SAN FRANCISCO
HEALTH SERVICE SYSTEM
Affordable, Quality Benefits & Well-Being

MEMORANDUM

September 13, 2018

TO**:** Karen Breslin, President, and Members of the Health Service Board

FROM**:** Abbie Yant, RN, MA Executive Director SFHSS

RE: September 2018 Board Report

INTRODUCTION

Please join me in welcoming Natalie Ekberg as the Health Service Board Secretary and my Assistant to today's meeting. I also wish to thank Anthony Gan for his assistance over the last few months and with the August Board meeting.

There has hardly been a summer lull for SFHSS as staff prepares for Open Enrollment!

I have continued to network throughout the City and with our vendors. I participated in the PBGH quarterly meeting, met with the leadership from Catalyst for Payment Reform and Silicon Valley Employers Forum.

There are many changes afoot in the healthcare market place which will have influence on SFHSS. To illustrate this point, I have included two articles in this packet:

You'll Never Guess Which Company Is Reinventing Health Benefit
https://www.nytimes.com/2018/08/31/health/comcast-health-insurance-employees.html

Consolidation Trends In California's Health Care System: Impacts On ACA Premiums And Outpatient Visit Price
https://www.healthaffairs.org/doi/10.1377/hlthaff.2018.0472

STRATEGIC PLAN

SFHSS staff continue to work closely with Aon to develop the SFHSS 3-year strategic plan. Since the Board last met Aon has worked with leadership to further develop the plan. We had an opportunity to share the draft plan in detail with President Breslin and Vice President Follansbee. On August 30, at the August SFHSS All Staff meeting, we led two input sessions with the staff. SFHSS Leadership has further developed the operational excellence plan that informs the workplan which will guide the execution of the Strategic Plan. In addition, three stakeholder sessions were planned for the week of 9/10/18 and we will collect valuable feedback from external stakeholders.

Today Aon will present the high- level review of the plan. On October 11, at the Health Service Board meeting the SFHSS Strategic Plan will be presented for approval.

MEETINGS/PRESENTATIONS

Health and Planning Joint Commission

Mitchell Griggs provided CPMC fee increase analysis update to the Health and Planning Joint Commissions at the CPMC Annual Review Hearing. The San Francisco Development Agreement with Sutter requires Sutter to limit fee increase for services to the City's health care system to no

more than 5 percent annually. SFHSS reported that the results of the analysis for 2015 performed by Milliman showed less than or equal to 5 percent as required.

In March of 2018 Milliman provided the analysis evaluating increases between calendar years 2014 and 2015 (using data from January through December of each year). Per agreement, Milliman reported that CPMC had satisfied the Annual Rate Increase commitment of rate increase to be less than or equal to 5%, but no additional details were provided other than the methodology used for the analysis. CPMC and SFHSS have agreed to engage Milliman to conduct two separate analyses: Evaluation comparing calendar year 2015 data to 2016 data and comparing 2016 data to 2017 data to determine year-to-year rate increases.

Facilitated by SFHSS, Milliman is in receipt of the 2016 and 2017 claims data from United Healthcare (UHC) and from Blue Shield of California (BSC) and are completing their analysis.

Deep Dive Education Sessions
Aon subject matter expert. Dr. Neil Mill, provided in depth education update to SFHSS leadership on Opioid Epidemic and Care Management. Both topics relate directly to the goals in the draft Strategic Plan.

Dependent Eligibility Verification Audit

- Continues to drive call and walk-in volume to HSS

DEVA UPDATE as of 9-6-2018	
Dependents Verified	24,298
To be Verified	2,025
Opt Outs	173
Approved Appeals	551
Non-Responders	837
% of Non-Responders	3.15%
% of Total Verified/Opted Out	**92.1%**

Schedule of DEVA Notices

- 4/09/2018 - Alert Notice Sent
- 4/20/2018 - Verification Request Notice Sent
- 4/30/2018 - Reminder notice sent
- 5/15/2018 - Reminder notice sent
- 6/01/2018 - Final reminder notice sent
- 6/16/2018 - End of audit notice – sent to those who had not responded to verification
- 7/15/2018 - Grace Period end date/final audit close
- 7/28/2018 - Final Results Notice – sent to those with unverified dependents remaining on the plan.
- 8/27/2018 - Special notice sent directly from SFHSS to all non-respondents

FOLLOW UP FROM PRIOR BOARD MEETINGS

Healthcare Value Initiative (HVI) Report
At the August Health Service Board Meeting, Aon was asked what entities were included in the public benchmark. Aon has reported that the public benchmark consisted of 54 total organizations including:

- 29 universities (none from No CA)
- 9 states (among them, only Nevada borders CA)
- 2 archdioceses
- 2 counties (SFHSS/CCSF, as well as Riverside)
- 12 anonymous organizations that choose not to release their identity in our reporting

Other items we are tracking (not an all-inclusive list of SFHSS work):

- VSP progressive lens benefit– September 2018
- Cataract Surgery benefit coverage - TBD
- Impact of Medicare Advantage programs – November 2018
- Relationship with Workers Compensation - TBD
- Other Postemployment Health Care Benefits (OPEB) – December 2018
- Skilled Nursing Facilities contracts with health plans - TBD

SFHSS DIVISION REPORTS – SEPTEMBER 2018

PERSONNEL

- New Commission/Executive Secretary Natalie Ekberg
- New 1209 Benefits Technician Matthew Pobre
- New 1209 Benefits Technician Geraldine Cerda-Lopez
- 1209 Benefits Analyst Interviews in September
- 1813 Senior Benefits Analyst Eligibility List is being created
- New 0923 Assistant Well-Being Manager Carrie Beshears promoted!
- 2593 Well-Being Coordinator position is now vacant. Recruitment has begun
- Spencer Christy and Kristan Olazo started as Public Service Trainees/Well-Being Interns.

OPERATIONS

- See attached slides

MEMBER SERVICES SYSTEMS

Open Enrollment

- Staff participating in self-service, eBenefits testing, benefit guide review, application review and enrollment data cleanup in preparation for Open Enrollment.
- Staff Is preparing for changes in Fidelity Informational Services software to allow for enhanced direct premium payment (credit cards and e-checks.)

ENTERPRISE SYSTEMS & ANALYTICS

- See attached slide.

Communications

- See attached slide.

Well-Being

- See attached slides

FINANCE DEPARTMENT

Budget, Procurement and Accounting:

- Finalizing FY 2017-18 Year-End Close
- Working with KPMG on external audit
- Prepared Manual Appropriation Carryforward Requests
- Reviewing 2019 plan materials in advance of Open Enrollment

Contracts

- Executed the following amendments:
  - 1st Amendment to the Silly Monkey (DBA Kanopi) Agreement to reorder project scope
  - 18th Amendment to the Agreement with Aon Hewitt for the Dependent Verification Eligibility Audit
  - 1st Amendment to the United Health Care Medicare Agreement to increase frequency of data exchange to the All-Payer Claims Database

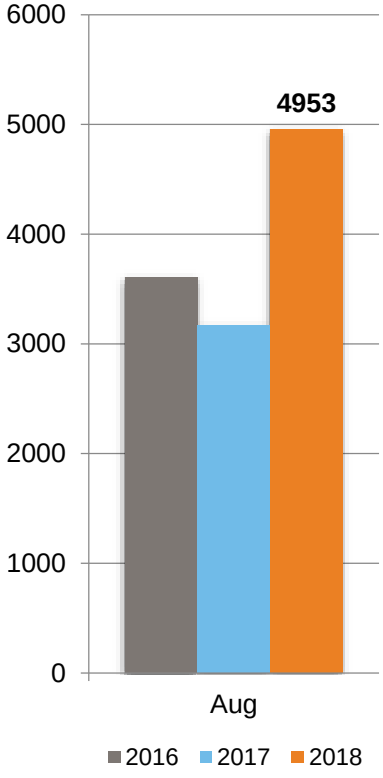
  - 3rd Amendment to the Truven Analytics Agreement to increase frequency of data exchange to the All-Payer Claims Database
- Executed the following City required Legal Agreements:
  - 2018 Nondisclosure Agreement executed with Delta Dental for documents for the external audit
  - 2018 Business Associate Agreement between San Francisco Health Service System and Total Compensation Systems, Inc. to support efforts on behalf of San Francisco Community College District for GASB 74/75

Management Report

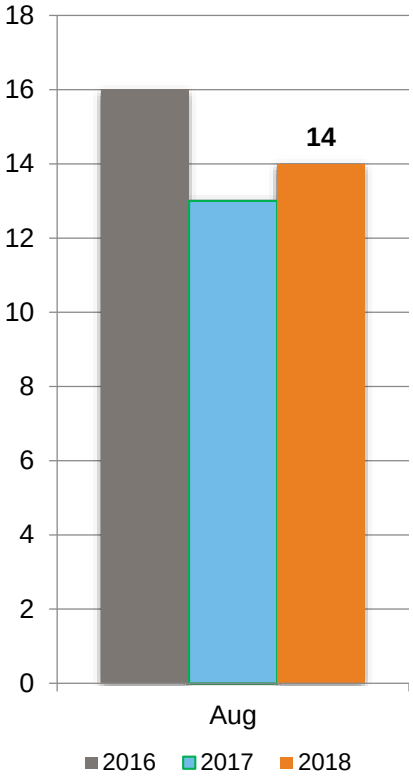
OPERATIONS UPDATE | September 2018

Calls and Office Visits: August 2018

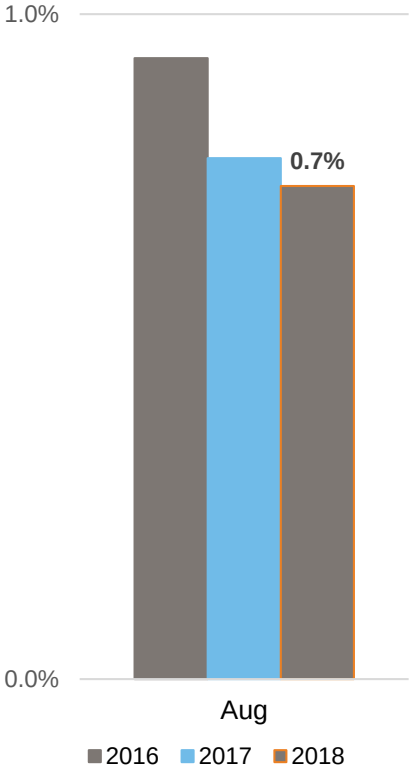
Inbound calls:
4,953 answered calls
(56.4% ↑ from 2017)



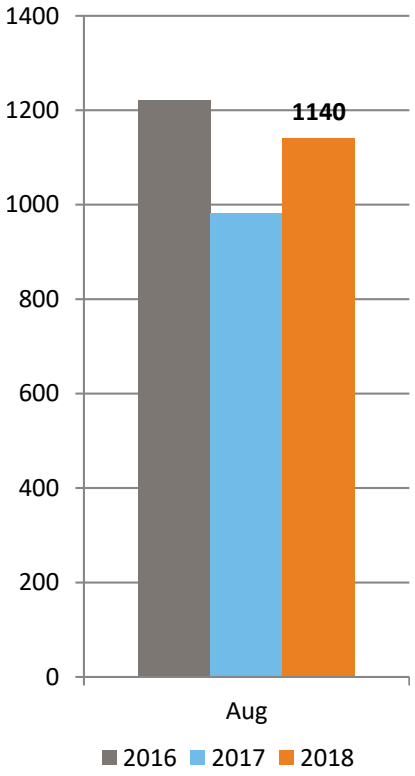
Speed of answer:
14 seconds
(7.7% ↑ from 2017)



Abandonment rate:
0.07%
(37 calls)



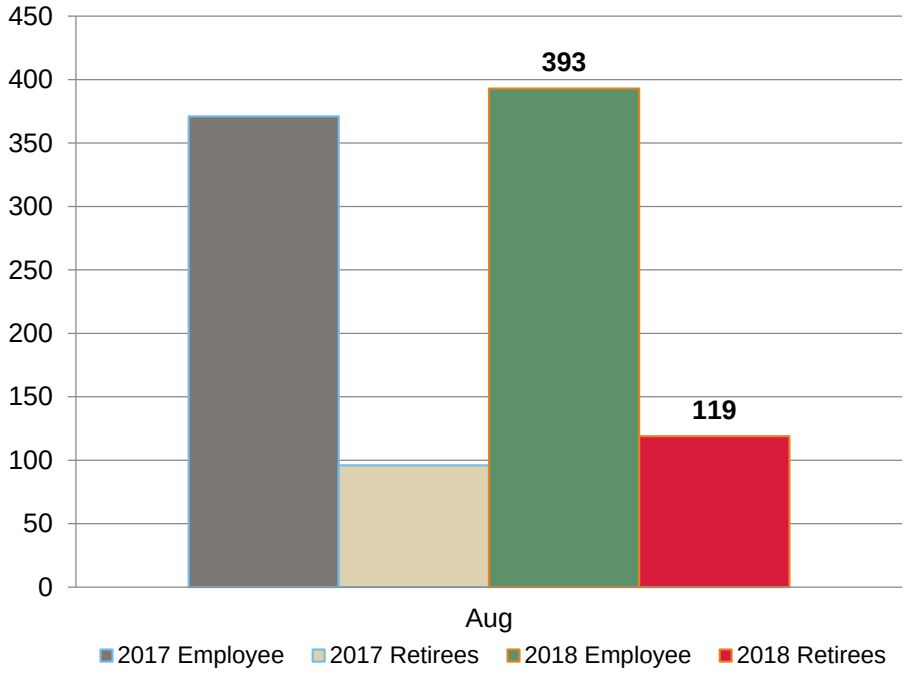
In-person assistance:
1,140 members
(16% ↑ from 2017)



Delinquencies & Terminations: August 2018

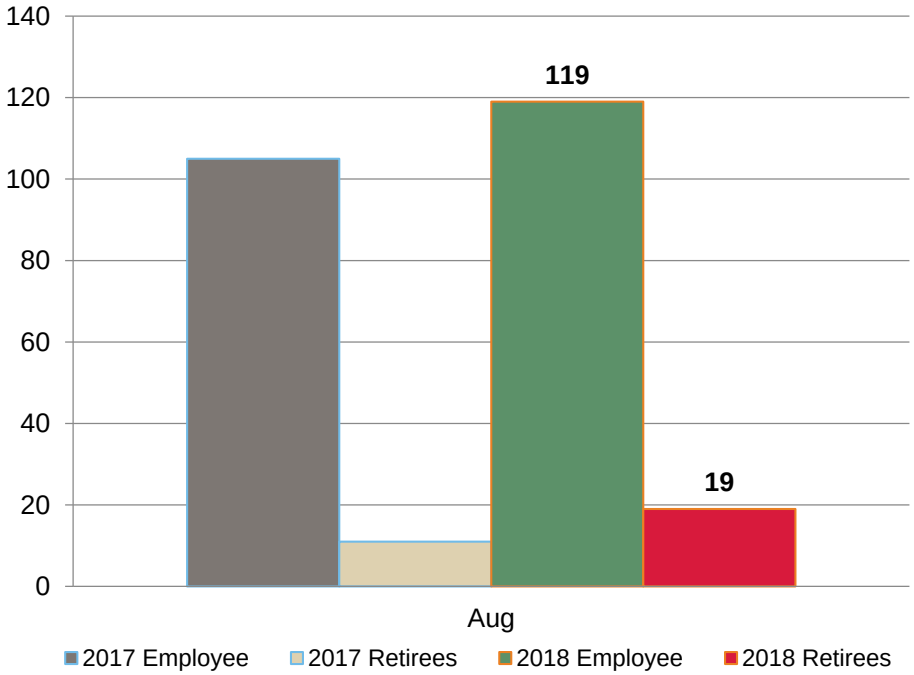
Delinquency Notices Sent.

- Employees: 393
- Retirees: 119



Termination Notices Sent.

- Employees: 119
- Retirees: 19



Enterprise Systems & Analytics Report

September 13, 2018

Key Initiatives

Project	Status	Key Accomplishments
Cybersecurity		• Initiated testing of multifactor authentication
eBenefits (Online OE)		• Completed User Acceptance Testing • Created IAM training materials • Onboarding Retirees to IAM in Progress
Open Enrollment (OE)		• Generated all OE letter files (additional complexity this year in identifying self-service population and Choice Not Available group) • Calculated 2,241 rates
Payment Gateway Conversion		• Development and testing with vendor in progress – Due to convert 9/17
Web Site Redesign		• Completed 2 rounds of polished design review

 On Schedule, Adequate Resources, Within Budget, Risks in Control

 Potential issues with schedule /budget can be saved with corrective actions

 Serious issues. Project most likely delayed or significant budget overrun

Management Report

Communications | September 13, 2018

Communications Update

- Continuous work managing assembly, design, writing, editing, planning and execution of Open Enrollment (OE) materials including:
- Six Guides (30-38 pages ea.), four Booklets (16-pages), 26 custom Open Enrollment Letter templates, six OE Enrollment Forms, OE Events Calendars, posters, banners, multiple flu materials, retiree inserts, multiple custom envelopes featuring artwork.
- Work closely with COO on OE campaign: design, layout, photo selections, pagination, copy, workflow.
- Oversee graphic design work and provide art direction to designer.
- Work closely with OE Project Manager on planning, execution, workflow and timeline with printer and mail house.
- Work closely with Contracts, Data Analytics, Finance and Operations on review, editing, rates, proofing among stakeholders and vendors.
- Plan and coordinate data set mailing lists with Senior Health Program Planner for 26 separate OE mailings to 76,000 members.
- Create and oversee *eBenefits* mailing with Enterprise Systems and Analytics team to 5,000 retirees.
- Continue working on *New Hire* and *Pre-Retiree* videos.
- Review and provide copyediting and revisions to vendor OE letters to members, direct mail and marketing materials.

August 2018 Web Traffic

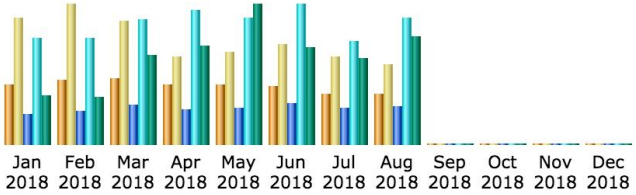
Summary

Month Aug 2018
01 Aug 2018 - 00:00
31 Aug 2018 - 23:59

Unique visitors	Number of visits	Pages	Hits
14951	**23196** (1.55 visits/visitor)	**135760** (5.85 Pages/Visit)	**457599** (19.72 Hits/Visit)
		74345	**86865**

robots, worms, or replies with special HTTP status codes.

Monthly history



Month	Unique visitors	Number of visits	Pages	Hits	Bandwidth
Jan 2018	17545	36976	111391	384230	26.86 GB
Feb 2018	19075	40921	120994	386641	26.42 GB
Mar 2018	19376	36358	143940	454047	49.94 GB
Apr 2018	17301	25827	124584	487422	54.93 GB
May 2018	17487	26861	135209	457999	77.81 GB
Jun 2018	16840	29156	148196	508267	54.39 GB
Jul 2018	14969	25499	134248	376605	47.70 GB
Aug 2018	14951	23196	135760	457599	60.29 GB
Sep 2018	0	0	0	0	0
Oct 2018	0	0	0	0	0
Nov 2018	0	0	0	0	0
Dec 2018	0	0	0	0	0
Total	137544	244794	1054322	3512810	398.35 GB

WELL-BEING MONTHLY REPORT

September, 2018

Prepared for the September 2018 HSB meeting

Campaign and Challenges: Services Summary

We raise awareness about the importance of healthy behaviors and support members to take action with a variety of campaigns and challenges throughout the year.

2018 Goals	2018 Progress as of August
Engage at least 7500 participants (1500/campaign) to participate in taking action related the campaign topic.	YTD: 5553 (74% of goal) 1. Live, Feel, and Be Better in 2018 Pledge = 1558 (ongoing) 2. Colorful Choices Challenge = 1482 3. Create a RECHARGE Routine = 1737 (ended 8/5) 4. Keep America Active = 776 registered so far (starts 9/10) 5. Maintain, Don't Gain Challenge in development.
Develop a campaign about the importance of proper workstation set up and movement to prevent injuries in the office setting.	Campaign name selected (Set Up & Go). Content development for web and print continues.

Employee Assistance Program: Services Summary

We provide a variety of services through the EAP that are grouped into two general categories:

1. Counseling (individual and couple)
2. Organizational Well-Being (i.e. training, consultations, Critical Incident Stress Debriefings (CISD), mediations)

2018 Goals	2018 Progress as of August
Sustain overall service levels as compared to 2017: • 4630 employee contacts • 1889 service hours	• YTD counseling services increased in new clients (15%) and total counseling hours (29%). • YTD organizational services decreased in the number of services offered (9%) and people served (10%).
Develop and launch a new training for leaders.	Training was completed in May and piloted in June and July. August was used to make revisions based on the pilot. Trainings are scheduled for September.

Well-Being@Work: Services Summary Part 1

We help departments create a culture of well-being through the Well-Being@Work framework which includes recruitment and training of key players, the development of annual plans for well-being, resources (campaign support materials, onsite activities, and grants), and recognition (spotlights and awards).

2018 Goals	2018 Progress as of August
Key Players: • 200 Champions • 50% of Champions attend training • 35 departments will have Department Leads for Well-Being (50% increase from 2017)	• 213 Champions • 107 (50%) of Champions attended one of 13 Play Your Way and Flu Prevention trainings. • 45 Department Leads for Well-Being
Annual Plans: • 25 departments will have Annual Plans for Well-Being (30% increase from 2017)	• 26 departments with plans

Well-Being@Work: Services Summary Part 2

2018 Goals	2018 Progress as of August
Resources: Onsite Activities • Offer 445 activities (10% more than 2017). Group Exercise • 13,250 visits (10% more than 2017) to group exercise classes offered by RPD at worksites Grants • Review the process and make improvements to increase efficiency and execution. • Award $125,000 in grants to departments for well-being.	Onsite Activities • 331 activities YTD (75% of goal) • Started tracking people served by onsite activities in 2018. Group Exercise • *These data will be available at the end of the next quarter.* Grants • The grant process was updated and communicated to departments via email and 2 webinars. • Grants for FY18-19 were due 8/31 and will be reviewed in September.
Recognition: Spotlights • 100 (20% more than 2017) Awards • 25 (30% more than 2017)	Spotlights • The most recent request for Spotlights were due 8/24 and are being reviewed.

Targeted Interventions: Services Summary

We target specific conditions (highly prevalent, high cost, highly preventable) with specialized programs.

2018 Goals	2018 Progress as of August
Healthy Weight Program (HWP) • Offer 12 sessions (20% increase from 2017) serving at least 120 people.	• 10 sessions are complete. • 2 began in August.
Diabetes Prevention Program (DPP) • Partner with the Y to bring the DPP to the worksite. Offer at least 3 cohorts.	• Summer launch delayed until the new year. • 5 locations have been identified for the launch. Meetings are scheduled for September to determine department/location interest.
Flu Shot Clinic & Educational Campaign • Educate members about the importance of the flu shot. • Provide ~25 worksite clinics to facilitate members getting shots and to help raise awareness. Provide immunizations to at least 4300 members at clinics (same as 2017).	• SFHSS Communications is finalizing educational and promotional materials for worksites and OE materials. • 25 clinic locations are confirmed for Oct. 1-Nov. 2.

Catherine Dodd Wellness Center: Services Summary

We offer services at the Wellness Center that serve employees and retirees in the area.

2018 Goals	2018 Progress as of August
8,800 visits annually (10% increase from 2017)	• Play Your Way Fitness Fair was offered to attract new members, share physical activity resources, and promote this year's Play Your Way campaign and Keep America Active Challenge. The health plans, several fitness centers, and City departments all exhibited at the fair. • 146 members attended the fair. • *Detailed Wellness Center reports are provided twice annually.*

Member Education: Services Summary

In addition to the campaigns and challenges, we strive to educate members about health and well-being resources through medium such as the enewsletter, website, and tabling events.

2018 Goals	2018 Progress as of August
Enhance the members' website experience – facilitate access to resources.	• Launched new Champion webpages including a searchable list of Champions and sortable training content to facilitate access to Well-Being@Work resources. • Coming in October: EAP and mental health website content. • In development: Content for Set Up & Go, the movement and ergonomics campaign and Maintain, Don't Gain, the holiday weight management challenge. • Ongoing: Participate in the website redesign project. Provided feedback on visual design and user experience as it relates to well-being content.

Retiree Well-Being Needs Assessment: Services Summary

To better serve the retired SFHSS members, we strive to understand their current state of well-being, needs, and interests.

2018 Goals	2018 Progress as of August
10% participation in the Retiree Check In survey	• Finalized the Retiree guide to Live Better Every Day which provides high level results from the survey, resources for retirees to address certain topics, and the opportunity to set goals. These guides will be available during Open Enrollment and on an ongoing basis.

The New York Times

You'll Never Guess Which Company Is Reinventing Health Benefits

Frustrated with insurers, some large companies — including a certain cable behemoth — are shedding long-held practices and adopting a do-it-yourself approach.

By Reed Abelson

Aug. 31, 2018

Comcast spends roughly $1.3 billion a year on health care for its 225,000 employees and families.
Cindy Ord/Getty Images

It's hard to think of a company that seems less likely to transform health care.

It isn't headquartered in Silicon Valley, with all the venture-backed start-ups. It's not among the corporate giants — Amazon, Berkshire Hathaway and JPMorgan Chase — that recently announced, with much fanfare, a plan to overhaul the medical-industrial complex for their employees.

And it is among the most hated companies in the United States, according to many surveys on customer satisfaction.

It's Comcast. The nation's largest cable company — the $169 billion Philadelphia-based behemoth that also controls Universal Parks & Resorts, "Sunday Night Football" and MSNBC — is among a handful of employers declaring progress in reaching a much-desired goal. In the last five years, the company says, its health care costs have stayed nearly flat. They are increasing by about 1 percent a year, well under the 3 percent average of other large employers and below general inflation.

"They're the most interesting and creative employer when it comes to health care benefits," said Dr. Bob Kocher, a partner at Venrock, a venture capital firm whose portfolio companies have done business with Comcast. (The cable company declined over several months to provide executives for an interview on this topic.)

Comcast, which spends roughly $1.3 billion a year on health care for its 225,000 employees and families, has steered away from some of the traditional methods other companies impose to contain medical expenses. It rejected the popular corporate tack of getting employees to shoulder more of the rising costs — high-deductible plans, a mechanism that is notorious for discouraging people to seek medical help.

Most employers now require their workers to pay a deductible before their insurance kicks in, with individuals on the hook for $1,500, on average, in upfront payouts, according to the Kaiser Family Foundation. Instead, Comcast lowered its deductible to $250 for most of its workers.

"We believe that no one should be required to be an expert in health care," Shawn Leavitt, the executive overseeing benefits at Comcast, said in a 2015 interview with a consultant. "Our model is based on providing employees support and assistance in making the right decisions for themselves and their families. Employees should not feel alone, confused and overwhelmed when it comes to understanding and selecting their benefits."

Cable TV subscribers who have felt confused and overwhelmed when dealing with Comcast customer service may be surprised to learn how nimbly the company has upgraded services for its employees. While Comcast continues to work with insurers, it has largely shunned them as a source of innovation. Instead, it has assembled its own portfolio of companies that it contracts with, and invests in some of them through a venture capital arm, Comcast Ventures.

Turning to health start-ups for new benefits

One such company is Accolade, in which Comcast is an investor, and which provides independent guides called navigators to help employees use their health benefits. Another, called Grand Rounds, offers second opinions and help in finding a doctor. Comcast was also among the first major employers to offer workers access to a doctor via cellphone through Doctor on Demand, a telehealth company.

"We see the start-up community as where the real disruption is taking place," said Brian Marcotte, the chief executive of the National Business Group on Health, which represents large employers. "We weren't seeing enough innovation." The group now vets some of these companies for employers, including Comcast.

Comcast "is the tip of the spear," Mr. Marcotte said.

The corporation, of course, is controlling costs and offering these unusual benefits out of self-interest. And these services are sometimes handed out at the expense of improving wages. In a tight labor market, Comcast also needs to remain competitive for not only highly skilled employees, but also lower-wage workers whose direct contact with customers has generated so much dissatisfaction over the years. "We do these things because it's great for business," Mr. Leavitt said.

But much of what sets Comcast apart is its willingness to directly tackle its medical costs rather than relying on others — insurers, consultants or associations. It's a luxury only the largest companies can afford, and roughly a fifth of big companies continue to see annual cost increases of more than 10 percent, according to Mercer, a benefits consultant.

While fate may play a role — a single expensive medical claim can drive up a company's costs in any given year — employers, like Comcast, that use a variety of strategies tend to have the lowest annual increases. "You attack this thing from different angles," said Beth Umland, Mercer's director of research for health and benefits. "The intensity of effort pays off."

Some companies are shaking up hospitals and doctors

Other employers are focusing more attention on unsatisfying hospitals and doctors. Walmart has been at the forefront of efforts to direct employees to specific providers to get medical care, even if it means paying their travel to places like the Mayo Clinic.

The retailer said it had found, for example, that employees were being told they needed back surgery even when they would not benefit from the procedure. "Walmart isn't going to stand for this," said Marcus Osborne, a benefits executive, at a health business conference. "We aren't going to sit around to try to build another coalition or bureaucracy."

The majority of working-age Americans — some 155 million — get their health insurance through an employer, and most companies cover their own medical costs. The companies rely on insurers to handle the paperwork and to contract with hospitals and doctors. Insurers may also suggest programs like disease management or wellness to help companies control costs.

But employers, including that Amazon-Berkshire-JPMorgan alliance, are increasingly unhappy with the nation's health care systems. Companies are paying more than they ever have. And their employees, saddled with escalating out-of-pocket costs and a confusing maze, aren't well served, either. "The results haven't been there," said Jim Winkler, a senior executive at Aon, a benefits consultant. "There's frustration."

At Comcast, some workers probably miss out on the new ventures altogether and others don't have much choice but to go along. The company's relationship with labor is often strained, and it has largely managed to fend off efforts by groups like the Communications Workers of America to organize its employees. Robert Speer, an official with a local of the International Brotherhood of Electrical Workers in New Jersey that represents about 180 workers, noted the company's use of independent contractors to do much of its work, none of whom are eligible for benefits and can be paid by the job rather than hourly. "You are making no money," he said.

And, like many other workers, many employees are being pinched by the rising cost of premiums, Mr. Speer said.

Comcast workers with company coverage are told to go to Accolade first. Its phone number appears on the back of their insurance cards and on the benefits website. "The key to Accolade's success is being the one place to go," said Tom Spann, a co-founder of the company.

Geoff Girardin, 27, used Accolade when he worked at Comcast a few years ago and he and his wife were expecting. "Our introduction to Accolade was our introduction to our first kid," Mr. Girardin said. He credits Accolade for telling him his wife was eligible for a free breast pump and helping find a pediatrician when the family moved. "It was a huge, huge help to have somebody who knew the ins and outs" of the system, he said.

For employees like Jerry Kosturko, 63, who survived colon cancer, Accolade was helpful in steering him through complicated medical decisions. When he needed an M.R.I., his navigator recommended a free-standing imaging center to save money. "They will tell me what things will cost ahead of time," Mr. Kosturko said.

A nurse at Accolade helped him manage symptoms after he had surgery for bladder cancer in 2014. He developed terrible spasms because, he said, he wasn't warned to avoid caffeine. The Accolade nurse thought to ask him and quickly urged him to call his doctor for medicine to ease his symptoms.

Mr. Kosturko also turned to Grand Rounds when his doctor thought he might need to stay overnight in the hospital to be tested for sleep apnea. The second opinion convinced him he did not.

In complicated cases, Grand Rounds can serve as a check on the network assembled by the insurer. It pointed to the case of Ana Reyes, 39, who does not work for Comcast and had contacted Grand Rounds after treatment for cervical cancer. When she continued to have symptoms, she says, she was told to wait to see if they persisted.

"This is my life at stake," she recalled in an interview. "I need to know what I'm doing is the best plan." Grand Rounds asked a specialist at Duke University School of Medicine, Dr. Andrew Berchuck, to review her case.

"Grand Rounds was able to get all my medical records, which is over 1,000 pages," Ms. Reyes said. Dr. Berchuck reviewed and wrote his opinion in one week, recommending a hysterectomy because she was likely to have some residual cancer. "The same day, my treating physician, she called me to schedule a hysterectomy," Ms. Reyes said.

Insurers are usually none too pleased with the employers' use of alternatives: They're reluctant to share information with an outside company and poised to undercut a potential competitor by offering a cheaper price. They may even refuse to work with some of the companies.

The largest employers push back. Fidelity Investments insists on cooperation between insurers and outsiders, said Jennifer Hanson, an executive at Fidelity Investments. "Those who don't will be fired," she said at a health business conference.

For Comcast, the next frontier is the financial well-being of its employees, many of whom live paycheck to paycheck and may not be able to afford even a small co-payment toward a doctor's visit. Employees who run into financial trouble have no independent source of information, Mr. Spann said.

After talking to hundreds of companies, Comcast Ventures could not find a financial services start-up that would help employees without trying to sell them a product or earning their money on commissions. So Comcast recruited Mr. Spann to serve as chief executive of a new company, Brightside, that it created and invested in.

Employees who are less worried about their finances may be less likely to miss work or suffer from health problems, Mr. Leavitt said. Ultimately, he said, "there is a productivity play for Comcast."

Reed Abelson covers the business of health care, focusing on health insurance and how financial incentives affect the delivery of medical care. She has been a reporter for The Times since 1995. @ReedAbelson

By Richard M. Scheffler, Daniel R. Arnold, and Christopher M. Whaley

Consolidation Trends In California's Health Care System: Impacts On ACA Premiums And Outpatient Visit Prices

DOI: 10.1377/hlthaff.2018.0472
HEALTH AFFAIRS 37,
NO. 9 (2018): 1409–1416

ABSTRACT **California has heavily concentrated hospital, physician, and health insurance markets, but their current structure and functioning is not well understood. We assessed consolidation trends and performed an analysis of "hot spots"—markets that potentially warrant concern and scrutiny by regulators in terms of both horizontal concentration (such as hospital-hospital mergers) and vertical integration (hospitals' acquisition of physician practices). In 2016, seven counties were high on all six measures used in our hot-spot analysis (four horizontal concentration and two vertical integration measures), and five counties were high on five. The percentage of physicians in practices owned by a hospital increased from about 25 percent in 2010 to more than 40 percent in 2016. The estimated impact of the increase in vertical integration from 2013 to 2016 in highly concentrated hospital markets was found to be associated with a 12 percent increase in Marketplace premiums. For physician outpatient services, the increase in vertical integration was also associated with a 9 percent increase in specialist prices and a 5 percent increase in primary care prices. Legislative proposals, actions by the state's attorney general, and other regulatory changes are suggested.**

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Increases in the market concentration of health care providers and insurers have been examined nationally.[1–3] Studies suggest that increases in market concentration are associated with increases in prices and premiums.[2–12] However, we also know that the local markets for health care differ dramatically. At the state level, laws and regulations, as well as the mix of providers and insurers, make markets in each state vastly different.

The health care system in California has several characteristics that distinguish it from the rest of the country.[13] The state contains some of the nation's most densely populated urban areas, but it is mostly rural. Its health care system has a high level of integration and managed care. More than 60 percent of care is provided through a fully or highly integrated care system.[14–16] The supply of doctors and nurses in California is slightly above national averages. For example, California has 380 physicians per 100,000 population, whereas the US has 295 per 100,000.[17] Although per capita health care spending in California was the fifteenth-lowest in the US in 2014,[18] it has been increasing—in large part because of the successful implementation of the Affordable Care Act (ACA) in California.[15]

This article explores three features of California health care markets. First, we measure trends from 2010 to 2016 in the horizontal concentration of insurers and providers (such as hospital-hospital mergers and acquisitions) and vertical integration—particularly, ownership of physician practices by hospitals. Second, we estimate the association of market concentration and vertical integration with ACA Marketplace premi-

ums and outpatient office visit prices. Finally, we discuss policy implications for California's Office of the Attorney General, the legislature, and other regulators in the state.

Study Data And Methods

DEFINING MARKET CONCENTRATION AND MARKET SHARE We measured market concentration by computing Herfindahl-Hirschman Indices (HHIs) for insurance, hospitals, primary care physicians, and specialist physicians in California. For each measure, we calculated these HHIs by summing the squared market shares of firms. For example, if a market included two firms, one with 80 percent of the market and the other with 20 percent, the HHI of the market would be 6,800 (or 80^2 plus 20^2). The Horizontal Merger Guidelines of the Department of Justice (DOJ) and Federal Trade Commission (FTC) consider markets with HHIs below 1,500 to be unconcentrated, those with HHIs of 1,500–2,500 to be moderately concentrated, and those with HHIs above 2,500 to be highly concentrated.[19] In the context of mergers, the DOJ/FTC guidelines state, "Mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power."[19] Both mergers in moderately concentrated markets that would lead to an increase in the HHI of more than 100 points and mergers in highly concentrated markets resulting in an increase in the HHI of 100–200 points "potentially raise significant competitive concerns and often warrant scrutiny," according to the guidelines.[19]

Our market shares for hospitals included only short-term general hospitals.[20] Additionally, we treated hospital systems as a single firm because they bargain with insurers as a single unit.[21] We calculated the market share of hospitals and health insurers using inpatient admissions and commercial enrollment (for both fully and self-insured employer groups), respectively. For specialist and primary care groups, we calculated market shares using the number of physicians in each group. Physician organizations owned by a group medical practice, hospital, or health care system (which always included at least one hospital) were treated as a single firm. Our measure of specialist market share included four specialties—cardiology, hematology/oncology, orthopedics, and radiology. These four specialties were chosen because the sample sizes were sufficiently large (at least 10,000 physicians nationally) in our physician data source. Data sources used to calculate these measures included the American Hospital Association (AHA) Annual Survey Database, for hospitals; the Managed Market Surveyor provided by Decision Resources Group (formerly HealthLeaders-Interstudy), for health insurers; and the SK&A Office Based Physicians Database provided by QuintilesIMS, for physicians (this data source is now known as IQVIA). We measured the level of vertical integration as the percentage of physicians in practices owned by hospitals.[22] We chose to use the SK&A database instead of the AHA database to measure the level of vertical integration because the former provides a more conservative estimate (by 4 percentage points) of the number of physicians in hospital-owned practices, according to a recent study.[23]

ANALYSIS Using multivariate linear regression, we estimated the association between Marketplace premiums and our measures of horizontal concentration and vertical integration in the market, using data for 2014–17 on premiums from the Covered California website.[24] We analyzed the benchmark premiums—those for the second-lowest-cost silver plan in each rating area—for a forty-year-old person. Rating areas are counties or combinations of counties in California through which Covered California sells health insurance. There were nineteen rating areas established by the California State Legislature in September 2013. Because the premiums available were at the rating area level, we correlated them with rating area–level HHIs (that is, we used rating area–level market shares in HHI calculations) rather than county-level HHIs.

The dependent variable in our model was the benchmark premium for a forty-year-old person in a rating area for a particular year. The independent variables in the model were the natural log of hospital HHI (mean centered), the percentage of all physicians in practices owned by hospitals (mean centered), an interaction term between these two measures, the natural log of insurer HHI, the natural log of the average weekly wage in rating areas, and year dummy variables to control for secular trends. All market concentration measures were lagged by one year because Marketplace premiums are set prospectively. There were seventy-six observations in the regression (nineteen rating areas multiplied by four years, 2014–17).

In separate regressions, we also estimated the association between market concentration and physician prices, separately for primary care physicians and specialists. The physician prices we analyzed came from medical claims data for 2011–16 collected from self-insured employers from multiple industries, including professional services, retail, local government, technology, and manufacturing. The database we used contained 70.9 million California claims for 2011–16 and included data for every county in the state.

From the claims data, we identified all procedures performed in an office-based setting by primary care physicians and specialists. For each procedure, identified by *Current Procedural Terminology* (CPT) codes, we calculated the mean price per procedure in each county and year. These prices represented the market-level prices used as the dependent variable in our model.

We then examined the association between market concentration and office visit prices using the log-transformed county-level price for each procedure and year, which allows for a percentage interpretation of our results. To measure market concentration, we used the log-transformed primary care physician or specialist HHI, the log-transformed insurer HHI, and the percentage of physicians (either primary care or specialists) in practices owned by a hospital. All market concentration measures were lagged by one year. We included fixed effects for CPT code, county, and year.

LIMITATIONS The study had several limitations. First, we could not rule out potential endogeneity or omitted variable bias between concentration/integration and prices/premiums. While our price regressions used CPT code, county, and year fixed effects to ameliorate concerns of omitted variable bias, our Marketplace premium model included year fixed effects only. And while lagging our concentration measures by a year should have helped reduce the concern of endogeneity, it did not eliminate the possibility.

Second, we report results for a single state. As we stated above, California's health care market differs from those of other states in a number of ways. Hence, our results might not be generalizable to other states. Finally, we did not measure the effects of integration on quality and utilization.[25] If care were more expensive while also more comprehensive, overall utilization and spending could decrease as prices increase.

Study Results

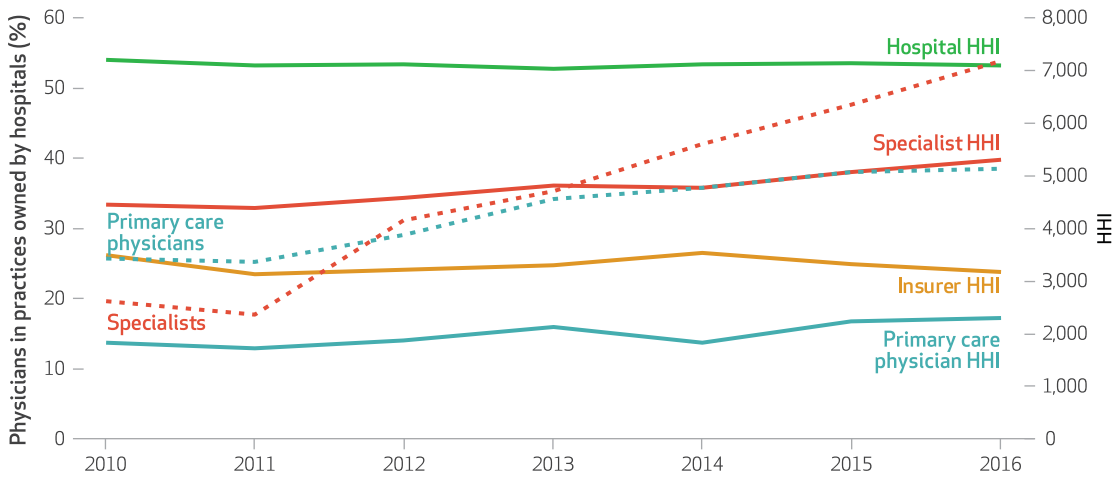
Hospitals in the forty-one counties with populations of less than 500,000 were highly concentrated during the entire study period (exhibit 1), with an average HHI of more than 7,000. (See online appendix figures A2–A4 for results for other counties.)[26] The insurer market was also highly concentrated, with an average HHI of more than 3,000 during the study period. For physician markets, the specialist HHI was more than 5,000, while the primary care physician HHI was just under 2,300 (exhibit 1).

There was a dramatic increase in vertical integration, with the percentage of physicians in practices owned by hospitals increasing from about 25 percent in 2010 to more than 40 percent by 2016 (data not shown). The percentage of primary care physicians in practices owned by hospitals increased from 26 percent to 38 percent in this time period, while the percentage of specialists in such practices increased from 20 percent to 54 percent (exhibit 1).

We also examined the average trends in hori-

EXHIBIT 1

Horizontal concentration and vertical integration in selected California counties, 2010–16



SOURCE Authors' analysis of data for health insurers from the Managed Market Surveyor provided by Decision Resources Group (formerly HealthLeaders-Interstudy), for hospitals from the American Hospital Association Annual Survey Database, and for physicians from the SK&A Office Based Physicians Database provided by QuintilesIMS. **NOTES** Herfindahl-Hirschman Indices (HHIs) indicate market concentration and are explained in the text. The figure shows unweighted data for forty-one California counties with populations of less than 500,000. Specialists include physicians in the fields of cardiology, oncology, radiology, and orthopedics. The dashed lines refer to percentages of primary care physicians and specialists in practices owned by hospitals.

zontal concentration and vertical integration for all counties, calculated at the county level and weighted by the population of each county to produce a statewide weighted average (appendix figure A1).[26] The population-weighted HHI for insurers was the highest among all of the horizontal measures (about 2,400), with virtually no change over the study period. The population-weighted HHI for hospitals was slightly lower and also showed little change. Most of the hospital and insurer consolidation in California took place before our study period.[27] The population-weighted HHIs for specialists and primary care physicians increased by 17 percent and 19 percent, respectively, in the period but remained below 1,500. The statewide average level of vertical integration, as measured by the percentages of physicians in practices owned by hospitals, increased at a rate similar to that for the forty-one counties with populations of less than 500,000.

To analyze levels of and changes in market concentration, we constructed a map of "hot spots"—markets that potentially warrant concern and scrutiny by regulators in terms of both horizontal concentration and vertical integration (exhibit 2). It should be noted that our vertical integration threshold is not codified in the DOJ/FTC guidelines, as the horizontal concentration threshold is.

Only two counties had a market concentration score (or "hot spot rating") of 6 in 2010. This increased to seven counties in 2016 (see appendix table A1 for a list of all counties and appendix figure A5 for a map of counties by name).[26] Similarly, only two counties had a score of 5 in 2010, compared to five counties in 2016.

We measured increases in the horizontal concentration and vertical integration scores. (Appendix figure A6 summarizes and displays the changes in our hot-spot map.)[26] For horizontal concentration, an increase in the score was recorded if the county had an HHI above 2,500 and a change in HHI that was greater than 200 points—in line with the DOJ/FTC Horizontal Merger Guidelines. For vertical integration, an increase in the score was recorded if the county went from below the median value in 2010 to above it in 2016.[28] During this period, out of a maximum score of 6, the highest score was 4. This indicates that the county's horizontal concentration or level of vertical integration increased on four of the six measures.

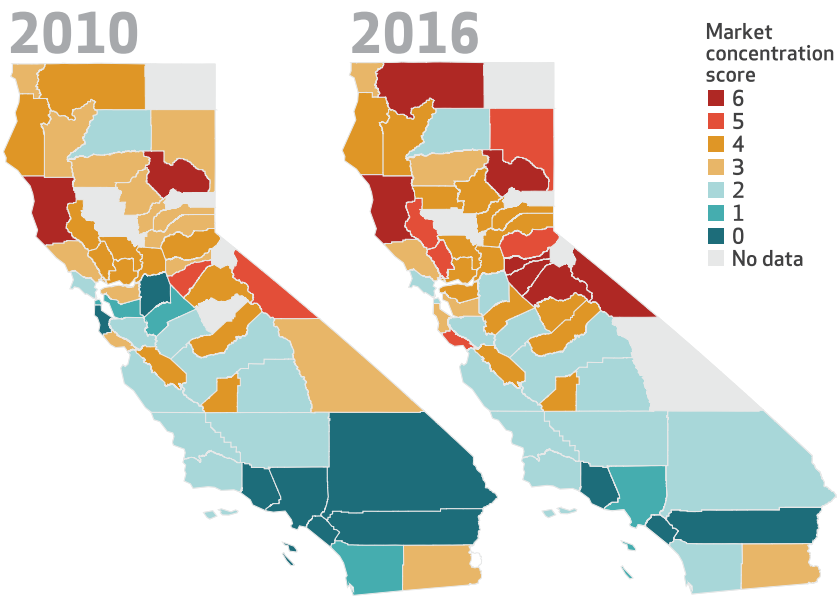
Four counties—Amador, El Dorado, Santa Cruz, and Siskiyou—each had a score of 4, which indicates that they had had the greatest change in terms of our six measures (appendix figure A6).[26] Of additional concern are the six counties—Calaveras, Humboldt, Kings, San Mateo, Stanislaus, and Tuolumne—that had a score of 3.

Appendix table A2[26] reports the results of our analysis of the relationship between benchmark Marketplace premiums and our measures of horizontal concentration and vertical integration. Our results suggest that hospital concentration was positively associated with Marketplace premiums. A 10 percent increase in the market concentration of hospitals was associated with a 1.8 percent increase in premiums; this is expressed as an elasticity of 0.182. Our measure of insurer concentration was also positively associated with premiums. The elasticity of 0.204 indicates that a 10 percent increase in insurer concentration was associated with a 2.0 percent increase in premiums. Importantly, the interaction term between hospital concentration and the level of vertical integration was positive and significant ($p < 0.05$). This means that the association between hospital concentration and premiums was larger when a high percentage of the physicians in a rating area were working in practices owned by hospitals.

The association between hospital concentra-

EXHIBIT 2

Horizontal concentration and vertical integration scores for selected California counties, 2010 and 2016



SOURCE Authors' analysis of data sources provided in exhibit 1. **NOTES** Each county has a market concentration score based on six measures: the average Herfindahl-Hirschman Indices (HHIs) (explained in the text) for hospitals, insurers, primary care physicians, and specialists; and the percentages of primary care physicians and specialists (explained in the notes to exhibit 1) working in practices owned by hospitals. Higher index values indicate greater concentration. Counties are assigned one point for each HHI greater than 2,500 and for the percentage of primary care and specialist ownership greater than 33.23 percent and 32.35 percent, respectively (the medians for the period 2010–16). Higher scores indicate greater market concentration. The scores can also be interpreted as a thermal gradient, with the cool colors indicating counties that warrant lower concern and scrutiny by regulators and the hotter colors indicating counties that warrant increasingly more.

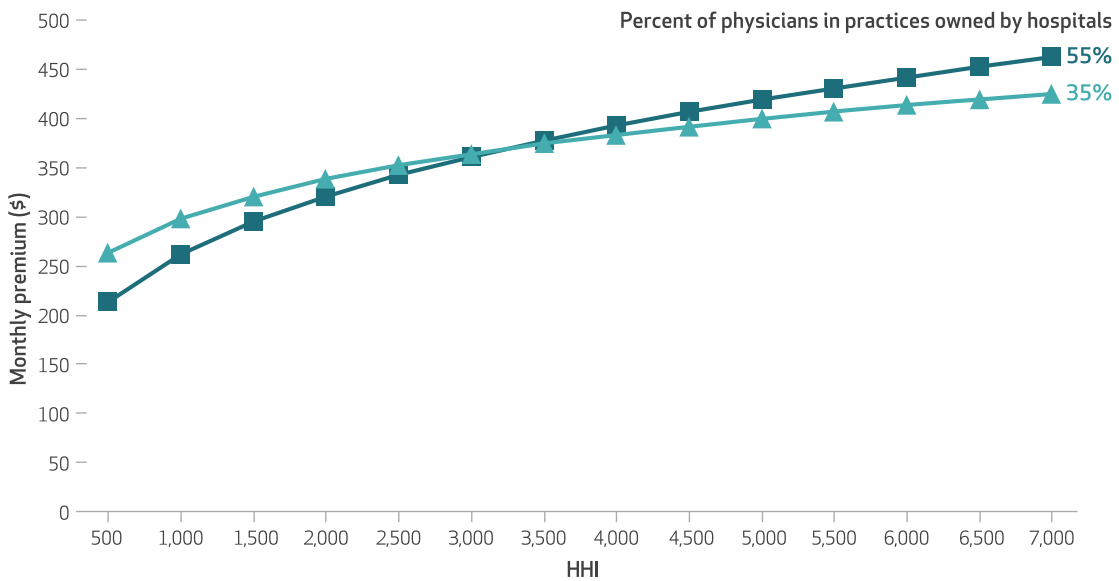
tion, the level of vertical integration, and Marketplace premiums is highlighted in exhibit 3. At a hospital HHI of 3,500, the predicted average monthly Marketplace premium for a forty-year-old person was about $375 in 2017. When the hospital HHI increased to 5,000, the predicted premium rose to about $400 (a 7 percent increase) if the percentage of physicians in practices owned by hospitals was 35 percent (the sample mean). If this percentage was 55 percent (the sample maximum), the predicted average monthly premium increased by even more—to about $419 (a 12 percent increase). This suggests that the association between hospital HHI and premiums varies with the percentage of physicians in practices owned by hospitals (an interaction effect) and that the impact of hospital concentration on premiums becomes larger as vertical integration increases.

Turning to the association between market concentration and physician prices, we found that higher levels of insurer concentration were associated with lower primary care prices (see appendix table A3 for the regression output).[26] Primary care physician concentration, however, was positively associated with prices. Most important, we found a positive and highly significant ($p < 0.01$) relationship between the level of vertical integration and primary care prices. Our results for specialist prices were somewhat different. We found no association between the concentration of insurers or specialists and specialist prices. However, there was again a positive and highly significant ($p < 0.01$) relationship between the level of vertical integration and specialist prices.

The positive relationship we found between vertical integration and physician prices aligns with the findings of other studies.[3,4] The magnitude of is relationship is shown in exhibit 4. When the percentage of specialists in practices owned by hospitals was 35 percent (the county-level sample mean over our study period), the predicted specialist price in 2017 was about $110. When the percentage increased to 100 percent (the county-level sample maximum over our study period), the predicted specialist price increased to about $120—a 9 percent increase. When the percentage of primary care physicians in practices owned by hospitals increased from 33 percent (the county-level sample mean over our study period) to 100 percent (the county-level sample maximum), the predicted primary care price in 2017 increased from about $80 to $84—a 5 percent increase.

EXHIBIT 3

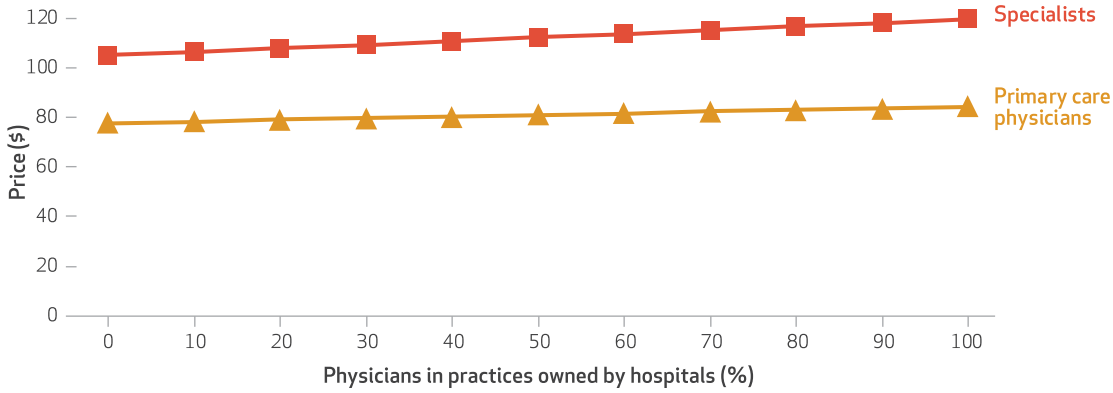
Predicted monthly benchmark premiums in California, by hospital market concentration, and physicians in practices owned by hospitals (maximum and mean), 2017



SOURCE For health insurers, authors' analysis of data sources provided in exhibit 1; for premiums, authors' analysis of data from Covered California. Data and research [Internet]. Sacramento (CA): Covered California; [cited 2018 Aug 21]. Available from: http://hbex.coveredca.com/data-research/. **NOTES** The benchmark premium is the premium for the second-lowest-cost silver plan in each rating area (explained in the text) for a forty-year-old person. HHI is Herfindahl-Hirschman Index (explained in the text). The regression coefficients used to produce this exhibit are in appendix table A2 (see note 28 in text). All continuous independent variables not shown in the exhibit were held at their sample means, and the year dummy variable was set to 2017.

EXHIBIT 4

Predicted outpatient office visit prices for primary care and specialist physicians, by percent of physicians in practices owned by hospitals, 2016



SOURCE For health insurers, authors' analysis of data sources provided in exhibit 1; and for prices, data obtained from a large group of self-insured employers. **NOTES** The regression coefficients used to produce this exhibit are presented in appendix table A3 (see note 28 in text). All continuous independent variables not shown in the exhibit were held at their sample means, the year dummy variable was set to 2016, and the county fixed effect was set to San Francisco.

Discussion

The most dramatic changes in hospital, physician, and insurer markets in California from 2010 to 2016 are seen most clearly in our measures of vertical integration—the percentages of primary care physicians and specialists in practices owned by hospitals. In 2016 more than 40 percent of physicians worked for practices owned by hospitals. Hospitals' desire to increase referrals has been advanced by researchers as a plausible explanation for why they pursue acquiring physician practices.[3,29,30] Additionally, physicians working in a hospital-owned practice can add a hospital facility fee, which raises prices.[31] Although there was little change in the market concentration of insurers and hospitals during our study period, both were highly concentrated according to the DOJ/FTC Horizontal Merger Guidelines and warrant high levels of concern and scrutiny by regulators. Any further consolidation, either horizontal or vertical, may need to be carefully examined.

There was significant variation in market concentration across the fifty-eight counties in California. Our hot-spot analysis shows that certain counties were high on all six measures of horizontal concentration and vertical integration. Moreover, some of these counties had an HHI increase of more than 200, which signals the need for regulatory scrutiny. This information can be used by California's Office of the Attorney General, the legislature, and other regulators to examine further consolidations and other actions that might increase market concentration or vertical integration.

An important result of our analysis is the combined effect of hospital concentration and vertical integration on Marketplace premiums. Hospital concentration was positively associated with premiums, and the impact of hospital concentration on premiums became larger as vertical integration increased.

Our measure of vertical integration, the percentage of physicians in practices owned by hospitals, was positively and significantly correlated with primary care and specialty physician prices. This suggests that increased and special attention should be given to the acquisition of physician practices by hospitals in California.

Such acquisitions are not California-specific: From 2010 to 2016 the national share of office-based physicians who worked in organizations owned by hospitals increased from 30 percent to 48 percent.[32] Other states have already taken regulatory actions to address this trend. One such action is taking place in Washington State, where the State Attorney General's office filed suit against Franciscan Health System to unwind acquisitions of and affiliations with physician organizations that allegedly violated antitrust laws and harmed consumers via anticompetitive health care prices.[33] The results of the St. Luke's case in Idaho are also relevant.[34] In this case, the judge took into account the benefits of vertical integration but found that the hospital's purchase of physician practices would give the hospital too much market power. Instead of allowing the hospital to purchase practices, he suggested that the benefits of vertical integration could be achieved by contracting, which would give the other hospitals in the area the ability to work with these physicians as well.

What can be done in the California legislature to deal with the effects of market concentration and integration on health care prices and premiums? Three important bills have been introduced in the legislature but have not yet passed. The first is SB-932 (2016), which proposes that any merger or consolidation would need to be approved by the director of the California Department of Managed Health Care and involve public hearings to ensure that the change would not have adverse effects on competition, health care costs, access, or quality of care in the state. SB-932 would also prevent hospitals from making anticompetitive demands when negotiating with health plans and insurers.[35] More recently, AB-595 (2017) would similarly require the director to review and approve health care plan or provider mergers based on whether they would have adverse effects on competition, health care costs, access, or quality of care.[36] Finally, SB-538 (2017) focuses on preventing anticompetitive practices among large hospital chains by instituting new rules for how hospital systems can contract with health plans, such as prohibiting hospital systems from requiring plans to include all of a system's hospitals in a contract.[37]

California's health care markets are at a pivotal point. Rapid integration and consolidation may have significant benefits. Care coordination and quality improvement are possible, but so are significant increases in the cost of care.[38] There is also a large variation in quality across California, as measured by the California Regional Health Care Cost and Quality Atlas.[39] It would be very useful to understand the relationship between quality and market concentration. Evidence provided by our study sheds light on what has been happening in California's health care markets. Our work highlights areas that should be of concern to regulators, policy makers, payers, and consumers.

Conclusion

Three aspects of hospitals' acquisition of physician practices in California and across the country are notable. First is the horizontal aspect of this consolidation, which needs to be scrutinized. For example, if a hospital system controls the market for orthopedists, it can raise prices for orthopedic surgery. Second is the cross-market power in hospital and physician service markets. For example, if a dominant hospital system acquires enough physician practices in a specialty, it can add significantly to its market power. Finally, the key and perhaps most important competitive threat is the ability of the acquiring hospital system to either foreclose rivals or significantly increase their costs. For example, lack of access to the patients of an acquired primary care practice by a rival hospital would be a vertical restraint that would limit competition.

The potential impact of hospitals' acquisition of physician practices calls for careful and detailed examination.[40] Improved economic and legal theories need development so that these acquisitions' potential efficiency and quality improvement can be weighed against the costs.[41,42] ■

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