Editorial

Understanding the Market Dynamics Associated with New Payment Models Emerging from Health Reform—Lessons from Postacute Care Payment Changes

The article by Peter Huckfeldt and colleagues (Huckfeldt et al. 2013) in this issue of *Health Services Research* focuses on the market impact of several payment changes instituted between 1997 and 2010 by the Medicare program for postacute care services, including skilled nursing care, home health care and rehabilitation services. Several of these reforms changed reimbursement from its historical cost basis to a prospective payment model, similar to the Diagnostic Related Group system implemented in 1983 and used by Medicare to reimburse inpatient care provided by hospitals. Other payment changes included moving from cost-based reimbursement to per diem or per discharge payments, with all models focused on setting “appropriate” payment rates as a function of expected resource needs based on scientific evidence and clinical guidelines, adjusting for patients’ clinical severity and functional ability to account for the fact that patients require different levels of services depending on their clinical and functional status. As Huckfeldt et al. (2013) describe, these payment changes can be viewed as affecting both the average payment per service and the marginal payment for a service, with the goal of these changes being to reduce unnecessary or excessive utilization, and to create incentives for health care providers to organize and deliver services more efficiently, at least within the limits of the new reimbursement levels.

The Huckfeldt et al. (2013) article uses retrospective analysis of Medicare data to ask an important question—what impact did these payment

changes have on the concentration of providers in the postacute care market? Specifically, did the payment changes result in increased provider entry or exit? Did the payment changes result in consolidation or regionalization of services or vertical integration across the continuum of postacute care? The authors' motivate their empirical work by developing hypotheses from a conceptual framework with its roots in prior work by Bresnahan and Reiss (1994). The Bresnahan and Reiss model, which has been used by other health economists, is rooted in microeconomic theories of the firm and of production, modeling health care providers' entry, exit, and scale/scope decisions as a function of cost structure (fixed, variable, and sunk costs for entrants), demand, and the revenue expected per unit of service provided. Depending on the mix of payment changes (e.g., changes in marginal or average payments), the model yields either certain or ambiguous hypotheses regarding provider entry, exit and scope/scale, but nevertheless, the authors estimate the relationship empirically using historical data before and after these various payment changes took effect. To confirm that changes in entry, exit, and provider concentration were due to Medicare's payment changes, as opposed to some other temporal trend, the authors investigate the presence of larger effects in markets with a higher percentage of care paid for by Medicare, also known as the Medicare share.

So what did the authors find? Not surprisingly, they found that the level and composition of reimbursement mattered and that estimated changes were largely consistent with the hypotheses generated by their conceptual model. Specifically, the authors found that when payment policies reduced both average and marginal payments, new provider entries decreased while provider exits increased, consistent with theoretical predictions. When payment policies resulted in reduced marginal payments with increased average payments, as was the case with the home health and inpatient rehabilitation services prospective payment systems, the results were mixed, consistent with ambiguous predictions from the conceptual model. For example, for home health care, entrants increased while the number of exiting firms decreased, with no statistically significant relationship estimated for inpatient rehabilitation services. In addition, the authors estimated greater changes in entry and exit in markets where Medicare held a greater share of the overall reimbursement, suggesting that the changes were due to payment policies rather than temporal trends. A central question not answered by the authors' analysis, however, is whether these payment reforms resulted in the socially optimal number and concentration of providers. This is a key question, as reducing the number of entrants or even prompting competitors to exit the marketplace may be

viewed as positive in an excess supply scenario, particularly if those leaving (or not entering) the market are less efficient than those that remain. On the other hand, a reduction in competitors or provider capacity may be negative in a shortage situation that results in clinically harmful delays in accessing appropriate care. But what is the socially optimal quantity and concentration of providers? That answer is not as simple as one might think, but certainly involves considering (a) the “ideal” number of providers needed to provide a reasonable level of access to care for a relevant geographic or patient population; (b) the reasonable preferences of patients regarding location, diversity, and practice style; and (c) the economically efficient organization and delivery of care, where efficiency considers both economies of scale (a positive) and excessive market power (a negative). The answer should also consider the production possibility frontier, and the possibility that, in some instances, certain types of providers might be capable of substituting for other types of providers, thus making both reductions and additions in the capacity of particular provider types desirable.

WHAT LESSONS FROM PRIOR POSTACUTE PAYMENT CHANGES CAN INFORM CURRENT PAYMENT REFORM EFFORTS?

The implementation of health reform has created a renewed interest in payment reform efforts with a variety of options being discussed and tested, including bundled or episode payments, shared savings models, global payments with the assumption of some or full risk, and various bonus or penalty models with payments tied to providers’ meeting structural requirements (e.g., PCMH certification or meaningful use criteria) or preset thresholds on standardized quality and safety measures. Many of these payment reform demonstrations are sponsored by the Centers for Medicare and Medicaid Services and its Innovation center (i.e., CMMI) that was created by the Affordable Care Act (Shrank 2013; Centers for Medicare & Medicaid Services: <http://innovation.cms.gov>). Other payment reform initiatives are being implemented by state governments or commercial payers, with new organizational entities, such as Accountable Care Organizations, being developed by provider organizations. Some of these new payment models, such as episode-based payments, are closely related to the prospective payment reforms in the postacute setting as discussed by Huckfeldt et al.

(2013) Still, many of these newer payment reform models are quite different, focused on linking care across the continuum (e.g., ambulatory and acute care and postacute care) and on addressing the cost structure of care provision, incentivizing integration among various provider and clinical settings and offering incentives for more efficient delivery relative to historical trends. Indeed, unlike the postacute examples studied by Huckfeldt et al. (2013), some of the more far-reaching payment models are changing the entity paid, requiring the creation of a new one that can receive payment at the organizational level and allocate that payment to providers across a continuum of care (Bartolini 2013).

Perhaps the biggest contribution of Huckfeldt et al.'s analysis (2013) is the imperative to understand how payment relates to (or should relate to) the cost structure of the firm—fixed costs, variable costs, and sunk costs. Focusing on the cost structure of the firm is also important when trying to develop a payment model that incentivizes innovation in efficient care delivery, which, by definition, is trying to change the status quo cost structure by identifying innovations that can deliver quality of care more efficiently. As Huckfeldt et al. (2013) point out, any proposed payment reform model ought to consider the impact on provider concentration (including provider entry, exit, and consolidation), and any potential anticompetitive or negative access effects of changes in provider concentration, but doing so is challenging, given the underlying goal of many payment reform efforts to reconsider the overall production function and to create a more efficient cost structure going forward. Thus, caution is in order to not focus too narrowly on changes in provider supply relative to historical trends, as some changes, such as substituting one type of provider for another, or increasing provider throughput and productivity by adopting innovations, such as electronic health records, can in fact create the very efficiencies our health system ought to be striving for in pursuit of the triple aim—improved health, better care experiences, and lower costs (Berwick, Nolan, and Whittington 2008). In short, what we really need from payment reform is the appropriate incentives to innovate on the production side of health care, where health output (health improvement, health maintenance, or realizing health potential) is maximized for a given population with a set amount of health expenditures. Innovation involves creatively thinking about how best to organize the various inputs used to achieve the desired health output, even if such organization results in changes in the balance of any one type of provider, or even the creation of new types of labor such as health coaches, health navigators, or health teams (Madden, Carrick, and Manno 2012; Coniglio 2013). Still, as Huckfeldt et al.

(2013) suggest, monitoring changes in provider capacity and concentration is important both for ensuring access and for making sure that health input markets are reasonably competitive.

As health care reform implementation continues to play forward and new payment models are piloted and implemented, it will be important for the health services research community to study the impact on health, patients' care experiences, and individual and system costs. Policy formulation in health care has often lacked sound data on insurer and provider market concentration, and understanding market concentration will become even more difficult as new models of vertically and virtually organized provider organizations are developed (Scanlon et al. 2006). While new payment models will not be rolled out in purely experimental settings, policy makers and researchers should work together to design implementation strategies amenable to study, so that the research community can help understand how payment changes are likely to impact individual patients and payers as well as the broader health care system. The work of Huckfeldt et al. (2013) provides one good example of how health services researchers can provide value in understanding the impact of payment changes.

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