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Editor's Spotlight/Take 5: The Affordable Care Act Decreased the Proportion of Uninsured Patients in a Safety Net Orthopaedic Clinic

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ost agree that the healthcare system in the United States is messy, confusing, and too expensive. Suggestions for reform generally follow party lines; those on the right favor less government intervention and a free-market

A note from the Editor-In-Chief: In "Editor's Spotlight," one of our editors provides brief commentary on a paper we believe is especially important and worthy of general interest. Following the explanation of our choice, we present "Take Five," in which the editor goes behind the discovery with a one-on-one interview with an author of the article featured in "Editor's Spotlight."

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approach, while many on the left look to a single-payer system as more equitable and protective of the vulnerable. And while The Patient Protection and Affordable Care Act (ACA), also known as "Obamacare," has survived congressional efforts for repeal, the law remains controversial, as the public generally supports guaranteed coverage for the elderly and poor, but opposes mandatory insurance and penalties for declining coverage [6].

The ACA clearly has provided more Americans with some form of insurance coverage. Since 2010, the percentage of the population who are uninsured has dropped from 16% to 9%, while the number of people without coverage for at least part of the year has gone from 49 million to 29 million [2, 4, 5]. The nature of this coverage varies from state to state, but typically takes the form of Medicaid expansion, funded through a combination of new taxes, cuts in Medicare provider reimbursement, and cuts to capitated plans known as Medicare Advantage. According to the Congressional Budget Office,

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roughly 11 million people gained insurance through Medicaid, while about 12 million purchased individual plans; of these, 10 million received government subsidies to help with payment [3].

But whether this expanded healthcare coverage has actually improved health is less clear; several studies have shown little effect on overall health, although it may simply be too early to tell whether improved insurance can improve these parameters [1, 8, 9, 11]. For example, the Oregon Experiment where the state implemented a limited expansion of its Medicaid program through a lottery drawing (choosing about 30,000 names among a waiting list of 90,000)—showed "no significant effect of Medicaid coverage on the prevalence or diagnosis of hypertension or high cholesterol levels or on the use of medication for those conditions" [1]. Wright and colleagues [10] found that although more patients underwent screening for cancer as a consequence of the ACA, there was no effect on adopting healthier behaviors which might reduce risk. Presumably, access is only the first step, and health will improve as patients build and maintain reliable relationships with doctors and care systems.

Poor or nonexistent reimbursement, in the form of charity care, also affects the providers of that care. Those

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hospitals and physicians who are responsible for the "safety net" are faced with several obstacles in giving care, as we see in this month's spotlight article by Dr. Edward Akelman's group at Brown University in Rhode Island. First, the patients are generally in poor health and require higher levels of intervention. Second, the resources required are often in short supply. In Rhode Island, where this study was performed, the Medicaid/Medicare reimbursement ratio for fee-for-service is 0.38—thus, where Medicare might reimburse USD 125 for an office visit of moderate complexity, Medicaid would pay only USD 47. Meanwhile, those without insurance can often pay nothing. It's not surprising that, in a small state, few providers are willing to overlook the "penalty" associated with providing safety-net care, and Dr. Akelman's group should be commended for their efforts to do so. But physicians and hospitals respond strongly to incentives, and a disparity of this magnitude is a strong

disincentive. Reducing that disparity might make it easier to "do the right thing."

Further, we need to determine whether insurance expansion has truly reached the populations most at risk, or whether certain groups have benefited more than others. Here, Dr. Akelman's group examines demographic changes within their safety net population over the period of implementation—a practical way to evaluate the effects of the ACA on the patients most at need. As it happens, the benefit of coverage did not extend to all groups equally. Dr. Akelman and his coauthors show that although the insurance coverage which resulted from the ACA provided some improvement when looking at their patient group as a whole, many patients continued to experience difficulty obtaining it. No matter how healthcare is provided, basic fairness would imply that Obamacare is not the last word in payment reform. No one can (or should) guarantee equality of outcomes, but equality of access is a worthy goal.

Please join me now for an interview with Dr. Edward Akelman, senior author of "The Affordable Care Act Decreased the Proportion of Uninsured Patients in a Safety Net Orthopaedic Clinic."

Take Five Interview with Edward Akelman MD, senior author of "The Affordable Care Act Decreased the **Proportion of Uninsured Patients in** a Safety Net Orthopaedic Clinic"

Paul Manner MD, FRCSC: Congratulations on your excellent study. You've shown a substantial change in the insurance status of the patients you serve. Did you find any similar changes in who the patients were? Were there differences in employment, ethnicity, gender, or overall health?

Edward Akelman MD: Additional comparison of demographics of patients seen before and after the enactment of the ACA revealed differences in the race, language, age, and income level (Table 1). Indeed, after implementation, a greater proportion of patients were

Table 1. Comparison of demographics of patients seen before and after the enactment of the ACA.

Demographic	Category	Pre-ACA		Post-ACA		P value (Chi-square)
		No. Visits	% Visits	No. Visits	% Visits	(c square)
Gender	Female	9422	41%	1992	4%	
	Male	13,537	59%	2857	59%	0.143
Race	White	14,322	62%	2690	56%	
	Nonwhite	8637	38%	2159	45%	< 0.001
Language	English	13,498	59%	3606	74%	
	Non-English	4498	20%	1243	26%	< 0.001
Age group	< 26	3258	14%	701	15%	
	26-64	18,319	80%	3773	78%	
	65+	1382	6%	375	8%	< 0.001
Zip code income	1	15,139	66%	3290	68%	
	2	3641	16%	689	14%	
	3	1693	7%	268	6%	
	4	734	3%	129	3%	< 0.001
Overall		22,959	100%	4849	100%	

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Edward Akelman MD

nonwhite, and spoke a language other than English. Unfortunately, employment status and overall health was not reliably captured by our electronic medical record system. Therefore, although we saw considerably higher proportion of patients with insurance coverage, our results suggest that the ACA did not have a uniform impact across patient populations.

Dr. Manner: In this vein, you found that patients who were male, under 26 or over 65, white, and from higher-income zip codes were more likely to obtain insurance after passage of the ACA. But it's concerning that many others seem to be "left out." Why might this be the case?

Dr. Akelman: Some populations were "left out," despite the outreach that was done by governmental agencies, insurers, and nonprofits ahead of the insurance exchange rollout. Although we did not explicitly study barriers to obtaining insurance coverage in our region, we speculate that language and educational hurdles may have been responsible for this. Additionally, the online platform for obtaining health plans could only be utilized by people who have Internet access and were computer literate (or had someone to help them with this). We think that our findings help highlight particular areas for improvement.

Dr. Manner: While access to care may be a first step in getting healthier, many studies looking at healthcare before and after passage of the ACA have only measured processes (ability to get an appointment, obtaining screening tests, getting a regular doctor) and not actual improvements to health. Were you able to measure improvements in the health of these patients, and if not, how might future studies determine whether better access really results in better care?

Dr. Akelman: One of the limitations of our study is that we were not able measure the health outcomes associated with improved insurance coverage. Ideally, measuring the effect of health policy on outcomes of care would require analysis of data from an EMR that integrates demographics (insurance status), physical exam characteristics (BMI and blood pressure measurements), medical history, surgical history, lab work such as hemoglobin A1c for patients with diabetes, HDL/LDL, calcium/vitamin D, imaging (DEXA scan results), cost/ charges for care, and patient-reported outcomes. Until this happens, this data remains in silos, and tracking population health (and observing the effect of different aspects of health policy) continues to be a challenging and labor-intensive task. Looking even further ahead, health information systems could potentially be able to identify patients at an elevated risk of fracture or complication following a procedure (such as those with fragility fractures, or undergoing dialysis), and could be capable of notifying clinicians to direct resources appropriately. Unfortunately, these types of databases tend to be maintained by insurers, which by definition means that uninsured patients will not be tracked. Since these patients are the most vulnerable, this is a major

problem that needs to be addressed. We suspect that can only be done by the federal government or the states.

Dr. Manner: You're looking at one institution's experience in one state. How might readers elsewhere interpret your findings? Are there some factors that do not apply elsewhere?

Dr. Akelman: In Rhode Island, charity care is defined as the delivery of free or discounted care for uninsured, low-income residents of the state [10]. According to the Rhode Island Department of Health, our health system provides approximately 75% of the charity care in our state [7]. Our orthopaedic clinic is the only dedicated clinic in the state where uninsured or underinsured patients are referred for orthopaedic surgery interventions. As this represents something of a captured population, we think that our findings may be expanded to orthopaedic providers on a regional level who care for underserved populations in similar settings. In states where Medicaid reimbursement is greater, improving health-insurance access may indeed improve healthcare access.

Dr. Manner: The overall national economic picture was at its worst in 2009, with the economy contracting between 8% to 10%, depending on the source. Although the ensuing expansion was weak, might some of your findings still have been related to that expansion, rather than to legislation?

Dr. Akelman: We don't believe so. Prior to implementation of the law, the proportion of insured patients was actually declining slightly, month over month. We saw a dramatic increase in the proportion of insured patients at the time of initial enrollment that does not correspond to such a slow annual growth rate.

References

1. Baicker K, Taubman SL, Allen HL, Bernstein M, Gruber JH, Newhouse JP,



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- Schneider EC, Wright BJ, Zaslavsky AM, Finkelstein AN; Oregon Health Study Group. The Oregon experiment–effects of Medicaid on clinical outcomes. *N Engl J Med.* 2013;368:1713–1722.
- Barnett JC, Berchick ER. Health insurance coverage in the United States: 2016. Current population reports. Available at: https://www.census.gov/content/dam/Census/library/publications/2017/demo/p60-260.pdf. Accessed February 8, 2018.
- Congress of the United States Congressional Budget Office. Federal subsidies for health insurance coverage for people under age 65: 2016 to 2026. Available at: https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51385-healthinsurancebaselineonecol.pdf. Accessed February 8, 2018.
- 4. DeNavas-Walt C, Proctor BD, Smith JC. Income, poverty, and health insurance

- coverage in the United States: 2010. Current population reports. https://www.census.gov/prod/2011pubs/p60-239.pdf. Accessed February 8, 2018.
- Glied S, Jackson A. Access to coverage and care for people with preexisting conditions: How has it changed under the ACA? Issue Brief (Commonw Fund). 2017;18:1–12.
- Kirzinger A, Hamel L, Clark C, Rousseau D; Kaiser Family Foundation. US public opinion on health care reform, 2017. *JAMA*. 2017;317:1516.
- Rhode Island Department of Health. Rhode Island uncompensated hospital care. Available at: http://www.health.ri. gov/publications/financialreports/hospitals/ 2009UncompensatedCare.pdf. Accessed November 2, 2017.
- 8. Simon K, Soni A, Cawley J. The impact of health insurance on preventive care and health behaviors: Evidence from the

- first two years of the ACA medicaid expansions. *J Policy Anal Manage*. 2017; 36:390–417.
- Sommers BD, Maylone B, Blendon RJ, Orav EJ, Epstein AM. Threeyear impacts of the Affordable Care Act: Improved medical care and health among low-income adults. Health Aff (Millwood). 2017;36: 1119–1128.
- State of Rhode Island Department of Health. Hospital charity care. Available at: http://health.ri.gov/hospitals/about/ charitycare/. Accessed January 23, 2018.
- Wright BJ, Conlin AK, Allen HL, Tsui J, Carlson MJ, Li HF. What does Medicaid expansion mean for cancer screening and prevention? Results from a randomized trial on the impacts of acquiring Medicaid coverage. Cancer. 2016;122:791–797.