

EXECUTIVE SUMMARY

Analysis of Senate Bill 220: Health Care Coverage: Tobacco

Cessation Services

A Report to the 2009-2010 California Legislature June 11, 2010

A Report to the 2009-2010 California State Legislature

EXECUTIVE SUMMARY Analysis of Senate Bill 220: Health Care Coverage: Tobacco Cessation Services

June 11, 2010

California Health Benefits Review Program 1111 Franklin Street, 11th Floor Oakland, CA 94607 Tel: 510-287-3876 Fax: 510-763-4253

www.chbrp.org

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

Suggested Citation:

California Health Benefits Review Program (CHBRP). (2010). *Analysis of Senate Bill* 220: *Health Care Coverage: Tobacco Cessation Services*. Report to California State Legislature. Oakland, CA: CHBRP. 10-0

EXECUTIVE SUMMARY

California Health Benefits Review Program Analysis of Senate Bill 220

The California Assembly Committee on Health requested on March 12, 2010, that the California Health Benefits Review Program (CHBRP) conduct an evidence-based assessment of the medical effectiveness and financial and public health impacts of Senate Bill (SB) 220, a bill that would impose a health benefit mandate. On April 22, 2010, the Assembly Committee on Health requested CHBRP analyze language included in further amendments to SB 220, which were made on May 26, 2010. In response to this request, CHBRP undertook this analysis pursuant to the provisions of the program's authorizing statue.

Provisions of SB 220

SB 220 requires health care service plans and health insurance policies¹ that provide outpatient prescription drug benefits to include coverage for the following smoking cessation services, to be selected by the enrollee and the provider:

- Telephone, group, or individual counseling.
- All prescription and over-the-counter (OTC) medications approved by the Food and Drug Administration (FDA) to help smokers quit, including drugs for nicotine replacement therapy (NRT) and prescription drug therapies in, but not limited to, the form of gum, dermal patch, inhaler, nasal spray, and lozenge, varenicline, and bupropion SR² or similar drugs that counter the urge to smoke or the addictive qualities of nicotine.

Conditions placed on the benefit include:

- Counseling and medications may be limited to two courses of treatment per year.
- No copayment, coinsurance, or deductible may be applied to the benefit.
- Benefits shall comply with the U.S. Public Health Service–sponsored 2008 clinical practice guidelines.
- Step therapy³ is prohibited for prescription drugs, and plans and insurers are prohibited from requiring counseling or the completion of a cessation program as part of the cessation benefit.

¹ SB 220 would amend Section 1367.27 of the *Health and Safety Code* and Section 10123.175 of the *Insurance Code*. Health care service plans, commonly referred to as health maintenance organizations, are regulated and licensed by the California Department of Managed Health Care (DMHC), as provided in the Knox-Keene Health Care Services Plan Act of 1975. The Knox-Keene Health Care Services Plan Act is codified in the *California Health and Safety Code*. Health insurance policies are regulated by the California Department of Insurance and are subject to the *California Insurance Code*.

² Bupropion SR at strengths of 100 or 150 milligrams is the only formulation of bupropion approved by the FDA for smoking cessation. It was originally approved for sale under the brand name Zyban. Other formulations and strengths of bupropion are marketed in the U.S. but are not approved for smoking cessation.

³ Step therapy requires an enrollee to try a first-line medication (often a generic alternative) prior to receiving coverage for a second-line medication (often a brand-name medication).

• At least four counseling sessions must be provided for in each course of treatment, each session lasting at least 10 minutes

SB 220 aims to diminish the statewide economic and personal cost of tobacco addiction in California by expanding access to and coverage for smoking cessation services for enrollees in DMHC- and CDI-regulated plans and policies that offer outpatient prescription drugs.

Potential Effects of Health Care Reform

On March 23, 2010, the federal government enacted the federal Patient Protection and Affordable Care Act (P.L.111-148), which was further amended by the Health Care and Education Reconciliation Act (H.R.4872) that the President signed into law on March 30, 2010. These laws (referred to as "PPACA") came into effect after CHBRP received a request for analysis for SB 220.

There are provisions in the PPACA that go into effect by 2014 and afterwards that would dramatically affect the California health insurance market and its regulatory environment. These major long-term provisions of the PPACA would require that most U.S. citizens and qualified legal residents have health insurance and that large employers offer health insurance coverage or a tax-free credit to their employees. Of particular relevance to the analysis of SB 220, the PPACA would require tobacco cessation treatments to be provided by qualified health plans providing coverage in the small-group and individual markets through the state-based insurance exchanges. Tobacco cessation will be considered part of the "essential health benefits package" to be provided, effective in 2014. Therefore, any effects of SB 220 might be diminished by the PPACA requirements following 2014. How the provisions of PPACA are implemented in California will largely depend on regulations to be promulgated by federal agencies, and statutory and regulatory actions to be undertaken by the California state government.

There are short-term provisions in the PPACA that go into effect within 6 months or less of enactment that would expand the number of Californians obtaining health insurance and their sources of health insurance. Some of these provisions include:

• Children up to the age of 26 years will be allowed to enroll in their parent's health plan or policy (effective 6 months following enactment). This provision may decrease the number of uninsured and/or potentially shift those enrolled with individually purchased insurance to group purchased insurance.

⁴ (Subtitle D, Sec. 1302, as modified by Sec. 10104) "Requires the essential health benefits package to provide essential health benefits and limit cost-sharing. Directs the Secretary to: (1) define essential health benefits and include emergency services, hospitalization, maternity and newborn care, mental health and substance use disorder services, prescription drugs, preventive and wellness services and chronic disease management, and pediatric services, including oral and vision care; (2) ensure that the scope of the essential health benefits is equal to the scope of benefits provided under a typical employer plan; and (3) provide notice and an opportunity for public comment in defining the essential health benefits. Establishes: (1) an annual limit on cost-sharing beginning in 2014; and (2) a limitation on the deductible under a small group market health plan." (CRS, 2010)].

- Denials to offer health insurance due to preexisting conditions will be prohibited (effective 6 months following enactment). This provision may decrease the number of uninsured, or shift enrollment in California Children Services or Healthy Families to those with privately purchased health insurance.
- A temporary high-risk pool for those with preexisting conditions will be established (effective 90 days following enactment). How California chooses to implement this provision would have implications for health insurance coverage for those high-risk individuals who are currently without health insurance and/or are on California's Major Risk Medical Insurance Plan (MRMIP). The federal government does not mandate what benefits are included in temporary high-risk pools.

These and other short-term provisions would affect CHBRP's *baseline* estimates of the number and source of health insurance for Californians in 2010. Given the uncertainty surrounding implementation of these provisions and given that Federal Health Care Reform was only recently enacted, the potential effects of these short-term provisions are not taken into account in the baseline estimates presented in this report. Further information on the provisions of Federal Health Care Reform that would alter the California health insurance market and have relevance to SB 220 is contained in this analysis.

Analytic Approach

For this analysis, CHBRP considered two factors that affect the use of smoking cessation services: benefit coverage and type of tobacco cessation use. Enrollees can have varying degrees of coverage ranging from no coverage to full coverage, which is defined in this report as coverage of 100% of costs associated with smoking cessation medications and counseling without a deductible, copayment, or coinsurance. CHBRP uses the 2005 California Tobacco Survey data and the RAND Health Insurance Experiment's (HIE) estimated impact of cost sharing for well care to estimate pre- and post-mandate utilization.

The estimated primary impact of SB 220 is based on data and literature demonstrating increased utilization of smoking cessation treatment(s), as opposed to attempting to quit without any cessation treatment. The total number of people attempting to quit is not increasing postmandate. In essence, the "denominator" stays the same. It's the "numerator" (utilization of cessation treatments of those attempting to quit) that changes, as more people utilize some combination of counseling and OTC and prescription medications, as opposed to trying to quit without cessation aids, or "cold turkey". While it is possible that the mandate could be the impetus that motivates more people to try to quit (the "denominator"), such an estimate is not provided in this analysis, as that data is not available. Thus, it is possible that the impact of SB 220 may be higher than CHBRP's estimates assuming that successful quit rates approach those in many of the randomized controlled trials; however, it is often the case that the effects in the "real world" may be less than in controlled trials.

Although the bill applies to all covered lives⁵, CHBRP makes the simplifying assumption to exclude adolescents aged 12 to 17 years from the analysis. This age group is typically in the initiation phase, rather than the cessation phase. Additionally, measurement of smoking prevalence in this population is difficult, due to methodological issues around telephone-based surveys of teens (frequently at home, thus potentially understating prevalence), and school-based surveys (potential overstating prevalence rate). Moreover, public health campaigns that target youth predominantly focus on smoking prevention.

Individual consumption of tobacco is one other factor in cessation (e.g., light, moderate, and heavy smokers); however, because of lack of overall data, CHBRP does not attempt to disaggregate the available data by consumption.

Other tobacco control policies, such as media campaigns, tobacco taxes, and smoking bans, are not considered here because this analysis considers the impact of only the proposed health benefit mandate.

The medical effectiveness review examines two topics: the effectiveness of pharmaceutical and counseling treatments for smoking cessation and the effectiveness of health insurance coverage on changing smoking cessation utilization. The standard CHBRP cost model is applied to the mandate to analyze its 1-year impact. In addition, the short-term impacts of SB 220 on three health outcomes (low–birth weight babies and acute myocardial infarction [AMI]) are analyzed, as the literature points to reductions in health care expenditures that are clearly attributable to smoking cessation. As a preventive service, smoking cessation would be expected to have long-term impacts, and the available literature is reviewed and summarized in the *Public Health Impacts* section.

Medical Effectiveness

Efficacy of Smoking Cessation Treatments

The literature on the efficacy of behavioral interventions (e.g., counseling, brief advice) and pharmaceuticals for smoking cessation is large and includes numerous meta-analyses of randomized controlled trials (RCTs), the strongest form of evidence for CHBRP analyses. These meta-analyses provide clear and convincing evidence that behavioral and pharmacological treatments and combinations of the two improve quit rates and increase the likelihood of sustained abstinence from smoking. These conclusions about the efficacy of smoking cessation interventions are not likely to be diminished or altered with the publication of new studies, because of the large quantity of literature summarized in the meta-analyses.

_

⁵ CHBRP examines the impacts of SB 220 on those plans and policies that are subject to the benefit mandates. This excludes populations enrolled in self-insured plans and those with Medicare as a primary payer. See http://www.chbrp.org/analysis_methodology/cost_impact_analysis.php for more information regarding the population typically subject to benefit mandates.

Behavioral interventions

- There is clear and convincing evidence that use of multiple types of counseling increases smoking cessation.
- Individual, group, and telephone counseling by physicians and other health professionals increases smoking cessation.
- Brief counseling interventions (as little as a few minutes) are effective, and the
 preponderance of evidence suggests that more intensive counseling is associated with larger
 effects.
- Psychologists, physicians, pharmacists, and nurses are all effective in providing smoking cessation counseling.
- RCTs that enrolled smokers at high risk for adverse health outcomes (e.g., persons with coronary heart disease, pregnant women) report similar findings to RCTs that enrolled smokers who were not at increased risk relative to other smokers.

Pharmacotherapy

- Pharmacological agents for smoking cessation are commonly divided into those used in initial attempts to quit smoking ("first-line agents"), followed by those used when initial attempts to quit have not been successful ("second-line agents"). First-line agents for smoking cessation include the following: NRT administered by gum, patch, lozenge, nasal spray, and inhaler; varenicline, a nicotine receptor partial agonist⁶; and the non-nicotine agent bupropion SR, an antidepressant useful in treating certain addiction syndromes. Second-line agents include clonidine and nortriptyline.
 - o Among first-line agents:
- There is clear and convincing evidence that NRT administered by gum, lozenge, patch, nasal spray, and inhaler increases smoking cessation.
- There is also clear and convincing evidence that varenicline and bupropion⁷ increase smoking cessation.
- There is a preponderance of evidence that varenicline is more effective than bupropion.
- There is a preponderance of evidence that smokers who receive a combination of pharmacological agents are more likely to abstain from smoking than persons who receive a single pharmacological agent.
 - o Among second-line agents:

-

⁶ The nicotine receptor partial agonist simulates the effects of nicotine to reduce cravings and the pleasurable effect of smoking cigarettes.

⁷ Although bupropion SR at strengths of 100 or 150 milligrams is the only formulation of bupropion approved by the FDA for smoking cessation, meta-analyses regarding the efficacy of bupropion for smoking cessation do not indicate whether all of the RCTs they included in their analyses assessed bupropion SR. Some of the RCTs included may have evaluated other formulations of bupropion or other strengths of the medication.

- o There is clear and convincing evidence that clonidine and nortriptyline also increase smoking cessation.
- There is a preponderance of evidence that smokers who receive both counseling and pharmacological agents are more likely to abstain from smoking than smokers who only receive counseling.

Generalizability of findings

The rates of abstinence from smoking found in the RCTs summarized above may be greater than those that would be achieved if SB 220 were enacted. Most of these RCTs used strict inclusion/exclusion criteria to maximize their ability to determine whether counseling or pharmacotherapy increases smoking cessation. These studies may have excluded some smokers who would have coverage for these treatments under SB 220. In addition, smokers who take the initiative to enroll in RCTs are probably more highly motivated to quit than the average smoker. Clinician researchers may also work harder than other clinicians to ensure that smokers use recommended amounts of counseling and/or pharmacotherapy.

Effects of Coverage for Smoking Cessation Treatments

The evidence base from which conclusions can be drawn about the effects of coverage on utilization of smoking cessation treatments and abstinence from smoking is much less robust than the evidence base regarding the efficacy of these treatments.

Use of smoking cessation treatments

- The preponderance of evidence suggests that persons who have full coverage 8 for NRT and/or bupropion are more likely to use these smoking cessation medications than are persons who do not have coverage for them.
- The evidence of the effect of full coverage for smoking cessation counseling relative to no coverage is ambiguous.
- Findings from single studies suggest that persons who have more generous coverage for NRT
 and/or counseling are more likely to use these smoking cessation treatments than are persons
 who have less generous coverage for them.

Abstinence from smoking

• The preponderance of evidence suggests that full coverage for smoking cessation counseling and pharmacotherapy is associated with improved abstinence from smoking relative to no coverage for smoking cessation treatments.

 The evidence of the effect of more generous coverage for smoking cessation counseling and pharmacotherapy relative to less generous coverage on abstinence from smoking is ambiguous.

⁸ For purposes of this report, full coverage for smoking cessation treatments is defined as coverage of 100% of costs associated with tobacco cessation medications and counseling without a deductible, copayment, or coinsurance. Partial coverage refers to coverage that requires users to pay a share of the cost of treatment (e.g., a copayment).

Utilization, Cost, and Coverage Impacts

Nearly 19.5 million Californians are currently enrolled in health care service plans regulated by the California Department of Managed Health Care (DMHC) and health insurance policies regulated by the California Department of Insurance (CDI). SB 220 mandates that all enrollees in DMHC- or CDI-regulated plans or policies with outpatient prescription drug coverage would also be offered no-cost smoking cessation services, but does not mandate that all plans or polices offer prescription drug coverage. Therefore, the coverage increase in 2011 would immediately affect the 97% of enrollees that have coverage for prescription drugs, or 18.89 million individuals (Table 1). Under SB 220, all enrollees with outpatient prescription drug coverage would also have full coverage for smoking cessation services, including counseling, NRT (either available over the counter or through a prescription), or prescription medication for smoking cessation, at no cost to the individual. In this section, we focus on the impact of SB 220 on increasing premium costs among all 19.5 million enrollees with plans or policies subject to mandate, and on the estimated increase of utilization of smoking cessation treatment among the 1.83 million adult smokers with current prescription drug coverage, since they will be the population who might attempt to quit using services covered by this newly mandated benefit coverage.

Coverage Impacts

- Currently, enrollees in all DMHC- and CDI-regulated plans and policies with drug coverage largely have some coverage for cessation interventions with cost sharing, but the rates of coverage vary by type of service.
- Eight in ten (81.7%) enrollees have full or partial coverage for smoking cessation-related counseling, 57.4% have full or partial coverage for OTC smoking cessation treatment, and 77.8% have full or partial coverage for prescription smoking cessation treatment (Table 1). If SB 220 were enacted, 100% of insured adults with drug coverage would have full coverage for smoking cessation services.
- Medi-Cal, which covers 2.6 million adults subject to the mandate (13.8%), already provides comprehensive smoking cessation benefits at no charge to enrollees.

Utilization Impacts

- CHBRP used the 2005 California Tobacco Survey data and the RAND Health Insurance Experiment's (HIE) estimated impact of cost sharing for well care to estimate pre- and post-mandate utilization. Pre-mandate, of the 1.83 million adult smokers enrolled in DMHC- or CDI-regulated plans or policies with drug coverage, 268,344 used one or more smoking cessation treatments, with 203,845 using treatments covered through their existing insurance and 64,500 enrollees using treatments for which they were uninsured.
- Post-mandate, of the 1.83 million insured adult smokers with outpatient prescription drug coverage, CHBRP estimated that the utilization of counseling services would increase by 34.3%, OTC treatments by 54.2%, and prescription treatments by 37.2% (Table 1).

• All together, the utilization of one or more smoking cessation treatments would increase by 44.2%, representing an additional 118,482 insured adult smokers getting treatment, after the mandate.

Cost Impacts

- Increases in per member per month (PMPM) premiums for the newly mandated benefit coverage vary by market segment (Table 5 in *Utilization, Cost, and Benefit Coverage Impacts*). Increases as measured by percentage changes in PMPM premiums are estimated to range from a low of 0.00% (for DMHC-regulated Medi-Cal HMO plans for ages 65+) to a high of 0.37% (for CDI-regulated individual policies) in the affected market segments. Increases as measured by PMPM premiums are estimated to range from \$0.00 to \$0.67.
- In the privately funded large-group market, the increase in premiums is estimated to range from \$0.38 PMPM among DMHC-regulated plan contracts to \$0.56 PMPM among CDI-regulated policies (Table 5 in *Utilization, Cost, and Benefit Coverage Impacts*).
- For enrollees in privately funded small-group insurance policies, health insurance premiums are estimated to increase by approximately \$0.49 PMPM for DMHC contracts to \$0.65 PMPM for CDI policies.
- In the privately funded individual market, the health insurance premiums are estimated to increase by \$0.58 PMPM and by \$0.67 PMPM in the DMHC- and CDI-regulated markets, respectively.
- In the publicly funded DMHC-regulated health plans, CHBRP estimates that premiums would remain flat for Medi-Cal HMOs, Healthy Families, and CalPERS HMOs, with the impact ranging from 0.00% to 0.07% (\$0.00 to \$0.26).
- Total net annual health expenditures are projected to increase by \$52.7 million (0.07%) (Table 1). This is due to an \$83.7 million increase in health insurance premiums partially offset by reductions in both enrollee copayments (\$10.4 million) and out-of-pocket expenditures (\$20.6 million).
- The net increase of \$52.7 million could also be reduced by a savings of \$1.04 million in health care spending, representing the potential short-term (i.e., 1-year) savings resulting from a reduction of less than ten fewer low-birth weight deliveries and hospitalizations due to AMI among those who quit smoking.
- In addition to gaining short-term savings in health expenditures, those who quit smoking may experience measurable long-term improvements in health status. Although the cost estimates presented are for one year only, tobacco use has both direct and indirect costs that affect individuals, employers, health plans, the government, and society.
- Medical care contributes the largest proportion of the direct costs of smoking, and individuals
 personally bear additional medical costs related to smoking. A number of studies have
 examined the long-term cost consequences of reductions in tobacco use, and all generally
 find that smoking cessation is cost-effective. For example, Warner et al. (2004) found that

quitters gain on average 7.1 years of life at a net cost of \$3,417 per year of life saved, or \$24,261 per quitter.

Public Health Impacts

SB 220 would likely have a positive impact on public health in California, based on (1) the scientific evidence of the medical effectiveness of smoking cessation treatments, (2) the likely increase in utilization of smoking cessation treatments and resultant abstinence associated with SB 220, (3) the positive impact of smoking cessation on both short- and long-term health outcomes, and (4) the cost effectiveness of smoking cessation.

- In California, the prevalence of smoking in the insured adult population is 14.2% resulting in 34,492 deaths annually (2007). The prevalence is among the lowest in the U.S., but above the *Healthy People 2010*⁹ goal of 12%.
- There is evidence to suggest that SB 220 would increase utilization of smoking cessation treatments, with approximately 118,482 insured adult smokers shifting from self-help to obtaining OTC and/or prescription medications and/or counseling services. As a result of this increase in utilization, it is estimated that an additional 8,081 smokers would successfully quit smoking annually.
- Prevalence of smoking and related health conditions differs by race, ethnicity, and gender.
 There are insufficient data for CHBRP to assess the extent to which SB 220 would modify gender and racial disparities for smoking and its associated health outcomes.
- During the first year of implementation, CHBRP estimates that a reduction of fewer than 10 cases of AMI and fewer than 10 low-birth weight deliveries would be attributable to SB 220 annually. These estimates are based on the insured California population and evidence-based literature.
- There is a preponderance of evidence that SB 220 would contribute to the reduction in premature death from long-term smoking-related diseases such as cancer and cardiovascular and respiratory diseases. When the estimates of increased longevity for quitters are applied to the projected 8,081 additional smokers who successfully quit each year attributable to the SB 220 mandate, approximately 56,567 to 100,204 years of potential life may be gained in the state each year.
- Smoking-related productivity loss in California in 2004 was about \$8.5 billion. Both direct
 costs (i.e., tobacco-related medical care) and indirect costs, (i.e., those associated with poorer
 quality of life among current smokers relative to quitters) are reduced by smoking cessation.

-

⁹ Published by the U.S. Department of Health and Human Services, *Healthy People 2010* establishes a set of health objectives for the U.S. to achieve over the first decade of the new century. States, local communities, professional organizations, and others use them to develop programs to improve health.

There is sufficient evidence to conclude that SB 220 would reduce smoking and its concomitant economic loss.

Smoking cessation treatment is cost-effective. This conclusion is supported by over two decades of health economics literature and is supported by America's Health Insurance Plans, a trade group representing health insurers, which recommends coverage of clinical treatments for smoking cessation as a cost-effective business investment. Smoking cessation compares favorably with treatment and prevention for other common health conditions with respect to cost effectiveness. For example, the cost for treating high blood pressure ranges between \$5,000 to \$45,000 per life-year gained, whereas smoking cessation treatment is estimated to cost a few hundred to a few thousand dollars per life-year gained.

Table 1. SB 220 Impacts on Benefit Coverage, Utilization, and Cost, 2010

Table 1. SB 220 Impacts on Benefit	Before Mandate	After Mandate	Increase/ Decrease	Change After Mandate
Benefit Coverage				
Total enrollees with health insurance				
subject to state-level benefit mandates (a)	19,487,000	19,487,000	-	0.00%
Total enrollees with health insurance				
subject to SB 220	19,487,000	19,487,000	-	0.00%
Percentage of enrollees with coverage for				
smoking cessation counseling (b)	10.20	0.004	10.00/	
No coverage	18.3%	0.0%	-18.3%	-100.00%
Coverage with cost sharing	66.9%	0.0%	-66.9%	-100.00%
Full coverage with no cost sharing	14.8%	100.0%	85.2%	576.91%
Number of enrollees with coverage for smoking cessation counseling				
No coverage	3,466,161	-	(3,466,161)	-100.00%
Coverage with cost sharing	12,635,494	-	(12,635,494)	-100.00%
Full coverage with no cost sharing	2,791,000	18,892,655	16,101,655	576.91%
Percentage of enrollees with coverage for OTC smoking cessation treatment (c)	2,771,000	10,072,033	10,101,033	370.5170
No coverage	42.6%	0.0%	-42.6%	-100.00%
Coverage with cost sharing	42.6%	0.0%	-42.6%	-100.00%
Full coverage with no cost sharing	14.8%	100.0%	85.2%	576.91%
Number of enrollees with coverage for				370.5170
OTC smoking cessation treatment				
No coverage	8,056,673	-	(8,056,673)	-100.00%
Coverage with cost sharing	8,044,982	-	(8,044,982)	-100.00%
Full coverage with no cost sharing	2,791,000	18,892,655	16,101,655	576.91%
Percentage of enrollees with coverage for prescription smoking cessation treatment (c)				
No coverage	22.2%	0.0%	-22.2%	-100.00%
Coverage with cost sharing	63.0%	0.0%	-63.0%	-100.00%
Full coverage with no cost sharing	14.8%	100.0%	85.2%	576.91%
Number of enrollees with coverage for	11.070	100.070	03.270	370.7170
prescription smoking cessation treatment				
No coverage	4,203,474	-	(4,203,474)	-100.00%
Coverage with cost sharing	11,898,182	-	(11,898,182)	-100.00%
Full coverage with no cost sharing	2,791,000	18,892,655	16,101,655	576.91%
Utilization and Cost	2,771,000	10,002,000	10,101,022	370.7170
Number of enrollees who smoke and use:				
Counseling	122,747	164,854	42,107	34.30%
OTC treatments	192,304	296,536	104,232	54.20%
Prescription drug treatments	63,419	86,984	23,565	37.16%
At least one treatment	268,344	386,826	118,482	44.15%
Average cost per course of treatment	200,344	300,020	110,402	++.13%
• •	\$200	\$200	\$0	0.00%
Counseling	\$200	\$200 \$236		
OTC treatments			\$0	0.00%
Prescription drug treatments	\$240	\$240	\$0	0.00%

Table 1. SB 220 Impacts on Benefit Coverage, Utilization, and Cost, 2010 (Cont'd)

	Before Mandate	After Mandate	Increase/ Decrease	Change After Mandate		
Expenditures						
Premium expenditures by private						
employers for group insurance	\$43,519,324,000	\$43,570,630,000	\$51,306,000	0.12%		
Premium expenditures for individually						
purchased insurance	\$5,992,795,000	\$6,007,684,000	\$14,889,000	0.25%		
Premium expenditures by individuals						
with group insurance, CalPERS HMOs,						
Healthy Families Program, AIM or						
MRMIP (d)	\$12,820,614,000	\$12,835,829,000	\$15,215,000	0.12%		
CalPERS HMO employer						
expenditures (e)	\$3,267,842,000	\$3,270,036,000	\$2,194,000	0.07%		
Medi-Cal HMOs state expenditures	\$4,015,596,000	\$4,015,596,000	\$0	0.00%		
Healthy Families Program state						
expenditures (f)	\$910,306,000	\$910,409,000	\$103,000	0.01%		
Enrollee out-of-pocket expenses for						
covered benefits (deductibles,						
copayments, etc.)	\$5,961,186,000	\$5,950,748,000	-\$10,438,000	-0.18%		
Enrollee expenses for noncovered						
benefits (g)	\$20,615,000	\$0	(\$20,615,000)	-100.00%		
Total Annual Expenditures	\$76,508,278,000	\$76,560,932,000	\$52,654,000	0.07%		

Source: California Health Benefits Review Program, 2010.

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

- (b) Includes telephone, individual, and group counseling.
- (c) Includes all medications approved by the Food and Drug Administration (FDA) to help smokers quit, including drugs for NRT and prescription drug therapies in, but not limited to, the form of gum, dermal patch, inhaler, nasal spray, and lozenge, and bupropion SR or similar drugs that counter the urge to smoke or the addictive qualities of nicotine
- (d) Premium expenditures by individuals include employee contributions to employer-sponsored health insurance and member contributions to public insurance.
- (e) Of the CalPERS employer expenditures, about 58% or \$71,920 would be state expenditures for CalPERS members who are state employees.
- (f) Healthy Families Program state expenditures include expenditures for 7,000 covered by the Major Risk Medical Insurance Program (MRMIP) and 7,000 covered by the Access for Infants and Mothers (AIM) program.
- (g) Reflects enrollee out-of-pocket expenses for benefits that would become a covered benefit if SB 220 is enacted. *Key:* AIM=Access for Infants and Mothers; CalPERS HMOs=California Public Employees' Retirement System Health Maintenance Organizations; CDI=California Department of Insurance; DMHC=Department of Managed Health Care.

Acknowledgements

This report provides an analysis of the medical, financial, and public health impacts of Senate Bill 220, a bill to mandate the coverage of tobacco cessation counseling and medications (for health plans that offer outpatient prescription drug coverage) for the treatment of tobacco addiction. In response to a request from the California Assembly Committee on Health on March 12, 2010, and amended language provided on April 22, 2010, the California Health Benefits Review Program (CHBRP) undertook this analysis pursuant to the program's authorizing statute. Edward Yelin, PhD, Janet Coffman, MPP, PhD, and Chris Tonner, MPH, all of the University of California, San Francisco, prepared the medical effectiveness analysis. Min-Lin Fang, MLIS, of the University of California, San Francisco, conducted the literature search. Joy Melnikow, MD, MPH, Stephen McCurdy, MD, MPH, and Dominique Ritley, MPH, all of the University of California, Davis, and Matthew Ingram of the University of California, Berkeley, prepared the public health impact analysis. Shana Lavarreda, PhD, MPP, and Ying-Ying Meng, DrPH, of the University of California, Los Angeles, prepared the cost impact analysis. Robert Cosway, FSA, MAAA provided actuarial analysis. Shu-Hong Zhu, PhD, of the University of California, San Diego, and principal investigator for the statewide, state-funded California Smokers' Helpline, provided technical assistance with the literature review and expert input on the analytic approach. Garen Corbett, MS, of CHBRP staff prepared the background section and synthesized the individual sections into a single report. Sarah Ordódy provided editing services. A subcommittee of CHBRP's National Advisory Council (see final pages of this report) and a member of the CHBRP Faculty Task Force, Sheldon Greenfield, MD, of the University of California, Irvine, reviewed the analysis for its accuracy, completeness, clarity, and responsiveness to the Legislature's request.

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

California Health Benefits Review Program 1111 Franklin Street, 11th Floor Oakland, CA 94607 Tel: 510-287-3876 Fax: 510-763-4253

www.chbrp.org

All CHBRP bill analyses and other publications are available on the CHBRP Web site, www.chbrp.org.

Susan Philip, MPP Director

California Health Benefits Review Program Committees and Staff

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

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

Faculty Task Force

Helen Halpin, ScM, PhD, Vice Chair for Public Health, University of California, Berkeley Robert Kaplan, PhD, Vice Chair for Cost, University of California, Los Angeles Ed Yelin, PhD, Vice Chair for Medical Effectiveness, University of California, San Francisco Wayne S. Dysinger, MD, MPH, Loma Linda University Medical Center Susan L. Ettner, PhD, University of California, Los Angeles Theodore Ganiats, MD, University of California, San Diego Sheldon Greenfield, MD, University of California, Irvine Kathleen Johnson, PharmD, MPH, PhD, University of Southern California Thomas MaCurdy, PhD, Stanford University Joy Melnikow, MD, MPH, University of California, Davis

Task Force Contributors

Wade Aubry, MD, University of California, San Francisco Yair Babad, PhD, University of California, Los Angeles Nicole Bellows, PhD, University of California, Berkeley Tanya G. K. Bentley, PhD, University of California, Los Angeles Dasha Cherepanov, PhD, University of California, Los Angeles Janet Coffman, MPP, PhD, University of California, San Francisco Mi-Kyung Hong, MPH, University of California, San Francisco Shana Lavarreda, PhD, MPP, University of California, Los Angeles Stephen McCurdy, MD, MPH, University of California, Davis Sara McMenamin, PhD, University of California, Berkeley Ying-Ying Meng, DrPH, University of California, Los Angeles Alexis Muñoz, MPH, University of California Dominique Ritley, MPH, University of California, Davis Chris Tonner, MPH, University of California, San Francisco Lori Uyeno, MD, University of California, Los Angeles

National Advisory Council

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

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

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

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

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

Susan Dentzer, Editor-in-Chief of Health Affairs, Washington, DC

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

Allen D. Feezor, Deputy Secretary for Health Services, North Carolina Department of Health and Human Services, Raleigh, NC

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

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

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

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

Carolyn Pare, CEO, Buyers Health Care Action Group, Bloomington, MN

Michael Pollard, JD, MPH, Senior Fellow, Institute for Health Policy Solutions, Washington, DC

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

Christopher Queram, President and CEO, Wisconsin Collaborative for Healthcare Quality, Madison, WI

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

Frank Samuel, LLB, Former Science and Technology Advisor, Governor's Office, State of Ohio, Columbus, OH

Patricia Smith, President and CEO, Alliance of Community Health Plans, Washington, DC **Prentiss Taylor, MD,** Regional Center Medical Director, Advocate Health Centers,

Advocate Health Care, Chicago, IL

CHBRP Staff

Susan Philip, MPP, Director Garen Corbett, MS, Principal Policy Analyst David Guarino, Policy Analyst John Lewis, MPA, Principal Policy Analyst Karla Wood, Program Specialist California Health Benefits Review Program University of California Office of the President 1111 Franklin Street, 11th Floor Oakland, CA 94607 Tel: 510-287-3876 Fax: 510-763-4253

Tel: 510-287-3876 Fax: 510-763-4253 chbrpinfo@chbrp.org www.chbrp.org

The California Health Benefits Review Program is administered by the Office of Health Sciences and Services at the University of California, Office of the President, John D. Stobo, M.D., Senior Vice President – Health Sciences and Services.