Key Findings

Analysis of California Assembly Bill 97
Insulin Affordability

Summary to the 2021–2022 California State Legislature, April 16, 2021

CALIFORNIA HEALTH BENEFITS REVIEW PROGRAM

SUMMARY

The version of California Assembly Bill (AB) 97 analyzed by CHBRP would prohibit a deductible from being applied to insulin prescriptions. Other cost sharing (copayments, coinsurance) would still be permitted.

In 2022, of the 21.9 million Californians enrolled in state-regulated health insurance, 13.9 million of them would have insurance subject to, and potentially impacted by, AB 97.

Benefit Coverage: At baseline there are 118,014 enrollees who use insulin. 81,265 of enrollees using insulin *do not* have a deductible (69%), while 36,750 enrollees using insulin *have* a deductible (31%). Postmandate, 100% of enrollees would not need to meet their deductible before paying the normal copayment or coinsurance for their insulin prescription. AB 97 appears not to exceed the definition of essential health benefits (EHBs) in California.

Medical Effectiveness: CHBRP found a *preponderance of evidence* that higher cost sharing reduces adherence to insulin and lower cost sharing increases adherence to insulin. There is *insufficient evidence* on the associated effect of cost sharing for insulin on diabetes-related health outcomes, including HbA1c levels, outpatient visits, emergency department visits, hospitalizations, long-term complications, and disability/absenteeism rates.

Cost and Health Impacts[1]: In 2022, AB 97 would increase total net annual expenditures by $10,162,000 or 0.008% for enrollees with DMHC-regulated plans and CDI-regulated policies. This is due to an increase in $23,853,000 in total health insurance premiums paid by employers and enrollees due to the cost-sharing cap, adjusted by a $13,691,000 decrease in enrollee expenses.

The 31% of enrollees with a deductible at baseline would experience a 3% reduction in cost sharing, which results in a 0.26% increase in utilization of insulin postmandate for those enrollees. Average cost sharing for these enrollees decreases from $89 per prescription to $87 per prescription. Almost 10% of enrollees who use insulin and have a deductible would experience a decrease in cost-sharing of more than $20.

Enrollees using insulin at baseline who have a deductible tend to be users of other high-cost medications and other medical services. For example, among enrollees in health savings account (HSA)-eligible high deductible health plans (HDHPs) (and therefore with a combined medical and pharmacy deductible), almost three quarters (70%) of enrollees have expenditures for medical care and non-insulin brand name prescription medications that exceeds $2,500 annually. As a result, almost all enrollees would reach their deductible or out of pocket maximum within a plan year, regardless of whether insulin is subject to the deductible.

Due to the small decrease in cost sharing and small increase in utilization, CHBRP projects no measurable public health impact. However, at the person-level, for enrollees who would not otherwise meet their deductible or out of pocket maximum and would therefore experience a higher change in cost sharing, AB 97 may result in improved glycemic control, a reduction in healthcare utilization, a reduction in long-term complications attributable to diabetes, and improved quality of life for enrollees that experience a decrease in cost sharing and improved insulin adherence, or begin using insulin due to reduced costs.

CONTEXT

Diabetes mellitus (DM), frequently referred to as diabetes, is one of the most common chronic conditions in California and the United States. According to the 2019 data from the Behavioral Risk Factor Surveillance System, about 10% of the adult population in California has been diagnosed with diabetes. The incidence of diabetes is highest among adults aged 65 and older.

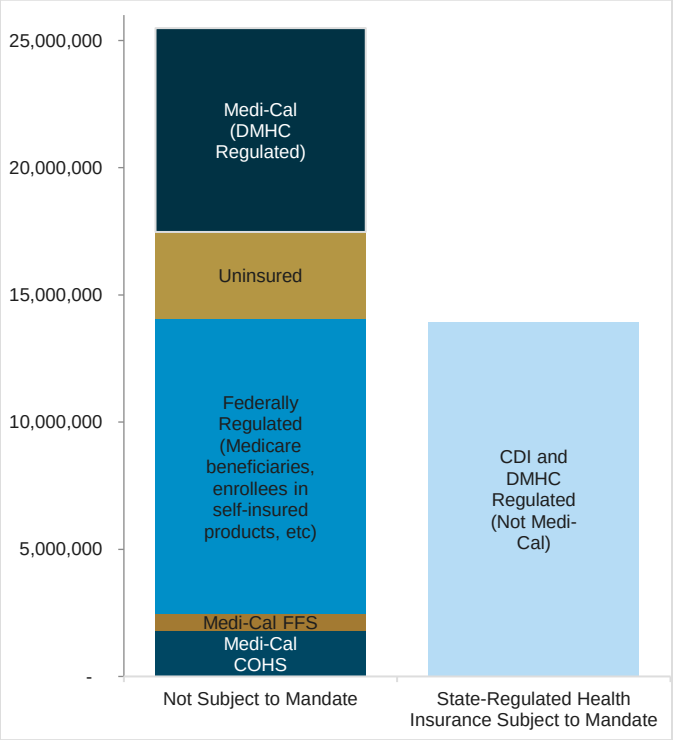
[1] Similar cost and health impacts could be expected for the following year, though possible changes in medical science and other aspects of health make stability of impacts less certain as time goes by.

Diabetes is a chronic disease with short- and long-term health effects that prevent the proper production of and/or response to insulin, a hormone that facilitates the transfer of glucose into cells to provide energy.[2] Insulin can be used to treat all three types of diabetes: Type 1 diabetes mellitus (T1DM); Type 2 diabetes mellitus (T2DM); and gestational diabetes (GDM). The American Diabetes Association recommends different insulin regimens based on the type of diabetes a person has. Insulin is necessary for the treatment of T1DM and sometimes necessary for the treatment of T2DM and GDM.

In general, insulin has become expensive for individuals living with diabetes; therefore, cost may be a barrier to insulin use for some individuals. Other identified barriers to insulin use that are independent of cost include regimen complexity and treatment tolerability, as well as injection-related factors.

BILL SUMMARY

Figure A. Health Insurance in CA and AB 97



Source: California Health Benefits Review Program, 2021.

Assembly Bill (AB) 97 would prohibit a deductible from being applied to insulin prescriptions. Other cost sharing (copayments, coinsurance) would still be permitted. Figure A notes how many Californians have health insurance that would be subject to AB 97 (approximately 35% of Californians).

IMPACTS

Benefit Coverage, Utilization, and Cost

Benefit Coverage

CHBRP estimates that, at baseline, there are 118,014 enrollees who use insulin in DMHC-regulated plans and CDI-regulated policies, where 81,265 enrollees (69%) using insulin do not have a deductible. CHBRP estimates 36,750 enrollees (31%) using insulin have a deductible (see estimates in Table 1). Postmandate, 100% of enrollees would not need to meet their deductible before paying the normal copayment or coinsurance for their insulin prescription.

Utilization

Postmandate, the group of enrollees with a deductible at baseline would experience an increase in utilization, because this group would experience a decrease in cost sharing due to the bill.

To estimate changes in utilization postmandate, CHBRP applied an estimate of price elasticity of demand to enrollees exceeding the cap at baseline. CHBRP bases the estimate of price elasticity on a Goldman et al. (2004) article that found use of insulin specifically decreased by 8% when copayments doubled. Based on this assumption, CHBRP estimates a 3% reduction in cost sharing for those enrollees who have a deductible at baseline, and therefore estimates a 0.26% increase in utilization of insulin postmandate for those enrollees.

Enrollees using insulin at baseline who have a deductible tend to be users of other high-cost medications and other medical services. A majority of these enrollees also have other prescription drug and medical costs that would cause them to meet their deductible or out-of-pocket maximum in a given year. Among enrollees with a pharmacy deductible, 64% have expenditures for other non-insulin brand name prescription medications that exceed $500 annually, and therefore would cause them to meet their pharmacy deductible. Among enrollees enrolled in health savings account (HSA)-eligible high deductible health plans (HDHPs) (and therefore with a combined medical and pharmacy deductible), almost three quarters (70%) of enrollees have expenditures for medical care and non-

[2] Refer to CHBRP's full report for full citations and references.

insulin brand name prescription medications that exceed $2,500 annually.

Expenditures

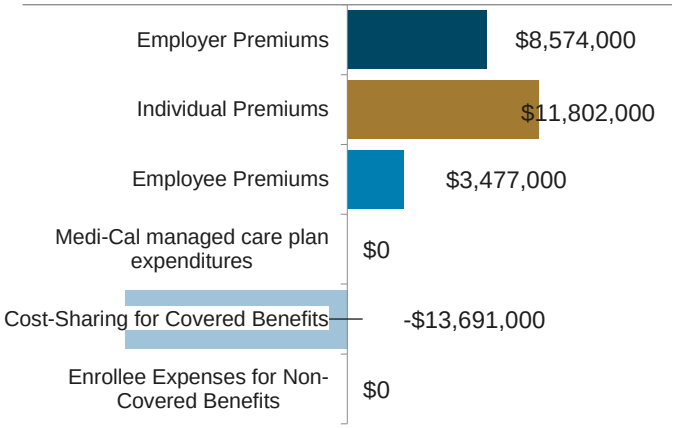
Based on Milliman's 2019 Consolidated Health Cost Guidelines Sources Database (CHSD) claims data, the average cost of insulin per prescription per month is $491. For enrollees who do not have a deductible at baseline, the average monthly cost sharing for insulin is $49, and for those enrollees for whom insulin is subject to the deductible at baseline, the average monthly cost sharing for insulin is $89.

AB 97 would increase total net annual expenditures by $10,162,000 or 0.008% for enrollees with DMHC-regulated plans and CDI-regulated policies. This is due to an increase in $23,853,000 in total health insurance premiums paid by employers and enrollees, adjusted by a $13,691,000 decrease in enrollee expenses.

Total premiums for private employers purchasing group health insurance would increase by $8,574,000, or 0.02%. Total premiums for purchasers of individual market health insurance would increase by $11,802,000, or 0.07%. The greatest change in premiums as a result of AB 97 is for the small-group policies (0.12% increase) and individual policies (0.11% increase) in the CDI-regulated market.

Due to the low change in utilization, no offsets are projected as a result of AB 97.

Figure B. Expenditure Impacts of AB 97



Source: California Health Benefits Review Program, 2021.

Enrollee Out-of-Pocket Expenses

For baseline insulin users, AB 97's prohibition of insulin being subject to the deductible only impacts those enrollees who have deductibles for pharmacy benefits. Overall, 31% of enrollees who use insulin at baseline have deductibles. However, a majority of these enrollees also have other prescription drug and medical costs that would cause them to meet their deductible or out of pocket maximum in a given year. As a result, there is only a 3% decrease in average cost sharing.

It is possible that some enrollees who had deferred insulin treatment due to cost could begin using insulin postmandate; thus, this group of enrollees would incur cost sharing postmandate, whereas they did not have cost sharing at baseline. However, this group is estimated to be relatively small. Literature suggests approximately 2.5% of people who were prescribed insulin never started their prescription in the past year due to cost. Thus, for some enrollees, cost sharing may be the sole barrier to filling their insulin prescription.

The enrollees most likely to experience the greatest cost sharing reductions postmandate are those who are enrolled in plans that require significant deductibles to be met before coinsurance is applied to the insulin purchase, e.g., HDHPs, Bronze, and Silver plans. CHBRP's cost model estimates indicate that for enrollees subject to AB 97, approximately 19% of large-group, 37% of small-group, and 61% of individual market enrollees are in plans or policies with deductibles that apply to prescription drugs, where deductibles may have a material impact on insulin cost sharing. However, as mentioned previously, most enrollees who use insulin are likely to meet their deductible and out of pocket maximum regardless.

Medi-Cal

CHBRP assumes Medi-Cal's pharmacy benefit carve out transition will be complete by 2022. Because AB 97 only impacts DMCH-regulated pharmacy benefits, Medi-Cal managed care plans are not subject to the provisions of AB 97.

CalPERS

For CalPERS HMO enrollees, the impact on premiums is $0 because there are no enrollees who have deductibles for pharmacy benefits.

Number of Uninsured in California

Because the change in average premiums does not exceed 1% for any market segment, CHBRP would expect no measurable change in the number of uninsured persons due to the enactment of AB 97.

Medical Effectiveness

CHBRP found a *preponderance of evidence*[3] from seven cross-sectional and retrospective studies on cost-related insulin use/adherence that cost sharing affects insulin use and adherence in patients with diabetes. These studies provided a *preponderance of evidence* that higher cost sharing reduces adherence to insulin, and lower cost sharing increases adherence to insulin.

CHBRP found *insufficient evidence*[4] on the associated effect of cost sharing for insulin on diabetes-related health outcomes, including HbA1c levels, outpatient visits, emergency department visits, hospitalizations, long-term complications, and disability/absenteeism rates. Though the studies presented did report on these health and utilization outcomes, the findings were not specific to the effect of insulin alone, but combined with use of other oral antidiabetic medications and testing supplies.

There were several limitations that contributed to the gradings provided in this review, most notably the inherent differences between the types of diabetes conditions and the multifaceted nature of diabetes treatment. This resulted in a literature base that is not as rigorous and thereby limiting the certainty of conclusions drawn from the evidence.

Public Health

In the first year postmandate, 36,750 enrollees who use insulin and have a deductible at baseline would experience a small reduction in cost sharing. Almost 10% of enrollees who use insulin and have a deductible would experience a decrease in cost sharing of more than $20. **C**HBRP projects that as a result, there would be a 0.26% increase in utilization of insulin. CHBRP found a preponderance of evidence that cost sharing for insulin is effective in improving adherence to insulin in patients with diabetes, and insufficient evidence on the effect of cost sharing for diabetes-related health outcomes. Due to the small decrease in cost sharing and small increase in utilization, CHBRP projects no measurable public health impact. However, at the person-level, for enrollees who would not otherwise meet their deductible or out of pocket maximum and would therefore experience a higher change in cost sharing, AB 97 may result in improved glycemic control, a reduction in healthcare utilization, a reduction in long-term complications attributable to diabetes, and improved quality of life for enrollees that experience a decrease in cost sharing and improved insulin adherence, or begin using insulin due to reduced costs.

Long-Term Impacts

CHBRP estimates annual insulin utilization after the initial 12 months from the enactment of AB 97 would likely stay similar to utilization estimates during the first 12 months postmandate. Utilization changes may occur if new diabetes products or medications change the landscape of insulin use for enrollees with diabetes, however CHBRP is unable to predict these types of changes. Similarly, health care utilization due to improved diabetes management may change in the long term. Reductions in significant complications or comorbidities may take years to develop, but are not trivial.

Similarly, reductions in significant complications or comorbidities may take years to develop, as would significant differences in disability and absenteeism. AB 97 is unlikely to impact these public health outcomes statewide, but at a person-level it could make a substantial difference in long-term health care spending, morbidity, and mortality for the enrollees who do experience substantial changes in cost sharing.

CHBRP estimates that AB 97 could improve disparities related to income for some enrollees who have cost-related barriers to insulin use. CHBRP is unable to estimate reductions in existing disparities. However, because the prevalence of diabetes is higher for Black persons than for Whites, and there is evidence that cost-related medication nonadherence is also more associated with Black persons, it is possible that this disparity may be reduced for the population AB 97 impacts.

The impact of AB 97 on premature mortality is unknown due to the lack of evidence that reduced cost sharing for insulin reduces mortality. However, well-controlled blood glucose results in fewer diabetes-related comorbidities (blindness, amputations, kidney disease, etc.). Therefore, for those patients who attain good glycemic control through increased adherence to insulin, these diabetes-related comorbidities that are known to lead to premature death could be prevented, delayed, or ameliorated.

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

[4] *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.

Essential Health Benefits and the Affordable Care Act

AB 97 would not require coverage for a new state benefit mandate and instead modifies cost sharing terms and conditions of an already covered medication. Therefore, AB 97 appears not to exceed the definition of EHBs in California.