## **EDITORIALS**

## The Insurance–Readmission Paradox: Why Increasing Insurance Coverage May Not Reduce Hospital-Level Readmission Rates

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The Affordable Care Act has made hospital readmissions a major public policy target by tying Medicare hospital payments to readmission rates for certain diseases. Since then, debate has spiked over the factors contributing to hospital readmissions, with particular attention being paid to the impact of socioeconomic status and access to care. The Massachusetts healthcare reform of 2006 is a useful natural experiment to help disentangle some of these effects. Although reform did little to change patients' income, education, health literacy, or other determinants of socioeconomic status, it did dramatically reduce uninsurance rates. State-wide uninsurance rates dropped from 8.4% prereform to 3.4% postreform. Most important, a gain in insurance appeared to translate to genuine improvements in access to outpatient and preventive care. Massachusetts residents postreform were more likely to report a usual source of care, were more likely to have had outpatient office visits, and less likely to use the emergency department.<sup>1-2</sup> Thus, the 2006 Massachusetts health reform legislation appears to have genuinely increased access both to insurance and to outpatient care, while reducing the need for preventable hospital-based care.

Contrary to popular belief, patients without insurance have low unadjusted readmission rates for most conditions, often even lower than rates among those who have private insurance, perhaps because uninsured patients tend to be younger and healthier than the general population, or perhaps because they avoid costly healthcare services such as hospitalizations and rehospitalizations.<sup>5,6</sup> A priori, it is therefore possible that obtaining insurance would encourage such patients to seek care, increasing readmission rates. On the other hand, access to insurance might increase use of outpatient preventive and follow-up care and treatments that would reduce readmission risk. A recent study by Lasser et al. found that, on a patient level, healthcare reform was associated with fairly minimal changes in readmission rates in Massachusetts, compared with trends in states not adopting health insur-

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ance reform.<sup>7</sup> The authors further found that there was no improvement in readmission rates among Hispanic and black patients in Massachusetts compared with other states, nor was there differential improvement in counties with the highest baseline uninsurance rates compared to other Massachusetts counties.

The question raised by Chen et al. in this issue of the Journal of Hospital Medicine, however, is whether the Massachusetts reform affected hospital-level aggregate readmission rates, not individual patient-level risk of readmission.<sup>8</sup> Because public policy regarding readmissions is directed at hospitals, not patients, a hospital-level examination can shed light on likely implications for hospitals of new insurance gains prompted by the Affordable Care Act. Some commentators have expressed concern that payment penalty programs for excess readmissions may harm safety-net hospitals. Although uninsured patients may have low readmission rates, hospitals with high proportions of uninsured patients (safety-net hospitals) tend to have slightly higher readmission rates than other hospitals, probably because they also have higher proportions of high-readmission-risk Medicaid patients. Reducing the rate of uninsurance at these hospitals could theoretically have a number of different hospital-level effects. Patients obtaining insurance might elect to seek care elsewhere, changing the distribution of patients among hospitals, and potentially affecting readmission rates. Hospitals might be more prone to readmit insured patients, increasing their readmission rate if more of their patients gain insurance. They might use new revenue from newly insured patients to provide better care-coordination services, potentially reducing readmission risk, or as happened in Massachusetts, safety-net hospitals may find themselves unexpectedly losing revenue because of elimination of other subsidies, potentially reducing their ability to provide care transition services. 10

Examining the effect of health insurance reform on hospital readmission rates empirically, Chen et al. find that readmission rates rose 0.6 percentage points in the group of hospitals with the highest prereform rates of uninsurance, but that after risk adjustment for age, gender, race, and comorbidity, there was no significant change relative to other hospitals. What accounts for these results? One possibility is that some patients gaining health insurance who previously received care at safety-net hospitals began to seek care at other institutions, but that the redistribution of patients

occurred more among healthier newly insured patients than among the more chronically ill newly insured. In such a case, the hospitals with the highest prereform uninsurance rates might be left with a sicker population, increasing their unadjusted readmission rates but leaving adjusted readmission rates unchanged. One study did show a 2.3% decrease in the annual volume at Massachusetts safety-net hospitals, compared to a 1.9% increase at non-safety-net hospitals postreform. The relative difference, however, was not statistically significant.<sup>10</sup> Nonetheless, Chen et al. did find that the comorbidity index increased postreform only for patients in the highest prereform uninsurance quartile, suggesting that their patient population might have become sicker. An alternate hypothesis is that safetynet hospitals were the most financially adversely affected by the Massachusetts reform and may therefore have cut services that would have reduced readmission risk. However, the fact that risk-adjusted readmission rates were unchanged makes that hypothesis less probable. Finally, the authors suggest that the population who were newly insured were themselves sicker than the general population, as illustrated by the increase in comorbidity postreform. Given the national profile of uninsured patients as generally healthier than insured patients, however, it is unlikely that Massachusetts' newly insured patients were much less healthy than previously insured patients, especially because Massachusetts enrolled a very large fraction of its previously uninsured patients. It is more probable that either there was a shift of healthier patients out of the safety-net hospitals, that hospital billing departments began paying more attention to documenting comorbidity in patients for whom hospitalizations would now be reimbursed, or that new access to care enabled preexisting conditions to be diagnosed and documented.

So what does Chen et al.'s study mean for hospitals as they face an influx of newly insured patients through the Affordable Care Act health exchanges or Medicaid expansions? First, it is important to note that although risk adjustment eliminated any change in readmission rates postreform, the risk adjustment model used by these investigators is not the same as that used by Medicare. Medicare does not adjust for race, as the investigators did. Therefore, if some of the change in readmission rate is driven by changes in patient population at safety-net hospitals, and if such moves occur differentially in different patient populations, increases in readmission rates at safety-net hospitals might still be present even after Medicare-type risk adjustment. Even so, the impact on Medicaredriven readmission penalties for hospitals is likely to

be fairly minimal, because Medicare coverage is relatively unaffected by the Affordable Care Act and by the Massachusetts reforms. Medicare enrollment rates are driven by age and disability, neither of which is directly relevant to universal coverage schemes. Studies of Massachusetts reform found very little change in Medicare enrollment postreform despite large declines in uninsurance.<sup>2</sup> Because payment penalties are determined based purely on readmission rates among Medicare patients over 65 years old, changes in overall hospital readmissions have little financial consequences for hospitals at the present moment. In the future, however, if private insurers and state Medicaid programs begin to focus on readmissions as well, then the situation may change.

Overall, Chen et al.'s study lends heartening support to accumulating evidence that the lessons of the RAND Corporation's health insurance experiment may not apply to high-intensity care such as hospitalizations—at least in Massachusetts. 2,11 Increasingly, it is becoming clear that gaining insurance does not necessarily mean receipt of more inpatient care. If you build it, they may not come.

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