Letter From The Editor

Just weeks before the 2016 presidential election, over 600 professionals gathered in Washington, D.C., for the bi-annual Public Health Law Conference. Co-hosted by the American Society of Law, Medicine & Ethics and the Network for Public Health Law, and generously funded by the Robert Wood Johnson Foundation, this event brought together some of the country’s leading scholars and practitioners in the field — many of whom have been part of ASLME for years. This year’s theme focused on equity, and how inequalities affect many issues central to public health: access to health and oral care, nutritious food, education, and safe and healthy communities. The authors of this supplement address equity in a variety of interesting ways — some are updates on topics we’ve previously published, while others are completely new. As the issue’s guest editor Donna Levin writes in her Introduction, “Equity is the cornerstone for the creation of a culture of health.” Together these articles show that, as a society, we are more than ready for a culture of health, and understanding how equity lies at the core of these issues is the first step toward taking action.

One of our favorite aspects of this conference is catching up with old friends, making new ones, and listening to everyone’s presentations. Each day attendees shared their ideas, insight, knowledge, and recommendations, and several kept the conversation going on social media. We are honored to work with such talented and dedicated practitioners in the field of public health. Their work inspires us to take whatever steps we can to improve the health and well-being of those around us. Publishing this supplement is our way of helping to move the conversation from the conference attendees to the public at large. As with all of our previous supplements published after the Public Health Law Conference, this issue will be free and available to all at aslme.org; we encourage you to share it far and wide. As always we thank you for being part of this journey and doing your part to achieve health equity for all.

Courtney McClellan
Assistant Editor
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This paper highlights the need to apply an equity lens when assessing the impact of preemption and related legal doctrines on community health. Community autonomy to set and pursue public health priorities is an essential part of achieving health equity. Unfortunately, the priorities of organized industry interest groups often conflict with health equity goals. These groups have a history of successfully using law to limit community autonomy to pursue public health measures, most notably through preemption and related legal doctrines. We examine this phenomenon using two examples. First, we look at dental association efforts to block the spread of dental therapists in Indian Country. Native dental therapists have been improving the oral health of native people in Alaska for over a decade; yet the national and state dental associations have sought with mixed success to leverage state and federal laws to hinder other tribal governments from utilizing these providers. We compare these efforts with a restaurant association-led movement to limit what municipal governments can do to address food-based health inequities, focusing on a “model” ALEC bill that started in Ohio. Finally, we discuss how municipalities and Tribes are fighting back and continuing to pursue health equity for their communities.

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This article briefly summarizes the rules governing public policy engagement by exempt organizations. It then describes different types of exempt organizations, and how they can work together to expand engagement. Next, it identifies several key mechanisms of policy development that public health advocates could influence. Finally, it suggests some methods of applying the tax rules to increase participation in these arenas.
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This commentary addresses public health issues underlying homelessness and related law, policy, and advocacy options. After framing public health issues for affected individuals and the community, legal and policy approaches and related barriers are assessed. Major topics include deficits in housing availability, the role of state-based Medicaid programs, criminalization of homelessness, and the use of emergency declarations seeking to address particular issues related to homelessness in select states and localities.

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Kathleen Hoke and Sarah Hexem

Allied health professionals play an integral role in providing safe, affordable care to communities in need. Laws that define the permissible scope of practice for these professionals may take full advantage of these providers and may unnecessarily restrict safe and effective care. Nurse practitioners in many states may provide care independent of a physician; research reveals that this care is safe, affordable and accessible. Yet hurdles exist that prevent communities from securing the full benefit of NPs in independent practice. The scope of independent practice for allied dental providers varies greatly across the country, often including stringent supervision requirements. Emerging approaches to allowing allied dental providers to practice independently in certain settings or with dentist supervision via telemedicine and creating the interlicense with the dental therapist, may increase access to safe, affordable dental care. Research on the impact of laws that allow broader independent practice by NPs to ferret out the hurdles to full implementation of the spirit of such laws is needed. That research could support expanded independent scope for allied dental providers and other allied health care providers.

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Smoking remains the leading cause of preventable disease and death in the United States, killing approximately 480,000 people each year. This crushing health burden falls disproportionately, and recent CDC data shows that large disparities in adult cigarette smoking remain. One factor in these disparities is the use of flavors. Menthol cigarettes and other flavored tobacco products are used at higher rates by vulnerable populations including youth and young adults, African Americans, women, Hispanics and Asian Americans. This is no accident; the tobacco industry has long targeted these same groups. Given FDA’s failure to act to ban flavored tobacco products, states and municipalities are considering taking matters into their own hands to protect their communities from these dangerous products. The authors will explore state and local authority to restrict the sales of these products and review the evidence base indicating that removing flavored tobacco products – and menthol combustible products in particular - from the market would significantly reduce the toll of illness and death caused by these products.

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Immigration and Health: Law, Policy, and Ethics
Wendy E. Parmet, Lorianne Sainsbury-Wong, and Maya Prabhu

Immigration poses numerous challenges for health professionals and public health lawyers. This article reviews these challenges. We begin by offering some background on immigration and health and then explain some of the reasons why immigrants are less likely than natives to have health insurance. Next we turn to a discussion of some of the particular challenges relating to the health care of refugees. We conclude by analyzing and rejecting some of the arguments that are made for discriminating against immigrants with respect to the provision of public health benefits and services.

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Dawn Pepin, Benjamin D. Winig, Derek Carr, and Peter D. Jacobson

This article introduces and defines the Health in All Policies (HiAP) concept and examines existing state legislation, with a focus on California. The article starts with an overview of HiAP and then analyzes the status of HiAP legislation, specifically addressing variations across states. Finally, the article describes California's HiAP approach and discusses how communities can apply a HiAP framework not only to improve health outcomes and advance health equity, but also to counteract existing laws and policies that contribute to health inequities.

EPSDT's Role in Improving Child Vision, Hearing, and Oral Health
Jane Perkins

The Medicaid Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit offers health care coverage specifically targeted to meet the needs to low-income children and children with disabilities. This article provides a brief overview of EPSDT and then discusses how states are working to bring vision, hearing, and oral health services to children through EPSDT.

Legal Epidemiology: The Science of Law
Tara Ramanathan, Rachel Hulkower, Joseph Holbrook, and Matthew Penn

The importance of legal epidemiology in public health law research has undoubtedly grown over the last five years. Scholars and practitioners together have developed guidance on best practices for the field, including: placing emphasis on interdisciplinary collaborations; creating valid, reliable, and repeatable research; and publishing timely products for use in decision-making and change. Despite the energy and expertise researchers have brought to this important work, they name significant challenges in marshalling the diverse skill sets, quality controls, and funding to implement legal epidemiology activities. The Centers for Disease Control and Prevention (CDC) has worked to develop cross-cutting research and translation on issues of national priority in legal epidemiology, and has explored ways to overcome some of these challenges. As such, this article describes a case study of the use of law to characterize states’ prior authorization policies regarding medication used to treat attention-deficit/hyperactivity disorder (ADHD), a central component of a broader effort to improve behavior therapy options for young children with ADHD. This article highlights the types of legal epidemiology work we have undertaken, the application of this work to an emerging public health problem, and the lessons learned in creating impactful research for the field.
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Krista Scott, Anna Ayers Looby, Janie Simms Hipp, and Natasha Frost

In the current landscape, child care is increasingly being seen as a place for early education, and systems are largely bundling child care in the Early Care and Education sphere through funding and quality measures. As states define school readiness and quality, they often miss critical elements, such as equitable access to quality and cultural traditions. This article provides a summary of the various definitions and structures of child care. It also discusses how the current child care policy conversation can and ought to be infused with a framework grounded in the context of institutional racism and trauma. Models and examples will explore the differences between state government regulations, and how those differ from the regulation and structure of child care in Indian Country.

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William C. Tilburg

Safe and healthy housing conditions are critical to improving population health, particularly for the most vulnerable - young children, senior citizens, and individuals with chronic illnesses and disabilities - who spend more time at home and are more susceptible to illness and injury. Across the country, millions of Americans are exposed to lead, radon, asbestos, volatile organic compounds, pests, mold, carbon monoxide, and tobacco smoke in the home, affecting the air they breathe and the water they drink. These household hazards are also associated with a wide range of illnesses and injuries, including asthma, cancer, falls, respiratory infections, and mental health issues. Legal and policy interventions can assist communities grappling with the adverse impacts of poor housing conditions and improve the health and safety of all residents, including vulnerable populations.

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Restructured health care reimbursement systems and new requirements for nonprofit hospitals are transforming the U.S. health system, creating opportunities for enhanced integration of public health and health care goals. This article explores the role of public health practitioners and lawyers in this moment of transformation. We argue that the population perspective and structural strategies that characterize public health can add value to the health care system but could get lost in translation as changes to tax requirements and payment systems are rapidly implemented. We urge public health leaders to take a more active role in hospital assessments of community health needs and evaluation of the patient outcomes for which providers are accountable.
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Jon S. Vernick, Ted Alcorn, and Joshua Horwitz

There were more than 36,000 firearm-related deaths in the U.S. in 2015. Under federal law, a background check is required only for gun purchases from licensed dealers. Research suggests that some persons prohibited from owning a gun turn to private sellers, including those identified online, to attempt to obtain a firearm. State-level approaches to make it more difficult for high-risk persons to purchase or possess firearms include universal background check (UBC) and gun violence restraining order (GVRO) laws. UBC laws, on the books in 18 states as of the end of 2016, can reduce both homicide and suicide rates. After Colorado adopted a UBC law in 2013, the number of background checks conducted by private sellers for sales occurring at places other than gun shows steadily increased. GVRO laws give law enforcement and families the authority to petition a court to temporarily remove firearms from an individual who presents a danger to himself or others during times of crisis, regardless of whether that person has been diagnosed with a mental illness. California enacted a GVRO law in 2014. Data are emerging to suggest the effectiveness of GVRO-type laws at averting suicides and providing an entryway to services.
INTRODUCTION

Donna E. Levin

In September 2016, the Network for Public Health Law and the American Society of Law, Medicine & Ethics (ASLME), with the generous support of the Robert Wood Johnson Foundation, co-sponsored the 2016 Public Health Law Conference — Lead, Connect, Innovate: Strategies for Achieving Health Equity, in Washington, D.C. This symposium issue of the Journal of Law, Medicine & Ethics (JLME) is dedicated to an examination of some of the critical topics discussed at this conference.

When we embarked on the planning for this conference, we knew we needed to focus on issues of equity. As Professor Lawrence Gostin remarked in one of our discussions, “equity is the animating center of public health.” The potential to use law to address injustice and inequity and to challenge and change law that perpetuates inequity is fundamental to the health of our communities and the operation of our health care delivery systems. Equity is the cornerstone for the creation of a culture of health. Addressing public health through an equity lens expands the focus of public health efforts to upstream inequalities that profoundly affect health — inequality in income, education, safe neighborhoods, access to healthy foods and more.

The 2016 Public Health Law Conference theme included a call to action — Lead, Connect, Innovate to achieve health equity. Attendees heard from national leaders and key experts working on legal developments in critical areas impacting health equity.

Georges Benjamin, Executive Director, American Public Health Association, Karen DeSalvo, Acting Assistant Secretary for Health, U.S. Department of Health and Human Services, and Professor Gostin of Georgetown University, talked about their respective efforts in the Leaders in Health Equity Session.

Michael Botticelli in his keynote session, shared valuable insights as the Director of National Drug Control Policy in President Obama’s administration on coordinating a balanced public health and public safety approach to reduce prescription drug abuse, heroin use and related overdoses.

Scott Burris, Gene Matthews, and Wendy Parmet joined forces to present “Public Health Law: Looking Back and Ahead”—a plenary favorite in which they explored some of the major issues that have emerged in public health law since the 2014 Public Health Law Conference including, the ongoing opioid epidemic, the Flint water crisis, health data sharing and privacy, communicable diseases and immunization, the Zika virus, reproductive health, marijuana legalization, ongoing health system transformation, legal epidemiology and more.

Over 600 attendees including health and public health law attorneys, practitioners, researchers, health care providers, law professors, non-profit and advocacy organizations as well as foundation representatives joined their fellow colleagues at the conference. Pre-conference workshops were available on de-identification of health data; training in policy surveillance — legal mapping techniques and tools; best practices

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in public health law teaching; and, for students and new lawyers, building a career in public health law. Forty sessions provided attendees opportunities to connect and share current work and ideas for addressing health equity through law. This symposium issue includes manuscripts addressing all five conference tracks: (1) health equity and social determinants of health; (2) bridging health care delivery with public health; (3) cross-sector innovation; (4) public health law — practice challenges, and (5) emerging issues.

On behalf of the conference planning committee and attendees, I want to express our sincere thanks to the plenary speakers and presenters for sharing their knowledge, insight and expertise in such critical areas of public health law. My deep appreciation goes to Network for Public Health Law Staff Attorney, Northern Region, Brittney Bauerly and consultant Dan O’Brien for their outstanding assistance in organizing the sessions and workshops, and to the moderators and conveners of workshops and concurrent sessions for helping to make the conference such a success: Julie Ralston Aoki, Staff Attorney, Public Health Law Center; Marice Ashe, Founder & CEO, ChangeLab Solutions; Lucy Baglin, State Policy Associate, National Coalition of STD Directors; Leila Barraza, Consultant, Network for Public Health Law – Western Region; Brittney Crock Bauerly, Staff Attorney, Network for Public Health Law — Northern Region; Jennifer Bernstein, Deputy Director, Network for Public Health Law — Mid-States Region; Scott Burris, Director, Center for Health Law, Policy and Practice, and Public Health Law Research, Temple University; Amy Campbell, Cecil C. Humphreys School of Law, University of Memphis; Denise Chrys-\r\n\r\nler, Director, Network for Public Health Law — Mid-States Region; Suzanne Condon, Senior Director, State Health Policy, Association of State & Territorial Health Officials; Corey Davis, Deputy Director, Network for Public Health Law — Southeastern Region; Jacqueline Fox, Associate Professor of Law, University of South Carolina School of Law; Natasha Frost, Staff Attorney, Public Health Law Center; Deirdre Golden, Health Law Professor, University of Detroit Mercy Law School; Eric Gorovitz, Principal, Adler & Colvin; Janie Simms Hipp, Founding Director, Indigenous Food and Agriculture Initiative at the University of Arkansas School of Law; James G. Hodge Jr., Director, Network for Public Health Law — Western Region; Kathleen Hoke, Director, Network for Public Health Law — Eastern Region; Sara Pollock Hoverter, Staff Attorney and Adjunct Professor, Harrison Institute for Public Law, Georgetown University Law Center; Peter Jacobson, Professor of Health Law and Policy, University of Michigan School of Public Health, Director, Center for Law, Ethics and Health, President, Public Health Law Association; Jill Krueger, Director, Network for Public Health Law — Northern Region; Joelle Lester, Staff Attorney, Public Health Law Center; Kerri McGowan Lowrey, Deputy Director, Network for Public Health Law — Eastern Region; Gene Matthews, Director, Network for Public Health Law — Southeastern Region; Angela K. McGowan, Project Director, Program Performance and Evaluation Office, Centers for Disease Control and Prevention; Thomas Merrill, General Counsel, New York City Department of Health and Mental Hygiene; Maureen O’Brien, Staff Attorney, Tobacco Control Legal Consortium at the Public Health Law Center; Daniel J. O’Brien, Consultant, Network for Public Health Law; Wendy Parmet, Matthews University Professor of Law and Professor of Public Policy & Urban Affairs, Northeastern University; Matthew Penn, Director, Public Health Law Program, Centers for Disease Control and Prevention; Jane Perkins, Senior Attorney, Network for Public Health Law — Southeastern Region; Matthew Pierce, Program Officer, Robert Wood Johnson Foundation; Clifford Rees, Practice Director, Network for Public Health Law — Western Region; Deborah Reid, Senior Health Policy Attorney, Legal Action Center; Lainie

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I would like to offer a special thank you to our conference co-sponsors, ASLME: Katie Johnson, ASLME Conference Director, Ted Hutchinson, ASLME Executive Director, Courtney McClellan, JLME Managing Editor of this issue, and their staff for all their hard work and dedication to the planning and execution of such an exceptional conference. My sincere gratitude and appreciation also goes out to my colleagues at the Network for Public Health Law for their assistance with the conference, and for their work in the careful review and editing of the manuscripts for this issue. And finally, I would like to thank Network Consultant Priscilla Fox and Network Membership Manager Kayleen Larson for their assistance in the preparation of this supplement issue.
Maximizing Community Voices to Address Health Inequities: How the Law Hinders and Helps

Julie Ralston Aoki, Christina Peters, Laura Platero, and Carter Headrick

A community’s ability to develop public health policy solutions tailored for its needs and priorities is an essential part of achieving health equity. Policies to address health inequities are more likely to succeed when they come from and are supported by the communities they are meant to serve. Authentic community engagement supports the development of laws tailored to meet specific community needs that carry legitimacy and will be sustainable over time. It also can foster innovative policy-making. Thus, an important goal of law should be to maximize community voices, and especially the voices of socially disadvantaged and marginalized groups, in public health solutions.

Unfortunately, the priorities of powerful interest groups such as Big Tobacco, Oil, Food, and even health-related trade organizations like the American Dental Association (ADA), often conflict with health equity and community goals. These industries also understand the power of community self-determination, and as a result, often push for preemption of state and/or local authority. Preemption is a legal doctrine whereby governmental authority to regulate or act is limited or eliminated by another, typically broader, governmental authority. Specifically, federal law can preempt state and local laws, and state law can preempt local laws. The application of preemption must be assessed through an equity lens. If it helps to promote health equity and support socially disadvantaged groups, it may be a positive force, as with federal civil rights laws. But when it is used to hinder community efforts to improve the health of socially disadvantaged and marginalized groups, as is all too often the case, it perpetuates health inequities and should be challenged. We present two examples of this phenomenon, one related to federal law and tribal governments, and one related to state and local law.

The American Dental Association Acts to Perpetuate Oral Health Inequities in Indian Country

Many dentists are working hard to address oral health inequities, including volunteering to serve underserved populations. The ADA also provides strong oral health education resources. Volunteer dentistry and oral health education are not enough to reverse oral health disparities in underserved communities, however. These communities need and want access to consistent, affordable, and restorative dental care.

Due to a confluence of factors, including attempted genocide, displacement, racism, and poverty, American Indian/Alaska Native (AI/AN) communities experience some of the worst health and oral health disparities in the U.S. AI/AN children ages 2 to 5 suffer from tooth decay at nearly three times the U.S. average rate, and more than 40% of AI/AN children ages 3-5 have untreated tooth decay compared to 14% in the general population. AI/AN adults experience twice the prevalence of untreated caries compared to the general population and more than any other racial or ethnic group. AI/AN adults are also more likely to have missing teeth and to report poor oral health, pain, and food avoidance because of oral problems.

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Tribal nations are actively seeking innovative solutions to reverse these severe disparities.

Alaska Natives and other Tribes are showing that adding dental therapists to dental teams is an effective approach. Dental therapists (or Dental Health Aid Therapists — DHATs) are primary oral healthcare professionals trained to provide a limited number of clinical dental procedures and preventive services such as simple extractions and fillings, diagnosis and treatment planning, and infection control, with off-site dentist supervision. This model is used in many countries and has proven to be a successful, community-based approach for improving access to oral healthcare for underserved communities, particularly in remote areas. In the U.S, the Alaska Native Tribal Health Consortium (ANTHC) pioneered use of dental therapists as part of the Alaska Community Health Aid Program (CHAP) established by the Indian Health Care Improvement Act (IHCIA). IHCIA establishes a framework with training requirements and standards to support the development of Native healthcare workers and paraprofessionals. ANTHC sent eight students to New Zealand to complete the dental therapy training program, certifying the first Native dental therapists in 2005.

Organized dentistry has actively opposed these safe, accessible, high-quality providers, out of what appears to be misguided economic self-interest and sense of privilege, at the expense of crushing health inequities. In early 2005, the Alaska Board of Dental Examiners urged Alaska to take action against these DHATs for practicing dentistry without licenses. Instead, the Alaska Attorney General issued a memorandum concluding that Alaska’s dental licensing laws were preempted by federal law with respect to these DHATs. The memo reasoned that if state licensing laws applied to Native dental therapists trained according to CHAP, this would obstruct Congress’s express objective to create a program for dental treatment by and for Alaska Natives using non-dentist, non-hygienist paraprofessionals who meet federal requirements. So in this situation, federal preemption was an important tool for protecting a community-based, health equity focused strategy from being stifled by a powerful industry group under the guise of state law.

Undaunted, in January 2006, the Alaska Dental Society and ADA sued the ANTHC and the state. While the lawsuit was pending, the dental society president stated on a dentist listserve that lack of personal responsibility caused Native oral health disparities and that “[a]ny culture that allows such disease will soon disappear and rightfully so.” This statement reflected organized dentistry’s lack of understanding of barriers to care and how racist viewpoints can often enter policy discussions and block access to care.

In 2007, the Alaska Supreme Court ruled that state law did not apply to Alaska Native DHATs, using the same reasoning applied by the Alaska Attorney General’s office. The court explained that Congress intended to create an independent statutory framework for providing healthcare to Alaska Natives, and this purpose would be defeated if a system that had failed to serve the dental healthcare needs of Alaska Natives were allowed to oversee and regulate the DHATs.

The ADA then took its complaint to Congress when the IHCIA was up for permanent reauthorization in 2010, and the CHAP, tested in Alaska, was to be nationalized to serve Tribes in other parts of the U.S. Citing unproven and debunked concerns about patient safety and with blatant disregard for health equity, the ADA lobbied to include language to prohibit DHATs from being included in a national CHAP. The final IHCIA language did not completely exclude DHATs from a national CHAP as the ADA pushed for, but does purport to restrict DHATs in tribal programs unless midlevel dental providers are authorized by state law. This condition of state authorization of DHATs violates tribal sovereignty and contradicts the sovereign principle, as explicitly acknowledged by the IHCIA, that Tribes have the inherent right to promote the health and welfare of their peoples. The significance of this action must be viewed in the larger context of federal-tribal relations: Tribes as sovereign nations have a government-to-government relationship with the U.S. and states do not have jurisdiction over Tribes except as delegated by Congress or determined by federal courts. By purporting to make the availability of tribal DHATs under the federal CHAP contingent on state law (an action akin to preemption), this IHCIA provision inappropriately inserted states into the government-to-government relationship between Tribes and the federal government.

Undaunted by the ADA, Swinomish Indian Tribal Community (Swinomish) has decided to challenge the notion that sovereign tribal nations need permission from a state to utilize proven and effective providers to address the health and welfare needs of their peoples, and has created its own legal framework outside of the state system to license DHATs. This decision did not come lightly. Swinomish worked for six years with a statewide coalition of oral health advocates to try to pass statewide dental therapy legislation in Washington State to satisfy this new IHCIA language and clear the way for DHATs and other midlevel providers, a change that would have benefitted many people in the state, not just tribal members.
Due to strong lobbying by the Washington State Dental Association, state legislators have refused to pass such legislation in Washington, continuing to leave many without access to oral health care. Swinomish decided to move forward to meet its community’s needs and implemented a plan to license and employ DHATs at Swinomish. In 2015 the Swinomish Senate passed the Swinomish Dental Practice Act, creating a tribal licensing scheme for DHATs. The scope of practice, education, and supervision requirements are identical to federal requirements, and Swinomish added a cultural competency requirement. Unfortunately, residents lacking access to oral healthcare in the rest of the state will have to wait for the state legislature to act.

DHAT services became available at the Swinomish dental clinic in January 2016 and care wait times have decreased. Most importantly to the Tribe, because its dental provider team now includes DHATs, all providers are able to focus their skills and expertise more efficiently — to work to the top of their licenses. This means that DHATs are providing basic and routine preventive and restorative procedures, so that the Tribe’s dentists have time to focus on more advanced, surgical procedures, and on serving aging tribal members who have complex and challenging oral healthcare needs as a consequence of growing up with poor oral healthcare due to itinerant dental care.

In Oregon, the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians (CTCLUSI) and the Coquille Indian Tribe, in collaboration with the Northwest Portland Area Indian Health Board, are taking a slightly different approach. These groups worked with the state to create a pilot project to train DHATs for employment by the tribal health program. Each Tribe sent two students to Alaska to train. The first student returns in the summer of 2017. This state-supported project will allow tribal DHATs to work in Oregon for at least the duration of the project, allowing time for the Tribes to consider the best next steps to pursue.

Meanwhile, the ADA is pushing its own effort, and heavily promotes the Community Dental Health Coordinator role. This role has a much narrower scope of practice compared to DHATs (for example, coordinators cannot diagnose or do restorative procedures), and thus is not considered to be an adequate substitute or equivalent for Tribal DHATs.

It is resource intensive to create an entire legal structure and a department within the tribal government to license DHATs. While some Tribes have the means to utilize their sovereignty to do this, many do not, and the Tribes with the most need do not have the extra resources to spare. The ADA’s effort to hinder the federal IHCIA option means that Tribes with the most staggering oral health needs are more likely to be unable to access DHATs, despite their proven effectiveness.

In the early work to bring DHATs to tribal communities, Native Alaskans were helped by federal preemption because it protected their program from the ADA’s efforts to use state law to stymie the DHAT program. The ADA then used its lobbying muscle to undermine that protection for Tribes in the rest of the U.S. by subjecting the availability of DHATs to state law. By inserting states into the federal-tribal government-to-government relationship, the ADA has made it more challenging for Tribes to expand their dental teams and bring DHATs to their programs. It is resource intensive to create an entire legal structure and a department within the tribal government to license DHATs. While some Tribes have the means to utilize their sovereignty to do this, many do not, and the Tribes with the most need do not have the extra resources to spare. The ADA’s effort to hinder the federal IHCIA option means that Tribes with the most staggering oral health needs are more likely to be unable to access DHATs, despite their proven effectiveness.

The Restaurant Association Perpetuates Food-Based Health Inequities across States

In March 2011, Cleveland launched a Healthy Cleveland initiative to promote “healthy neighborhoods and residents who enjoy longer and healthier lives and... combat[...] chronic disease[s]... like chronic pulmonary disease, heart disease, diabetes, [and] obesity...” Right away, the city council passed a law prohibiting
artificial trans fat in restaurant foods. Cleveland, with a majority African American population, wrestles with health inequities — specifically, health inequities based on racial and socioeconomic factors — many of which are related to diet. Numerous residents are food insecure, with many poor neighborhoods lacking full service grocery stores. At the same time, fast food is easily available, making up over half of restaurants in the area. Cleveland residents have higher rates of diabetes, hypertension, and obesity compared to Ohio and the nation, with predominantly African American neighborhoods having significantly higher prevalence.

The Ohio Restaurant Association quickly reacted to Cleveland’s effort to address health inequities by proposing a state law, tucked inside a 5,000 page appropriations bill, to prohibit cities from regulating restaurants “based on...food-based health disparities” (among other things). After the law was passed, the American Legislative Exchange Council (ALEC) adopted the Ohio language as a model bill, even including the typos.

ALEC is a self-proclaimed “right-of-center” group that connects business groups with state legislators to create model laws, many of which are about preempting local authority. ALEC is highly effective, based on its claim that its membership “surpassed all Democratic legislators in passing legislation by a two-to-one ratio.” Mississippi lawmakers passed an expanded version of the Ohio/ALEC bill in 2013, followed by Kansas in 2016. In both states, supporters touted the law as an “anti-Bloomberg” measure protecting extra-large sodas. It is unclear to what extent legislators understood the phrase “health disparities.” Ironically, Mississippi and Kansas are in the top ten for obesity rates.

Food-based health disparities are intimately linked with inequity and systemic barriers such as structural racism. While every level and type of government has a role in addressing this problem, local governments are especially important. That is part of what makes this ALEC preemption bill particularly invidious — food-based health disparities are inherently local, depending on the type of food outlets available; whether the area is urban or rural; and on the specific community demographics (elderly, low income, etc.). These disparities require solutions tailored for local circumstances, the very thing the “model” forbids. Local governments are best positioned to understand community needs. Community members who will be impacted can have direct input into shaping solutions. Another invidious aspect of the ALEC bill is that it creates a void — the states that have passed the law have failed to offer policy solutions as an alternative to local action. But even if these states offered such solutions, there is no compelling justification for prohibiting local governments from going beyond state requirements as needed to address inherently local health disparities. Laws that completely preempt local authority to address food-based health disparities not only stifle community voices, but also perpetuate systemic barriers to health equity.

Similar to the Swinomish, Cleveland chose to fight back. The city sued the state, alleging the law violated the Ohio constitution’s home rule provision and single subject requirement that state bills address one subject. Cleveland won the case, invalidating the law. As a side note (but one that was relevant to the home rule argument), the litigation uncovered an email between the state restaurant association and Ohio’s agriculture department revealing that the association drafted the law specifically to protect fast food restaurants from Cleveland’s law, despite clear evidence about artificial trans fat’s health harms and Cleveland’s health disparities.

For Mississippi and Kansas, this preemption law remains unchallenged (so far). According to advocates, it has caused uncertainty and slowed some efforts but not stopped them. For Kansas communities in particular, with its strong home rule tradition and emerging food and farm council movement, Cleveland provides inspiration and a road map for action.

Conclusion
Community self-determination is a powerful force for positive change and improving health equity. Innovative community policy efforts can change the conversation about how to promote social good and move closer to health equity — so that everyone can eat food that is free of harmful trans fat, or have easy access to affordable, quality primary dental care. When strategies such as preemption are used to limit community self-determination and stifle community voices, they must be fought if we are to make progress in promoting equity.

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Introduction
Vaccine policies have played a vital role in protecting the public’s health through disease prevention. The Centers for Disease Control and Prevention (CDC) lists vaccination as one of the “Ten Great Public Health Achievements in the 20th Century” because of its tremendous impact on morbidity and mortality in the United States. Despite these successes, recent outbreaks of certain vaccine-preventable diseases have been on the rise. While measles was declared eliminated in the United States in 2000, there were 23 measles outbreaks and a reported 668 cases of the disease in the U.S. in 2014. Intentionally unvaccinated individuals comprised a substantial proportion of the recent U.S. cases of measles, suggesting a continued role for vaccine policies to increase vaccination rates and reduce disease outbreaks.

This paper identifies select state vaccine policies across the U.S. First, the paper discusses state legal frameworks for mandatory vaccination in the context of school and healthcare worker vaccination and corresponding litigation. The paper then turns to one policy approach to expanding vaccine access — specifically, state laws allowing pharmacists the authority to vaccinate.

Mandatory Vaccinations
School Entrance
All 50 states require children to receive certain vaccinations before attending public school, and often these requirements extend to children attending day care or private schools. State laws permit exemptions from school vaccination requirements for medical (in all 50 states), religious (in 47 states), or philosophical reasons (in 18 states). From late 2014 through early 2015, one measles outbreak originating from exposures at a theme park in California resulted in a total of 125 cases and spread throughout eight states. California residents accounted for 110 of the 125 cases. Of the California measles patients, 45% were unvaccinated for measles, and 43% had unknown vaccination status, with other patients receiving varying doses of measles vaccine. Among the unvaccinated patients, which included 18 children aged 18 years or younger
who contracted measles during the outbreak, a majority (67%) of vaccine-eligible patients intentionally were unvaccinated because of personal beliefs.\textsuperscript{10}

The 2014–2015 measles outbreak spurred policy discussions regarding vaccine requirements and exemptions. During the 2015 legislative session two states, Vermont and California, passed legislation that made it more difficult for parents to seek exemptions from mandatory vaccination requirements.\textsuperscript{11} Vermont’s legislation removed the state’s philosophical exemption but retained its religious vaccination exemption.\textsuperscript{12} California’s legislation restricted vaccine exemptions only to those seeking it for medical reasons (joining Mississippi and West Virginia as the only states permitting only medical exemptions to vaccines).\textsuperscript{13} The legislation in California (Senate Bill 277) removed the state’s philosophical exemption and the religious exemption.\textsuperscript{14} Students entering daycare or school for the first time or advancing to seventh grade, except for homeschooled students, must now receive all mandatory vaccinations in order to attend school in the state, unless they have a medical reason for not doing so.\textsuperscript{15}

\textbf{Healthcare Worker Vaccination}
Healthcare facilities are an additional setting in which vaccination requirements have been established. These vaccination requirements can be found in state statutes and regulations or be established by healthcare facility policy. Healthcare worker vaccination laws vary across states but generally fall into four categories: (1) laws requiring healthcare facilities to assess the vaccination status of healthcare workers, known as assessment requirements;\textsuperscript{16} (2) laws requiring healthcare facilities to offer vaccination to healthcare workers, known as administrative offer requirements;\textsuperscript{17} (3) laws requiring that healthcare workers be vaccinated or have a valid medical or religious exemption or other declination statement, known as administrative ensure requirements;\textsuperscript{18} and (4) laws requiring healthcare workers who have not been vaccinated for influenza to wear surgical masks while at the workplace.\textsuperscript{19}

State healthcare worker vaccination laws include requirements for vaccination for various diseases, including hepatitis B, influenza, measles, mumps, pertussis, pneumonia, rubella, and varicella. However, the requirements vary by state and by applicable healthcare facility. For example, 18 states have established influenza vaccination laws for hospital healthcare workers; 8 of these states have assessment requirements, 10 have administrative offer requirements, 8 have administrative ensure requirements, and 3 have surgical mask requirements.\textsuperscript{20}

\textbf{Litigation}
Laws aimed at changing the immunization requirements landscape have not been without legal challenges. As described above, California removed non-medical exemptions to vaccine requirements for school entrance. As of early September 2016, at least two lawsuits had been filed to challenge the new California law. The first lawsuit, filed in April 2016, raises several challenges to the law, including that the plaintiffs’ children have a right to education regardless of vaccination status, and is still pending review by state court.\textsuperscript{21} The second lawsuit, filed on July 1, 2016, by parents of children in California, plus additional nonprofit organizations, sought to suspend the bill’s implementation.\textsuperscript{22} The complaint included assertions that plaintiffs’ children have “a right to be free from potentially dangerous medical interventions,” and plaintiffs have concerns, based on their religious beliefs, about vaccines.\textsuperscript{23} The plaintiffs’ motion for a preliminary injunction to temporarily stop the law was denied on August 26, 2016,\textsuperscript{24} and the plaintiffs voluntarily withdrew the lawsuit shortly thereafter.\textsuperscript{25}

Mandatory healthcare worker vaccination policies have also led to litigation, with healthcare workers challenging healthcare facility policies that mandate vaccination. Although healthcare facilities generally have the authority to establish such policies, the adoption, implementation, and enforcement of these policies can be subject to various areas of law.\textsuperscript{26} Successful challenges to these policies have arisen under various legal theories.\textsuperscript{27}

For example, in Virginie Mason Hospital v. Washington State Nurses Association, a labor union representing nurses in the state of Washington challenged a hospital’s mandatory vaccination policy. The union argued that adoption of the policy should not have been unilateral but instead bargained for, as required by the collective bargaining agreement between the parties.\textsuperscript{28} An arbitrator found that the hospital could not unilaterally implement a mandatory vaccination policy, a decision that was later affirmed in federal court.\textsuperscript{29} As demonstrated by this and other cases, healthcare facilities interested in mandatory vaccination policies might consider the impact of labor laws, as well as other areas of law including employment law, when adopting mandatory healthcare worker vaccination policies.

\textbf{Expanding Vaccine Access}
\textit{Pharmacist Vaccination Authority}
Vaccination mandates for students and healthcare workers are not the only vaccination policy levers states have used. Many patients understand the benefits of immunization but have insufficient access to
Vaccination services. Consequently, implementing laws that expand scopes of practice is another approach used by states to potentially expand vaccine access. Laws that authorize pharmacists to administer vaccines are one example of this approach that have achieved widespread adoption despite resistance from some physician groups.

Pharmacists in all states administer vaccines, but state laws vary considerably on the scope of vaccination authority. A 2016 assessment of pharmacist vaccination authority found more than 200 distinct legal variables in state laws across 51 jurisdictions. This assessment revealed three types of legal provisions that can significantly impact pharmacists’ roles in vaccinations.

First, patient age restrictions can affect access to vaccination in several ways. Laws with lower patient age restrictions effectively increase the pool of patients that pharmacists can vaccinate. Additionally, certain vaccines are only effective if they are administered before exposure to the pathogen. For example, some states permit pharmacists to administer the human papillomavirus (HPV) vaccine to adult patients; however, many adolescents become sexually active and are exposed to the virus before they turn 18. In those situations, high age restrictions might limit access to effective vaccination.

Next, state vaccine restrictions also impact vaccination access. Pharmacists cannot provide vaccinations if the state law does not authorize their administration. Yet, the introduction of recommendations for newly licensed vaccines and changes in recommendations for existing vaccines (e.g., expanded populations, changes in dosing) can make it difficult for state policy makers to keep pace. Some states have employed a way to dynamically adapt their laws to new evidence without changing the letter of the law: authorizing pharmacists to administer vaccines recommended by the Advisory Committee on Immunization Practices (ACIP). Pharmacists in these states are permitted to follow the most recent ACIP guidance without having to wait for statutory or regulatory amendments.

Third-party authorization requirements are another factor that could significantly affect pharmacists’ ability to improve vaccine access. In many states, pharmacists must have an authorization from a third party before administering a vaccine. These third-party authorization requirements can be either patient-specific (i.e., a prescription covering a named patient), or general (i.e., a standing order). Other laws go further and authorize pharmacists to administer vaccines independently without a third-party authorization. Laws granting pharmacists prescriptive vaccination authority could improve access by removing administrative hurdles for certain safe vaccinations.

Conclusion
Recent outbreaks of vaccine-preventable diseases continue to keep state vaccine policy in the forefront of public health policy debates. States have implemented various vaccine policies in order to prevent these outbreaks. For example, in 2015, two states passed legislation making it more difficult for children to be exempt from mandatory childhood vaccines. Similarly, while some healthcare facilities have implemented mandatory vaccination policies for healthcare workers, some states have opted to establish statutory or regulatory mandates for healthcare worker vaccination assessment, as well as offer and ensure requirements in an effort to increase vaccination rates for healthcare workers. Apart from vaccination mandates, states are expanding access to vaccination services by increasing the scope of practice for healthcare professionals, such as pharmacists. State laws show sustained expansion for pharmacist vaccination authority. Many states have expanded pharmacists’ prescriptive authority, the patient age-groups pharmacists may vaccinate,
and the vaccines pharmacists may administer.\textsuperscript{43} Vaccination's recognition as one of the Ten Great Public Health Achievements in the 20th Century is in part due to the state laws and policies that promote vaccination coverage and access. States have continued to deploy law and policy tools to support vaccination in the settings of school vaccination, healthcare worker vaccination, and pharmacist vaccination authority.

Disclaimer
The findings and conclusions in this article are those of the authors and do not necessarily represent the official positions of the Centers for Disease Control and Prevention.

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Action, Not Rhetoric, Needed to Reverse the Opioid Overdose Epidemic

Corey Davis, Traci Green, and Leo Beletsky

The Rise of the Epidemic

In 2011, the Office of National Drug Control Policy (ONDCP) released a watershed report, *Epidemic: Responding to America’s Prescription Drug Abuse Crisis*. The report broke with decades of tradition to shift the agency’s rhetorical focus toward a more evidence-based, proactive approach to what had previously been termed the “War on Drugs,” and announced the agency’s goal of decreasing unintentional opioid overdose deaths in the United States by 15% within five years.1 Unfortunately, that has not come to pass: the number of Americans lost to overdose increased from 41,340 in 2011, when ONDCP set its goal, to 47,055 in 2014.2 More Americans now die each year of drug overdose than died of HIV/AIDS during the peak of that terrible epidemic.3

The root causes of the opioid crisis include not only over-prescribing of opioid pain relievers (OPR), but also an interplay of economic stress, social isolation, and systemic pressures on the health care system to address patients’ complex physical and mental health needs combined with a lack of the appropriate tools and incentives to do so.4 Many policy solutions, however, focus solely on overprescribing of OPRs and fail to address any of the underlying causes of the epidemic.5 As a result, while the number of OPR-related deaths in the U.S. appears to have plateaued, fatal heroin overdoses have more than tripled since 2010.6 Concurrently, a surge in the availability of illicitly manufactured synthetic opioids appears to be driving a significant increase in overdose deaths.7

As evidenced by the ONDCP’s report, the rhetoric associated with the opioid epidemic is different in many ways than the response to previous drug-related crises, which overwhelmingly relied on blaming, shaming, and punishing those most impacted.8 However, many of these changes have remained in the rhetorical realm. Despite widespread acknowledgement that opioid overdose is an epidemic, it has largely failed to produce an epidemic-appropriate public health response.9 This must change. Dramatically reducing the number of lives unnecessarily lost to overdose requires an evidence-based, equity-focused, well-funded, and coordinated response. We present in this brief article suggestions for improving and refo-cusing the response to this simmering public health crisis.

Improving Clinical Decision Making

Most of the increase in opioid prescribing is driven by well-intentioned efforts to reduce the burden of untreated pain. This is a worthy goal: chronic pain affects millions of Americans and often occurs in tandem with other medical and mental health conditions including depression and anxiety.10 Opioid therapy is indispensable for treatment of severe cancer and HIV/AIDS pain, and is invaluable for palliative care.11 However, OPR therapy for other conditions is often no more effective than other interventions, and often carries a higher risk of harm.12 Indeed, the Centers for Disease Control and Prevention now advises against the routine or first-line use of opioid therapy for chronic pain

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Despite widespread acknowledgement that opioid overdose is an epidemic, it has largely failed to produce an epidemic-appropriate public health response. This must change. Dramatically reducing the number of lives unnecessarily lost to overdose requires an evidence-based, equity-focused, well-funded, and coordinated response.

on racial and ethnic minorities. Unfortunately, most physicians receive little training in evidence-based pain management, and only a handful of states require them to remain abreast of the latest evidence.

To reduce this knowledge gap, state licensing boards should require that all physicians receive training or demonstrate efficacy in evidence-based opioid prescribing, as well as recognizing and appropriately responding to opioid use disorder (OUD). This training should be funded by neutral entities, not pharmaceutical companies. Additionally, states should strongly consider imposing additional oversight on the “self-regulating” medical profession, which in many cases has been slow to respond to the epidemic. Insurers can also help reduce inappropriate prescribing by discouraging the use of methadone for treatment of pain (an outsized driver of OPR overdose), covering non-opioid therapies such as physical therapy to the same extent as opioid therapy, and disincentivizing OPR therapy in situations where best available evidence suggests that those medications are inappropriate.

**Improving Access to Evidence-Based Treatment**

Although treatment with methadone and buprenorphine, referred to as medication assisted treatment (MAT), dramatically improves outcomes for many people with opioid addiction and the opioid antagonist naloxone decreases the risk of overdose death, access to these proven treatments remains grossly inadequate. Only approximately 11% of Americans who needed drug or alcohol treatment in 2013 were able to access it, and availability of naloxone continues to be hampered by cost, legal concerns, and other barriers.

To reduce this lack of access, insurers should remove onerous prior authorization requirements for MAT and be required to cover naloxone, including where the medication is intended to be used on a person other than the insured. Compliance with the Mental Health Parity and Addiction Equity Act, which requires that drug treatment be provided on equal terms to medical and surgical care, should be strictly enforced.

At both federal and state levels, arcane laws and regulations make it considerably more difficult for practitioners to prescribe medications to treat OUD than the medications known to cause it. This absurd situation has no basis in evidence and should be dismantled. At the same time, a wide variety of non-evidence-based “treatment” providers have flourished. These providers, many of which likely increase risk of negative outcomes including fatal overdose, should be tightly regulated. A dramatic increase in funding for the development of non-opioid treatment (and potentially non-addictive opioid treatment) for both chronic and acute pain is desperately needed.

**Investing in Comprehensive Public Health Approaches**

Given the extensive investments in infrastructure across the U.S. in interventions like prescription drug monitoring programs (PDMPs), it is important to ensure that these resources explicitly embrace public health goals and applications. Rhode Island, where a Governor’s Task Force on Opioid Addiction and Overdose adopted a four-point plan aiming to reduce overdose deaths by one-third in three years, has emerged as a leader in this area. The Rhode Island Plan is comprehensive in approach but strategic in execution, and uses PDMP data for tracking Plan progress. The Prevention initiative tackles co-use of benzodiazepines and opioids by creating provider guidelines on this specific risk. Its Treatment initiative rolls out MAT in prisons and jails, in the community, and in hospitals. Rescue efforts expand naloxone as the standard of care, by providing sustainable community-based naloxone sources and naloxone at the pharmacy. Recovery expands recovery centers and peer recovery
support capacity, especially in the emergency department, post overdose. While it is too early to tell if these efforts will have the intended effect, they exemplify an integrated, coordinated, health-focused agenda to addressing overdose.

Re-focusing Law Enforcement Response

Although governmental agencies have largely adopted public health rhetoric to describe substance use disorder (SUD), the public officials most likely to interact with people with the disease of addiction are not physicians or public health workers but law enforcement and correctional officers. Of ONDCP’s $25 billion annual budget, less than half is allocated to prevention and treatment; the majority remains slated for interdiction and enforcement.21 Some federal and state prosecutors have responded to the epidemic by charging individuals who deliver drugs used in fatal overdoses with homicide, and some jurisdictions have increased penalties for drug-related crimes. Aside from their futility, these types of punitive laws and aggressive law enforcement actions have numerous unintended health consequences, including fueling the spread of HIV and discouraging help-seeking during overdose events.22

On the other hand, there have been a number of innovative police initiatives across the U.S. that mark a departure from the strictly punitive approach towards one that confronts the opioid crisis as primarily a public health issue. For example, more than 2000 law enforcement agencies nationwide are now trained and equipped to reverse opioid overdose using naloxone, and more than half a dozen jurisdictions operate law enforcement assisted diversion (LEAD) programs that train, permit, and encourage officers to refer people who use illicit drugs to a case manager for referrals to housing, health, and other programs in lieu of arrest.

Although SUD diagnosis and treatment in correctional settings remain scandalously inadequate, initiatives in over 150 jurisdictions permit people in need of addiction treatment to present to a police station and be assisted in navigating to an SUD treatment program. While this is a positive step, it also represents a misalignment of scarce public resources, as the police officers being asked to provide evidence-based, non-judgmental assistance to people who use drugs are often neither trained nor equipped to do so.

Conclusion

The country confronts a challenge equal to that posed by HIV in the 1980s. Despite good intentions, a change in tone and some positive movement, Americans with the disease of addiction are still often stigmatized, criminalized, and denied access to evidence-based care. Structural change to address both the causes and effects of the epidemic is urgently needed. In the case of HIV/AIDS, failure to deploy non-judgmental, evidence-based interventions was directly responsible for the preventable deaths of hundreds of thousands of Americans. Improvement, when it came, was championed not by officials but by activists such as ACT UP.23 We are now faced with the choice of whether to learn from that mistake — or repeat it.

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Public Health and Politics: Using the Tax Code to Expand Advocacy

Eric Gorovitz

Introduction
Protecting the public's health has always been an inherently political endeavor. From its roots in preventing the spread of infectious disease to its modern, vastly expanded arena encompassing the promotion of nutrition and exercise, the health impact of paid sick leave, and preventing obesity, gun violence, and bioterrorism, public health has relied on the machinery of public policy to define and deploy effective interventions.

Public health today stands against not only natural phenomena that threaten our collective well-being, but also risks introduced and disseminated by private actors deeply invested in contesting and quashing prevention strategies that would protect the public's health at the expense of corporate interests. Those interests (corn and tobacco farmers, soft drink manufacturers, prison contractors, minimum-wage employers, drug and medical device manufacturers, and many more) use all of the tools and assets at their disposal to fend off strategies that public health data demonstrates would be good for us, but, in theory, bad for their profits.

The field of public health, on the other hand, is conspicuously and persistently absent from sustained, sophisticated engagement in political processes, particularly elections, that determine policy outcomes, largely conceding the policy arena to corporate interests.

This imbalance results, at least in part, from a widespread lack of confidence among public health advocates working in nonprofit organizations, about how, and how much, they can participate in policy development, and from institutionalized reluctance — of advocates, academics, funders, and their organizational leadership — to commit available resources to achieving the degree of political influence required to overcome the clout of corporate producers of harm.

Much of this hesitation reflects the misperception that the provisions of the Internal Revenue Code (the “Code”) that grant tax-exempt status to many public health organizations are full of obstacles and landmines that make it difficult and dangerous to work on public policy.

In reality, the Code provides a roadmap of opportunities for advocacy. Advocates and funders who know how to read and use that map can engage aggressively in public policy advocacy without violating the Code.

This article highlights some of the most valuable opportunities provided by the Code, and how to use them.

Federal Tax Rules Governing Advocacy
The Code authorizes exemption from federal income tax for many different types of organizations, with varying rules governing qualification for and retention of exempt status. Because it is a form of government subsidy, exemption is accompanied by restrictions on certain activities, particularly with respect to advocacy.

The different exempt statuses can be divided into three categories, with different implications for policy advocacy. By combining structures and understanding the rules applicable to each, advocates can expand the advocacy tools at their disposal.

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1. Charities Exempt under Section 501(c)(3)
Charities get the most favorable tax treatment but are also the most constrained.

TAX TREATMENT
The primary tax benefit available to charities is that in addition to the charity's income being exempt from tax, an individual donor to the charity can generally deduct the amount of her contribution from her own taxable income. This extra subsidy makes it easier to raise money.

In exchange for this significant benefit, however, a charity's advocacy activities are constrained in two ways.

LIMITED LOBBYING
For federal tax purposes, the term “lobbying” refers specifically to advocacy that seeks to influence the outcome of legislation. Under Section 501(c)(3), “no substantial part” of an organization's overall activities may constitute lobbying. In other words, a charity can lobby; the only question is how much.

The best answer is provided in Section 501(h), which provides an optional and highly protective mechanism for measuring a charity’s lobbying. Section 501(h) sets forth specific, and surprisingly generous, rules for determining both the charity’s lobbying limit and exactly what activities count against that limit. Section 501(h) contemplates two types of lobbying: direct, which includes efforts to influence lawmakers, and grassroots, which includes efforts to enlist the public on influencing legislators. Grassroots lobbying is more stringently constrained. (The same rules apply when determining whether restricted grant funds from a foundation or government agency can be used for an activity.) Viewed another way, Section 501(h) explains how to construct a communication that falls outside of the definition of lobbying (because, for example, it fits within one of several statutory exceptions, or it does not refer to “specific legislation”), and that, therefore, are not subject to the limit.

NO CANDIDATE CAMPAIGN INTERVENTION
A charity cannot “intervene” in any candidate campaign for election to public office. This prohibition is absolute; unlike the rule on lobbying, there is no permissible amount of “intervention.”

Again, however, the provision creates opportunity. Charities can engage in policy- and election-related activities during elections, so long as those activities remain non-partisan. While not nearly as precisely drawn as the lobbying definition under Section 501(h) (the IRS applies a vague and complex “facts and circumstances” test), candidate campaign intervention encompasses only election-related activity that reflects a preference for one candidate or party over another.

2. Other Section 501(c) Organizations
Non-charitable organizations that qualify for exemption under other subparagraphs of Section 501(c) (e.g., Section 501(c)(4) social welfare organizations; Section 501(c)(5) labor unions; and Section 501(c)(6) trade associations and business leagues) cannot offer donors a charitable deduction for their contributions. However, because they receive a smaller government subsidy, their participation in advocacy is less restricted.

These non-charities can conduct unlimited lobbying, and they can engage to a limited degree in candidate campaign intervention.

3. Political Organizations Exempt under Section 527
Section 527 exempts organizations, including political parties and candidate campaign committees, whose primary purpose is to influence candidate elections.

A Section 527 organization can be independent, or it can be a bank account, called a "separate segregated fund" ("SSF"), belonging to Section 501(c) organization. The IRS treats such an account as a separate entity for federal tax purposes (though it is part of its parent Section 501(c) organization for other purposes). Thus, if a Section 501(c) organization has an SSF, and uses the SSF solely to raise and spend money to influence candidate elections, then, for tax purposes, those expenditures will be attributed to the SSF, not the 501(c).

4. Tandem Structures
The IRS respects the corporate form of separate legal entities, so long as they operate as distinct entities. This principle allows the creation of hybrid structures that maximize both tax advantages and advocacy capabilities.

For example, a Section 501(c)(3) charity could form and control a Section 501(c)(4) affiliate. The affiliate, in turn, could establish a Section 527 SSF. This structure would allow the affiliated enterprise to raise deductible contributions into the charity while retaining the ability to engage (with separate funds) in more lobbying than the charity could do on its own, and to influence candidate elections directly through contributions or independent expenditures.

There are many variations of affiliated structures, depending on which entity is dominant, available funding sources, and the desired mix of activities.
The Tools of Public Policy
Every public policy outcome reflects the extent and effectiveness of participation in the policy development process by individuals and institutions interested in that policy. When a proposed policy faces opposition, the outcome often depends largely on the balance of power among competing interests. The side that exerts, at the right time, the most influence on the relevant decision-makers, whether through persuasion, coercion, or favor, has the best chance of getting the outcome it seeks.

Exerting the necessary influence requires persistent and knowledgeable engagement with the varied machinery of public policy — specifically, legislation, regulation, and the selection of decision-makers through appointment (which sometimes requires legislative confirmation) or election.

a. Legislation
Legislative policy change may be the strategy most familiar, at least superficially, to public health advocates. Federal, state, and local legislation, including government budgets, directly affects the substance and availability of public health interventions and can have lasting impact on the public’s awareness of and response to risk.

The key to legislative victory lies in persistent communication with legislators and staff when the details of a proposal, and the alignment of votes, are being worked out behind the scenes, long before a legislative hearing or floor vote. Those visible moments, though easy to explain and organize around, are not where the primary legislative work gets done; rather, they typically mark the close of lengthy negotiations that have already ended by the time the hearing is held or the vote is called.

Ballot measures are a special case of legislative policy-making. When a measure is on the ballot, the public stands in the shoes of a legislature, and the rules for direct lobbying apply. While ballot measures can be clumsy and expensive, they may also be the best opportunity for accomplishing elusive policy change.

b. Regulation
Regulation is an advocacy freebie that encompasses activities of the Executive Branch implementing and enforcing legislative enactments. Federal tax law imposes no limitations on a charity’s ability to influence regulation (although the agreements accompanying government grants may restrict the use of public funds for such purposes).

In a contentious policy debate, a legislative victory can quickly become Pyrrhic if one side is absent from the regulatory process that follows. Companies engage as fully with regulatory agencies as they do with legislatures, and will look for every opportunity to weaken legislation that they believe harms their interests by influencing the details that legislatures often leave to regulators to work out.

c. Selection of Decision-Makers
Sometimes, the biggest obstacle to accomplishing policy change is the decision-maker. Influencing the selection process, whether election or appointment, can dramatically change the policy landscape.

ELECTIONS
Candidates and elected officials respond to influence from people they think can affect the outcome of elections. They may also respond on principle, based on their own world views, experiences, or personal commitment to causes and ideas.

While charities cannot take sides in candidate elections, they can conduct nonpartisan activities (including candidate forums or questionnaires, voter registration, educating candidates about issues, etc.) that inform and engage the public in the context of an election.

Non-charity exempt organizations may, within limits, influence candidate elections directly, through contributions of money or services directly to candidate campaigns, or by conducting independent activities that support or oppose candidates.

APPOINTMENTS
Some decision-makers with influence over public health policy serve by appointment, usually by the chief executive.

Confirmable appointments. Certain appointments, particularly to high-level positions, require confirmation by a legislative body. For example, the President’s nominations for Cabinet secretaries must be confirmed by the United States Senate.

Nomination is an administrative act by the Executive Branch, but the confirmation vote by a legislature constitutes legislation. Accordingly, efforts to influence a legislatively confirmable nomination constitute lobbying for federal tax purposes.

Appointments not requiring confirmation. An appointment that does not require confirmation is purely administrative, and efforts to influence it are not lobbying. Such appointments include many positions in agencies relevant to public health, such as key offices in state or local health agencies, insurance regulatory bodies, etc.

Charities can influence such appointments without limit.
The Code provides a roadmap of opportunities for advocacy. Advocates and funders who know how to read and use that map can engage aggressively in public policy advocacy without violating the Code.

a. Use the Section 501(h) Lobbying Limit
Public health charities should consider the available amount of lobbying under Section 501(h) not as a limit, but as a target. They should embrace their power to lobby, and seek to use as much of their lobbying limit as they can fund, every year. If unrestricted funds are scarce, then finding more should become a development priority.

b. Private Foundations Devoted to Public Health Should Free Up Grant Funds for Lobbying Whenever Possible
Private foundations can use two safe harbors, one for general support grants and one for certain, carefully-constructed grants supporting specific projects, to make grants that support a charity that lobbies, without restricting the use of grant funds for lobbying. The more educated foundations are about these opportunities and how to use them, the more funds public health advocates will have available to influence public policy. Charities can educate their funders about these tools and encourage foundations to use them more frequently.

c. Invest Proactively in Advocacy Relationships
Public health organizations that want or intend to influence public policy should not wait for hearings or votes, but should proactively engage with the decision-makers, staff, allies, and other influencers, building strong relationships that can be drawn upon when a policy opportunity arises. Relationships with local officials can be particularly fruitful, especially as they advance to higher levels of government.

d. Build the Infrastructure to Influence Elections
The final weapon missing unnecessarily from public health’s arsenal is the ability to hold elected officials accountable when they fail to address the public health needs of their constituents. Ultimately, this is the single most effective tool, because demonstrating the ability to influence how those constituents will vote in the next election is the most persuasive argument one can make to any elected official.

Public health organizations and advocates should build the infrastructure that will allow active engagement in elections. Public charities should establish social welfare affiliates (exempt under Section 501(c)(4)) that have broader public policy capabilities under the tax code, including the ability to take sides in candidate elections. Where appropriate, these affiliates should create Section 527 political organizations specifically to raise and spend money on candidate elections, to impose accountability on candidates who prioritize corporate interests over public health.

Conclusion
Public health advocates should embrace (with help from knowledgeable counsel when appropriate) the full array of tools available to them under the Code to influence public policy. Doing so will vastly increase their ability to engage in all of the advocacy mechanisms that harm-causing corporations use to defeat sound public health policy.

References
1. The Code does not define “advocacy”. As a general principle, subject to the limitations discussed in the text, every charity can express, promote, and educate the public about the charity’s perspective on the policies, practices, and behaviors of governments, public officials, private institutions, or individuals.
2. All statutory references are to the Code.
3. This limit applies to activity at any level of government, foreign or domestic.
4. Small organizations (with expenditure budgets of $500,000 or less) can spend up to 20% on lobbying. As the organization grows, the percentage limit shrinks.
5. Currently, for example, Section 501(c)(4) organizations must ensure that their candidate campaign intervention activities constitute less than half of their overall activities. The IRS is considering whether to modify this limit.
6. A charity cannot have a separate segregated fund, because such a fund can only conduct activities that a charity is prohibited from conducting.
7. Ballot measure advocacy, including fundraising, may trigger disclosure obligations under state or local campaign finance rules.
8. Candidate campaign activity may be subject to disclosure obligations under federal, state, or local campaign finance rules.
Homelessness and the Public’s Health: Legal Responses

James G. Hodge, Jr., Barbara DiPietro, and Amy E. Horton-Newell

Introduction
Homelessness remains a prevalent, pervasive public health issue in the United States despite years of legal and policy interventions offering short- and long-term solutions. In 2002, the U.S. Interagency Council on Homelessness (USICH) began working with states and localities to create ten-year plans to end homelessness. Over the last 6 years alone, USICH reports a 33% reduction of veteran homelessness, 21% reduction of individuals experiencing chronic homelessness, and a 53% reduction in unsheltered homelessness among families. These achievements are laudable. Still, 564,000 people were homeless on average each night in 2015, according to the U.S. Department of Housing and Urban Development (HUD), and 1.5 million accessed homeless services in 2014. Progress in reducing homelessness and its detrimental impacts on public health is promising, but insufficient. Homeless populations have become targets nationally for interventions that can be discriminatory or degrading, raising complicated issues at the intersection of protecting community health and respecting individual rights. This commentary initially frames public health issues for homeless individuals and the community and then assesses related law, policy, and advocacy options. Major topics include access to basic health services through state-based Medicaid programs, deficits in housing availability, criminalization of homelessness, and use of emergency declarations to address specific issues related to homelessness in select states and localities.

Homelessness and the Public’s Health
Poor health is simultaneously a cause and consequence of homelessness. The experience of homelessness leads to new health conditions, exacerbates existing ones, and complicates treatment options. Consequently, homeless people have high rates of chronic disease and acute illnesses, often associated with, or exacerbated by, their living situations. A considerable amount of published research on the health status and conditions of homeless persons also shows that they have a broad range of mental health and substance use needs. Greater exposure to violence, malnutrition, extreme weather, and criminal charges are additional risk factors for homeless persons, contributing to poor health outcomes and premature deaths. Lack of health insurance and access to basic health services lead homeless populations to frequent emergency rooms and hospitals more often than the general public. They also have high rates of hospital inpatient readmissions. Pursuant to the Affordable Care Act (ACA), expansions of Medicaid coverage in 31 states to very low income people (under 138% of poverty, or about $16,000 a year for an individual) are key to improving health coverage for homeless populations. States that opted to expand their Medicaid programs created greater access to treatment options, enabled community-based safety net providers to deliver services, and helped patients transition to, and sustain, housing placements (although federal matching funds cannot be used directly for rental assistance).
Fortunately, nearly 20 states (including big population states like Florida and Texas) have refused to expand their Medicaid programs to date, leaving approximately 3 million low-income people, including tens of thousands of homeless, medically uninsured. Millions more may lose access to health insurance if key portions of the ACA are repealed by President Trump’s administration.

Even among states that expanded their Medicaid coverage, provider reimbursements remain low, which diminishes their participation and communities’ capacity to meet patient needs (particularly concerning specialty care and behavioral health). Additionally, services critical to homeless persons, including adult dental care, case management, and housing support, are optional in state-based Medicaid plans.

Greater efforts to improve access to comprehensive health care, housing, and support services for homeless populations are still needed. . . . Additionally, communities need to increase mental health and substance abuse treatment capacity, change laws that criminalize mental illness and addiction, and prioritize permanent and supportive housing over emergency shelters.

Greater efforts to improve access to comprehensive health care, housing, and support services for homeless populations are still needed. All states should consider expanding their Medicaid programs. States choosing expansion should include optional benefits, ensure adequate provider networks, and seek higher reimbursements. Additionally, communities need to increase mental health and substance abuse treatment capacity, change laws that criminalize mental illness and addiction, and prioritize permanent and supportive housing over emergency shelters. According to one survey conducted by the U.S. Conference of Mayors, between 2014–2015, emergency shelters in 76% of surveyed cities turned away homeless families with children; 61% turned away unaccompanied individuals.” Improved access to lower-cost housing may flow from inclusionary zoning laws for affordable, low-income housing, and rejection of “not-in-my-backyard” (NIMBY) efforts to block such housing units or corollary health care facilities. Greater access to stable, affordable housing reduces homelessness among individuals and families, and improves community health.

Alternatives to Criminalization of Homelessness
The lack of affordable housing and available shelter space subjugates many homeless persons to survive on the streets, often prompting responses from the criminal justice system. Some communities target homeless persons by making it a crime to perform life-sustaining activities (e.g., eating, sitting, sleeping, camping, and begging) in public spaces. Criminalization efforts also include selective enforcement of community neutral laws, such as loitering or open container prohibitions, against homeless persons. Prompted by concerns of businesses and neighbors, law enforcement officers may also conduct sweeps to drive homeless persons from specific areas, including encampments. These enforcement measures frequently result in the destruction of homeless persons’ personal property, including private documents and medications, but do not typically result in housing placements of homeless individuals.

In 2007, the American Bar Association adopted a policy against state and local efforts to criminalize homelessness or punish “Good Samaritans” for assisting homeless persons. These types of laws make it difficult for homeless persons to stay in urban areas and drive them away from crucial public and private sector services and outreach. Homeless persons who are arrested for non-violent offenses develop criminal records, accumulate fines, and may be temporarily incarcerated, all of which makes it more difficult to obtain employment or secure housing. Incarcerating homeless persons costs communities up to two to three times more than providing long-term supportive housing.”

Criminalizing homelessness also raises troubling constitutional questions. In 2006, the Ninth Circuit invalidated a Los Angeles ordinance that made it a crime to sit, sleep, or lie down in city public spaces on the basis that the ordinance violated homeless persons’ Eighth Amendment rights.” Courts have similarly found constitutional problems with anti-panhandling laws. In 1993, the Second Circuit court
of appeals ruled that a New York law banning begging violated homeless people’s First Amendment rights to free speech. The court held that to the extent that begging constituted expressive conduct, the government lacked a compelling interest in prohibiting those who beg peacefully from communicating with fellow citizens. New York’s statutory attempt to ban homeless persons from begging was not narrowly tailored, not content-neutral, and left open no alternative channels of communication. Recent, expansive views of free speech interests noted by the U.S. Supreme Court in Reed v. Town of Gilbert in 2015 led lower courts to strike down state and local laws banning panhandling. There are more constructive law and policy approaches to address homelessness rather than criminalizing their conduct or expressions. They include:

1. An array of cost-effective local government programs that partner community health and justice systems to address high rates of serious mental illness among hospitalized and incarcerated populations;
2. Collaborations among homeless persons, pertinent city/county agencies, health care and behavioral health systems and providers, and law enforcement to implement best practices focused on outreach, housing, and community-based treatment;
3. Diversion of individuals from criminal justice systems to appropriate community-based housing, treatment and services through “homeless outreach” or “crisis intervention” teams including police and social workers;
4. Development of specialty courts or dockets (e.g., Community Justice Courts, Behavioral Health Courts, Veterans Treatment Courts) centered on homeless assistance instead of punishment; and
5. Business community support for homelessness assistance, such as safe day centers for persons to access when overnight or emergency shelters are typically closed. These centers provide homeless persons critical services such as laundry, showers, and meals, as well as connections with health care providers and housing officials.

**Emergency Declarations Addressing Homelessness**

Even as communities consider policies to provide improved access to health care and housing for homeless persons or decriminalize their behaviors, escalating rates of homelessness have led to increased use of emergency declarations to address public health and other impacts. Unprecedented rates of homelessness, dangerous weather conditions, shortages of affordable housing, and protection of minors undergird emergency declarations aimed at ameliorating homelessness. These declarations can be beneficial in assisting the homeless, but also raise significant issues of fairness and justice in specific states and localities. Hawaii has the highest rate of homelessness per capita in the U.S. In 2015, nearly 8,000 individuals across the State’s islands experienced some form of homelessness on any given night. In response, Hawaii’s Governor David Ige issued a declaration of emergency on October 26, 2015 (which has since been renewed four times). The declaration suspends various laws to hasten construction of temporary shelters for homeless families, extends homeless service contracts, and shifts $1.3 million from general funds to mitigate Hawaii’s homelessness crisis. Conversely, the City of Honolulu has passed various laws aimed at criminalizing homelessness, including controversial bans on panhandling and sweeps on tent camps.

Even though California has about 12% of the total U.S. population, 21% of all homeless persons nationally live in the state. Unlike in Hawaii, California’s Governor Jerry Brown has not declared a state-wide emergency, although some localities have urged him to do so. However, the cities of San Diego, Los Angeles, and Oakland have each declared local states of emergency or “shelter crisis,” invoked in response to spikes in the number of homeless persons (e.g., Oakland’s declaration cited 2,190 homeless persons in its jurisdiction). Although most of these emergency declarations, designed to provide rapid access to shelters, are fairly short in their duration, the Los Angeles City Council unanimously voted to extend its shelter crisis indefinitely.

In November, 2015, San Diego’s San Ysidro School District relied on California’s Emergency Services Act and San Diego’s local state of emergency (in response to El Nino) to issue a local declaration of emergency. This resolution authorized the school district to use its property to provide temporary relief shelters for over 1,500 homeless children (roughly 30% of the student population) and their families. Around this same time, King County (Washington) declared a homelessness emergency to increase mental health services for the county’s youth. The city council of Portland (Oregon) proclaimed a one-year housing emergency, waiving various zoning codes to increase temporary housing and emergency shelters and launch a day-storage pilot program to provide portable units with sanitation facilities and trash disposal.

New York’s homeless, concentrated in New York City, comprise nearly 16% of the nation’s homeless population. On January 3, 2016, Governor Andrew Cuomo issued an “Emergency Declaration Regarding
Homelessness During Inclement Winter Weather. Based in part on a provision of New York State’s Mental Hygiene Law, the declaration allowed for the involuntary transfer of homeless individuals to sheltered facilities. Police officers were authorized to “take into custody any person who appears to be mentally ill and is conducting himself in a manner which is likely to result in serious harm to [one’s self] or other[s].”

The order raised mixed responses from New York municipalities and mental health professionals who questioned the legality of such transfers without sufficient medical justification. To the extent the Governor’s emergency declaration authorized an effective “round-up” of individuals based on specious grounds, it runs counter to constitutional principles of liberty and equal protection. Of note, New York City Mayor Bill De Blasio issued a Winter Weather Emergency Declaration the same month, activating the city’s Code Blue protocols. The protocols mandate that police officers offer unsheltered homeless individuals transportation to emergency shelters.

Conclusion

The public health, health care, and housing challenges homeless persons and families face across U.S. communities are profound and daunting despite decades of remedial efforts. Initial policy and practical approaches fraught with legal complications and outright discrimination are giving way to new and innovative legal approaches. Opportunities to expand health care and housing access, divert affected persons from criminalization, and address homelessness crises head on through emergency declarations provide viable options. Yet each of these legal interventions must be carefully crafted to chart solutions that are politically viable, cost-effective, and constitutionally sound. Working together, public and private sectors can improve the plight of homeless persons in their communities in furtherance of the public’s health and with respect for individual rights.

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Allied healthcare professionals play an integral role in the healthcare system: healthcare teams depend on nurses; comprehensive patient care often cannot be achieved without a pharmacist; dental offices thrive with the work of dental hygienists; and emergency medical technicians play a vital role in emergency care. The contributions of these and other allied healthcare professionals are typically defined by state laws governing the particular practice. These laws may be hurdles or enablers to expanding access to care in a community. We examine scope of practice laws for nurse practitioners (NPs) and allied dental providers to demonstrate how these laws may impact access to care and population health.

Nurse Practitioners
Nurse practitioners (NPs) have rapidly become integral to the healthcare workforce, particularly primary care. In 21 states and the District of Columbia, NPs have “full practice authority,” meaning they can practice to the full extent of their education and training without physician oversight.1 In the remaining 39 states, NPs can practice to their full scope — including prescribing medications and serving as primary care providers — if they have a physician practice, or “collaborative,” agreement.

Multiple independent bodies have synthesized decades of research on NP care and consistently identify NPs as high-quality providers of cost-efficient care that can expand access. Thus, fully leveraging the NP role can advance the Triple Aim: better care, reduced costs, and improved health. Yet while research on the potential of optimizing NP practice abounds, fewer studies explore the practical implications of removing barriers to independent practice and the actual impact on care, cost, and health.

Better Care
The National Governors’ Association conducted a 30-year literature review and concluded that NPs provide primary care equal in quality to physicians; and on several indicators, including patient satisfaction, NPs perform better.2 In 2014, the Federal Trade Commission questioned the value of legislative restraints on NP practice, which have historically protected physicians, and called upon states to narrowly tailor limitations on practice “to address well-founded health and safety concerns.”3 There is no evidence that care provided by NPs in states requiring physician collaboration is better — or worse — than in states that enable NPs to practice independent of such agreements. Administrative burdens that arise from requiring a collaborative practice agreement arguably threaten patient satisfaction and reduce time for care in both physician and NP practices. Evidence from progressive states supports that care quality is not compromised; further research is needed to better understand that dynamic.

Reduced Cost
Since 1981, studies have found that NP care matches the quality of physician care at equal or lower cost.4 Research on the cost of NP care has increasingly focused on the cost savings due to the type of care typically provided by nurse practitioners (e.g., noninvasive treatments, self-managed chronic conditions), beyond

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the historical focus on lower salaries, reimbursements rates, and cost of education.\textsuperscript{5} However, little research exists quantifying the cost of practice barriers. Anecdotal evidence suggests that the cost NP practices pay for collaborative agreements can be prohibitive and varies by market. The administrative burden associated with collaboration also has a cost for which the collaborating NP practice is not compensated. Thus, while the NP care is cost-effective, cost barriers may limit the extent to which NPs can deliver that care. Laws enabling full practice alleviate those burdens and costs for NPs as well as collaborating physicians.

**Improved Health**
With 20 million newly insured, an aging population, and pervasive health disparities, the need for meaningful access to high-quality, cost-effective primary care has never been greater. Improving population health by securing access to care for more individuals has been a driving force in the push to remove barriers to NP care.\textsuperscript{6} One study found a strong association between restrictions on NP practice and the percentage of patients with NP primary care providers; the fewer barriers to access to NPs, the higher the percentage of patients receiving primary care from NPs.\textsuperscript{7} As states continue to modernize their laws, the natural experiment of federalism provides an opportunity to explore variations across states. An even greater research gap stems from full appreciation of the barriers to access beyond state laws requiring physician oversight. For example, a law may require collaborative agreements, but leave the terms of that agreement to providers’ discretion. State law might provide NPs with full practice authority, yet the managed care organizations in the state might not include NPs within their network or contract with NPs as primary care providers. As states increasingly remove legislative barriers to practice, it is imperative that researchers continue to analyze the impact of those policies to fully optimize the care delivered by NPs.

Evidence-based policy on NP practice has evolved over decades. Lessons learned from this experience can be helpful in developing policy on enhanced scope of practice for other allied health professionals, though each area of practice involves different issues of training, education, access, and types of care.

**Allied Dental Providers**
Timely preventive dental care is critical to both oral health and overall health. Lack of access to dental care is particularly acute among the elderly and individuals from low-income and rural communities; people of color disproportionately lack access to dental care.\textsuperscript{8} Many factors contribute to lack of access, including low income, lack of insurance, low health literacy, and a dearth of dentists in some areas.\textsuperscript{9} One approach to increasing access is expanding the scope of practice of allied dental providers, such as dental hygienists, therapists and assistants. Allied dental providers may be more plentiful in and available to rural and underserved communities where dentists may be sparse or unavailable.\textsuperscript{10} States have explored expanded options and researchers are encouraged to evaluate the new provisions and pilot programs to determine whether the goal of increased access is met without diminution in quality of care.

**Telemedicine**
State laws govern the practice of allied dental providers, including defining the scope of practice for each type of provider. These scope provisions generally address the required level of supervision by a dentist, including variations in certain settings, and the type of services allied dental providers may perform.\textsuperscript{11} One approach to enhancing the reach of allied dental providers is to permit the required supervision by a dentist via telemedicine. Alaska now allows telemedicine for supervision in designated remote areas;\textsuperscript{12} California recently expanded a pilot program that broadens the scope of practice for allied dental providers to...

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better enable the use of telemedicine.\textsuperscript{18} Delaware and Arizona allow dentists to practice via telemedicine in certain circumstances,\textsuperscript{16} and given the trend in this direction, we can expect other states to pass such laws. States should be encouraged to make clear in these provisions that telemedicine may be used to satisfy the supervision requirement.

**Practice by Setting**

Another approach is to permit independent practice by allied dental providers in certain settings. Many state laws describe the different practice settings in which allied dental providers may perform dental services; these provisions typically allow for lesser supervision by a dentist but balance that with a slightly modified scope of practice or impose certain qualifications on the providers who may practice in the special settings. Although most patients receive dental care in the traditional setting of a private dentist’s office, many receive care in institutional or public practice settings. This is particularly true for vulnerable populations. Increasing access to care in these settings could allow for care to reach those who otherwise cannot physically or financially gain access.

Public health settings are the most common practice setting in which an allied dental provider may practice independently or with less supervision than in the private setting. What qualifies as a public health setting is determined by state law; states commonly include federally qualified health centers, state or local public health facilities, long-term care institutions, Head Start and WIC centers, and schools. Some programs provide care to homebound individuals. In 2015, Illinois created the “public health dental hygienist” who may practice independently in a variety of public settings.\textsuperscript{15} Maryland recently expanded its law to include long-term care facilities,\textsuperscript{16} and Arizona expanded its law to include long-term care facilities, private schools, and homebound settings.\textsuperscript{17} Modifying the supervision rules in these settings may increase access to care and improve public health as long as patient safety and quality of care are assured.

**Dental Therapists**

Emerging state laws are addressing the access issue by expanding the type of allied dental providers permitted to practice, particularly creating the dental therapist, mid-level professionals who provide basic preventive and restorative oral healthcare. Compared to other allied dental providers, state and tribal laws tend to grant an expansive scope of practice, require less supervision, and may specify permissible practice settings for therapists. The Commission on Dental Accreditation recently approved national accreditation standards for dental therapy education, which may facilitate development of a consistent scope of practice for the field.\textsuperscript{19} The Alaska Native Tribal Health Consortium created the first U.S. dental therapists in 2005. Minnesota law has recognized dental therapists and advanced dental therapists since 2009.\textsuperscript{20} Like some NPs, these dental therapists must enter into a written collaborative management agreement with a dentist and must practice primarily in settings that serve low income, uninsured, and underserved patients or in a dental health professional shortage area. Maine and Vermont recently passed laws creating the dental therapist, who may practice more independently.\textsuperscript{20} With more rigorous education and training requirements than dental hygienists, the dental therapist may safely provide quality care, increasing access particularly to vulnerable populations.

**Conclusion**

While the nurse practitioner example is illuminating for those seeking to increase access to oral health care through expanded scope of practice, research on the effectiveness and impact of the various state law approaches on oral health is nascent. And there are confounding issues, such as the fact that health insurance rarely includes dental care and dental insurance can be costly. Yet innovative policy approaches to expanding access to oral healthcare should be encouraged — then evaluated. Given the high demand for oral healthcare — indeed all healthcare — policymakers should consider options that are rational but may not yet have a full evidence base. Pilot programs can help in that regard.

Public health improves as access to quality healthcare expands. One mechanism to expand access to care is allowing allied healthcare providers to practice at the top of their license. As state and tribal laws take on this issue, we encourage researchers to study the public health and economic impact, informing policymakers and public health officials of the factors that will help meet the Triple Aim: better care, reduced costs, and improved health across the population.

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Promoting Mental Health and Well-Being in Public Health Law and Practice

Jill Krueger, Nathaniel Counts, and Brigid Riley

Mental health, our cognitive and affective tools for processing and making decisions about the world, is one of the most meaningful resources in maximizing our well-being. When we talk about mental health and well-being, too often our conversations move immediately to mental illness. We have neither built a vocabulary to clearly express what “mental well-being” means, nor communicated the findings of scientific research that illuminate the connection between the brain and the body. We have been slow to recognize mental health and well-being as amenable to efforts at disease and injury prevention, health promotion, and population-wide interventions. But, as research finds that mental health is especially influenced by social determinants of health, and related morbidity can be mitigated or entirely prevented, these attitudes are changing.

This article begins with a review of individual stress and its relationship to well-being in cultural context. It then offers examples of laws, policies, and programs to promote mental health and well-being, and examines how collective impact contributes to well-being.

Individual Stress and Its Relationship to Well-Being in Cultural Context

Our bodily systems are in constant communication, and those studying the interactions of mind, body, and behavior are pushing us to recognize the “biological pathways and mechanisms by which thoughts, emotions and life experiences can influence susceptibility or resistance to disease.” As a result of these biological pathways, positive thoughts, emotions, and life experiences — the foundation of mental well-being — can create an “inoculation” effect against disease processes, acting as a wellness reserve from which to draw when experiencing life stress. Conversely, the presence of stressful, negative thoughts, emotions, and life experiences sets up conditions so that life stress may have a negative effect on health, creating fertile ground for disease processes to put down roots.

Experiencing stress can lead to both physical and behavioral responses. The physical response, often described as the fight-or-flight response, includes increased blood pressure and heart rate as well as the release of stress hormones. Continuous stress exposure leads to ongoing strain on the body’s systems. This can eventually affect the body at the genetic level. Although exposure to all types of stress can lead to changes in health and well-being, ongoing strain on the body from routine stress may be the least noticeable, and too often receives inadequate attention.

Behavioral responses may include coping behaviors, such as smoking, drinking, over-eating and over-working, which offer short-term stress relief, but can eventually lead to a course of disease. Both types of stress reactions can lead to diminished mental well-being and set up conditions for chronic diseases to take hold. While stress and its effects are not the only contributors to the disease process, they represent an area of promising intervention.

Two main routes have emerged for addressing negative interactions with stress: managing the stress response and addressing its causes. Improving one’s ability to manage life stress may improve mental well-being. Many stress management methods have demonstrated results, including regular exercise, healthy

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foods, the Mindfulness-Based Stress Reduction program,\(^7\) yoga, sufficient sleep, spending time outdoors, and engagement in the arts. Improving relationship skills and addressing social and economic conditions have been effective in addressing causes of stress.\(^8\)

Unfortunately, the persistent connotation of mental well-being and mental health with mental illness prevents many from seeking support because of the social stigma associated with mental illness.\(^9\) This is especially true in many cultures and communities where using the word “mental,” as in “mental well-being,” may discourage potential engagement before it can start.\(^10\) Also, some cultural groups do not have words for mental well-being, or do not have access to providers familiar with their culture. Research suggests that efforts to promote mental well-being are more likely to succeed when they include culturally and linguistically appropriate frameworks and services.\(^11\)

While direct legal intervention is one approach to improving population-level mental health and well-being, law can also be used to promote alignment between health care, public health, and other sectors toward maximizing mental health and well-being. This type of approach is known as collective impact, or “the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem.”

Recently, the Centers for Medicare & Medicaid Services (CMS) announced that maternal depression screening and family therapy may be covered under a child’s Medicaid policy, as a direct benefit to the child.\(^13\)

Inability to afford diapers can lead to rashes and infections for babies and create a reduced sense of competence in parents.\(^14\) The Community Diaper Program involves a partnership with the private and nonprofit sectors to fill the diaper gap. A pilot in San Francisco uses federal TANF dollars to address diaper need, and several states exempt diapers from sales tax.

**Education**

Changing school conditions may help students affected by trauma to attend regularly and learn effectively.\(^15\) The Every Student Succeeds Act (ESSA), the new federal education law, offers opportunities for state and local education agencies to improve school climate.\(^16\) Importantly, ESSA addresses equity issues with respect to economic disadvantage, race and ethnicity, gender, disability, English proficiency, migrant status, rural status, and homelessness.\(^17\)

Social and emotional learning skills include self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. While frameworks for these “soft skills” vary, and assessment poses a challenge, teaching these skills improves academic performance and increases the likelihood of students choosing positive health behaviors.\(^18\) Similarly, delayed high school start times provide opportunities for healthy sleep, with benefits for academic outcomes as well as mental and physical health.\(^19\)

**Law Enforcement**

Improving relationships between community members and police could increase well-being for both. Emerging law enforcement training programs distinguish mental illness from criminal activity, teach de-escalation skills, and address implicit bias. Research should evaluate the comparative effectiveness of mindfulness, Mental Health First Aid, crisis intervention teams, and community policing.\(^20\)

**Public Health, Health Care Reform, and Promoting Mental Health and Well-being**

While direct legal intervention is one approach to improving population-level mental health and well-being, law can also be used to promote alignment
between health care, public health, and other sectors toward maximizing mental health and well-being. This type of approach is known as collective impact, or “the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem.”

For example, Track 3 of the Accountable Health Communities pilot from the Centers for Medicare and Medicaid Innovation requires health care systems to work with a third-party organization to convene community stakeholders and create a common strategy to meet the community’s health-related needs. This is significant because health care systems tend to be one of the most well-resourced community stakeholders in terms of financing, technology, and infrastructure. There is also important work in health care reform, such as the “continuously learning system” model in which real-time data within a system is used to identify and scale up effective practices. These practices can be used in collective impact models to help the entire community more effectively promote well-being.

Policy influencers can support the success of these new community collaborations and ensure that they focus explicitly on mental health and well-being. First, they can have stakeholders adopt common metrics for understanding problems and measuring success that specifically encompass mental health and well-being. This can be accomplished in part by unifying the many community needs assessments required under laws like the Affordable Care Act and ESSA. For example, the 100 Million Healthier Lives Initiative is developing a community-level well-being metric and provides links to others currently in use, and Vermont’s new all-payer Accountable Care Organization model focuses on minimizing state-wide rates of suicide and substance use. Second, influencers can implement an innovative shared financing model that allows stakeholders to promote greater cross-sector investment and more fairly share the benefits of an intervention, such as a wellness trust in which funds are pooled in order to invest in effective prevention measures. Finally, they can require stakeholders to share data in a way that protects individual privacy, but gives access to enough information to allow community-level decision-making and to foster the success of a collective impact model.

By implementing some of these policies, policy influencers can enable health care, public health, and allied sectors to align so that communities can most efficiently maximize their own well-being.

**Conclusion**

Mental health and well-being are a crucial part of health and public health. By promoting skills to manage stress and by ameliorating social and economic sources of stress, public health laws and programs, in alignment with laws in other sectors, have already begun to promote well-being in powerful new ways.

**References**

4. Id.
5. Id.


I. Introduction
Smoking remains the number one preventable cause of death and disease in the United States, killing more than 480,000 people per year.\textsuperscript{1} Despite steep decreases in current smoking prevalence in both adults and youth, cigarettes have become more lethal over time, causing more death and disease.\textsuperscript{2} Without bold action, 5.6 million of youth today will die prematurely from smoking.\textsuperscript{3}

A significant part of this problem is the continued sale of menthol cigarettes. The Family Smoking Prevention and Tobacco Control Act of 2009 banned all flavored cigarettes except for menthol cigarettes.\textsuperscript{4} Today, menthol cigarettes represent an increasing share of the cigarette market and prevalence rates show that menthol cigarettes loom as an obstacle in ending the tobacco epidemic.

This paper examines the impact of menthol cigarettes on public health and explores the legal authority of states and municipalities to protect the health of their residents by restricting the sale of menthol cigarettes.

II. Menthol in Cigarettes Harms Public Health
The Tobacco Control Act gave the U.S. Food and Drug Administration (FDA) broad authority to regulate tobacco products and established the Public Health Standard to guide this activity.\textsuperscript{5} Under this standard, when considering tobacco regulatory action, FDA must evaluate the evidence in terms of not just the impact on individual health, but also on the population as a whole, including those who do not use tobacco. Specifically, FDA must consider whether a product is more likely to increase or decrease initiation and whether a product is more likely to increase or decrease cessation.

The evidence is clear that menthol poses a threat to public health because menthol cigarettes increase the likelihood that youth and young adults will start smoking.\textsuperscript{6} Menthol also has a disproportionate impact on vulnerable populations including youth, African-Americans, Hispanics, the Lesbian, Gay, Bisexual and Transgender (LGBT) community, Asian-Americans, and women. This has been established by several reviews of the scientific literature by FDA, its Tobacco Products Scientific Advisory Committee (TPSAC), and Truth Initiative’s Schroeder Institute. Some of the key findings from those reviews are below.\textsuperscript{7}

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a. Menthol in Cigarettes Increases Initiation
Menthol covers the harshness of tobacco and makes it easier to inhale. Indeed, we know from industry documents that the tobacco industry has known for decades that menthol cigarettes make a good starter product, that they appeal to African-Americans, and that they have manipulated the level of menthol in the product to attract youth and young adults. Today, menthol cigarettes are still very popular among young people, African Americans, and other minorities. A 2014 study showed that 50% of youth who had ever tried cigarettes, smoked a flavored cigarette the first time they tried smoking, and 59.8% of current youth smokers used menthol cigarettes. Additionally, youth and young adults use menthol cigarettes at higher rates than older adults. Because most tobacco users start before age 18, and nearly all start before the age of 25, the high use of menthol among youth and young adults is concerning.

Moreover, even as non-menthol cigarette use among youth and young adults has decreased, menthol use rates have either remained constant or increased, occupying an increasing portion of the market. One study found that among adolescents and adults over 25, as non-menthol cigarette use decreased, menthol cigarette use remained constant from 2004-2014. Among young adults age 18-25 menthol cigarette use actually increased.

b. Menthol Disproportionately Impacts Vulnerable Populations
Menthol cigarettes not only contribute to initiation, they are used disproportionately by youth and minority groups. In addition to the alarming youth use of menthol, women smoke menthols at higher rates than men, and LGBT smokers smoke menthols at higher rates than the national average. Among those African Americans who smoke, 84.6% use menthols. Other racial and ethnic groups also use menthol at high rates, including 38% of Asian Americans and 46.9% of Hispanics, compared to 28.9% of Caucasians.

This is no accident. Industry has long targeted youth and young adults, as well as racial and ethnic minorities with menthol cigarette marketing and advertising and pricing strategies to make menthol cigarettes not only more appealing but more affordable. Study after study has shown that menthol cigarette advertisements are more prevalent in African-American and Hispanic publications, as well as more prevalent at the point of sale in neighborhoods with more African-American residents. At least one study found that menthol prices are lower in neighborhoods with higher proportions of African-American residents. Earlier this year, Reynolds American acquired Newport — the most popular menthol brand — and increased its targeting of young adults, based on the data showing that preference for menthol cigarettes has been rising among smokers, and smokers under 30 in particular.

In sum, overwhelming evidence indicates that, in the words of the TPSAC report, “Removal of menthol cigarettes from the marketplace would benefit public health in the United States.”

III. Legal Authority for States and Municipalities to Act
Although FDA has the authority to prohibit menthol in tobacco products, the agency has yet to propose such a regulation. It is therefore up to states and communities to act. The most obvious question, then, is whether the Tobacco Control Act preempts a state or local prohibition on the sale of menthol cigarettes. Based on the plain language of the Act, as well as relevant case law, we conclude that it does not.

The Tobacco Control Act contains requirements concerning the distribution, manufacturing, and marketing of tobacco products. The law also grants FDA the authority to regulate tobacco products, including the power to set standards for things like tar and nicotine levels in tobacco products, as appropriate to protect the public health. However, the Act also preserves some state authority over tobacco products.

To address how authority to regulate tobacco products is divided and shared between federal and state governments, the Tobacco Control Act contains a specific section on preemption, which is divided into

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three provisions. First, the preservation clause explicitly preserves state and local authority for certain laws that are stronger than provisions in the Tobacco Control Act. Examples include laws and regulations regarding tobacco sales, use and possession. Second, the preemption provision bars most state and local requirements “relating to tobacco product standards, premarket review, adulteration, misbranding, labeling, registration, good manufacturing standards, or modified risk tobacco products.” Third, the saving clause reiterates that states and local entities can enact laws and regulations regarding the same issues listed in the preservation clause.22

The tobacco industry has argued that a state or local law prohibiting the sale of flavored tobacco products is preempted by the Tobacco Control Act because: (1) such a law constitutes a “tobacco product standard,” authority expressly reserved to FDA; and (2) because FDA is prohibited from banning certain classes of tobacco products, state and local governments are also thus prohibited from doing so through a sales regulation. The plain language of the Act and recent case law indicate these arguments will fail against well-crafted sales restrictions.

1. Tobacco Product Standards

Two recent court decisions upholding local laws restricting the sale of flavored tobacco products dealt with the industry’s argument that a state or local law prohibiting sales of flavored tobacco constitutes a “tobacco product standard” and illustrate how courts have viewed that argument thus far. New York City and Providence each passed an ordinance prohibiting the sale of any flavored non-cigarette tobacco product, with narrow exceptions. The industry sued both cities, and in both cases the ordinances were upheld. In the New York City case, the Second Circuit Court of Appeals found that because the ordinance regulates the sale of a finished product, it was not a tobacco product standard and therefore not preempted.23 In Rhode Island, the First Circuit Court of Appeals held that the ordinance limiting the sale of flavored tobacco products was a sales restriction not a product standard, and was therefore not preempted.24

These decisions support the argument that a state or local law prohibiting the sale of flavored tobacco products is not a “tobacco product standard” preempted by the Tobacco Control Act. Rather, such a law regulates the sale of a particular type of tobacco product rather than manner in which the product is manufactured. While the New York and Providence decisions are not binding outside of their federal circuits, they may serve as persuasive authority to other courts ruling on related issues.

2. Eliminating Certain Tobacco Products

A second argument the industry will likely raise to challenge a menthol sales restriction is that the Tobacco Control Act provision prohibiting FDA from eliminating the sale of classes of products also applies to state and local governments. The Act limits FDA’s power by explicitly prohibiting FDA from “banning all cigarettes, all smokeless tobacco products, all little cigars, all cigars other than little cigars, all pipe tobacco, or all roll-your-own tobacco products.” Furthermore, one of the Tobacco Control Act’s stated purposes is “to continue to permit the sale of tobacco products to adults in conjunction with measures to ensure that they are not sold or accessible to underage purchasers.”25

Of course, prohibiting or restricting the sale of one kind of cigarette — menthol, in this case — is not the same as banning an entire class of products. But in any case, the Act’s provision on this point does not apply to states or cities. In U.S. Smokeless Tobacco, the New York City case discussed above, the court found that the Tobacco Control Act’s prohibition barring an FDA ban against entire categories of tobacco products “nowhere extend[ed] that provision to state and local governments.” The court noted instead that the preservation clause of the Tobacco Control Act “…expressly preserves localities’ traditional power to adopt any ‘measure relating to or prohibiting the sale’ of tobacco products.”26

Based on this ruling and the plain language of the Act, while FDA cannot ban a class of tobacco products, that limitation probably would not prevent a state or local government from prohibiting the sale of menthol cigarettes.

IV. Conclusion

The industry strategy has worked. More than half of youth smokers smoke menthol cigarettes, and minority smokers smoke menthol cigarettes disproportionately. Much of this is due to industry marketing and advertising, as well as industry manipulation of the product. Menthol cigarettes are increasingly buoying smoking rates.

The evidence for banning menthol cigarettes is overwhelming. Ideally, FDA would issue a product standard to eliminate them. However, since FDA has taken no action, states and municipalities can fill the void and move to protect their residents by instituting menthol sales restrictions. Eliminating menthol has the potential to save hundreds of thousands of lives over time — nearly a third of them African American lives.27 We must take bold action now to eliminate menthol and move closer to ending the tobacco epidemic.
References
2. Id., at Chapter 12.
3. Id.
13. See Villanti et al., supra note 11.
15. See Villanti et al., supra note 11.
16. Id.
18. See Henriksen et al., supra note 17.
25. 21 U.S.C.A. § 387g, et seq.
The Prescription Drug Pricing Moment: Using Public Health Analysis to Clarify the Fair Competition Debate on Prescription Drug Pricing and Consumer Welfare

Ann Marie Marciarille

Introduction

The American Public Health Association tells us that “[p]ublic health promotes and protects the health of people and the communities where they live, learn, work and play.” It further distinguishes public health concerns from clinical health concerns by the latter’s focus on the individual’s special circumstances. When it comes to prescription drug cost and access, both the health of the community and the health of the individual may be implicated. Even individual prescription drug access has a collective element, in that we do not typically purchase or acquire prescription pharmaceuticals as individuals until the very last stage of distribution: retail sale. Rather, the journey of a prescription drug from manufacturer to individual consumer occurs in stages, most of them highly intermediated by collective contracting by a pharmacy benefit manager or by the government before the pharmaceutical reaches the level of retail distribution. This pre-retail sale collective phase of pharmaceutical acquisition and distribution has direct and serious implications for pharmaceutical cost and access for all.

In pharmaceutical pricing and distribution we find ourselves at the intersection of collective and individual health concerns in the United States. The recent price spikes in pharmaceuticals present problems of access and affordability that rise to the level of a public health challenge. Because we consume pharmaceutical drugs individually according to our unique health profiles, we experience problems of cost and access individually. Nevertheless, pricing and its attendant access and affordability concerns are at the intersection of two important values that have always been central to public health: community health and individual responsibility.

Antitrust

American antitrust law has its own analytical axis on which to examine the organization of pharmaceutical manufacturing firms and the structure of their industry. This axis is found in the debate over the definition of consumer welfare. Antitrust considers one definition or calculus of consumer welfare that includes savings that do not redound to the pharmaceutical consuming public directly and also considers a second that excludes those savings that do not redound directly to the pharmaceutical consuming public.

Professor Stephen Salop, for example, offers a vision of consumer welfare that resonates with public health analysis. He argues that a “true consumer welfare standard would condemn conduct [that] reduces the welfare of buyers, irrespective of its impact on sellers.” He argues that efficiencies that redound elsewhere should only be found relevant to this calculus if such efficiencies are eventually passed through to consumers.

Antitrust analysis also offers a competing definition of consumer welfare, one that values efficiencies that are not necessarily passed through to the pharmaceutical consuming public but, rather, retained by the pharmaceutical firm for the research and development of new products or returned to its shareholders and investors.

Thus, fair competition law and public health law talk past each other when discussing pharmaceutical pricing and distribution. The former cannot agree on the relevant definition of consumer welfare. The latter does not fully comprehend the highly complex but inherently collective nature of pharmaceutical drug acquisition in the United States.
What might public health analysis contribute to the current roiling debate over pharmaceutical pricing and, in particular, about solutions consistent with American values? This essay proposes to inject public health discourse into this debate to enrich it, focus it, and render it more accessible to those who must live by its outcome. As David Blumenthal and David Squires have pointed out, drug pricing is having its moment, and this attentive moment is long overdue.

Understanding Our Collective Acquisition of Pharmaceutical Drugs

It is a truism of American pharmaceuticals that what you pay is determined by who you are. Such price discrimination is embedded in the American health care landscape of multiple overlapping health care systems, each designed to serve different populations and each designed to cross-subsidize cost and access to pharmaceuticals for some by others.

The history of our systems of pharmaceutical pricing is astonishingly complex. A few lessons may be gleaned from its origins in our multi-layered combining of different health care systems onto each other. Our pharmaceutical pricing regimes can be seen as the fullest flowering of our commitment to three principles: free market rewards for innovation, our commitment to prioritized preferential access to pharmaceutical drugs for certain populations, and our comfort with market-governed exclusion from access to certain pharmaceutical drugs for other populations. Seen in this light, the tradition of the Veterans Administration in — for example — leading the way as the low price leader, by custom and by statute, on domestic pharmaceutical acquisition cost, is the modern version of Abraham Lincoln's motivation in founding the Veteran's Administration in 1865, "...to care for him who shall have borne the battle, and for his widow, and his orphan." By extension, all modern government programs that benefit favored groups with preferential cost and access to prescription drugs — whether it be veterans, or the "deserving poor" in non-Medicaid expansion states, or some lower-income individuals in Medicaid expansion states — have a connection to this history of favored pricing for their group.

While it is fascinating to consider the rationale for favored-group pricing for pharmaceuticals, it is as important to consider who is not in that category. In the modern era, it is most particularly Medicare beneficiaries. The "why not" here may be the most significant story to tell.

Direct price negotiation for pharmaceuticals has never been a consistent enduring part of the Medicare program. Medicare's exclusion from the groups of the insured that are allowed to bargain to reduce pharmaceutical drug acquisition cost as a tool for improving prescription drug access and affordability, is the direct result of representations made and deals struck to ensure pharmaceutical industry non-opposition both to the Medicare Modernization Act in 2003 and to the Affordable Care Act in 2010. Thus low and lower income Medicare beneficiaries are at the mercy of the market (in Part B infusion therapies used to combat cancer, for example), and (in Part D) at the mercy of the negotiating power of their insurer and their insurer's pharmacy benefit manager — if they can afford to get themselves inside this tent.

Medicare Part C, sometimes called Medicare Managed Care, is commercial insurance sold through a structured marketplace where the insurers may engage in direct bargaining for pharmaceuticals. Medicare beneficiaries who are not poor enough to be eligible for Medicaid but who are not rich enough to purchase a robust Part D plan make up a significant portion of the Medicare Part C enrollment population. The non-trivial public health concerns raised by elders who sacrifice all to pay their Part B premiums, Part D premiums, and Medicare Supplemental Insurance for fear of tightly managed care are sobering. The love of narrow networks and tightly constrained formularies is not strong in the Medicare population, making Part C enrollment a last resort for many so enrolled.

On the commercial insurance side, we can also see direct bargaining but with fractured buyer power. Perverse incentives are generated by pharmacies' and pharmacy benefit managers' (PBMs) working off of a business model based on a percentage of cost and price along with dispensing fees. These lessen the likelihood that commercial insurers, PBMs, or commercial pharmacies will rise to full-throated discussion of the effects of pharmaceutical pricing and distribution systems on cost and access for individuals.

Different solutions are likely appropriate for different problems in different segments of the pharmaceutical market. As Rena M. Conti has pointed out, the problem of price spikes in generic drugs, where the government can do so much more to entice generic drug manufacturers into the marketplace, is undoubtedly different from credible solutions to the price spike in branded drugs first to market with true innovation. This problem is also different from any credible solution to price spikes in pharmaceuticals that, however new to the market, are being sold into a drug universe where there are other therapeutic equivalents available at radically different price points.

In this last group, experiments with different forms of reference pricing or grouping drugs into categories based on therapeutic effect and moving only those drugs that have a distinctive therapeutic effect into
higher priced categories, have gained some traction in other countries and in commercial insurance in the United States. More politically palatable and thereby perhaps more possible than government price setting, reference pricing merits further consideration. It attempts to balance the welfare of the group in promoting pharmaceutical innovation with the interest of the group in promoting affordability and access. Public health analyses weighing these two competing values can enrich the conversation. Reference pricing attempts to thread the needle between reasonable reward of innovation and unreasonable restrictions on access.

**Considering Daraprim**
Turing Pharmaceuticals’ (Turing) Daraprim (pyrimethamine) frames the issue of how to address the 5,000% price increase of a decades-old drug most widely known for the treatment of toxoplasmosis. Daraprim is a sole source drug. Turing’s price increases of sole-source market position produced a product unavailable to many who lacked insurance or were under-insured.

Important work has been done by Michael A. Carrier, Nicole Levidow, and Aaron S. Kesselheim on the antitrust implications of Daraprim production and distribution. Turing’s behavior around Daraprim may give rise to a monopolization claim with a focus on the changes made to the drug’s distribution system to keep rivals from entering the generic market with a competitor product. More interesting, for the purposes of this essay, is whether either the Daraprim price increase itself or the exclusionary re-configured distribution system can be said to harm public health and consumer welfare.

Daraprim has been eligible for generic development for close to 50 years. No generic had entered this market. It illustrates that the cost of a modestly valued drug may be substantially enhanced by a drug distribution mechanism that defeats generic entry. Daraprim reminds us that the general rule that increased competition will discipline sudden price spikes depends on that new entry being “timely, likely, and sufficient.” Turing’s re-priced Daraprim and re-configured Daraprim distribution system has already existed long enough to have made the changes highly profitable. Indeed, a competing generic entry, at this point, could hardly be said to be timely from the perspective of drug costs. Many millions of dollars have been wrung out of the drug acquisition system on an overnight price spike.

A crucial variable in promoting competition for generic eligible pharmaceuticals is supposed to be to keep the opportunities for generic entrants open. Federal Trade Commission (FTC) data tells us that the more generic entrants, the more price competition, at least to a point. None of this contemplates a

As a public health matter, the FDA has announced its intention to prioritize generic drug applications on sole-source drugs. What is lacking in public discussion is mention of the public health implications of rendering a curative sole source drug unaffordable to those with no other option. The discussion, instead, is cast as an individual’s problem of cost and access. Lacking a vocabulary for the kind of harm we all suffer when a therapeutic alternative is effectively removed because of its extraordinary acquisition cost, antitrust law can learn from public health that the consumer welfare on prescription drug pricing in the United States is collective.
sole source price spike combined with a distribution mechanism designed to delay generic entry to make new entry untimely. If such exclusionary behavior is not to prove both lucrative and replicable, antitrust law needs a different definition of timely entry. And it may also need a more focused definition of consumer welfare to talk back to distribution system innovation designed to suppress competition.

Public health can help antitrust law find this vocabulary and legal analysis. Turing’s innovation was in learning how to game the generic entrant system to delay or divert new entrants for an expensive interval. Antitrust law will need to determine if this is the kind of innovation that brings efficiencies. As a public health matter, the FDA has announced its intention to prioritize generic drug applications on sole-source drugs. What is lacking in public discussion is mention of the public health implications of rendering a curative sole source drug unaffordable to those with no other option. The discussion, instead, is cast as an individual’s problem of cost and ccess. Lacking a vocabulary for the kind of harm we all suffer when a therapeutic alternative is effectively removed because of its extraordinary acquisition cost, antitrust law can learn from public health that the consumer welfare on prescription drug pricing in the United States is collective.

Conclusion
Public health’s recognition of collective as well as individual interests in affordability and access offers a vocabulary that fair competition law might be able to use. It could power a consumer welfare analysis of market gaming behavior that extends beyond shifting pharmaceutical acquisitions costs to other payers and, in fact, effectively sets public health priorities. The reality is that our pharmaceutical drug budget is not infinite. Elevated prices for some pharmaceuticals thus reduce access to other pharmaceuticals for everyone.

Acknowledgment
Thanks to Valerie Shea for her fine research assistance.

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5. It is not every issue that, in one week, focused both congressional concern and focused popular cultural concern. Congressional concern as expressed by the call for Committee hearings and inquiry into the pricing of certain pharmaceuticals. See A. Edney, “Mylan CEO to be Grilled by Congress Over EpiPen Price Surge,” Bloomberg Politics, September 14, 2016, available at <https://www.bloomberg.com/politics/articles/2016-09-14/mylan-eco-will-appear-before-house-overight-panel-next-week> (last visited January 20, 2017). Popular cultural concern was expressed by the knowing laugh at the 2016 Emmy Awards broadcast when Jimmy Kimmel, the program’s host, noted, while passing out brown bags stuffed with peanut butter and jelly sandwiches, “If you’re allergic to peanuts, well, I guess this is goodbye, because we can only afford one EpiPen.” See S. Rense, “The Story Behind Jimmy Kimmel’s Sharpest Joke at the Emmys,” Esquire, September 19, 2016, available at <http://www.esquire.com/lifestyle/health/videos/a48703/epipen-joke-emmies-transparent/> (last visited January 20, 2017); see also K. Don, “Jimmy Kimmel’s EpiPen Joke at the 2016 Emmys Was Honestly Very Much Appreciated,” Romper, available at <https://www.romper.com/p/jimmy-kimmels-epipen-joke-at-the-2016-emmys-was-honestly-very-much-appreciated-18614> (last visited January 20, 2017) (observing that “[n]ot only was [the EpiPen] joke incredibly well-timed, but it was also well received by the audience.”).
9. Both Part B pharmaceutical coverage and Part D prescription drug plans encompass Medicare beneficiaries at all income levels.
18. *Id.*
22. *Id.*
Motorcycle Policy and the Public Interest: A Recommendation for a New Type of Partial Motorcycle Helmet Law

Kurt B. Nolte, Colleen Healy, Clifford M. Rees, and David Sklar

In the U.S., motor vehicle crashes are one of the leading causes of injury-related death accounting for 34,485 deaths in 2009. Of all road traffic fatalities, motorcycle crashes account for 14%, though motorcycles represent less than 1% of all vehicle miles traveled. Compared to automobile drivers, motorcycle riders are 34 times more likely to die in a traffic collision.

Fatal and nonfatal motorcycle crash injuries are largely attributable to head injuries. Helmet use by riders has been demonstrated to decrease these injuries and save approximately five quality-adjusted life years. Nevertheless, helmet nonuse is the most significant factor for death in motorcycle collisions in a global study of motorcycle crashes involving 70 countries.

While motorcycle crash-related deaths and injuries can be reduced by the use of protective helmets, many states have had limited success in implementing or maintaining helmet laws because of political pressure from motorcycle lobbying groups who favor individual rights of motorcycle riders over the public benefits of mandatory helmet laws. We describe the costs of motorcycle crash injuries from unhelmeted riders, suggest that these costs can lead to a framework for a partial motorcycle helmet law that allows for personal choice but provides incentives for helmet use, and relate our experience advocating for such a law in New Mexico.

Legal and Policy Background

There are two types of motorcycle helmet laws in the U.S. Universal laws require all riders to wear a helmet. Partial helmet laws require a subset of riders (younger than 17-21 years old) to wear a helmet. These laws are established by each state. As of 2016, 19 states and the District of Columbia had universal helmet laws, 28 states had partial helmet laws, and 3 states had no helmet law. New Mexico has a partial helmet law applying to riders 17 years old and younger.

The patchwork system of helmet laws in the U.S. follows years of inconsistent federal involvement and shifting federal requirements. Since 1966, various federal laws have tied financial incentives and/or penalties to states’ federal highway funds to encourage passage of universal helmet laws. In the absence of consistently strong federal imperatives, however, state motorcycle helmet laws are often based on how state legislatures respond to data about motorcycle crash injuries and deaths and to arguments focused on individual liberties. Although the authority for state action limiting individual liberty to protect the public’s health was recognized over 100 years ago in Jacobson v. Massachusetts 197 U.S. 1 (1905), public health laws still are often opposed as limiting individual freedoms and exemplifying government paternalism.

Arguments in support of public health laws have resonated best when they involve communicable diseases or environmental factors that affect individuals who are unwillingly exposed (e.g., second hand smoke). When public health issues are framed as
matters of individual choice, however — such as in discussions about motorcycle helmets — there is often significant resistance.\textsuperscript{15} Despite the tension between individual and collective perspectives, a 2012 poll shows that the majority of Americans support laws that foster road safety:\textsuperscript{16} 82\% of respondents supported requiring motorcycle riders to wear helmets, with 57\% "strongly" supporting this protective policy. There is also abundant epidemiologic data that suggests universal helmet laws significantly increase helmet use and decrease motorcycle crash-related deaths and injuries.

### Efficacy of Motorcycle Helmet Laws

Motorcycle helmet laws are effective because they lead to high rates of rider compliance in wearing a helmet.\textsuperscript{17} Universal laws are readily enforceable by police officers because non-compliance is readily observable. In states with universal helmet laws, 12\% of fatally injured riders were unhelmeted compared with 64\% in states with a partial helmet law and 79\% in states with no helmet law.\textsuperscript{18} States that have enacted universal laws after no law or a partial law have seen helmet usage increase from 15-60\% to 80-99\% of riders. Overall, when compared with states without a helmet law, states with universal laws have a 22-33\% reduction in motorcycle crash mortality and states with partial laws have a 7-10\% reduction.\textsuperscript{19} In contrast, states that have repealed or weakened helmet laws have experienced significant decreases in helmet use among motorcycle riders and corresponding increases in fatalities and head injury hospitalizations.\textsuperscript{20}

Existing partial helmet laws are not fully effective in protecting the segment of the population they are designed to protect—specifically the young. States with partial laws focused on riders younger than 21 years had a 38\% higher incidence of traumatic brain injury from motorcycle crashes among this population than universal law states.\textsuperscript{21} Mortality rates for motorcycle riders 15-20 years of age are 31\% lower in states with universal helmet laws, while states with partial laws fail to see a reduction in mortality for this age group.\textsuperscript{22} In addition, it is difficult to ensure helmet compliance among this segment of the population since rider age is not easily observable by police officers.

Motorcycle crash injuries and deaths also create societal and economic costs for others. We believe these costs justify a new type of partial motorcycle helmet law that respects individual freedoms, but compensates for societal costs attributable to non-helmet use. Implementation of such a law could potentially increase helmet compliance resulting in fewer motorcycle crash-related injuries and deaths and decreased associated costs.

### Economic Costs of Motorcycle Crash Injuries and Deaths

In a 13 year study (1994-2006) from a Level II Trauma Center that reviewed 1738 motorcyclists admitted after a crash, 760 riders were unhelmeted.\textsuperscript{23} The unhelmeted riders used more resources, spending more days in the hospital and more days in the intensive care unit. These factors resulted in higher hospital charges per person ($44,744 vs. $31,369), with total excess charges of $9,959,800 for the unhelmeted population over the study period. Fifty-nine percent of the motorcyclists were uninsured, and unhelmeted motorcyclists had an adjusted odds ratio (OR) of 1.4 (95\% confidence interval 1.1-1.7) compared to helmeted riders of being uninsured. Uninsured individuals are more likely to require the public to finance their health care. Another study looking at 9769 motorcycle crash patients (30.8\% unhelmeted) showed that unhelmeted riders were more likely to die (OR 1.72), require a rehabilitation hospital (OR 1.25), or require a nursing home (OR 1.75), all of which have profound financial consequences.\textsuperscript{24} Other studies have shown the uninsured portion of injured unhelmeted motorcyclists to be as high as 60-82\%.\textsuperscript{25}

The differential economic burden of hospital charges between helmeted and unhelmeted injured motorcyclists in police-reported crashes is estimated to be $250,231,734 per year in the U.S.\textsuperscript{26} The economic advantages of being helmeted included sustaining fewer injuries requiring medical attention and having fewer inpatient admissions and lower inpatient costs. This study was unable to evaluate rehabilitation and other post-discharge costs.

Other investigators developed a complex model with several datasets and examined economic costs saved from helmet use (medical and emergency services costs, and household and work productivity losses) in 2010.\textsuperscript{27} Approximately $3 billion were saved by riders wearing helmets in the U.S. and an additional $1.4 billion could have been saved if all riders were helmeted. States with universal helmet laws saved an average of $725 per registered motorcycle from helmet use compared to states with partial helmet laws, which saved $198 per registered motorcycle. New Mexico saved $48 per registered motorcycle from helmet use, reflecting very low helmet compliance in the state.

### Recommendation for a Novel Partial Motorcycle Helmet Law

The epidemiologic and economic data support consideration of a novel partial motorcycle helmet law that respects individual freedoms and a rider’s “right to choose,” but holds riders responsible for their choices...
by providing incentives to wear a helmet and disincentives to ride unhelmeted.

For example, a state could create two types of motorcycle registrations, each linked to a distinctive reflective license plate. One type would be a “helmet registration,” costing the standard amount and requiring riders to wear helmets. The other type would be a “non-helmet registration” and would allow riding without a helmet. It would cost the standard amount plus a proportional share of the increased costs created by injured unhelmeted motorcycle riders. This fiscal burden can be calculated from economic data as follows. The average cost savings per registered motorcycle from helmet use in states with a universal helmet law ($725) minus the cost savings per registered motorcycle from helmet use in the state without a universal helmet law equals the potential costs per registered motorcycle associated with the lack of helmet compliance that a universal law would provide. For example, in New Mexico this calculation would be $725-$48= $677. A non-helmet registration tied to economic costs for New Mexico would therefore cost $16 (the standard amount)+ $677= $693. To ensure compliance, riders of helmet-registered motorcycles caught driving without a helmet should be subject to a substantial fine. Funds from non-helmet registrations can be used by the state to improve trauma care and brain injury services, support medical examiner diagnosis and surveillance, or provide free or discounted helmets for low-income riders.

While such a proposed helmet law has not been tested elsewhere, the concepts behind it have been tested. Economic costs passed on to consumers through tax and price policies can change behaviors. For example, price increases from increased tobacco excise taxes decrease overall tobacco use, reduce prevalence of tobacco use in adults and young people, induce current users to quit, reduce initiation of tobacco use in young people, and lower consumption of tobacco products among continuing users.

The concept of paying more up front to ride a motorcycle without a helmet is not new. Florida, Michigan, and Texas condition helmet requirements in part on whether riders have an established type or amount of medical insurance coverage. To ride without a helmet in Michigan, for example, riders must be 21, have at least $20,000 of medical insurance and have held a motorcycle license for 2 years or passed an approved safety course. Unfortunately, the $10,000-$20,000 of insurance coverage required to ride unhelmeted in Michigan and Florida does not come close to covering the average hospitalization costs for unhelmeted injured motorcyclists. Nor does it cover costs associated with rehabilitation, long-term care, and support of surviving dependents.

**New Mexico Motorcycle Helmet Legislation Proposed in 2015**

In 2015, public health advocates in New Mexico proposed Senate Bill (SB) 308 to establish the new type of partial motorcycle helmet law described above and characterized it as “Rider’s Choice.” After a lengthy and contentious hearing, the Senate Public Affairs Committee tabled the bill. SB 327, a companion bill to reinstate the universal wearing of motorcycle helmets, was heard at the same time and also tabled. Proponents of the legislation are preparing to re-introduce an updated version of SB 308 in 2017.

**Future Reframing of the Novel Law**

How public health policies and laws are perceived is related to how they are framed. Given the frequently vocal opposition to motorcycle helmet legislation,
effective framing is essential to achieving the broad support necessary for policy change. Framing must both bolster support from existing public health advocates and engage individuals not historically invested in public health efforts. In contrast to the often data-heavy messages of public health, cognitive scientists have explained that policies must be situated within moral frameworks to gain traction, because people place more emphasis on their identities — rather than data or economic self-interest — when interpreting political messaging. Identities are based on worldviews that are characterized by values and moral judgments that are largely subconscious and developed primarily through intuition rather than reasoning. Thus, issues must be framed in terms that “carry moral importance” that fit within an audience’s intuitive worldview.

Understanding the primary values underlying U.S. liberal and conservative worldviews is essential to developing an effective frame. The primary values for liberals have been summarized as “caring for victims of oppression,” or “empathy, together with the responsibility and strength to act on that empathy.” Liberals tend to support an active role for government in protecting the public’s health and ensuring access to quality health care for all. Conservatives’ primary values have been described as “[p]reserving [moral] institutions and traditions,” or “[o]bedience to legitimate authority” (including the free market) through “personal responsibility and discipline.” Conservatives emphasize individual control over health-related decisions and support a market-based approach to paying for health care services. However, both perspectives recognize the need to control public spending in health care.

A useful frame for the partial motorcycle helmet bill could be “rider responsibility.” Rather than reinforcing the opposition’s “choice” framework, advocates could emphasize that freedom in this case comes at a cost and therefore riders must take financial responsibility for their choice: they must either wear a helmet or pay an up-front fee to cover the costs to society associated with the risk of riding without a helmet. This frame emphasizes fairness and personal responsibility, which are core values in the conservative worldview and tied to notions of obedience and morality. The frame also appeals to liberals’ primary value of caring for others and preventing harm.

Conclusion

Motorcycle helmet laws are life-saving, evidence-based, cost-effective public health interventions. The novel partial motorcycle helmet law set forth in this article promotes the public’s health and upholds widely held values of fairness and responsibility, but recognizes and responds to opponents’ primary concern (individual choice). With language that frames the bill to appeal to liberals’ and conservatives’ intuitive moral values, bipartisan support may be possible even in polarized political environments. Appropriate frames may create more political space for issues like this one that are dominated by small but vocal interest groups.

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31. See Jones and Bayer, supra note 7; Riding on seat of bicycle, motorcycle, moped, or ectic personal assistive mobility device; number of persons; wearing of crash helmet; conditions; rules; requirements for autocycle., Mich. Comp. Laws § 257.658 (5). Michigan Vehicle Code(2012); Equipment for motorcycle and moped riders.—, Fla. Stat. § 316.211(3)(b); Protective Headgear for Motorcycle Operators and Passengers, Texas Transportation Code § 661.003(c). Texas Transportation Code: Title 7, Subtitle G(2001).
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34. See Brown et al., supra note 23.
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39. Id. (Lakoff, 2008).
40. See Haidt, supra note 38.
41. See Lakoff (2008), supra note 38.
42. See Haidt, supra note 38.
43. See Lakoff (2008), supra note 38.
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45. See Lakoff (2008), supra note 38.
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Immigration and Health: Law, Policy, and Ethics

Wendy E. Parmet, Lorianne Sainsbury-Wong, and Maya Prabhu

Immigration poses numerous challenges for health care professionals and public health lawyers. Health professionals must care for patients with different cultural backgrounds, some of whom have experienced traumas in their country of origin, may not speak English, or lack access to health insurance. Public health lawyers must untangle the multifaceted interactions between immigration law and health law, which add complexity, inefficiency and inequity to the U.S. health care system. These challenges are apt to intensify under the Trump Administration, which has pledged to increase deportations and repeal the Affordable Care Act (ACA). This paper offers an overview of some of these issues, as well as the arguments that are given for denying immigrants equal access to health care.

Immigrants’ Access to Health
The anti-immigrant sentiment evident in the 2016 election was not new. American history has been marked by periodic waves of nativism. Such anger towards immigrants often focuses on health. Throughout history, immigrants have been blamed, usually erroneously, for disease outbreaks. This association between immigrants and disease can be seen in the health-based exclusions in U.S. immigration law and the disproportionate use of coercive public health powers against immigrants as when San Francisco quarantined Chinese American residents in response to a smallpox outbreak in 1900.1

In 2015 there were 244 million people around the world living outside of their country of origin.2 In the last two years, rapid increases in immigration in Europe triggered a backlash of nationalism and xenophobia. The U.S. has not witnessed a similar surge in immigration, but xenophobia remains potent. The U.S. is home to the largest number of immigrants in the world.3 In 2014, there were 42.2 million immigrants in the U.S., making up 13.2% of the population. Forty-seven percent of these immigrants are citizens; only 3.5% are undocumented.4 Immigrants are less likely to have health insurance than native-born citizens.5 This is due to many factors including their disproportionate employment in low-wage sectors that tend not to provide employer-sponsored insurance. Another reason is the exclusion of many classes of immigrants from publicly-funded health insurance programs.

Living in poverty is not enough to establish eligibility for federal health care coverage in the U.S. Immigration status also matters, not because of any logical or health care-related nexus between coverage and immigration, but because federal law restricts access to federally-funded benefits to numerous classes of immigrants, including many with legal status.

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) limits eligibility for public insurance, including Medicare and Medicaid, and imposes a mandatory waiting period on certain legal immigrants who must first demonstrate at least five years of continual qualified immigration status and residency in the U.S.6 PRWORA also bars “aliens who are not qualified aliens” from Medicaid, except for immigrants accessing emergency services7 or “lawfully residing” children or pregnant women in a state that has expanded Medicaid under the Chil-
dren’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA). PRWORA, however, exempts from the five-year bar certain qualified immigrants, such as asylees or refugees, who have been congres-
sionally designated as immigrants of special humani-
tarian concern. PRWORA does not prohibit states from establishing separate, state-funded insurance or health care benefits for their immigrant residents.

The ACA expanded coverage for some immigrants. Under that act, immigrants who are “lawfully present” within the terms of the ACA, a category that includes some who are either within PROWRA’s five-year wait period or not qualified within the meaning of that statute, may purchase insurance on the ACA marketplace if they can afford to do so. They may also be eligible for advance premium tax credits and other cost sharing reductions to purchase qualified health plans during the five-year waiting period, depending on their income. Further, certain legal immigrants with incomes between 100% to 138% of the federal poverty level (FPL) are eligible for premium tax credits and cost sharing even though these federal benefits are only available to citizens with incomes over 138% FPL. However, immigrants who cannot demonstrate lawfully present status — even with incomes at or below 400% FPL — are ineligible for federal subsidies and are not permitted to purchase coverage on the marketplace, even if they pay full cost. In addition, even the poorest of legal immigrants, such as those with incomes under 100% FPL, may be ineligible for the ACA’s financial subsidies if they have a qualified immigration status under PROWRA — such as refugees and asylees — and reside in a state that declined to expand Medicaid. Moreover, although overall national uninsured rates declined under the ACA, President Trump and a Republican-controlled Congress may well repeal all or part of that act. Whether non-citizen immigrants will be able to participate in any programs that may be implemented in its stead remains questionable, given the new Administration’s stance on immigration.

Advocates have contested the exclusion of immi-
giants from public insurance programs as a violation of the principle of equal protection. New York’s Court of Appeals, for example, determined that a state law barring legal immigrants from Medicaid violated both the New York and U.S. Constitutions. As a result, the state provides nonfederally funded Medicaid to resi-
dents who do not qualify as lawfully present under the ACA but who are permanently residing under color of law. Similarly, in Finch v. Commonwealth Health Ins. Connector Auth., the plaintiffs successfully challenged under the state constitution a Massachusetts law ending public insurance to approximately 30,000 legal immigrants who had received coverage since the inception of that state’s health-care reform policy but who were subsequently terminated pursuant to a state law that purportedly adopted PRWORA’s classifications.

Advocates have also persuaded some states to expand coverage for their immigrant populations. For example, in 2016 California asked the Centers for Medicare and Medicaid Services to grant an innovation waiver under ACA Section 1332, to permit health plans in the state marketplace to sell nonsubsidized qualified health insurance to immigrants who are uninsured and not lawfully present provided that all costs are borne solely by the immigrants, thereby reducing the number of medically uninsured residents. The state withdrew the waiver after the election.

Refugee Health Care

Although many immigrants face difficulties accessing appropriate health services, refugees face particular challenges, especially with regard to their mental health needs. Under U.S. law, refugees are defined as those who have fled their countries due to a well-founded fear of persecution “for reasons of race, religion, nationality, membership in a particular social group, or political opinion.” In 2016, the U.S. took in 84,995 persons, making it the world’s largest resetter of refugees; for 2017, the U.S. pledged to take in 110,000 with a new focus on Syrian refugees; however, the Trump Administration has indicated it will alter course. Most of those recently settled refugees came from five countries: the Democratic Republic of the Congo, Syria, Burma, Iraq, and Somalia. While there is a public misconception that refugees automatically gain entry to the U.S. merely by having fled any violent or unsafe country, they must undergo an extensive adjudication process. Of the 21.3 million refugees in the world at present, only 1% are referred for resettlement consideration by the United Nations High Commission on Refugees, the international agency tasked with protecting persons in need of humanitarian assistance. Refugees are then subject to an extended evaluation process with the U.S. Citizenship and Immigration Services to determine their eligibility for refugee status, including whether they are credible and are otherwise admissible to the U.S.

Not surprising, rates of mental health difficulties amongst refugee groups are very high. By definition, many refugees have experienced a range of traumas prior to leaving their home countries including detention, torture, gender-based violations, or having been the victim of or witness to extraordinary violence. The process of flight often displaces and separates families and communities while exposing refugees to addi-
tional threats of violence, loss of property, and disease. Then, even in a “country of first refuge,” whether in urban milieus as was often the case for refugees in the Iraqi and Syrian diaspora, or in UN refugee camps, refugees continue to experience limited or no access to health care, education, employment, or economic opportunities, thus exposing them to additional risks of exploitation. Many refugees also describe the refugee adjudication process as highly traumatizing as they are required to describe the details of experiences in a credible and persuasive narrative during what divergent cultural beliefs about health and mental health. Research with refugees themselves identifies cultural, structural and psychological barriers to care, including a lack of understanding of mental health conditions related to trauma, a reluctance to initiate conversations about mental health symptoms, and mental health stigma. The variability of publicly-funded insurance and mental health services even at federally qualified health centers poses an additional structural barrier, as does the lack of insurance for interpretation services.

Discrimination against immigrants with respect to health undermines efficient and effective health policy. When we try to exclude immigrants to keep out disease, we divert attention from effective public health policies. When we apply coercive public health measures disparately to immigrants, we drive their communities away from the public health system and erode trust between public health workers and vulnerable communities. And when we deny immigrants access to health insurance, we cause them to delay treatment, shifting costs to U.S. safety net providers. Laws that treat immigrants disparately add enormous complexity to our health care system.

many describe as an adversarial set of interviews. For those invited to resettle in the U.S., the post-migration period can be unexpectedly stressful due to acculturation difficulties and disappointments in expectations.

As a result, refugees are at increased risk of developing serious psychiatric disorders such as posttraumatic stress disorder (PTSD), major depression, and a variety of anxiety disorders with the rates varying by torture experiences and cumulative exposure to trauma. For example, a 2012 survey of Iraqi refugees who had lived in the U.S. 8-36 months found that 50% of participants reported anxiety, 49% depression, and 31% a need for further assessment for PTSD. During 2009–2012, the rate of suicides among Bhutanese refugees relocated to the U.S. was 20.3/100,000 persons, nearly twice the rate of suicide in the U.S. population as a whole (12.4/100,000).21

Although refugee resettlement agencies readily appreciate the need for mental health services and the CDC includes mental health screening in its guideline for initial health screenings, numerous barriers exist to mental health assessment and referral of refugees. Shannon et al. report that physicians and mental health providers experience difficulties with interpreters, establishing rapport, discomfort eliciting trauma histories, language and acculturation barriers, and

The Interdependency of Health

Many arguments are given for excluding immigrants from some public health insurance programs, as well as for the disparate application of coercive public health laws to immigrants. In enacting PRWORA, for example, Congress claimed that access to public benefits draws immigrants to the country. Similar claims were made in the United Kingdom prior to the Brexit vote. In fact, there is no empirical evidence that people immigrate in large numbers to access health care. Instead they come to escape violence or persecution, improve their economic lot, or reunite with their families.

Health-based exclusions and punitive public health policies are often justified as necessary because immigrants are thought to be sicker than non-immigrants and the source of dangerous diseases. These claims are also false. Although there is substantial heterogeneity, immigrants as a class tend to be healthier than the native-born population and have lower health care costs. Moreover, while some diseases can be imported into the U.S., they are as likely to come from travelers or international commerce as from immigrants.

Opponents of immigration also argue that undocumented immigrants, in particular, should be excluded
from public health insurance programs because they broke the law. This argument ignores the fact that native-born citizens who break the law don’t lose their access to health care. Even imprisoned felons have a constitutional right to health care. The mere fact that someone breaks a law doesn’t in itself justify the denial of access to health care.

Discrimination against immigrants with respect to health undermines efficient and effective health policy. When we try to exclude immigrants to keep out disease, we divert attention from effective public health policies. When we apply coercive public health measures disparately to immigrants, we drive their communities away from the public health system and erode trust between public health workers and vulnerable communities. And when we deny immigrants access to health insurance, we cause them to delay treatment, shifting costs to U.S. safety net providers. Laws that treat immigrants disparately add enormous complexity to our health care system.

Critics sometimes argue that equal treatment for immigrants undermines the solidarity that undergirds support for health systems. In the current climate, this argument may seem to have some empirical support. It overlooks, however, the fact that with respect to health, immigrants and natives have shared goals — keeping communities healthy, and shared interactions, as patients and providers. Indeed, immigrants form a large percentage of the healthcare workforce. Moreover, immigrants and natives often utilize the same health care services and face shared health risks. When it comes to health, immigrants and natives are largely in it together. This interdependency binds across immigration status, calling upon us to care for one another regardless of country of origin.

Acknowledgments

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11. 26 C.F.R. § 1.36B–2 (“Eligibility for premium tax credit”).

12. Certain legal immigrants with “modified adjusted gross income” (MAGI) under I.R.C. § 36B(d)(2) are deemed to be financially eligible for Medicaid expansion in states that choose to implement it, provided their income is at or below 138% FPL. See 42 U.S.C. § 1396a(a)(14)(I)(i) (2010) (authorizing a five (5) percent disregard from the MAGI income standard).


16. INA § 101(a)(42). U.S. law also includes additional admissibility and exclusion criteria.


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Collaborating for Health: Health in All Policies and the Law

Dawn Pepin, Benjamin D. Winig, Derek Carr, and Peter D. Jacobson

Introduction
Health in All Policies (HiAP) is a policy framework resulting from movements beginning in the 1970s and 1980s. HiAP highlights the importance of intersectoral collaboration and shifts focus away from the biological basis of health outcomes to a broader understanding of the role of behavioral and other lifestyle considerations. Since 2006, the HiAP approach has spread across Europe and is gaining momentum in the United States. This article discusses the concept of HiAP and explores emerging trends in HiAP law. It also examines California’s HiAP experience, including the development and evolution of HiAP in the state and the ability to leverage a HiAP framework to improve health outcomes, advance health equity, and counteract laws and policies that contribute to health inequities.

What Is HiAP?
Scholars and public health advocates have expressed optimism about HiAP’s potential to improve population health. Although no consensus definition of HiAP exists, this article uses the following definition: "HiAP is a strategy to assist leaders and policymakers in integrating considerations of health, well-being, and equity during the development, implementation, and evaluation of policies and services." Health departments typically take the lead in developing HiAP activities and engaging other governmental agencies and external partnerships to improve health, equity, and sustainability.

According to Rudolph et al., HiAP’s key elements are health equity/sustainability, benefits for health and non-health sectors, intersectoral collaboration, a goal of creating structural or procedural change, and the

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need to engage community groups and stakeholders.\textsuperscript{6} Werhham and Teutsch observe that the basic components are community engagement, cross-sector collaboration, and government involvement (especially through laws and policies).\textsuperscript{7} Likewise, Gase et al. theorize that HiAP is designed to incorporate cross-sector relations, incorporate health into decision-making, enhance workforce capacity, coordinate funding and investments, integrate evaluation/research/data, enhance communications and messaging, and implement accountability measures.\textsuperscript{8}

A HiAP approach also should be considered along with similar efforts to address social determinants of health on a community-wide basis. These include, among others, the Accountable Health Communities model supported by the Centers for Medicare & Medicaid Services; the Robert Wood Johnson Foundation’s Culture of Health program; activities of anchor institutions (organizations rooted in their communities, such as universities, community hospitals, or similar place-based institutions focused more on community revitalization); and health impact assessments (tools for implementing HiAP, but distinct in their approaches and outcomes). These efforts share basic aims to improve both the health of a group of individuals (usually geographically determined) and, typically, the distribution of health outcomes within that group (usually labeled health equity). All take multisectoral, multistakeholder approaches to achieve those goals.

A deliberate, collaborative approach across health and non-health sectors (e.g., transportation, education, and housing), involving both public and private decision-makers, differentiates HiAP from the aforementioned efforts to address social determinants of health. Although these efforts and HiAP share commonalities, HiAP usually results from government initiatives (e.g., state legislation, executive order, or local ordinance). As a result, the health department usually takes the lead in coordinating HiAP, while nongovernmental organizations often lead the other types of community-based collaborative efforts. Certainly, nothing prevents non-governmental cross-sectoral efforts to achieve similar goals; however, these efforts are likely to be less policy focused.

**HiAP Laws across the United States**

U.S. jurisdictions are increasingly becoming aware of and incorporating HiAP into laws.\textsuperscript{9} Since 2010, when the first U.S. jurisdictions passed such laws, there has been a gradual increase in HiAP laws (laws that use the term HiAP) and HiAP-like laws (laws that do not explicitly use the terminology HiAP but contain elements of a HiAP approach). In fact, more of these laws were passed in 2016 than any previous year.

HiAP laws at all levels of government share common elements, and there are emerging trends in how the elements appear in such laws. HiAP or HiAP-like laws emphasize achieving better public health outcomes through increased intersectoral collaboration. In addition, most HiAP laws consider health equity an important component of a HiAP approach. For example, Washington, D.C.’s HiAP law expressly incorporates health equity, stating that its HiAP approach aims “to ensure a sustained and continuous pursuit of health equity among District residents.”\textsuperscript{10} Conversely, Vermont’s HiAP law does not explicitly reference equity considerations, indicating instead that the law aims to “identify strategies to more fully integrate health considerations into all state programs and policies, and promote better health outcomes through interagency collaboration.”\textsuperscript{11} This difference raises questions about the fundamental components of a HiAP approach and whether a HiAP law can or should highlight all components.

Although many HiAP laws share common elements, there are some differences between approaches taken at the state versus local level. For example, task forces can be important to a HiAP approach because they serve as the primary body for coordinating HiAP efforts among partners and for implementing the HiAP framework.\textsuperscript{12} For instance, in Rhode Island, the Commission for Health Advocacy and Equity is charged to “develop and facilitate coordination of the expertise and experience of the state’s health and human services systems, housing, transportation, education, environment, community development, and labor systems in developing a comprehensive health equity plan addressing the social determinants of health.”\textsuperscript{13} In contrast, local laws commonly adopt a HiAP approach applicable to their local governing body. While a task force might be critical for a state-level program or in large cities such as Chicago, a local-level program in a smaller jurisdiction might find a task force unnecessary. For example, in Summit County, Ohio, members of the Summit County Council, the legislative body at the county level, are to “encourage all public officials, community and business leaders to adopt a Health in All Policies [approach] in their policy decisions.”\textsuperscript{14} These variations in state and local laws’ incorporation of a task force demonstrate the different ways state and local governments use law as a tool to implement HiAP.

Trends in HiAP laws and HiAP-like laws demonstrate that while all laws contain similar elements, substantial variation exists in the components, purpose, and depth of the provisions. Jurisdictions may use law to implement a formal HiAP approach that incorporates every element of HiAP or, alternatively,
to implement pieces of a HiAP approach. In addition, there are particular differences in the way that state and local governments use law to implement HiAP. As more jurisdictions pass HiAP laws and HiAP-like laws, emerging trends and new information about ways to use law in the HiAP arena can help inform other jurisdictions’ future efforts to incorporate the HiAP approach.

HiAP in California: Past, Present, and Future

California’s HiAP experience reflects many of the same trends seen in HiAP initiatives across the country, especially those focusing on improving health outcomes through increased intersectoral collaboration. These collaborative efforts are vital to improving population health and advancing health equity. However, this forward-looking approach frequently overlooks the legacy of laws and policies that, whether deliberately or unintentionally, created or exacerbate health inequities. California’s HiAP experience also demonstrates that a HiAP approach can both (1) ensure that future laws and policies incorporate health equity principles and (2) counteract the effects of laws and policies that have contributed to health inequities.

In 2010, then California Governor Arnold Schwarzenegger issued an executive order establishing the California HiAP Task Force (Task Force). The order charged the Task Force with identifying priority programs, policies, and strategies to improve the health of Californians. Since its creation, the Task Force has made substantial progress toward these goals, including implementing an Action Plan on Active Transportation to promote physical activity and a Farm-to-Fork program to improve access to healthy, affordable food. In 2016, California elevated the Task Force’s role in state government by formally moving it under the umbrella of the Strategic Growth Council, a cabinet-level committee that coordinates the activities of state agencies to support sustainable communities, economic prosperity, and social equity (the Task Force previously operated out of the California Department of Public Health and the Public Health Institute). This move demonstrates California’s growing confidence in the HiAP approach to tackle deep-seated social determinants of health — forces rooted in our economic, social, and legal systems that affect residents’ prospects for a healthy life.

The Task Force’s current Action Plan to Promote Violence-Free and Resilient Communities (Action Plan) serves as one example of its burgeoning work to address these more systemic social determinants of health. The Action Plan seeks to address the underlying determinants of violence through interagency collaboration, an emphasis on equity, and strong stakeholder engagement. The Action Plan recognizes that “violence is not only preventable, but is a cross-sectoral public health issue, and not solely the responsibility of the criminal justice or law enforcement system.” This recognition diverges dramatically from decades of tough-on-crime policymaking — an approach that California voters historically have supported but one that has had dire consequences for health equity. California’s “three strikes law” and laws permitting or requiring the state to prosecute certain youth offenders as adults, for instance, have disproportionately affected communities of color and created some of the underlying inequities the Action Plan now seeks to remedy. The Action Plan highlights how a HiAP framework can mitigate the negative health outcomes and inequities produced by laws and policies enacted...

California's HiAP experience reflects many of the same trends seen in HiAP initiatives across the country, especially those focusing on improving health outcomes through increased intersectoral collaboration. These collaborative efforts are vital to improving population health and advancing health equity. However, this forward-looking approach frequently overlooks the legacy of laws and policies that, whether deliberately or unintentionally, created or exacerbate health inequities. California’s HiAP experience also demonstrates that a HiAP approach can both (1) ensure that future laws and policies incorporate health equity principles and (2) counteract the effects of laws and policies that have contributed to health inequities.

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without a health equity lens, such as those in the areas of law enforcement and criminal justice.

Likewise, Richmond, California — a racially and economically diverse city in the San Francisco Bay Area that once ranked among the most dangerous cities in the United States — has already proved the vast potential of a HiAP framework to combat inequities produced by such laws. After years of robust community engagement, Richmond adopted a HiAP ordinance and implementation strategy. With residents’ help, the city identified a number of causes of inequities and poor health outcomes, many of which could be traced to laws and policies that did not consider health and equity. For example, community members identified racial profiling, which has been institutionalized by laws and policies such as redlining, as one of the most significant “toxic stressors” contributing to health inequities. To address these issues, Richmond developed targeted interventions, such as implementing community policing, providing implicit bias and de-escalation training to law enforcement, and adopting a ban-the-box ordinance that limits when employers may ask about a prospective employee’s criminal conviction history.

By recognizing the need to address underlying social determinants of health, such as institutionalized racism and poverty, Richmond’s approach exemplifies the “cross-sectoral public health” model described in the state’s Action Plan. Richmond’s HiAP framework also acknowledges the role of laws and policies in producing the inequities the city seeks to remedy. Both the city’s accomplishments and the state’s Action Plan show how a HiAP framework can not only improve community health by increasing intersectoral collaboration in policy development, but also help communities recognize and counteract laws and policies that contribute to health inequities.

Conclusion
Given the increasing momentum behind HiAP in the United States, it is useful to reflect on the role that law can play in supporting effective and sustainable implementation. Lawmakers in all jurisdictions might want to consider how the elements of a HiAP approach, including intersectoral collaboration and a focus on health equity, can and should appear in law, given each jurisdiction’s unique needs. The early successes and demonstrated potential of a HiAP approach also can provide valuable lessons. For instance, California is starting to use the HiAP framework to tackle more systemic social determinants of health, such as violence, and Richmond has applied its HiAP strategy to address racial profiling. As more jurisdictions pass HiAP laws, it becomes increasingly clear that law can help establish, support, and develop a HiAP approach in the United States.

Acknowledgments
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EPSDT’s Role in Improving Child Vision, Hearing, and Oral Health

Jane Perkins

Medicaid’s Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit is an expansive legal entitlement for Medicaid-eligible children under age 21. Among other things, EPSDT targets vision, hearing, and dental health. Today, more than 40 million children in the United States qualify for Medicaid and EPSDT. Congress added the EPSDT provisions to the Medicaid Act (the Act) in 1967 for a simple reason — to make children healthier. In doing so, it recognized that the law can play a significant role in advancing child health. Properly implemented, EPSDT’s clinical and community coordination requirements can improve child health while creating a bridge between medical and social services to emphasize prevention, health promotion, and community integration. After providing a brief explanation of the EPSDT benefit, this article discusses EPSDT’s role in improving child vision, hearing, and oral health.

Overview of EPSDT

Screens, or well-child check-ups, are a basic element of each state’s Medicaid EPSDT program. Four separate types of screens are required: medical, vision, hearing, and dental. The medical screen must include: (1) a comprehensive health and developmental history; (2) a comprehensive unclothed physical exam; (3) immunizations; (4) laboratory testing; and (5) health education and anticipatory guidance. Each type of screen must be provided according to its own “periodicity schedule,” which is to be set by the state in consultation with entities and organizations, such as the American Academy of Pediatrics, with expertise in child health care. EPSDT also includes “interperiodic screens,” which are visits to a health care provider when needed outside of the periodicity schedule to determine whether a child has a condition that needs further care. Persons outside of the health care system (for example, a teacher or parent) can determine the need for an interperiodic screen.

EPSDT is more than just a screening program. The Act requires state Medicaid agencies to “arrange for (directly or through referral to appropriate agencies, organizations, or individuals) corrective treatment.” Significantly, the Act defines a comprehensive package of EPSDT benefits that each state must cover and establishes the medical necessity standard that must be applied to decide each child’s service needs. Covered services include all mandatory and optional services that the state can cover under Medicaid, whether or not such services are covered for adults. Medical necessity is defined as “necessary health care, diagnostic services, treatment, and other measures ... to correct or ameliorate defects and physical and mental illnesses and conditions[.].” In sum, EPSDT coverage is broad and deep. For example, if a child needs dental care to ameliorate a problem, then EPSDT must cover it — even if the state does not cover dental services for adults.

Moreover, if EPSDT is to work, there is an absolute need for effective outreach to Medicaid-enrolled families and children. As noted by the Seventh Circuit Court of Appeals:

[States cannot] expect that children of needy parents will volunteer themselves or that their parents will voluntarily deliver them to the providers of health services for early medical care.
screening and diagnosis. By the time [a child] is brought for treatment it may too often be on a stretcher ... EPSDT programs must be brought to the recipients; the recipients will not ordinarily go to the programs until it is too late to accomplish the congressional purpose. Therefore, states must use a combination of written and oral methods to effectively inform EPSDT-eligible individuals and their families about: (1) the benefits of preventive health care; (2) the services available through EPSDT; (3) that services are without charge, except for premiums for certain families; and (4) that support services, specifically transportation and appointment scheduling assistance, are available on request. If the child/family has difficulty reading or understanding English, then information needs to be conveyed in a format that can be understood.

EPSDT is more than just a screening program. The Act requires state Medicaid agencies to “arrange for (directly or through referral to appropriate agencies, organizations, or individuals) corrective treatment.” Significantly, the Act defines a comprehensive package of EPSDT benefits that each state must cover and establishes the medical necessity standard that must be applied to decide each child’s service needs. Covered services include all mandatory and optional services that the state can cover under Medicaid, whether or not such services are covered for adults.

Finally, the EPSDT requirements must be met regardless of the delivery system being used by the state Medicaid program, for example fee-for-service, managed care, or accountable care organizations. As recently noted by the Centers for Medicare & Medicaid Services (CMS), “The goal of EPSDT is to assure that individual children get the health care they need when they need it — the right care to the right child at the right time in the right setting.”

EPSDT and Vision
An estimated 25 percent of children in the United States have a vision problem significant enough to affect school performance, and low-income children and children of color are disproportionately affected. Not surprisingly, vision services are a mandatory component of the EPSDT benefit. At a minimum, services must include ongoing screening, diagnosis and treatment for defects in vision, including eyeglasses. Replacements for lost, broken, or stolen glasses must also be covered.

Some states have implemented policies designed to maximize vision services through the EPSDT program. For example, Wisconsin uses a comprehensive periodicity schedule that emphasizes regular screening of children aged 0-5. Wisconsin is also among a handful of states that has specially mentioned the need to screen young children for amblyopia (a common, but preventable, cause of adult blindness). The Michigan Medicaid program has included provisions in its contracts with managed care organizations that require vision screening to follow the American Academy of Pediatric protocols, with additional screening as required by court order, foster care placement, or medical necessity. Illinois has developed strong provisions for vision services by, among other things, specifying the various vision assessment tools that can be used during an EPSDT screen for children at various ages. Finally, a handful of states (e.g., Maine, Minnesota, Hawaii) have developed reporting and monitoring methods designed to help the state evaluate the extent to which vision services are being provided through EPSDT.

EPSDT and Hearing
Despite the proliferation of hospital-based newborn hearing screening programs, a significant number of children with possible hearing loss are not receiving prompt diagnosis and treatment. Children from low-income households experience hearing loss at a greater rate than more affluent children. As with vision services, hearing services are a mandatory EPSDT component. At a minimum, services must include assessment, diagnosis, and treatment for defects in hearing, including hearing aids, augmentative communication devices, and cochlear implants.
The vast majority (but not all) of states have established separate EPSDT periodicity schedules for hearing screening. Some states, including Louisiana, have outlined the testing frequencies that EPSDT-participating providers should use, as well as acceptable hearing threshold levels. Other states (including Alabama, Massachusetts, and Virginia) have included provisions that instruct providers to take specific steps to address missed hearing appointments or failed hearing tests. As with vision services, some states are monitoring performance. In the District of Columbia, for example, Medicaid-participating managed care organizations must report each month on the number and percentage of eligible children who received hearing and vision screening.

**EPSDT and Dental**

Dental disease is a chronic condition experienced by all too many children, particularly low-income children. Dental disease affects not only oral health but also physical health, school attendance, and job and school performance.

EPSDT covers the full range of oral health services that children need. In addition to periodic and inter-periodic assessment of the child’s teeth, EPSDT coverage must, at a minimum, include “relief of pain and infections, restoration of teeth, and maintenance of dental health.” EPSDT anticipates direct referral to a dentist, generally beginning at age one, and states must cover orthodontia when needed to restore oral structures to health and function (but not for cosmetic reasons).

State Medicaid agencies are using many approaches to increase the oral health of low-income children. Iowa’s Medicaid agency has entered into interagency agreements to provide for more effective care coordination services and to secure Medicaid reimbursement for oral health services provided by dental hygienists who are employed or contracted by agencies that receive Title V maternal and child health block grant funding from the federal government to improve the health and well-being of women and children. Most state EPSDT programs cover dental sealants and fluoride varnish that enable children to avoid cavities. Wisconsin’s Seal-A-Smile program has focused on delivering sealants in school sites, which has reduced both Medicaid spending and cavities.

As of January 1, 2016, a billing code (CDT D1354) is available to state Medicaid programs for reimbursing the application of anti-microbials. Finally, states such as California and Oregon are experimenting with providing integrated care that, among other things, targets children at high risk of dental caries for early intervention, disease management, and more intensive care.

**Conclusion**

In recent years, the federal Medicaid agency, CMS, has encouraged states to improve EPSDT coverage of vision, hearing, and dental screening and services. Among other things, it has created extensive web pages that offer concrete, best practice examples that states can model as they work to increase the number of children served through EPSDT. In addition, CMS has made it easier for schools to bill for vision, hearing, and dental services in school settings. Moreover, organizations such as the Network for Public Health Law and the National Health Law Program have surveyed state EPSDT laws, policies, and managed care contracts to report on states’ model activities and where states are falling short. Yet, there is room for improvement. Stakeholders can increase awareness of the problems children are experiencing and work with state Medicaid agencies and their contractors to ensure that low-income children are benefited by EPSDT’s promise of comprehensive vision, hearing, and oral health.

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7. Stanton v. Bond, 504 F.2d 1246, 1251 (7th Cir. 1974).
11. 42 U.S.C. § 1396d(r)(2); see also, e.g., CMS, EPSDT-A Guide for States, supra note 9, at 15-16.


Legal Epidemiology: The Science of Law

Tara Ramanathan, Rachel Hulkower, Joseph Holbrook, and Matthew Penn

Introduction
In Thomas R. Frieden’s *A Framework for Public Health Action,* law appears as a primary driver for “changing the context to make individuals’ default decisions healthy.” The notable public health interventions he mentions use law and policy to achieve this goal: fluoridating the public water supply, removing trans-unsaturated fatty acids in processed foods, and dis-incentivizing tobacco use through taxes and zoning. Laws also impact socioeconomic factors such as poverty, education, and housing, together responsible for creating the greatest impacts on public health.

Despite numerous examples of the critical influence that law and policy have on public health outcomes, only systematic evaluations can show which laws facilitate, challenge, or harm health. To that end, legal epidemiology — the scientific study and deployment of law as a factor in the cause, distribution, and prevention of disease and injury in a population — has recently emerged as a unifying field for public health law research and practice. The scientific study of law’s impact on public health outcomes requires the use of rigorous methods to measure the characteristics and prevalence of laws of interest and assess their impact on health outcomes of interest.

This work is inherently transdisciplinary, requiring collaborations that foster innovative and insightful research, and can be challenging, particularly for government programs. For example, tracking legal and policy provisions over time through policy surveillance can be labor-intensive, and policies are not often integrated into existing public health surveillance platforms. Legal evaluations that identify associations between legal levers and health outcomes or ask public health stakeholders about the effects of law on their activities can require statistical software and support, federal approvals under the Paperwork Reduction Act of 1995, and other significant resources. The Centers for Disease Control and Prevention (CDC) explored ways to overcome these obstacles through four years of applying and supporting legal epidemiology in practice.

In this article, we describe a case study of one successful legal epidemiology initiative: the exploration of legal and policy approaches that might help increase the recommended practice of behavior therapy as first line treatment for young children with attention-deficit/hyperactivity disorder (ADHD), rather than beginning treatment with medication. Behavior therapy, given by parents with the support of health care providers, uses positive communication, positive reinforcement, structure, and discipline to teach children to better control their own behavior at school, at home, and in relationships with others, leading to better outcomes.

This project exemplifies the purpose, process, and lessons learned that practitioners could adapt to their own legal epidemiology activities in the field.
The Public Health Problem
ADHD is the most common neurodevelopmental disorder of childhood, with approximately 6.4 million school-aged children diagnosed in the United States.\textsuperscript{10} The percentage of U.S. children diagnosed with ADHD has increased by 3\%–5\% per year since the 1990s, and the percentage taking ADHD medication increased by about 7\% per year from 2007 to 2011.\textsuperscript{11} School-aged children with public insurance are 50\% more likely to be diagnosed with ADHD than privately insured children,\textsuperscript{12} and this disparity is even greater among 2- to 5-year-olds, a group for which treatment guidelines differ from those for older children.\textsuperscript{13} Behavior therapy works for 2- to 5-year-olds, its benefits are known to persist and generalize, and it has no adverse events associated with its use.\textsuperscript{14} For these reasons, the American Academy of Pediatrics recommends that healthcare providers first refer parents of young children with ADHD for training in providing behavior therapy to their children before trying medication.\textsuperscript{15}

Approximately 40\%–50\% of young children with ADHD receive psychological services, which could include behavior therapy.\textsuperscript{16} CDC recognized that addressing this discrepancy between recommended treatment and clinical practice could achieve measurable impact on public health quickly. With this support, researchers in the National Center on Birth Defects and Developmental Disabilities (NCBDDD) began to research strategies to increase the percentage of young children with ADHD who receive behavior therapy.

Transdisciplinary ADHD Research
To investigate the variety of tools states might use related to pediatric ADHD treatment, NCBDDD’s research team conducted a 50-state policy review aiming to produce a dataset describing the applicable policies and an evaluation to study the effect of the policies on the use of medication and behavioral therapies. The team found some state Medicaid programs that implemented policies intended to manage the use of ADHD medications and guide physicians toward best practices for treatment in children. These policies include medication prior-authorization requirements, which require Medicaid approval of medications for certain patients before reimbursement is granted. To apply current systematic methods, the team contacted CDC’s Public Health Law Program to implement a comprehensive legal epidemiology project.

Gathering and analyzing state Medicaid policies is evidence-based work that is inherently transdisciplinary. NCBDDD’s team of epidemiologists, biostatisticians, and psychologists joined with attorneys, health communicators, and data scientists to apply policy surveillance methods\textsuperscript{17} to help better understand ADHD prior-authorization policies and produce two important resources. The research team hired an attorney to review law and policy language and conduct a legal mapping study with a dataset that compared Medicaid prior-authorization policies in 50 states and the District of Columbia.\textsuperscript{18} The team culled secondary source research, federal reports, provider memoranda, and preferred drug lists, and spoke to Medicaid officials about their programs. CDC also engaged experts at Temple University’s Policy Surveillance Program to design a legal evaluation comparing policy surveillance data to Medicaid claims data on rates of ADHD medication prescriptions and psychological services referrals.

These efforts produced impactful data. As of November 1, 2015, 27 states restricted ADHD medication payment approval for children served by Medicaid. The characteristics and criteria used to make authorization decisions varied significantly among states. Seven Medicaid programs asked a prescriber to indicate whether non-medication treatment, such as behavior therapy, was attempted before prescribing medication treatment. Sixteen Medicaid programs had policies applicable specifically to children younger than age 6 years, the target population for this CDC initiative.\textsuperscript{19}

Significant progress has been made on this agency priority because it is now known which states have policies that (1) require prior-authorization for ADHD medications, (2) list specific medications for which
Third, operationalizing legal epidemiology suffers from gaps that can be closed only by investing in systems to access data. For example, health data for evaluation purposes can be difficult to use because of the costs to access databases, the limitations in existing data sources, and the number of intervening factors that weaken a legal associational study. For the ADHD dataset, the evaluation of prior-authorization policies required a license to access Medicaid participant information and was limited by privacy requirements and reporting variability in each state’s Medicaid payment structure. Tools to translate legal data into products for the client are also limited. For example, displaying state-based results on U.S. maps does not necessarily communicate all of the issues at play in comparative legal epidemiology studies.

Despite the energy and expertise researchers have brought to this important work, there are significant challenges in marshalling the diverse skillsets, quality controls, and funding to implement legal epidemiology activities. Public health law researchers are developing cross-cutting research and translation platforms to overcome many of those challenges. When applied to CDC’s agency priority to promote behavior therapy first for young children with ADHD, the potential for legal epidemiology research is clearly evident and provides lessons learned for other research.

Lessons Learned

This study is an important example of how to effectively study the relationship of law and policy to public health goals and outcomes. Not only did the study produce actionable data, but the research process also required detailed documentation about purpose, roles, resources, and outcomes. These documents identified several key lessons for future legal epidemiology activities in governmental or other contexts.

First, discussion about public health and legal research processes and outcomes is essential. The type of data collected and analyzed should mirror evaluation goals, which in this case was to collect and analyze information that could inform Medicaid directors and decision-makers about policies that may support recommended treatment. Those who formulate coding questions must characterize policies in a way that is both legally and topically important. Scientific experts and lawyers alike might have to rethink the scope and phrasing of study questions in light of their differing areas of expertise. Communicating these goals to differing audiences similarly requires engagement from both sides, including deciding which audiences to inform.

Second, measuring the consequences of a law or policy requires time, resources, planning, and patience. In federal agencies, planning for legal evaluations can require months for application and approval from the Office of Management and Budget, validation by external experts, and significant financial resources. Although policy surveillance and quantitative evaluation studies are indispensable to understanding the landscape of public health interventions, such as policies governing ADHD treatment, they alone cannot reveal the effects of discretionary implementation and enforcement of prior-authorization policies. Qualitative studies could reveal other incentives that guide providers’ decisions to use behavior therapy instead of medication, such as reimbursement for mental health services. These findings could alter the legal issues to be surveilled, the research priorities, and the resources dedicated to legal epidemiology.

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12. Id.


Employer Requirements to Work during Emergency Responses: Key Ethics Considerations

Lainie Rutkow, Holly A. Taylor, and Tia Powell

Local health departments (LHDs) are at the forefront of emergency preparedness, response, and recovery. LHD workers participate in epidemiological investigations, staff vaccination clinics, and implement response plans for scenarios ranging from floods to salmonella outbreaks. LHD workers provide crucial disaster services. For instance, when lower Manhattan lost power after Hurricane Sandy, LHD workers coordinated evacuation of over 6,000 patients from multiple health care facilities. Yet, studies have found that, depending on the emergency scenario, between seven and 40 percent of LHD workers would not report to work. This can greatly compromise a response, as many LHDs need “all hands on deck” to effectively meet increased demands. While the precise reasons are unknown, LHD workers’ lack of willingness may be due to several factors, including unclear or inconsistent explanations about work requirements during emergency responses.

To address concerns about employee participation in emergency responses, LHDs have implemented varied policy strategies to ensure that their employees do report to work. This article first describes different approaches LHDs have used to convey work expectations during emergencies. Next, it briefly identifies and explores key ethics considerations that arise for LHDs when employees are required to report to work for emergency responses. Finally, the article discusses how these ethics considerations may inform LHD practices intended to promote robust emergency responses.

Employee Notification of Work Requirements

While every LHD is unique, most expect at least some employees to report to work during an emergency. As part of a project to develop ethically and legally sound practices to promote response willingness among LHD workers, we conducted focus groups and in-depth interviews with LHD employees. Among the topics discussed were how staff are informed about roles and responsibilities for emergency responses. We learned that there is a lack of consistency among processes for disclosing emergency response roles and responsibilities, which may leave employees without a thorough understanding of employers’ expectations. LHDs that convey their emergency response expectations typically do so in one or more of the following ways: (1) language included in an employment contract; (2) during new employee orientation; or (3) through routine communication with a supervisor.

When staff roles and responsibilities are conveyed through an employment contract, it may occur via specific language about reporting to work during an emergency, or it may be implied, through contractual language that refers to “other duties as assigned” during an emergency response. Some employees may not notice or appreciate this language, particularly if its implications are not described. For example, despite signing legally binding contracts that mention required “other duties as assigned” during an emergency response, some LHD workers have indicated that they might ignore these provisions in some circumstances. In theory, failure to participate in a response despite contractual language that creates a

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legal obligation could result in disciplinary action and, in the most extreme cases, lead to employment termination. Yet, in our interviews and focus groups, many LHD employees and supervisors stated that they did not know, or had not thought through, consequences for non-response. Several even noted that contractual language might be ignored with no consequences for failure to comply with an emergency response work requirement. Though our study participants did not mention this option, an LHD worker could theoretically even prefer to risk job termination rather than face the real or perceived risk of reporting to work under certain circumstances. These reactions suggest that, in the context of emergency response work requirements, traditional legal mechanisms (e.g., signing a contract) may not be effective to promote response willingness.

Regardless of whether a contract is signed, expected emergency response roles and responsibilities may be shared during an LHD’s new employee orientation. This information is generally mentioned to an audience of several new employees, either via a human resources representative or during an emergency preparedness module. If the information is conveyed by a supervisor, it is often discussed during an annual one-on-one conversation or correspondence (e.g., yearly review or assessment). In both instances, employees usually have an opportunity to ask questions to clarify what is expected of them. No matter how roles and responsibilities are conveyed, trainings and exercises intended to prepare employees for an emergency response may be offered through the LHD, but participation may not be required.

Ethics Considerations for Work Requirements

This section briefly identifies ethical justifications that support LHD actions intended to increase the likelihood that staff report to work and participate in infectious disease emergency responses.

Respect for Persons, Building Capacity

LHDs should appreciate that providing knowledge and skills will enhance individuals’ ability, and likely their willingness, to respond to emergencies. In the absence of education and training, an employee will be unable to understand the importance of his or her role and responsibility, or how their role and responsibility are essential to the overall response. Therefore, at a minimum, LHDs should have a standardized protocol for disclosing to each employee whether she is expected to respond in an emergency and, if so, the details of her expected role. However, disclosure alone is inadequate. If employees are expected to respond, the LHD must assure they are adequately prepared. As a start, each employee should have the opportunity to ask questions about his role at the time of disclosure and be provided with information about how he will be equipped, mentally and physically, to assume his emergency response role.

After work requirements have been disclosed but before an emergency has occurred, LHDs should ensure that a variety of trainings are offered. Of note, in some instances this may be necessary to meet legal duties to prepare employees to participate in responses. Required trainings should correspond to the role an employee will have during a response, and should be easy to access. For example, for some employees completion of online training modules may be enough preparation. For others, tabletop exercises or specific trainings may be more appropriate. Certain trainings, such as donning and doffing of personal protective equipment (PPE), should be offered in person. During PPE trainings, the LHD should explain measures in place to ensure that everyone who might risk exposure during a response will receive PPE. Limited data suggest that, if LHDs took certain steps such as guaranteeing access to and training about PPE, response willingness might increase.

As training is essential to employees’ capacity to fulfill their responsibilities during an emergency, trainings and drills should be offered during standard work hours. Employees should not be expected to participate in trainings outside of their standard work week (e.g., at night, on the weekend). If circumstances only allow for trainings and/or drills to be offered during non-work times, then employees should be compensated through overtime pay or flex time hours, if such arrangements are permitted by their employer. Adequately reimbursing employees for their time acknowledges that their role during an emergency is an essential component of their public service. Asking for voluntary participation in trainings and/or drills may convey an impression that participation is optional. A request for participation in uncompensated training may also suggest that the institution does not value staff members’ time, or perhaps even their person, which could erode the trust and respectful relationship necessary to encourage maximum participation.

An important benefit of attending training and engaging in drills is that employees see the value of their role and how their contribution is key to a response’s success. Research has shown that willingness to respond may lie in employees’ understanding of how the response is dependent on their contribution and how failure to respond will leave their colleagues to take on additional burdens.
Respect for Persons, in Relationships

Having a specific role in a response can inflict a potentially significant burden on LHD workers, including time away from family and friends, temporary shifts in work responsibilities, and exposure to hazardous or frightening situations. Failing to acknowledge or address these burdens and fears may increase the likelihood that some LHD workers — even those well trained — will be unwilling to report to work for an emergency response. By taking actions to address these factors, LHDs can accomplish the twin goals of promoting response participation and minimizing the burdens they impose on their employees. As a starting point, the following are steps that LHDs can take to minimize the burdens and risks that emergency response work requirements impose on their employees.

Leadership should explore creative solutions, including having some dependents shelter-in-place with employees at the workplace. LHDs should also explore options for working remotely during disasters, by routing access to data systems and phone lines to employee homes. Staff might be more likely to attend work when needed if they knew genuine efforts minimized the number of staff needed for the response. Finally, LHDs may wish to ask employees about the types of assistance they would find helpful to fulfill their duties. Communication strategies that include listening, as well as informing, signal the mutual respect needed for cohesive disaster responses.

As part of emergency preparedness, employees should, on an annual basis, receive dedicated work time to develop plans for care of their dependents and/or pets should their response participation occur outside of a standard work week. Once the emergency occurs and employees are required to report to work, LHDs should continue to minimize the burden their employees face. When the emergency involves an infectious disease or hazardous exposure, LHDs should ensure that their employees receive prompt access to vaccinations or countermeasures. Priority should be given to those who are frontline responders, and thus most likely to face exposure, but ideally all employees who respond should be granted priority access to these measures. By taking this step, LHDs acknowledge the risks their employees may face during a response and help to mitigate them. Extending this priority allocation to immediate family members of LHD employees acknowledges the peace of mind that can come from knowing family members are safe and first in line for needed resources when faced with potential exposure.

In addition, LHDs should create response work plans that minimize the likelihood that employees who report to work will have to work longer than anticipated or during sequential shifts. This can be accomplished by developing a system in which multiple “back-up” employees are available should someone not report to work during the emergency response. Such a system is critical to evenly distribute responsibilities and ensure that those who report to work as required are not unintentionally punished by working longer hours to compensate for those who are not present. During some emergencies, it may be impossible to avoid extended shifts (e.g., flooding makes roads impassable). Leadership should explore creative solutions, including having some depen-
ness to participate in a response may decrease despite requirements to report to work. Given current data about lack of response willingness among LHD workers — and the difficulties associated with responses field by a limited workforce — LHDs should look favorably on steps they can take to improve response willingness.

Although employment contracts typically establish work requirements, LHD employees and supervisors have indicated that they are not adhered to, or treated consistently by staff, during an emergency response. Therefore, because traditional legal mechanisms will not necessarily yield robust response participation, LHDs need be open to other measures that might improve response willingness. By augmenting current processes and policies with lessons learned from this brief exploration of key ethics considerations, LHDs have an opportunity to improve the experiences of their employees and, thus, the quality of their emergency responses.

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5. See supra note 4.


Applying an Equity Lens to the Child Care Setting

Krista Scott, Anna Ayers Looby, Janie Simms Hipp, and Natasha Frost

Introduction
The majority of brain development happens before children enter the formal schooling system, positioning the early care and education system (“ECE system”) to have a profound and long-lasting impact on a child’s health, learning, and ability to regulate emotion. However, the current ECE system in the United States is fragmented, under-funded, and lacks cultural competence. As a result, many children are being cared for in a system that does not always have resources to support optimal development for all, setting the most vulnerable on a trajectory aimed lower than their peers. Providing examples from Indian Country, this article examines systemic barriers to equity, and how the system’s fragmentation leads to lower child care outcomes in some communities. It is imperative that we strategically focus attention on aligning systems in a way that decreases health inequities.

Child Care and ECE
Of the 19.9 million children under the age of five in the United States, approximately 11 million are cared for in some capacity by child care providers. Child care is one component of the larger ECE space that provides education, care, and developmental services to children, birth through age 13 with full-day and partial-day programs, before-and-after school care and summer care.

The ECE system (Figure 1) is composed of three sub-systems: (1) child care, a market-based system subsidized by federal block grants to states; (2) Early Head Start and Head Start programs (EHS/HS), federally funded and granted to individual programs within states; and (3) Pre-Kindergarten, a state-funded discretionary program serving 4- and/or 3-year-olds in public school settings. Child care is a broad term that includes private, for-profit and non-profit child care centers, summer camps, family and kinship care, family child care providers, nannies, and in-home care.

Child care is defined by each state, usually through laws and regulations implementing those laws. These state policies governing the child care environment are impacted by a wide range of federal requirements. For Indian Country, which exists in a separate legal environment, each sovereign Tribal nation has the authority to write and enforce laws and regulations within their jurisdictional boundaries or it can choose to follow state systems based on federal requirements through mutual agreements. Just as the settings and types of child care can vary state-to-state, Tribe-by-Tribe, so too can the regulations and policies that govern these settings. For example, states may have different training requirements or staff-to-child ratios depending on the setting. These policies impact the health, safety, and development of children, and are fundamental to the decision-making process around how many children are able to receive quality care in the first place. How states or Tribes define the setting can impact a provider’s ability to receive funding and access supportive services like technical assistance and training. These criteria mean that certain chil-
dren and families may be excluded from the child care environment.

**Child Care, Equity and Health Inequities**

Of all the public ECE settings, child care is uniquely positioned to employ an equity approach to reduce health disparities and promote health equity. Equity means providing everyone the necessary resources to be successful, recognizing that everyone may not be starting at the same place and need different types of support-systems to ensure success. Further, health equity is the absence of disadvantage in disease-related health outcomes regardless of race, gender, disability, mental health, nationality, age, ethnicity, religion, geography, and socio-economic status. The pursuit of health equity involves “striving for the highest possible standard of health for all people and giving special attention to the needs of those at greatest risk of poor health, based on social conditions.”

The following are some important considerations regarding equity and health equity in child care:

- **Policies impacting equity:** Some states have policies that may limit certain groups from obtaining a child care license. For example, some states have English language requirements for providers, or only have forms and resources in English. Other states have requirements for providers to get approval from landlords, which may be especially difficult for certain community members. These institutionalized barriers may make it difficult for people from marginalized communities to have access to licensed providers or for providers from those communities to become licensed.

- **Policies impacting health equity:** Policies affect the health environment in child care both directly through the regulatory framework, as well as indirectly by creating the infrastructure behind resource allocation. One example of this is access to culturally-specific food. State licensing requirements or reimbursement programs may directly impact access by specifically excluding difficult-to-find traditional and culturally appropriate foods as a matter of expediency. Likewise, policy may indirectly impact access to culturally-specific food by imposing a framework for technical assistance that is easier to navigate for child care centers than it is for child care providers operating out of their homes — a setting that may be more prevalent among rural populations or isolated Tribal communities.

**Funding Challenges**

Unlike schools, considerable funding for child care comes from parents, placing a disproportionate financial burden on low-income families as well as contributing to the general underfunding of the larger child care system. Some federal dollars supplement child care with resources that flow through the Child Care and Development Block Grant Act (CCDBG), which authorizes the Child Care and Development Fund (CCDF) programs in states. CCDF provides low-income families with subsidies towards child care costs. States have licensing statutes, regulations, and monitoring systems to ensure that the state CCDF program meets foundational requirements. Unfortunately, only 13% of eligible children end up receiving subsidies; children of different racial and ethnic groups have disparate access to the CCDF program. While there is no data indicating specific reasons for disparate access, the Center for Law and Social Policy (CLASP) has pointed to a lack of sufficient funding for...
programs, the federal funding allocation process, and the high variability of state demographics and allocation processes as likely factors.\textsuperscript{8} Due to the high cost of child care, some families opt out of the regulated system and move their children into informal or unlicensed settings, which are not subject to basic health and safety requirements, minimum training requirements, or background checks for providers.\textsuperscript{9} In some communities within Indian Country that suffer from chronic generational unemployment, overcrowded housing, and lack of basic infrastructure, imposing and enforcing minimum requirements may create seemingly insurmountable challenges. Ensuring quality, health, and safety for children in all settings, by all providers, regardless of the number or types of regulations is a difficult and complicated undertaking. Funding challenges can also negatively impact the implementation of workforce requirements for ECE settings.

Workforce Challenges

A critical ECE quality measure is the staff education and past experience. Recent reports show the ECE workforce is underpaid, with the child care workforce critically underpaid. Incomes differ greatly when comparing child care providers to Head Start or Pre-K teachers. According to the National Survey of Early Care and Education (NSECE) report, there is a $13,936 gap in pay for those working in community-based settings that do not receive Head Start or public preschool funding. This means that 59\% of the early learning child care center-based workforce makes $13,936 less than their peers that work in public preschool or Head Start funded settings. Those who work in public preschool have the highest wages but comprise only 6\% of the workforce. In fact, the “median annual earnings of child care providers are so low that many are eligible for public assistance.”\textsuperscript{10} Given the low compensation, there is little incentive to continue education or get an advanced degree. Many communities in Indian Country have high levels of chronic unemployment, lower educational attainment, lack of access to community-based careers, low levels of technical training or higher education to achieve established child care standards, and lack of opportunity for meaningful employment. Therefore, the imposition of minimum levels of education or wages can be unattainable both for child educators and their employers, despite the evident need for quality care and adequate payment for child care providers.

The child care system is the largest provider of care and education to children from birth to three. Even with the critical window in brain development,\textsuperscript{11} infant-toddler teachers are the lowest paid, with an average pay of $3.30/hour less than their peers who work with preschool ages (3-5).\textsuperscript{12} Credentialing and qualifications of staff vary greatly within the ECE system. Early Head Start/Head Start programs require at least 50\% of their workforce to hold a bachelor’s degree, and Pre-K programs in 24 states require that all lead teachers have a bachelor's degree. However, in child care:

- 10 states have no educational requirements for center-based lead teachers, and
- 23 states have no requirements for regulated home-based providers.\textsuperscript{13}

Again, when it comes to equitable distribution of quality teachers, younger children in the child care system are often given providers with less education and training. Funding sources — not teacher qualifications — determine salaries which, in consequence, drive qualified teachers to other systems.\textsuperscript{14} Likewise, in Indian Country, where levels of formal education can be much lower than in other communities, requiring all child care workers to attain a minimum level of education may be equally unobtainable if the community as a whole lacks access to post-secondary training resources.

To be clear, providers with all levels of education are needed in the child care system. A bachelor's degree does not guarantee all skills and training needed to be a quality child care provider; likewise, the absence of a bachelor's degree does not and should not preclude a provider who has a high school diploma and years of training and experience from providing quality care. Policymakers need to understand the barriers to the workforce as another layer in implementing policies and programs. In order for ECE systems to be proactive in achieving equity, it is imperative to develop and support a system of professional development that fosters the habits and conditions aimed to help children best learn and grow. Central to this development is the availability of choices that are appropriate for children's context — their communities and families.

Child Care and Indian Country: Traditional Foods

When considering the most severe health inequities, it is critical to examine the resources available to child care programs serving children in Indian Country and their larger communities. There are some emerging and vibrant health improvement outcomes occurring in Indian Country, fueled by the food sovereignty movement and the reintroduction and revitalization of Native traditional and healthy food systems. These systems feed both the children and the larger community.
Traditional foods in Indian Country, for example, can serve the dual purpose of improving health outcomes while addressing community and cultural needs. In light of this, the focus on healthy children in Indian Country must ground health improvements within the broader context of their families, Tribes, and communities. For example, if a community battles structural and institutional racism as well as historic trauma, then requirements and protocol compliance designed for trauma-free communities is inappropriate at best and is a setup for failure at worst. Historical trauma is “a constellation of characteristics associated with massive cumulative group trauma across generations.” These trauma can take the form of genocide, forced relocation, destruction of cultural practices along with current-day discrimination, racism, and ongoing daily assaults on community and individual strength.

Health disparities, substance abuse, and mental illness can be linked to experiences of historical trauma. Child care protocols that recognize and aim to relieve trauma will better support a child’s health and wellbeing. By failing to adequately support the serving of culturally-specific foods, for example, policies may be exacerbating trauma or suppressing the community healing that could come through the foods. Identifying opportunities to build on the linkage to Native languages, culture, and family in Native communities is critical when researching and identifying best practices in the ECE settings in Indian Country.

Additionally, it is important to understand the historical and legal context of children in their communities. A critical example of this is the Indian Child Welfare Act — a federal law that seeks to ensure that Native children are kept with Native families. The exacerbation of historical trauma through separation of children from their Native families and communities was meant to be ameliorated by the Act; however, those central tenets of the Act are currently under attack in the legal system. Recognizing this context in the child care setting, most literature focuses on racial/ethnic backgrounds of providers without framing the studies and practices within the larger community or Tribal context. Often, the studied best practices are rooted in Western beliefs of health, behavior, family units, and relationship to food. In Indian Country there is a growing awareness that in order to achieve improved health outcomes, messaging must be grounded in cultural beliefs and language; it must embed the use of traditional foods that provide healthier nutritional choices while feeding the cultural needs of the child — an approach requiring cultural competence where the frequently-measured best practices often fall short. It is critical that the child care field continues to work to incorporate a broader cultural lens to science-based practices in order to best support healthy emotional and physical growth. Therefore, to apply an equity framework to the child care setting:

- Research needs to intentionally address equity through a holistic and trauma-informed lens— not simply looking at the racial or ethnic backgrounds of the providers or children. This is often best accomplished through community-based participatory research methods.
- When considering the challenges in the ECE system, researchers and advocates must examine not just the imminent issues of access and affordability, but also of the workforce crisis faced by child care providers.

In order for ECE systems to be proactive in achieving equity, it is imperative to ensure that the child care system develops and supports a system of professional development that fosters the habits and conditions aimed to help children best learn and grow. Central to this development is the availability of choices that are appropriate for children’s context — their communities and families. Traditional foods in Indian Country, for example, can serve the dual purpose of improving health outcomes while addressing community and cultural needs.
• More needs to be understood about how quality measures are framed and contextualized. For example, it is important to consider how studies attempting to address equity in child care often measure best practices that favor a white, Western culture.

Conclusion

Because of the Early Care and Education (ECE) focus on school readiness and quality, many other factors critical to child development and cultural context are left out of the conversation and, subsequently, unfunded. The current child care policy conversation must be infused with a framework grounded in the context of institutional racism and trauma, must include a discussion around funding streams and child care workforce barriers, and must ensure cultural competency by deliberately applying an equity and health equity framework.

References


2. The age range may differ depending on state regulation and ability.


5. California Manual of Policy and Procedures, Title 22, Division 12, Chapter 3, Section 10241177(p).


8. Id.


12. Number and Characteristics of Early Care and Education (ECE) Teachers and Caregivers: Initial Findings from the National Survey of Early Care and Education (NSECE), at Tables 12 and 13.


Climate Change and Public Health Policy

Jason A. Smith, Jason Vargo, and Sara Pollock Hoverter

The science supporting climate change is robust and compelling to the point that actions to prevent catastrophic and irreversible alteration of the climate system and avoid related impacts are not only justified, but required. The breadth of the evidence and number of potential impacts to human systems related to changing climate are immense and varied. In this summary we provide an argument that making climate change the focus of public health may bring significant benefits.

Climate Change and Health

The body of scientific inquiry around climate change has been widely cultivated and critiqued. The Intergovernmental Panel on Climate Change (IPCC) is a prestigious scientific body formed specifically to evaluate the state of the knowledge and make public the results. Its 5th Assessment Report provides the most complete and daunting picture of evident and forecast climatic change to date. The findings detail both the uncertainty of future impacts in terms of both confidence (of the validity of findings) and likelihood (the projected probability of an impact occurring). Such meta-documents, which compile and distill fundamental scientific knowledge on a subject, provide a trusted source for policy makers to refer to when proposing and defending climate change laws.

The evidence of climate change is unequivocal. Since 1950 the observed warming in the atmosphere and ocean, decreases in the ice cover at the poles, and rises in sea levels are unprecedented over several centuries. The measured increases in emissions of the drivers of climate change — greenhouse gases (GHG), principally carbon dioxide — correspond with observed atmospheric changes, and the influence of humans on these increases is clear. Given GHG contributions to date, as well as positive feedbacks between Earth’s land, oceans, and atmosphere, the impacts of climate changes are expected to persist and in many regions increase, even under the most aggressive scenarios for climate mitigation.

Research on the human health impacts of climate change has also been evaluated in order to prioritize actions for maximizing mutual progress on climate change and improving health. The Lancet Commission’s Report “Health and Climate Change” puts forward the case for policy to protect human health globally, and the U.S. Global Change Research Group’s Climate and Health Assessment provides an overview.

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of U.S.-specific public health challenges from climate change. There is strong evidence that health is sensitive to changes in the climate system. The most severe impacts are the expected exacerbation of existing health problems, rather than the emergence of new disorders. The distribution of those impacts will depend on regional climate shifts as well as the adaptive capacity of specific populations, with increased vulnerability among those suffering from poor health and poverty. The implications of the planetary changes involved with climate change touch nearly every sector of health care and promotion. There are significant immediate needs for improved basic public health measures, securing essential health care services, increasing capacity for disaster preparedness and response, and alleviating poverty. Work on long-term strategies to slow and reverse planetary change can begin immediately and include investing in climate change and health research, creating economic incentives for clean fuel technologies, and facilitating international agreements and collaborations on emissions targets. Many of these strategies benefit public health through promotion, protection, and by avoiding reversal of health gains from economic development in the last century. This could make action on climate change the greatest global health opportunity of the century.

**Current Policy Activity on Climate Change and Public Health**

At the federal level, multiple governance structures foster collaboration among the diverse federal agencies involved in climate change mitigation (reducing climate-related emissions) and adaptation (preparing for and ameliorating projected climate impacts). The Council on Environmental Quality (CEQ), located in the Executive Office of the President, plays a coordinating role for federal agencies’ climate change actions, including collecting agency adaptation plans and ensuring implementation of President Obama’s Executive Order 13653 (establishing a State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience). The recommendations from the Task Force prioritize several relevant policies, including: (1) requiring consideration of climate risks and vulnerabilities in all federal programs and investments, (2) coordinating among agencies and sectors at all levels of government; and (3) acting on policies that promote both mitigation and adaptation simultaneously. These recommendations were subsequently adopted by the President, and agencies have begun mainstreaming climate change into regular programs and policies. A collaboration of 13 agencies — the Climate Change and Human Health Workgroup — coordinates federal efforts specific to climate and health taking a collaborative Health in All Policies approach. These interventions are designed to build economic, environmental, and social resilience in local communities. More interagency collaboration focusing on equity and social determinants of health helps to build public health capacity and increase community resilience.

Similar governance bodies exist at the state level. For example, Rhode Island has an Executive Climate Change Coordinating Council (EC4), originally created by executive order and then made permanent through legislation. The EC4 coordinates state-level agencies on both mitigation and adaptation and supports local government efforts, but lacks regulatory authority or full-time staff. Many states’ coordinating bodies lack legal authority and therefore rely on leadership from the governor’s office, which can change with the political cycle. Minnesota, for example, has a highly productive Interagency Climate Adaptation Team (ICAT) that could be disbanded by a future governor who was not supportive of the effort.

States like Delaware, with formal executive orders requiring climate action, may be more protected from such political changes. Delaware is currently conducting an interagency demonstration project, Climate-Ready Workforce, focused on the health of state employees who work outdoors. By involving multiple agencies to work on reducing public health risks, the project should inspire broader action and coordination on health and climate change.

**Suggested Approach**

Many of the approaches to greenhouse gas mitigation have attendant health co-benefits. California provides an example of how using climate change as an organizing principle for public health policy can be put into practice. California’s mitigation statute requires policy makers to consider public health co-benefits. In addition, California has required policy makers to direct funds from greenhouse gas mitigation efforts to directly benefit disadvantaged communities in the state.

Given the intersection of many of the issues associated with climate change and health, practitioners must also break down disciplinary and departmental silos that separate different sectors and restrict coordinated responses that bring public health to the fore, and integrate climate change into everyday processes. As discussed here, creating governance structures within federal, state, and local governments that serve as coordinating bodies among various stakeholders, such as the CEQ, is one such strategy. Another is to
Climate change policies, even those focused on health co-benefits, must coordinate and link adaptation and mitigation efforts to be maximally effective. Though California is attempting to address health issues and rectify environmental injustices in its mitigation policies, these approaches are not addressing many other related health issues. For example, funding in California to benefit disadvantaged communities has been used to build affordable housing. While important, this affordable housing has been built in areas with high pollution and poor air quality, only increasing exposures.

Emphasizing co-benefits, combining adaptation and mitigation efforts, and increasing interagency coordination can effectively address both public health and climate change issues. This level of coordination and organization is challenging, but the health effects of climate change are so widespread, complex, and inimical to sustained wellbeing that it is essential that climate change should be the organizing principle for public health policymaking for the foreseeable future. Making climate change one of many policy priorities is insufficient. Simply, climate resilience is public health.

It is important that policy makers address the constant and ubiquitous nature of climate change. If adaptation policy focuses only on episodic extreme events, little progress can be made on more subtle and long-lasting challenges. Adaptation policy must be expanded across all sectors of policy, and policy systems must be better coordinated.

Emphasizing co-benefits, combining adaptation and mitigation efforts, and increasing interagency coordination can effectively address both public health and climate change issues. This level of coordination and organization is challenging, but the health effects of climate change are so widespread, complex, and inimical to sustained wellbeing that it is essential that climate change should be the organizing principle for public health policymaking for the foreseeable future. Making climate change one of many policy priorities is insufficient. Simply, climate resilience is public health.

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5. See Watts et al., supra note 3.
is a collaborative approach that can relate health, equity, and sustainability across policy areas.


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Reducing Hospital Readmissions: Addressing the Impact of Food Security and Nutrition

Mathew Swinburne, Katie Garfield, and Aliza R. Wasserman

In 2015, approximately 42.2 million Americans lived in households that lacked adequate access to food due to insufficient money or other resources. Food insecurity is associated with a range of negative health outcomes. Many food insecure individuals must decide whether to spend their limited resources on medication or food. Food insecurity is also associated with increased hospital admissions and a range of health conditions including anxiety and depression, hypertension, diabetes, and obesity.

Hospital Readmission Reduction Program
As community institutions grappling with the negative health outcomes associated with food insecurity, hospitals are uniquely situated to help address this public health challenge. In addition, the Affordable Care Act (ACA) provides considerable financial incentive to do so through the Hospital Readmission Reduction Program (HRRP). This program penalizes certain hospitals for excessive readmissions of Medicare patients diagnosed with specific conditions. The HRRP was created to address issues in the quality of care that were resulting in unnecessary readmissions. For perspective, in 2011, Medicare patients represented the largest percentage of hospital readmissions at 55.9% and cost the healthcare system approximately $24 billion. According to recent data, the HRRP is working; between 2010 and 2015 monitored readmission rates dropped in every state except one. However, while improvements have been made, there is still work to be done. As a result of hospital readmissions, 2,597 hospitals will be penalized for a total of $528 million in 2017.

The HRRP incentivizes hospitals to engage in nutrition interventions through two key program elements: covered conditions and penalty calculations. Currently, the HRRP monitors Medicare readmission rates for acute myocardial infarction, heart failure, pneumonia, acute exacerbation of chronic obstructive pulmonary disease, total hip arthroplasty, total knee arthroplasty, and coronary artery bypass graft surgery. Several of the monitored conditions have nutrition-related needs in their post-discharge care. Poor adherence to a low-sodium diet is associated with increased readmission and mortality among heart failure patients. Obesity, which is linked to food insecurity, increases the need for hip and knee arthroplasty, as well as intraoperative and postoperative complications.

The HRRP’s penalty formula for excessive readmission also incentivizes hospitals to explore nutritional interventions. To determine if a hospital has experienced excessive readmission, the hospital’s 30-day readmission rate for the monitored conditions is compared to the national average. The greater the hospital’s deviation from the national average, the greater the penalty; the maximum penalty is currently a 3% reduction in Medicare payments. In an attempt to ensure that readmission penalties reflect quality of care rather than the composition of a hos-
pital's patients, the hospital's readmission rate is risk-adjusted for certain factors including patient age, gender, and the presence of comorbidities.\(^{11}\)

However, the HRRP's risk adjustment does not account for sociodemographic factors including race, education, income, and food insecurity, that can substantially affect recovery and the likelihood of readmission.\(^{12}\) Unsurprisingly, hospitals serving communities of color, individuals with lower education levels, and individuals with lower incomes are penalized at a greater rate under the HRRP.\(^{13}\) This controversial systematic flaw has not gone unnoticed. In fact, Congress has repeatedly introduced unsuccessful bills requiring the inclusion of socioeconomic status in the HRRP’s risk adjustment calculation.\(^{14}\)

However, until Congress addresses the issue, the HRRP will continue to punish certain hospitals based on the sociodemographic profile of their patients. To proactively respond to these pressures and better meet the overall health needs of their patients, hospitals can adopt interventions that address these social determinants of health including food insecurity.

**Food Insecurity and Nutrition Interventions**

An innovative set of nutrition interventions exists to address food insecurity, including healthy food prescriptions and medically tailored meals. While a range of interventions is being employed by hospitals to address food insecurity, these targeted interventions address food as medicine, by providing healthy, medically appropriate food to patients, and are a critical opportunity to prevent readmissions due to poverty.

**Healthy Food Prescriptions**

Communities around the country are working with hospitals to develop healthy food prescription programs for food insecure patients with diet-related illness. Since communication from providers is an effective strategy to promote healthy behaviors,\(^{15}\) but fresh fruits and vegetables may not be affordable for patients most in need of healthy food,\(^{16}\) programs using a prescribed healthy food benefit can help patients stay healthy and out of the hospital. Frequently beginning with a screening for food insecurity, low income, and/or diet-related disease, these programs generally include a provider referral or “prescription” for fruits and vegetables. The prescription is a voucher that can be used to pay for the produce. In addition to providing affordable produce, the programs also provide nutrition education and counseling.

Preliminary data from healthy food prescription programs indicate significant, positive impacts on low-income patient and household fruit and vegetable intake, food security, and consistency of primary care visits (compared with groups that have received only nutrition education without a voucher).\(^{17}\) Data from a pilot program in New York City indicated that 45% of low-income patients (sample includes both adult diabetic and pediatric overweight patients) decreased their body mass index, 69% increased their fruit and vegetable consumption, and 91% expressed greater satisfaction with their care as a result of the program.\(^{18}\) In a national survey conducted informally by Wholesome Wave in 2016 (n=16), nearly all programs included a significant clinical component, ranging from provider referrals and recruitment to ongoing support groups and monthly visits with a nutritionist and clinicians. Fruit and vegetable benefit types ranged from a majority using a physical prescription to others providing tokens or scrip for local farmers’ markets and still others offering produce boxes. Twelve of the programs surveyed targeted the benefit to the entire household of the index patient, to foster sustained behavior change and address household food insecurity.\(^{19}\)

One of the biggest challenges healthy food prescription programs face is scaling small pilot programs to sustainable initiatives that can support patients throughout a hospital. Hospitals play a key role in ensuring that the screening of patients for food insecurity and the referral of patients to food prescription programs is part of the standard of care for hospitalized patients. Funding these programs through community benefit resources,\(^{20}\) using existing billing structures or building a healthy food benefit into new health care payment models are cost-effective strategies hospitals can employ to direct resources towards healthy food prescriptions. In order to align hospital resources to best target food insecurity as a cause of hospital readmissions, nonprofit hospitals are using the federal Community Health Needs Assessment (CHNA) and community benefit reporting requirements\(^{21}\) to leverage efforts towards systemic level change.\(^{22}\)

**Medically Tailored Meals**

In some cases, patients with severe or chronic illness are unable to shop or cook for themselves, and therefore require more intensive interventions in order to avoid malnutrition, its attendant complications, and readmissions. In order to meet the needs of these high-need, high-cost patients, hospitals can investigate opportunities to connect patients with more targeted food and nutrition services such as medically tailored meals.

Medically tailored meals are meals designed by a Registered Dietitian as part of a treatment plan for an individual with or at risk for one or more health condi-
tions. These meals are usually delivered to the home and are designed to meet the precise dietary needs of the particular patient according to his or her diagnosis. Such meals can play an important role in improving patient health outcomes and reducing costs. While malnutrition is linked to many negative health outcomes, including increased risk for hospital readmissions, initial evidence indicates that the provision of medically tailored meals to individuals with complex illness is associated with reduced hospital admissions and length of stays and greater likelihood of a patient being discharged to their home rather than to a long-term care or subacute rehabilitation facility.\textsuperscript{23}

Despite promising initial evidence regarding their impact, access to medically tailored meals remains limited in much of the country. While urban areas such as New York City, Philadelphia, Baltimore, Atlanta, Boston, and San Francisco have active medically tailored meal providers, access is more limited in rural areas. Additionally, those programs that do exist may have limited capacity due to funding constraints, as they often rely on charitable donations, grants, and funding provided by the federal Ryan White HIV/AIDS Program, which is narrowly tailored to serve individuals living with HIV. To improve program sustainability and better reach the full spectrum of patients that could benefit from their services, many meal providers are now looking to integrate into public and private health insurance programs such as Medicare Advantage Plans,\textsuperscript{24} Medicaid Managed Care Plans,\textsuperscript{25} dual eligible programs, Medicaid 1915(c) Home and Community Based Services Waiver programs, and Medicaid Section 1115 Demonstration Waiver programs,\textsuperscript{26} but coverage remains limited in many states.

As with healthy food prescriptions, hospitals can play a key role in improving access to medically tailored meals by establishing the infrastructure necessary to connect patients to meal services, where available, and supporting the creation of new funding streams that are necessary to allow the scaling of meal programs to reach additional locations and patient populations. Specifically, hospitals can partner with meal providers to fund access to medically tailored meals as part of their Community Benefit activities, work to incorporate meal benefits into emerging value-based payment models, or make the case for increased coverage of meals by local insurers. By doing so, hospitals can both advance broader systemic change to benefit the health of their patients and address the ongoing role of food insecurity in promoting hospital readmissions.

Conclusion
Food insecurity in the United States is a profound public health challenge that hospitals are uniquely situated to address. Through the enactment of the Hospital Readmission Reduction Program, the Affordable Care Act provides a strong economic incentive for hospitals to actively confront food insecurity within the communities they serve. While there is a spectrum of nutrition interventions that hospitals can look to when engaging in these efforts, healthy food prescriptions and medically tailored meals are two particularly innovative and promising approaches that could...
help hospitals reduce readmissions by addressing the nutritional needs of vulnerable patients.

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Policy Approaches to Improving Housing and Health

William C. Tilburg

Background
The United States subprime mortgage crisis (2007-2009) is widely associated with a dramatic increase in home foreclosures, declining home values, and the Great Recession. During the crisis annual foreclosure filings nearly quadrupled, median home prices dropped 13 percent, and 8.8 million Americans lost their jobs. Less well known is the impact the crisis had on physical housing conditions. From 2007 to 2011, home improvement and repair expenditures declined 28 percent for owner-occupied homes and 23 percent for rental units. This reduction in housing investment had an immediate impact on the quality of the U.S. housing stock. The number of “inadequate” housing units, classified as housing with moderate or severe physical deficiencies, increased significantly for the first time since tracking housing quality began in 1940.

Inadequate and Unhealthy Housing
The American Housing Survey (AHS), conducted biennially by the U.S. Census Bureau to evaluate the nation’s housing stock, indicates that the proportion of inadequate housing units grew from 5 to 5.5 percent during the subprime mortgage crisis. This seemingly modest increase represents an additional seven hundred thousand inadequate housing units nationwide. AHS data also show that nearly 1 in 2 homes surveyed contained at least one physical deficiency. Among the most common issues were lack of electricity, heat or running water, an inoperative toilet or shower, water leaks, and cracks in the ceiling, floors, or walls. Once the quality of the housing stock declines it is often difficult to reverse, suggesting that the long-term adequacy of these properties is uncertain absent outside help.

Tens of millions of Americans are likewise adversely impacted by “unhealthy” housing conditions. While inadequate housing relates to the structure and safety of a housing unit, unhealthy housing relates to involuntary exposure to environmental toxins, such as asbestos, lead, mold, and radon. Common indicators of unhealthy housing include the presence of rodents or other pests, poor air or water quality, older homes containing lead-based paint, and water leaks. According to the U.S. Centers for Disease Control and Prevention (CDC), an estimated 1 in 4 households, or nearly 35 million homes, have at least one health or safety hazard and qualify as unhealthy.

Inadequate and unhealthy housing disproportionately impacts vulnerable populations, including, ethnic and racial minorities, persons with disabilities, and low-income households. Non-Hispanic black households have the highest likelihood of living in unhealthy housing (28.3 percent), and are more than twice as likely as white, non-Hispanic households to live in inadequate housing (9.0 to 4.1 percent). Persons with a disability are 1.4 times more likely than those without a disability to live in poor housing conditions. Households earning less than $25,000 per year are more than 4 times as likely as households earning at least $75,000 per year to live in inadequate housing.

The housing and economic crises impacted low-income households more than any other group. Declining annual incomes and rising foreclosures forced a growing number of low-income households into an already oversaturated rental market. From 2000 to
2013 the number of extremely low-income households — those earning 30 percent or less of the area median income — increased by 38 percent.6 Extremely low-income and low-income households also became far more likely to rent and be cost-burdened (e.g., annual housing costs exceed 30 percent of household income) by the costs associated with renting. With 1 million new renters entering the market each year during the housing crisis, the number of affordable housing vacancies plummeted. By 2010, a record 50 percent of renter households in the United States were cost-burdened, with 28 percent spending more than half of their income on housing associated costs.7

Household hazards adversely affect the health and safety of millions of Americans. The housing crisis and economic recession exacerbated longstanding housing quality issues by reducing housing investments and forcing many Americans out of their homes and jobs, and into substandard housing. While federal programs attempt to address a wide range of these health and safety risks, resources are often scarce and difficult to secure. This article highlights three low-cost measures communities and property owners may take to reduce exposure to household hazards and improve overall housing quality.

This inability to find adequate affordable housing units has pushed many low-income households into substandard and unhealthy housing, which in turn adversely impacts resident health and safety. Exposure to household hazards is associated with a wide range of illnesses and injuries, including asthma, cancer, falls, respiratory infections, and mental health issues. For instance, exposure to high levels of lead, primarily through lead-based paint and lead contaminated drinking water, is associated with hyperactivity, hearing and vision problems, impaired brain development in children, coma, and even death. Today, an estimated 24 million homes have deteriorated lead-based paint and elevated levels of lead-contaminated dust; 4 million of these households have young children, and at least 500,000 children under the age of 5 have elevated blood lead levels.8

Lead poisoning is one of many health risks facing those living in inadequate and unhealthy housing. More than 40 percent of the estimated 8.7 million childhood asthma cases in the United States are attributable to residential exposures. Household falls and other injuries account for 4 million emergency room visits and 70,000 hospital admissions each year.

The U.S. Environmental Protection Agency estimates that 21,000 lung cancer deaths per year — or 1 in 7 lung cancer deaths in the United States — are associated with exposure to radon.9

Household hazards adversely affect the health and safety of millions of Americans. The housing crisis and economic recession exacerbated longstanding housing quality issues by reducing housing investments and forcing many Americans out of their homes and jobs, and into substandard housing. While federal programs attempt to address a wide range of these health and safety risks, resources are often scarce and difficult to secure. This article highlights three low-cost measures communities and property owners may take to reduce exposure to household hazards and improve overall housing quality.

Healthy and Safe Housing Interventions
Rental Property Registration
On average, rental housing is older and less well maintained compared to owner-occupied properties. While most communities maintain housing codes establishing minimum health and safety standards, most enforcement is complaint-based, meaning residents must file a complaint in order to initiate a compliance inspection. Complaint-based enforcement programs are problematic because many tenants are unaware of their right to safe and habitable housing or afraid of landlord retaliation.

To combat poor housing conditions, many communities require rental property owners to register their properties. Registration programs help ensure rental housing is safe and meets minimum housing standards by identifying all rental properties in the area and establishing periodic housing inspections. Communities often conduct housing inspections upon a change of ownership or tenancy, or inspect all proper-
ties within a specified time period (e.g., every 5 or 10 years). Properties that fail inspection typically must remediate the health or safety issue, pay a penalty, or both. Modest annual fees may be assessed to cover the costs associated with administering the program.\(^\text{10}\)

Maryland significantly reduced childhood lead poisoning by implementing rental property registration. The “Lead Law” requires all rental properties built prior to 1978 to register with the Department of the Environment, pay an annual $30 fee, and pass a lead-contamination test at each change of occupancy in a unit.\(^\text{11}\) In addition, if any tenant under 6 years of age has an elevated blood lead level, the property owner must relocate all tenants until the property is certified lead-free. The program, first enacted in the mid-1990s and greatly expanded in 2015, reduced the number of Maryland children with elevated blood lead levels from 11,000 per year to less than 400 per year.\(^\text{12}\)

**Health Impact Assessments**

For decades federal and state governments have used environmental assessments to determine the effect major policies and projects will have on the human environment and reduce this impact where feasible. Health impact assessments (HIAs) seek to do much the same for population health, evaluating the potential health impacts of a proposed project and providing evidence-based recommendations to minimize these risks. Increasingly, communities utilize HIAs to assess the effect policies and projects will have on housing quality and affordability. While HIAs can take several months or longer, streamlined assessments can be completed by governments and businesses alike in weeks and utilizing limited resources.\(^\text{13}\)

HIAs can protect and promote population health and mitigate adverse health impacts on the community. Health assessments also foster collaboration among public and private stakeholders, inform policymakers about health issues, and enhance community engagement and decision-making. The use of HIAs has grown considerably in recent years, particularly to evaluate the impact of various policies and programs on housing. In Georgia, health assessments were used to incorporate healthy and affordable housing development into the State’s low-income housing tax credit plan.\(^\text{14}\) Portland, Oregon examined the comparative health effects associated with complaint-based and proactive housing inspection programs.\(^\text{15}\) Other states and municipalities have also used HIAs to assess housing affordability, rental assistance programs, building code enforcement, and efficient energy programs. By examining the health effects of projects during the planning stage, communities can avoid displacing or otherwise adversely impacting vulnerable groups, and thereby protect existing low-income housing properties and promote the development of new affordable and healthy housing projects.

**Smoke-Free Multiunit Housing**

Smoking continues to be the leading cause of preventable death in the United States, killing an estimated 480,000 Americans each year, including 42,000 nonsmokers. Exposure to secondhand smoke also increases nonsmokers’ risks of asthma, respiratory infection, cardiovascular disease, stroke, and cancer. While state and local laws restricting indoor smoking in bars, restaurants, and other workplaces have significantly decreased secondhand smoke exposure, an estimated 60 million nonsmokers are still exposed to tobacco smoke. In addition, 40 percent of children ages 3 to 11, including 70 percent of black children, and 40 percent of all low-income individuals, continue to be regularly exposed to secondhand smoke. Much of the exposure occurs in the home, especially in multiunit housing, where 1 in 3 nonsmokers are exposed to secondhand smoke.\(^\text{16}\)

Smoke-free multiunit housing policies are becoming the industry standard, with market-rate, subsidized, and public housing properties across the country adopting policies restricting smoking in growing numbers. In November 2015, the U.S. Department of Housing and Urban Development (HUD) announced a proposed rule requiring the nation’s more than 3,100 public housing agencies (PHAs) to implement comprehensive smoke-free policies. The rule is expected to reduce secondhand smoke exposure for more than 760,000 children living in public housing and save $150 million per year in health care and maintenance costs.\(^\text{17}\) Recent peer-reviewed studies involving multiunit housing properties in Florida, Minnesota, and Oregon indicate that smoke-free policies significantly reduce indoor exposure to secondhand smoke and promote decreased smoking or cessation among residents.\(^\text{18}\) Smoke-free policies also may reduce property owner maintenance and turnover costs and increase tenant occupancy rates, helping the landlord’s bottom line.

**Conclusion**

The subprime mortgage crisis and economic recession had a profound effect on the health and safety of housing. The quality of the U.S. housing stock deteriorated and more Americans, particularly low-income renters, were forced into substandard housing units. Today, state and municipalities across the country are struggling to provide sufficient affordable and safe housing to meet the growing demand. Communities can meet this challenge head-on by implementing effective low-

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\(^{11}\) ibid., 2015, 43, issue 4, pp. 435-501.

\(^{12}\) ibid., 2015, 43, issue 4, pp. 435-501.

\(^{13}\) ibid., 2015, 43, issue 4, pp. 435-501.

\(^{14}\) ibid., 2015, 43, issue 4, pp. 435-501.

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\(^{17}\) ibid., 2015, 43, issue 4, pp. 435-501.

\(^{18}\) ibid., 2015, 43, issue 4, pp. 435-501.
cost measures to incentivize property owners to build and maintain affordable, safe, and healthy housing.

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5. Id.
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Health Care System Transformation and Integration: A Call to Action for Public Health

Lindsay F. Wiley and Gene W. Matthews

Introduction
We are on the cusp of a total rewiring of the circuitry that connects public health departments, health care providers, third-party payers, and government programs. Experts have long argued for integration of public health and health care goals.¹ Now, financial pressure to integrate is coming from both sides, creating unprecedented opportunities to serve public health goals by integrating them into financing and delivery structures within the better-resourced health care sector. But there are also challenges. The population perspective, social justice commitment, and structural interventions that characterize public health could easily be dismissed in favor of more individualistic strategies reliant on ineffective patient counseling and expensive technological solutions. In this unique moment, the health care sector is receptive to the public health perspective. Public health leaders must be ready to answer the call.

The Drivers of Integration
On the health care side, the Affordable Care Act (ACA)² and the Medicare Access and Chip Reauthorization Act (MACRA)³ are accelerating a sweeping transformation of how health care is financed and delivered. In particular, new tax and reimbursement incentives are giving hospitals and other health care providers a financial stake in patient outcomes. These reforms enjoy bipartisan support and are likely to remain in place even if other provisions of the ACA are repealed.

New Internal Revenue Service (IRS) regulations⁴ strengthen and clarify the obligations of nonprofit hospitals, which make up more than half of all hospitals in the U.S., to invest in addressing their communities’ health needs as a condition of their tax-exempt status. There are two distinct requirements. First, nonprofit hospitals must conduct community health needs assessments (CHNAs) every three years.⁵ Second, they must provide community benefits — programs and services to promote community health and access to health care — which they must report annually to the IRS using Form 990 Schedule H.⁶

Nonprofit hospitals report more than $62 billion in annual community benefit spending. To date, however, the majority of community benefit spending is dedicated to downstream interventions: financial assistance to patients (charity care) and expenditures associated with Medicaid participation (for which reimbursements are often below cost).⁷ Community building activities — including physical improvements and housing, economic development, community support, environmental improvements, and leadership development and training for community members — are permitted, but the onus is on hospitals to justify the nexus between these activities and community health.⁸ In many instances, the mandated CHNA process identifies community building needs, but the IRS has not directly linked the two requirements by asking hospitals to indicate how much of their community benefit spending addresses needs identified through the CHNA.

In addition to new IRS requirements for nonprofit hospitals, virtually all providers are increasingly dependent on outcome-based payments. Because patient outcomes are heavily influenced by social-ecological factors (such as social connectedness, stable...
housing, and access to healthy food), tying payment to patient outcomes gives health care providers a greater stake in their communities. In response, hospitals and other providers are looking upstream within their patient catchment areas to anticipate and understand community needs and risks.

Supported by MACRA, the federal Department of Health and Human Services (HHS) has committed to transitioning half of all Medicare payments from fee-for-service to quality- or value-based models — including bundled payments for episodes of care, shared savings for Accountable Care Organizations made up of hospitals and physician groups, and the Patient Centered Medical Home payment model for physicians — by the end of 2018. HHS aims to tie 90 percent of all remaining fee-for-service payments to outcome-based incentives (add-ons or deductions to all Medicare payments a provider receives), such as the Hospital Value Based Purchasing Program, the Hospital Readmissions Reduction Program, and (for physicians) the Merit-based Incentive Payment System. Similar approaches are being adopted by state Medicaid programs and private insurers.

On the public health side, local health departments are tackling increasingly complex threats with shrinking resources. While health spending is projected to grow at an average of 6 percent per annum over the next decade, the percentage allocated to public health is projected to decrease to 2.4 percent — down by a quarter from its peak in 2002. Not surprisingly, job loss at local health departments continues unabated.

Opportunities Generated by This Moment of Transformation

There are many opportunities for health care sector incentives to move the needle on community health. Whether they do will depend on alignment with public health priorities and engagement of public health leaders.

Activities addressing the social determinants of health currently represent a small proportion of community benefit spending, but that could change. The IRS has existing authority to require nonprofit hospitals to link community benefit spending to the priorities they have identified through CHNAs. Local health departments could also encourage hospitals to commit more of their community benefit dollars to upstream activities. Fortunately, new resources are available to help stakeholders tackle the social determinants of health, including the CDC’s Community Health Improvement Navigator, and a new web resource under development that will provide easy access to the community benefit financial information that hospitals report to the IRS.

Health care providers’ efforts to improve patient outcomes currently focus on individual behavior change, but they are beginning to take the next step toward community-level changes that facilitate healthy living. The patient-centered medical home, for example, is designed to coordinate care for chronic conditions and address barriers to patient adherence with provider-recommended lifestyle changes. In some cases, coordinators link patients to community resources such as subsidies for fresh produce and recreational facilities. These efforts could be boosted by linking them to community resource networks fostered by local health departments.

New outcome-based alternative payment structures could also evolve in ways that are more attuned to public health goals. Some payments are already tied to outcomes with direct public health significance, such as the percentage of eligible patients who are offered a seasonal flu vaccination and rates of preventable hospital-acquired infections. More payments could be tied to outcomes with population-level significance in coming years, particularly with respect to chronic disease prevention.

Emerging initiatives illustrate the potential of integration. In North Carolina, for example, a large hospital system that is exempt from the IRS CHNA requirement decided on its own to undertake a community health improvement process. Public health experts assisted the hospital system — which serves patients in 10 different local jurisdictions across two states — by mapping hot spots where social determinants put health at risk and helping hospital administrators reach out to local health directors. In Pennsylvania, the Governor’s Office for Health Care Reform convened the major third-party payers operating in the state to adopt incentives for statewide implementation of the patient-centered medical home model for managing diabetes. New York City’s Department of Health and Mental Hygiene uses its A1C Registry to aggregate data and connect patients and providers to community resources.

Challenges Posed by the Integration of Public Health Goals into the Health Care Sector

Fruitful integration of public health and health care goals depends on how public health leaders respond to several challenges.

After decades of health care industry dominance of the health policy agenda, the public health sector has come to undervalue itself. For several decades, high-cost technological solutions and individualistic and...
ineffective patient counseling pushed public health law and policy into dormancy.\textsuperscript{18} Local health departments became health care service providers of last resort. If those services are viewed as no longer needed in the wake of insurance coverage expansion, public health must make the case for its unique and vital role in health promotion and community development.

Providers and payers are on board with the prevention focus of public health, but they do not share its population perspective.\textsuperscript{19} Rather, they are steeped in the process of improving health one patient at a time and controlling costs one insured individual at a time. When providers and payers talk about populations, they are talking about the patient populations assigned to them for a year. They have a lot of incentive to pick the cherries and drop the lemons. Public health authorities’ obligation is to the public as a whole over the full life course; they do not get to choose whom to serve and whom to steer clear of. To the contrary, public health goals often require prioritizing the needs of people whose health, race, and socioeconomic status make them particularly vulnerable.

When providers and payers focus on prevention, they are still operating downstream\textsuperscript{20} — targeting individuals who are high risk because they have already developed markers of cardiovascular disease, for example. The whole notion of outcome-based payment puts a lot of faith in what providers can do to achieve good outcomes. This faith may be misplaced. Especially when it comes to non-communicable diseases associated with tobacco use, alcohol use, poor nutrition, and physical inactivity, providers rely heavily on individual patient education. Similarly, payers offer the individuals they insure financial incentives to attend behavior change programs instead of advocating for environmental changes to workplaces and communities. This approach, which puts the onus on the individual to adopt healthier behaviors without changing the context to facilitate those behaviors, is largely ineffective compared to the structural, social-ecological approaches endorsed by most public health experts.

Although HHS and private insurers are moving toward outcome-based payment, older payment structures that reward technological solutions are still highly influential. Providers are conditioned to rely on the latest (often expensive) technology instead of working with patients and community members to achieve structural and social change to improve health. The predisposition of health care providers and payers is further fostered by deep cultural biases and the influence of industries harmful to the public’s health, both of which favor individualistic, downstream, behavioral, and technological solutions to health risks.

Integration of population health goals into the organization of health care delivery and financing cannot and should not be left to health care administrators alone. Social determinants of health, upstream prevention, and population health have only recently become watchwords in the health care sector; they have been the wheelhouse of public health experts for decades. Furthermore, local health departments have a powerful forum to connect with communities about the issues people care about. Few things are more politically potent than an enraged local health director with a good sound bite about how government failures are harming children and families.

Conclusion: A Call for Public Health Leadership and Dialogue

Health care providers and third-party payers have powerful incentives to reduce the costs of illness and injury; the question is how they will respond to those incentives. To date, the integration process has been driven primarily by the health care sector. What role should public health play? What strategies can public health leaders use to ensure that their unique perspective is heard by health care administrators? What skills do public health leaders require to engage in dialogue with the health care sector and how can public health education support those skills? Are there examples that can be drawn on to develop a set of best practices for engagement with the health care sector? What about the role of public health lawyers specifically? We raise these questions to start a dialogue within the public health community.

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and should not be left to health care administrators alone. Social determinants of health, upstream prevention, and population health have only recently become watchwords in the health care sector; they have been the wheelhouse of public health experts for decades. Furthermore, local health departments have a powerful forum to connect with communities about the issues people care about. Few things are more politically potent than an enraged local health director with a good sound bite about how government failures are harming children and families.

Public health lawyers are well positioned to play a role in integration. They have the expertise to guide health departments and hospitals as they seek to understand and implement evolving tax policy and payment incentive requirements. Lawyers are trained in the painstakingly rigorous analysis of language. They can identify and clearly define how terms like “population health,” “community health,” “preventable,” and “social determinants” are being used and modified as they are integrated into tax and payment structures. They can assist with the legal aspects of creating new backbone organizations to support stakeholder collaborations without running afoul of complex antitrust and fraud and abuse regulations. More broadly, they are well suited to assist with policy development. The marriage of evidence and political savvy in the context of mutual self-interest makes for a robust conversation that cannot happen unless public health leaders bring their A game.

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Background Checks for all Gun Buyers and Gun Violence Restraining Orders: State Efforts to Keep Guns from High-Risk Persons

Jon S. Vernick, Ted Alcorn, and Joshua Horwitz

Introduction
Despite an upsurge of public interest in gun violence prevention since the Newtown shooting, the U.S. Congress has been unable to overcome resistance by a vocal minority to enact new gun laws. And more than 40 states have laws that specifically forbid cities from enacting at least some types of local public safety ordinances relating to firearms. As a result, states have become the primary engines of change for firearm policy.

In particular, state legislation poses opportunities for making it more difficult for high-risk persons to purchase or possess firearms. Newly enacted legislation of this type includes laws requiring background checks on all gun sales, including guns sold by unlicensed sellers, as well as innovative efforts to temporarily remove guns from persons who pose a danger to themselves or others through gun violence restraining orders.

Under federal law, anyone who buys a gun from a licensed firearm dealer must undergo an instant criminal background check. The check is designed to determine if the prospective buyer fits any criteria that prohibit purchase or possession of firearms, including a prior felony conviction, certain domestic violence misdemeanors, unlawful use of controlled substances, or, inter alia, commitment to a mental institution.

However, federal law does not require a background check when a gun is purchased from someone who is not a licensed gun dealer. People prohibited from purchasing firearms may not legally acquire guns under any circumstances, but when no check is required to verify their status, there is nothing to enforce the prohibition.

The Riskiness of Unlicensed Online Sales
Since 1994, prohibited people have attempted to purchase firearms from licensed dealers nearly three million times but were stopped by background checks. In light of this, common sense suggests that offering these persons an alternative method to buy firearms without background checks will pose an elevated risk to public safety. A variety of data corroborate this.

Just as commerce in many consumer goods has moved online, there is now a thriving trade in firearms conducted on thousands of websites, much of it between unlicensed sellers. In a series of investigations of online gun markets, including Armslist.com, one of the largest online gun markets with over half a million unique gun ads listed by unlicensed sellers each year, Everytown for Gun Safety showed that between four and ten percent of would-be online buyers are prohibited by federal or state law from possessing firearms due to prior felony or domestic violence convictions or active domestic violence restraining orders, but were shopping for guns anyway. That share is four to fifteen times higher than the share of prohibited buyers blocked by the background check system at licensed dealers in the states examined.

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Background Check and Permit-to-Purchase Laws

Currently 18 U.S. states go beyond federal law and require a background check for all handgun sales, whether from a licensed dealer or unlicensed seller. These laws fit into two main groups (see Figure 1). Ten states require prospective buyers to first obtain a license or permit prior to initiating a purchase, whether at a gun store or show or elsewhere, and a background check is required to obtain the permit. The permit must be periodically renewed, with the duration varying from state to state. Some permit-to-purchase states also give the license issuer the authority to deny permits to people who may pose a threat to public safety, even if they do not fit into a specified category. For example, in New Jersey authorities may deny a permit to one who is not “of good character and good repute in the community in which he lives.”6

Eight states require background checks for all handgun transfers at the point-of-sale without a permitting system. In these states, unlicensed sellers must conduct background checks on potential buyers with the help of a third party. Typically a licensed dealer or the local police conduct the check on behalf of the unlicensed seller. (One state, Nebraska, may fit into either the permit category or the background check without a permit category, depending on how the law is interpreted.)

States with laws requiring background checks of all buyers are unevenly distributed throughout the U.S., with a greater density of these laws in the northeast and western states. That geographic distribution became even more skewed in 2007 when Missouri repealed its longstanding permit-to-purchase law. An evaluation of Missouri’s repeal showed that it was associated with a 25% increase in annual firearm homicides, or an additional 68 homicides per year through 2010. These changes occurred at the same time that the national firearm homicide rate declined 5.5% and the rate in the eight states bordering Missouri fell 2.2%. Missouri’s repeal was not, however, associated with any change in homicides committed with other weapons (or no weapon). This is important because if such a change had been observed, one might suspect that some other factor, other than the repeal, was affecting homicide rates.7

Connecticut is one of the newest states to enact a permit-to-purchase law, in 1995. An evaluation using somewhat different methods than the Missouri study indicated that enactment of Connecticut’s law was associated with a 40% reduction in the firearm homicide rate through 2005, with no effect on non-firearm homicides.8

One mechanism by which background checks may affect homicide rates is through their effect on interstate gun trafficking. An analysis of ATF data showed that states that do not require background checks for all handgun sales via a permit-to-purchase law are three times more likely to “export” crime guns (i.e., be the source state of guns later recovered and traced by the police) than states that do.9

Gun purchase laws also affect rates of violence beyond homicides. Most deaths by gunfire in the U.S. are suicides. Research found a 15.4% reduction in firearm suicide rate associated with Connecticut’s enactment of a permit-to-purchase law, and a 16.1% increase in firearm suicide rate following Missouri’s repeal.10

Figure 1

U.S. States in Which a Background Check of All Handgun Buyers (a Universal Background Check) Is Required as of September 1, 2016

Legend
- No UBC
- UBC with License
- UBC without License

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Background Check Laws and Behavior Change
The crucial contribution that background checks make to public safety and health plays out across the country as people prohibited from purchasing firearms, who would have failed background checks at licensed gun dealers, are nevertheless able to buy firearms from unlicensed sellers and then perpetrate crimes. Colorado's recent enactment of a state background check requirement provides a case study of how legislative change can affect population behavior in ways that help safeguard public health.

Colorado has required background checks for sales by unlicensed sellers at gun shows since 2000 (gun sellers elsewhere could voluntarily request their buyer undergo a background check but were not required to do so). In 2013, the state's legislators passed HB 1229, extending the background check requirement to all unlicensed sellers, with some exceptions including gifts to immediate family members and some types of temporary transfers.

The Colorado Bureau of Investigation (CBI) conducts background checks of would-be gun buyers in the state. Would-be gun buyers who are denied may appeal the finding, and CBI resolves these cases within 30 days. On a monthly basis, CBI publishes the number of gun sales by licensed gun dealers and by unlicensed sellers that were approved or denied. CBI has also intermittently issued data separating sales from unlicensed sellers that occurred at gun shows from those that did not, and to reflect denials that were appealed and ultimately reversed.

These data show that the expansion of the state's background check system has made it more difficult for some high-risk people to acquire guns. In the first two years after passage of HB 1229, CBI conducted 29,634 background checks for unlicensed sales of firearms. Over that period, 393 sales from unlicensed sellers were denied and upheld, including to people convicted of assault or sexual assault, people under restraining orders, and people prohibited due to mental illness or mental impairment. The number of checks conducted for unlicensed sales has increased since the law's passage.

The data also demonstrate the specific changes wrought in gun seller behavior. At the time of passage of the law, even during a period of record-high gun sales, CBI conducted few checks for sales by unlicensed sellers outside of gun shows. But since enactment, the number has steadily increased, and by June 2015, background checks conducted for unlicensed transfers at sites other than gun shows outnumbered those at gun shows seven to one (Figure 2). This suggests unlicensed sellers increasingly require background checks of their buyers before completing their sales.

Gun Violence Restraining Orders
The gun violence restraining order (GVRO) is an evidence-based policy that complements policies such as background checks for all gun buyers. GVROs give law enforcement and families the authority they need to petition a court and temporarily remove firearms from an individual who presents a danger to himself or to others during times of crisis, regardless of whether that person has been diagnosed with a mental illness.

Additionally, the GVRO temporarily prevents these individuals from purchasing new firearms and ammunition during the time that the order is in effect. By targeting high-risk individuals on the basis of behavior indicating they are a danger to themselves or others, regardless of a mental illness diagnosis,
the GVRO can reduce gun violence without promulgating the false narrative that mental illness itself is the root cause of gun violence.

In March of 2013, a group of researchers, public and mental health practitioners, and gun violence prevention advocates met to discuss the scientific evidence and identify areas of consensus at the intersection of mental illness, gun violence, and policy. This group, now known as the Consortium for Risk-Based Firearm Policy (Consortium), agreed on one guiding principle: while restricting firearm access on the basis of certain dangerous behaviors is supported by the evidence, restricting access on the basis of mental illness diagnoses alone is not. The Consortium reviewed evidence that the vast majority of people with mental illness are never violent, and only 4% of interpersonal violence is attributable to mental illness alone.

The GVRO, as fully conceived by the Consortium, is a civil order modeled on the well-established system of domestic violence restraining orders that allows law enforcement and families to intervene before an act of violence occurs. In 2014, California enacted a GVRO law that allows both family members and law enforcement to petition for orders. Indiana and Connecticut have GVRO-type laws that are limited to law enforcement petitioners.

Data are emerging about the effectiveness of GVRO-type laws. An evaluation of the first 14 years (1999-2013) of Connecticut’s risk-warrant law shows that there were 762 risk-warrants issued, with significantly more widespread use after the 2007 mass shooting at Virginia Tech. In nearly all cases (99%), police found and removed firearms when they conducted a search, with an average of seven guns removed per subject. When information was available, the majority of cases (61%) listed suicidality or self-injury as a concern. Despite the documented elevated risk of self-harm, most risk-warrant subjects (88%) did not have contact with the public behavioral health system in the year before the risk-warrant was served. However, in the year following gun removal, nearly one-third (29%) of risk-warrant subjects received treatment in the state system, indicating that the risk-warrant provided an entryway to critically needed mental health and substance use related services. Notably, the study estimated there was one averted suicide for every 10 to 20 gun removals — saving 38 to 76 lives over the period of study.

Other states are currently considering enacting their own GVRO-type laws. The GVRO policy fills an important gap in current state laws by preventing violent acts through the temporary removal of firearms from individuals in crisis who present a danger to themselves or to public safety. Moreover, data from Connecticut demonstrate that the GVRO can be a vehicle for individuals to get the healthcare they need.

**Conclusion**

Keeping guns from high-risk persons is a proven violence prevention strategy. With more than 36,000 gun deaths in the U.S. in 2015 alone, additional legal innovation as well as political will to act are needed.

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