Hypertension and Healthy People 2020
The Role of Health Insurance Expansion

Benjamin D. Sommers, MD, PhD

Hypertension remains one of the most prevalent and treatable risk factors for cardiovascular disease and is associated with an enormous public health burden in terms of morbidity, mortality, and healthcare spending. Both clinical and policy interventions have important roles to play in primary prevention, prompt diagnosis, and appropriate treatment. However, although the tools at clinicians’ disposal for managing hypertension have proliferated over the past decades, policy makers continue to struggle with a refractory set of social and economic determinants of health in this area. With nearly 50 million Americans lacking any health insurance and millions more underinsured and exposed to high out-of-pocket costs, financial barriers play an important role in preventing the appropriate management of chronic diseases such as hypertension, particularly in lower-income populations. The year 2014, with the full implementation of the Affordable Care Act (ACA), brings with it a dramatic change to the set of policies in place to help tackle these challenges.

The main mechanism by which the ACA may affect the diagnosis and treatment of hypertension is through the expansion of insurance coverage. Through its combination of new regulations in the private insurance market (most notably the elimination of coverage denials or premiums related to pre-existing conditions), tax credits to purchase coverage through Health Insurance Marketplaces, the individual mandate for existing conditions), and early 2014, the number of uninsured adults fell by an estimated 10 million, suggesting that the law is well on its way toward dramatically decreasing the number of Americans without health insurance. Absolute gains in coverage have been largest for racial and ethnic minorities, welcome news in terms of hypertension-related disparities as demonstrated by Egan and colleagues, who show that blood pressure control among blacks and Hispanics continues to lag behind that of whites.

However, these early coverage gains under the ACA raise an important question: Does having health insurance improve outcomes for hypertension? One could imagine several plausible pathways for such an effect: better diagnosis, better treatment adherence, more consistent follow-up care, and an improvement in underlying health behaviors that might reduce the overall prevalence of hypertension in the first place. Although this proposed pathway makes intuitive sense, the evidence base for these effects of coverage on hypertension is more mixed than many might imagine.

Studies like that of Egan and colleagues and other observational cross-sectional analyses have shown associations between being uninsured and having undiagnosed hypertension and between being uninsured and having poorly controlled hypertension even among those with a diagnosis. Egan and colleagues also note that less healthcare use (measured in office visits per year) was another major risk factor for poor hypertension control.

However, even in well-done multivariate analyses, there is a strong threat of unmeasured confounding that makes it impossible to ascribe a causal effect of insurance coverage or healthcare service use on poor blood pressure control (or, for that matter, on any other chronic disease). People who are uninsured or who use fewer healthcare services than other individuals likely differ from the rest of the population in fundamental ways. Health literacy, attitudes toward health, comorbid mental illness, diet, workplace stress, and exercise are all potential confounders likely to be correlated with insurance status and directly affecting blood pressure control. Some of these factors not included in the Egan et al article, for example, diet, exercise, and mental illness, could be adjusted for in a rich data set like the National Health and Nutrition Examination Survey; this adjustment would likely attenuate the reported association between insurance, health care use, and hypertension outcomes. Other factors, however, are not easily measured and point to the inherent limitations of cross-sectional observational analyses.

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From the Harvard School of Public Health and Brigham & Women’s Hospital, Boston, MA.

Correspondence to Benjamin D. Sommers, MD, PhD, Harvard School of Public Health, 607 Huntington Ave, Room 406, Boston, MA 02115. E-mail bsommers@hsph.harvard.edu

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What do other study designs, namely quasi-experimental and true randomized trials, tell us about the ability of health insurance to improve care for chronic conditions such as hypertension? The classic RAND Health Insurance Experiment conducted from 1971 to 1982, which randomized individuals to insurance with no cost sharing (“free care”) or a variety of cost-sharing plans, found little evidence of any population-wide impact of cost sharing on hypertension outcomes, but it did find that more generous coverage led to a small significant improvement in blood pressure control among the subset of low-income individuals with hypertension.10 More recent experimental data from Oregon’s Medicaid lottery, in which low-income adults on a wait list were randomized to receive an offer of Medicaid coverage versus no offer, notably did not demonstrate any significant change in either mean blood pressure or the diagnosis rate of hypertension over a 2-year follow-up period. However, the study did detect major gains in access to a usual source of care, use of outpatient services, prescription drugs, and self-reported health status.11 Thus, 2 randomized, controlled trials of health insurance provide mixed evidence on the role of insurance in improving care for individuals with hypertension.

Most recently, a large-scale, quasi-experimental analysis of the Massachusetts health reform law of 2006 found that near-universal insurance coverage in the state led to increased use of preventive visits and significant reductions in healthcare-universal insurance coverage in the state led to increased use of preventive visits and significant reductions in healthcare.
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