http://blogs.lse.ac.uk/usappblog/2016/01/18/accountable-care-organizations-are-too-small-and-loosely-affiliated-for-financial-bonuses-to-be-effective-at-improving-performance/

## Accountable Care Organizations are too small and loosely affiliated for financial bonuses to be effective at improving performance.

One part of the Affordable Care Act – or Obamacare – has an attempt to tackle the fragmentation of US health care delivery through the introduction of Accountable Care Organizations (ACOs). These organizations contract to provide care to large groups of Medicare recipients and there are group incentives for care to be provided more cost effectively. In new research Brigham Frandsen and James B. Rebitzer find that ACO's relatively large sizes and loose setups mean that more powerful incentives are needed to reach cost-reduction targets. They write that for an ACO to achieve a cost reduction of 6 percent, bonuses would need to exceed 12 percent of costs – twice the intended savings.



The US healthcare delivery system is famously inefficient, but the causes of its inefficiency are poorly understood. One widely discussed potential source of inefficiency is fragmented care delivery. Fragmentation occurs when health care delivery is spread across an excessively large number of weakly coordinated providers, leading to high costs and low quality. These inefficiencies are most apparent for patients with chronic diseases and they are magnified when care is spread across providers working as independent owners of small practices – as is common in the US



Fixing the problem of fragmentation has been an important goal of public policy, most notably and recently via the introduction of Accountable Care Organizations (ACOs) as part of the Patient Protection and Affordability Act (or Obamacare). ACOs refer to a network of providers who jointly contract with Medicare to provide care to a large block of Medicare enrolees. This contract involves group incentives designed to encourage the provision of cost-effective care while maintaining quality.

In new research, we analysed the likely effectiveness of incentives for ACOs. We do this by calibrating an economic model of ACO incentives using cost and quality data from a million chronically ill commercial insureds. Using this model we estimate how large incentives would have to be to achieve modest cost-reduction targets in a Medicare population. We find that in order for even modest cost-reduction targets to be achieved, the incentives would have to be so large that the cost savings would be unable to pay for them.

Although the rules are complicated, in essence ACOs are given a global budget and are allowed to keep a fraction of the savings from coming in under budget. These group incentives, which can be distributed to individuals as bonus pay, are aimed at counteracting fragmentation by encouraging physicians to adopt more efficient practices and engage in more effective care coordination.



In our model, individual physicians in an ACO can take actions that influence the cost and quality of care, but Medicare cannot directly observe these actions. Instead Medicare measures the ACO's aggregate cost and quality outcomes and uses these measures to specify cost and quality targets. When ACOs hit their quality targets and come in under budget, they receive a share of the savings which are distributed to individual physicians. Physicians respond to these incentives in the usual way: they will act to improve efficiency or quality when the marginal benefits exceed the marginal opportunity cost of their efforts.

A key goal of ACOs is to encourage physicians to join larger, more integrated groups. Our calibration therefore highlights the effect of group size on ACO incentives. Group size influences the power of incentives in two ways. First, Accountable Care Organizations (ACOs) are paid based on the performance of all the physicians in the group, so larger ACOs suffer from free-riding problems that weaken incentives. Secondly, in larger groups the precision of performance measures improves and this enhances the power of incentives. It turns out that as ACOs increase in size, the free-riding problem worsens much more rapidly than precision improves. The net result is that the larger the ACO, the more powerful will be the incentives required to hit any given cost reduction target (while maintaining quality above a threshold level). Our calibration reveals that this problem is so severe that at typical ACO sizes, the savings generated by the incentives won't be enough to pay for the incentives.

To see the stark implications of this result, suppose that Medicare aims for ACOs to reduce costs by 6 percent. Our calculations imply that for an ACO of ten physicians, the performance bonus required to hit this target will exceed 12 percent of costs—twice the level of the hoped-for savings! This means that unless individual ACOs have a means for breaking through their budget constraints, they will necessarily operate with bonuses that are too small to achieve their goals. Does this mean that ACOs are doomed to failure?

Not necessarily. Rather these results imply that successful Accountable Care Organizations must find ways to amplify their weak financial bonuses. To understand the prospects for amplifying underpowered bonuses, it is important to note that ACOs are not typically made up of tightly integrated organizations in which physicians are employees working with shared technologies and human resource practices at internally owned hospitals. ACOs are more typically hybrid organizations formed from an amalgam of loosely affiliated physicians running their own, much smaller, practices and working at affiliated hospitals.

The degree of integration matters for two reasons. First, valuable on-going employment relationships allow for

deferred compensation and efficiency wage incentives that can be quite powerful even when performance bonuses are weak. Secondly, tight integration enables another set of powerful but subtle amplifying strategies. These include: (i) the use of job design to reduce the opportunity cost of effort; (ii) "nudges" that make cost-effective protocols default behaviors; and (iii) the use of peer pressure and mutual monitoring to establish positive social norms among providers who interact frequently.

Our analysis of ACO incentives thus raises important, but hitherto overlooked, public policy questions. Will the many ACOs that are built upon loose, open networks of independent providers be able to augment their underpowered bonuses? Will they do this by employing their physicians or will they find alternative approaches? The answers to these questions will, according to our analysis, be central for understanding the long-term viability of ACOs as an antifragmentation policy.

This article is based on the paper, 'Structuring Incentives within Accountable Care Organizations', in The Journal of Law, Economics, and Organization.

Please read our comments policy before commenting.

Note: This article gives the views of the author, and not the position of USAPP – American Politics and Policy, nor the London School of Economics.

Shortened URL for this post: http://bit.ly/10srwPu

## About the authors

## **Brigham Frandsen** – *Brigham Young University*

Dr Frandsen is an Assistant Professor of Economics at Brigham Young University. Dr Frandsen's methodological research focuses on causal inference on distributional effects. He applies these methodologies to questions about the impact of labor market institutions and interventions on education and earnings outcomes. His health policy research deals with the consequences of fragmentation in the U.S. health care system.



## James B. Rebitzer – Boston University's Questrom School and NBER

James B. Rebitzer is a professor of management, economics and public policy at Boston University's School of Management where he chairs the Markets, Public Policy and Law Department. He is also a professor of economics (by courtesy) in the College of Arts and Sciences Economics Department. He is a Research Associate at the National Bureau of Economic Research and the Levy Economics Institute, a research fellow at the Institute for the Study of Labor (IZA) and Cornell's Compensation Research Institute and also an Affiliate of the Sloan Industry Centers Project.



CC BY-NC 3.0 2015 LSE USAPP