restricted provider networks, has passed the Democratic-controlled Assembly three years in a row and is one vote short of a majority in the Republican-led Senate. Gottfried also explains that the New York bill has integrated the causes of the setbacks that single-payer plans have met in Vermont, Colorado, and California.

Bob Moffit (p. 453), from the conservative Heritage Foundation, disagrees that badly designed tax rates, inferior public relations, or insufficient campaign spending caused the single-payer plan collapses in Vermont, Colorado, and California. Citizens in those three states were concerned by increasing taxes, costs outrunning projected revenues, and losses of private health plans, including their employer coverage.

Gottfried and Moffit, however, are both in favor of states being free to experiment with health policy. According to Gottfried, "The states have always been 'the laboratories of democracy' and New York has led on many issues that once seemed out of reach."(p453) Moffit says, "If 'Blue' states like New York wish to enact a 'single payer' system, they are free to do so. If Congress liberalizes current law, 'Red' states should also be able to experiment in health policy. One caveat should apply to both: federal taxpayers should not be forced to bail out failure."(p454)

INSTITUTIONAL RACISM

Mary Bassett, Health Commissioner, and Jasmine Graves (p. 457), both from the New York City Department of Health, assert that all US state and nonstate institutions have public health policies and practices that discriminate on the basis of race. This institutional racism draws upon racist theories claiming some biological or behavioral inferiority of non-Whites. Racist institutions characteristically vituperate people, not policy. Acknowledging the impact of racism on health is a necessary step toward an antiracist practice of public health.

Pete Kirkham (p. 458), former executive director of the National Republican Congressional Committee, agrees that institutions, programs, and outcomes reflect the racial bias existing in our society, but cautions that it cannot be that all US public institutions and government programs are racist. The full story must include adequacy aspects related to financial, professional, economical, procedural, and competency factors. A nuanced approach to bias is more likely to bring people together to enact durable and effective solutions.

THE PUBLIC HEALTH DIALOGUE

This set of points and counterpoints has begun a public health dialogue among experts with contrasting opinions on important issues that are rarely discussed directly between opposing sides. The authors are highly qualified to address the issue(s) they agreed to discuss. Their opinions are shared by millions of people and will be considered by millions of people. These opinions are not entirely reconcilable, but the dialogue enriches our vision of the diversity of contemporary opinion and helps us understand where more research is needed. Some topics, such as racism (covered in this issue), gun control, reproductive rights, and sexual identity and orientation (my attempts to cover these questions have not been successful yet), are very sensitive; dialoguing about them is courageous.

Most readers will side with one or the other author, and counterarguments about facts or ideas will come to mind. Let us explore these divergences on the basis of evidence and history. If any ideas or statements sound inaccurate, the role of the *Journal* is to show it in substantial research articles, commentaries, and analytic essays. AJPH

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Probing Beyond Individual Factors to Understand Influenza and Pneumococcal Vaccine Uptake

See also Hughes et al., p. 517.

In a spring 2017 lecture at the University of Maryland, Anthony Fauci, director of the National Institutes of Health's National Institute of Allergy and Infectious Diseases, described pandemic influenza as what keeps him awake at night. Today, the possibility of a novel influenza virus with a high attack rate remains one of public health's greatest concerns.

Even without a pandemic, Iuliano et al. recently estimated that influenza kills 291 000 to 646 000 people globally in a year.[1] In the United States, during an average flu season, the Centers for Disease Control and Prevention estimates the disease burden to range between 9.2 and 60.8 million cases annually, with between 140 000 and 710 000 adults hospitalized with influenza-related complications (http://bit.ly/2hr9YbP). Influenza-related mortality is responsible for 12 000 to 56 000 deaths per year, the majority (64%) among adults aged 65 years and older, with higher age-adjusted influenza mortality rates for African Americans than for Whites.[2] Although the Advisory Committee on

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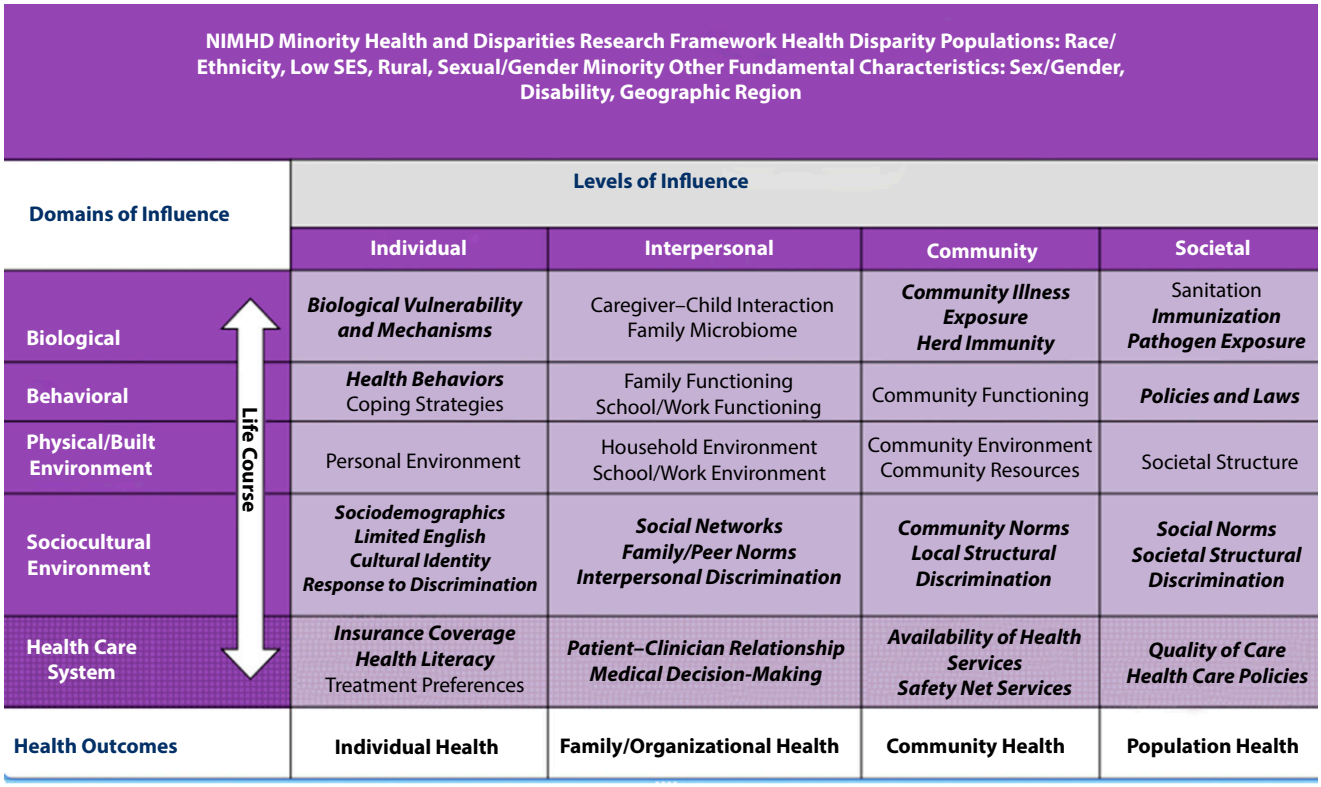

Note. NIMHD = National Institute on Minority Health and Health Disparities; SES = socioeconomic status. Factors that are relevant to vaccination are bolded and italicized.
Source. National Institute on Minority Health and Health Disparities (http://bit.ly/2DZB0Fb).

FIGURE 1—Minority Health and Health Disparities Research Framework

Immunization Practices at the Centers for Disease Control and Prevention recommends annual immunization against influenza for all adults, with a Healthy People 2020 goal of 70% uptake, significant disparities by race, ethnicity, and income exist today, causing unnecessary illness and death.[3,4]

WORRISOME DISPARITIES

Disparities extend to uptake of pneumococcal vaccination, with the percentage of adults aged 65 years and older by race and ethnicity who have ever received a pneumococcal vaccination at 47.8% for Hispanics, 55.2% for Blacks, and 71.0% for Whites.[5] Of the three groups, White adults were more likely to have ever received a pneumococcal vaccination than Black and Hispanic adults.[5]

There is no question that worrisome disparities in flu and pneumococcal vaccination rates persist over time, yet there has been limited research to examine this at the neighborhood level. However, the welcome news is that there is increasing interest in the social determinants of influenza and vaccination that will enable researchers to move beyond individual attitudes and behaviors and explore neighborhood and community characteristics, workplace and social policies, and systemic factors.

Early in 2017, the National Institute of Minority Health and Health Disparities released its Minority Health and Health Disparities Research Framework, calling on researchers to investigate health disparities through examining complex interactions among individual, interpersonal, community, and societal levels with specific domains from biological, behavioral, physical or built environment, sociocultural environment, and health care systems (http://bit.ly/2DZB0Fb). This framework (Figure 1) can inform research on influenza and pneumococcal vaccination disparities, providing a depth of understanding that is often missing from the literature.

In this issue of *AJPH*, the article by Hughes et al. (p. 517) is unique in that it provides an opportunity to look at local neighborhood vaccination rates. One of the interesting facets of the study was their ability to examine differences between Hispanic populations, comparing Puerto Ricans to Mexicans in Chicago, Illinois; too frequently, other research fails to explore within-group differences that can be meaningful. The authors found distinct differences in several areas including lack of awareness of vaccine recommendations, perceived disease risk and vaccine safety concerns, vaccine receipt, the impact of insurance status, and acculturation. Acculturation emerged as an interesting variable with increasing acculturation associated with decreasing flu vaccination.

Although much of the literature on adult vaccine disparities has focused thus far on African Americans, there is emerging scholarship that examines the barriers to immunization, including health care access and lack of insurance, acculturation, country of nativity, and immigration status. The findings presented here for the two largest Hispanic groups speaks to the importance of "breaking down the monolith" to understand within-group differences, which will ultimately contribute to the ability to more effectively target and tailor interventions.

NUANCED DIFFERENCES

I applaud the authors' example of two distinct Hispanic subgroups and different neighborhoods. In future research, I would argue that a more nuanced study of differences between Hispanics, and indeed between neighborhoods, could foster a more complete understanding of living and working environments. During the H1N1 pandemic, our research included the first empirical test of the conceptual model by Blumenshine et al. of disparities in a pandemic, which examined disparities in exposure, susceptibility to complications, and access to care.[6] Our research demonstrated that Hispanic adults—English-speaking but particularly Spanish-speaking Hispanics—were much more likely to be exposed to influenza, because, in part, of housing factors including living in an apartment building, having a larger household size, and having less access to care. Indeed, our research team estimated that, combined with undervaccination, this resulted in 1.2 million additional cases of H1N1 among Hispanics.[7] This Chicago study and our previous work points to the importance of research at the community, neighborhood, and societal levels, and recognizing how the complex interactions of factors can differentially affect subpopulations.

Interestingly, the study's primary results focus more on intrapersonal factors such as trust, perceived risk, and concerns about vaccine safety, and less so on the impact of access to care, which clearly emerged as more important in the context of pneumococcal vaccination. These results are important for tailoring health communication about these vaccines. In future research, there may be an opportunity to explore other potential differences within and between these neighborhoods that could have an impact on vaccine uptake, including prevalence of chronic health conditions in these neighborhoods. Given what we know about racial, ethnic, and income disparities in chronic conditions and the recommendation that populations at high risk receive an annual flu vaccination, the potential inclusion of this issue in future research would reflect the National Institute of Minority Health and Health Disparities framework's biological domain, individual biological vulnerability and mechanisms, and specific facets of the health care domain. The authors' finding that access to health care was associated with pneumococcal vaccination rates is an important one. In addition to identifying insurance and actual health care facilities, future research could include whether patients received a recommendation and an offer of the vaccine at their provider visit, thereby bridging the interaction between interpersonal interactions and the health care domain.

MULTILEVEL INTERVENTIONS

This study provides a stimulus for other localities to consider local-level research on vaccination disparities. However, to fully realize the potential for changes in local public health and health care practices and policies, future studies, explicitly focused on adult vaccination, would benefit from an in-depth examination of intrapersonal, interpersonal, community, and societal factors that influence vaccine decision-making. When research can reflect the complex interaction of the multiple drivers of disparities, public health agencies, health care providers, community organizations, and policymakers will have the data to pursue the types of multilevel interventions necessary to eliminate disparities in vaccine uptake. AJPH

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