Health Insurance and the Promise of Incrementalism

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SINCE 2010, HEALTH INSURANCE policy debate has escalated with the development, implementation, and then attempted repeal of the Affordable Care Act (ACA). Proposals for ACA replacement policies were estimated to result in loss of insurance for tens of millions; impact the wider insurance market;¹ decrease Medicaid funding, and change coverage requirements.² Most recently, the U.S. Senate has voted against the repeal of ACA, although a repeal may be considered again.

In this context, Edmonds et al.³ undertake a timely study of health insurance and health outcomes among women living with HIV or are at high risk for HIV infection. The study draws from a previously established cohort, the Women's Interagency HIV Study (WIHS). The strength of studying this population includes enrollment across the United States, in multiple state policy contexts, over time. A large proportion of study participants are low-income women of color, a group with disproportionate cardiovascular disease burden.⁴ Although the cohort originated in 1994, it has undergone four recruitment waves.⁵ This study includes women from 2005 until 2014 with a median of four follow-up visits.

The exposure evaluated was disruption of health insurance. However, the binary categories of "health insurance" or "no health insurance" do not capture the range of insurance in the heterogeneous U.S. health system. Edmonds et al.³ recognized the unique role of the AIDS Assistance Program (ADAP), which is authorized under Medicare Part B to provide medications to low-income people living with HIV who have low or no health insurance—a functional equivalent of insurance for prescription drug access. The study therefore distinguishes group A (participants with HIV with traditionally defined health insurance) from group B (participants with HIV with enrollment in traditionally defined health insurance *or* ADAP), and group C (participants without HIV with traditionally defined health insurance).

Among over 2000 participants, loss of hypertension control in follow-up was high (26.8/100 person-years). Coverage interruption was generally low but occurred at twice the rate among women without HIV infection compared to women with HIV (7.6/100 person-years vs. 3.4/100 person-years). All three groups demonstrated increased hazard of losing hypertension control when insurance coverage was interrupted. In the group that included ADAP as a functional insurance equivalent, loss of coverage had stronger effect on the outcome, suggesting ADAP's role in providing access to not just antivirals but also antihypertensive medications for uninsured HIV-infected women.

Hypertension control is a meaningful outcome as a major cardiovascular disease risk factor. It can be rigorously measured with unambiguous criteria for "controlled" or "not controlled." Even so, Edmonds et al.³ acknowledge the limitation of this outcome. Namely, the prognostic value of a point-in-time measurement of hypertension control, taken twice a year, although suggestive, is unclear—especially given low background occurrence of cardiovascular events, and relatively short follow-up. However, hypertension control remains a key target in clinical practice. It has well-established significance in longer term studies and is often used in major studies of insurance policy (some of which are discussed below), contextualizing this study within the literature. Another issue is that hypertension is affected by a wide variety of determinants, thus introducing potential for extensive confounding (*e.g.*, race, age, and HIV clinical control). In addition, correlates of hypertension risk (income and HIV status) are themselves determinants of the variable studied (insurance status). This means confounders not only at baseline but also over time, as the confounding variables (*e.g.*, HIV control) can be directly affected by the variable being studied (insurance interruption). Edmonds et al.³ address this potential bias by using a marginal structural model.

This study is an important and timely contribution to the literature of health insurance and health outcomes. Specifically, this study examines not only health insurance status, which has been examined in several key studies,⁶ but evaluates health insurance *continuity* as well. This is an important variable within the U.S. healthcare system, which, among high-resource economies, is uniquely characterized by uncertainty—not only are there significant regional variations among states, there can also be dramatic changes over time, such as changes in major policy like ACA or in individual circumstances (*e.g.*, employment or marital status).

In addition to continuity, the *level* of coverage is another feature that complicates the binary of "insured" and "not insured." Although Edmond et al. address the complexity of ADAP as a safety net for patients with HIV, they do not distinguish between types of insurance.³ An important feature of insurance is how much a patient is asked to cost share. Most participants in this study were on Medicaid, which has very low-cost sharing (nearly free), while private insurance varies more.⁷ Some proponents argue that increased cost sharing would lower health spending by discouraging overutilization, but this hypothesis is questionable.⁸ The Oregon Health Insurance Experiment *did* show that Medicaid increased

utilization (compared to no insurance) without detecting improvements in hypertension, high cholesterol, diabetes, or mortality. However, the population was small and follow-up was 2 years, which is short for detecting changes in these longer term outcomes.⁹ In that short time, the Oregon experiment did show promising improvements in depression outcomes; diagnosis and treatment of diabetes; and self-perceived health status, which can predict mortality.⁶ Other studies have shown that insurance without prohibitive cost-sharing decreased net healthcare utilization costs and resulted in better outcomes, especially in chronic diseases among sicker patients.⁸ Decreasing access to routine ambulatory care among Medicare recipients actually increased hospitalizations¹⁰—every \$1 saved on ambulatory visits and drug spending increased hospital costs by \$6.

It is possible that if the WIHS cohort was followed for longer periods, it may reveal similar patterns. Future studies such as this are needed to examine the nuanced impact of insurance on health outcomes among different populations and policy contexts. To detect meaningful impact on chronic disease, follow-up will need to be longer. These diseases call for the “heroism of incremental care”—the observation that sustaining good outcomes in chronic disease requires persistent, small “doses” of care over a long time, whereas our current system is often optimized for the care of severe, acute disease.¹¹ This is especially urgent now, as widely prevalent diseases such as diabetes are joined by an epidemic of opioid use disorder, the leading killer of young people, and also a chronic disease that can be treated with continued, incremental care.¹²

Reflecting on the history of HIV/AIDS is instructive here. The epidemic of HIV/AIDS in the United States and abroad grew for years without major political attention, until mounting pressure from the community, clinicians, and public health officials changed priorities.¹³ Once the country as a whole was mobilized, highly coordinated and intense efforts were organized. Federal and other resources were deployed to develop treatment guidelines; train and support clinicians; develop interdisciplinary outreach staff; spur research; and secure funding for ADAP to provide continuous access to antiretrovirals—access that is critical in maintaining disease control.¹⁴

Although the president has declared opioid epidemic a federal emergency, the resources have not been mobilized yet to successfully implement evidence-based care. Like the HIV epidemic, these chronic diseases demand coordinated effort, innovations in delivery systems, and rigorous evaluation of those innovations. As the healthcare landscape continues to evolve, more studies must build on the work of Edmonds et al.³ and others to inform clinical care, policy, and public health decisions.

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