Cicero Institute

Leading by Example: State Employee Health Plan Reform

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State and local governments are often the largest employers in their respective states, employing about 16.2 million full-time equivalent employees across the United States in 2014, with roughly 6.6 million working in elementary or secondary education and another 2.1 million working in higher education.[1] These employees and their dependents typically receive health benefits through their jobs. As of 2018, local government employees participated in state employee health plans in at least 22 states, public school employees participated in at least 19 states, and university and college employees participated in at least 16 states.[2] The plans are typically open to retirees, generous with benefits, and have high uptake.

Among state and local governments, 89 percent of workers are offered health benefits, and 79 percent of these workers enroll.[3] According to a Pew Charitable Trust report, States and their employees spent nearly $31 billion on insurance premiums in 2013 for more than 2.5 million employees and their families, with the state share exceeding $25 billion.[4] In that same year, States spent another $18 billion funding retiree benefits beyond employee pensions.[5] Although this study has not been updated since 2013, given general premium growth, it's now likely that total spending on state employee health plans exceeds $40 billion annually.[6] In addition, spending on local employee health plans almost certainly exceeds this amount, since local government employees exceed state government employees due to the large number of public-school employees.

Managing an employee health benefit plan for such a large population provides the State with an opportunity to reform its entire health sector simply through reforms to its own health plan. Unfortunately, many employers, including States, lack creativity in their approach to health benefits.

This paper contains five recommendations for initial steps States can take to lower spending through their state employee health benefits programs while maintaining or improving quality of care. These recommendations center on transparency, smart analytics, commonsense pricing structures that avoid unnecessary charges, and incentives for plan members to obtain lower-priced care.

Based on several studies, States can expect to save 10 percent or more of their current spending on state employee health benefits through the implementation of these reforms. For example, this translates into more than $40 million a year in savings in Indiana, a mid-sized state. For other states where local government employees and public-school teachers are covered by the state health plan, the magnitude of such savings would be much higher. States can use these savings to improve public services, lower state taxes, and increase public sector wages. Given that States are dealing with severe fiscal pressure from coronavirus-related business closures and reduced economic activity, these savings are likely to be more important than ever. For example,

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1 "States with Most Government Employees: Totals and Per Capita Rates," Governing, accessed October 26, 2020, https://www.governing.com/gov-data/public-workforce-salaries/states-most-government-workers-public-employees-by-job-type.html.

2 "State Employee Benefits, Insurance and Costs," National Conference of State Legislatures, May 1, 2020, https://www.ncsl.org/research/health/state-employee-health-benefits-ncsl.aspx.

3 "Employee benefits in the United States," Bureau of Labor Statistics, U.S. Department of Labor (2018), September 24, 2020, https://www.bls.gov/news.release/pdf/ebs2.pdf.

4 "State Employee Health Plan Spending," Pew Charitable Trusts, August 2014, https://www.pewtrusts.org/-/media/assets/2014/08/stateemployeehealthcarereportseptemberupdate.pdf.

5 "State Retiree Health Plan Spending," Pew Charitable Trusts, May 11, 2016, https://www.pewtrusts.org/en/research-and-analysis/reports/2016/05/state-retiree-health-plan-spending.

6 According to the Kaiser Family Foundation's annual survey of employer-provided health coverage, the average premiums for family coverage increased from $16,351 in 2013 to $21,342 in 2020—a 30.5% increase in average premiums from 2013 to 2020. Applying this average increase to the $31 billion of spending on state employee health benefits equates to $40.5 billion in 2020. http://files.kff.org/attachment/Report-Employer-Health-Benefits-2020-Annual-Survey.pdf

Georgia, Indiana, and Tennessee are each currently dealing with budget holes of nearly $1 billion.[7] Texas projects a $4.6 billion shortfall for fiscal year 2021.[8]

BACKGROUND

Several states, both progressive ones like California and conservative ones like Montana, have introduced significant reforms to their public employee health plans over the past decade. Many of these reforms address the significant price variation in health care markets through shifting utilization away from high-priced facilities. Table 1 demonstrates the substantial variation in health care prices in the United States by showing the ratio of the 90th percentile of allowed charges (payments to hospitals) to the 10th percentile of allowed charges across hospital reference regions (HRRs). In the median HRR, the 90th percentile facility payment for major joint replacement was 2.6 times greater than the 10th percentile facility payment. Clearly, substantial savings can result from patients migrating to lower-price facilities as well as high-price facilities lowering their prices.

Table 1: Ratio of 90th Percentile Allowed Charge to 10th Percentile Allowed Charge, at the HRR

	Major Joint Replacement, Without Major Complications	Mid-level Office Visit, Established Patients
Minimum	1.26	1.34
25th Percentile	2.06	1.83
Median	2.60	2.05
75th Percentile	3.35	2.35
Maximum	80.05	5.49

Source: https://www.actuary.org/sites/default/files/files/publications/ReferencePricing_11.2018.pdf

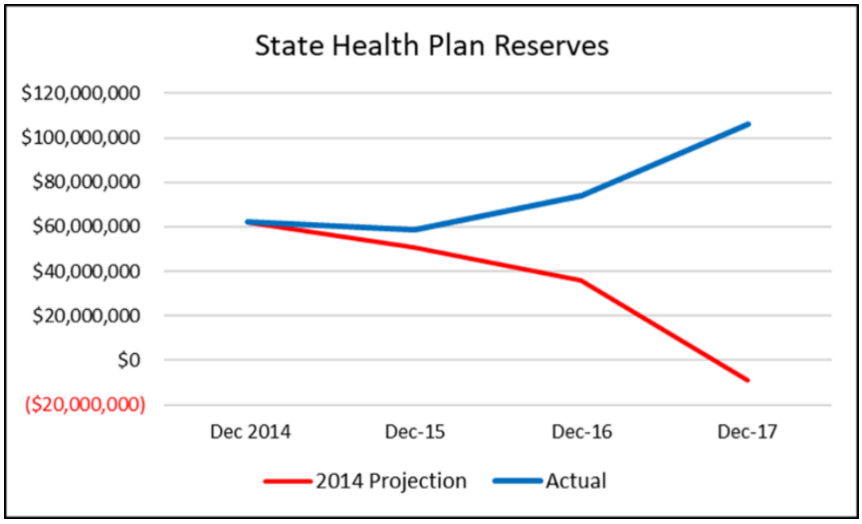
In 2011, California initiated a reference pricing structure for several procedures, including orthopedic procedures. With reference pricing, an insurer agrees to pay a flat amount—known as a reference price—for a procedure. The insurer might set the reference price for a knee replacement, for example, at the median amount hospitals in a community collect for that procedure. The patient has an incentive to seek care from providers who charge an amount that is less than or equal to the reference price. They remain free to get care from a provider who charges more, but they are responsible for the difference between that provider's rate and what their plan pays (the reference price). Consumers thus retain broad choice among providers but have strong incentives to avoid high-price ones.

7 James Salzer, "Georgia Ends Fiscal Year $1 billion short of revenue goal," Atlanta Journal Constitution, July 10, 2020, https://www.ajc.com/news/state--regional-govt--politics/georgia-ends-fiscal-year-with-billion-drop-tax-collections/Q0gBS9feVUrDnrW6Bs9gJP/ ; Niki Kelly, "State had $882 million deficit, relied on surplus to stay in black," July 16, 2020, https://www.journalgazette.net/news/local/indiana/statehouse/20200716/state-had-882-million-deficit-relied-on-surplus-to-stay-in-black ; Kyle Horan, "Tennessee lawmakers have to make up $1 billion budget shortfall," May 26, 2020, https://www.newschannel5.com/news/tennessee-lawmakers-have-to-make-up-1-billion-budget-shortfall.

8 "Texas Comptroller Glenn Hegar Projects a Fiscal 2021 Ending Shortfall of $4.6 Billion in Revised Revenue Estimate," Press Release, Texas Comptroller of Public Accounts, July 20, 2020, https://comptroller.texas.gov/about/media-center/news/2020/200720-cre.php.

The California experience shows that reference pricing incentivized employees to shop, caused high-priced providers to significantly lower their prices, and led to large average price and spending reductions. Other states, such as New Hampshire and Kentucky, have had positive results with "shared savings" payment structures by which people benefit from using less costly providers.[9] Both reference pricing and shared savings models remedy poor incentives that result from patients facing little, if any, difference in cost-sharing amounts once they meet their annual deductible.

Montana reformed its state employee plan by negotiating and contracting with hospitals to pay prices around twice what Medicare pays. The contracts prohibited balance billing and included annual hospital rate increases tied to Medicare payment growth.[10] Montana also demanded a full accounting of pharmaceutical costs, including fees paid to various entities in the supply chain, and eliminated duplicate programs and many vendor contracts. When Montana initiated these reforms, the state health plan faced large future deficits. Montana's reform turned those deficits into large surpluses and succeeded in reducing what the State paid for its employee health plan by about eight percent in the first two years.[11] The figure below contrasts the projected state health plan reserves before the reforms with the actual results of the reform.



9 "Right to Shop for Public Employees: How Healthcare Incentives Are Saving Money in Kentucky," The Foundation for Government Accountability, March 8, 2019, https://thefga.org/wp-content/uploads/2019/03/RTS-Kentucky-HealthCareIncentivesSavingMoney-DRAFT8.pdf.

10 Some people refer to payment models like this as reference pricing because the payer agreed to pay a certain percentage of Medicare rates. The hospitals in Montana agreed to accept those payments and not balance bill patients. One of the risks of universal reference pricing in traditional employer plans is that some providers will not accept the reference price payment as payment in full and will balance bill patients. During the author's work on a state health reform effort in Indiana, he heard about one company that implemented a reference pricing model that set prices around 175 percent of Medicare rates. According to the company, the opposition from the hospital systems was intense, with some taking steps to aggressively balance bill patients, and one system using chargemaster rates in order to discourage the use of this type of payment model.

11 "A Tough Negotiator Proves Employers Can Bargain Down Health Care Prices," National Public Radio, October 2, 2018 https://www.npr.org/sections/health-shots/2018/10/02/652312831/a-tough-negotiator-proves-employers-can-bargain-down-health-care-prices

The recommendations in this paper could lead to a drop of 10 percent or more in total state spending on state employee health programs. Moreover, because state health plans have many members, external benefits will accrue to private-sector employers and employees in two ways:

1. Lower health care prices. Research on a California public employee reference pricing initiative found that 75 percent of the benefits ensued to the broader state population as high-priced hospitals and providers lowered their prices for people outside the initiative as well.[12]
2. The state reform will serve as a model to private employers for how to reform their own employee health benefits plans.

FIVE RECOMMENDATIONS FOR STATE EMPLOYEE HEALTH PLAN REFORM

States have an opportunity to both lower their employee health plan costs and lead by example through modeling a smarter health plan for other employers in the state. States should first ensure that they have all of the pertinent information about their plan, such as prices paid to hospitals and providers and claims data. States should use this information to design better benefit plans.

Three elements are crucial:

1. refusing to engage in the charge-discount shell game that allows hospitals and providers to unilaterally increase prices,
2. eliminating inappropriate add-on payments for services provided in a hospital or hospital-affiliated facility, and
3. implementing payment designs that incentivize plan members to obtain better value care.

Recommendation #1: States should only enter into agreements with TPAs who agree to transparency about the plan, including price and claims information.

For decades, employers have generally been complacent in their approach to health benefits, acquiescing to large annual premium increases and largely reverting to higher deductibles and copayments to somewhat mitigate plan premium increases. Some employers are starting to push back and try different approaches. Writing in Health Affairs about recent employer efforts to constrain health care prices, Gloria Sachdev, Chapin White, and Ge Bai note, "One reason for employers' lack of success in health care cost containment efforts is their limited awareness of the prices they are paying providers. Just like consumers in other markets, employers need to know the prices that their insurance carriers have negotiated for them." [13] In addition to price information, employers also need to know whether their third-party administrator (TPA) has signed contracts

12 Christopher Whaley and Timothy Brown, "Firm Response to Targeted Consumer Incentives: Evidence from Reference Pricing for Surgical Services," Journal of Health Economics 61 (September 2018): 111-133, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2686938.

13 "Self-Insured Employers Are Using Price Transparency to Improve Contracting With Health Care Providers: The Indiana Experience," Health Affairs, October 7, 2019. https://www.healthaffairs.org/do/10.1377/hblog20191003.778513/full/.

with hospital systems that contain anticompetitive provisions, like anti-steering or all-or-nothing clauses, that may increase plan costs.[14]

Perhaps surprisingly, many States have difficulty accessing the pertinent information for their state employee health plan. In Tennessee, state representative Martin Daniel examined a sample of state employee health claims and noticed "an extraordinary difference in claims paid for similar services."[15] One contractor analyzed a set of professional service claims (not hospital claims) for the state plan and found overcharges on nearly 150,000 claims and nearly 100,000 claims where the TPA paid more than the billed amount.[16] There is evidence that the Tennessee state employee plan is overpaying for emergency room care as well.[17]

Daniel requested that the executive director of Tennessee's Department of Finance and Administration obtain the contracted prices that Blue Cross Blue Shield and Cigna, the TPAs for the state employee health plan, negotiated with hospitals and providers.[18] These insurers manage benefits for an estimated 140,971 public employees as well as 42,997 Medicare-eligible retirees.[19] Blue Cross Blue Shield and Cigna have blocked this request, refusing to provide the State with this information.[20] Like Marilyn Bartlett did in Montana when Cigna refused to provide the State with the prices that it had negotiated in the Montana state employee health plan, Tennessee should cancel contracts with its current TPAs and engage a TPA that agrees to transparency and accountability requirements.

The State's actions in this area should do the following:

- Require that the TPA(s) that administer the state employee health plan provide the State with claims data files (both medical and pharmacy) at the State's request. The State would be provided with data that complies with HIPAA requirements and that identifies the health care provider associated with the claim.
- Require that the TPA(s) provide the State with access to all of its signed contracts with hospitals and health systems.
- Require that the TPA(s) allow the State to share claims data, including prices paid, with third-party entities.
- Require that the TPA(s) disclose the rates, including those for facility fees and professional services, that it pays health care providers.

14 Anna Wilde Matthews, "Behind Your Rising Health-Care Bills: Secret Hospital Deals That Squelch Competition," Wall Street Journal, September 18, 2018.

15 Whaley and Brown, "Firm Response to Targeted Consumer Incentives,".

16 Andy Sher and Elizabeth Fite, "'Little biopsy' of Tennessee health insurance program finds at least $17.58 million in medical provider overcharges," Chattanooga Times Free Press, August 15, 2020. https://www.timesfreepress.com/news/local/story/2020/aug/15/tennessee-health-plan-overcharges/529945/.

17 Ibid.

18 Ibid.

19 Ibid.

20 Ibid.

Recommendation #2: States should share claims data with an independent organization that has expertise in analyzing such data in order to reduce plan spending, the use of the highest-price providers, and improper utilization.

Transparent data will enable the State to evaluate provider and facility payments, as well as the performance of their TPA (how claims were paid, for example). Importantly, States must be permitted to share the data with third-party researchers and innovators who have expertise and algorithms for analyzing claims data and developing and implementing strategies to lower health care spending. Neither the TPA nor consultants and brokers should be involved in this process, assuring that the State receives objective information and recommendations from entities that are not involved in the transactions being analyzed.

The State's actions in this area should do the following:

- Contract with an independent entity (not affiliated with the TPA(s)) to analyze claims data and make recommendations for how to reduce plan costs, the use of the highest-priced providers, and improper utilization.

Recommendation #3: States should insist on bottom-up pricing and refuse to set any rates as discounts from billed charges.

The so-called "chargemaster rates" that hospitals and other health care providers bill are substantially inflated and do not resemble anything close to a market price, yet many contracts are negotiated as discounts from these "prices." After hospitals sign contracts with insurers or TPAs, they often increase these "prices," which ratchets up the reimbursement they receive. This type of payment structure is inherently inflationary. One of the key steps Montana took in reforming its employee health plan was tying health care prices to a set rate so that hospitals and providers could not unilaterally inflate their payments. Montana tied rates to Medicare's reimbursements, which is one approach that States could consider. However, States should be mindful of the problems with how Medicare sets their payment rates, particularly for physician payments and for technological innovations.[21] At a minimum, States should ensure that the rates they pay do not automatically increase when a hospital raises its chargemaster rates. Contracts should stipulate either that the negotiated rate remains flat for a period of years, or that increases must be agreed to by the State.

The State's actions in this area should do the following:

- Prohibit TPA(s) from negotiating payment rates with facilities and providers that are tied to chargemaster rates or list prices.

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21 Medicare rates are subject to intense special interest group pressure. This includes rates set for inpatient and outpatient hospital services which are set annually through regulation. Most problematic is how physician fees are set. Much of the work behind the physician fee schedule is done by the resource-based relative value scale (RVS) Update Committee (RUC) of the American Medical Association. The RUC updates the relative value scale for physicians, meaning the time and intensity of the work for certain procedures. The RUC makes its recommendations to CMS, and CMS relies heavily on these recommendations when setting rates. The RUC has historically been dominated by specialists and rates have tended to favor specialists at the expense of generalists. These rates often do not resemble the payments that would have resulted under normal market conditions.

Another problem is that Medicare—as a result of federal statute—requires payment differentials based on site of service, an issue that has led many services to be performed at hospital outpatient departments rather than in ASCs or physicians' offices. Moreover, Medicare pays hospitals differently based on features like whether a hospital is a teaching hospital and the amount of uncompensated care delivered by the hospital.

As a result of status quo bias and risk aversion of regulators, the political process behind outpatient Medicare rate-setting can result in rates being very difficult to change even as technology improves and better alternatives emerge. This can stifle innovation. For example, the author recently wrote about the problems that Medicare faces in properly reimbursing autonomous artificial intelligence for diabetic retinopathy, which is a new technology that makes a far more accurate and cheaper diagnosis of this condition than the current standard which involves a clinician diagnosis. See: http://blasepolicy.org/wp-content/uploads/2020/10/Properly-Incentivizing-Health-Care-Innovation-October-6.pdf

Recommendation #4: States should insist that their health plan avoid inappropriate facility fee charges.

Many employers' plans pay more for outpatient services performed in hospitals than at non-hospital-affiliated facilities. This is largely because hospitals and facilities associated with hospitals charge "facility fees." A facility fee is a charge that reimburses for the use of a hospital's facility, equipment and non-physician personnel. It is added to professional service fees, which compensate physicians and other medical providers. An office visit at a hospital-owned medical practice will often bill a facility fee, meaning that the plan will pay much more for the same episode of care at a hospital-owned facility than at a doctor's office. Similar differential payments occur for medical procedures performed in a hospital outpatient department compared to the lower-priced ambulatory surgical center (ASCs) that is not owned by a hospital. Payment differentials like these raise the cost of state employee health plans. Moreover, they lead to more consolidated health care markets by producing incentives that lead hospitals to purchase independent physician practices, imaging centers, and ASCs. Such reduced competition in the market means higher prices and spending.

A 2014 report found that average hospital outpatient department prices for common imaging, colonoscopy, and laboratory services can be double the price for identical services provided in a physician's office or other community-based setting.[22] For some simple laboratory tests, average hospital outpatient prices were as much as 14 times higher than average community-based lab prices in some metropolitan areas.[23] Moreover, there is evidence that non-hospital facilities, such as ASCs, provide a higher quality of care and better outcomes than services provided in hospitals.[24]

The federal government has taken action to reduce the extra payments for identical services provided in hospital-affiliated facilities rather than in non-hospital affiliated facilities. Specifically, through congressional and administrative action, the federal government has placed limits on facility fee charges, moving toward site-neutral payments in Medicare. The National Academy for State Health Policy has proposed model legislation—patterned after Medicare payment policies—that prohibits site-specific facility fees for services rendered at physician practices and clinics located more than 250 yards from a hospital campus.[25] The model legislation also prohibits facility fees for outpatient services that are billed using evaluation and management codes, even if those services are provided on a hospital campus. The model legislation requires annual reporting of facility fees billed by health care providers and provides three enforcement mechanisms: an annual facility fee audit by the relevant state agency; a private right of action for consumers; and administrative financial penalties against health care providers for violation.

22 "Location, Location, Location: Hospital Outpatient Prices Much Higher than Community Settings for Identical Services," National Institute for Health Care Reform, June 2014, https://www.nihcr.org/analysis/improving-care-delivery/prevention-improving-health/hospital-outpatient-prices/.

23 Ibid.

24 Ibid.

25 National Academy for State Health Policy, "NASHP Model State Legislation to Prohibit Unwarranted Facility Fees," August 24, 2020. https://www.nashp.org/nashp-model-state-legislation-to-prohibit-unwarranted-facility-fees/.

The State's actions in this area should do the following:

- Prohibit the use of facility fees, except for procedures and services provided on a hospital's campus, at a facility that includes a licensed hospital emergency department, or for emergency procedures or services at a freestanding emergency facility in the state health plan.
- Prohibit facility fees for all outpatient evaluation and management services in the state health plan, along with any other outpatient, diagnostic, or imaging services identified by the State as inappropriate for facility fees, regardless of the location of the service.
- Require each hospital, health system, and freestanding emergency facility to submit an annual report to the State on the facility fees charged or billed during the previous year, including information on patient visits and facility fees paid by Medicare, Medicaid, and private insurance. For the top 100 procedures or services based on patient volume, the hospital, health system, or freestanding emergency facility must report the gross and net revenue received for each procedure and service.
- Require the State to annually identify procedures or services that may be safely and effectively provided in settings other than hospitals to avoid unnecessary facility fees. The annual facility fee reports provided to the State will assist with this review.

Recommendation #5: States should utilize reference prices and shared savings for shoppable services.

If States take steps to move to site-neutral payments and prohibit inappropriate use of facility fees, reference pricing—which is premised on large price variation—loses some of its utility. However, differences in prices across providers and facilities—both within regions and across regions—will still occur. Reference pricing, which directly engages employees and patients in health care decisions and permits them the widest choice of providers, has demonstrated success in lowering health care prices and spending.

Under reference pricing payment design, the employer or insurer agrees to pay a set amount per procedure or service regardless of the provider chosen and the amount charged by the provider. Under reference pricing, the provider may generally bill the patient for amounts above the established reference price.

Reference pricing is most applicable for "shoppable" and relatively standardized services such as laboratory tests, imaging like X-Rays and CT Scans, blood work, and orthopedic procedures like knee and hip replacements. Estimates suggest that shoppable medical services comprise roughly two-in-five health care dollars. Reference pricing should also be considered for drugs—setting a payment based on a therapeutic drug class and then letting patients purchase the particular medication of their choice. The reference price needs to be set high enough to ensure that an adequate number of quality providers participate. However, the higher the reference price is set, the lower the savings that the payment system will produce for the plan. For reference pricing to be successful in producing savings and a more efficient health sector (high-price providers reducing unnecessary costs), it needs to cause a shift in consumer behavior.

Reference pricing payment designs are principally aimed at reducing the utilization of high-priced providers and facilities, thus pressuring them to lower prices. While reference pricing payment models may also create an incentive for lower-priced facilities to increase their prices, the savings from moving services away from high-priced providers and facilities have been shown to dwarf these increases.

Shared savings models would provide patients with an incentive to use lower-priced providers. Under shared savings, employees receive a portion of the benefit if they choose a lower-priced provider. For example, if a reference price for a service is set at $1,000 and the employee obtains the service for $800, the employer might provide the employee with a cut of the $200 savings. This could be utilized to reduce the patient deductible or could be provided as a cash payment to the individual.[26] Doing so would incentivize employees to obtain the best possible deal and would likely result in the most cost savings for the plan. To ensure that shared savings models do not incentivize overutilization of services, the insurer could include a prior authorization process to verify that the medical treatment is appropriate whenever the price is below the reference price.

The State's actions in this area should do the following:

- Direct the State to solicit proposals on a reference pricing structure and a shared savings payment structure to incorporate into the state employee health plan.

PROVEN RESULTS

There are two prominent examples that show the benefits of reference pricing. In 2011, the California Public Employee and Retiree System implemented reference pricing for several shoppable services, including orthopedic procedures and colonoscopies. Enrollees in CalPERS Preferred Provider Organization (PPOs), which consisted of about 22 percent of CalPERS active health plan members in 2011, were part of the reference pricing system. The reference price was generally set at the 66th percentile of the allowed amounts paid to health care providers.

CalPERS initially wanted to institute a high deductible health plan (HDHP), but the public employee union resisted this and instead recommended reference pricing. Reference pricing was viewed as more palatable to enrollees than a HDHP, as it allows enrollees to avoid higher prices simply by changing where they receive care.[27] California's public union leadership took it upon themselves to educate their members on how it worked.[28]

In addition, Safeway implemented reference pricing for laboratory tests and images in 2011, setting the reference price at roughly the 60th percentile of the payment distribution for a total of 492 procedure and service codes. Spending above the reference price, like in CalPERS, did not count toward the member's deductible or out-of-pocket maximum.

Promoting Consumer Shopping

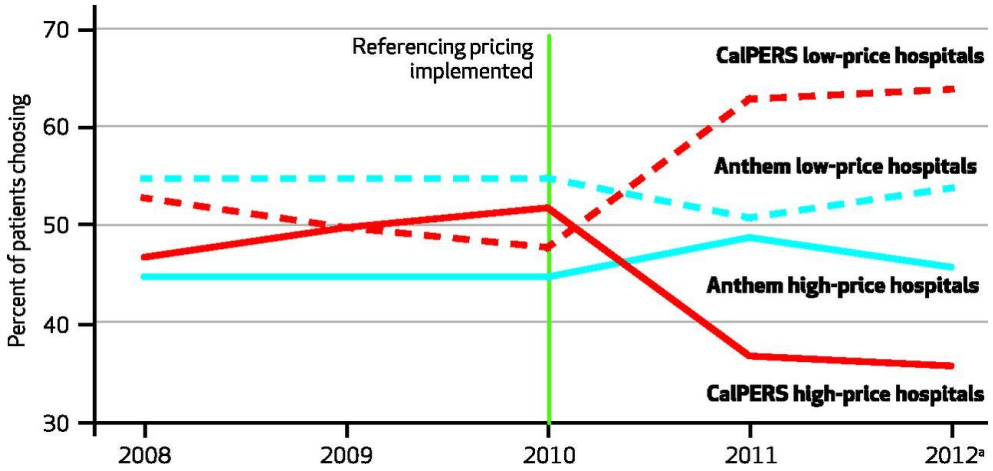
According to a 2018 study by the American Academy of Actuaries, "Evaluations of CalPERS' more expensive surgical services report consumer switching rates ranging from 9 percent to 29 percent; evaluations of

26 There are potential complexities with how this could work if the individual were enrolled in a high deductible health plan with a health savings account. Generally, these plans cannot cover any medical expenses before the deductible is satisfied.

27 Author's conversations with CalPERS reference pricing system experts.

28 Of note, in 2016, CalPERS expanded reference pricing to a dozen additional but low-volume surgical procedures—all of which can be done in ASCs. Apparently, CalPERS also aimed to expand reference pricing to laboratory testing and imaging but received significant pushback from Sutter Health System, the system with a near hospital monopoly in northern California.

Safeway's less expensive diagnostic services report switching rates of 9 percent to 25 percent."[29] The table below is reproduced from a Health Affairs study and shows the percentage of high-priced providers and low-priced providers chosen over time by CalPERS enrollees in the reference pricing payment structure for knee and hip replacements, using a control group of enrollees in Anthem's PPO plan.[30] The figure clearly shows that reference pricing modified employees' health care choices, with a significant number moving from high-priced providers to low-priced ones.



Promoting Provider Competition, Lower Prices, and Overall Savings

Table 2 is reproduced from the same 2018 American Academy of Actuaries report and summarizes the effects of CalPERS and Safeway's reference pricing models.

Table 2: Reference Pricing in Practice, Impact on Savings and Behavior

System	Procedure	Reference Price Percentile	Savings	% of Consumers Switching	Reduction in High-Priced Provider Prices
CalPERS	Cataract Surgery	66th	17.9%	8.6%	N.A.
CalPERS	Colonoscopy	66th	21.0%	17.6%	N.A.
CalPERS	Hip & Knee Replacement	66th	20.2%	28.5%	34.3%
CalPERS	Arthroscopy: Knee	66th	17.6%	14.3%	N.A.
CalPERS	Arthroscopy: Shoulder	66th	17.0%	9.9%	N.A.

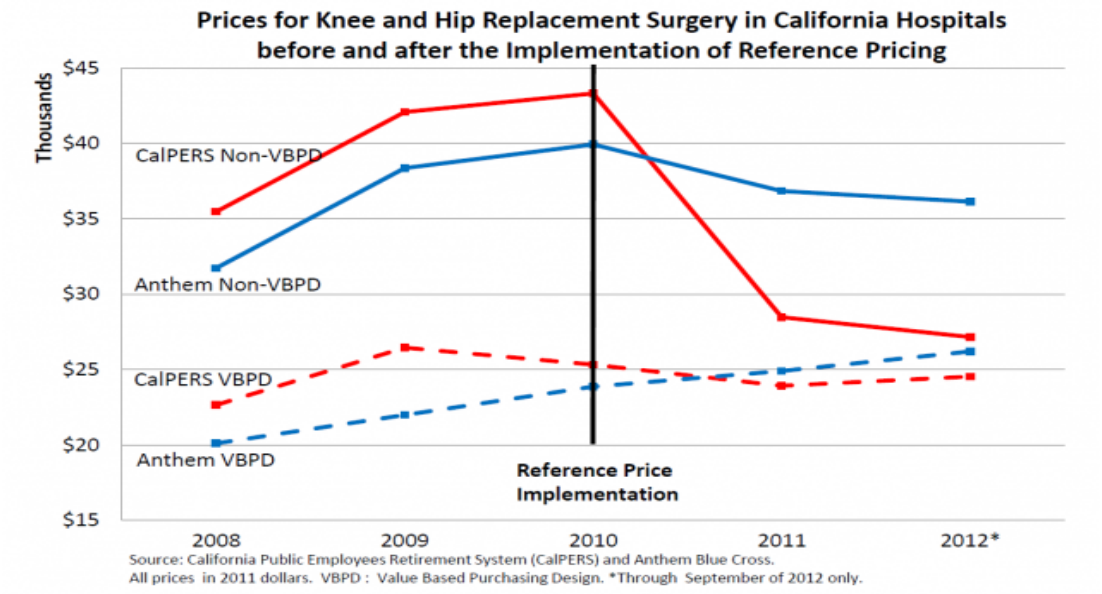
29 "Estimating the Potential Health Care Savings of Reference Pricing," American Academy of Actuaries, November 2018, https://www.actuary.org/sites/default/files/files/publications/ReferencePricing_11.2018.pdf

30 Anthem also managed the CalPERS reference pricing payment structure.

Safeway	492 CPT Codes, Lab Services	50th	20.8%	12.0%	N.A.
Safeway	Diagnostic Lab Testing	60th	31.9%	25.2%	N.A.
Safeway	Imaging: CT	60th	12.5%	9.0%	N.A.
Safeway	Imaging: MRI	60th	10.5%	16.6%	N.A.

N.A. means that the reduction in provider prices was not an aspect of the analysis.
This table is replicated from the American Academy of Actuaries 2018 paper cited above.

Across the five procedures, an average of 18 percent of enrollees switched from high-priced to low-priced facilities with average savings of around 19 percent. The American Academy of Actuaries points out that "procedures with higher shares of consumers switching weren't necessarily the ones with the highest savings, suggesting that provider price reductions are also an important factor."[31] Only one study estimated the reduction in prices charged by high-priced providers. These were for hip and knee replacements and the figure below (also reproduced from the Health Affairs study) clearly shows a significant decline in the prices charged by high-priced facilities—an average drop of 34 percent.



Such past instances of reference pricing show that the method encourages consumers to shop on price and leads many higher-priced providers to move their prices toward the reference price. The total savings to the CalPERS plan after implementing reference pricing—which it did for only a few procedures—are on the order of one

31 Ibid.

percent.[32] Crucially, economists Christopher Whaley and Timothy Brown found that about 75 percent of the price reductions spilled over to the non-CalPERS population, meaning that people benefited from the implementation of reference pricing even if they didn't directly shop, since many providers lowered their prices across the board for these services.[33]

Potential Total Savings from Reference Pricing

The Health Care Cost Institute (HCCI) has estimated that roughly 40 percent of health care spending is for shoppable services while another 10 percent of spending is on pharmaceuticals, which are generally shoppable given the large number of substitutable medications for many conditions. In a 2014 study, Chapin White and Megan Eguchi defined a set of 350 shoppable services that would be amenable to reference pricing.[34] In a November 2019 regulation requiring hospitals to post price information,[35] the Centers for Medicare and Medicaid Services put out a list of 70 shoppable services. The HCCI estimated that these 70 services represented about 12 percent of total spending among people with employer-sponsored insurance.[36] More recently, in an October 2020 final regulation requiring insurers to post price information, the Departments of Health and Human Services, Labor, and the Treasury provided a list of 500 shoppable services and procedures for which insurers will need to provide an internet-based self-service tool that will provide patients with cost sharing estimates by January 1, 2023.[37]

White and Eguchi estimated savings using a reference price set at the 65th percentile of allowed amounts, with 30 percent of consumers switching from higher- to lower-price providers. They estimated that spending on the 350 shoppable services could be reduced by 14 percent, equating to a total reduction in health care spending of 5 percent.

Sinaiko and Mehrotra examined the impact of a reference-pricing design implemented by three self-insured employers in 2015 relative to a sample of adults with PPO coverage that did not use reference pricing.[38] They focused on the facility fees for advanced imaging, including CT scans and MRIs. Sinaiko and Mehrotra found a 9.3 percentage point increase in the use of lower price imaging facilities and a $101 decrease in net prices paid for imaging services in the second year. Overall, there was an 8.1 percent decrease from baseline expenditures for these imaging procedures, but Sinaiko and Mehrotra did not find that high-priced facilities lowered prices.

In a 2018 paper, the American Academy of Actuaries estimated savings using a variety of assumptions and reference price thresholds (55 percent, 60 percent, and 65 percent of the allowed amounts in a region). Using a 60th percentile for the reference price and under the assumptions that consumers switch to lower-cost providers

32 Author's conversations with CalPERS reference pricing system experts.

33 Whaley and Brown, "Firm Response to Targeted Consumer Incentives,".

34 Chapin White and Megan Eguchi, "Reference Pricing: A Small Piece of the Health Care Price and Quality Puzzle," National Institute for Health Care Reform Research Brief No. 18, October 2014, https://www.nihcr.org/wp-content/uploads/2016/07/Research_Brief_No._18.pdf.

35 One aspect of this rule requires hospitals to provide bundled price information on 300 shoppable services (they generally get to choose the other 230 services) in a consumer-friendly format.

36 "CMS-specified shoppable services accounted for 12% of 2017 health care spending among individuals with employer-sponsored insurance," Health Care Cost Institute, January 16, 2020, https://healthcostinstitute.org/hcci-research/cms-specified-shoppable-services-made-up-12-of-2017-health-care-spending-among-people-with-employer-sponsored-insurance-1.

37 Department of Health and Human Services, "Transparency in Coverage," https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/CMS-Transparency-in-Coverage-9915F.pdf.

38 A.D. Sinaiko and A. Mehrotra, "Association of a national insurer's reference-based pricing program and choice of imaging facility, spending, and utilization," Health Services Research 55, Issue 3 (June 2020): 348-356.

and that providers respond by lowering prices, there is a 15 percent reduction in inpatient spending and a 19 percent reduction in outpatient spending.[39] They found that the impact on expenditures is greater from providers lowering prices than from consumers switching providers.

Pharmaceutical Reference Pricing

Several European countries employ reference pricing for drugs. Under this model, medications that have approximately equivalent therapeutic purposes are put in the same class and the reference price is set at the lowest-priced medication within that class. Patients who utilize more expensive medications are responsible for the difference between the price of the medication and the reference price. Entrepreneurs, such as ActiveRadar, have moved into this space, to help employers establish reference pricing programs for pharmaceuticals.

A 2017 study published in The New England Journal of Medicine assessed RETA Trust's experience adopting a reference price program for prescription drugs. The RETA Trust, a national association that purchases health care for employees at 55 Catholic organizations, limited the payment to the price of the least-costly drug in each of 78 therapeutic categories.

Pharmaceutical price variation, like hospital price variation, is extreme. For example, among statins, a commonly used class of oral drugs to treat high cholesterol, the price for drugs in the class ranged from $12.30 to $447.20 for the RETA Trust. The trust also paid for a more expensive drug whenever a physician requested an exemption with a clinical justification to continue use of the more expensive drug. Without this exemption, patients could still choose a more expensive drug, but they were required to pay the price difference.

The researchers found that reference pricing was associated with a higher percentage of prescriptions filled for the lowest-price drug within each class, a lower average price paid per prescription, and a higher rate of copayment by patients relative to the control group. Ultimately, the trust saved 12.2 percent on drug spending after the first year and 18.7 percent during the second year. In dollar terms, in the first 18 months after implementation, the program reduced the trust's drug spending by $1.34 million and consumer out-of-pocket costs rose by $0.12 million from patients who chose not to switch to lower cost prescriptions.

The overall savings from pharmaceutical reference pricing appears similar to the savings from reference pricing for medical services. Since roughly 20 percent of employer health plan expenditures are on pharmaceuticals, the adoption of reference pricing programs for pharmaceuticals could reduce total plan spending by three percent or more. Adding this savings to potential savings from instituting reference pricing for shoppable medical services means that reference pricing overall has the potential to save nearly ten percent of employer health plan spending.

Estimating State Savings

At a saving rate of 10 percent, fully incorporating reference pricing into the state employee health plan (even without the additional reforms recommended above) could directly save taxpayers $4 billion a year. The benefits to the public due to increased shopping in the short run would be approximately $16 billion a year using the estimates for external benefits from the CalPERS model discussed above. The table below shows

39 Although the average allowed charge of shoppable inpatient services ($19,181) exceeds that of shoppable outpatient services ($129), the potential for savings is greater for outpatient services due to the much higher total volume of shoppable outpatient services—882 million services and $114 billion in spending for outpatient services versus less than 2 million shoppable inpatient services and $30 billion in spending for inpatient services.

estimated savings to the state plan, including the state and employee share of spending, assuming that the reforms produce a 10 percent reduction in public spending on the employee health benefit plan.

Table 3: Estimated Annual Savings from Reference Pricing for Select States

State	# of people covered	Employees covered	Total plan spending	Reference price savings
Arizona	137,700	Active state and university employees, retirees, and their dependents	$618 million	$61,800,000
Florida	365,729	State employees, retirees, and their dependents	$1.613 billion.	$161,300,000.
Georgia	665,906	State employees, teachers, school system employees, and retirees	$4,837,509,303	$483,750,930
Indiana	60,000	State employees	$415,000,000	$41,500,000
Missouri	93,000	Active and retired state employees	$499,070,275	$49,907,028
North Carolina	720,00	Teachers, state employees, retirees, and dependents	$1,995,000,000	$199,500,000
Tennessee	282,509	Local education, local government, higher education, and state employees (includes retirees and dependents)	$1,570,000,000	$157,000,000
Texas	541,594	Does not cover teachers and higher education employees	$2,361,022,912	$236,102,291

Sources: Arizona Department of Administration, Arizona Health Insurance Trust Fund Annual Report 2018, https://benefitoptions.az.gov/sites/default/files/media/LEGI_HITF_2018_Annual_Report.pdf, p. 6.

Florida Division of State Group Insurance, State Employees' Group Self-Insurance Trust Fund Report on Financial Outlook FY 2020-2025, http://edr.state.fl.us/content/conferences/healthinsurance/HealthInsuranceOutlook.pdf, p. 4.

Georgia Department of Community Health Annual Report for Fiscal Year 2019.

Indiana figures are estimates from authors discussions with Indiana.

Missouri Consolidated Health Care Plan 2019 Annual Report, http://www.mchcp.org/aboutUs/documents/annualReport_2019.pdf, pp. 44-122.

North Carolina State Health Plan, "Who We Are," https://www.shpnc.org/about-us/who-we-are; North Carolina State Health Plan Financial Update June 5, 2019, https://files.nc.gov/ncshp/documents/board-of-trustees/April_2019_Financial_Report.pdf, p. 4.

State of Tennessee Department of Finance and Administration, 2018 Annual Program and Financial Report for Benefits Administration, https://www.tn.gov/content/dam/tn/finance/fa-benefits/documents/2018_annual_report.pdf.

Employees Retirement System of Texas, Operating Budget for Fiscal Year 2020, https://ers.texas.gov/About-ERS/Reports-and-Studies/Reports-on-Overall-ERS-Operations-and-Financial-Management/FY-2020-Operating-Budget.pdf; Fiscal Year 2019 at a Glance, https://ers.texas.gov/About-ERS/Reports-and-Studies/Reports-on-Overall-ERS-Operations-and-Financial-Management/2019-At-A-Glance.pdf.

OVERCOMING OBSTACLES TO IMPLEMENTATION

Given that reference pricing payment structures have demonstrated significant savings, it is surprising that adoption has not been more widespread. While reference pricing remains limited, wellness programs, which have not demonstrated either improvements in employee wellness or cost-savings, have proliferated. Several reasons are given below for limited take-up of reference pricing payment structures thus far. These will likely need to be addressed in order for States to utilize reference pricing in their state employee health plan.

Complexity and Employee Confusion

Employees at a single large employer often live in different communities. This leads to a concern that if all employees face a single reference price, employees in some areas may have a limited number of providers who charge at or below the reference price from which to choose. Adjusting the reference price by area to account for this may be difficult to operationalize.

Safeway and CalPERS sought to minimize the complexity around consumer choice by setting the reference price at the LabCorp or Quest price for labs or the ASC price for outpatient services. Therefore, employees could use the basic heuristic of simply avoiding the hospital or hospital-affiliated facility for a medical service, image, or lab work. In addition, the State would need to commit initial resources to educate plan enrollees about how the reference pricing model works and should have well-trained staff in its Human Resources or Employee Benefits offices trained to assist plan members.

Risk of Out-of-Pocket Exposure

Some employers may be concerned about large out-of-pocket exposure for plan members who use a facility or provider that charges above the reference price and balance bills the member. According to the American Academy of Actuary study, "While some hospitals have chosen to waive the collection of charges above the reference price, it is unclear whether providers would be willing to waive such charges under a more broadly implemented reference pricing program."[40] The concern about larger out-of-pocket exposure is most relevant in the event that there is a complication during a procedure and the provider bills a higher charge.

Again, the general problem is best addressed by the State educating its members about the reference pricing model and providing necessary resources for members. Moreover, the State should consider structuring its reference pricing model to make accommodations for members if a complication occurs during a procedure by having the plan pick up the extra cost.

Insufficient Savings

Some States may be resistant to reference pricing because shoppable services are less than half of total spending and they may question whether the savings are sufficient to justify a disruption to plan enrollees. However, there are large potential savings from reference pricing implementation for all shoppable services, including pharmaceuticals. States should be eager to employ payment systems that could save up to ten percent of state

40 "Estimating the Potential Health Care Savings of Reference Pricing," American Academy of Actuaries, November 2018, https://www.actuary.org/sites/default/files/files/publications/ReferencePricing_11.2018.pdf

spending on the state employee health plan without a reduction in the quality of care received by plan members. Many employers, including States, may want to begin with a smaller reference pricing program to allow plan members to become familiar and comfortable with the payment system. Savings will grow as the program includes more shoppable services.

Extremely Consolidated Markets

Some believe that reference pricing structures face greater limitations in more consolidated markets since consumers have fewer alternatives and providers, who have more negotiating leverage in consolidated markets, may be resistant to lower prices. Perhaps surprisingly, however, under CalPERS there were much greater savings in the northern part of California, where the hospital markets are more consolidated, than in the southern part of the state, where the hospital market is less consolidated. In northern California, the reference price motivated patients to obtain care at ASCs. In addition to spurring competition within local markets, reference pricing also encourages patients to escape local areas where prices are high and receive elective care elsewhere. Faced with the threat of patients travelling elsewhere to receive care, local providers and facilities may lower prices.

Legal Considerations

For reference pricing to be most successful, it is important that the higher out-of-pocket costs that consumers face by using a provider who charges more than the reference price do not count toward the plan deductible or out-of-pocket limits. Previous FAQs, jointly issued by the departments of Health and Human Services, Labor, and the Treasury stated that plans with reference pricing may, but would not be required to, include such balance bill payments toward the out-of-pocket maxima, which are limited under the ACA.[41] It's important that plans retain the flexibility to exclude balance bill payments from counting toward the out-of-pocket maxima.

Steps to Ensure Success

Employers, and in this case States, must take steps to ensure that their employees are educated about how reference pricing works. The State should make an expert or a professional service available to work with employees and family members if they need help in choosing providers. There are many applications and benefits experts who will help employers educate employees and make shopping as easy as possible for plan members.

According to a survey of employers that utilize reference pricing designs, most implement extensive communication and decision-support strategies, which include targeted outreach to employees who were scheduled to receive care at a higher-cost provider, as well as a concierge service that employees could call for help in identifying a low-priced provider. Crucially, reference pricing models will be easier to implement in the coming years because of the abundant price information which will be made available as a result of recent federal rules. A November 2019 regulation requires hospitals to make public complete price information in a standardized, machine-readable format starting January 1, 2021.[42] The rule also requires hospitals to provide

41 The American Academy of Actuaries report has further detail on this.

42 Department of Health and Human Services, "CY 2020 Hospital Outpatient PPS Policy Changes and Payment Rates and Ambulatory Surgical Center Payment System Policy Changes and Payment Rates. Price Transparency Requirements for Hospitals to Make Standard Charges Public," https://www.hhs.gov/sites/default/files/cms-1717-f2.pdf.

prices for 300 shoppable services in a consumer-friendly format on their website.[43] In addition, an October 2020 regulation requires insurers to make public the rates they negotiate with providers as well as the typical amounts that they pay for out-of-network care starting January 1, 2022 in a machine-readable, standardized format.[44] This regulation also requires insurers to offer an online shopping tool that shows the negotiated rate between the provider and plan plus a personalized estimate of the plan members' out-of-pocket cost for 500 of the most shoppable items and services starting on January 1, 2023.[45] Starting on January 1, 2024, insurers must show the negotiated rates and personalized out-of-pocket estimate for all remaining procedures, services, drugs, and durable medical equipment. In addition to the consumer tool, insurers must provide complete price information.[46]

CONCLUSION

Through a smarter employee health benefits plan, States have an opportunity to reform their health systems while also providing a model for commonsense steps that other employers can take to trim costs in employee health plans while maintaining access to high quality care. States should insist that their TPA is fully transparent, refuses to pay inappropriate facility fees, and implements reference pricing and shared savings programs for shoppable services. They should contract with innovative companies that can help deploy smart analytics to target wasteful spending. Such reforms have the potential to lower the cost of state employee health programs by 10 percent or more, enabling the State to pay higher wages to its employees, lower taxes, and improve public services.

43 Ibid.

44 Department of Health and Human Services, "Transparency in Coverage," https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/CMS-Transparency-in-Coverage-9915F.pdf

45 Ibid.

46 Ibid.