

## Situational Overview:

Fostering accountability for health care spending and quality has become a central goal of Medicare payment policy. As part of the Affordable Care Act (ACA), in 2012 the Centers for Medicare and Medicaid Services (CMS) implemented the first two Accountable Care Organization (ACO) payment models: the Medicare Shared Savings Program (MSSP) and the Pioneer ACO model. Under these new payment arrangements, groups of participating providers (ACOs) are given targets (or “benchmarks”) for total spending for their primary care patients with incentives to lower spending below the benchmarks and to perform well on a set of quality measures. Participation in the Medicare ACO program has grown rapidly, and the ACO model has been adopted widely by other payers, mak-

ing it the most prominent payment reform since Medicare created and expanded the Medicare Advantage program. From its inception, the ACO program has been controversial with many critics. ACO model expansion and support through the innovation center required evidence that it did not increase spending or reduce quality. The detailed rules governing the ACO programs needed to be established at the outset and have been revisited regularly. In this dynamic environment, sound analysis was needed to answer several critical questions: Have ACOs lowered spending and improved quality? How have any savings been generated? How can voluntary ACO programs be designed to establish strong incentives to save without compromising participation? Answers to these questions are critical to the development of provider payment systems that successfully slow the rate of spending growth while improving or maintaining the quality of care.



## Summary of the Work:

The work on ACOs by Dr. J. Michael McWilliams and colleagues at Harvard, including core team members Michael Chernew, Bruce Landon, and Laura Hatfield, includes 30 published articles over seven years and numerous translational efforts

to support evidence-based policy. Collectively, this work has made substantial contributions to understanding the impact, mechanisms, and optimal design of ACO payment models.

**Evaluation:** Using rigorous quasi-experimental methods, McWilliams and colleagues found that the Medicare ACO programs achieved modest net savings for Medicare in their early years of operation. For example, ACOs in the MSSP generated \$432 million in net savings from 2014–2015. The finding of modest savings was robust to a battery of sensitivity analyses and falsification tests in which McWilliams and his coauthors considered a range of alternative explanations for the spending reductions, such as favorable risk selection or differential exposure to provider consolidation. Although small, the estimated savings differed qualitatively from calculations based on program benchmarks, which indicated slight losses. McWilliams and his team decomposed this difference, providing an explanation why the savings estimates based on comparing spending to

program benchmarks systematically misestimated the economic effect of the program and thus, while widely used, were not the appropriate metric for assessing program impact.” They also provided evidence that conventional assessments of savings underestimated total savings because they ignored spillover effects on care for non-ACO patients served by ACOs and effects of ACO savings on Medicare Advantage payments. Finally, the evaluation work by McWilliams and his team demonstrated that the savings were achieved without deterioration in measurable aspects of quality of care and with improvement in several domains of patient experiences with care.

**Mechanisms:** Deeper examination by McWilliams and his team produced insights into the mechanisms of savings, which are critical to understand to support program refinements and dissemination of effective strategies. When ACOs were conceived, it was widely presumed that integrated delivery systems would be best positioned to achieve efficiencies through care coordination. McWilliams and colleagues’ finding that physician group ACOs have outperformed health systems directly challenged this notion. Similarly, their findings that ACO program participation was not associated with greater savings among high-risk patients or meaningful improvements in readmission rates, admissions for ambulatory-care sensitive conditions, medication adherence, behavioral health care, or end-of-life care, similarly challenged popular conceptions that high-risk case management, chronic disease control, and transitional care would be the pathways to

## POLICY IMPACT:

Broadly, the evaluation work by McWilliams and colleagues has contributed substantially to the scientific basis for continued development of population-based payment models. Insights gained about the mechanisms of ACO impact have changed the conversation. These insights, cited in regulations and official reports, coupled with the team's engagement in the policy process have directly informed ACO program reforms and design in numerous concrete ways. These include, for example, weakening the link between savings and subsequent "rebasings" of ACO benchmarks, slowing

savings."<sup>10</sup> Instead, McWilliams and colleagues found that much of the savings stemmed from reduced spending on major sources of wasteful spending, such as post-acute care and care in high-priced hospital outpatient facilities, suggesting that direct strategies to limit unnecessary care may be most responsible for the savings. These findings were consistent with conceptual reasons laid out by McWilliams and colleagues as to why physician groups that provide less of the care continuum have much stronger incentives to lower spending as ACOs and why care coordination and focusing on high-cost patients may not produce significant savings, even if good for patients."<sup>11</sup>

**Design:** By anticipating program challenges and recognizing the complexities of regulatory policy, the analytic contributions by McWilliams and colleagues extend far beyond standard evaluative work to identify key considerations and provide empirical guidance on program design. In published papers, unpublished white papers, and comments on proposed rules, they have commented on many features of the ACO payment model.<sup>12</sup> For example, a recurring theme in their empirical findings is that savings from ACOs have been greater when the incentives have been stronger (e.g., the growing savings among physician group ACOs). Another key finding is that ACOs dropping out of the MSSP or Pioneer program generated savings that were similar to those generated by continuing participants, underscoring the costs of dropout and the importance of participation. Thus, in their policy analysis and recommendations, McWilliams and colleagues have focused in particular on sources of weak incentives (e.g., "rebasings" of benchmarks) and offered recommendations for strengthening incentives while encouraging participation.

the transition to regional benchmarks for ACOs with above-regional spending, accommodating smaller ACOs, modifying patient attribution rules, and refining the treatment of overlap between ACO and bundled payment models. The work also has broader implications for the structure of the delivery system. For example, McWilliams and colleagues demonstrated that, contrary to expectations, provider consolidation has not accelerated as the result of providers entering ACO contracts.<sup>1</sup> This finding, coupled with the finding that smaller physician-group ACOs have generated more savings, questions the widespread use of ACO formation as a justification for mergers, acquisitions, or regulatory relief from antitrust law.

## Representative List of Papers:

**McWilliams JM, Landon BE, Chernew ME.** Changes in health care spending and quality for Medicare beneficiaries associated with a commercial ACO contract. *JAMA* 2013;310(8):829-36

**McWilliams JM, Chernew ME, Dalton JB, Bruce BE.** Outpatient care patterns and organizational accountability in Medicare. *JAMA Intern Med* 2014;174(6):938-45

**McWilliams JM, Landon BE, Chernew ME, Zaslavsky AM.** Changes in patient experiences in Medicare Accountable Care Organizations. *N Engl J Med* 2014;371:1715-24

**Douven R, McGuire TG, McWilliams JM.** Avoiding unintended incentives in ACO payment models. *Health Aff (Millwood)* 2015;34(1):143-9

**McWilliams JM, Chernew ME, Landon BE, Schwartz AL.** Performance differences in year 1 of Pioneer Accountable Care Organizations. *N Engl J Med* 2015;372(20):1927-36

**McWilliams JM, Hatfield LA, Chernew ME, Landon BE, Schwartz AL.** Early performance of accountable care organizations in Medicare. *N Engl J Med* 2016;374(24):2357-2366

**McWilliams JM.** Changes in Medicare Shared Savings Program savings from 2013 to 2014. *JAMA* 2016;316(16):1711-13

**McWilliams JM.** Cost containment and the tale of care coordination. *N Engl J Med* 2016; 375(23):2218-20

**McWilliams JM.** Savings from ACOs—building on early success. *Ann Intern Med* 2016;165(12):873-875

Rose S, Zaslavsky AM, McWilliams JM. Variation in accountable care organization spending and sensitivity to risk adjustment: implications for benchmarking. *Health Aff (Millwood)* 2016;35(3):4408

McWilliams JM, Chernew ME, Landon BE. Medicare ACO program savings not tied to preventable hospitalizations or concentrated among high-risk patients. *Health Aff (Millwood)* 2017;36(12):2085-2093

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## Related Papers:

Mechanic RE, Santos P, Landon BE, Chernew ME. Medical Group Responses To Global Payment: Early Lessons From The 'Alternative Quality Contract' In Massachusetts. *Health Aff* 2011; 30(9):1734-42.

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## In addition to the quality of the research, why do you believe your research had the effect it did at the time it did?

This work was among the first to rigorously examine the impact of ACO programs, producing much needed evidence at a time when CMS was considering scaling back ACO initiatives because of their lackluster performance. The elucidation of weak incentives in the programs and the finding of greater and growing savings when incentives were stronger helped to refocus attention on options for building on areas of early success and improving program design. Along the way, the examination of the nitty-gritty aspects of the program—including risk adjustment, benchmark setting, participation, leakage, and patient attribution—generated useful estimates and recommendations to policymakers as they revised program rules. Dissemination through publication in high-impact journals was important, but the impact was largely accomplished by engaging policymakers, analysts, and stakeholders directly.

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