ADVANCED PRIMARY CARE:
A Key Contributor to Successful ACOs[1]

Summary of the 2018 Patient-Centered Primary Care Collaborative Evidence Report

August 2018

TOPLINE RESULTS

Public and private policymakers have worked for more than a decade to transform care delivery and payment in order to derive more value for their healthcare spend. Two such leading models — the Patient Centered Medical Home (PCMH) and the Accountable Care Organization (ACO) — exist in the same ecosystem, but little research has been done on how these models interact to promote the Triple Aim of better clinical quality, lower costs and improved population health.[2]

> *A strong foundation of advanced primary care as embodied in the PCMH is critical to the success of care delivery reforms.*

In a first-ever study of its kind, the Patient-Centered Primary Care Collaborative's (PCPCC) 2018 Evidence Report examines the interaction between these two models through both qualitative and quantitative methods. The quantitative analysis shows that after adjusting for organizational and beneficiary characteristics:

- Medicare ACOs with a higher proportion of PCMH primary care physicians were more likely to generate savings;
- Medicare ACOs with a higher proportion of PCMH primary care physicians demonstrated higher quality scores, including on a significant number of process and outcome measures.

Further research is needed to more fully examine the relationship between PCMHs and ACOs, to understand why the PCMH results do not follow a stepwise pattern, and to determine if the findings remain true with respect to commercial ACOs and other measures of advanced primary care beyond National Committee for Quality Assurance (NCQA) recognition.

Patient-Centered Primary Care COLLABORATIVE

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At the same time, these findings suggest that a strong foundation of advanced primary care as embodied in the PCMH is critical to the success of care delivery reforms focused on keeping people healthy and preventing illness, managing chronic conditions to reduce hospitalizations and ER visits, better meeting patient needs and preferences, and reducing costs, among other goals.

With 10 percent of the US population in ACOs and growing, and more than 20 percent of primary care physicians practicing in PCMHs, **these findings have widespread applicability for public and private policymakers who should consider evolving these programs to promote synergy between them**.

IMPORTANCE OF THE RESEARCH

The Challenge with Uncoordinated Care — Patients and families define patient-centered care as care that is integrated and coordinated across settings, between different caregivers and across time, so that in essence the healthcare system knows you and has a memory.[3] The U.S. healthcare system — with its varying care delivery models, distinctly different types of payers, varied state legislation/regulation and ever evolving federal policy — presents a host of challenges to care coordination and an ongoing relationship with a clinical partner. Organization of the U.S. health system undermines patient-centeredness and contributes to rising costs and quality issues (repeat tests and imaging, missed or incorrect diagnosis, conflicting or redundant medications, poor management of acute and chronic conditions, among other issues).

Technology holds the promise of addressing poor care coordination and integration. In many cases, technology has enhanced communication and provided the system with a rudimentary memory. At the same time, innovation in how and where care is delivered — including retail clinics and urgent care settings, telemedicine and smart phone applications, and at-home programs — suggest potentially new challenges to care coordination.

PCMHs and ACOs as Remedy for Uncoordinated Care — Both PCMHs and ACOs were conceived as models to better integrate and coordinate care and to incent the clincal team and other providers to provide proactive care focused on a defined population's needs as opposed to reactive, visit-based care. And while some early proponents of these two models envisioned the nesting of medical homes within a broader healthcare neighborhood and patient care facilitated across settings via an ACO, these models have generally evolved in relative isolation.

Promise of Advanced Primary Care within an ACO Model — Barbara Starfield's research defined key pillars of primary care practice and evidence that others have added, making a strong case that in countries and health systems with robust primary care, people feel better and live longer and healthcare is more equitable.[4] The Joint Principles of the PCMH[5] and the Shared Principles of Primary Care[6] have built upon the Starfield model with an updated evidence base. These attributes comprise the concept of advanced primary care, to differentiate from their absence in much of primary care as it exists today.

ACOs, introduced to the policy community in 2006, focused on population health management across all settings of care, including primary care.[1] This involves better management of care upstream to reduce downstream complications and costs that undermine quality and patient satisfaction.

Given the alignment between these models and related incentives, how might they best fit together to optimize quality, reduce costs and improve overall patient health?

RESEARCH AND FINDINGS

Research question. Given that the PCMH and ACO models are both focused on improving the Triple Aim and that the research literature underscores the importance of aligning performance measures and incentives across settings to achieve optimal results, **the focus of the 2018 PCPCC Evidence Report examines how the role of advanced primary care, such as the PCMH, may contribute to the success or failure of ACOs**.

To answer this question, the researchers at the Robert Graham Center and IBM Watson Health utilized qualitative and quantitative methods. The qualitative methods included two literature reviews and the input of an expert committee (see box #2). The quantitative research included analysis of the 2014 Medicare Shared Savings Program (MSSP) data set and NCQA PCMH data set. NCQA was selected as a proxy for PCMH status as they have the highest PCMH recognition penetration. Other entities that recognize PCMHs include AAAHC, Joint Commission, URAC, state programs and the Federal government.

Qualitative Findings: Summarizing the Literature Reviews and Expert Input

The Report's first literature review examined characteristics of successful ACOs, with success defined as ACOs with shared savings, improved quality or more appropriate utilization of healthcare services. Of 186 peer-reviewed articles identified, 15 met the research criteria. From those articles, six domains were identified that contribute to successful ACOs. **These six ACO success factors closely align with the Shared Principles for Primary Care and were cited by the leaders involved in the expert meeting**. The six factors include:

1. Leadership and Culture
2. Prior Experience
3. Health Information Technology
4. Care Management Strategies
5. Organizational and Environmental Factors
6. Incentive and Payer Alignment

The second literature review summarizes evidence on the cost, quality and utilization outcomes of ACOs that have a specifically articulated advanced primary care focus, with an initial 261 peer reviewed articles identified and 10 meeting narrow research criteria. Most of the articles were based on individual ACO data, and the two that looked at a cross section of Medicare ACOs only briefly mentioned the impact of primary care (not PCMH or advanced primary care).

Results of the articles describing ACOs with a primary care orientation show that:

- **Cost outcomes were generally positive**, with reported costs savings in four articles, one article showing no difference, and one article where costs increased;
- **Quality outcomes were all positive** in the six articles that included such outcomes, although one study showed that the quality improvements eventually leveled off, and in another study quality improvements were not uninform;
- **Utilization was mixed**, with three studies showing positive results (reduced ER) and inpatient hospitalization and increased primary care visits), two studies with mixed utilization and one study showing negative utilization results.

Given the alignment between these models and related incentives, how might they best fit together to optimize quality, reduce costs and improve overall patient health?

Quantitative Analysis Findings

To understand the potential association between PCMH and costs and quality outcomes for ACOs, researchers grouped 333 MSSP ACOs into quartiles from no PCMH experience (Q1) to 43% PCMH PCPs (Q4). On average, ACOs with a higher PCMH PCP share had lower historical benchmarks than the ACOs in the lowest quartile. With respect to the key research question, the major findings show:

- **Cost Outcomes**. After adjusting for organizational and beneficiary characteristics, ACOs in quartiles 2, 3 and 4 which had progressively more PCMH PCP share were more likely to generate savings. Yet the relationship was not stepwise; in other words, a higher PCMH PCP share did not increase savings. More specific results include:
  - Compared to the lowest quartile, ACOs in the second quartile averaged savings of 1.9% (statistically significant) while those in the 3rd and 4th quartiles showed savings of 1.3% and 1.2% respectively (not statistically significant). These results, for ACOs with more PCMH PCP share, are notable given that the overall savings for all MSSP ACOs in the study sample is 0.6%.
- **Quality Outcomes**. After adjusting for organizational and beneficiary characteristics, ACOs in the highest quartile of PCMH PCP share performed better on the 27 process, intermediate outcome and outcome measures as compared to those in the lowest quartile. More specific results include:
  - ACOs with higher PCMH PCP share, had higher clinical quality scores related to preventative screenings and services as well as chronic management (both diabetic and coronary artery disease composites).

IMPLICATIONS: SYNERGY BETWEEN PCMH AND ACOs ELEVATES PERFORMANCE

A 2017 evaluation of the Medicare MSSP program showed that one-third of ACOs in the program achieved savings, although they outperformed their FFS counterparts on most quality measures.[8] As both public and private policymakers shape the evolution of ACOs, they should consider the multiple findings in this report, which suggest that a foundation of advanced primary care — with its ability to drive care coordination and integration — may contribute to better ACO cost savings and higher quality. Conversely, PCMHs may wish to consider how affiliation with an ACO with a strong primary care orientation could contribute to their ability to better achieve the Triple Aim, including improved health for the patients they serve. More research is needed to shed additional insights on the relationship of PCMH and ACOs to guide policymaker evolution of these models.

#1: Differences in Private Payer Utilization for Medicare ACO Penetration Level (2012 and 2016)

A preliminary analysis by IBM® Watson Health™ explored the possibility of spillover effects of Medicare ACOs on surrounding areas, using the IBM® MarketScan® Commercial Claims and Encounters Database which includes claims from nearly 190 million employees and dependents in commercial health plans.

The results show varied penetration rates of Medicare ACOs across regions and varying expenditures and hospitalization rates among patients. However, the results are not linear in that areas with the highest share of ACOs do not necessarily have the lowest expenditures or more appropriate utilization. This suggests that higher prevalence of ACOs in an area does not necessarily mean better or more efficient care for patients in the broader community.

#2: An Expert Meeting was convened on March 22, 2018 by the Robert Graham Center to inform the research on the relationship between PCMH and ACOs

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ENDNOTES

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