



Why U.S. Health Care Costs So Much, and What a Region Can Do in Response

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Issue Briefs by Leif Wellington Haase

Commissioned by the Jewish Healthcare Foundation and
Pittsburgh Regional Health Initiative

INTRODUCTION

Since the Pittsburgh Regional Health Initiative (PRHI) started in 1997 as an initiative of the Allegheny Conference on Community Development, it has been on a journey to achieve a value reform vision in health care. By turning its own community into a demonstration lab, PRHI sought to show that removing waste and reinvesting in services that matter would create maximum value for the patient and for society.

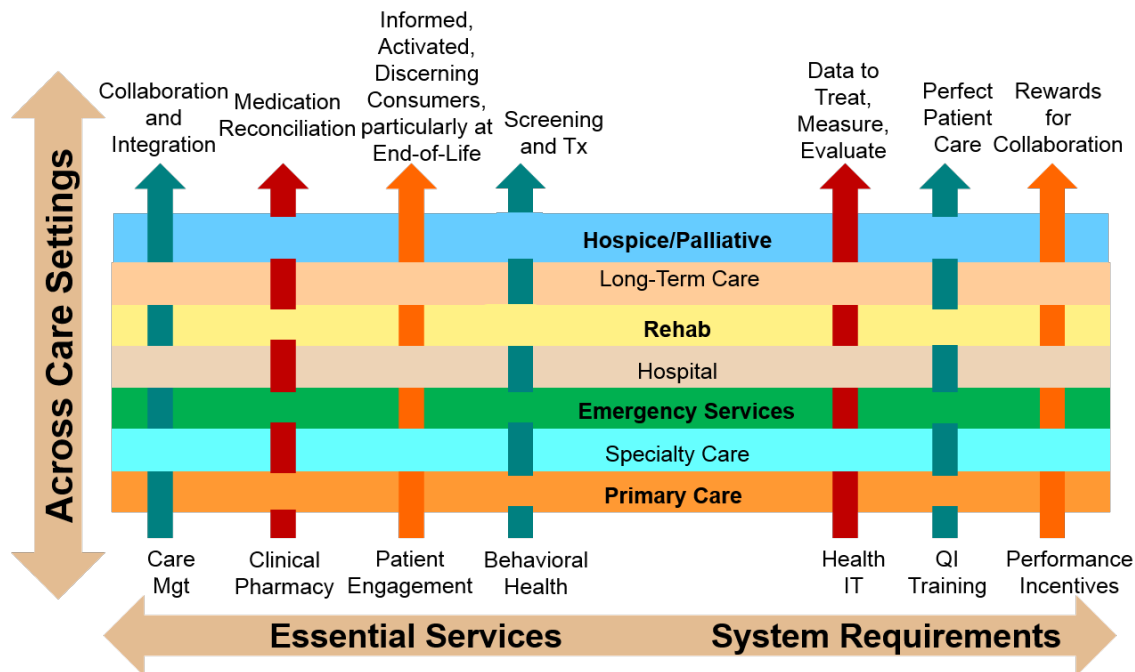
Value Vision: Reinvesting in Health



PRHI pioneered a Lean-based quality improvement methodology—Perfecting Patient CareSM—to eliminate waste and improve quality. This led to early successes in hospitals, including an 86% reduction in medication errors, a 68% drop in CLABs in 34 hospitals, and elimination of MRSA infections in a hospital unit.

PRHI then adopted a Systems Approach to keep people out of hospitals. For patients with complex medical, behavioral, and social conditions, this meant integrating behavioral health care in medical practices, creating Primary Care Resource Centers in community hospitals, preventing the revolving door between hospitals and skilled nursing facilities, adopting health information technology, and organizing community conversations about end of life.

Systems Vision: Preventing Hospitalizations



PRHI is poised to start its 20th anniversary by revisiting its roots and testing a new pathway to 100% value through the Reinvesting in Health Initiative, with support from the Jewish Healthcare Foundation (JHF). PRHI aims to remove unnecessary services—one-fourth of the waste—and reinvest in services that improve health by adopting Choosing Wisely guidelines, testing bundled payment models, and engaging health plans and employers to support these efforts. Bundled, or episode-based, payments enable providers to remove unnecessary services and waste, and reinvest the savings by configuring team roles and services based on their patients' needs.

Maternity care is one example where women in the U.S. are dying from too much spending on waste and not enough spending on services that matter to the mom and baby. The rate of moms dying in the U.S. before, during, or after child birth is three times greater than any other developed country. If we reinvest in the right services at the right time, we could prevent deaths, complications, and morbidity for both the mom and the baby.

To help inform the direction of the Reinvesting in Health initiative, JHF and PRHI commissioned Leif W. Haase—a national expert on health care reform, insurance markets, employer-based coverage, and controlling health costs—to conduct interviews with thought leaders across the country on why U.S. health care cost so much and what regional stakeholders can do about it.

After interviewing the following thought leaders, Leif wrote the enclosed issue briefs on the role of regional stakeholders and employers in reducing waste, reinvesting in health, and improving maternity care.

- Kevin Barnett, MD, Vice-President, Public Health Institute
- Leah Binder, President & CEO, Leapfrog Group
- Patrick Conway, MD, President & CEO, Blue Cross and Blue Shield of North Carolina
- David Cutler, Otto Eckstein Professor of Applied Economics, Harvard University
- David Feinberg, MD, CEO, Geisinger Health System
- Harvey Fineberg, MD, President, Gordon and Betty Moore Foundation
- Jacob Hacker, Stanley B. Resor Professor of Political Science, Yale University
- George Halvorson, past Chairman and CEO, Kaiser Permanente
- Clay Johnston, MD, Dean, Dell Medical School, University of Texas
- Gary Kaplan, MD, CEO, Virginia Mason Health System
- Kenneth Kizer, Director of the Institute for Population Health Improvement, UC Davis Health
- Brian Klepper, former CEO, National Business Coalition on Health
- Vivian Lee, MD, former CEO, University of Utah Health Care
- Lew Sandy, Senior Vice President, United Health Group
- Neal Shah, MD, Assistant Professor, Harvard Medical School
- Will Shrank, MD, Chief Medical Officer, UPMC Insurance Services Division
- Charles Sorenson, MD, President Emeritus, InterMountain Healthcare
- Susan Turney, MD, CEO, Marshfield Clinic Health System
- Gail Wilensky, Senior Fellow, Project Hope, former administrator, HCFA
- Dan Wolfson, Executive Vice President and COO, ABIM Foundation

On PRHI's 20th anniversary, we are pleased to provide these issue briefs to you as we revisit PRHI's roots and look to PRHI's future in reducing waste and reinvesting in services that create maximum value for the patient and for society.

HOW REGIONAL STAKEHOLDER GROUPS CAN LOWER THE GROWTH OF HEALTH CARE COSTS AND REDUCE MEDICAL WASTE (Issue Brief #1)

Leif Wellington Haase, 2018

BACKGROUND

U.S. Health Costs Still Unchecked

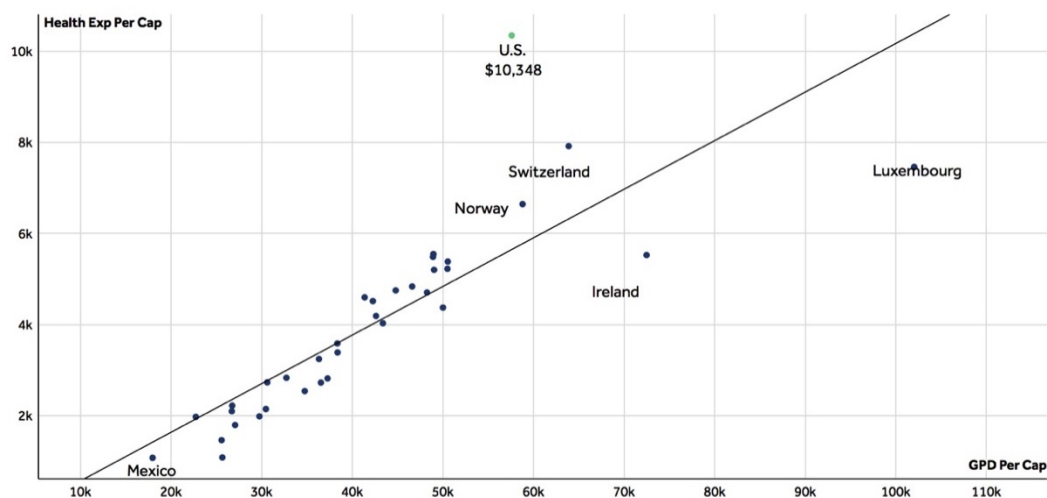
When it comes to high, rising, and eventually unsustainable U.S. health care costs, the theme of Leonard Cohen's dark anthem "Everybody Knows" rings true. It is no secret that Americans pay the highest prices for care in the developed world and still, in comparative terms, achieve mediocre outcomes.¹

Excessive spending on health care makes American businesses less competitive. It crowds out spending on transportation, education, infrastructure, and other vital civic needs. As health care costs rise, American inequity rises in tandem, since fewer individuals can be covered by private insurance or by public health programs.

Studies suggest that as much as one-third of this spending, or around 6 percent of GDP, may be wasted.² This waste includes overuse of services that don't improve health outcomes, regional variations in spending in the absence of medical need, unnecessarily high prices, and outsized administrative costs.

Relative to the size of its wealth, the U.S. spends a disproportionate amount on health care

Total health expenditures per capita/GDP per capita, U.S. dollars, PPP adjusted, 2016



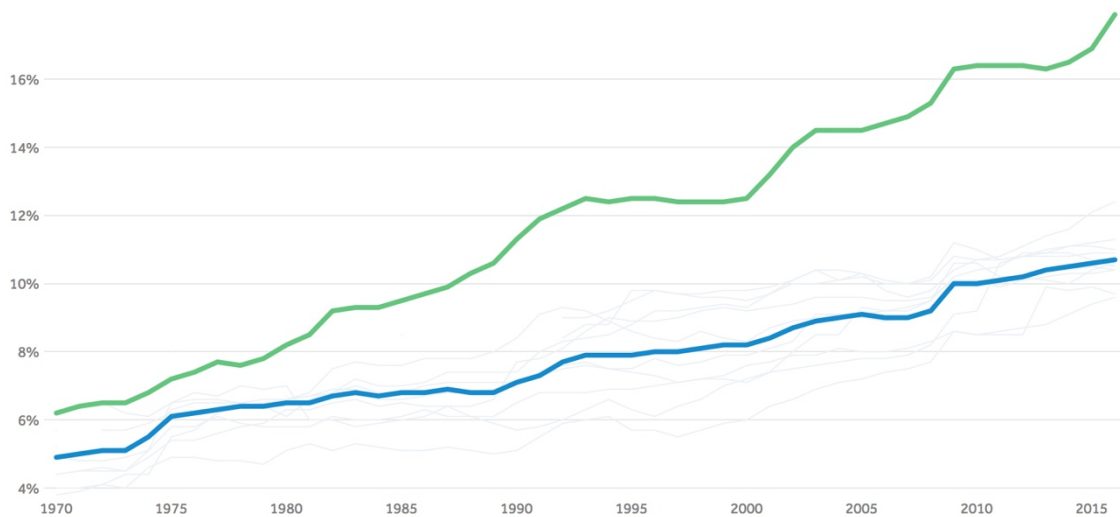
The US value was obtained from the 2016 National Health Expenditure data.

Source: Kaiser Family Foundation analysis of data from OECD (2017), "OECD Health Data: Health expenditure and financing: Health expenditure indicators", OECD Health Statistics (database). DOI: 10.1787/health-data-en (Accessed on March 19, 2017). • Get the data • PNG

Peterson-Kaiser
Health System Tracker

Since 1980, the gap has widened between U.S. health spending and that of other countries

Total health expenditures as percent of GDP, 1970 - 2016



Excludes spending on structures, equipment, and noncommercial medical research. Data unavailable for: the Netherlands in 1970 and 1971; Australia in 1970; Germany in 1991; and France from 1971 through 1974, 1976 through 1979; 1981 through 1984, and 1986 through 1989. These countries are not included in calculated averages for those years. Break in series in 2003 for Belgium and France and in 2005 for the Netherlands. Data for 2016 are estimated values. The 2016 US value was obtained from National Health Expenditure data.

Source: Kaiser Family Foundation analysis of data from OECD (2017), "OECD Health Data: Health expenditure and financing: Health expenditure indicators", OECD Health Statistics (database) (Accessed on March 19, 2017). • Get the data • PNG

Peterson-Kaiser
Health System Tracker

RHICs (Regional Health Improvement Collaboratives) Have a Key Role in Moderating the Growth of Health Care Costs

Payers, physicians, hospital executives, consumers, must become better stewards of the resources the U.S. devotes to health care. Groups of regional stakeholders, which include representatives of these groups and seek collaboration between them, have an important role to play in making health care more affordable.

Around 250 stakeholder groups have been formed in the U.S. with the aim of improving the quality of care and reducing unnecessary health spending.³ Of this total, around thirty-five of the larger and more organized groups are termed RHICs (pronounced "Rick's") or Regional Health Improvement Collaboratives.⁴

RHICs are non-profit organizations based in a metropolitan area or specific geographic region. They are composed of providers, purchasers, payers, and consumers, with a multi-stakeholder board.⁵ RHICs rarely pay directly for care or manage or oversee the provision of insurance or health services, though there are a few, though there are a few exceptions. For instance, the Pacific Business Group on Health, based in the San Francisco Bay area, has administered health care marketplaces or exchanges.

RHICs are the hub of efforts to achieve the Triple Aim, or achieving higher quality at lower cost, better population health, and higher patient satisfaction, through diffusing innovative ideas for improving health delivery through data generated at the local level.⁶ They typically develop and disseminate research on quality improvement and performance measurement, train medical workers, connect community leaders with

physicians and hospital administrators, amplify academic research that bears on health care delivery, and convene workshops and meetings.

While much of the work carried out by these groups of regional stakeholders affects the effort to reduce excessive health care spending, the urgency of this goal suggests the importance of undertaking projects that bear directly on spending. Shining a light on those projects that are already underway is also important.

We asked two dozen prominent American health care experts and practitioners, CEOs of hospitals and integrated systems, insurance executives, consumer watchdogs, and leading academics, among others, how groups of regional stakeholders could best contribute to bringing down the growth of health care costs and reducing wasted spending on health care.

These experts felt that RHICs can be a “**honest broker**” or “**trusted convener**” in conversations over how to reduce health care spending—especially since many health care organizations have a financial stake in the outcomes of policy debates and would have difficulty remaining impartial. Regional consortia, they believed, can perform an important role by bringing together the knowledge base of key players in a setting that encourages them to cooperate rather than to joust for market advantage.

According to these leaders in health care, RHICs could make the biggest difference in restraining U.S. health care spending in several different ways;

- Through **developing and helping to implement payment and quality reforms**, including **performance measurement and price transparency**, as well as **pathways to care for specific and detailed procedures**;
- **Promoting the redesign of care delivery** and the **reduction of low-value care** through the support of projects such as “Choosing Wisely”; and
- **Advancing the long-term vision of population health**, with its central finding that the social and geographical determinants of health, not the provision of acute health care, is the principal source of health outcomes.

“Focus on areas that seem to be wasteful but that are very, very specific, such as excessive use of institutionalized post-acute care. ... Taking advantage of small steps builds momentum on other things.”

- David Cutler, Harvard Medical School

“The way to start is to become completely patient-centered and to design the system that way. In the system of the future, every hospitalization is a failure.”

- David Feinberg, M.D., CEO, Geisinger Health System

DEVELOPING AND IMPLEMENTING PAYMENT AND QUALITY REFORMS

“Improvement of outcomes is the main mechanism to reduce costs.”

- Clay Johnston, M.D., Dean, Dell Medical School, University of Texas

The evidence-based medicine and quality movements in health care, as they gained prominence, helped firmly establish the findings of substantial waste in the U.S. health care system. The definition of “waste” varies among researchers: from a narrower version that cites the provision of care that is useless or harmful to a patient to a broader, efficiency-based one that stresses the volume of resources needed to deliver a specific outcome.

Don Berwick and Andrew Hackbarth, in an influential *JAMA* article, defined waste in this broader sense, singling out failures in care delivery, care coordination, overtreatment, administrative complexity, pricing failures (“the waste that comes as prices migrate far from those expected in well-functioning markets, that is, the actual cost of production plus a fair profit”) and fraud and abuse.

These findings dovetailed with a critique of fee-for-service medicine which contained incentives, many argued, for doctors to perform too many needless procedures and tests. John Wennberg and his Dartmouth colleagues showed how sharply Medicare spending varied in different regions of the country even after adjusting for local prices and the underlying health of the population, without evidence of better health outcomes in higher spending areas.⁷ While critics pointed out that commercial health spending didn’t necessarily show similar variations and that some areas of the U.S. had more illness than Wennberg acknowledged, the theory of unwarranted variation has remained influential.⁸ (See text box)

Weeding out wasted health care spending has been difficult in large part because the evidence rests substantially on aggregated high-level studies or very minute analyses of specific procedures.⁹ RHICs have been trying to identify wasted spending, with some success, in this middle ground. The Network for Regional Health Improvement (NRHI), the national membership organization of the regional health improvement collaboratives, has been working since 2013 with HealthPartners, the measure

developer of the National Quality Forum-endorsed Total Cost of Care measure set, with members in five states, to develop a Total Cost of Care index that allows different regions to compare provider-specific costs to an average benchmark for that region.¹⁰ In addition, it allows observers to begin to identify whether a region's costs are driven principally by higher prices or by higher uses of medical services, and in which combination.

For instance, Maryland—which is the only state with all-payer hospital rate regulation—used resources slightly less than the benchmark and had significantly lower prices. Oregon had higher prices and a lower volume of service use, while Colorado had higher prices than the benchmark and also used more services, especially outpatient services.

This Total Cost of Care benchmarking approach, which has drawn considerable praise from state health officials and stakeholders, is a valuable tool for targeting high costs, in large part because it draws on commercial claims (some 5 million claims from around 20,000 physicians) while other data has typically covered only public programs. It is especially useful because it can be used to identify outliers and because it distinguishes between areas in which prices and service utilization leads to higher costs. Should the areas with better records become the norm, over a billion dollars in existing health care spending conceivably could be saved and redirected elsewhere.

To be sure, the index has limitations—it doesn't have access to all commercial claims but only those that are voluntarily submitted by participants. It doesn't adjust for quality but assumes that higher prices aren't systematically correlated with better outcomes. Nevertheless, by broadening the base of study and distinguishing between the factors that drive health spending, it is a big step forward and one largely brought about by the support and engagement of RHICs.

Paying providers through ways other than fee-for-service or capitation involves amassing considerable claims data and clinical information to determine what a reasonable price for a service, under different conditions and for different patients, should be.

The creation of the all-payer data system in Maryland and claims databases in other states were supported by RHICs. Dr. Susan Turney, CEO of the Marshfield Clinic, a twelve-hospital integrated system in rural Wisconsin, told us that the impetus for systemic transformation in her state dated back to 2004, when the Wisconsin Collaborative for Healthcare Quality, a voluntary statewide consortium of physician groups, hospitals, health plans, and employers, began operations. "When it got off the ground an industry grew up around it," Turney said. The WCHQ, which includes 65 percent of the state's primary care providers, collects data on thirty performance measures across its members. Wisconsin has consistently outperformed neighboring states on performance measures in diabetes and cardiovascular care.¹¹

Likewise, a number of regional collaboratives either manage state-based all-payer claims databases (APCDs), which help state officials understand price variations and given them guidance in purchasing care and developing consumer-friendly information. For instance, Colorado's Center for Improving Value in Health Care (CIVHC) acts as the manager of the state's claims data base. RHICs are among the leaders in using their own data sets and APCDs to generate price transparency for providers and payers, which is a

key building block in figuring out how best to contain costs.¹² Minnesota's MN Community Measurement, a Minneapolis-based RHIC, operates a highly-regarded consumer-oriented site that details costs and quality for hospitals and medical groups statewide.¹³

The Alternative Payment Contract in Massachusetts, a global payment model with annual incentives that has been in effect since 2009, has steadily been shown to save money compared to previous payment methods. The APC was designed through extensive cooperation between the Blue Cross Blue Shield Foundation and many local and regional stakeholders.¹⁴

Accountable Care Organizations (ACOs) received a strong boost through high-profile cost-containment efforts included in the Affordable Care Act. ACOs are voluntary affiliations of doctors, hospitals, and medical providers who share financial and medical responsibility for coordinating care for patients. Though the jury is still out on whether such arrangements will save money for public programs and commercial payers, ACOs have become much more common in both sectors, with nearly one thousand in operation.¹⁵

One major challenge for ACOs is measuring how well they stack up against benchmarks for cost and quality, and in respect to their peers. In response, two large RHIC's in California, the Integrated Healthcare Association (IHA) and the Pacific Business Group on Health (PBGH) have embarked upon a performance measurement initiative that they hope will be a model for the country, launching with 18 clinical quality, utilization, and cost measures applied to commercial ACOs. Most of the largest employers and the largest provider groups in Northern California are on board.¹⁶

As David Cutler and others suggested, assembling cost-lowering reforms one step at a time, while building out from local physician practice, represents an alternative both to top-down federal "one-size-fits-all" price reforms and also to capitation in which a medical group assumes the full risk of the costs of patient care. Disseminating and in some cases assisting with bundled or episode-based payment design was seen as an especially useful role for RHICs.

Cost, Waste, and Prices

Recent and some earlier studies have argued that high prices, plus outsized administrative costs, not excessive utilization of medical services, are the principal reason why U.S. pays so much more for health care than other developed countries¹⁷. Some have interpreted these findings to question the focus on value-based payment, which attempts to coordinate care and reduce overtreatment connected to fee-for-service payment, is misplaced. While these studies make a compelling case that the *differential* between the U.S. and other countries is higher U.S. prices, they don't show that overuse, the prevalence of low-value care, and medical waste is negligible¹⁸. What other studies now aided by international data suggest is that most health systems practice a great deal of low-value care: the U.S. is an outlier because of its high prices and a more expensive mix of services delivered when a patient is admitted to care.

AIDING DELIVERY REFORM: DESIGNING AND DISSEMINATING BEST PRACTICES

“Physicians are changing their mindset from thoroughness to appropriateness...from ‘Why didn’t you do that test?’ to ‘Why did you?’”

- Daniel Wolfson, CEO, ABIM Foundation (sponsor of Choosing Wisely)

“Almost everyone has electronic systems—but they use them for billing rather than care delivery.”

- George Halvorson, former CEO, Kaiser Permanente

The Choosing Wisely campaign, launched by the American Board of Internal Medicine (ABIM) Foundation in 2012, is an ambitious effort to root out low-value care and to reduce wasted medical spending. Working through more than seventy medical societies, physicians have created “lists of five” tests, treatments or services that they believe their specialty regularly overuses. These recommendations, which now number 552 in total, are endorsed by the medical societies based on clinical guidelines and a consensus of expert opinion. Recommendations include the overuse of radiography, the inappropriate use of urinary catheters, and the overuse of elective C-sections in maternity care.¹⁹ The philosophy of Choosing Wisely is that doctors are in the best position to identify and root out unnecessary care and that “focusing, activating, and resourcing physician professionalism has been found to be an excellent recipe for success.”²⁰

One of the most important activities of RHICs has been to call attention to the Choosing Wisely recommendations, and other guidelines, and to disseminate them to physicians and consumers. Our expert panel frequently pointed to this initiative and pointed out the different ways that groups had chosen to use the lists.

For instance, Premier Medical Group, a large multi-specialty group in western Pennsylvania, had moved to a risk sharing contract and wanted to use the Choosing Wisely recommendations to engage specialists who hadn’t previously been exposed to value-based payments. Premier built wallboards with the lists for physician bullpens, pointed out areas of likely waste, and asked each specialty to review the guidelines.

Across specialties, Premier pays doctors based on “productive,” “quality,” and “citizenship” components; exposure to Choosing Wisely recommendations was one component of the citizenship category. Premier also built a risk calculator for cardiac care into its electronic health record and printed brochures for patients.

The Washington Health Alliance, a stakeholder group, recently used forty-seven of the Choosing Wisely recommendations to estimate the amount of wasted health care spending in the state. It arrived at a \$282 million figure for wasted health care dollars that included only the costs directly associated with the service or procedure in question. The Alliance hopes that this finding would prompt a community dialogue on overuse of low-value care in the state. It has apparently prompted organizations in other states to launch similar studies.²¹

One insurer, Arkansas Blue Cross and Blue Shield, is using Choosing Wisely as part of its unique Value-Based compensation model, which it launched in 2017. Using scores based on cost variability, it is systematically reducing fee-for-service payments and depositing the difference in a bonus pool, which will be used to reward providers that practice high-value care, avoid low-value procedures, and practice quality reporting.²²

The Choosing Wisely campaign has been criticized from opposite quarters: one school of thought argues that its recommendations are too small-bore and not precise enough; conversely, some believe that these guidelines will be taken too literally as a device to measure and extrapolate the costs of wasted care. In recent years, as a consensus around the dominant role of price in distinguishing U.S. health costs has coalesced, this criticism has been joined by the argument that the campaign, in trying to reduce low-value care and overuse, is pursuing the wrong culprit. In response, it is worth pointing out that utilization almost certainly remains a driver of high costs, even though it may not be the *differential* factor in explaining the outlier nature of U.S. spending.²³ More troubling, perhaps, is that the awareness of Choosing Wisely among physicians, which expanded initially at a rapid pace, appears to have slowed down considerably.²⁴

Other examples of stakeholder group-led implementation of best practices have led to better outcomes and reduced costs. For instance, the Better Health Partnership, a primary-care led RHIC located in the suburbs of Cleveland, Ohio, adopted best practices of care for patients with diabetes, heart failure, and hypertension: following the adoption of these practices, rates of hospitalization for these conditions fell more sharply than in other comparable parts of the state, leading to an estimated savings, over five years, of almost forty million dollars.²⁵

“When we asked our doctors about the best way to do procedures, they all disagreed. When we asked them what doctors should never do, we got consensus and a quick list. So that’s where we started.”

- Charles Sorenson, M.D., former CEO, Intermountain Healthcare System.

Choosing Wisely illustrates several key principles of Quality Improvement as they apply to health care. As Charles Sorenson suggests, QI is about managing the process of care and engaging managers—in this case doctors, nurses, and other medically-trained personnel—to achieve better results. Measures that are agreed upon, even if imperfect, are better than perfect measures. Even the brief experience of Choosing Wisely suggests that these lists are modified regularly as clinical practice evolves. Second, even though Choosing Wisely’s lists are wide-ranging, they lead naturally to processes that can be measured. Finally, working through specialty societies tends to ensure that the revamping of the processes of care is driven by clinicians, without whose buy-in the improvement is unlikely to occur.

One of the strongest contributions by RHICs has been developing and managing Health Information Exchanges—regional and national data portals designed to manage and streamline the transfer of digital health data between medical providers and social service agencies. In Louisiana, the Louisiana Health Care Quality Forum, established in the wake of hurricanes Katrina and Rita, now connects some 240 hospitals and numerous other clinics and medical sites, processing 80 million transactions a month in 2015. It has recently completed an application that will identify “super-users” of emergency room departments (Louisiana ranks high in the number of per capita ED visits) with the promise of substantial cost savings.²⁶

The Health Collaborative (THC) in Cincinnati, a RHIC focused on the secure exchange of digital health data, played a critical role in establishing a regional cog in what has now become a national data exchanges that alerts a patient’s local provider when he or she has a health crisis when away from home. THC previously quarterbacked a “heartland” version of this project which linked exchanges in Kentucky, Michigan, and Tennessee, offering a proof of concept for the national-level exchange that was launched in 2018.²⁷

Regional stakeholder groups are a natural liaison between accrediting agencies and specialist societies and local hospitals and patients. They can also support the training offered by medical schools, especially newly-formed ones such as the Dell Medical School at the University of Texas, which have incorporated a focus on cost-conscious medicine and low-value care into their curricula. According to one study conducted at the University of Pennsylvania’s School of Medicine, residents practiced medicine in a more expensive fashion than doctors in outside practice, in large part because of their use of new technologies and a tendency to practice “defensive medicine.”²⁸

BETTER POPULATION HEALTH AND LOWER LONG-TERM HEALTH SPENDING

“Speak to what is happening in your city as a role model.”

- Will Shrank, M.D., Chief Medical Officer, UPMC Health Plan

“How can the integration of social services and medical care best be organized? There are so many people you can’t reach even when behavioral health is integrated with acute care. We really have a constellation of social issues that go far beyond what doctors can address.”

- Lew Sandy, M.D., Vice President, UnitedHealthcare

Virtually every expert to whom we spoke, regardless of affiliation or profession, felt that regional groups could accelerate a movement toward population health. This includes healthier individual behavior and collective health improvements based on eating healthier food, passive methods of encouraging exercise, expanded and more efficient mass transportation, and in sum all the “upstream” factors that influence health outcomes. The rapidly-growing “upstream” movement in health care is fueled by strong evidence that the overall health of communities is primarily driven by social and environmental factors, not on improvements in acute medical care.²⁹

This also entails, in the longer term, developing payment methods that would reflect, as David Feinberg alludes to, incentives to avoid hospitalization altogether. The group felt that the stakeholder groups could move their regions toward this goal by virtue of being trusted civic leaders and known change agents: the need to develop “upstream” approaches to improving health outcomes, and ultimately lowering costs, cropped up repeatedly regardless of the specific question under discussion. Although capitated payment, over time, reflects and justifies upstream spending, and population health measures based on life-years gained (QALYs) have been proposed for decades, it is difficult to bring cost savings generated by one party, whether payer or provider, back to that source, in what is sometimes known as the “wrong pockets” problem.³⁰

Chronic illness, many observed, is often the result of individual behaviors, such as smoking and alcohol abuse, as well as outside factors such as poor housing and a polluted environment. Studies increasingly show that life chances, including the likelihood of leading a healthy life, are heavily influenced by experiences in infancy and early childhood. George Halvorson, past CEO of Kaiser Permanente, for example, cited research that children who are read and sung to in their first year are less likely to have developmental problems and more likely to be healthy and able to function at their appropriate grade-level, or above.

Initiatives are underway that use regional stakeholder collaborations to bring down the rate of chronic illness. For instance, AIR Louisville, a group that brought together city government, a not-for-profit, and a tech company’s digital health platform, resulted in a sharp drop in rescue inhaler use and nearly a fifty percent improvement in days that asthmatic individuals in Louisville were symptom-free.³¹

The UPMC Health Plan, working with Housing and Urban Development Officials in Allegheny County, has matched HUD spending and created a program that helps the chronically homeless in Medicaid and dually eligible for Medicaid and Medicare find housing, as well as coordinating care for these individuals. UPMC estimates that it has saved \$6500 per person per year for the seventy people it has assisted and changed their habits of medical usage from ER visits and hospital admissions to primary care visits

and adherence to medication. Although this particular enterprise hasn't used a RHIC as an intermediary, it is a natural model for organizations in cities with a large homeless populations.³²

Regional stakeholders are ideally situated to develop and cooperate with programs that quantify the impact of improving population health. The challenge is to find the right areas and the right partnerships so that large amounts of energy aren't poured into "one-off" ventures that have little staying power or replicability beyond a single community.

Experts pointed toward a number of well-funded national and regional initiatives through which tangible measures were being created and successful partnerships built. Prominent among these is the Culture of Health initiative spearheaded by the Robert Wood Johnson Foundation, the nation's largest health care foundation.³³

This four-year old initiative has identified thirty-five tangible measures of healthy populations, including volunteering, Internet health searches, housing affordability, neighborhood walkability, residential segregation, and access to public health services. These measures, in turn, are linked to chronic illness, reduction in incarceration, family health costs, end-of-life spending, and many others. Partners include the Memphis Business Group on Health, the national YMCA, and the state of Hawaii, all of whom are using the project to benchmark health trends in their communities.³⁴ It is explicitly aimed at promoting cross-sector collaboration: through its partner AcademyHealth, RWJF convened RHICs from five regions to propose ways in which non-medical needs could be incorporated into alternative payment models.³⁵

The country's second largest health-related foundation, The California Endowment, likewise radically overhauled its grant-making priorities to focus on turning around the health of populations in fourteen California communities over a ten-year period: the impact of this decision, especially from the standpoint of reducing costs, is uncertain.³⁶ Explicitly following the endowment's lead, the giant integrated system Kaiser Permanente recently made a \$200 million commitment to reducing homelessness in California.³⁷

The Geisinger Health System, the dominant integrated system in Eastern Pennsylvania, has embarked on an ambitious "upstream" effort to change the eating habits in Scranton, PA, partnering with a major food bank and supermarket chain in an effort to reduce the incidence of Type 2 diabetes.³⁸

Another strategy mentioned by several experts, though questioned by others, would redirect required hospital community benefit spending requirements toward upstream goals: through influence and example, nudging insular institutions focused on acute care toward becoming health improvement systems for a community, without sacrificing those institution's capacity to deliver excellent acute care when needed.

CONCLUSION: LINKING REGIONAL EFFORTS TO STATE AND NATIONAL POLICY

The journalist James Fallows has argued that the United States is reinventing itself through hundreds of explicit and natural policy experiments at the local and regional level. What RHICs are beginning to do with respect to restraining health care spending follows this pattern.³⁹

Price transparency efforts, health information exchanges, and other initiatives are formally linking regional, state, and federal partners. While the participating physicians, employers, and other stakeholders are pursuing goals that are frequently local, they are beginning to remodel the U.S. health system from the bottom up. It is easier to show that these programs are demonstrating value for patients and communities than to make the claim that community-based programs will bend the curve of health spending. But stitching together the considerable savings from each innovation will make a sizeable dent.

¹ David M. Cutler, “What Is The US Health Spending Problem?” *Health Affairs*, March 2018.

² Donald Berwick and Andrew Hackbarth, “Eliminating Waste in US Health Care,” *JAMA*, March 14, 2012.

³ See Jane Erickson, “Multi-Sector Partnerships Have the Potential To Transform Health, But Most Aren’t There Yet,” *Health Affairs* blog, January 26, 2018. While researchers have identified no fewer than 237 health stakeholder groups that fit this model, many of these lack the capacity or the policy knowledge to achieve ambitious goals.

⁴ www.nrhi.org/uploads/what-is-a-rhic_318.pdf. There are some 35 RHICs in the country, many of them launched through the Robert Wood Johnson’s Aligning Forces for Quality project.

⁵ NRHI, 2017.

⁶ Joseph Tanenbaum et.al., “Association of a Regional Health Improvement Collaborative With Ambulatory Care-Sensitive Hospitalizations,” *Health Affairs*, February 2018.

⁷ See especially John E. Wennberg et.al., “An Agenda for Change: Improving Quality and Curbing Health Care Spending,” A Dartmouth Atlas White Paper, December 17, 2008.

⁸ On responses to Wennberg and the overall debate on quality, cost, and regional variation, see Leah Burke and Andrew Ryan, “The Complex Relationship Between Cost and Quality in U.S. Health Care,” *AMA Journal of Ethics*, February 2014.

⁹ Daniel O’Neill and David Sheinker, “Wasted Health Spending: Who Is Picking Up the Tab?” *Health Affairs*, May 31, 2018.

¹⁰ Network for Regional Healthcare Improvement, “Healthcare Affordability: Untangling Cost Drivers,” February 13, 2018.

¹¹ <https://www.ahrq.gov/workingforquality/priorities-in-action/wisconsin-collaborative-for-healthcare-quality.html>; Wisconsin’s work inspired the formation of the multi-state High Value Healthcare Collaborative, which focuses on diabetes, congestive heart failure, sepsis, and hip and knee surgery: <https://www.opennotes.org/partner/high-value-healthcare-collaborative/>

¹² Network for Regional Healthcare Improvement (NRHI) and the Milbank Memorial Fund, “When Regional Health Improvement Collaboratives and States Work Together: Lessons Learned from Health Improvement Partnerships,” December 2015.

¹³ www.mnhealthscores.org/

¹⁴ <https://www.bluecrossma.com/visitor/pdf/alternative-quality-contract.pdf>

¹⁵ See, amidst a vast and far from uniform literature, David Muhlenstein and Mark McClellan, “Accountable Care Organizations in 2016: Private and Public Sector Growth and Dispersion,” *Health Affairs* blog, April 21, 2016.

¹⁶ Diana Manos, “Plans Endorse Standardized ACO Performance Measures,” *Health Plan Week*, January 8, 2018.

¹⁷ A full set of citations and bibliography is included in the forthcoming final report of this JHF affordability study, which is forthcoming. For a summary of the main points, see Irene Panicholas, Lianna

Woskie, and Ashish Jha, “Health Care Spending in the United States and Other High-Income Countries,” *JAMA*, January 2018.

¹⁸ “Right Care” (Lown Institute), *The Lancet*, January 8, 2017.

¹⁹ ABIM Foundation, “Choosing Wisely: A Special Report on the First Five Years,” 2017.

²⁰ Leslie Tucker and Daniel Wolfson, “Advice for CMMI from Choosing Wisely,” ABIM Foundation, December 14, 2017.

²¹ Washington Health Alliance, “First, Do No Harm: Calculating Health Care Waste in Washington State,” February 2018, www.wacomunitycheckup.org

²² Steve Spaulding, “Changing Health Care Compensation by Rewarding Value-Based Outcomes,” *NEJM Catalyst*, November 20, 2017.

²³ Daniel Wolfson, ABIM Foundation, “Beyond High Prices: Five Reasons to Continue Addressing Overuse,” April 10, 2018.

²⁴ Corrie Colla and Alexander Mainor, “Choosing Wisely Campaign: Valuable For Providers Who Knew About It, But Awareness Remained Constant, 2014-17,” *Health Affairs*, November? 2017.

²⁵ Joseph Tanenbaum et.al., “Association of a Regional Health Improvement Collaborative With Ambulatory Care-Sensitive Hospitalizations,” *Health Affairs*, February 2018.

²⁶ NRHI and Milbank Memorial Fund, “When Regional Health Improvement Collaborative and States Work Together,” December 2015.

²⁷ “SHIEC’s Patient-Centered Data Home Initiative Launches Nationally,” January 4, 2018; “The Health Collaborative Participates in National Launch of SHIEC’s Patient-Centered Data Home Initiative,” January 4, 2018.

²⁸ Knowledge@Wharton, “Medical Waste: Why American Health Care Is So Expensive,” August 18, 2016.

²⁹ Rishi Manchanda, “Upstream Doctors,” is the locus classicus of this growing movement, <https://www.amazon.com/Upstream-Doctors-Medical-Innovators-Sickness-ebook/dp/B00D5WNXPE>

³⁰ David H. Freedman, “Health Care’s Upstream Conundrum,” *Politico*, January 10, 2018.

³¹ Meredith Barrett et.al., “AIR Louisville: Addressing Asthma With Technology, Crowdsourcing, Cross-Sector Collaboration, and Policy,” *Health Affairs*, April 2018.

³² Leslie Small, “Home is Where the Health Is: Insurers Tackle Housing Insecurity,” *Health Plan Weekly*, April 30, 2018.

³³ Robert Wood Johnson Foundation, <https://www.rwjf.org/en/how-we-work/building-a-culture-of-health.html>

³⁴ https://www.rwjf.org/en/library/research/2018/05/moving-foward-together--an-update-on-building-and-measuring-a-culture-of-health.html?rid=0034400001rlr5NAAQ&et_cid=1256501

³⁵ Robert Wood Johnson Foundation & Academy Health, “Striving Toward a Culture of Health: How Do Care and Costs For Non-Medical Needs Get Factored Into Alternative Payment Models,” January 26-27, 2017.

³⁶ California Endowment, <http://www.calendow.org/building-healthy-communities/>

³⁷ www.modernhealthcare.com/article/20180521/NEWS/180529995

³⁸ <https://www.geisinger.org/freshfoodfarmacy>

³⁹ James Fallows, “Reinventing America,” <https://www.theatlantic.com/magazine/archive/2018/05/reinventing-america/556856/>

WHAT CAN EMPLOYERS DO TO REDUCE WASTE AND LOWER HEALTH CARE SPENDING?

(Issue Brief #2)

Leif Wellington Haase, 2018

BACKGROUND

Employer-based health insurance, which covers around 160 million Americans, is the backbone of the American health care system. This system came about largely by accident. After earlier efforts to create a national health system fell by the wayside, private health insurance grew rapidly during the 1930s. Blue Cross successfully recruited middle-class Americans to buy insurance for hospital coverage, seeking out working Americans because they were more easily recruited at their place of work, were in better health, and could more easily pay the monthly premiums.¹

During World War II, companies faced wage and price controls and had to compete for scarce labor by offering generous in-kind benefits, which were not subject to taxation. After the war, labor unions successfully included health benefits in their collective bargaining demands, widening the scope of those with coverage. Several court decisions in the 1950s, though not directly involving health care, confirmed that employer payments for their workers' health care would remain tax-deductible.²

Through "path dependence," as political scientists term it, these circumstances led to a uniquely American health system that tied employment to health insurance.³ Most public coverage in the US was built on the chassis of employer-based coverage. For instance, the cumbersome distinction in Medicare between Part A (for hospital coverage) and Part B (for physician and other services) reflects the model of private sector insurance when Medicare was enacted.

This voluntary employer-based system has made it harder to insure all Americans. Those without jobs have always had more difficulty accessing affordable coverage. It also affects why health care is more expensive in the US relative to other developed countries. Thousands of fragmented individual employers, each covering their own employees, generally have been unable to exert countervailing downward pressure on the prices demanded by powerful suppliers: physicians, hospitals, drug and device makers, and supply chain vendors.

Though the overall percentage of Americans with employer-based coverage has slowly but steadily declined, the employer-based system has proven to be remarkably durable. Policy analysts have predicted its demise for decades. Politicians at the federal and state level have introduced bills, such as single-payer legislation, designed either to eliminate or to circumvent it.

Nevertheless, driven by the favorable tax exclusion (a tax subsidy worth over \$200 billion a year to the mostly better-off Americans who receive it), the perceived value of offering benefits to recruit workers, the desire for healthy employees, and sheer inertia, the system remains largely intact.⁴ Commercial payers, especially large self-insured employers, are the

linchpin to financing the modern U.S. health care system; they frequently pay twice as much as government payers and sometimes much more. There was no “flight to the exits” after the passage of the Affordable Care Act in 2010, even though the creation of state marketplaces for individuals offered employers a potential escape hatch.⁵

WAKING THE SLEEPING GIANT

Nevertheless, employers have been uneasy for decades about the rising costs of health care for their companies. Their principal response has been to shift the costs to employees by changing the kinds of insurance they offer, from indemnity coverage—which simply paid claims as they were rendered—to HMOs and PPOs in the 1990s, and on to HDHP’s, with their high copays and deductibles, today. Some 70 percent of large employers now offer HDHPs, and 5 percent offer only such plans.⁶ They have been less involved in trying to change the way health care is paid for and delivered. Despite their potential clout, employers have had less impact on reining in U.S. health care spending in the past than their potential influence might warrant. There are several reasons for this:

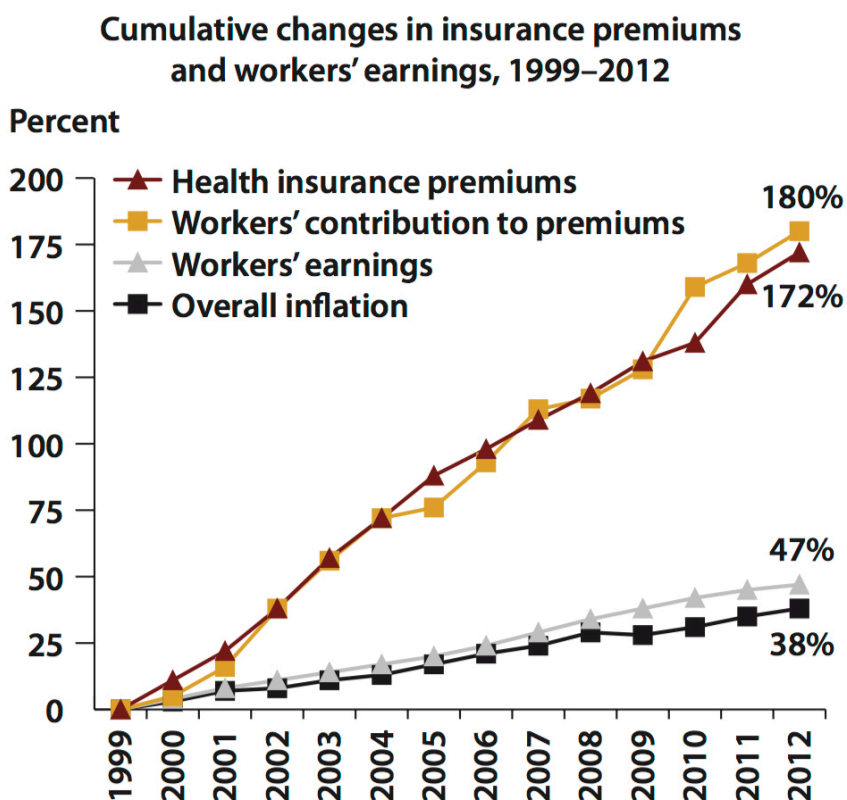
- Businesses have tended to be reflexively opposed to health reform because they **fear that the burden of change would be largely placed on them in the form of an employer mandate**;
- **CEOs defer consideration of health insurance to the HR department**, which frequently knows little about health care and purchase it on price rather than quality or value, or the firm hires benefits consultants whose interests are not always entirely aligned with the company’s;
- Because CEOs frequently serve with hospital administrators, prominent doctors, and other medical executives on local non-profit boards and mingle with them socially, there is **strong social pressure** not to take an aggressive position on medical overspending;
- At the federal level, dealing with health care is always a **“third or fourth priority”** after tax policy and regulation;
- When major companies did become directly involved with health care through the **“managed care revolution,”** which briefly stemmed the upward march of health care costs, they were confronted by a **fierce backlash** from providers and employees;
- **Companies often find it difficult to cooperate and to engage in collective action.**

“In Health Care, 2018 is the Year of the Corporation.”

- Robert Kaplan, Harvard Business School

In the past several years, employers—and especially large self-funded companies—have become newly aggressive about taking on rising health costs. What has changed?

After a brief slowdown due to the recession and the impact of the Affordable Care Act, health costs have steadily ticked upward again, rising more than five percent annually from 2013 to 2017 with similar increases expected in the near future.⁷ The total cost of health benefits, including premiums and out-of-pocket costs, averages \$14,156 per employee in 2018, with employees bearing roughly thirty percent of this sum, or around \$4,400 a year.⁸



Source: *Confronting Costs, Stabilizing U.S. Health Spending While Moving Toward a High Performance Health Care System*. The Commonwealth Fund. January 2013. Commonwealthfund.org

Some cost-conscious CEOs have lost patience with insurers and their own benefits departments and are now pursuing “direct and deep” collaboration with providers. Many have also reached the limit of cost reductions won by compelling employees to pay more in cost-sharing and steering them toward high-deductible plans: in the jargon of the industry, they are suffering from “benefit buy-down fatigue.” At the same time, employees have become more educated about health care tradeoffs and are more comfortable trading off narrower networks of doctors for a lower price. A new generation of “value-based purchasing” tools—such as accountable care organizations, bundled payments, and other alternative payment models—is at the business owners’ disposal.

In addition to these trends, the scale and scope of purchasing initiatives have grown. These include the Amazon/ Berkshire Hathaway/ JP Morgan partnership, discussed below, Apple's expansion of its wellness initiatives, and the emergence of groups such as the Health Transformation Alliance, which combines forty-six self-funded companies with 7 million covered employees. More companies are self-funded—meaning they use insurers only to perform administrative tasks. This lowers costs in its own right but also allows firms to experiment with new payment and coverage designs outside of insurer preferences and constraints, as well as many federal and state regulations.

WHAT CAN COMPANIES DO EFFECTIVELY?

“Shared savings is a transition to full financial risk. As providers take full risk, they become in effect insurance companies. ...If I were an employer, I would offer a broad array of products, look for a plan that is owned by providers, and contract directly with doctors.”

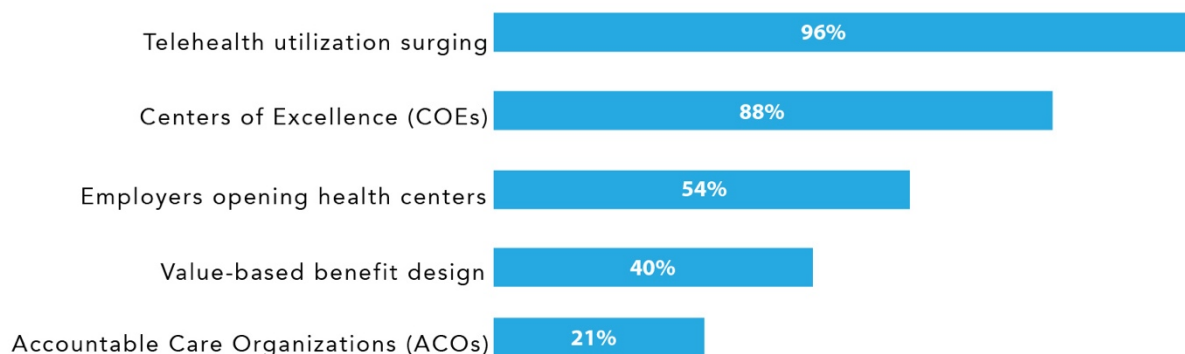
- Dr. Will Shrank, Director of Insurance Services,
University of Pittsburgh Medical Center (UPMC)

In conversations with two dozen health care leaders, from insurance executives to the CEOs of integrated health systems to payers from large companies, a dominant theme emerged: employers are increasingly demanding that their contracted physicians and hospitals show evidence of value, generally in the form both of lower costs and of better health outcomes.

Some are taking baby steps toward this goal by steering some of their business toward Accountable Care Organizations (ACOs) and episode-based and bundled payments. Others are moving more aggressively toward direct contracting with physicians and integrated health systems, which combine a physician-hospital network with an insurer, in which the provider takes on full risk for the cost of treating patients.

McKinsey estimates that some 25-35 percent of all contracts signed by hospitals in 2015 contained value-based provisions, up from less than 10 percent a year earlier, although these contracts still account for a small fraction of hospital revenue.

LARGE EMPLOYER HEALTH CARE STRATEGIES AND PLAN DESIGNS



Source: Large Employers' 2018 Health Care Strategy and Plan Design Survey ©2018 National Business Group on Health.

Accountable Care Organizations (ACOs)

An ACO is a voluntary affiliation of doctors, hospitals, and medical providers who share financial and medical responsibility for coordinating care for patients with the aim of reducing unnecessary procedures and medical spending.⁹ 70 percent of employers either expect to adopt an ACO or show considerable interest in the concept.¹⁰

ACOs were proposed in response to a specific theory of why U.S. healthcare costs were rising. Fee-for-service payment encourages doctors and other medical professionals to perform too many procedures, tests, and other services and resulted in care delivery that was both inefficient and often needless. The work of John Wennberg and his colleagues at Dartmouth College on the wide variation in the volume of services delivered in different regions of the country, as well as the prices paid for them—absent evidence of underlying medical need—was strong evidence for this theory.¹¹ Dr. Atul Gawande, in a much-read *New Yorker* article on the excessive volume of services delivered in McAllen, Texas, brought the argument against fee-for-service payment to the close attention of policymakers.¹²

To combat this inefficiency, ACOs try to arrange structural and payment incentives that encourage coordination of care for a patient, moving away from the fragmentation and incentives for overuse inherent in FFS payment. A primary care physician is usually designated as the quarterback of a patient's care. At the first stage, providers typically receive bonuses ('shared savings') when they collectively meet or exceed targeted measures of quality and outcomes for a particular patient.

In some ways, ACOs resemble health maintenance organizations (HMOs) such as Kaiser Permanente, which provide all patient care to members in return for a capitated (per person, per month) payment from an employer or individual. In theory, the differences are considerable: HMO networks are put together by the insurer rather than providers

themselves, those enrolled in an ACO may go outside the network without penalty (indeed, patients may not even know they are in an ACO¹³), payment is rarely fully capitated, and quality benchmarks are in place to guard against the systematic under-treatment that is a possibility in fully capitated payments.¹⁴

Both in terms of number and volume of payments, ACOs have grown rapidly over the past decade. Although the concept received its first test in the commercial sector, ACOs received a strong boost through high-profile Medicare initiatives launched through the Affordable Care Act—almost 250 ACOs began contracting with Medicare in 2012 and 2013, most of them accepting only “upside risk” or bonuses for saving money relative to a benchmark but some willing to risk losses if they underperformed the benchmarks. Of the ACOs that contracted with Medicare, 52 initially cut costs enough to share in savings while 115 did not achieve any savings, and eight of those that accepted more risk left the program altogether.¹⁵ Roughly one-third of these ACOs saved money and were eligible for bonuses by their third year, a modest improvement.¹⁶ They continue to become more prevalent—nearly one thousand ACOs are now in operation, and more than 32 million insured are enrolled in or placed in them, six in 10 those in a commercial ACO.

“In 2012, Medicare had zero percent of payments in alternative payment models, and by 2016 we were ahead of schedule with over 30 percent of payment in these models like ACOs, bundled payment, comprehensive primary care. ...The ACOs that have been in the program longer are on average saving significantly more money and having better quality results.”

- Patrick Conway, CEO, Blue Cross Blue Shield of Carolina,
former director, CMS Innovation Center.

While the future expansion and success of ACOs remains an open question, most large employers will have a substantial number of their employees enrolled in them in the near future.¹⁷ Employers have a strong stake in supporting national performance measures for ACOs, some of which are being developed by regional stakeholder groups.¹⁸ They can explain the concept to their employees, whose active participation can improve the care coordination that ACOs promise. They can insist that providers, over time, take on real risk as a condition of payment. And as with health systems more generally, they can contract with better-performing ACOs and steer their employees to use them.

Bundled or Episode-Based Payments

Bundled payments are single payments that cover the entire cost of care, across providers and settings, for a patient for a particular illness or condition during a specified period.¹⁹ In their aim of lowering costs and improving quality and efficiency by moving away from FFS payment, and in linking payment to outcomes, their goals are similar to those of ACOs.

Like ACOs, bundled payments were developed in the commercial sector—through Thomson Reuters computer software packages, Geisinger's ProvenCare system, and the PROMETHEUS payment model—and given a substantial boost by Medicare, which launched its own initiative, Bundled Payments for Care Initiative (BPCI) in 2012 to cover 48 episodes of care, roughly half acute care conditions and others related to chronic illness.

As Hoangmai Pham explains, bundled payments can complement ACOs while being something of a hedge as well: "The ACO approach theoretically has more upside because it provides incentives to control episode volume as well as to improve the efficiency of episodes of care. But ACOs face greater risk of falling short because the approach essentially relies on fee for service and the organizational changes required for success are more challenging."²⁰ Some analysts, such as Michael Porter and Robert Kaplan, believe that bundled payments are a preferred alternative to ACOs and to capitated payment, arguing that capitation locks patients into a particular health system, reduces choice, stifles innovation, and entrenches large incumbent health systems.²¹

Bundled payments are far more common than ACOs and are growing more rapidly. Around 10,000 providers receive some kind of bundled payment, while roughly one thousand ACOs are up and running.²² There is also evidence that they are saving money for purchasers while delivering high quality and improved outcomes. For instance, almost half of the nearly 800 hospitals in Medicare's Comprehensive Care for Joint Replacement bundled payment program saved money in its first year.²³ The first evaluation of Medicare's BPCI found that the cost of hip or knee replacement episodes fell \$1166 in participating compared to nonparticipating hospitals, with no measurable differences in outcomes.²⁴

After a slower start, the commercial sector has also been benefiting from bundled payment initiatives. Geisinger's non-emergency CABG bundle saved an estimated 5% relative to traditional methods.²⁵ Horizon Blue Cross of New Jersey reduced its hospital readmission rate for complications from hip replacement by 37 percent after introducing an episode-based payment for joint replacements, and the rate of C-sections for pregnant women with uncomplicated deliveries fell by one-third.²⁶ Likewise, General Electric and Tri Health have launched a maternity care bundled payment plan for GE's employees in Cincinnati.²⁷ Baptist Health System in Texas for joint replacement led to a reduction in post-acute care spending by 27 percent.²⁸

Not all well-planned and promising bundled payment initiatives have succeeded. In California, a demonstration project launched by the Integrated Healthcare Association and the RAND Corporation, which numbered among its participants most of California's health plans along with eight hospitals and a prominent medical group, attempted without success to inaugurate a model bundled payment for orthopedic surgery for adults in commercial plans, mainly because the potential partners could not agree on either design parameters or how to divvy up compensation.

Both the early successes and setbacks point out a set of criteria for employers and other payers with respect to bundled payment:

- Put care redesign, not payment reform, at the heart of bundled payment implementation;
- Consider retrospective payment for the first go-around, in order to get a clear picture of the financial risks involved;
- Ensure that there is a high enough volume of patients for hospitals and other participants to adjust their practices;
- Make sure that clinical quality and appropriateness criteria are included in the stipulations for the bundle;
- Keep the initial definition of the bundle simple and revise over time;
- Make sure that the participating providers have sufficient administrative and legal capacity to handle the payment process.

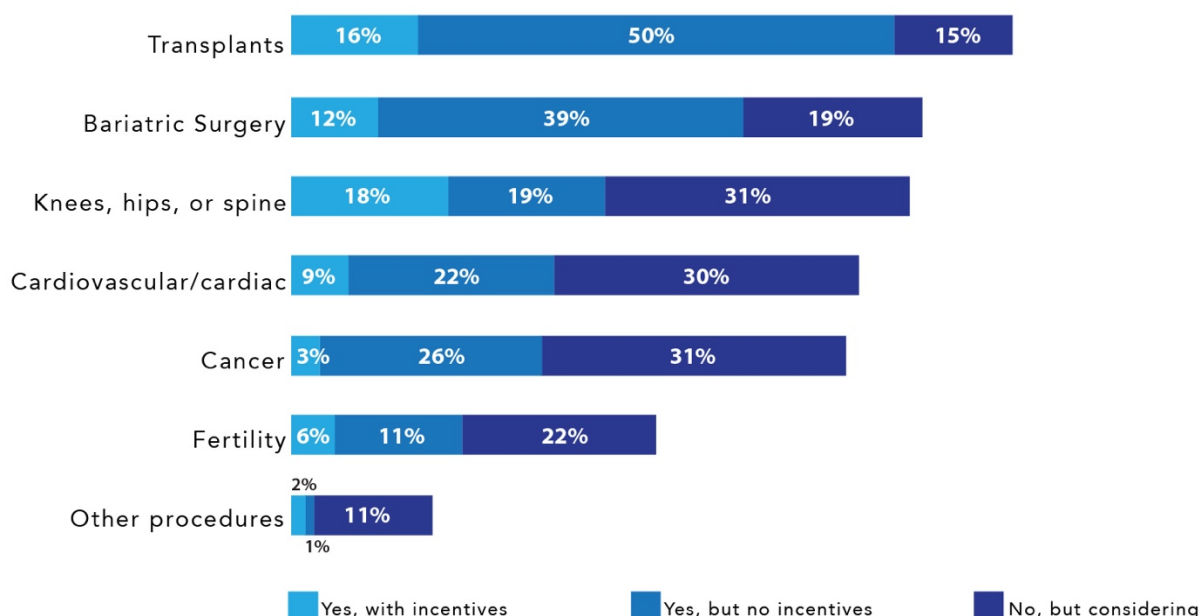
Centers of Excellence

The term “Center of Excellence” has various meanings in health care: in fact, it was first used extensively to refer to a pioneering Medicare project in bundled care payments for heart bypass surgery in the early 1990s. It now refers to a hospital-based institute or cluster of physicians, often-team based, who achieve a high level of quality in particular niche specialties, with an aim toward gaining market share for an institution and attracting patients both through measurable results and reputation. The specialties tend to involve surgeries that demand a significant amount of medical management in the aftermath: examples include cardiology, neurology, spine and orthopedic surgery, and the treatment of diabetes.

Others have used the term to characterize the future of the hospital once most diseases can be managed by drugs in an outpatient setting and in which “upstream” management of health care leads to better population health: under those conditions, hospitals will predominantly focus on the most difficult and labor-intensive procedures and their sequelae.²⁹

In related fashion, Wal-Mart describes “Centers of Excellence” to designate what it deems low-cost and high-quality facilities to perform spine surgery, paying 100 percent of the cost at these locations and only 50 percent elsewhere.³⁰ The rationale draws explicitly from *Choosing Wisely* and its estimate that some 30 percent of spine surgery is unnecessary and indeed harmful, in many cases, to the patient. Back and spine treatments, which are conducted more than twice as often in the US as in any other country, have been estimated, including their complications, to consume 4 percent of US GDP alone.

STATUS OF LARGE EMPLOYERS' CONTRACTS WITH CENTERS OF EXCELLENCE IN 2015



Note: Other centers of excellence include maternity, NICU, sleep apnea, pancreas, cornea, and kidney.

Source: Large Employers' 2016 Health Plan Design Survey ©2015 National Business Group on Health.

Direct Negotiation and Integrated Systems

Some employers are largely bypassing insurers and other intermediaries altogether in order to cut the least expensive deals with a network of high-value providers, in effect creating a kind of “Super ACO.” Sometimes such provider-focused initiatives use integrated systems such as Kaiser, Geisinger, and Intermountain Healthcare, and other companies construct partnerships, relatively speaking, from scratch.

Quality improvement expert Harold Miller speaks of FFS payment as buying a TV one part at a time, and bundled payment as getting an assembled product. The newer and narrower employer-based networks are more of a do-it-yourself (DIY) assembly from a set of superior components.

For instance, Seattle-based Boeing has negotiated direct contracts with large integrated systems in four markets—Seattle, St. Louis, Charleston S.C., and Los Angeles—for some 15,000 of its employees, or around one third of those eligible in those locations. Boeing and the health providers agree on a financial and performance guarantee in advance, with health systems sharing in the savings if they materialize. Boeing's managers can also stipulate aspects of care they find important—like including behavioral health and primary care coordination—and can better customize the plans because its employee base is relatively stable and because (unlike in standard insurance plans) the provider has access to specific

data on the employee population served. Since the program only launched in 2015, knowing the extent of cost savings is premature, but satisfaction among executives, participating providers, and employees is high.³¹

One prominent experiment in California paired the state's retirement fund, CalPERS with a hospital system (Catholic Health West), an independent practice association (Hill Physicians), and an insurer (Blue Shield) to successfully reduce premiums for members by fifteen percent—largely by avoiding the high costs associated with back pain and other orthopedic interventions. The design of this program was developed by a RHIC, the Integrated Healthcare Association, based in Oakland. Despite its well-measured success, it hasn't led to further partnerships, mainly because of leadership changes in the companies involved.

The New Jersey-based Health Transformation Alliance (HTA), a nonprofit composed of 46 self-funding companies with over seven million employees, including American Express, IBM, Johnson & Johnson, and Macy's, has constructed a value-based network to deliver care for several costly conditions including Type 2 Diabetes, hip and knee replacements, and back pain, in three cities, with pay tied to performance rather than volume. This initiative has enormous transformative potential, not least because HTA is doing the actual purchasing rather than simply identifying strong performers and trying to drive others their way. HTA's effort to disrupt the supply chain for drugs, however, has yet to show much in the way of results.

Purchasers need not be as large as Boeing nor part of a giant health alliance to realize the promise of direct contracting. Langdale Industries of Valdosta, Georgia, a rural wood products company, held its average increase per employee to 1.31 percent annually from 2000-2009, far below the national average of 8.83 percent over that time period, while keeping quality high. Its main strategy was to set-up a HIPAA-compliant firm that could figure out quality and cost data for individual providers, then aggressively court those firms to place them in an ad hoc network.³²

The Pittsburgh (Allegheny County) school board likewise managed to spend less in 2016 on health care than in 2014 by thoroughly researching hospital and quality data and using reference pricing to steer its members toward preferred, less expensive sites.³³

The newfound determination of American business to bring down health care costs, reflected in the move toward alternative payment schemes, is driving two forms of consolidation in the health care industry, vertical and horizontal. The spate of mergers between health care businesses of various kinds—such as CVS-Aetna-- are being prompted not only by the historic desire to dictate terms of payment to insurers but to achieve the scale necessary to succeed in the new payment environment. The physical networks being created by hospitals and medical groups of emergency rooms, urgent care centers, and freestanding outpatient facilities are responding to the same incentives.

At the same time, the horizontal integration taking place between insurers, drugmakers, and retailers, as United Healthcare VP Lewis Sandy points out, shows responsiveness to the landscape of high deductible health plans and consumer “skin in the game” with respect to a wide range of everyday health costs formerly covered by insurance, as well as carving out a niche should insurers, as is increasingly the case, be gradually shut out of their traditional business with companies.

“There are proven but mostly untapped approaches in the market that consistently deliver better health outcomes at significantly lower cost. In the main, legacy health care organizations have ignored these solutions, because efficiencies would compromise their financial positions.”

- Brian Klepper, Principal, Worksite Health Advisors

The Buyer Whose Time Has Come: the Amazon Moment in Health Care

Few vague press releases have ever caused such a stir. When Amazon announced in late January 2018 that it would partner with Berkshire Hathaway and JP Morgan (the nation’s largest bank) to create a company that would seek out long-term “technology solutions that will provide...simplified, high-quality and transparent health care at a reasonable cost” it roiled the stock market and prompted a tsunami of speculation. Most of the responses, both in the daily press and in online health care sites and journals, took the form of *schadenfreude*: Messrs. Bezos and Buffett, like many before them, were sure to be ground up on the reefs of American health care. Or even if their one million employees or so got a better deal, it was unlikely that this new consortium would improve the system as a whole. One prominent health economist grumbled that the entire episode was as insubstantial as “pixie dust.”³⁴

While there are dozens of things Amazon could and probably should do—starting with the creation of a framework for making choices in health care that would range from identifying high and low value providers to how best to pick a primary care doctor—the reaction to the announcement was more significant than any of the specific ideas in the sparse press release. Stock analysts—who are as unsentimental as Vegas bookies—clearly expect a set of serious challenges to incumbents in health care. Those organizations, in turn, are all too aware that their dominance largely depends on more money being spent on health care, rather than that it is spent judiciously. In this respect, Amazon is painting a bullseye on changes yet to come. Because of its entry into the health care lists, the set of reforms discussed in this brief are much more likely to get a closer look.

Tackling the High Price of Drugs

The high prices of pharmaceuticals and particularly of specialty drugs are of deep concern to employers: for many CEOs, it is their single greatest worry about health costs. Increased drug spending has accounted for more than a third of cost increases for large employers over the past three years, outpatient drug costs are now a larger source of employee spending than inpatient hospital costs for many employers, and the unpredictability of price changes has especially rattled purchasers. Moreover, many of the levers that can affect drug pricing are in the hands of governments, including price regulation or reimportation, not directly in the control of employers or insurers.

What employers can try includes bypassing PBMs and other suppliers, especially for very large companies, insist on greater transparency on how the price of their pharmaceuticals is set, ensuring that drugs are administered in the least effective setting that is clinically acceptable, and making outcomes-based pricing agreements with drugmakers by setting reimbursements, based on data about a patient's condition, to reflect the expected value of a drug in treating it.³⁵

Historically, drug spending has reached around ten percent of total U.S. health costs, then fallen back. Just six years ago, when drug price rises were in single digits, many analysts argued that drug price rises were of relatively low importance or were self-correcting.³⁶ This correction may not happen quickly this time around, in substantial part because the availability of cheaper generics is likely to be far less for newer drugs. Moreover, the introduction of drugs that actually cure rather than palliate medical conditions (such as Harvoni for Hepatitis C) is likely to upend traditional calculations of drug costs and benefits.

Improving Population Health

Rochester, N.Y., which has some of the lowest premiums and slowest premium growth in the country, is a very good example of how the business community has led on health care. Rochester features living well and prevention initiatives, community-wide technology assessment and oversight of hospital expansion, electronic record sharing, and chronic care management programs, among others.³⁷ Grand Junction, Colorado, is another standout example of a collective commitment by employers to demanding affordability not only for their own workers but for the community at large.

Companies should pay far more attention to the direct impact of employment conditions, especially stress. Even at top companies, job stress produces chronic illness and “presenteeism” which is a large cause of high US health care spending. According to Stanford Business School professor Jeffrey Pfeffer, stressful work conditions cost U.S. companies as much as \$300 billion annually and result in 120,000 “excess deaths” annually. Solutions might include more control over work hours for employees, work space adjustments, less outsourcing, and other changes.³⁸

Wellness Programs

More than half of all American employers with forty or more employees have some kind of wellness program in place, with disease management, lifestyle change, physical activity challenges, digital health assessments, and similar features. While opinions vary, there is little evidence that such programs either save companies much money or contribute substantially to population health. The main reason is self-selection of employees: while costs are invariably concentrated on a few sick employees, it is the mostly healthy ones that avail themselves of the wellness benefits.³⁹

CONCLUSION: WHY WORKING WITH REGIONAL STAKEHOLDERS BENEFITS EMPLOYERS

There are many reasons why being actively involved with other stakeholders, including in a formal RHIC, is mutually beneficial both to employers and to consortia dedicated to eliminating waste and bringing down the costs of care:

- It exposes employers to new forms of value-based purchasing and moves them away from purchasing based on price, convenience, or the preferences of the HR department.
- Employers can help drive the progress of performance measurement and data sharing, and benefit in turn from these initiatives;
- They can become aware of, and participate in, the broad range of activities that improve health outcomes and bring down costs long-term, especially “upstream” costs;
- RHICs are a natural liaison to hospitals and the medical environment for employers who want to improve their understanding of how care is delivered;
- Participation in education and training programs can result in employers being better able to explain health programs and initiatives to their employees;
- Joining RHICs brings together competitors and companies that ordinarily focus on other goals than health reform.

¹ Leif Wellington Haase, *A New Deal for Health*, New York: Century Foundation Press, 2005.

² Jonathan Engel, *Unaffordable: American Healthcare From Johnson to Trump*, University of Wisconsin Press, 2018.

³ Other countries, such as Germany, use employers to facilitate enrollment and contribute to paying for health care, but individuals outside the firms are allowed to join the plan or “sickness fund.”

⁴ Sherry Glied, “The Employer-Based Health Insurance System: Mistake or Cornerstone,” in David Mechanic et al., ed. *Policy Challenges in Modern Health Care*, New Brunswick: Rutgers University Press, 2005.

⁵ Many companies and health policy analysts expected a much different outcome. For the flavor of just one of these, see Moss-Adams LLC, “Will Employer-Based Health Care Live or Die?” February 2013.

⁶ <https://www.shrm.org/resourcesandtools/hr-topics/benefits/pages/high-deductible-plans-more-common-but-so-are-choices.aspx>

⁷ Center for Medicare and Medicaid Services, Health Care Cost Accounting Group, 2017.

⁸ National Business Group on Health, “Large U.S. Employers Project Health Benefit Costs to Surpass \$14,000 per employee in 2018,” August 8, 2017.

⁹ See Jenny Gold, “Accountable Care Organizations, Explained,” *Kaiser Health News*, September 14, 2015; Victor Fuchs and Leonard Schaeffer, “If Accountable Care Organizations Are the Answer, Who Should Create Them,” *JAMA*, June 6, 2012; CMS.gov, “Accountable Care Organizations (ACO); Elliott S. Fisher and Stephen M. Shortell, “Accountable Care Organizations: Accountable for What, to Whom, and How?” *The Commonwealth Fund*, October 20, 10.; Mark McLellan et al., “Accountable Care Around the World: A Framework to Guide Reform Strategies,” *Health Affairs*, September 8, 2014; Fred Pennic, “What Is the Aim of An Accountable Care Organization?”

¹⁰ This understates the interest in the latter, since virtually all the new payment strategies, such as bundled or episode-based payments, include metrics that demand that care meet a population-based or individual standard, which entails delivery reform.

¹¹ John Wennberg, *Tracking Medicine*, New York: Oxford University Press, 2010.

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- ¹² Atul Gawande, "The Cost Conundrum, *The New Yorker*, June 1, 2009; "Overkill," *The New Yorker*, May 11, 2015.
- ¹³ Mark Lutes and Joel Brill, "The 'Missing Link' in ACOs: Patients," *Kaiser Health News*, March 15, 2011; Ian Morrison, "Why Some ACO Pioneers Turned Back," *CAPG Health Magazine*, September/October 2013.
- ¹⁴ Austin Frakt, "Accountable Care Organizations: Like HMOs, but Different," *New York Times*, January 19, 2015; Richard Amerling, M.D., "ACOs Are Just the Failed HMOs, but With More Power," *The Wall Street Journal*, October 31, 2014.
- ¹⁵ Analyzing the early performance of ACOs in Medicare was a virtual cottage industry: some of the key reports and articles include Sharon Silow-Carroll and Jennifer N. Edwards (Health Management Associates), "Early Adopters of the Accountable Care Model: A Field Report on Improvements in Health Care Delivery," The Commonwealth Fund, March 2013;
- ¹⁶ "Larger Share of MSSP ACOs Earn Payouts For 2015 Program Year; Half Break Even," *AIS's Value-Based Care News*, September 2016.
- ¹⁷ Optimists note that ACOs that have operated longer are achieving higher levels of savings and quality, especially in physician-led models. They believe, as well, that comparing savings with benchmarks underestimates how much ACOs have actually saved because it can't be determined how much would have been spent had the organizations not existed. Pessimists see ACOs as representing a small portion of hospital revenue, and a negligible amount of revenue for most physicians, despite the overall number of contracts signed and organizations created. They also note that any savings seem largely unconnected to coordination of care, as expected by advocates, and cast doubt on the studies that show savings. They see the model stalling and meeting a fate similar to many physician-led organizations in the 1980s and 1990s, which mostly collapsed thanks to a lack of capital and an inability to accept full risk for patients.
- ¹⁸ Roslyn Murray and Suzanne Delbanco, "Two Ways Employers Should Push ACO Arrangements to Evolve," *Health Affairs* blog, April 9, 2018; Delbano and David Lansky, "The Payment Reform Landscape: Accountable Care Organizations," *Health Affairs* blog, August 5, 2014; Integrated Healthcare Association, "IHA/PBGH ACO Measurement Initiative Gains Momentum," December 15, 2017; Integrated Healthcare Association (James Robinson and Emma L. Dolan), "Accountable Care Organizations in California: Lessons for the National Debate on Delivery System Reform," 2010.
- ¹⁹ For excellent definitions, descriptions, and overviews, see Cathy Schoen et.al., *Bending the Curve: Options for Achieving Savings and Improving Value in U.S. Health Spending*, The Commonwealth Fund Commission on a High Performance Health System, December 2007; Hoangmai H. Pham et.al., "Episode-Based Payments: Charting a Course for Health Care Payment Reform," National Institute for Health Care Reform, January 2010, and Harold Miller, CHQPR, glossary.
- ²⁰ Pham op.cit. p.9. Joshua M. Liao, et.al., "BPCI Advanced Will Further Emphasize the Need to Address Overlap Between Bundled Payments and Accountable Care Organizations" is a thorough and up-to-date analysis of the ways ACOs and bundled payments can co-exist, and where pitfalls may lurk, in the Medicare program, *Health Affairs* blog, April 17, 2018.
- ²¹ See, in particular, Michael E. Porter and Robert S. Kaplan, "How to Pay for Health Care," *Harvard Business Review*, July-August 2016, the most comprehensive and thoroughgoing case on behalf of bundled payments.
- ²² Paul Kamel et.al., "Expanding the Use of Episode Analytics Beyond Alternative Payment Models," McKinsey & Co., March 2018.
- ²³ Amol S. Navathe et.al., "Characteristics of Hospitals Earning Savings in the First Year of Mandatory Bundled Payment for Hip and Knee Surgery, *JAMA*, March 2018. One non-measurable but telling testament to the momentum around bundled payments is that the Department of Health and Human Services in the Trump administration, after initially intending to roll back some of the bundled payment initiatives, reversed course and now plans to go forward with a similar plan: Jacquelyn W. Chou et.al., "Bundled Payments: Balancing Incentives, Quality, and Affordability," *Health Affairs* blog, December 20, 2017; Robert Pear, "Trump Officials Rejected An Obama Medicare Idea, But Now Adopt One Like It," *The New York Times*, January 11, 2018.
- ²⁴ Jonathan O'Donnell et.al., "Moving Beyond Joint Replacement: Expanding Payment Reforms To Better Incentivize Chronic Care For Degenerative Joint Disease," *Health Affairs* blog, April 23, 2018.
- ²⁵ NYS Health Foundation, "Bending the Health Care Cost Curve in New York State: Options for Saving Money and Improving Care," (The Lewin Group), July 2010.
- ²⁶ Kamel, op.cit. The PBGH/ ECEN network is a good example...it is value-based purchasing, largely for joint replacement, with McKesson, Walmart, JetBlue, and Lowe's participating.
- ²⁷ <https://www.bizjournals.com/cincinnati/news/2016/04/08/ge-taps-cincinnati-hospital-system-to-deliver.html>

²⁸ Kamel, op.cit.

²⁹ <https://www.athenahealth.com/insight/why-hospitals-must-become-centers-of-excellence>

³⁰ <https://news.walmart.com/2016/10/10/the-right-care-at-the-right-time-expanding-our-centers-of-excellence-network>

³¹ Joseph Burns, "With Direct Contracting Boeing Cuts Out the Middleman," *Managed Care*, October 31, 2017. Integrated Health Network of Wisconsin promised to lower costs by 10-15 percent for 55,000 employees of self-insured companies, but it disbanded instead.

³² Brian Klepper, "Case Study: Langdale Industries," in Dave Chase, *The CEO's Guide to Restoring the American Dream*, 2016..

³³ Chase, op.cit.

³⁴ Knowledge @ Wharton (Mark Pauly), "Will Amazon, Berkshire Hathaway, and JP Morgan Reinvent Health Care? February 6, 2018.

³⁵ Daniel L. Blumenthal, et.al., "Using Outcomes-Based Pricing for Medical Devices To Improve Cardiovascular Disease Treatment Value," *Health Affairs* blog, March 29, 2018; Suzanne Delbanco and Andrea Elizabeth Caballero, "The Payment Reform Landscape: For Employers, Keep Pushing Ahead," *Health Affairs* blog, April 21, 2017.

³⁶ See, for example, John Marcille, "A Conversation with Jeff Goldsmith: Finding Success in Change," *Managed Care*, December 14, 2014.

³⁷ Ian Morrison, "Rochester Revisited," *Hospitals and Health Networks*, November 2017.

³⁸ Jeff Pfeffer, *Dying For a Paycheck*, Stanford Graduate School of Business, 2018.

³⁹ RAND's study "Do Workness Wellness Programs Save Employers Money?" (2016) is a good, though skeptical, introduction to this debate and the vast literature that it has generated.

IMPROVING MATERNITY CARE: A MODEL APPROACH FOR REGIONAL STAKEHOLDERS

(Issue Brief #3)

Leif Wellington Haase, 2018

If the cost of giving birth in America were a separate budget line—including the hospitalization of mother and child, plus complications arising from those births-- it would account for a full 0.6 percent of GDP, or around \$100 billion annually. Almost one in three mothers undergoes a Caesarean section, a major surgery, to deliver her baby.

As the Leapfrog Group, an organization that seeks to improve the quality and safety of medical care, points out, among privately insured women aged 19-44, childbirth accounts for the majority of all U.S. hospitalizations.¹ Pregnancy and delivery is the single largest category of diagnoses, by cost, for employers that offer health benefits.

To bring down health care costs and improve the value of spending, improving maternity care—and reducing unneeded and elective C-sections in particular—should rank high on the list:

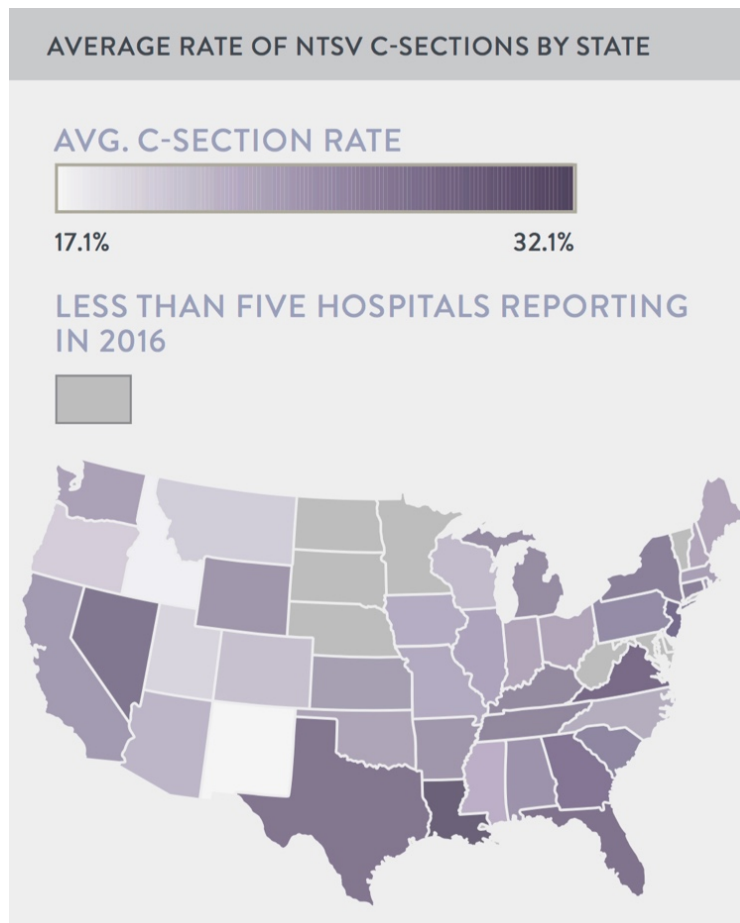
- Other developed countries deliver babies in different settings, pay less to do so, and experience better outcomes in terms of maternal and child mortality rates;
- The number of C-sections is high and rates vary without an apparent difference in underlying need. Consequently, the amount of wasted and harmful care is large;
- The evidence of waste is widely known and shared by physicians and researchers;
- Promising strategies for paying for better maternity care—such as bundled or episode-based payments—have been implemented or are being tested in many states, medical systems, and hospitals.
- Expectant mothers and their families are motivated to be strong partners during pregnancy and in the first months of a child's life.

BACKGROUND

Other developed countries deliver babies in different settings, pay less to do so, and experience better outcomes in terms of maternal and child mortality rates and fewer unnecessary C-sections and other procedures.² The countries nearest the U.S. in birth-related spending, Switzerland and France, spend less than half the amount per birth.

The reason is that in addition to higher prices for services and a fee-for-service payment model in the U.S. other countries deliver babies in different settings and frequently without doctors attending.

While there is no “ideal” rate for C-sections, the prevailing rate of 32 percent in the United States is far above the World Health Organization estimate that just 10 percent of such procedures may be scientifically justified. Healthy People 2020’s goal, backed by the Leapfrog Group and most other advocates for quality of care, is 23.9 percent for first-time mothers with a low-risk pregnancy.³ As Figure 1 shows, a number of US states, mostly in the Northeast and South, substantially exceed this average. The overall U.S. C-section rate rose from 21 percent of births in 1996 to almost 33 percent in 2009. This rate has dipped slightly, to 32 percent in 2016, in the face of a concerted public health campaign to slow the rate of growth.






Source: Castlight Health and The Leapfrog Group, "Maternity Care: Data By Hospital on Nationally Standardized Metrics," 2017.

**“We Have a \$17 Trillion GDP and We Spend 0.6 of GDP
Just On Hospitalizing Moms and Babies at Childbirth”**

- Neal Shah, M.D., Harvard Medical School

MATERNITY CARE HOSPITAL QUALITY STANDARDS

	WHAT IS IT	ASSOCIATED COMPLICATIONS	LEAPFROG'S TARGET RATE
 NTSV C-SECTION	C-Section delivery for a first-time mother of a single baby at term (at least 37 weeks gestation) in the head-down position	Mothers: Increased risk of infection and blood clots, longer recoveries, difficulty with future pregnancies, and chronic pelvic pain Babies: Breathing difficulties, increased risk of developing chronic childhood diseases (e.g. asthma, diabetes)	23.9% or lower
 EARLY ELECTIVE DELIVERY	Scheduled C-Sections or medical inductions performed prior to 39 completed weeks gestation without medical necessity	Babies: Risk of respiratory diseases, pneumonia, or even, in rare cases, death	5.0% or lower
 EPISIOTOMY	An incision made in the perineum to widen the birth canal during childbirth	Mothers: Linked to worse perineal tears, loss of bladder or bowel control, and pelvic floor defects	5.0% or lower

Source: Castlight Health and The Leapfrog Group, "Maternity Care: Data By Hospital on Nationally Standardized Metrics," 2017.

On average, the cost of a C-section is around 50 percent greater than a vaginal birth, not including the greater likelihood that the mother will be more likely to have C-sections for future births, a higher chance of complications, and a greater risk of readmission to the hospital. (Figure 2)

More than half of all births in the US are paid for by Medicaid. An increasing number of those births are covered through Medicaid managed care programs. In the absence of uniform federal rules there has been a great deal of experimentation in payment policies, described below in more detail, and a strong opportunity for bottom-up reform. Many of the strategies for bringing down the rates of C-sections, elective or otherwise, have been bottom-up approaches undertaken by hospitals, integrated delivery systems, and regional stakeholder groups. Employers have a special interest because roughly forty percent of all births are covered through employer-based coverage.

The rate of elective induction or C-sections before 39 weeks, scheduled by the physician and expectant mother, and usually for scheduling convenience or the patient's fear of pain, have plummeted from roughly 17 percent in 2010 to just 1.9 percent today, largely because of public health efforts to measure these rates and to educate doctors, patients, midwives, and others involved in the birthing process about their potential harms.⁴ Choosing Wisely, the initiative launched by the American Board of Internal Medicine Foundation to identify areas of medical overuse, has made the reduction of induced labor and elective C-sections a priority.⁵

Likewise, the rate of episiotomies or perineotomies, in which a surgical incision is made at the opening of the vagina to aid difficult deliveries, has dropped substantially from 13 percent to 9.6 percent in 2016. This rate remains considerably higher than the very limited number of cases in which the procedure is medically necessary.⁶

For patients, most medical procedures are unexpected and unwanted “grudge purchases.” By contrast, expectant mothers and their partners pay greater attention to pregnancy-related findings than to other health care information, making education easier and best practices easier to implement in practice.⁷

REDUCING LOW-VALUE MATERNITY CARE THROUGH PAYMENT REFORM

One promising strategy to improve the quality and lower the cost of maternity care has been to introduce bundled or episode-based payments. Like all forms of alternative payment in medicine (or packaged services of any kind, such as travel or entertainment), bundled payments are a way to encourage suppliers to coordinate services and to discourage the incentives to do more, sometimes needlessly, that fee-for-service reimbursement promotes.⁸

Hospital DRG payments by Medicare are a form of bundled payment. Such episode-based payment schemes that pay for a set of services rather than per unit of care have been developed and tried for dozens of medical procedures, with mixed but generally improving results.

As one policy analyst describes it, “A bundled payment is a single payment to providers or health care facilities (or jointly to both) for all services to treat a given condition or provide a given treatment. It asks providers to assume financial risk for the cost of services for a particular treatment or condition, as well as costs associated with preventable complications. ... When designed to improve value, bundled payment should include clear quality metrics focused on desired clinical outcomes that providers must achieve to maximize their payment.”⁹

Designing a bundled payment is a labor-intensive process. It demands a lot of upfront work, involving providers, administrators, payers, and consumers, to determine what the bundle will cover and what an appropriate payment will be, based on actual costs and the improvements in value that are sought. It is also high-maintenance: adjusting the payment requires a great deal of attention to outcomes, expected and unexpected costs during a process, and how to handle especially expensive cases. The payments are a compromise between FFS and full capitation (per-person payment), in which the provider or medical group assumes full risk for the costs of care.

Design Recommendations for Maternity Care Episodes

1. Episode Definition	2. Episode Timing	3. Patient Population	4. Services	5. Patient Engagement
Episode includes maternity and newborn care for the majority of pregnancies that are lower risk, as well as for women with elevated risk conditions for which there are defined and predictable care trajectories.	Episode begins 40 weeks before the birth and ends 60 days postpartum for the woman, and 30 days post-birth for the baby.	The population is women and newborns who are lower-risk, as well as women who may be at elevated risk due to conditions with defined and predictable care trajectories.	All services provided during pregnancy, labor and birth, and the postpartum period (for women); and newborn care for the baby. Pediatric services are not included. Other exclusions should be limited.	Engage women and their families in all three phases of the episode (prenatal, labor and birth, and postpartum/newborn).
6. Accountable Entity	7. Payment Flow	8. Episode Price	9. Type and Level of Risk	10. Quality Metrics
Accountable entity chosen based on readiness to both re-engineer change in the way care is delivered to the patient, and to accept risk. Shared accountability may be required, given that a patient may be cared for by multiple practitioners across multiple settings.	Payment flow – either retrospective reconciliation or prospective payment – depends on the unique characteristics of the model's players.	The episode price should balance single and multiple providers and regional utilization history. It should reflect the cost of services needed to achieve the goals of the episode payment model.	Ultimate goal is both upside reward and downside risk, with strategies in place to mitigate risk, encourage provider participation, and support inclusion of a broad patient population.	Prioritize use of metrics that support the episode goals, including measures of clinical outcomes and patient reported outcomes, for use in payment, accountability, quality scorecards, and other tools to communicate with and engage patients and other stakeholders.

Accelerating and Aligning Clinical Episode Payment Models, August 1, 2016, HCP-LAN; <https://hcp-lan.org/groups/cep/clinical-episode-payment/>

Despite these challenges, maternity care, like orthopedic joint replacement, is a very good candidate for bundled payment. Giving birth involves a standard timeline, a definitive outcome and endpoint, a generally-agreed upon set of best practices, and a limited number of providers. In addition, the process of pregnancy and delivery exhibits the wide range of price and quality metrics that such a payment scheme can address. The Health Care Payment Learning and Action Network (HCP-LAN) summary of the design principles behind a maternity bundle, reproduces these key elements (Figure 3). Much like the authors of model legislation, this federally-affiliated group of private and public payers has generated a useful blueprint that is guiding bundled payment programs throughout the country.

Though each new bundled payment program reflects local circumstances, all of them have been building on a common knowledge base derived from a set of closely-watched experiments launched over the past decade.

- ***As part of its ProvenCare program, hospitals in Pennsylvania's Geisinger Health System have been receiving bundled payments for maternity care since 2010.***¹⁰ This bundle includes only the mother's care for low-risk pregnancies. According to Geisinger, it has saved money and fewer babies have gone to the ICU.
- ***Community Health Choice, a 350,000 member Medicaid managed-care organization in Houston, Texas, piloted a bundled care program focused on low-income children and pregnant women served by the University of Texas and the University of Texas Medical Branch System.*** One system went substantially over the budget reflected in the bundled care payments, mainly because more infants than expected were born prematurely and incurred high costs. The program showed, however, that by properly setting relative rates for C-Sections and vaginal-births an explicit incentive to reduce unnecessary C-Sections was created and fulfilled.¹¹

- Closely following the HCP-LAN guidelines, ***the state Medicaid agencies of Ohio and Tennessee began to plan similar maternity bundled payment models in 2013 and launched them the following year.*** In Ohio, maternity claims were the single most frequent type. Both states worked very closely with providers and paid close attention to claims history, choosing to make retrospective payments and to establish target thresholds rather than putting providers at risk.¹²
- ***Horizon Blue Cross Blue Shield of New Jersey launched an episode-based payment plan at around 300 sites in the state, commencing in 2013.*** Horizon has found a drop of one-third in unnecessary C-sections in the practices that have chosen to receive bundled payments.
- ***Cigna, in late 2017, became the first national insurer to launch a maternity care bundled payment model.*** It intends to partner with the U.S. Women's Health Alliance, a coalition of 34 large OB-GYN practices nationwide.¹³

Several lessons stand out from the experience of these pioneering maternity bundled payment programs. First, the reach of these payment reforms is growing. Bundled payments have gained more traction in integrated systems that accept risk more readily, but it is expanding outward to commercial insurers for which this concept is more novel. Second, the trend is toward expanding the scope of payment toward including not only the mother's care but that of the baby's as well, usually for a month after delivery. This makes good sense from the standpoint of continuity of care but makes the payment more complicated to design and administer.

Third, and perhaps most important, those designing the payments are striving to keep the patient's perspective in mind. In Ohio, for instance, the Medicaid program wrestled with a target for epidural use which balanced medical necessity and costs with patients' desire for comfort and a less painful delivery. Physicians and their patients are deeply wary of efforts to change styles of practices that seem driven by costs rather than benefit to the patient, so this approach must be embedded both in the design itself and in the way it is presented.¹⁴

A COMPREHENSIVE MATERNITY CARE STRATEGY: CALIFORNIA STEPS UP

Medicaid programs and integrated delivery systems around the country have launched initiatives to lower the rate of C-sections and to promote high-quality maternity care.

California has coordinated a statewide effort whose elements have reduced the harms associated with low-quality maternity care while lowering costs, based on the cycle of pregnancy, birth, and early childhood care. This initiative has relied upon close

cooperation between purchasers, hospitals, major foundations, and regional stakeholder groups such as the Pacific Business Group on Health.

Its origins lie in efforts to reduce the alarming spike in maternal death rates that occurred in California in the early 2000s. From just over 10 deaths per 100,000 births in 2000, California's rate rose rapidly to over 17 deaths in 2006.

In response, with financial support from a division of the California Department of Public Health, the Stanford University School of Medicine launched the California Maternal Quality Care Collaborative, which partnered with 200 California hospitals and over 40 other partners including state agencies, professional groups, consumer organizations, and purchasers. It currently receives funding from hospitals as well as the California HealthCare Foundation and the CDC.¹⁵

The Collaborative's Stanford-based medical director began by establishing a maternal "death review committee" composed of leading physicians, health department officials, and hospital administrators. A statewide committee of this kind had been disbanded years earlier because the maternal death rate had dipped so low. This committee undertook the time-consuming effort to track deaths. This involved, among other research, linking birth and death certificates and sifting through hospital records and media stories.¹⁶

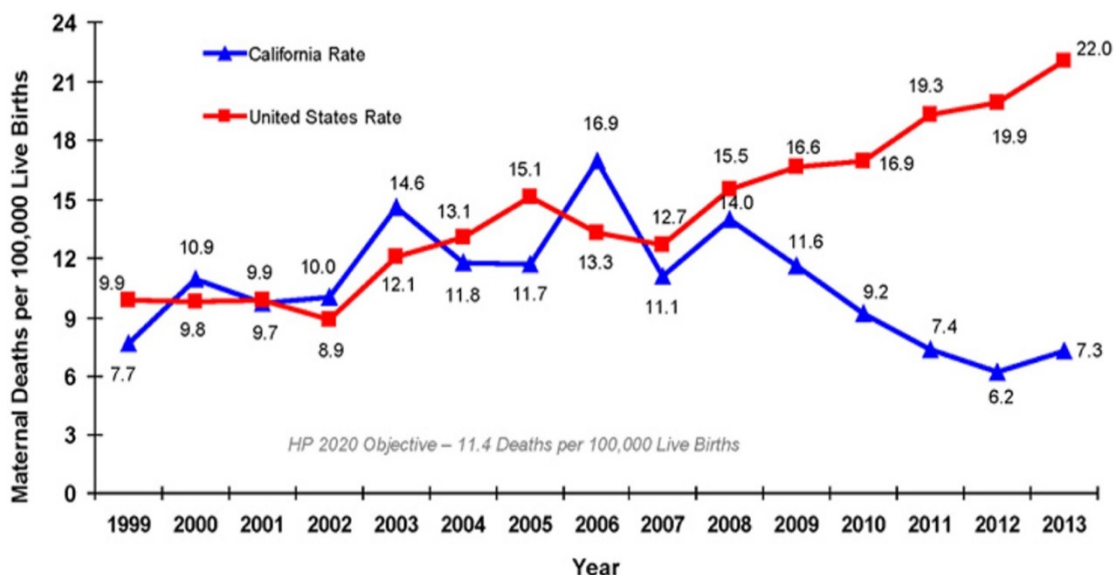
The committee found that mothers were dying from a variety of causes—among them heart attacks, hypertension, and hemorrhaging. Their response was to put together a comprehensive quality-improvement "toolkit" containing best practices for responding to emergency situations, and sharing this with California's hospitals, health plans, and community health centers.¹⁷

They also found that many of these complications were the result of C-sections. This prompted further interventions to reduce the numbers of C-sections, especially those performed on first-time mothers without complications in pregnancy.

At this stage, the California HealthCare Foundation, a "conversion" foundation formed in 1996 as nonprofit Blue Cross of California became for-profit health plan WellPoint, stepped up to fund a database that linked hospital discharge data with birth certificates, allowing both hospitals and the public to learn the rates of C-sections, episiotomies, and elective delivery rates. This, in turn, prompted hospitals and doctors to learn their rates and relative rankings, many for the first time, and to take steps to improve these rates.

With this framework in place, California has been able to radically reverse its infant mortality rates and to reduce drastically unneeded C-section deliveries. The mortality rate has dropped to just over 7 per 100,000, one-third the national average, and a fraction of the poorest performing state, Texas, which hovers around 32 per 100,000.

Maternal Mortality Rate, California and United States; 1999-2013



SOURCE: State of California, Department of Public Health, California Birth and Death Statistical Master Files, 1999-2013.

In 2015, Smart Care California, a coalition of purchasers that cover around 40 percent of Californians, or about 16 million people, established the goal of meeting or exceeding the federal Healthy People 2020 target of 23.9 percent for low-risk, first-time births (meaning a single baby, with its head down, borne by a healthy mother).¹⁸ In early 2018, the coalition recognized 111 hospitals for meeting or exceeding this target, or around 45 percent of the 242 hospitals in the state that offer maternity care.¹⁹

At the same time, Covered California, the marketplace established by the Affordable Care Act, which serves about 1.4 million people in the state, took the unprecedented step of announcing that it would not contract with plans that include hospitals in their networks which exceed the 23.9 percent C-section target.

While most hospitals will meet this goal, a handful of hospitals that serve poorer, often uninsured patients may have difficulty: these hospitals can apply for exemptions and will avail themselves of coaching and consulting offered by the Smart Care collaborative.²⁰

**“Covered California’s Action is Probably the Boldest Move
We’ve Seen In Maternity Care Ever.”**

- Leah Binder—CEO, Leapfrog Group

Not every state has the same well-developed infrastructure of foundations, health plans, associations, and regional stakeholders as California. But few states have as diverse a population or initially wider variations in care. In most states, collaboration of a similar kind would reduce maternal deaths, eliminate unneeded C-sections, and give better value for medical spending.

WHO DELIVERS BABIES AND WHERE?

About three-quarters of births in Scandinavia and in France involve a midwife, a non-physician professional trained to assist women in childbirth. In Great Britain, midwives assist in around half of all births. In the U.S., the rate is lower than 10 percent. Over half of all counties in the U.S. have no midwives. Studies suggest that for uncomplicated births, births in which midwives take the lead have outcomes similar to other methods, including hospital births overseen by physicians.²¹ Scope of practice rules in many states limit the participation of midwives, and many of these may either be misplaced or obsolete. After generations of skepticism and hostility directed toward midwives, the American College of Obstetricians and Gynecologists is poised for a rapprochement with this profession, opening the way to a new and potentially much less costly set of norms for births.

Far more planned births take place outside the hospital in other countries. In the United States, such births account for less than one percent of the annual total, although the rate is over three percent in the Pacific Northwest and in Pennsylvania.²² In most European countries the rate is closer to 2 percent though in the Netherlands, which has the most established tradition of home births in the developed world, the figure is around 30 percent. In the U.S., freestanding birth centers (FBCs), which account for less than half of one percent of all births, have outcomes similar to hospitals at substantially lower prices. A group of OB-GYN researchers at the University of California, San Francisco estimate that if even five percent of expectant mothers each year delivered their babies at FBCs it would result in \$200 million in savings.²³

To be sure, suggesting a change in who assists at birth and where mothers give birth depends on a shift in how the entire organization of the birthing process takes place. At present, giving birth at home in the U.S. may be far more dangerous to mother and child than in other countries because the system is less integrated and the midwives less well-trained.²⁴ But given the discrepancies in costs and outcomes between the U.S. and other similar nations, exploring ways to adopt such approaches should not be controversial.

Individual and group coaching strategies aimed at the expectant mother can also pay dividends in terms of reducing pregnancy and birth-related complications, as well as improving the health of the baby into early childhood. Some studies have shown that expectant mothers who have participated in these groups experience greater satisfaction and better outcomes, and that participation also reduces disparities by race. For instance, a 2017 Cochrane review found that pregnant women who engaged doulas—companions who assist pregnant women during labor and after birth, providing practical and emotional support—were more likely to have spontaneous vaginal births and less likely to need pain medication.²⁵ Group prenatal care, of which the best-known

example is Centering Pregnancy, a program founded by a registered nurse-midwife, aims to reduce lack of education, cultural barriers and feelings of isolation that can contribute to poor birth outcomes: it has received positive reviews but limited evidence-based evaluation to date.²⁶

HOW REGIONAL STAKEHOLDERS CAN TAKE THE LEAD

As this brief has shown, improving maternity care is a true team effort. It closely fits the existing “skill sets” of regional businesses, employers, trade associations, foundations, health advocates, health professionals, and other participants in RHICs. Areas in which the consortium could take a leading role include:

- Convening stakeholders to understand new ways to pay for maternity care and new ways to deliver it;
- Justifying and disseminating the performance standards related to non-essential C-sections and elective inductions;
- Conducting demonstrations of bundled and blended (a single payment regardless of procedure used) payment programs;
- Funding data collection of the kind that proved so effective in California, and served both to lower maternal death rates and rates of unnecessary C-sections;
- Investigating whether changes in staffing or choosing different settings for giving birth can save money without harming, and perhaps enhancing the satisfaction of newborns and parents;
- Investing in training of nurse-midwives and other related medical personnel;
- Producing toolkits and educational materials related to maternity care for medical professionals;
- Community education, outreach, and media blitz aimed at expectant mothers and their families.

MATERNITY CARE AS A GATEWAY TO COOPERATION

Reinvesting dollars saved in health care doesn’t happen automatically, but there are few areas other than maternity care in which spending money in different ways—both upstream on better education, nutrition, and housing—and within health care, by changing how and where babies are delivered, that would do more to improve the value of care and help lower the unacceptably high rates of maternal and infant mortality.

Despite the challenge of developing new payment models and educating providers and patients, the relatively near-term payoff from these changes could offer a model for cooperation in other areas where value in medical spending is sought, but in which the parameters are less clear and the path forward somewhat murkier.

As Lilli Brillstein, the medical director of Horizon BCBS of New Jersey, puts it, “This is a big movement that is catching fire. If we can get this right, I think this will basically filter into every single specialty and every area of health care.”²⁷

¹ The Leapfrog Group and Castlight Health, “Maternity Care: Data by Hospital on Nationally Standardized Metrics, 2018.

² Sy Mukherjee, “Giving Birth in The U.S. Costs More Than Anywhere Else in The World,” *ThinkProgress*, July 1, 2013.

³ <https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives>

⁴ Leapfrog Group, “Maternity Care...”

⁵ Choosing Wisely, www.choosingwisely.org/topic-area/obstetrics/page/2/

⁶ Leapfrog Group, “Maternity Care”; Jennifer Margulis, “What You Don’t Know About Episiotomies Can Hurt You,” *The New York Times*, January 27, 2013.

⁷ For example, see Susan L. Perez, Desiree Backman, and Marge Ginsburg, “Assessing Social Values for California’s Efforts to Reduce the Overuse of Unnecessary Medical Care,” John Wiley, Learning Health Systems, November 16, 2017.

⁸ Hoangmai Pham et.al., “Episode-Based Payments: Charting a Course for Health Care Payment Reform,” National Institute for Health Care Reform, January 30, 2010.

⁹ Suzanne Delbanco, “The Payment Reform Landscape: Bundled Payment,” July 2nd, 2014.

¹⁰ Jess White, “Bundled Payments May Be Coming for Maternity Care,” *Healthcare News & Insights*, January 5, 2017; Sarah Lally (Integrated Healthcare Association), “Transforming Maternity Care: A Bundled Payment Approach,” Issue Brief No.10, September 2013.

¹¹ Francois de Brantes & Karen Love, “A Process for Structuring Bundled Payments in Maternity Care,” *NEJM Catalyst*, Case Study, October 24, 2016; Elizabeth Whitman, “Bundles of Joy? How New Payment Models for Maternal Care Could Deliver Low Costs,” *Healthcare Economics*, August 13, 2016.

¹² Health Care Payment Learning and Action Network, “Establishing Maternity Episode Payment Models: Experiences from Ohio and Tennessee,” 2018. Also link directly to their episode-based payment criteria. Arkansas was the first state to implement bundled payments for maternity care statewide, though its experience did not show any statistically significant drop in C-sections.

¹³ Lola Butcher, “Bundled Payment for Bundles of Joy,” *Managed Care*, January 30, 2018.

¹⁴ Susan L. Perez, Desiree Backman, and Marge Ginsburg, “Assessing Social Values for California’s Effort to Reduce the Overuse of Unnecessary Medical Care,” November 16, 2017, <https://www.onlinelibrary.wiley.com/doi/full/10.1111/hex.12644#references-section>

¹⁵ <https://www.cmqcc.org/who-we-are>

¹⁶ Ashley Lopez, “Like Texas, California Once Had a Maternal Mortality Crisis. Here’s How The State Solved It,” KUT 90.5, February 20, 2018.

¹⁷ Lopez, op.cit.

¹⁸ This consortium includes Medi-Cal, CalPERS, the retirement program for state employees, and the Pacific Business Group on Health, which serves self-insured employers.

¹⁹ State of California, Health and Human Services Agency, “Smart Care California Recognizes 111 Hospitals For Reducing C-Sections,” January 18, 2018.

²⁰ “A New Message for California Hospitals: Shape Up, or Get Kicked Out of Obamacare Networks,” tk, 2018. Covered California, though not its partners in the collaborative, is making similarly targeted quality demands with respect to hospitals and opioid prescriptions and the use of imaging to diagnose and treat back pain.

²¹ J. Sandall, et.al., “Midwife-led Continuity Models of Care Compared With Other Models of Care For Women During Pregnancy, Birth, and Early Parenting,” *Cochrane Database of Systematic Reviews* 2016, Issue 4.

²² <https://www.cdc.gov/nchs/products/databriefs/db144.htm>

²³ Malini Nijigal et.al., “Could Freestanding Birth Centers and Bundled Payments Slow Spiraling Costs for Maternal Care—and Lower C-sections?” *Becker’s Hospital Review*, March 27, 2018.

²⁴ For example, see Kat Eschner, “U.S. Home Births Aren’t As Safe As Many Abroad,” *Smithsonian.com*, May 5, 2017.

²⁵ <https://evidencebasedbirth.com/the-evidence-for-doulas/>

²⁶ See Kathleen Thielen, “Exploring the Group Prenatal Care Model,” *Journal of Perinatal Education*, 2012.

²⁷ Butcher, op.cit.