

VIEWPOINT

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Supplemental content

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Alternative Payment Models—Victims of Their Own Success?

The US health care system requires major changes to make health care more affordable and higher quality. In the decade since passage of the Patient Protection and Affordable Care Act (ACA), alternative payment models have become central to this effort. These models are designed to replace existing fee-for-service payments with a reimbursement structure that provides incentive for high-quality and cost-effective care—so-called value-based care. The Centers for Medicare & Medicaid Services has introduced several alternative payment models, each with a particular focus, such as Comprehensive Primary Care Plus for primary care and the oncology care model for patients with cancer.

Whether the shift to alternative payment models has been a success or failure is a matter of intense debate with substantial implications for future policy directions. Yet there is a paradox. Individual demonstration projects have not reported significant success. However, overall health care spending as a share of gross domestic product (GDP) has plateaued at just less than 18%, below the 20% predicted by the US Department of Health and Human Services (HHS) Office of the Actuary and the Congressional Budget Office (CBO).¹ This in part may reflect that the economy has expanded at a rate faster than predicted. Nevertheless, the flattening of real per capita Medicare expenditures since the passage of the ACA is evidence of cost control.² How can these contradictory findings be explained?

Three Explanations for the Paradox

The ACA established the Center for Medicare and Medicaid Innovation (CMMI) to design and test new payment and care models, which it did at a rapid pace and on a large scale during the past decade. The ACA required the introduction of accountable care organizations (ACOs)—consortiums of physicians, hospitals, and other clinicians designed to reduce spending and improve quality by coordinating care. Today, 1 of every 3 traditional Medicare beneficiaries is enrolled in an ACO. From 2012 to 2017, HHS introduced major payment reform initiatives for primary, specialty, and hospital care and greater than 40% of Medicare payments are now value based.

The Secretary of HHS can scale models tested by the CMMI if they reduce spending while maintaining or improving quality. Hence, the center rigorously evaluates alternative payment models. However, at least 3 main factors help to explain why these individual model evaluations may underestimate the true effects of alternative payment models on health spending.

First is psychological change among clinicians and health care organizations. In 2015, then-HHS Secretary Burwell signaled that delivery system reform was inevitable. Anticipation of ACA-driven expansion of value-based payment may have catalyzed a change in psychology and approach among clinicians and health care entities, and produced practice pattern changes and efficiency gains that

decreased spending regardless of alternative payment model participation.

Second is peer network effects. When a clinician's or health care organization's neighboring practitioners or medical centers practice differently, they may be influenced by this other behavior. Clinicians and health care organizations observing colleagues or peer organizations engaging in novel, value-oriented behavior may pursue similar efforts. Commercial insurers, now responsible for 60% of ACO contracts, also expanded value-based contracting to align incentives with Medicare's alternative payment models, further contributing to network effects. This could have accelerated shifts in practice patterns.

Third is control group contamination. Because the CMMI has implemented a large number of models in a short period, it has become practically impossible to ascertain the influence of any single model. Although formal accounting of the degree of contamination across dozens of programs is not yet available, it is likely to be large, supported by reports that more than 350 000 clinicians were exempt from MIPS (Merit-based Incentive Payment System) because of participation in alternative payment models.³ Thus, it is likely that clinicians and health care organizations affected by 1 or more models may be counted in the control group of another model, yielding smaller estimates than true alternative payment model effects.

Therefore, it may be that after enactment of the ACA, alternative payment models catalyzed broader system-wide control of health care spending that is not detectable in any individual model evaluation but is observed in both the flat per capita Medicare spending and flattening of national health expenditures as a proportion of GDP.

Empirical Data on the Shifting Baseline

The plausible influences of these 3 explanations—psychological changes, peer networks, and control group contamination—may be assessed by examining the secular trend in the control groups used in single-model evaluations. If the control group spending consistently decreased in evaluations of different alternative payment models spanning types of participants (eg, primary care practices, hospitals) and types of spending (eg, total spending per patient, total spending on clinically defined episodes of care), it would suggest underlying changes separate from any particular alternative payment model.

Assessment of peer-reviewed, systematic evaluations of prominent alternative payment model programs that reported Medicare spending trends reveals patterns in the control group spending trend. Despite expectations of an increase in spending based on CBO and HHS projections, there was a consistent “bending of trend,” reflecting slowing of spending growth or actual spending declines in the control group for 7 of 8 studies evaluated (eTable in the Supplement). For the 5 reports in which an absolute decrease in control group spending was reported, the de-

crease in spending ranged between 1.7 and 7.0 percentage points, with greater decreases in the control group in more recent years.

Consequently, alternative payment model participants were evaluated against a spending baseline that was decreasing. The changes in control group spending would make it more difficult to detect the effects of single alternative payment models. This is an important point; if the trajectory of lower spending in the control group was directly or indirectly a result of the alternative payment model movement, it could lead to systematic underestimation of the effects of individual alternative payment models.

There are alternative explanations for these observations, but they are improbable. Some might argue that the problem is related to inaccurate health expenditure projections. This explanation seems unlikely. For years, projections have been relied on by health economists, insurers, and the government for estimating spending and savings from various policies. These estimates have been accurate. A 2016 systematic review of HHS projections since 1998 confirmed accuracy across 1-, 2-, or 10-year forecasts to within 1%.⁴

Another possible explanation is that financial uncertainty from changes in the US economy led patients to use less health care. However, this is not supported by the evidence, which indicates that Medicare patients have not reduced their demand for health services.⁵ As a further possible explanation, perhaps Medicare payment reductions explain the observed declines in spending. Yet a 2012 CBO analysis projected that savings from these reductions would be \$35 billion annually, approximately 1% of national health expenditures.⁶ A 2014 Kaiser Family Foundation analysis concluded that a large portion (38%) of the gap between projected and realized spending remained unexplained after accounting for CBO projected savings from the ACA, payment reductions in the Budget Control Act of 2011, the slowing of prescription drug price growth, and other policy changes. Payment reductions alone cannot explain the gap. Policy interventions such as alternative payment models have surely played some role in this unexpected slowdown in spending growth.

Policy Implications of a Changing Expenditure Baseline

When the future of alternative payment models and the best ways to improve affordability and quality of health care are considered, it may be necessary to reexamine whether greater interest should be given to micro causal effects of individual models or to the combined macro effects of policy changes on the trajectory of US national health expenditures.

To truly quantify the national system-level change would require augmenting existing methodological approaches. This may require greater comparisons of Medicare with "closed" systems such as Kaiser Permanente or the VA (taking care to recognize that some clinicians simultaneously practice outside of these systems) or greater efforts for rigorous cross-national comparisons.

Moving forward, these findings also may have implications for alternative payment model design in general and control group selection in particular. It may be useful to treat alternative payment models more experimentally from the onset, focusing mandatory models in specific geographic areas while limiting overlap and contamination. Stratification based on participation in existing models, combined with randomization in the event of overlap, could help isolate effects. Randomization at the organization level and within volunteer cohorts also could help ensure robust controls that better isolate the effects of a model against a neutral backdrop.

The slowing or declines in spending in control groups reported in alternative payment model evaluations are important and suggest that it is premature to call alternative payment models a failure. Conversely, through the rapid implementation of broadly transformative models, the Centers for Medicare & Medicaid Services may be a victim of its own success, with broad secular changes prompted by policy undercutting individual program results. Given that few, if any, alternative strategies to decrease health care spending are supported by robust evidence, and that alternative payment models have not led to worsening quality or higher spending, these models remain an attractive option that policy makers should exploit.

ARTICLE INFORMATION

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2 start-ups, Village MD and Oncology Analytics; and being a partner at Embedded Healthcare LLC and COVID-19 Recovery Consulting.

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