

Straining Emergency Rooms by Expanding Health Insurance

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The crowded, chaotic emergency room (ER) is often invoked as a symbol of all that's wrong with the American health care system. The uninsured, the story goes, cram into ERs—legally prohibited from turning away patients—for routine medical attention that could be provided more cost-effectively through primary care providers (also known as general practitioners in many countries). It's an image of America's dysfunctional approach to providing “free” health care for those who cannot afford it. In policy circles, this take on ER medicine has been cited by, among others, Health and Human Services Secretary Kathleen Sebelius, as justification for universal health coverage, because the current system “has forced too many uninsured Americans to depend on the emergency room for the care they need.”

Many in the medical profession dispute this picture of the ER overrun with uninsured patients. A 2008 literature survey (1), for example, found that most uninsured prefer self-treatment or just hope their maladies will disappear, rather than deal with the financial catastrophe that can follow a visit to the ER (2, 3). If the uninsured are not coming to the ER in great numbers in the first place, then there is little basis for the claim that universal coverage will reduce the current strain on emergency care.

The new study by Taubman *et al.* [(4), page 263] provides compelling evidence to adjudicate on this question of whether health insurance increases or decreases ER usage. This work, which builds on earlier analyses of the Oregon Health Insurance Experiment (OHIE), finds that low-income, uninsured adults randomly selected to get Medicaid health insurance coverage go to the ER more, not less. And the impact is enormous—in the 18 months after the program's start, ER visits increased by about 40% relative to those

not offered coverage through the Medicaid expansion (see the graph).

These findings explode the myth that health insurance access will reduce the strain on emergency services and thus undermine the hope that expanded coverage will put an end to this particular inefficiency in America's bloated health care market.

That the insurance expansion in the study involved random assignment is particularly important, given the difficulties in interpreting the results of observational studies: Insured and uninsured populations are simply too different from one another to allow for a straightforward apples-to-apples comparison of ER usage. That is why a randomized controlled study is so valuable; by construction, an individual who signed up for and was selected by the Oregon Medicaid lottery for coverage is identical, on average, to someone who signed up for the lottery but was not selected (5, 6).

Nor does economic theory provide any guidance on whether insurance should increase or decrease ER use. From the patient's perspective, insurance is essentially an across-the-board price cut that makes all health services a lot cheaper. The direct effect is, naturally, more consumption of health care of all sorts—primary care, ER, and everything else. But different forms of health services—particularly primary and emergency care—could substitute for one another, an effect that insurance coverage proponents clearly have in mind. In an earlier study based on the OHIE, researchers found an increased use of primary care after Medicaid enrollment, and if these primary care visits substitute for what would otherwise have been trips to the ER, insurance could cause overall ER use to decline (7). (Primary care use could, in theory, act to increase ER use instead if primary care providers refer patients on to the ER for treatment, a point I return to below.)

The fact that primary care access does not crowd out ER usage says a great deal about the nature of health care delivery in America

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today: A remarkable fraction of care [as well as admissions (8)], takes place at the ER. Further, ERs manage cases that span a range of circumstance, some of it emergent but much that, according to Taubman *et al.* and others, could have been managed through lower-cost primary care.

To appreciate why there is this apparent mismatch of patient needs and type of service—and whether the increase in emergency care constitutes unnecessarily expensive treatment or the provision of important care—it is critical first to understand why people choose to go to the ER. It certainly is not because it presents a more pleasant option.

A recent RAND Corporation survey of ER usage (9) argues that, in many cases, patients go to the ER simply because they are told to do so by their primary care physician or some other health care professional they contact. This is the case even for non-emergency injuries like sprains or cuts that nonetheless require immediate attention. That is, primary-care practices fill their schedules with appointments for regular, predictable treatment and are de facto using ERs as a referral for urgent or time-consuming cases. (This finding highlights the difficulty in predicting, before this study, whether expanding primary care would substitute for ERs or increase traffic to them.) Additionally, patients quite reasonably show up at the ER in situations that may, ex post, turn out to be harmless but present reasonable cause for concern. A 70-year-old with chest pain would be wise to go straight to the ER without seeking further advice and would have been instructed to do so by any professional he or she consulted (10, 11).

The diversity of reasons that lead patients to go to the ER highlights the impossibility of adjudicating, solely on the basis of data and analyses in this paper, whether insurance leads to overuse of emergency services. As the authors note in their conclusion, the retroactive classification of visit types based on eventual diagnosis separates heartburn from cardiac arrest, although both just seemed like chest pain to the patient. More important, given the nature of health care delivery in America today, it would be dangerous to label an ER patient with non-emergent needs

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as seeking “unnecessary ER care.” As noted earlier, in a great many cases, the patient has gone to the ER at the instruction of a health professional who was consulted with the hope of finding other, possibly lower-cost, more convenient care (12).

This lack of resolution matters a great deal for the policy implications that will no doubt be sought from the study on both sides of the Affordable Care Act debate. This study runs the risk of suffering the same fate as the two previously published articles based on the OHIE, which served as health insurance policy Rorschach ink blots for many readers: People saw in the results whatever they wished to see in order to validate preexisting positions on Obamacare and health insurance more generally.

The first study, published in the *Quarterly Journal of Economics*, found that Medicaid coverage increased the use of health services (including preventive care) and led to higher self-reported physical well-being and happiness (13). Supporters of universal care pointed to it as evidence of both the

suppressed demand for health care among the poor and nascent evidence of its benefits. Critics emphasized that health care costs went up (because of increased use of care) without any impact on medical outcomes.

The second study, published in the *New England Journal of Medicine* (7), showed modest improvements in biomarkers like cholesterol and blood pressure, although none were statistically significant (5, 6). At the same time, Medicaid enrollees showed significant improvements in financial well-being and declines in depression. Again, both sides claimed victory—universal care naysayers had a field day with the lack of significant physical health results, which was interpreted as showing that more spending had no impact on actual health. Their adversaries took the results as proving nothing, owing to lack of statistical precision, and further pointed to mental-health improvements and financial benefits as showing that Medicaid—fundamentally an insurance product designed to offer protection against health-induced financial catastrophe—was doing exactly what it was supposed to do. (As some commentators put it at the time, fire insurance does not prevent fires, but many people still think it is a good investment.)

For the current study, it is possible to argue that the observed increase in ER use likely represents greater access to necessary care, or that it shows that insurance serves as further encouragement to seek unnecessarily expensive treatment. But both sides would do well to focus on what this latest study does tell us—that Medicaid access increases ER use—rather than emphasizing the very different spins that can potentially be put on the findings (i.e., whether the observed increase in ER use represents greater access to necessary care or further encouragement to seek unnecessarily expensive treatment).

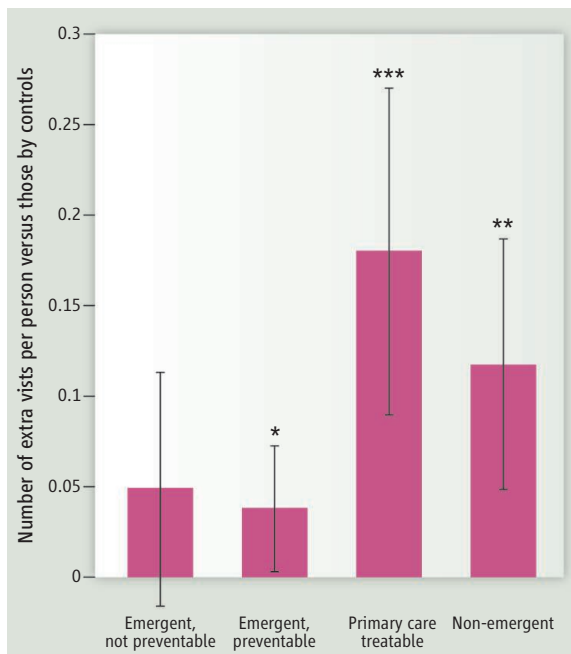
If all goes as planned, many more Americans will soon be covered by some type of health insurance. Although much of the United States looks very different from white, liberal, urban Portland, and the OHIE involved a small, rather than universal, expansion in coverage, there is no obvious reason

to expect that insurance will have drastically different effects elsewhere. That is, based on this paper’s findings, we have good reason to anticipate a large increase—and almost surely not a decrease—in traffic to already overburdened emergency departments across the country. Whether or not you think universal coverage is a good idea, we had better start planning for it.

Clearly, the answer is unlikely to be just increasing ER budgets to accommodate more patients: There are surely better ways to manage health delivery to low-income populations, particularly with an eye to long-term preventive care rather than short-term treatment. This study gives that discussion that much more of a sense of urgency and, one hopes, will further spur new innovations aimed at solving America’s health care problems.

References and Notes

1. M. F. Newton, C. C. Keirns, R. Cunningham, R. A. Hayward, R. Stanley, *JAMA* **300**, 1914 (2008).
2. A separate study debunks the urban legend of the supposed preponderance of drug addicts and indigents populating the ER. See (3).
3. J. Billings, M. Raven, *Health Aff.* **32**, 2099 (2013).
4. S. L. Taubman, H. L. Allen, B. J. Wright, K. Baicker, A. N. Finkelstein, *Science* **10.1126/science.1246183** (2014).
5. Although Taubman *et al.*’s research design provides the cleanest evidence on the link between insurance coverage and ER use, it is worth noting that earlier research—reviewed in Taubman *et al.*—finds mixed results. In particular, an analysis of the impact of the Massachusetts health care reform (6), which caused a large expansion in insurance coverage, found no effect on ER use. This still indicates that the best-case scenario is likely no increase in ER traffic as a result of increased insurance coverage.
6. C. Chen, G. Scheffler, A. Chandra, *N. Engl. J. Med.* **365**, e25 (2011).
7. K. Baicker *et al.*, Oregon Health Study Group, *N. Engl. J. Med.* **368**, 1713 (2013).
8. J. D. Schuur, A. K. Venkatesh, *N. Engl. J. Med.* **367**, 391 (2012).
9. K. Morganti *et al.*, “The evolving role of emergency departments in the United States” (RAND Corporation, Santa Monica, CA, 2013); www.rand.org/pubs/research_reports/RR280.
10. Also, although most Medicaid recipients in the OHIE sample reported having a usual source of care, prior research has found that many physicians are averse to taking Medicaid patients, given their lower reimbursement rates. A 2011 study, for example, found that physicians were less likely to accept new patients on Medicaid than new patients with Medicare or with private, noncapitated insurance (11). Thus, some Medicaid patients in other parts of the country may also end up in the ER because they have not found a primary care provider, which could further increase the effect size documented by Taubman *et al.*
11. T. F. Bishop, A. D. Federman, S. Keyhani, *Arch. Intern. Med.* **171**, 1117 (2011).
12. Many hospitals are set up with the expectation that many of the cases that come through the door would have been better dealt with in other settings. For example, ER “fast tracks” that triage patients into urgent (but not emergency) care are common in U.S. hospitals.
13. A. Finkelstein *et al.*, Oregon Health Study Group, *Q. J. Econ.* **127**, 1057 (2012).



Medicaid insurance coverage increases the number of ER visits, compared to a non-Medicaid control baseline. Bar heights (and 95% confidence intervals) reflect the number of increased visits per person during the 18-month study period. Visits that require immediate ER care and could not have been prevented are “emergent, not preventable.” Visits that require immediate ER care and could have been prevented with ambulatory care are “emergent, preventable.” Visits that require immediate care but could be treated in an outpatient setting are “primary care treatable.” Visits that do not require immediate care are “non-emergent.” Control group baseline levels of ER use differed across categories. Overall, ER use increased by 0.41 visits relative to control baseline value of 1.02 visits, an increase of 41%. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. See (4), particularly table 4, for data and details.