Do Salaried Physician Specialists Provide Less Care to Patients With Chronic Disease?

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Under traditional fee-for-service (FFS) payment, health care professionals receive higher revenue when they provide more services, which can lead to excess care delivery. In response to growing health care expenditures, policy makers around the world are piloting and implementing alternative methods of reimbursement, such as capitated and pay-for-performance models, with the goal of eliminating unnecessary health care services without compromising the quality of care. For physicians employed by larger organizations, salary-based payment may be one way to achieve these goals.

In Canada, the federal government is the primary payer for health care. In contrast, private payers have a much larger role in financing US health care. However, both systems rely heavily on FFS payment for physicians. In Canada, physicians typically serve as independent contractors, and 72% of contracts follow a FFS payment model, while 95% of physician contracts in the United States are FFS.1,2 Alternatives to FFS reimbursement for physicians—such as salary-based and capitated payments—show promise in reducing health care costs in some primary care settings3 and may serve an important role in future policies designed to encourage more efficient care delivery.

In response to a growing demand for specialty care, decreasing numbers of physician specialists, an aging population, and physician burnout, the Alberta government piloted a new payment model beginning in 2002 to 2004, the Academic Alternative Relationship Plan (AARP), which shifted physician payment from FFS to salary- or contract-based payment. The AARP payment model was enacted in the hope that it would encourage innovation and improve overall population health.4 While the original AARP only involved 2 academic departments, similar models have since been adopted throughout the province.5 Quinn and colleagues6 use more recent information from a large data repository in Alberta, Canada, to determine whether participation in the AARP salary-based payment model is associated with differences in health care quality, utilization, and treatment costs for patients with chronic illness.

Quinn et al6 focus on patients with diabetes or nondialysis chronic kidney disease (CKD) who first visited a physician specialist between 2011 and 2014. Measures of health care quality include the delivery of guideline-recommended care (eg, angiotensin converting enzyme inhibitor or angiotensin receptor blocker use, statin use, urine albumin screening, hemoglobin A1c screening, and eye exam in patients with diabetes) in the 6 months following each patient’s initial visit to a physician specialist and adverse event rates (hospital and emergency department admissions for ambulatory care-sensitive conditions) at any point prior to March 31, 2015. Measures of health care utilization and costs included rates of follow-up physician visits and procedures and overall health care costs. The 17,890 patients with diabetes and 22,294 patients with CKD who were seen by salary-based physicians during the study period were matched 1:1 using propensity scores to patients who were seen by FFS physicians. Matched pairs were compared in unadjusted analyses and then again in models that accounted for remaining covariate imbalances and clustering of observations within individual physician practices. Patients seen by endocrinologists, nephrologists, and internal medicine physicians (considered specialists in the Canadian system) were included in the analysis.

In the matched cohorts, patients seen by salary-based physicians had 13% higher rates of overall follow-up physician visits and procedures compared with those seen by FFS physicians (1.74 visits per 1000 patient-days [95% CI, 1.58-1.92 visits] vs 1.54 visits [95% CI, 1.41-1.68 visits]), although this
difference was not statistically significant ($P = .06$). Among patients with diabetes, the rate of hospital admissions and emergency department visits for diabetes-specific conditions was 12% higher in patients seen by salary-based physicians compared with FFS physicians (1.63 per 1000 patient-days [95% CI, 1.47-1.81] vs 1.47 [95% CI, 1.32-1.63]), although this difference was also not statistically significant ($P = .15$). There were no meaningful differences in hospital admissions for kidney-specific conditions, measures of guideline-recommended care, or overall costs. The authors also observed variation in measures of health care utilization and quality of care across physicians.

This study indicates that patients with diabetes and CKD who were newly treated by specialists in a salary-based payment model did not receive less care and, in fact, may have received more outpatient care. Considering prior evidence from both primary care and specialty care settings that economic incentives influence physician behavior, and evidence in primary care that FFS is associated with higher costs and health care utilization, findings in this study are somewhat surprising. It would appear that salary-based payment does not have the same association with reduced quantity of care provided for specialist physicians who treat chronic diseases as it does in some primary care settings. Instead, other factors contribute more to the variation in care delivery and outcomes observed across physicians. To support this conclusion, the authors cite several studies of physician specialists that demonstrate similar findings.

There are several other explanations for these findings that are also worth considering. First, the AARP model did more than shift from FFS payment to a salary-based payment system. The payment reform included incentives for innovative care delivery, improved access to specialist and high-quality care, improved medical education and research capacity, and more effective governance and accountability. An examination of care delivered when the model was first enacted demonstrated substantial increases in the quantity of care delivered among participating institutions. Perhaps these other incentives built into the model offset any tendencies for salary-based physicians to provide less care. Second, the scope of outcomes examined may not have been sufficient to detect meaningful differences in quantity and quality. For example, the investigators did not examine patient-reported outcomes and did not compare the number of new patients seen by specialists or wait times among physicians who did and did not participate in the AARP model.

Finally, underlying differences in the health of the 2 comparison groups could have confounded efforts to detect differences in care delivery due to the method of payment. Prior to matching and statistical adjustment, patients in salary-based payment systems appeared sicker. They were more likely to have advanced CKD and had more comorbidities, lower socioeconomic status, and a longer duration of diabetes. While the matching process eliminated many of these baseline differences in observed characteristics, unobserved differences may persist. A need for more intensive care among sicker patients may offset any effects of the payment model. Although the differences were not statistically significant, increased hospitalizations for diabetes-related conditions and more intensive outpatient care among patients seen by salary-based physicians may reflect differences in underlying health. Salary-based programs were more likely to be in tertiary-care centers, which could account for some of the differences in illness severity.

To combat rising health care costs, policy reform efforts are increasingly transitioning physician reimbursement away from FFS. In the United States, the Merit-Based Incentive Payments System and Alternative Payment Models represent efforts to align physician payment toward value rather than quantity. Fully capitated models, such as Medicare Advantage, are also common. In Canada, provinces have made similar efforts. For example, the Excellent Care for All Act in 2010 in Ontario mandated quality committees and plans to focus on high-quality patient care and value-based health care. As these (and other) initiatives continue, the findings by Quinn et al indicate the importance of proceeding with caution. They highlight how economic incentives that have a desired effect on physician behavior in one clinical setting may not have the same effect when applied to other care settings and in conjunction with other policy changes.
REFERENCES