California pays significantly more for common health care services than the rest of the country, and the gap has been widening. Various inpatient and outpatient services (see box) cost more in California than in other states, and they cost more in Northern California than in Southern California. Even after accounting for wage differences, a large gap remains. Researchers examined wage-adjusted 2016 data and found the following:

- California was the 16th most expensive state on average across the selected common services.
- California was the 8th most expensive state for uncomplicated childbirth at 9,751.
- CT scans of the head cost 36% more in California than in the rest of the country.

Premiums under the Affordable Care Act (ACA) were also higher in California than in the rest of the nation.

A critical factor in the fast growth of prices in California compared with the rest of the country is market concentration — including hospital consolidation and physician integration — which has been proliferating in the state along with price acceleration. The percentage of physicians in practices owned by a hospital/health system has increased dramatically. For specialists, the increase has been even faster.

Because high market concentration pushes health care prices upward, it is of serious concern for California policymakers and regulators. Policies that can be considered to address high health care prices and ACA premiums are discussed in this issue brief.

**Childbirth and the Price Gap**

Childbirth prices offer a good example of the magnitude of the problem for California. Normal childbirth — vaginal delivery without complications — is the most common type of hospital admission; since the services vary little from place to place and require limited technology, it is relatively straightforward to compare across states and within areas of California. The graph on the left in Figure 1 shows the price difference between California and the rest of the country, and the graph on the right shows the same information after adjustment for wages (see page 2). A large gap remains.

Many states have lower prices for uncomplicated childbirth. See Figure 2 (page 2). In 2016, the average price across California was over $11,000, whereas the adjacent states of Nevada and Arizona had average prices below $8,000.

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**Health Care Services Studied**
- Vaginal delivery without complications
- Hip or knee replacement
- Colonoscopy
- Head CT scan without contrast
- Cesarean delivery without complications
- Percutaneous transluminal coronary angioplasty (PTCA)
- Spinal fusion
- Primary care office visits (6 types)
Figure 1. Vaginal Delivery Without CC
Average and Wage-Adjusted Prices, California and the Rest of the Country, 2012–2016

<table>
<thead>
<tr>
<th>Year</th>
<th>California Average</th>
<th>California Wage-Adjusted</th>
<th>Rest of the Country Average</th>
<th>Rest of the Country Wage-Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$8,882</td>
<td>$7,672</td>
<td>$5,728</td>
<td>$6,318</td>
</tr>
<tr>
<td>2013</td>
<td>$9,353</td>
<td>$8,381</td>
<td>$6,115</td>
<td>$6,460</td>
</tr>
<tr>
<td>2014</td>
<td>$9,777</td>
<td>$8,725</td>
<td>$6,318</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>$10,345</td>
<td>$9,015</td>
<td>$6,666</td>
<td>$6,808</td>
</tr>
<tr>
<td>2016</td>
<td>$11,345</td>
<td>$9,751</td>
<td>$7,177</td>
<td>$7,295</td>
</tr>
</tbody>
</table>

GROWTH SINCE 2012

- California: 27.7%
- Rest of the Country: 26.8%

Notes: CC is complicating conditions. No data identifies states with insufficient observations.

Source (Figures 1–3): Authors’ analysis of the IBM MarketScan Database Inpatient Services Tables, Diagnosis-Related Group (DRG) code 775.
Prices vary widely within California, even after controlling for higher wages in certain regions of the state. Figure 3 shows how vaginal childbirth prices differed throughout the state’s 19 rating areas in 2016 (see page 2). Northern California wage-adjusted prices were on average 24% higher than in Southern California. As an example of the substantial variation within the state, the 2016 average wage-adjusted vaginal delivery price in Rating Area 9 (which has Monterey as its largest county) was $22,751 compared with $11,387 in Rating Area 19 (San Diego). This is a difference of $11,364, or 100%.

More important than the levels of these prices is how fast they are growing. Wage-adjusted average vaginal delivery prices grew by over 20% from 2012 through 2016 in a number of rating areas, including:

- San Francisco (29% increase, $6,389 to $8,268)
- Los Angeles (32%, $8,167 to $10,780)
- Orange County (40%, $8,692 to $12,144)
- San Diego (28%, $8,911 to $11,387)

**Outpatient Visits and Procedures**

Prices for outpatient procedures, office visits, and imaging studies were also consistently higher in California compared with the rest of the country, although the difference was not as dramatic as the inpatient price gap. The graphs in Figure 4 show the price difference for a head scan (head CT without contrast) without wage adjustment and with wage adjustment.

**ACA Premiums**

Health insurance premiums increase when health care costs rise, and premiums under Covered California (the state-based ACA exchange in California) as well as in the rest of the country rose quickly from 2015 through 2019. In 2015, ACA premiums for a 50-year-old individual were higher under Covered California than for the rest of the country. Under Covered California, ACA premiums increased 32% to 51% across four premiums (ACA’s three “metal” tiers — bronze, silver, and gold — and the

![Figure 4. Head CT Scan Without Contrast, Average Price California and the Rest of the Country, 2012–2016](image-url)

**Note:** CT is computed tomography.

Source: Authors’ analysis of the IBM MarketScan Database Outpatient Services Tables, Current Procedural Terminology (CPT) code 70450.
average benchmark premium (the premium of the second-lowest-cost silver plan in a rating area). In the rest of the country, ACA premiums increased even faster at 57% to 81% across the four premiums.

Notably, Covered California has done much better than the majority of states in terms of controlling premium growth. Although ACA premiums in 2015 were higher in California than in the rest of the country, the reverse was true in 2019. California’s success in this regard is likely due to a combination of factors, including its role as an active purchaser, its decision to offer standardized benefit designs, and its significant effort to recruit a broad mix of enrollees.

**Market Concentration**

As market concentration rises, so do prices. Horizontal concentration refers to entities of the same type, as when two hospitals merge. Vertical integration occurs when entities of different types combine, as when a hospital purchases a physician practice.

The Herfindahl-Hirschman Index (HHI) measures market concentration on a range from 0 to 10,000. Markets with HHIs between 1,500 and 2,500 points are considered to be moderately concentrated, and those with HHIs in excess of 2,500 points are considered to be highly concentrated. Mergers that would increase the HHI in a market by over 200 points and leave the market with an HHI over 2,500 are assigned the highest level of concern and scrutiny, according to Department of Justice/Federal Trade Commission guidelines.

In California, hospital, specialist physician, and insurer markets were highly concentrated in 2019, with HHIs over 2,500. The primary care physician market was moderately concentrated, with an HHI between 1,500 and 2,500 over the 2010 through 2018 period. Specialist HHI increased by 7%, whereas primary care physician HHI increased by 49%.

As the graph in Figure 5 shows, the percentage of physicians in practices owned by a hospital/health system increased dramatically in California between 2010 and 2018. On average, 24% of primary care physicians were in practices owned by a hospital/health system in 2010. By 2018, the percentage had risen to 42% — an increase of 75%. The percentage of specialists in practices owned by a hospital/health system rose even faster, from 25% in 2010 to 52% in 2018 — an increase of 108%.

**Figure 5. Percentage of Physicians in Practices Owned by a Hospital/Health System in California by Type of Physician, 2010–2018**

As the graph in Figure 5 shows, the percentage of physicians in practices owned by a hospital/health system increased dramatically in California between 2010 and 2018. On average, 24% of primary care physicians were in practices owned by a hospital/health system in 2010. By 2018, the percentage had risen to 42% — an increase of 75%. The percentage of specialists in practices owned by a hospital/health system rose even faster, from 25% in 2010 to 52% in 2018 — an increase of 108%.

**Figure 5. Percentage of Physicians in Practices Owned by a Hospital/Health System in California by Type of Physician, 2010–2018**

Note: All measures are calculated at the state level.
Source: Authors’ analysis of data provided by the SK&A Office-Based Physicians Database provided by QuintilesIMS (now IQVIA).

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1. The Herfindahl-Hirschman Index is used in the US Department of Justice and Federal Trade Commission to measure market concentration. See www.justice.gov (PDF).
There are potential benefits to hospital-physician integration, including reduced transaction costs and technological interdependencies that improve coordination of care. However, such integration can also result in higher prices, particularly when the hospital or physician organization has significant market share in its market. For example, if a physician organization had market power prior to it being acquired, the acquisition could increase hospital market power if it closed off access to physician services for rival hospitals. This concern was recently discussed by the Federal Trade Commission. In fact, hospitals that have stronger affiliations with physicians have been found to have higher prices themselves. Similarly, if a hospital/health system had market power prior to its acquisition of a physician organization, the acquisition could increase physician market power if it closed off access to hospital services for rival physician organizations.

The combined effect of higher hospital and physician prices results in health insurance premiums becoming even more unaffordable.

How Market Concentration Is Associated with Prices

Prices for both inpatient and outpatient services rise when market concentration increases. Figure 6 shows an example on the inpatient side — the association between cesarean delivery price and horizontal concentration of hospitals. For cesarean births without complications, a 10% rise in hospital HHI is associated with a 1.3% increase in price. An increase in hospital HHI from 1,500 to 2,500 would be associated with an increase in price of $1,152 ($16,386 to $17,538).

Outpatient services prices also respond to market consolidation. As an example, Figure 7 shows the relationship between head scan prices and horizontal and vertical concentration of radiologists (see page 6). A 10% increase in radiologist HHI is associated with a 1.4% increase in price. An increase in radiologist HHI from 1,500 to 2,500 would be associated with an increase in price of $44 ($566 to $610).
This scrutiny can be enhanced at the state level. For example, the Massachusetts Health Policy Commission provides an analysis of proposed health care mergers for the attorney general and the public. In California, a 2018 law requires health plans to obtain approval from the Department of Managed Health Care for mergers with other health plans or health insurers (regulated by the Department of Insurance).

Vertical integration has also been recently challenged. In 2017, the Washington State Attorney General’s office filed suit against Franciscan Health System to unwind acquisitions and affiliations with physician organizations that had allegedly violated antitrust laws and harmed consumers via anti-competitive health care prices. In a case decided in 2014, the Federal Trade Commission, Idaho Attorney General, and private plaintiffs successfully challenged St. Luke’s Health System’s acquisition of Saltzer Medical Group in Nampa, Idaho.

### Potential Policy Responses

A number of policies have been proposed to enhance market competition and thereby reduce upward pressure on prices. They are discussed below. To fully address each policy area, California might want to consider a health policy commission that examines health care costs and quality in a comprehensive manner, similar to the Massachusetts Health Policy Commission or Rhode Island’s Office of the Health Insurance Commissioner.

#### Enforce Antitrust Laws

Proposed mergers and acquisitions could be scrutinized by the federal and state governments to evaluate whether the net result is pro-competitive or anti-competitive. This is what the US Department of Justice and attorneys general from multiple states did in the proposed Anthem-Cigna and Aetna-Humana insurer mergers, which were ultimately blocked. Such scrutiny includes evaluating whether the pro-competitive effects could be accomplished without the merger, as was ruled in the St. Luke’s case involving a hospital acquiring a physician group.
However, antitrust enforcement is difficult to implement because many hospital acquisitions of physician organizations involve small practices that would not draw federal or state scrutiny. Moreover, sometimes market concentration and vertical integration increases without a merger. Physicians are independently joining larger physician organizations that are owned by or affiliated with hospitals/health systems. Therefore, there may be a role for states to enhance their monitoring of the cumulative impact of mergers, joint ventures, and alliances on markets to determine whether they are pro-competitive or anti-competitive. This monitoring is particularly important in markets that are already highly concentrated.

**Reduce Barriers to Market Entry**
When markets are concentrated and entities within them are profiting, it is important to allow additional firms to enter by changing policies that restrict entry. For example, California prohibits nurse practitioners from practicing independently from a physician, which may reduce entry into the market. In contrast, California does not have hospital certificate-of-need laws, which can be anti-competitive when monopolistic incumbents use the law to block entry.

**Regulate Provider and Insurer Rates**
If antitrust enforcement is not successful and there are significant barriers to entry into the market — including small markets not being able to support a competitive number of hospitals and specialists — regulating provider and insurer rates is another option to consider. Seven states began regulating hospital rates in the 1970s and generally had lower hospital spending growth. However, all but two states discontinued this practice because of private insurers’ shift to managed care and Medicare’s shift to diagnosis-related group reimbursement. Although hospital rate setting may be promising, it is challenging for regulators to set rates that account for changes in technology and input costs, and it is subject to regulatory capture, which occurs when regulators become overly influenced by the regulated industry. A few states are beginning to link hospital reimbursement rates for state employee health plans to Medicare rates; however, these negotiations are still challenging because the percentage paid above Medicare varies.

The California’s Assembly Bill (AB) 3087, California Health Care Cost, Quality, and Equity Commission, was introduced in 2018 to establish a commission to set health insurance premiums for health plans and reimbursement rates for hospitals, physicians, and other providers. Due to staunch opposition from health plans and health care providers, the bill did not advance. Another bill, Senate Bill (SB) 562, The Healthy California Act, was introduced in 2017 to establish single-payer health care in the state coupled with universal coverage. The bill passed in the Senate but was tabled in the Assembly because of its high potential cost and, again, because of opposition from health plans and health care providers.
It is not clear whether single-payer health care would lower rates or be subject to industry capture. For example, Medicare’s effort to link physician reimbursement increases to per capita gross domestic product growth was not successful. The US Department of Defense, the single payer for defense, generally receives large bipartisan support, partially because its $700 billion budget impacts nearly every congressional district. Notwithstanding, single-payer systems in other developed countries have figured out a way to set lower prices.

More recently, AB 731, Health Care Coverage: Rate Review, would apply the ACA’s rate review provisions to the large-group market (the provisions currently apply to only the individual and small-group markets). The ACA requires insurers to file rates with regulators who actuarially review them to determine their reasonableness. However, an insurer can proceed with a rate that the regulator deemed unreasonable. In contrast, if California had prior approval authority, an insurer could not market a rate that had not been approved. Prior approval authority, which exists in about half the states, and ACA exchange active purchaser states using selective contracting, including Covered California, are associated with lower growth rates in premiums. Since 2016, when SB 908 (Premium Rate Change: Notice) went into effect, health insurers in California have been required to notify enrollees of unreasonable or unjustified premium increases so that enrollees could shop for coverage. Although not prior approval, the goals of SB 908 are similar to those of prior approval authority.

Despite opposition, given the recent and growing inflation of health care prices that affect all Californians, regulators and policymakers will need to heavily scrutinize the vertical integration of physician practices and other efforts that might stymie competition. California’s health care system relies on competitive provider and health insurer markets to lower costs and improve quality.
About the Authors

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About the Foundation

The California Health Care Foundation is dedicated to advancing meaningful, measurable improvements in the way the health care delivery system provides care to the people of California, particularly those with low incomes and those whose needs are not well served by the status quo. We work to ensure that people have access to the care they need, when they need it, at a price they can afford.

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