Updated Analysis:

Analysis of California Senate Bill 1021
Prescription Drugs

Summary to the 2017-2018 California State Legislature, June 20, 2018

CALIFORNIA HEALTH BENEFITS REVIEW PROGRAM

AT A GLANCE

CHBRP analyzed the impacts of the sunset of cost sharing provisions enacted through the passage of Assembly Bill (AB) 339 in 2015, should Senate Bill (SB) 1021 not pass.

1. CHBRP estimates that, in 2018, 13.4 million Californians enrolled in state-regulated health insurance will be impacted by the sunset of cost sharing provisions included in current law.
2. **Benefit coverage.** Enrollees with health insurance offered through Covered California or an off-exchange mirror product are subject to Covered California standard plan benefit design rules (which includes cost sharing limits for prescription drugs), therefore the sunset of cost sharing provisions in current law is unlikely to directly impact these enrollees.
3. **Utilization.** CHBRP estimates 342,300 enrollees in plans and policies subject to current cost sharing provisions have outpatient prescription drug claims that hit the current cost sharing limitation of $250 per prescription for up to a 30-day supply, or about 3% of the impacted population.
4. **Expenditures.** The sunset of AB 339's cost sharing provisions would decrease annual expenditures by $71,070,000 or -0.04% for enrollees with DMHC-regulated plans and CDI-regulated policies. This decrease is largely due to a decrease of $117,961,000 in total health insurance premiums paid by employers and enrollees, adjusted by an increase of $46,891,000 in enrollee expenses. These estimates are an overestimate of premium reduction since the impact of cost sharing increases on utilization of other medical services are not incorporated in the cost model.
5. **Impacts of Out of Pocket Maximums and Deductibles.** Should cost sharing limits that exist in current law sunset January 1, 2020, a majority of enrollees who use high cost prescription drugs would be protected from increases in cost sharing due to health insurance plan designs. Limitations on overall enrollee cost sharing are incorporated in virtually all medical plan designs through out-of-pocket maximums. Approximately 60% of enrollees utilizing high cost prescription drugs currently reach their out of pocket maximums and therefore would continue to be protected from increases in cost sharing due to the sunset of current law. However, for the 39.5% of enrollees who do not meet their out of pocket maximums within the plan year, increases in cost sharing may lead to changes in utilization of prescription drugs due to cost. Utilization of high cost prescription drugs for these enrollees is projected to decrease by 4.4% in 2020 due to the increase in cost sharing. Patient assistance programs can help income-qualified patients pay for the more expensive prescription drugs, which may help shield some enrollees from increases in cost sharing for prescription drugs. If enrollees are not helped by patient assistance programs and reduce their prescription drug use due to increased cost sharing/out of pocket costs to the enrollee, it could result in significant clinical consequences; however, because CHBRP is unable to estimate the magnitude of this problem and cannot estimate the costs of clinical care when drugs are forgone, the expenditure and premium impacts presented here do not reflect any changes to medical care utilization or costs.
6. **Long-term impacts.** Over time, an increasing number of enrollees utilizing high cost prescription drugs may experience increases in cost sharing due to rising drug costs or the availability of new and more expensive medications. This may place more enrollees at risk of experiencing high cost sharing early in the plan year and may potentially result in utilization changes, which could also impact medication adherence and subsequent medical care.

CONTEXT

Upon request from the Senate Health Committee, CHBRP analyzed Senate Bill (SB) 1021 Prescription Drugs, as introduced, and submitted the report to the Legislature on April 9, 2018. On May 8, 2018, the Assembly Health Committee requested additional analysis on the impacts on premiums and utilization of prescription drugs should SB 1021 not pass and the cost sharing limitation in current statute sunset.

BILL SUMMARY

SB 1021, introduced by Senator Weiner on February 7, 2018, amends provisions of current law enacted through the passage of Assembly Bill (AB) 339 in 2015 and adds additional provisions. For a full list of provisions included in SB 1021 as introduced, refer to CHBRP's analysis of SB 1021 published April 9, 2018.[1]

This analysis is specific to the provision enacted through the passage of AB 339 that limits cost sharing for covered outpatient prescription drugs to $250 per prescription for up to a 30-day supply for enrollees in DMHC-regulated plans and CDI-regulated policies, including CalPERS and exempting Medi-Cal Managed Care plans. For enrollees in high deductible health plans (HDHPs), cost sharing is limited to $500 per prescription for up to a 30-day supply. This provision of current law sunsets January 1, 2020, unless extended through the passage of SB 1021.

BENEFIT COVERAGE, UTILIZATION, AND COST IMPACTS

This section reports the potential incremental impacts should current cost sharing limits sunset on estimated baseline benefit coverage, utilization, and overall cost. For further details on the underlying data sources and methods, please see Appendix A.

Currently, 100% of the 15.9 million enrollees with health insurance subject to current law currently have coverage with cost sharing limits of $250 per prescription for up to a 30-day supply. Should SB 1021 not be enacted and current law (AB 339) sunset, 100% of these enrollees would have health insurance no longer required to include cost sharing limits.

As described in the previous analysis of SB 1021, enrollees with health insurance offered through Covered California or an off-exchange mirror product are subject to Covered California standard plan benefit design rules. Covered California included cost sharing limits for prescription drugs in the standard plan benefit design beginning in 2016, and therefore CHBRP assumes enrollees in Covered California and mirror plans would continue to have health insurance that includes cost sharing limits for prescription drugs. Therefore, 81% of all enrollees in the individual market and 23% of all enrollees in the small group market have health insurance that would not change should current law sunset.

To model the expenditure impact of allowing the mandate to sunset, CHBRP applied an average benefit design for enrollees in large and small group plans based on information from PwC's Touchstone Report (2017) and the 2017 Kaiser/HRET Survey of Employer-Sponsored Health Benefits (KFF/HRET, 2017). The average plan design incorporated a $1,350 deductible, 20% coinsurance, and $3,500 maximum out of pocket cost (MOOP). Under a 20% coinsurance provision, any drug costing at least $1,250 could exceed the $250 per prescription limitation that is currently in place. The impacts of removing limits on cost sharing for prescription drugs must be considered in conjunction with the likelihood enrollees will

[1] CHBRP's analysis of SB 1021 published on April 9, 2018 is available at: http://chbrp.org/completed_analyses/index.php

reach their overall MOOP limits and be spared further cost sharing for the year. Enrollees taking high cost prescription drugs (defined as a drug costing at least $1,250 per prescription) have higher total healthcare costs than average, and the majority of these enrollees will meet their benefit plan's MOOP limit. As a result, the removal of cost sharing limits on high cost prescriptions has little effect on plan costs and enrollees' annual cost sharing amounts. Appendix A includes more detail on how different plans have differing MOOPs and the results of a sensitivity analysis to see how estimated impacts are affected by assumed MOOP.

Current law sunsets January 1, 2020. CHBRP has adapted the cost model that estimates impacts on benefit coverage, utilization, and expenditures in 2019 by continuing to trend increases in premiums and expenditures, while assuming enrollment and population estimates remain constant in order to estimate impacts in 2020. Changes at federal and state level that impact enrollment, as well as population changes, will alter the results obtained in this analysis.

Key Assumptions

- High cost drugs are often classified as specialty drugs, which may be placed on higher tiers of prescription drug formularies. As shown in the previous analysis of SB 1021, insurers in California do not offer prescription drug formularies with more than four tiers. Not all specialty drugs are placed in Tier 4 of prescription drug formularies, which dictate cost sharing for enrollees. CHBRP is also aware that not all enrollees have health insurance with four tiers, and therefore cost sharing may vary for some specialty prescription drugs. For this analysis, CHBRP assumes all specialty drugs are placed on Tier 4 of prescription drug formularies.

- CHBRP assumes prescription drugs available in 2016 will continue to be the only drugs available in 2020. CHBRP is unable to predict the number of these drugs nor the cost of new prescription drugs.

- CHBRP assumes deductibles apply to both medical and prescription drug benefits, though some enrollees may have separate deductibles for medical benefits and prescription drug benefits.

- CHBRP assumes plans and policies will continue to include out of pocket maximums in plan designs in all markets. However, only nongrandfathered plans and policies offered on the small group, large group and individual markets are required to include out of pocket maximums in plan design. Although grandfathered plans in all markets are not required to include out of pocket maximums, CHBRP has assumed that these plans include maximums.

Baseline and Post-sunset Benefit Coverage

Currently, 15.9 million enrollees are subject to the provisions of AB 339. Because enrollees with health insurance offered through Covered California or an off-exchange mirror product are subject to Covered California standard plan benefit design rules that includes cost sharing limits for prescription drugs, cost sharing provision mandate changes are likely not to directly impact the benefit design of health insurance for these enrollees. Thus, excluding this group of individual and small group enrollees, there are 13.4 million enrollees with health insurance likely to be impacted by the sunset of current law. This represents 57% of the 23.4 million Californians who have health insurance regulated by the state that may be subject to any state health benefit mandate law or law affecting the terms and conditions of coverage.[2]

[2] State benefit mandates apply to a subset of health insurance in California, those regulated by one of California's two health insurance regulators: the DMHC and the CDI. Of the rest of the state's population, a portion will be uninsured (and therefore will have no health insurance subject to any benefit mandate), and another portion will have health

Based on the analysis of the California Employer Benefit Survey, CHBRP estimates that approximately 1.4% of enrollees in plans regulated by DMHC or policies regulated by CDI have no coverage for outpatient prescription drugs (OPDs) and 3.0% of these enrollees have OPD coverage that is not regulated by DMHC or CDI. Taking this into account, 12.4 million enrollees have health insurance likely affected by the sunset of cost sharing limitations put in place by AB 339.

Baseline and Post-sunset Utilization

CHBRP extracted all medical and drug claims for enrollees with at least one high cost outpatient prescription from the 2016 MarketScan® commercial claims and enrollment data for the state of California. Using this database, CHBRP estimates 342,300 enrollees in plans and policies subject to current cost sharing provisions have outpatient prescription drug claims that hit the current cost sharing limitation (Table 1). If AB 339 sunsets, the cost sharing limit that is currently in place due to AB 339 will cease and affect the 342,300 enrollees who are currently subject to the cost sharing limit. This group of 342,300 enrollees represents about 3% of all enrollees with health insurance likely impacted by the sunset of current law (13.8 million).

CHBRP assumes that additional member cost sharing due to the sunset of cost sharing limitations will reduce the utilization of outpatient prescription drugs; this assumption is based in part on the literature on the price elasticity of demand for prescription drugs (Gatwood et al., 2014; Goldman et al., 2010). Enrollees who experience an increase in out of pocket costs for outpatient prescription drugs decrease their utilization of outpatient prescription drugs such that a 100% increase in costs leads to a 10% reduction in utilization (Goldman et al., 2006), which subsequently impacts estimates of enrollee expenditures on outpatient prescription drugs (presented below). Changing the share of enrollee expenditures affects premium estimates, so the utilization change in outpatient prescription drugs is also reflected in the premium impacts presented below.

Impact of Out of Pocket Maximums and Deductibles

Should cost sharing limits that exist in current law sunset January 1, 2020, a majority of enrollees who use high cost prescription drugs would be protected from increases in cost sharing due to health insurance plan designs. Limitations in overall enrollee cost sharing are incorporated in virtually all medical plan designs through maximum out of pocket (MOOP) cost provisions. MOOP provisions typically range from $2,000 to $6,750 per benefit year and limit the total cost sharing for medical and/or prescription drugs an enrollee is exposed to each year. To analyze the impact of a sunset of the $250 per prescription cost sharing limitation, it is important to consider the likelihood that enrollees would reach their benefit plans' MOOPs, thus protecting them from increases in cost sharing as a result of the sunset of AB 339's OPD cost sharing limitations. Approximately 60% of enrollees utilizing high cost prescription drugs would be expected to reach their out of pocket maximums under the assumed plan design and therefore would continue to be protected from increases in cost sharing due to the sunset of current law. However, for the 39.5% of enrollees who do not meet their out of pocket maximums within the plan year, increases in cost sharing may lead to changes in utilization of prescription drugs due to cost. Utilization of high cost prescription drugs for these enrollees is projected to decrease by 4.4% in 2020 due to the increase in cost sharing.

The impact of the sunset is highly dependent on the underlying plan design, and in particular, on the MOOP limit. If the drug cost sharing limitation included in current law sunsets, enrollees with high cost

insurance subject to other state laws or only to federal laws. CHBRP's estimates of the source of health insurance available at: www.chbrp.org/other_publications/index.php.

prescription drugs will have annual cost sharing increases ranging from 1.0% to 15.0%, on average, with the lowest impact experienced by enrollees in benefit plans with low MOOP limits and the highest impact experienced by enrollees in benefit plans with high MOOP limits. Individual enrollees may experience changes in cost sharing that are significantly more than that indicated by average impact.

Enrollees with health insurance plans or policies with lower maximum out of pocket limits or lower deductibles are more likely to hit their maximum out of pocket limits and therefore are less likely to change utilization of prescription drugs due to increased cost sharing. Enrollees in the large and small groups are more likely to have more generous plan designs and therefore less likely to experience increases in cost sharing due to the sunset of current law. Conversely, enrollees with higher out of pocket maximums and deductibles, such as enrollees in high deductible health plans, are less likely to reach their out of pocket maximums and are more likely to experience an increase in cost sharing.

One potential outcome of the elimination of cost sharing limits for high cost drugs is that enrollees may reach their deductibles and out of pocket maximums sooner in the plan year. Whereas previously an enrollee who is not in a HDHP may pay a $250 cost sharing for a prescription drug for two months to reach their $500 deductible, an enrollee may now reach that $500 deductible after the first month if the prescription's cost share at a 20% coinsurance exceeds their deductible. This may place an insurmountable financial burden on enrollees who are lower income and are less able to afford high costs upfront, versus spread over multiple months.

However, an enrollee's response to increases in cost sharing is variable depending on the disease or condition for which they are taking medications. For example, enrollees with cancer who are taking oral anticancer medications are less likely to reduce utilization due to increases in cost sharing (Goldman et al., 2010). As indicated in the Medical Effectiveness section of CHBRP's analysis of SB 1021 published on April 9, 2018, the existing literature indicates nonadherence to prescription drugs with higher levels of cost sharing, in general and for specific prescriptions. The literature also indicates ambiguous evidence on the impact of HDHP enrollment on prescription drug adherence in general, but finds a decline in adherence to prescriptions for HDHP enrollees with chronic conditions such as high cholesterol. In addition, the literature indicates a stronger negative relationship between higher cost sharing and adherence to prescription drugs for low-income populations. The average annual cost of medical and prescription drug services for enrollees taking high prescription drugs is approximately $42,700, compared to $3,700 for enrollees not taking high cost prescription drugs. Enrollees taking high cost prescription drugs are more likely to have substantial medical needs and require additional medical services and prescriptions, therefore meeting their deductible and out of pocket maximums.

Impact of Cost Sharing on Utilization of Other Medical Service Utilization

Utilization of other medical services could change in a variety of ways based on changes in cost sharing for high cost prescription drugs. As discussed in the previous analysis of SB 1021, it is well established in the literature that persons who face high cost sharing use fewer services than persons with lower cost sharing. In addition, there is a preponderance of evidence across multiple health conditions that, as cost sharing increases, adherence to drug regimens decreases, with a majority of studies indicating that decreased adherence is associated with worse outcomes. Enrollees for whom cost sharing increases due to the sunset of current law could decrease utilization of the high cost prescription drugs. This in turn may lead to a deterioration of health status that could result in additional medical utilization. For example, an enrollee who reduces utilization of a drug treating rheumatoid arthritis could experience increases in pain that lead to consumption of additional provider visits or hospitalization.

Patient Assistance Programs

Patient assistance programs (i.e., pharmaceutical company-sponsored rebates and coupons, foundation payments) can help income-qualified patients pay for the more expensive specialty prescription drugs. Approximately 19% of enrollees used copay assistance for commercially branded prescriptions nationally in 2016, up from 13% in 2013 (Quantiles IMS, 2017). These programs may help shield some enrollees from increases in cost sharing for prescription drugs.

Baseline and Post-sunset Expenditures

Table 2 and Table 3 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).

The sunset of AB 339's cost sharing provisions would decrease annual expenditures by $71,070,000 or -0.04% for enrollees with DMHC-regulated plans and CDI-regulated policies. This decrease is largely due to a decrease of $117,961,000 in total health insurance premiums paid by employers and enrollees, adjusted by an increase of $46,891,000 in enrollee expenses. However, due to the availability of patient assistance programs and the impact of potential utilization changes due to cost sharing increases of prescription drugs on utilization of other medical services, these estimates may overestimate the impact of the sunset of cost sharing limits.

Premiums

Changes in premiums as a result of the sunset of AB 339 would vary by market segment. Note that such changes are related to the number of enrollees (see Table 1, Table 2 and Table 3) with health insurance affected by the sunset of current law.

The largest reduction in per member per month premium is in the CDI-regulated plans, with small group CDI-regulated plans having the highest reduction (-0.16%). The individual and large group DMHC-regulated plans have the lowest changes in premiums, -0.03% and -0.10% respectively.

Since plans offered through Covered California and mirrored plans are not impacted by the sunset of current law, the impacts on premiums and expenditures are larger in the grandfathered and other non-grandfathered plans. Specifically within the DMHC-regulated small group market, premiums are estimated to decrease by -0.12% among grandfathered plans and by -0.18% among other non-grandfathered plans. Within the DMHC-regulated individual market, premiums are estimated to decrease by -0.14% among grandfathered plans and by -0.27% among other non-grandfathered plans. Within the CDI-regulated small group market, premiums are estimated to decrease by -0.19% among grandfathered policies and -0.20% among other non-grandfathered policies. Within the CDI-regulated individual market, premiums are estimated to decrease by -0.14% among grandfathered policies and -0.26% among other non-grandfathered policies.

Among publicly funded DMHC-regulated health plans, CalPERS HMOs are the only plans impacted by the sunset of current law; CHBRP estimates a -0.10% decrease in premiums for this market segment.

Enrollee Expenses

With a sunset of AB 339's cost sharing limitations, enrollee out of pocket expenses for outpatient drugs are expected to increase for the enrollees who are currently subject to a limit in cost sharing. As described above regarding utilization changes, CHBRP applied an estimate of change in utilization due to increase in costs to enrollees, thus the estimates of enrollee expenses (as well as the premium estimates shown above) take into account the assumed decrease in utilization.

Enrollee expenses for covered benefits (deductibles, copays, etc.) and enrollee expenses for noncovered benefits would vary by market segment. The large group CDI-regulated market would likely experience the largest increase in expenditures by enrollees at $0.60 per member per month. The lowest increase in expenditures by enrollees is estimated to be $0.10 per member per month for DMHC-regulated individual market enrollees.

Post-sunset Administrative Expenses and Other Expenses

CHBRP estimates that the increase or decrease in administrative costs of DMHC-regulated plans and/or CDI-regulated policies will remain proportional to the increase or decrease in premiums. CHBRP assumes that if health care costs decrease as a result of decreased utilization or changes in unit costs, there is a corresponding proportional decrease 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.

Long Term Impacts

Over time, an increasing number of enrollees utilizing prescription drugs may experience increases in cost sharing due to rising drug costs or the availability of new and more expensive medications. This may place more enrollees at risk of experiencing high cost sharing early in the plan year and may potentially result in utilization decreases.

Over time, the share of enrollees in high deductible health plans (HDHPs) has increased. The CDC found enrollment in employment-based HDHPs increased from 24% in 2011 to 34.9% in 2016, nationally (Cohen and Zammatti, 2017). If this trend continues, enrollees in these plans face higher upfront costs and are at an increased risk of being adversely impacted through lower utilization due to higher cost sharing.

Table 1. 2020 Impacts of Sunset of Cost Sharing Provision Enacted Through AB 339 on Benefit Coverage, Utilization, and Cost

	Baseline	Postsunset	Increase/ Decrease	Percentage Change
Benefit coverage				
Total enrollees with health insurance subject to state-level benefit mandates (a)	23,433,000	23,433,000	0	0%
Total enrollees with health insurance subject to cost sharing provisions in current law	15,923,000	15,923,000	0	0%
Total enrollees with health insurance impacted by sunset of current law	13,383,000	13,383,000	0	0%
Total enrollees with health insurance impacted by sunset of current law with OPD coverage -	12,362,000	12,362,000	0	0%
Utilization and unit cost				
Number of enrollees with high cost prescription drug claims **subject** to the cost sharing limitation	342,300	0	-342,300	-100.0%
Percentage of enrollees with high cost prescription drug claims **subject** to the cost sharing limitation	2.6%	0.0%	-2.6%	-100.0%
Expenditures				
Premiums by payer				
Private Employers for group insurance	$73,817,182,000	$73,736,445,000	-$80,737,000	-0.1094%
CalPERS HMO employer expenditures (b)	$5,598,878,000	$5,593,069,000	-$5,809,000	-0.1038%
Medi-Cal Managed Care Plan expenditures	$30,139,205,000	$30,139,205,000	$0	0.0000%
Enrollees for individually purchased insurance	$16,540,870,000	$16,535,045,000	-$5,825,000	-0.0352%
Individually Purchased – Outside Exchange	$7,043,319,000	$7,037,494,000	-$5,825,000	-0.0827%
Individually Purchased – Covered California	$9,497,551,000	$9,497,551,000	$0	0.0000%
Enrollees with group insurance, CalPERS HMOs, Covered California, and Medi-Cal Managed Care (a) (c)	$22,630,493,000	$22,604,901,000	-$25,592,000	-0.1131%
Enrollee expenses				

Enrollee out of pocket expenses for covered benefits (deductibles, copayments, etc.)	$15,903,248,000	$15,950,138,000	$46,890,000	0.2948%
Enrollee expenses for noncovered benefits (d)	$0	$0	$0	0.00%
Total expenditures	$164,629,876,000	$164,558,803,000	-$71,073,000	-0.0432%

Source: California Health Benefits Review Program, 2018.

Notes: (a) This population includes persons with privately funded (including Covered California) and publicly funded (e.g., CalPERS HMOs, Medi-Cal Managed Care Plans) health insurance products regulated by DMHC or CDI. Population includes enrollees aged 0 to 64 years and enrollees 65 years or older covered by employer-sponsored health insurance.
(b) Approximately 56.17% of CalPERS enrollees in DMHC-regulated plans are state retirees, state employees, or their dependents. About one in five (20.5%) of these enrollees have an OPD benefit not subject to DMHC (see Appendix E in CHBRP's analysis of SB 1021), so 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) Enrollee premium expenditures include contributions by employees to employer-sponsored health insurance, health insurance purchased through Covered California, and contributions to Medi-Cal Managed Care.

(d) Includes only expenses paid directly by enrollees (or other sources) to providers for services related to the mandated benefit that are not currently covered by insurance. 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.

Key: CalPERS HMOs = California Public Employees' Retirement System Health Maintenance Organizations; CDI = California Department of Insurance; DMHC = Department of Managed Health Care; OPD = outpatient prescription drug.

Table 2. Baseline (before Sunset) Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2020

	DMHC-Regulated						CDI-Regulated			
	Privately Funded Plans (by Market) (a)			Publicly Funded Plans			Privately Funded Plans (by Market) (a)			
	Large Group	*Small Group*	*Individual*	*CalPERS HMOs (b)*	*MCMC (Under 65) (c)*	*MCMC (65+) (c)*	*Large Group*	*Small Group*	*Individual*	**Total**
Enrollee counts										
Total enrollees in plans/policies subject to state mandates (d)	9,371,000	3,117,000	2,081,000	887,000	6,832,000	678,000	214,000	133,000	120,000	23,433,000
Total enrollees in plans/policies **subject** to cost sharing provisions in current law	9,371,000	3,117,000	2,081,000	887,000	0	0	214,000	133,000	120,000	15,923,000
Total enrollees in plans/policies **impacted** by sunset of current law	9,371,000	2,381,000	313,000	887,000	0	0	214,000	107,000	110,000	13,383,000
Premiums										
Average portion of premium paid by employer	$514.09	$366.33	$0.00	$526.01	$284.98	$832.76	$593.41	$489.18	$0.00	$109,555,265,000
Average portion of premium paid by employee	$130.20	$168.77	$633.86	$85.63	$0.00	$0.00	$187.26	$178.19	$494.57	$39,171,362,000
Total premium	**$644.29**	**$535.11**	**$633.86**	**$611.64**	**$284.98**	**$832.76**	**$780.67**	**$667.37**	**$494.57**	**$148,726,627,000**
Enrollee expenses										
For covered benefits (deductibles, copays, etc.)	$51.27	$118.87	$172.03	$52.15	$0.00	$0.00	$142.65	$187.88	$121.42	$15,903,248,000
For noncovered benefits (e)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0
Total expenditures	**$695.55**	**$653.97**	**$805.88**	**$663.80**	**$284.98**	**$832.76**	**$923.33**	**$855.25**	**$616.00**	**$164,629,875,000**

Source: California Health Benefits Review Program, 2018.

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

(b) Approximately 56.17% of CalPERS enrollees in DMHC-regulated plans are state retirees, state employees, or their dependents.

(c) Medi-Cal Managed Care Plan expenditures for members over 65 include those who are also Medicare beneficiaries. This population does not include enrollees in COHS.

(d) This population includes both persons who obtain health insurance using private funds (group and individual) and through public funds (e.g., CalPERS HMOs, Medi-Cal Managed Care Plans). Only those enrolled in health plans or policies regulated by the DMHC or CDI are included. Population includes all enrollees in state-regulated plans or policies aged 0 to 64 years, and enrollees 65 years or older covered by employer-sponsored health insurance.

(e) 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 currently covered by insurance. 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.

Key: CalPERS HMOs = California Public Employees' Retirement System Health Maintenance Organizations; CDI = California Department of Insurance; DMHC = Department of Managed Health Care; MCMC = Medi-Cal Managed Care.

Table 3. Postmandate (After Sunset) Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2020

	DMHC-Regulated						CDI-Regulated			
	Privately Funded Plans (by Market) (a)			Publicly Funded Plans			Privately Funded Plans (by Market) [a]			
	Large Group	*Small Group*	*Individual*	*CalPERS HMOs (b)*	*MCMC (Under 65) (c)*	*MCMC (65+) (c)*	*Large Group*	*Small Group*	*Individual*	**Total**
Enrollee counts										
Total enrollees in plans/policies subject to state mandates [d]	9,371,000	3,117,000	2,081,000	887,000	6,832,000	678,000	214,000	133,000	120,000	23,433,000
Total enrollees in plans/policies **subject** to cost sharing provisions in current law	9,371,000	3,117,000	2,081,000	887,000	0	0	214,000	133,000	120,000	15,923,000
Total enrollees in plans/policies **impacted** by sunset of current law	9,371,000	2,381,000	313,000	887,000	0	0	214,000	107,000	110,000	13,383,000
Premiums										
Average portion of premium paid by employer	-$0.5183	-$0.5042	$0.0000	-$0.5457	$0.0000	$0.0000	-$0.9027	-$0.8008	$0.0000	-$86,545,000
Average portion of premium paid by employee	-$0.1313	-$0.2323	-$0.1877	-$0.0888	$0.0000	$0.0000	-$0.2849	-$0.2917	-$0.7890	-$31,416,000
Total premium	**-$0.6495**	**-$0.7365**	**-$0.1877**	**-$0.6345**	**$0.0000**	**$0.0000**	**-$1.1876**	**-$1.0925**	**-$0.7890**	**-$117,961,000**
Enrollee expenses										
For covered benefits (deductibles, copays, etc.)	$0.2168	$0.3839	$0.1074	$0.2207	$0.0000	$0.0000	$0.6031	$0.6110	$0.4169	$46,891,000
For noncovered benefits [e]	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000	$0
Total expenditures	**-$0.4328**	**-$0.3526**	**-$0.0803**	**-$0.4138**	**$0.0000**	**$0.0000**	**-$0.5845**	**-$0.4815**	**-$0.3721**	**-$71,070,000**
Percent change										
Premiums	-0.1008%	-0.1376%	-0.0296%	-0.1037%	0.0000%	0.0000%	-0.1521%	-0.1637%	-0.1595%	**-0.0793%**
Total expenditures	-0.0622%	-0.0539%	-0.0100%	-0.0623%	0.0000%	0.0000%	-0.0633%	-0.0563%	-0.0604%	**-0.0432%**

Source: California Health Benefits Review Program, 2018.

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

(b) *Approximately 56.17% of CalPERS enrollees in DMHC-regulated plans are state retirees, state employees, or their dependents.*

(c) Medi-Cal Managed Care Plan expenditures for members over 65 include those who are also Medicare beneficiaries. This population does not include enrollees in COHS.

(d) This population includes both persons who obtain health insurance using private funds (group and individual) and through public funds (e.g., CalPERS HMOs, Medi-Cal Managed Care Plans). Only those enrolled in health plans or policies regulated by the DMHC or CDI are included. Population includes all enrollees in state-regulated plans or policies aged 0 to 64 years, and enrollees 65 years or older covered by employer-sponsored health insurance.

(e) 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 currently covered by insurance. 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.

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

APPENDIX A COST IMPACT ANALYSIS: DATA SOURCES, CAVEATS, AND ASSUMPTIONS

The cost analysis in this report was prepared by the members of the cost team, which consists of CHBRP task force members and contributors from the University of California, Los Angeles, and the University of California, Davis, as well as the contracted actuarial firm, PricewaterhouseCoopers (PwC).[3]

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.[4]

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

Approach – Data Sources

- Costs and patient counts were modeled using 2016 MarketScan® commercial claims and enrollment data for the state of California. CHBRP extracted all medical and drug claims for enrollees with at least one high cost prescription. These enrollees represented approximately 2.6% of all enrollees in the California MarketScan data, and have an average allowed cost that is 11 times that of enrollees without high cost drugs (see Table below).

Enrollee Category:	Average 2016 Allowed Cost Per Cohort
Impacted by OPD Cost Sharing Sunset	$42,720
Not Impacted by OPD Cost Sharing Sunset	$3,760
Total CA Mandate Population Subject to AB 339	$4,760

Analysis-Specific Assumptions

This subsection discusses the caveats and assumptions specifically relevant to the sunset of enrollee out of pocket cost-sharing limitations for Outpatient Prescription Drugs (OPDs) enacted through the passage of AB 339 that would sunset January 1, 2020. This assumes that SB 1021, which would extend the cost sharing provisions of current law, does not pass.

- CHBRP trended the data to 2020 using the trend assumptions shown in the table below. Because CHBRP is unable to predict the prescription drugs that will be introduced in the future and unable to predict the potential changes in utilization of drugs due to new products or changes in existing products, CHBRP assumed the mix of drugs remains unchanged from 2016 and no new high cost drugs become available. Additionally, CHBRP assumes no changes in plan/insurer methods of utilization management that may impact the coverage of medical and drug treatments between baseline and sunset periods, such as use of prior authorization requirements and medical review for medical treatments or mandatory generic substitutions for drug treatment. CHBRP also assumes no changes in use of formularies, tiered copayments, or assignment of a drug to a formulary tier. The table below provides source information for annual cost trends.

[3] CHBRP's authorizing statute, available at www.chbrp.org/docs/authorizing_statute.pdf, requires that CHBRP use a certified actuary or "other person with relevant knowledge and expertise" to determine financial impact.
[4] See *2017 Cost Impact Analyses: Data Sources, Caveats, and Assumptions*, available at www.chbrp.org/analysis_methodology/cost_impact_analysis.php.

Service Category:	Annual Cost Trend	Source
Inpatient	2.6%	"Behind the Numbers 2018: Medical Cost Trend" by PwC.
Outpatient/Professional	2.6%	"Behind the Numbers 2018: Medical Cost Trend" by PwC.
Outpatient Prescription Drugs (not specialty)	1.0%	"2017 Drug Trend Report" by Express Scripts.
Outpatient Prescription Drugs (specialty)	11.0%	"2016 Drug Trend Report" by Express Scripts.

Cost relatively factors are also applied to 2016 MarketScan® commercial claims to adjust covered benefits upwards to reflect estimated 2020 expenditures by plan.

- CHBRP assumes that additional member cost sharing due to the sunset of cost sharing limitations will reduce the utilization of high cost drugs. Price elasticity estimates for specialty drugs have been found to range from 0.01 to 0.21 (Goldman et al., 2006). CHBRP assumes a price elasticity of demand of -0.1, which is the mid-point of the range published in the Goldman et al (2006) article (100% increase in price leads to a 10% reduction in demand and utilization). This price elasticity of demand assumption was applied to the specialty drug coinsurance payments for enrollees who do not hit their out of pocket maximum. CHBRP did not apply a price elasticity of demand for the utilization of medical services due to the lack of understanding how medical services would change.

Benefit Design Sensitivity Analysis

- To estimate the protections afforded by MOOP benefit provisions on those enrollees who have high cost prescription drugs, CHBRP modelled a range of benefit designs, varying deductibles, coinsurance percentages, and MOOP limits. To simplify benefit cost modeling, CHBRP assumed simplified benefit plans under which all services were covered under a common deductible, coinsurance, and maximum out of pocket cost. Impact on member cost sharing payments due to the cost sharing limitation was evaluated for each member identified in the MarketScan data as having a high cost prescription drug. Due to time and data constraints and other complexities, it was not feasible to perform date-order readjudication of the claims to precisely calculate plan costs and member cost sharing under the baseline and sunset scenarios, and a number of simplifying assumptions were employed. For example, CHBRP assumed all other medical services and non-specialty drugs are subject to the plan design deductible and MOOP before modeling the removal of the OPD cost sharing limitations on high cost drugs.

- To analyze the impact sensitivity due to variations in primary benefit design elements, plan costs and member cost sharing were modeled for benefit plans with combined medical and drug deductibles ranging from $1,350 to $3500, member coinsurance from 20% to 30%, and maximum out of pocket cost from $3,500 to $6,750. The results of the sensitivity analysis demonstrate that the impact of the mandate sunset is highly dependent on the underlying plan design, and in particular, on the MOOP limit. The sensitivity analysis indicated that if the drug cost sharing limitation is allowed to sunset, enrollees with high cost drugs will have annual cost sharing increases ranging from 1.0% to 15.0%, on average, with the lowest impact experienced by enrollees in benefit plans with low MOOP limits and the highest impact experienced by enrollees in benefit plans with high MOOP limits. Individual enrollees may experience changes in cost sharing that are significantly more than that indicated by average impact.

- To model the expenditure impact of allowing the mandate to sunset, CHBRP applied an average benefit design for enrollees in large and small group plans based on information from PwC's Touchstone Report and the Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 2017. The average plan design incorporated a $1,350 deductible, 20% coinsurance, and $3,500 MOOP. Under a 20% coinsurance provision, any drug costing at least $1,250 could exceed the $250 per prescription limitation that is currently in place. This results in an effective cost sharing of 5.5% before and 5.7% after current law sunsets on January 1, 2020. Effective cost sharing refers to the enrollee cost share as a percentage of total allowed cost of all medical and pharmacy services. Enrollees with high cost drugs will have annual cost sharing increases that average approximately 4.0% (calculated as (5.7/5.5)-1).

Interaction Between Spending on Outpatient Prescription Drug and Medical Services

- Enrollees with high outpatient prescription drug claims who are affected by the cost sharing limits put in place by AB 339 have higher costs of medical services and higher annual cost sharing for these medical services ($59,210 and $4,910, respectively) compared to those who do not reach the outpatient prescription drug limit ($4,910 and $750, respectively). This is important to note given the annual deductibles or out of pocket maximums of health plans includes costs of both medical expenses and outpatient prescription drugs. Enrollees who have high outpatient drug costs are likely to have high medical service costs. While CHBRP did not assume a change in medical services due to a change in outpatient drug utilization in the cost model (i.e. a price elasticity of demand was not applied for medical services), the potential medical and financial consequences of a change in utilization of medical services is briefly described qualitatively in this analysis.

- The table below shows the distribution of enrollees with high cost drugs using the average plan design (as noted above, this average plan design includes a $1,350 deductible, 20% coinsurance, and $3,500 MOOP). The majority of enrollees with high cost drugs reach the MOOP limit under both the baseline and sunset scenarios, which means these enrollees experience no change in total cost sharing. This has the effect of reducing the impact of the sunset of the cost sharing limits.

Categorization:	% of those Subject to Cost Sharing Limitation
Subject to cost sharing limitation	**100%**
1. Does not meet deductible	0.1%
2. Hits the maximum out of pocket (pre-sunset and post-sunset)	60.4%
3. Estimated to be impacted by cost sharing limitation	39.5%

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