Appendix

Our literature review found other high-income countries are also grappling with how to address racial and ethnic disparities in access to care and treatment outcomes. We’ve summarized the key takeaways.

Addressing Racism in Care Delivery

Medical Schools Exposed and Enforced Stereotypes of Canadian Aboriginal People

Developing medical education curricula that addresses health issues among indigenous populations is an ongoing process in many parts of the world, though little has been done on how stereotypes impact health outcomes. This study seeks to examine the views of undergraduate medical students regarding their views of Canadian Aboriginal stereotypes and how they potentially affect Aboriginal people’s health. The findings show that, while students recognize the linkage between stereotypes and processes of racism and discrimination, they generally felt stereotypes of Aboriginal people were based in reality. Medical schools were also noted as environments that exposed students to negative views of Aboriginal people. Anh Ly and Lynden Crowshoe, “‘Stereotypes Are Reality’: Addressing Stereotyping in Canadian Aboriginal Medical Evaluation,” Association for the Study of Medical Education 49, no. 6 (June 2015): 612–22.

A History of Racism and Failures of the Modern Canadian Government Have Allowed Health Inequities for the Aboriginal Community

Historically, Canadian health policy has failed Aboriginal people; from the Indian Act shaping modern Aboriginal health policy and failure of the modern Canadian government to implement a national policy, racism is built into the policies that impact Aboriginal health today. Though there are many barriers to Aboriginal health, there is promise in community led approaches like community self-determination and community-led research as a form of health care and policy reform. The Report on the Truth and Reconciliation Commission of Canada (2015) is referenced as reconciliation is seen as a fundamental means to improving Aboriginal health equity. Chantelle A.M. Richmond and Catherine Cook, “Creating Conditions for Canadian Aboriginal Health Equity: The Promise of Health Public Policy,” Public Health Reviews 37, no. 2 (July 2016).

Transforming Institutional Racism at an Australian Hospital

A study of institutional racism’s role in health outcome disparities for Aboriginal and Torres Strait Islander people and the management of institutional racism in an Australian hospital and health service (HHS) used publicly available information to focus on five areas of the Australian HHS: inclusion in governance, policy implementation, service delivery, employment, and financial accountability. Results showed that while major changes were made in areas of
governance, service delivery, and employment, there were no changes in financial accountability or policy implementation. Researchers also found that the outcomes of some racial groups can be damaged by institutional racism and proposed the implementation of an external assessment tool to monitor, measure, and report on institutional racism in Australia. Cristopher John Bourke, Henrietta Marrie, and Adrian Marrie, “Transforming Institutional Racism at an Australian Hospital,” Australian Health Review 43, no. 6 (Jan. 2019): 611–18.

Education and Diversifying the Physician Population are Important Steps to Prioritizing Social Determinants of Health

US public and health care professionals care about improving health outcomes, but underinvestment in social determinants of health have hampered progress in improving health outcomes. 2017 report found that hospitals and physicians are actively seeking to address social needs, though the effectiveness of their approaches is unknown. Addressing social determinants of health has to be a core goal of medical professionals from the start; the authors suggest revising medical education to include social determinants in coursework, as well as diversifying the physician population to include those who have knowledge of the importance of social determinants prior to being educated about them. Nason Maani and Sandro Galea, “The Role of Physicians in Addressing Social Determinants of Health,” JAMA 323, no. 6 (Apr. 3, 2020): 1551–52.

Australian Government Outlines Series of Initiatives to Improve Indigenous Cultural and Social Determinants of Health


Housing First Results in Better Outcomes for Ethnic Minority Adults

Over two years, 237 ethnic minority adults and Housing First (HF) participants who were experiencing mental illness and homelessness were studied to determine outcomes on housing stability. Secondary outcomes were physical and mental health, social functioning, quality of life, arrests and health service use. Results found that HF participants were stably housed significantly more than usual care participants (75% vs. 41%). HF that incorporates anti-racism and anti-oppression practices can also improve housing stability and community functioning. Vicky Sergiopoulos et al., “The Effectiveness of a Housing First Adaptation for Ethnic Minority Groups: Findings of a Pragmatic Randomized Controlled Trial,” BMC Public Health 16, no. 1110 (2016): 1–11.

The Aboriginal and Torres Strait Islander Health Performance Framework (HPF)

The Australian Government launched the Aboriginal and Torres Strait Islander Health Performance Framework (HPF) to monitor health outcomes, health system performance, and
broader determinants of health within the Aboriginal and Torres Strait Islander communities. Reports are released every two to three years beginning in 2006 and cover 68 measures across three tiers: Health status and outcomes, determinants of health, and health system performance. “The Aboriginal and Torres Strait Islander Health Performance Framework (HPF),” Australian Government.

**Establishing Thorough Review Processes Are Essential to Combating Inequities in the Health Workforce**

In the wake of Brexit, rising anti-immigrant sentiment and increasingly overt racism forced self-reflection within U.K. institutions, a process the NHS took part in. Research found differences in training and career progression by ethnicity, increased referrals to the General Medical Council for ethnic minority doctors which would often result in investigation or harsher sanctions after investigation. In addition to the Workforce Race Equality Standard, the MWRES, a supplement to the WRES for the medical workforce specifically, is under development with the hopes of drawing out ethnic variations in experience and opportunities among doctors, of which 40% are from ethnic backgrounds. Victor Adebowale and Mala Rao, “Racism in Medicine: Why Equality Matters to Everyone” (editorial), BMJ (Feb. 12, 2020): 368.

**Black and Minority Ethnic Staff Experience Disparities Within the NHS**

In the wake of the 2020 COVID-19 pandemic, the Workforce Race Equality Standard program studied the disparities among Black and minority ethnic (BME) NHS staff. Key findings from the 2020 report noted the disproportionate rate of death among black and minority ethnic staff during the pandemic as these groups are over-represented as front line workers and subsequently more vulnerable to infection. The report noted a 2.9 percent increase in BME staff working at NHS trusts and clinical commissioning groups (CCGs) as well as a 41.7 percent increase in the total number of BME staff at very senior manager pay bands. 30.3 percent of BME staff reported experiencing harassment, bullying, or abuse from patients, relatives, or the public in 2020, a 1.9 percent increase from 2016. Being from BME backgrounds was associated with increased disparities comparative to White colleagues. National Health Service, “Workforce Race Equality Standard 2020,” Feb. 2021.

**Changing Culture, Beliefs, and Attitudes**

**Tackling Health Disparities: Lessons from Abroad**

Health disparities affect every nation, ranging from disparities by race/ethnicity to those among people with different education levels. A 2009 report found that, while groups with the worst health outcomes improved in England, the gap between groups did not narrow. Still, there are examples of programs that have successfully reduced disparities, such as Mexico’s conditional cash transfer program, which inspired a similar one in New York City, or Brazil’s conditional cash transfer program, “Bolsa Familia,” which significantly reduced disparities. Countries can learn from each other’s successes and failures in how to implement effective policies. Jessica Bylander, “Tackling Disparities with Lessons from Abroad,” Health Affairs 35, no. 8 (Aug. 2016): 1348–50.
Canadian Medical Students Interested in Indigenous Health, But Lack Knowledge or Qualifications

How much do Canadian medical students know about Indigenous peoples and how does their knowledge shape their beliefs and behaviors? Researchers surveyed 129 Canadian medical students to gauge their interest in learning about Indigenous health and working with Indigenous communities, among other topics. Students reported a strong interest in Indigenous health but did not feel educated or prepared to work in an Indigenous community. Students expressed positive interest and sociopolitical attitudes about Indigenous peoples. Sharon Yeung et al., “Predictors of Medical Student Interest in Indigenous Health Learning and Clinical Practice: A Canadian Case Study,” BMC Medical Education 18, no. 307 (2018): 1–11.

Health and Health Care Must Be Understood from a Postcolonial Perspective

In-depth, semistructured interviews were carried out in Canada to determine how to incorporate the topic of postcolonialism into health care training programs. Participants recommended including a foundational history of Aboriginal peoples in Canada as a starting point to addressing health inequities and experiences of privilege and oppression in Canada. There were also calls for critical reflection on the limits and harms of the Western world view to promote reconciliation and justice for all. Allana S. W. Beavis et al., “What All Students in Healthcare Training Programs Should Learn to Increase Health Equity: Perspectives on Postcolonialism and the Health of Aboriginal Peoples in Canada,” BMC Medical Education 15, no. 155 (Sept. 23, 2015): 1–11.

Black, Asian, or Other Minority Ethnic Medical Students Experience High Levels of Discrimination and Harassment

Two-fifths of medical students are from Black, Asian, or other minority ethnic (BAME) backgrounds in the U.K. Research shows that about one of four BAME medical students had experienced racial harassment since starting medical school, while a third felt that bullying or harassment was a problem at their medical school. These trends continue into the workforce, too, with 55 percent of BAME doctors saying diversity and culture of inclusion were not respected, in contrast to 75 percent of white doctors saying diversity and culture of inclusion were respected. The British Medical Association proposed a charter to prevent and address racial harassment, a plan for how medical schools can implement the charter, and a course of action for the future. British Medical Association, “A Charter for Medical Schools to Prevent and Address Racial Harassment” (2020).

Addressing Historic Inequities Beyond Cultural Competency Is Crucial to Tackling Health Inequities in New Zealand

There are still mixed definitions and understandings of cultural competency and safety, and how best to achieve these aims. Findings from a literature review found that health practitioners, organizations, and systems need to be prepared to deconstruct their own knowledge about culture and cultural systems before trying to understand the challenges of Indigenous and ethnic communities. Health care organizations also need to be accountable for harms they may have perpetuated. A move to cultural safety rather than competency is recommended, while also

Providing Equity-Oriented Care to Indigenous Peoples in Canada Requires Working with Local Communities

Health services often fail to address health and social inequities as part of health care delivery for Indigenous peoples in Canada and elsewhere. A study conducted using ethnographic design and mixed methods at two Urban Aboriginal Health Centers in Canada found four key dimensions of equity-oriented health services: inequity-responsive care, culturally safe care, trauma- and violence-informed care, and contextually tailored care. In noting that partnerships with local Indigenous leaders, agencies, and communities are vital to provide equity-oriented health services, the authors discuss 10 strategies to optimize the effectiveness of health care services for Indigenous peoples and provide examples of how to implement them in various settings. Annette J. Browne et al., “Enhancing Health Care Equity with Indigenous Populations: Evidence-Based Strategies from an Ethnographic Study,” BMC Health Services Research 16, no. 544 (Oct. 4, 2016): 1–17.

Closing Historic Gaps Due to Individual and Institutional Racism Requires Comprehensive Strategies

Creating a culturally safe and respectful organization that addresses centuries of racism is a massive undertaking, but one that is vital to achieving positive outcomes for those most affected by institutional and individual racism. Commitment and strategy are key to success and including Aboriginal stakeholders is another way to safeguard proper practices and methods. This paper describes the three-pronged approach taken by a large regional health organization in New South Wales, Australia: 1) staff education and training; 2) leadership; and 3) consultation, negotiation, and partnerships. Tony Martin and Michael DiRienzo, “Closing the Gap in a Regional Health Service in NSW: A Multistrategic Approach to Addressing Individual and Institutional Racism,” NSW Public Health Bulletin 23, nos. 3–4 (June 2012): 63–67.

NHS Race & Health Observatory Seeks to Address Health Inequities for Black and Minority Ethnic Groups in England

The NHS Race & Health Observatory was established to examine health inequities experienced by Black and ethnic minority communities in England. The observatory provides evidence-based health policy recommendations and facilitates long-term transformational change across health and care. It has five workstreams: improving health and care, empowering vulnerable communities, innovating for all, creating equitable environments, and collaborating globally. The Observatory’s research has found, for example, that the average white medical consultants’ pay is 4.9 percent higher than the average for Black and minority ethnic consultants, white job applicants are 1.61 times more likely to be appointed from shortlisting, and just 10 percent of NHS Trust board members are from Black or minority ethnic backgrounds. NHS Race & Health Observatory.
Advancing Health Equity

How the Affordable Care Act Has Narrowed Racial and Ethnic Disparities

In the U.S., the insurance coverage expansions ushered in by the Affordable Care Act (ACA) have significantly narrowed racial and ethnic disparities in insurance coverage — a key objective of the law. This brief examines how much the ACA has also reduced disparities in access to health care among Black, Hispanic, and white adults. The brief examines differences between states that have expanded Medicaid and those that have not and identifies policy options that might further reduce disparities. Jesse C. Baumgartner et al., “How the Affordable Care Act Has Narrowed Racial and Ethnic Disparities in Access to Health Care,” Commonwealth Fund (Jan. 2020).

Health Insurance Coverage Gains Have Stalled in Parts of the U.S.

The Affordable Care Act (ACA) significantly reduced U.S. racial and ethnic disparities in health insurance coverage and improved access to care but, after 2016, coverage gains stalled and slightly eroded. The American Rescue Plan Act provides states that have not already done so greater incentives to expand eligibility for their Medicaid programs to more low-income adults. Using 2013–19 data from the American Community Survey Public Use Microdata Sample and the Behavioral Risk Factor Surveillance System, the authors examine trends in Black and Latinx/Hispanic disparities, with a particular focus on the effects of Medicaid expansion on equity at the state level. They found that the insurance coverage gap between Black and white adults dropped 4.6 percent between 2013–19 and by 9 percent between Latinx/Hispanic and white uninsured adults. Jesse C. Baumgartner, Sara R. Collins, and David C. Radley, “Racial and Ethnic Inequities in Health Care Coverage and Access, 2013–2019,” Commonwealth Fund (June 2021).

Universal Health Coverage Is More Than Just Coverage

Universal health coverage is the goal that all people obtain health services they need without risking financial hardship from unaffordable out-of-pocket payments. It involves coverage that is accessible to all, provides access to good health services, and offers financial risk protection. Universal health coverage is not possible without universal access, and the two are not the same. Universal access has three dimensions: physical accessibility, financial affordability, and acceptability. Universal health coverage and access are complementary goals that must be pursued together. David B. Evans, Justine Hsu, and Ties Boerma, “Universal Health Coverage and Universal Access” (editorial), Bulletin of the World Health Organization 91 (2013): 546–46a.

Survey Finds Inequalities in Health Outcomes in England Were Minimal for Ethnic Minorities

Using four waves of the Health Survey for England, researchers analyzed a representative population survey with oversamples of ethnic minority communities. They measured use of primary and secondary health care services and clinical outcomes for chronic conditions. They found that ethnic minorities were not less likely to use GP services, though there were inequalities in access to hospital services and marked inequalities in use of dental care. There were no inequalities for hypertension, cholesterol, and diabetes care outcomes. J. Y. Nazroo et
Māori Are More Likely to Be Diagnosed with Breast Cancer Than Non-Māori Women, Contributing to Excess Mortality

Māori women have among the highest instances of breast cancer in the world, as well as significant excess mortality. Low rates of mammogram screenings and late-stage diagnoses seem to contribute to excess mortality from breast cancer. Māori women also experience delays in receiving treatment, lower rates of radiotherapy, are more likely to be treated with mastectomy, and are less likely to follow adjuvant endocrine therapy long term. The authors propose ways to lower inequity like primary prevention, increased breast cancer screening, and standardization of care for newly diagnosed women. Ross Lawrenson et al., “Breast Cancer Inequities Between Māori and Non-Māori Women in Aotearoa/New Zealand,” *European Journal of Cancer Care* 25, no. 2 (Mar. 2016): 225–30.

High Rates of Socially Disadvantaged Groups Forgo Health Care Because of Discrimination in France

While much is known about the effects of discrimination on the health of socially disadvantaged groups, little is known about experiences of discrimination within health care that may act as barriers to care. With data from an oversample of immigrants from a national French survey, this report found rates of forgoing care and reporting discrimination were highest among women (17%), immigrants from Africa (North Africa = 22%; Sub-Saharan Africa = 32%), immigrants from Overseas France territories (13%), and Muslims (26%). The data also revealed that those who reported “Other Religion” had the highest rate of forgoing care, but discrimination was not a factor. Joshua G. Rivenbark and Mathieu Ichou, “Discrimination in Healthcare as a Barrier to Care: Experiences of Socially Disadvantaged Populations in France from a Nationally Representative Survey,” *BMC Public Health* 20, no. 31 (2020): 1–10.

Indigenous Health Systems Are Best Placed to Overcome Social Determinants of Poor Health

Indigenous peoples face more barriers to health care than non-Indigenous people, with factors such as unemployment and low levels of education often hindering Indigenous patients from accessing health care. Indigenous health systems in different countries address these issues several ways, including by providing transportation to and from appointments, reducing costs for people with low incomes, and communicating with community members in identifying and addressing health needs. Carol Davy et al., “Access to Primary Health Care Services for Indigenous Peoples: A Framework Synthesis,” *International Journal for Equity in Health* 15, no. 163 (Sept. 30, 2016): 1–9.

Increased Use of the MHA Disproportionately Affects Black and Minority Ethnic Groups

The use of the Mental Health Act (MHA) increased by 40 percent between 2005/06 and 2015/16 in England. People from Black and minority ethnic groups are much more likely to be detained under then law than white British groups. In response, the U.K. launched a review of the MHA to explore potential reasons for increased rates of detention. Among some of the hypotheses were a rise in the detention rate since 2010 due to a more complete national database, multiple
detentions in one calendar year, and an increase in the overall U.K. population, including an increase of populations that are most at risk of detention. CareQuality Commission, “The Rise in the Use of the MHA to Detain People in England” (Jan. 2018).

**Ethnic Variations in Early Intervention Services for Psychosis**

This study examined whether there are variations among different racial and ethnic groups in the use of early intervention services for psychosis. By collecting data from 1,024 individuals with psychotic disorders at eight London early intervention services, researchers found that untreated psychosis was prolonged among white British people compared to other ethnic groups, though white patients were more likely to have made contact with their general practitioner. All Black patient groups were more likely than white British groups to have been involved with criminal justice agencies. Sharif Ghali et al., “Ethnic Variations in Pathways into Early Intervention Services for Psychosis,” *British Journal of Psychiatry* 202, no. 4 (Apr. 2013): 277–83.

**Engagement in Black Faith Settings to Promote Mental Health Awareness**

This study reviewed efforts undertaken in Black faith settings to promote mental health and reduce stigma around mental health problems. Research found that the use of a “bottom up” approach to the interventions and use of mental health champions were effective. Louisa Codjoe et al., “Evidence for Interventions to Promote Mental Health and Reduce Stigma in Black Faith Communities: Systematic Review,” *Social Psychiatry and Psychiatric Epidemiology* 56 (Apr. 2021): 895–911.

**Major Health Inequalities Among Norwegians with Different Educational Levels**

There are major health inequalities in Norway, particularly among groups with different levels of education. Men and women with the highest educational levels live between five and six years longer and experience better health outcomes than those with the lowest levels, though differences are increasing, particularly among women. Within the capital city, Oslo, life expectancy varies by up to eight years depending on district of residence. Norway also has some of the largest inequalities in health compared to many other European countries. Improving living conditions, like employment, education, and housing, could promote more equitable health outcomes. Astri Syse et al., “Social Inequalities in Health,” Norwegian Institute of Public Health (2016).

**Dutch Health Care System Faces Future Challenges**

The Dutch health care system is designed to ensure all residents can afford and access health insurance that covers medically necessary care and treatment. However, there are challenges, namely long waiting times for some procedures, slight regional differences in access to health care, and gradually increasing out-of-pocket costs, particularly in areas of the country experiencing depopulation. Despite these challenges, the Netherlands has some of the lowest rates of residents reporting unmet health needs. Karen Anderson, “ESPN Thematic Report on Inequalities in Access to Healthcare: The Netherlands,” European Social Policy Network (May 2018).
The French Health System Is Largely Accessible, Though There Are Challenges for Some

The French health system allows great freedom for patients and doctors, while also guaranteeing extensive coverage of health expenditures. Most French residents have a complementary health plan through their employer or one they purchase on their own. For this reason, most French patients’ out-of-pocket spending on health care and medical goods is half that of other European countries. But 5 percent of the population, mainly the unemployed and retired people with low pensions, do not have complementary coverage. Regional disparities in availability of health care, discrepancies in out-of-pocket costs, and differences in sociocultural behavior and economic insecurity all contribute to challenges in the French health system. Gilles Huteau and Michel Legros, “ESPN Thematic Report on Inequalities in Access to Healthcare: France,” European Social Policy Network (2018).

Strengthening Measurement of Health Inequalities in Canada

Health inequalities in Canada are largely related to individuals’ and groups’ relative social, political, and economic disadvantages. In compiling data from several national surveys and databases, this report offers a picture of the inequalities faced by portions of the Canadian population, namely First Nations people living off reserve, the Métis and Inuit, and First Nations people living on reserve and in northern communities. Significant health inequalities were observed among Indigenous peoples, sexual and racial minorities, immigrants, and people living with functional limitations. Some populations with lower socioeconomic status (First Nations, Inuit, and Métis peoples) fared less favorably while others had mixed outcomes. “Key Health Inequalities in Canada: A National Portrait,” Public Health Agency of Canada (Aug. 2018).

Australian Health System Performs Well Overall, But Some Groups Experience Health Disparities

Life expectancy among Australians is rising and most Australians say they are in good health. Yet there are disparities: people living in rural, remote, and/or with poorer areas, people with disabilities, and Aboriginal and Torres Strait Islander people experience higher rates of illness, hospitalization, and death than other Australians. Indigenous Australians are 2.9 times more likely to have diabetes than non-Indigenous Australians, for example. People living in the lowest socioeconomic area are 2.3 times as likely to die from potentially avoidable causes than people in other areas. Four of 10 people with a disability also say their health is fair or poor while people who experience homelessness are among Australia’s most disadvantaged. “Australia’s Health 2020 in Brief,” Australian Institute of Health and Welfare (2020).

Māori Community Hasn’t Reaped Benefits of New Zealand’s High-Performing Health System

Initiatives to improve the health of Māori people — including supporting Māori health care providers, cultural competence training, community-led programs, and health literacy programs — are often constrained by systemic inertia and inattention to the underlying causes of inequities. The field of public health can impart positive contributions to the Māori people and contribute to positive dialogues on health inequities. Matthew Hobbs et al., “Reducing Health Inequity for Māori People in New Zealand,” The Lancet 394, no. 10209 (Nov. 2019):1613–14.
Socioeconomic Inequalities in Health in Germany

Across many countries, people with low socioeconomic status are particularly at risk of diseases, health complaints, and functional limitations and die at younger ages than people with higher socioeconomic status. Reasons for this include greater workplace stress, family and home environments, and lack of resources. In Germany, general health has improved over time among socially advantaged groups, while health inequalities in terms of health behaviors and behavioral risks (e.g., smoking and exercise) have grown. Thomas Lampert et al., “Health Inequities in Germany and in International Comparison: Trends and Developments over Time,” Journal of Health Monitoring 3, no. S1 (Mar. 2018): 1–24.

Major Health Inequalities Persist and, in Some Cases, Have Worsened in England

Health inequality is a major problem in England, ranging from disparities in life expectancy between the most and least deprived areas to higher mortality rates in deprived areas from heart disease, lung cancer, and chronic lower respiratory diseases. Inequalities are noted from early life, with children in the most deprived areas more than three times as likely to experience tooth decay than children in the least deprived areas. There is no evidence that inequalities in life expectancy have narrowed in recent years. However, there have been long-term improvements in infant mortality rates and rates of premature deaths from cancer and cardiovascular disease. “Health Profile for England: 2018 — Chapter 5: Inequalities in Health,” Public Health England (Sep. 11, 2018).

A Focus on Global Health Equity

The COVID-19 pandemic has exacerbated health disparities within and between countries, sparking interest in global health equity. Several issues have inhibited progress toward achieving global health equity, including a narrow emphasis on what shapes health and lack of focus on the drivers of health and health inequities. This report proposes developing global metrics of health inequity, convening a forum for global health equity, documenting inequities across and within countries that were present before COVID-19 and those that have widened, and developing systems of global accountability for health equity. Salma M. Abdalla et al., Global Equity for Global Health, Think20 Summit (2021).

Reparations Are Vital to Improving Health Outcomes for Black Americans

While the racial gap in life expectancy has narrowed, Black Americans still die four years earlier than white Americans, Black mothers are three times as likely as white mothers to die from pregnancy-related causes, and Black infants are more than twice as likely to die in their first year than white infants. Reparations for slavery could help reduce such disparities by expanding limited resources available to many Black Americans and reducing the stress felt by many Black Americans. Reparations could be as cash transfers or investment vehicles. Reparations are highly controversial and would not solve racism, but they would serve as a crucial step to ameliorating health inequities. Mary T. Bassett and Sandro Galea, “Reparations as a Public Health Priority — A Strategy for Ending Black–White Health Disparities,” New England Journal of Medicine 383, no. 22 (Nov. 26, 2020): 2101–03.

The authors would like to acknowledge the editorial contributions of Sarah Klein and Martha Hostetter and the research contributions of Evan Gumas, all of the Commonwealth Fund.