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Understanding the impact of health reforms and insurance designs on population health: Lessons from the experimental laboratory of the United States

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My Harkness Fellowship explored two key questions: how enrollment in health insurance plans with high out-of-pocket costs affect care for patients with chronic illness, and how health systems address patients' social needs. These questions reflect trends accelerated by the Affordable Care Act.

The U.S. system—with its state-by-state variation—offered a unique setting for comparative research. In one study, I examined the effects of high-deductible plans on patients with chronic obstructive pulmonary disease; in another, I analyzed how healthcare organizations implemented models for addressing social needs like housing and food insecurity. The latter work is especially relevant for Norway, where cross-sector collaboration is essential to strengthen prevention and achieve population health goals.

Six years after my return to Norway, it is sobering to see the United States scale back its engagement with global health collaborations and witness the growing pressure on its science-based institutions. This underscores the importance of the Commonwealth Fund's mission and the Harkness Fellowship in advancing core values such as equity, diversity, and inclusion through global partnerships.

When preparing my proposal for the Harkness Fellowship, I set out to explore how the healthcare systems in the United States prioritize prevention, focusing on the impact of institutional changes introduced and influenced by the landmark Affordable Care Act. The motivation was that prevention is an underprioritized area of effort and investment within the Norwegian healthcare system. Understanding how healthcare reforms and institutional changes in the United States have heightened attention to prevention could therefore provide valuable insights.

The Affordable Care Act is the landmark legislation, enacted under President Barack Obama, that have contributed to expansion of health insurance coverage and access to healthcare for millions of previously uninsured (1). In addition to the legal provisions enabling expansion of health insurance, the Affordable Care Act also established key institutional arrangements that advanced a stronger prevention agenda, including provisions supporting the development of Accountable Care Organizations. These are groups of primary care practices, hospitals, and other healthcare providers who, through financial incentives—including models that involve accepting financial risk and sharing savings when care is delivered below benchmark costs—come together to provide more efficient healthcare, prevent illness and the use of costly acute care and improve population health outcomes.

Two broad questions, reflecting major trends with system-wide impact across the U.S. healthcare system, became the foundation of my proposal:

First, how does the utilization of healthcare and outcomes for patients with chronic conditions change when exposed to high out-of-pocket payments? One major trend, which has accelerated after the Affordable Care Act, is the increasing preference for high-deductible health plans by employers as a cost-control measure (2) — a shift that may be at odds with prevention goals if it leads patients to delay or avoid necessary care. At the same time, some healthcare policy experts argue that high-deductible health plans can promote prevention by making people more cost-conscious and encouraging healthier behaviors to avoid expensive care. Although premiums are low, patients who require outpatient care or emergency department visits risk facing high out-of-pocket costs due to the high deductible levels of these plans. I was mentored by Dr. Frank Wharam, who has made major novel contributions to the literature on the impact of high-deductible plans on healthcare utilization, costs and outcomes (3).

The second question centered on how healthcare addresses the broader social factors, such as lack of access to healthy food or poor housing conditions, that contribute to patients' medical needs. In many settings—especially in Norway and other European countries—social welfare services traditionally respond to these needs. In contrast, the United States has seen an increasing policy shift that places healthcare systems at the center of efforts to address social needs, spurring a growing body of literature on the subject (4). My time in the United States offered a chance to explore the implementation of such models in Rhode Island and New Jersey, under the guidance of Prof. Roberta Goldman from Brown University. I especially explored how the systems and provider-levels managed the tension between a biomedical focus on treating clinical illness and a social focus on addressing upstream factors. For both questions, the goal was to draw on the fact that the United States, with its variations in how states, insurers, and employers design and implement the delivery of healthcare, serves as a "laboratory" for research using comparative methods.

Main findings of my work

For different reasons, the two studies I have led have not yet been published. One study examined how individuals with chronic obstructive pulmonary diseases responded to a shift from traditional insurance to high-deductible health plans with higher out-of-pocket costs. The analysis suggested lower use of healthcare services following the transition, particularly emergency department visits and hospital admissions. Importantly, there were no clear indications of worsened short-term outcomes, such as patients presenting to the emergency department or hospital with more severe acute illness. This may suggest a shift in how individuals with chronic obstructive pulmonary disease manage their condition—potentially adopting alternative care strategies in response to increased financial exposure, thereby avoiding the need for emergency or inpatient care. These observations contrast with findings in other chronic disease populations, where similar insurance design changes have raised concerns about delayed or foregone care (5). My work highlights how cost-sharing arrangements can influence healthcare utilization in condition-specific and context-dependent ways, shaped by both the nature of the illness and the structure of the surrounding healthcare system.

The second study focused on how healthcare organizations in Rhode Island and New Jersey implemented models for identifying and responding to patients' unmet social needs within clinical settings. My findings point to a range of implementation challenges, particularly in hospital environments, where workflows are typically centered on acute medical care. Interviews with healthcare leaders, managers and providers involved in these efforts revealed a broader tension between individualized approaches implemented by healthcare organizations to address social needs and the more structural, population-level interventions needed to address root causes such as housing conditions or food access. These reflections raised deeper questions about the role of the healthcare system in responding to social needs, and where responsibility should lie—especially given that community-based and social service organizations often hold deeper expertise and longer-standing engagement with these issues.

In interviews with healthcare leaders, managers and providers about their perceptions of healthcare's role in addressing social determinants of health, it was striking to note that many viewed social determinants as services that individuals need to access and benefit from. I made similar observations while attending the ethics meetings of the Ethics Advisory group of Harvard Pilgrim Health Care (a provider of health benefit plans, programs and services), which debated ethical aspects of key issues faced by the payer. At the time, these meetings were chaired by Dr. Jim Sabin, who together with Norman Daniels, developed the Accountability for Reasonableness Framework for securing a due process when making difficult prioritization decisions in healthcare systems (6). It struck me that during one of these meetings, several participants did not view "social determinants"—such as heat or transportation—as universal entitlements and argued that those who had paid for their healthcare should not be expected to subsidize these services for others with fewer means. These observations contrast with the approach to social determinants in Norway and other European countries, where the focus is on how population-level policies—such as those related to education, social welfare, and environmental protection—contribute *universally* to better health outcomes.

Further contributions inspired by my U.S. experience

In addition to my own research, I contributed to a piece co-authored with the other Harkness Fellows, published in *Health Affairs*: (7). In this piece, we argued that while the U.S. excels in innovation and investment, its healthcare system is fragmented, marked by significant regional disparities and inconsistencies that set it apart from the more unified, government-supported models in other high-income countries. We pointed out that politicized debates over initiatives like the Affordable Care Act—and the varying approaches to its implementation across states—have created a landscape marked by political polarization around healthcare issues. We further argued that framing healthcare as a privilege rather than a right underlies many systemic issues. This approach not only fuels high costs through mechanisms like inflated drug prices and high-deductible plans but also blurs accountability, resulting in a focus on financial outcomes over patient care. In contrast, countries with universal coverage, centralized pricing, and clearer governance demonstrate how a more coordinated system can better address the needs of their populations.

Conversations with public health experts in the United States also motivated me to reflect on other public health challenges faced there and in Norway. One example is the growing promotion of vaping by multinational tobacco companies, which are increasingly targeting the youth market with these products. One such conversation motivated me to write a response to representatives of Philip Morris International, who in the Norwegian medical daily *Dagens Medisin* had argued that they, through their efforts on harm reduction, should be seen as a "team player" in the efforts for a smokefree world (8). In response, I argued that tobacco companies' push for harm reduction products primarily to maintain their profits and brand strength, rather than stemming from a genuine commitment to public health. Despite promoting harm reduction, the industry actively resists effective tobacco control policies, particularly in low- and middle-income countries, undermining global public health efforts. Moreover, the tobacco industry's ongoing marketing to youth and attempts to bypass regulations contradict their claims of supporting a smoke-free future. Given their role in creating the tobacco-related health crisis and their opposition to key tobacco control measures, tobacco companies have no rightful place in the efforts for tobacco prevention and control and should not be seen as trustworthy partners in the push for a smoke-free world.

Reflections on national and international impact

For the Norwegian setting, I think my project on how healthcare organizations are addressing social needs holds greater relevance. This is because the high-deductible health plans are relatively unique to the U.S. context and the out-of-pocket expenses experienced by patients in these plans are many times greater than in the Norwegian context, where the deductible level in primary care is relatively low (currently around 300 USD) and patients do not pay for emergency department visits and hospitalizations. However, I believe the United States has made more progress in exploiting variations in out-of-pocket costs among patient groups to assess their impact on health care utilization and outcomes, whereas, in Norway, the evidence base on the impacts of out-of-pocket payments remains relatively sparse.

I believe my work on addressing social needs raised critical questions about the role of healthcare systems in relation to other sectors' responsibilities for population health. This links directly to a major challenge faced by healthcare systems worldwide: bridging the gap between health needs and available resources. Priority-setting will be crucial to ensure effective and equitable resource allocation, requiring open dialogue among policymakers, providers, and the public. It may also be necessary to examine how other sectors contribute to population health goals and impact healthcare utilization. As Norway and other countries shape their healthcare systems, it may be beneficial to consider how unmet social needs contribute to poor health and increased utilization, and how these needs can be efficiently and equitably addressed. The approach in the United States, which centers around identifying and addressing social needs in the clinical setting, may not be the way forward. Instead, regional health authorities could work with other social welfare institutions to assess whether patient groups, particularly those with chronic conditions or mental illness, are underserved in terms of social needs like food, income support, or housing. These institutions could advocate for more cross-sector involvement, potentially improving medical outcomes and population health. Such responsibility, guided by the concept of "anchor institutions," is also being advocated in the U.K.'s National Health Service—a system that, for Norway, tends to offer a better comparison (9).

Career impact and further research

After my Harkness fellowship, I returned to the Norwegian Institute of Public Health in a scientist position. I was quickly pulled into the public health response to the Covid-19 pandemic, working on advising municipalities on managing outbreaks, reviewing emerging evidence to inform national guidance and strengthening the institute's capacity for research to generate timely analysis. Partly inspired by my Harkness fellowship research on healthcare's role in addressing social needs, and motivated by the glaring inequities exposed by the Covid-19 pandemic, I explored how this applies globally in a *British Medical Journal* paper, focusing on the World Health Organization's role in addressing the social determinants of health (10). During my time in the United States, I experienced maturation and increasing skills to engage with experts, which has benefited me when leading international projects after my return. I have worked with several of my fellow Harkness fellows on EU proposals, led a major World Bank project on financing of healthcare systems, and currently I lead several research projects involving international partners. In my current role, I continue to work on building international partnerships, focused on strengthening the evidence base for public health and social measures for managing pandemics.

The United States: A Changed Landscape from Then to Now

In closing, it is difficult not to briefly reflect on the current political situation in the United States. and its impact on science-based institutions. At the time of writing, the U.S. public administration responsible for healthcare is facing its most challenging moment. I have observed that many key institutions I had the privilege of visiting and learning from, such as the Agency for Healthcare Research and Quality, have experienced significant staff cuts and will likely struggle to fulfill their missions. This serves as a reminder that the trust between politicians and public administration—

something we enjoy largely in Norway, and which was crucial to the success of the public health response to Covid-19—should never be taken for granted. Moreover, as the federal government in the United States takes steps to significantly scale back its engagement in global health collaborations, institutions like the Commonwealth Fund and its Harkness Fellowship can play a critical role in sustaining global partnerships and promoting core values such as equity, diversity, and inclusion.

Literature

1. Obama B. United States health care reform: progress to date and next steps. *JAMA* 2016; 316: 525-352.
2. Wharam JF. The ACA and high-deductible insurance--strategies for sharpening a blunt instrument. *N Engl J Med* 2013; 369: 1481-1481.
3. Wharam JF, Lu CY, Zhang F et al. High-deductible insurance and delay in care for the macrovascular complications of diabetes. *Ann Intern Med* 2018; 169: 845-854.
4. Alderwick H, Gottlieb LM. Meanings and misunderstandings: a social determinants of health lexicon for health care systems. *Milbank Q* 2019; 97: 407-419. doi: 10.1111/1468-0009.12390
5. Wharam JF, Zhang F, Eggleston EM et al. Diabetes outpatient care and acute complications before and after high-deductible insurance enrollment: a natural experiment for translation in diabetes (NEXT-D) study. *JAMA Intern Med* 2017; 177: 358-368.
6. Daniels N, Sabin JE. *Setting Limits Fairly: Can we learn to share medical resources?* Oxford: Oxford University Press, 2009.
7. Malâtre-Lansac A, Docherty M, Gopinathan U et al. An International Perspective On The Paradoxes Of US Health Care. *Health Affairs Forefront*. 2019. doi:10.1377/forefront.20190826.181413
8. Gopinathan U. Ikke troverdig om skadereduksjon: *Dagens Medisin* 8.3.2019 https://www.dagensmedisin.no/debatt-og-kronikk/ikke-troverdig-om-skadereduksjon/409861. (8.2.2025)
9. Health Foundation. The NHS as an anchor institution 28.3.2018 https://www.health.org.uk/features-and-opinion/features/the-nhs-as-an-anchor-institution.(1.4.2025)
10. Gopinathan U, Buse K. How can WHO transform its approach to social determinants of health? *BMJ* 2022; 376: e066172.

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