Evidence Summary: Primary Care Initiatives | March 2019

Primary Care Initiatives in Other States: What Can Oregon Learn?

It is widely acknowledged that the United States should invest in new systems to deliver and pay for primary care. Across the U.S., new systems are being tested and evaluated. What can Oregon learn from prior initiatives to improve primary care?

Evidence for Primary Care Transformation in Oregon

In Oregon, the State Legislature created the Primary Care Transformation Initiative (PCTI) to increase investment in primary care without increasing costs to consumers or total cost of health care; align primary care payment methods across payers; and improve the way we pay for primary care, including payment for addressing social determinants of health.

What can Oregon learn from prior initiatives to improve primary care? The Oregon Health Authority (OHA) selected the Center for Health Systems Effectiveness (CHSE) at Oregon Health & Science University to synthesize evidence from a sample of these initiatives, with the goal of helping OHA develop options for evaluating payer and delivery system adoption of PCTI recommendations.

In this brief evidence summary, we describe recent studies of a range of efforts that reflect direct or indirect investments in primary care, including the patient-centered medical home (PCMH) model, accountable care organizations (ACOs), the Comprehensive Primary Care Initiative (CPCI), and Rhode Island's recent primary care reforms. We focus on recent research and place higher priority on high-quality peer-reviewed studies, although we include some discussion of other reports that may have particular relevance to Oregon or the PCTI efforts. We conclude with considerations for evaluation of the PCTI.

KEY POINTS

- **Patient-centered medical home (PCMH) models**, which represent a diverse set of standards, have not been consistently associated with reductions in spending, utilization, or improvements in quality.
- **Accountable care organizations (ACOs)** have achieved savings by improving care for a broad population of patients, optimizing care in specific settings, and affecting physicians' referral patterns.
- **The Comprehensive Primary Care Initiative (CPCI)** has not been associated with reductions in spending or meaningful improvements in health care quality in the Medicare population.
- **Affordability measures and spending caps** implemented by Rhode Island were associated with increased spending on primary care and reductions in overall spending.

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PCMH Models

The most extensive and rigorous review of PCMH studies to date found no association between PCMH implementation and most measures of spending, quality and service use.

The Patient-Centered Medical Home (PCMH) Model

What's the Initiative?

A patient-centered medical home (PCMH) model is a set of standards for providing primary care. Across the U.S., there are multiple PCMH models that serve as the foundation for payment and delivery system reform. The Joint Principles of the Patient-Centered Medical Home, issued by a coalition of physician organizations in 2007, serve as the foundation for many of these models. The Joint Principles state that a PCMH must: include the voices of patients in decision making; account for all care needs of a patient; coordinate care across the health care system; and commit to measuring quality, safety and outcomes. As of 2017, approximately 12,000 practices and 59,000 clinicians were recognized as a PCMH by the National Committee for Quality Assurance (NCQA).[1]

What's the Evidence?

The studies of PCMH implementation we reviewed typically evaluated the relationship between PCMH recognition and measures of service use (such as primary care visits or emergency department visits), claims-based quality measures (such as diabetes or cancer screening tests), and spending (such as total spending or primary care spending).

Among high-quality peer-reviewed studies, the majority showed no consistent association between PCMH implementation and spending; and no association or mixed associations with quality. While a study of PCMH recognition in Oregon found substantial savings associated with the program, the study had important limitations that suggest the savings cannot necessarily be attributed to PCMHs.

The most extensive and rigorous review of PCMH studies to date, published in 2017, found no association between PCMH implementation and most measures of spending, quality, and service use.[2] In the decade following the release of the Joint Principles, a variety of studies were published that provided a mixed picture of the impact of PCMH initiatives on costs, quality, and utilization.[3–19] To overcome several shortcomings of these individual studies, Sinaiko and colleagues conducted a meta-analysis, focusing on studies that compared PCMH patients to carefully selected control groups. It brought together findings from 11 major PCMH initiatives across eight states, and included measures of primary care, emergency department, and inpatient visits; quality (6 measures); and total spending (excluding pharmacy). The review found no consistent association between PCMH implementation and these measures. However, PCMH implementation was associated with reduced total spending among sicker ("higher morbidity") patients.

The study has several limitations. First, it was based on earlier PCMH models, with data spanning 2006 through 2012. PCMH models have evolved since that time, meaning the findings may not be generalizable to today's models. Second, PCMH programs and results included in the study were diverse, suggesting that there may be opportunities for standardizing and fine tuning certain components of the PCMH model in ways that may achieve better health outcomes at a lower cost. Third, the review did not include studies that focused solely on children or individuals with Medicaid coverage, and assessed only a two-year period following PCMH implementation.

Despite these limitations in the Sinaiko study, the lack of a consistent association between PCMH recognition and outcomes is consistent with an earlier systematic review,[20] and also with subsequent peer-reviewed studies of individual PCMH programs, described below.

PCMH Models

Studies of four PCMH programs show mixed associations between PCMH implementation and quality, utilization, and spending.

Studies of four PCMH programs published since the Sinaiko meta-analysis show mixed associations between PCMH implementation and quality, utilization, and spending. The examined programs include a PCMH designation initiative in health centers supported by the Health Resources and Services Administration (HRSA)[21]; the CareFirst medical home model, implemented by a large mid-Atlantic health insurance plan[22,23]; Maryland's Multipayor Patient-centered Medical Home Program[24]; and the Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration, which examined effects of PCMHs on Medicare fee-for-service beneficiaries in 8 states.[25] Considered together, the studies provide a mixed picture of the changes associated with PCMH implementation. For example, the study of HRSA-supported health centers reported improved quality, while studies of the Maryland and CareFirst models reported mixed results or no improvements, respectively. In addition, Maryland's model was associated with lower spending in the Medicaid population but not the commercial population, and studies of the CareFirst and MAPCP models found no consistent impacts on spending in the Medicare fee-for-service population.

A study of Oregon's Patient Centered Primary Care Home (PCPCH) Program found substantial program-related reductions in spending. Specifically, it found that PCPCH recognition reduced total health care spending by 4.2 percent from the year before clinics became recognized as PCPCHs to three years after, with savings reaching 8.6 percent in the third year (2014).[26] (The study did not include quality measures.) The study compared clinics that gained PCPCH recognition with a matched comparison group of clinics that did not become recognized. However, it had two important limitations: First, PCPCH clinics that comprised the treatment group had a significantly larger share of Medicaid patients than those in the comparison group (54 percent versus 18 percent). Because spending among commercial patients generally increases faster than spending among Medicaid patients (a phenomenon that may have been amplified by the 3.5 percent spending growth cap in Oregon's 2012 Medicaid waiver), and because the study did not adjust for the price of health care services, it is unclear what portion of the savings was attributable to the PCPCH Program versus differential spending trends in the commercial and Medicaid programs. Second, the study used only one year of data prior to PCPCH recognition, and did not test for comparable trends between treatment and control clinics prior to recognition. In economic literature, statistically comparable or "parallel" trends are considered critical for analysis using treatment and control groups.

Accountable Care Organizations (ACOs)

What's the Initiative?

Accountable Care Organizations (ACOs) are groups of health care providers that assume responsibility for health care access and quality among a defined population of patients. At minimum, they consist of a group of doctors and a hospital. ACOs typically receive financial incentives if they meet quality goals. Although ACOs do not represent a direct or explicit investment in primary care, we include reviews of the ACO model because it represents a payment model that depends heavily on primary care as a locus of change. Furthermore, ACOs have been widely studied and provide some indications of where savings may be achieved.

The federal Medicare program includes two ACO initiatives: the Medicare Shared Savings Program (MSSP) and the Pioneer ACO Program, both of which began in 2012.

- The MSSP program provides incentive payments to ACOs that meet quality and spending benchmarks. Relatively few ACOs that began participating in MSSP have left the program since entering.

ACOs

ACOs have achieved savings through system-level changes. Hospital-integrated ACOs demonstrate lower savings, consistent with a reduced incentive to limit inpatient spending.

- Participants in the Pioneer ACO Program can earn bonus payments if they meet spending and quality goals, but may have to pay penalties if spending exceeds a benchmark target. This ambitious program began with 32 ACOs that were selected because they were assumed to be capable of succeeding under these arrangements; by 2015, 13 had left the program,[27] suggesting general challenges with a model that subjected providers to significant downside risk.

ACO models have also been developed for commercially insured and Medicaid beneficiaries. For example, Blue Cross Blue Shield implemented an Alternative Quality Contract (AQC) in 2009, a global budget model that provides rewards for ACOs meeting quality and spending benchmarks for commercial patients in Massachusetts. In addition, some state Medicaid programs are beginning to experiment with ACOs, although these efforts are diverse. Oregon's Coordinated Care Organizations (CCOs) share some characteristics with the ACO framework.

What's the Evidence?

ACOs are associated with savings among patients with Medicare, Medicaid, and commercial coverage. ACOs have been shown to achieve this goal by optimizing care in specific settings and affecting physicians' referral patterns.

Overall, MSSP ACOs were associated with substantial savings. Importantly, the impact differed between hospital-integrated ACOs and ACOs formed from physician groups. On average, hospital-integrated ACOs did not produce savings during the first three years, while physician-formed ACOs were associated with spending reductions that grew with longer participation in the program (4.9 percent lower spending among those in the program for three years).[28] These findings suggest that ACO-participating clinics that are part of a hospital system may lack incentives to reduce hospital admissions, since hospital admissions are an important source of revenue for the health system to which they belong.

Within the Medicare MSSP program, savings were concentrated in certain settings. Specifically, savings occurred in the inpatient setting[29] and, more substantially, with reductions in the use of skilled nursing facility (SNF) and other post-acute care.[30]

Successful Medicare ACOs appear to have achieved lower spending by improving care for a broad population of patients, rather than focusing on small groups of high-cost patients.[31] Some analysts and policymakers have advised provider organizations and payers to "hot spot," or identify and target interventions to very high-cost, high-risk patients. However, there is relatively little evidence to suggest that programs that specifically target high-cost patients can successfully reduce spending.[32–36]

Savings in the first year of the Pioneer ACOs were modest. Savings have been on the order of 1 to 2 percent, but the program, which shifted significant risk to providers, struggled to sustain participation.[37,38]

The AQC, a commercial ACO, was associated with substantial savings which were initially linked to changes in physicians' referral patterns. Specifically, the program demonstrated savings relative to reliable comparison groups for four years running, with the equivalent of 6.8 percent savings over a four-year period by the fourth year.[39] However, these results do not include spending on bonuses—when bonuses were included, they offset savings in Years 1-3, and actual savings did not begin to accrue until Year 4. Of note, some of the early savings occurred not from changes in utilization, but from changes in referral patterns, where primary care physicians steered patients toward lower-priced specialists and facilities. Reductions in utilization and prices contributed to savings, especially in the areas of imaging, tests, and outpatient procedures.

CPCI

A rigorous study of CPCI found that the program was associated with a small reduction in ED visits, but not associated with changes in spending, quality, or physician or patient experience.

Oregon's Medicaid transformation to CCOs was associated with lower spending. Oregon's CCO model has some similarities to the ACO model, given its global budgets, incentive metrics, and comprehensive scope of services. A comparison of Medicaid spending in Oregon to Washington State found savings of approximately 7 percent in the two years after the CCO intervention.[40,41] Savings were primarily attributable to reductions in inpatient spending. Overall changes in quality and access were mixed, although improvements in quality were most prominent among measures where CCOs received bonus payments tied to improvement.

Comprehensive Primary Care Initiative (CPCI)

What's the Initiative ?

The Comprehensive Primary Care Initiative (CPCI) was a four-year effort to strengthen primary care launched by the Centers for Medicare and Medicaid Services (CMS) in October 2012. CPCI offered population-based payments and shared-savings payments to primary care clinics in order to improve their capabilities in specific areas, such as care coordination, risk stratification, and care for chronic conditions. The initiative engaged 502 practices across seven regions in the U.S., including Oregon.

What's the Evidence?

A rigorous study of CPCI found that the program was associated with a small reduction in ED visits, but not associated with changes in spending, quality, or physician or patient experience.[42] The study compared outcomes among Medicare patients at CPCI clinics in all four years of the program with patients at a group of matched comparison clinics, and included statistical controls for patient demographics. A subanalysis of patients in Oregon found a similar lack of association with spending or quality, even when the focus was restricted to sicker ("high risk") patients. The analysis was consistent with an earlier study of the program's first two years, which found no association with spending, a small reduction in primary care visits, and small improvements on two of six patient experience measures.[43]

A less rigorous review of CPCI in Ohio and Kentucky found some desirable changes associated with the program.[44] This study included commercial and Medicare Advantage patients—who were not included in the more comprehensive study described above—and offers the only evaluation of the program's effects on these populations. The study did not find any association between CPCI and spending for commercially insured patients, but did find lower spending among Medicare Advantage patients. However, the study did not use comparison groups or statistical controls for patient demographics. As a result, it offers weaker evidence about the effects of CPCI.

Despite the lack of more promising results, CPCI provided important lessons for its successor, "CPC+," launched in January 2017. CPC+ expands the number of practices enrolled, introduces two tracks for payment and care delivery requirements, strengthens incentives through elimination of the shared savings model and use of a prepaid bonus that practices must repay if they do not meet performance targets, and, in Track 2, moves from a fee-for-service model to a hybrid payment model.

Rhode Island: Affordability Caps and Spending Requirements

What's the Initiative?

Within the last decade, the State of Rhode Island carried out two initiatives to decrease overall health care spending while increasing investment in primary care:

- Between 2009 and 2014, state regulators required commercial insurers to increase their primary care spending rate by one percentage point per year (using strategies other than raising fee-for-service rates)

Rhode Island Initiatives

A study of Rhode Island's affordability standards found that overall spending declined by 8.1 percent while spending on primary care increased between 2010 and 2016.

as a condition of having their rates approved.[45]

- Starting in 2010, the state implemented affordability standards on contracts between commercial insurers and hospitals. The standards included annual price inflation caps (equal to the Medicare price index plus one percentage point) and the transition of hospital payments from per diem to value-based payments.

Rhode Island's model is noteworthy because it parallels Oregon's efforts to increase primary care spending. However, Rhode Island's efforts included specific legislative language that restricted price increases in the commercial market.

What's the Evidence?

A study of Rhode Island's affordability standards found that overall spending declined by 8.1 percent while spending on primary care increased between 2010 and 2016.[46] The study compared spending for commercially insured Rhode Island patients with similar patients in other states. Spending reductions appear to have resulted from lower prices, rather than from changes in health care use or quality; the affordability standards were not associated with changes in use of outpatient services, use of inpatient services, or quality measures—suggesting that it may be possible to slow total commercial health care spending growth while maintaining quality and increasing investments in primary care.

Conclusion

Reforming the payment and delivery system is difficult, requiring cooperation and engagement across a variety of stakeholders. A review of recent reform efforts yielding mixed results confirms these challenges. While the studies reviewed above suggest that there is no silver bullet, they do offer a variety of lessons for future reform and evaluation efforts.

Although the PCMH model has not been consistently associated with lower spending or improved outcomes, there is a general sense among stakeholders that the model is an improvement over the status quo. Realizing the full potential of this model may necessitate a consideration of the system at large. As Sinaiko and colleagues concluded in their study of PCMHs, "[T]he work needed to improve utilization, cost, and quality outcomes in health care cannot be completed within the walls of these practices. More deliberate systemwide transformation, of which implementation of PCMHs may be a part, is needed."[2]

It is possible to reduce spending growth across different patient populations without detriment to access or quality, with the right combination of reforms. Rhode Island provides one example, combining affordability caps with increases in primary care spending. ACOs provide another example, improving outcomes by reducing utilization or changing referral patterns and shifting to higher-value providers.

Savings have been achieved in models that emphasize investment in primary care in tandem with explicit targets for health care spending. Sometimes these savings are modest (e.g., 1 percentage point in the first year of Medicare ACOs), but in other cases they are more substantial (e.g., savings in Rhode Island of 8 percentage points). In contrast, efforts that have emphasized investment in primary care without strong incentives to reduce spending have generally not been associated with lower expenditures.

Price is a critically important consideration for savings in the commercial market. While savings in the Medicare program must come from changes in utilization, savings among the commercially insured can occur through changes in utilization and changes in the price of a service. Most of the variation in commercial spending is driven by differences in prices, not utilization. Furthermore, Oregon's prices appear to be high: about 35

percent higher than the national average,[47] suggesting significant opportunities for cost savings when reforms target prices.

Evaluations of payment and delivery system initiatives never point to a single solution for all of the challenges of our complex health system. The best evaluations shed light on what works, what needs to be refined, and how changes can be sustained over time. The studies reviewed above do not offer easy solutions for Oregon. However, they do provide strong evidence on approaches that have been beneficial. Future evaluations of Oregon's efforts should continue in this vein, providing high value information to guide policy and system change.

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CENTER FOR HEALTH SYSTEMS EFFECTIVENESS

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