California Health Interview Survey (CHIS). askCHIS 2023. UCLA Center for Health Policy Research. Available at: <https://healthpolicy.ucla.edu/chis/Pages/default.aspx> Accessed February 3, 2023.
- Centers for Medicare and Medicaid Services (CMS). CMS Issues New Roadmap for States to Address the Social Determinants of Health to Improve Outcomes, lower costs, support state value-based care strategies. 2021a. Available at: <https://www.cms.gov/newsroom/press-releases/cms-issues-new-roadmap-states-address-social-determinants-health-improve-outcomes-lower-costs>. Accessed on February 15, 2023.

- Centers for Medicare and Medicaid Services (CMS). State Health Official # 21-001 Re: Opportunities in Medicaid and CHIP to address social determinants of health (SDOH). 2021b. Available at: <https://www.medicare.gov/federal-policy-guidance/downloads/sho21001.pdf>. Accessed on February 15, 2023.
- Center for Medicare and Medicaid Services (CMS). A Guide to Using the Account Health Communities Health-Related Social Needs Screening Tool: Promising Practices and Key Insights. August 2022. Available at: <https://innovation.cms.gov/media/document/ahcm-screeningtool-companion>. Accessed February 2023.
- Chapman S, Bates T, Miller J. Understanding California's Community Health Worker/Promotor Workforce: A Survey of CHW/Ps. California Health Care Foundation. November 2022. Available at: <https://www.chcf.org/wp-content/uploads/2022/11/UnderstandingCHWPWorkforceSurveyCHWPs.pdf>. Accessed February 2, 2023.
- County Health Rankings. California 2022. Available at: <https://www.countyhealthrankings.org/explore-health-rankings/california?year=2022>. Accessed February 3, 2023.
- Covered California. Attachment 1 to Covered California 2023-2025 Individual Market QHP Issuer Contract: Advancing Equity, Quality, and Value. Published August 1, 2022a. Available at: [https://hbex.coveredca.com/insurance-companies/PDFs/2023-2025\\_QHP\\_IND\\_Att-1\\_Appendix-A\\_8-1-22\\_Clean\\_7-19\\_v.pdf](https://hbex.coveredca.com/insurance-companies/PDFs/2023-2025_QHP_IND_Att-1_Appendix-A_8-1-22_Clean_7-19_v.pdf). Accessed on February 20, 2023.
- Covered California. Attachment 1 to Covered California for Small Business 2023-2025 Qualified Health Plan Issuer Contract: Advancing Equity, Quality, and Value. Published August 1, 2022b. Available at: [https://hbex.coveredca.com/stakeholders/plan-management/library/2023-2025%20CCSB%20Attachment%201\\_Clean\\_Draft%2011-18-21.pdf](https://hbex.coveredca.com/stakeholders/plan-management/library/2023-2025%20CCSB%20Attachment%201_Clean_Draft%2011-18-21.pdf). Accessed on February 20, 2023.
- Davidson KW, Krist AH, Tseng C, et al. Incorporation of Social Risk in US Preventive Services Task Force Recommendations and Identification of Key Challenges for Primary Care. *JAMA*. 2021;326(14):1410–1415. doi:10.1001/jama.2021.12833
- De Marchis EH, Alderwick H, Gottlieb LM. Do Patients Want Help Addressing Social Risks? *J Am Board Fam Med*. 2020 Mar-Apr;33(2):170-175. doi: 10.3122/jabfm.2020.02.190309. PMID: 32179597.
- De Marchis EH, Brown E, Aceves B, et al. State of the Science of Screening in Healthcare Settings. Social Interventions Research & Evaluation Network, 2022.
- Department of Health Care Services (DHCS). Community Health Worker (CHW) Preventive Services. July 2022. Available at: <https://files.medi-cal.ca.gov/pubsdoco/publications/mastersmtp/Part2/pregcom.pdf>. Accessed February 2023.
- Department of Health Care Access and Information (HCAI). Community Health Workers/Promotores/Representatives (CHW/P/R). 2023. Available at <https://hcai.ca.gov/workforce-capacity/community-health-workers-promotores-chw-p/>. Accessed on March 7, 2021.
- Dubowitz H, Lane WG, Semiatin JN, Magder LS. The SEEK model of pediatric primary care: can child maltreatment be prevented in a low-risk population? *Acad Pediatr*. 2012 Jul-Aug;12(4):259-68. doi: 10.1016/j.acap.2012.03.005. Epub 2012 Jun 2. PMID: 22658954; PMCID: PMC5482714.
- Eder M, Henninger M, Durbin S, Iacocca MO, Martin A, Gottlieb LM, Lin JS. Screening and Interventions for Social Risk Factors: A Technical Brief to Support the U.S. Preventive Services Task Force.

- AHRQ Publication No. 20-05267-EF-1. Rockville, MD: Agency for Healthcare Research and Quality; 2021.
- Escobar RE, Pathak S, Blanchard CM. Screening and Referral Care Delivery Services and Unmet Health-Related Social Needs: A Systematic Review. *Preventing Chronic Disease*. 2021;18:E78. doi: 10.5888/pcd18.200569
- Fiori KP, Rehm CD, Sanderson D, et al. Integrating Social Needs Screening and Community Health Workers in Primary Care: The Community Linkage to Care Program. *Clinical Pediatrics*. 2020;59(6):547-556. doi:10.1177/0009922820908589
- Fleegler EW, Lieu TA, Wise PH, Muret-Wagstaff S. Families' health-related social problems and missed referral opportunities. *Pediatrics*. 2007;119(6):e1332-41. doi:10.1542/peds.2006-1505
- Garg A, Butz AM, Dworkin PH, Lewis RA, Thompson RE, Serwint JR. Improving the management of family psychosocial problems at low-income children's well-child care visits: The WE CARE project. *Pediatrics*. 2007;120(3):547-558
- Garg A, Marino M, Vikani AR, Solomon BS. Addressing families' unmet social needs within pediatric primary care: the health leads model. *Clinical Pediatrics*. 2012;51(12):1191-3.
- Garg A, Toy S, Tripodis Y, et al. Addressing social determinants of health at well child care visits: a cluster RCT. *Pediatrics*. 2015;135:e296-e304.
- Gottlieb L, Hessler D, Long D, Amaya A, Adler N. A randomized trial on screening for social determinants of health: The iScreen Study. *Pediatrics*. 2014;134(6):e1611-1618. PMID: 25367545. DOI: 10.1542/peds.2014-1439.
- Gottlieb LM, Hessler D, Long D, et al. Effects of Social Needs Screening and In-Person Service Navigation on Child Health: A Randomized Clinical Trial. *JAMA Pediatrics*. 2016;170(11):e162521. doi:10.1001/jamapediatrics.2016.2521
- Gottlieb LM, Adler NE, Wing H, et al. Effects of In-Person Assistance vs Personalized Written Resources About Social Services on Household Social Risks and Child and Caregiver Health: A Randomized Clinical Trial. *JAMA Network Open*. 2020;2:3(3):e200701.
- Heller CG, Parsons AS, Chambers EC, Fiori KP, Rehm CD. Social risks among primary care patients in a large urban health system. *American Journal of Preventive Medicine*. 2020; 58(4): 514-525.
- Henrikson NB, Blasi PR, Dorsey CN, et al. Psychometric and Pragmatic Properties of Social Risk Screening Tools: A Systematic Review. *American Journal of Preventive Medicine*. 2019;57(6 Suppl 1):S13-S24. doi:10.1016/j.amepre.2019.07.012
- Hill S, Topel K, Li X, Solomon BS. Engagement in a Social Needs Navigation Program and Health Care Utilization in Pediatric Primary Care. *Acad Pediatr*. 2022 Sep-Oct;22(7):1221-1227. doi: 10.1016/j.acap.2022.05.012. Epub 2022 May 18. PMID: 35597440. *Pediatrics*, Volume 22, Issue 7
- Johnson KA, Barolin N, Ogbue C, Verlander K. Lessons from five years of the CMS Accountable Health Communities Model. *Health Affairs Forefront*. 2022. Available at: <https://www.healthaffairs.org/content/forefront/lessons-five-years-cms-accountable-health-communities-model>. Accessed February 15, 2023.
- Kaiser Family Foundation (KFF). States reporting social determinants of health related policies required in Medicaid Managed Care Contracts. 2021. Available at: <https://www.kff.org/other/state->

indicator/states-reporting-social-determinant-of-health-related-policies-required-in-medicaid-managed-care-contracts. Accessed February 12, 2023.

Kangovi S, Mitra N, Grande D, Long JA, Asch DA. Evidence-Based Community Health Worker Program Addresses Unmet Social Needs And Generates Positive Return On Investment. *Health Affairs*. 2020;39:2. doi.org/10.1377/hlthaff.2019.00981.

Kelly L, Benyo A, Buck L, Moses K, Nuamah A, Ophof E. Advancing California's Community Health Worker & Promotor Workforce in Medi-Cal. California Health Care Foundation; 2021. Available at: <https://www.chcf.org/resourcecenter/advancing-californias-community-health-worker-promotor-workforce-medi-cal/>. Accessed February 4, 2023.

Kim K, Choi JS, Choi E, Nieman CL, Joo JH, Lin FR, Gitlin LN, Han HR. Effects of Community-Based Health Worker Interventions to Improve Chronic Disease Management and Care Among Vulnerable Populations: A Systematic Review. *American Journal of Public Health*. 2016;106(4):e3-e28. doi: 10.2105/AJPH.2015.302987.

Kulie P, Steinmetz E, Johnson S, McCarthy ML. A health-related social needs referral program for Medicaid beneficiaries treated in an emergency department. *American Journal of Emergency Medicine*. 2021;47:119-124. doi: 10.1016/j.ajem.2021.03.069

Lian T, Kutzer K, Gautam D, Eisenson H, Crowder JC, Esmaili E, Sandhu S, Trachtman L, Prvu Bettger J, Drake C. Factors Associated with Patients' Connection to Referred Social Needs Resources at a Federally Qualified Health Center. *J Prim Care Community Health*. 2021 Jan-Dec;12:21501327211024390. doi: 10.1177/21501327211024390. PMID: 34120507; PMCID: PMC8202269.

Long M, Frederiksen B, Rnaji U, Diep K, Salganicoff A. Women's Experiences with Provider Communication and Interactions in Health Care Settings: Findings from the 2022 KFF Women's Health Survey – Issue Brief. February 22, 2023. Available at: <https://www.kff.org/womens-health-policy/issue-brief/womens-experiences-with-provider-communication-interactions-health-care-settings-findings-from-2022-kff-womens-health-survey>. Accessed February 23, 2023.

Maryland Department of Health, Maryland Primary Care Program (MDPCP). Overview. 2021. Available at: <https://health.maryland.gov/mdpcp/Pages/home.aspx>. Accessed February 13, 2023.

Maryland Department of Health, Maryland Primary Care Program (MDPCP). Guidance for social needs screening and demographics data collection. Available at: [https://health.maryland.gov/mdpcp/Documents/MDPCP\\_Guidance\\_for\\_Social\\_Needs\\_Screening\\_and\\_Demographics\\_Data\\_Collection.pdf](https://health.maryland.gov/mdpcp/Documents/MDPCP_Guidance_for_Social_Needs_Screening_and_Demographics_Data_Collection.pdf). Assessed on February 13, 2023.

Maryland Department of Health, Maryland Primary Care Program (MDPCP). Community Health Worker Integration Resource Guide. 2022. Available at: [https://health.maryland.gov/mdpcp/Documents/Community\\_Health\\_Worker\\_Integration\\_Resource\\_Guide.pdf](https://health.maryland.gov/mdpcp/Documents/Community_Health_Worker_Integration_Resource_Guide.pdf). Accessed on February 13, 2023.

Miller J, Quan A, Chapman S. Understanding California's Community Health Worker/Promotor Workforce: CHW/P Training Programs. California Health Care Foundation. February 2023. Available at: <https://www.chcf.org/wp-content/uploads/2023/02/UnderstandingCHWPWorkforce.pdf>. Accessed February 2, 2023

National Academies of Sciences, Engineering, and Medicine (NASEM). Integrating social care into the delivery of health care: Moving upstream to improve the nation's health. Washington, DC: The National Academies Press. 2019. <https://doi.org/10.17226/25467>.



- National Academy for State Health Policy (NASHP). State Community Health Worker Models. 2021. Available at: <https://nashp.org/state-community-health-worker-models/>. Accessed February 2023.
- National Committee for Quality Assurance (NCQA). Social determinants of health resource guide. 2020. Available at: [https://www.ncqa.org/wp-content/uploads/2020/10/20201009\\_SDOH-Resource\\_Guide.pdf](https://www.ncqa.org/wp-content/uploads/2020/10/20201009_SDOH-Resource_Guide.pdf). Accessed February 16, 2023.
- National Committee for Quality Assurance (NCQA). California again commits to NCQA Health Plan Accreditation. 2021. Available at: <https://www.ncqa.org/blog/california-again-commits-to-ncqa-health-plan-accreditation/>. Accessed February 16, 2023.
- National Committee for Quality Assurance (NCQA). NCQA Updates & Releases New Quality Measures for HEDIS 2023 with a Focus on Health Equity. 2022. Available at: <https://www.ncqa.org/news/ncqa-updates-releases-new-quality-measures-for-hedis-2023-with-a-focus-on-health-equity-stratifying-measures-by-race-ethnicity-and-affirming-gender-identity-helps-tackle-health-disparities>. Accessed February 16, 2023.
- Pantell MS, Hessler D, Wing H, et al. Association of 2 Social Needs Interventions With Child Emergency Department Use and Hospitalizations: A Secondary Analysis of a Randomized Clinical Trial. *JAMA Pediatrics*. 2022;176(7):716–717. doi:10.1001/jamapediatrics.2022.0503
- Pourat N, Chuang E, O'Masta B, Haley LA, Chen X, Zhou W, Haile M: Final Evaluation of California's Whole Person Care (WPC) Program. Los Angeles, CA: UCLA Center for Health Policy Research, December 2022.
- Power-Hays A, Li S, Mensah A, Sobota A. Universal screening for social determinants of health in pediatric sickle cell disease: A quality-improvement initiative. *Pediatric Blood Cancer*. 2020;67(1):e28006. doi:10.1002/pbc.28006
- Quiñones-Rivera A, Wing HE, Barr-Walker J, Yee M, Harrison JM, Gottlieb LM. Provider Impacts of Socioeconomic Risk Screening and Referral Programs: A Scoping Review. *Journal of the American Board of Family Medicine*. 2021;34(4):820-831. doi:10.3122/jabfm.2021.04.210039
- Rapfogel N and Rosenthal J. How North Carolina is using Medicaid to address social determinants of health. Center for American Progress. 2022. Available at: <https://www.americanprogress.org/article/how-north-carolina-is-using-medicaid-to-address-social-determinants-of-health>. Accessed February 13, 2023.
- Social Interventions Research and Evaluation Network (SIREN). Social Needs Screening Tools Comparison Table. 2019. Available at: <https://sirenetwork.ucsf.edu/tools-resources/resources/screening-tools-comparison>. Accessed February 2023.
- Sokol R, Austin A, Chandler C, et al. Screening Children for Social Determinants of Health: A Systematic Review. *Pediatrics*. 2019;144(4):e20191622
- Sullivan GM. A primer on the validity of assessment instruments. *Journal of Graduate Medical Education*. 2011;3(2):119-120. doi:10.4300/JGME-D-11-00075.1
- Thomas M, Valentine A. Health Disparities by Race and Ethnicity in California: Pattern of Inequity. California Health Care Foundation. October 2021. Available at: <https://www.chcf.org/wp-content/uploads/2021/10/DisparitiesAlmanacRaceEthnicity2021.pdf>. Accessed February 22, 2023.

- UCLA Health. Sustainability: Social Determinants of Health. 2023. Available at: <https://www.uclahealth.org/sustainability/our-commitment/social-determinants-health> Accessed February 12, 2023.
- U.S. Health and Human Services (USHHS). Healthy People 2030: Social Determinants of Health Workgroup. 2023. Available at: <https://health.gov/healthypeople/about/workgroups/social-determinants-health-workgroup>. Accessed February 24, 2023.
- Whitman A, De Lew N, Chappl A, et al. Addressing Social Determinants of Health: Examples of Successful Evidence-Based Strategies and Current Federal Efforts. Assistant Secretary for Planning and Evaluation. Office of Health Policy. Report HP-2022-12. April 1, 2022. Available at: <https://aspe.hhs.gov/sites/default/files/documents/e2b650cd64cf84aae8ff0fae7474af82/SDOH-Evidence-Review.pdf>. Accessed February 1, 2023.
- World Health Organization (WHO). Social Determinants of Health. 2023. Available at: [https://www.who.int/health-topics/social-determinants-of-health#tab=tab\\_1](https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1) Accessed February 2, 2023.
- Wyatt R, Laderman M, Botwinick L, Mate K, Whittington J. *Achieving Health Equity: A Guide for Health Care Organizations*. IHI White Paper. Cambridge, MA: Institute for Healthcare Improvement; 2016.
- Yan AF, Chen Z, Wang Y, et al. Effectiveness of Social Needs Screening and Interventions in Clinical Settings on Utilization, Cost, and Clinical Outcomes: A Systematic Review. *Health Equity*. 2022;6(1):454-475.

## CALIFORNIA HEALTH BENEFITS REVIEW PROGRAM COMMITTEES AND STAFF

A group of faculty, researchers, and staff complete the analysis that informs California Health Benefits Review Program (CHBRP) reports. The CHBRP **Faculty Task Force** comprises rotating senior faculty from University of California (UC) campuses. In addition to these representatives, there are other ongoing researchers and analysts who are **Task Force Contributors** to CHBRP from UC that conduct 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 manages all external communications, including those with the California Legislature. As required by CHBRP's authorizing legislation, UC contracts with a certified actuary, **Milliman**, to assist in assessing the financial impact of each legislative proposal mandating or repealing a health insurance benefit.

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 of its National Advisory Council. CHBRP assumes full responsibility for the report and the accuracy of its contents.

### Faculty Task Force

**Paul Brown, PhD**, University of California, Merced

**Timothy T. Brown, PhD**, University of California, Berkeley

**Janet Coffman, MA, MPP, PhD**, *Vice Chair for Medical Effectiveness*, University of California, San Francisco

**Todd Gilmer, PhD**, University of California, San Diego

**Sylvia Guendelman, PhD, LCSW**, University of California, Berkeley

**Elizabeth Magnan, MD, PhD**, *Vice Chair for Public Health*, University of California, Davis

**Sara McMnaman, PhD**, *Vice Chair for Medical Effectiveness and Public Health*, University of California, San Diego

**Joy Melnikow, MD, MPH**, University of California, Davis

**Aimee Moulin, MD**, University of California, Davis

**Jack Needleman, PhD**, University of California, Los Angeles

**Mark A. Peterson, PhD**, University of California, Los Angeles

**Nadereh Pourat, PhD**, *Vice Chair for Cost*, University of California, Los Angeles

**Dylan Roby, PhD**, University of California, Irvine

**Marilyn Stebbins, PharmD**, University of California, San Francisco

**Jonathan H. Watanabe, PharmD, MS, PhD**, University of California, Irvine

### Task Force Contributors

**Bethney Bonilla, MA**, University of California, Davis

**Danielle Casteel, MA**, University of California, San Diego

**Shana Charles, PhD, MPP**, University of California, Los Angeles, and California State University, Fullerton

**Margaret Fix, MPH**, University of California, San Francisco

**Naomi Hillery, MPH**, University of California, San Diego

**Jeffrey Hoch, PhD**, University of California, Davis

**Julia Huerta, BSN, RN, MPH**, University of California, Davis

**Michelle Keller, PhD, MPH**, University of California, Los Angeles

**Jacqueline Miller**, University of California, San Francisco

**Marykate Miller, MS**, University of California, Davis

**Katrine Padilla, MPP**, University of California, Davis

**Amy Quan**, University of California, San Francisco

**Dominique Ritley, MPH**, University of California, Davis

**Emily Shen**, University of California, San Francisco  
**Riti Shimkhada, PhD**, University of California, Los Angeles  
**Meghan Soulsby Weyrich, MPH**, University of California, Davis  
**Steven Tally, PhD**, University of California, San Diego  
**Sara Yoeun, MPH**, University of California, San Diego

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**Jeffrey Lerner, PhD**, President Emeritus, ECRI Institute Headquarters, Plymouth Meeting, PA; Adjunct Senior Fellow, Leonard Davis Institute of Health Economics, University of Pennsylvania  
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**Carolyn Pare**, (Retired) President and CEO, Minnesota Health Action Group, Bloomington, MN  
**Richard Roberts, MD, JD**, Professor Emeritus of Family Medicine, University of Wisconsin-Madison, Madison, WI  
**Alan Weil, JD, MPP**, Editor-in-Chief, *Health Affairs*, Bethesda, MD

## CHBRP Staff

**Garen Corbett, MS**, Director  
**John Lewis, MPA**, Associate Director  
**Adara Citron, MPH**, Principal Policy Analyst  
**An-Chi Tsou, PhD**, Principal Policy Analyst  
**Victor Garibay**, Policy Associate  
**Karen Shore, PhD**, Contractor\*

<p><b>California Health Benefits Review Program</b> <b>MC 3116</b> <b>Berkeley, CA 94720-3116</b> <a href="mailto:info@chbrp.org">info@chbrp.org</a> (510) 664-5306</p>
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CHBRP assumes full responsibility for the report and the accuracy of its contents. All CHBRP bill analyses and other publications are available at [www.chbrp.org](http://www.chbrp.org).

Garen Corbett, MS  
Director

Please direct any questions concerning this document to: California Health Benefits Review Program; MC 3116; Berkeley, CA 94720-3116, [info@chbrp.org](mailto:info@chbrp.org), or [www.chbrp.org](http://www.chbrp.org)