

► **DirectTalk** MUSINGS FROM THE 10TH FLOOR



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## Environmental Health 2.0

**I**t's about improving environmental health, not about the environmental health profession

It's about health, not health care

It's about population health, not population medicine

It's about interoperability and integration, not programmatic excellence

It's about blurring the lines between the health professions, not drawing clean distinctions

*Environmental health 2.0, it's about progress, not process*

In late 2015 the U.S. Department of Health and Human Services released a report containing mind-numbing figures. For fiscal year 2014, 17.5% of gross domestic product was spent on health care; that's \$3 trillion, or roughly \$9,500 for every man, woman, and child. Each U.S. citizen has a vested interest in getting these expenditures under control. According to the Centers for Disease Control and Prevention, only 2.5% of that astonishing figure is invested in public health and prevention. At the same time, the health status of the U.S. population has languished. *E. coli* and noroviruses are daily news. The U.S. suffers from 20 million foodborne illnesses a year; globally, the number approaches 550 million with an estimated 230,000 deaths, mostly among children younger than five.

*Environmental health is a best buy for the nation. We save lives, save money, and protect the nation's future.*

Here in the U.S. about 13% of the total burden of disease is attributable to the environment. That translates to 400,000 deaths and almost six million disability-adjusted life years lost each and every year. Leading the way is cardiovascular disease, in which air quality plays a major role. Neuropsychiatric disorders (think heavy metals such as lead) represent \$4.3 billion in lost productivity among the exposed. The bronze medal goes to cancer; about 6% of all cancers are reportedly related to occupational and environmental exposures.

Ignoring the environment comes at a great cost to society. Environmental health professionals have an important, and in my estimation, growing role to play in the future of health at large. The critical nexus in our professional journey is the public health–health care interface. We are now entering an era where the traditional models of excellence are no longer

sufficient, and we need to rethink our manner of conducting business, which will drive us to become more conversant and familiar with our colleagues in the clinical professions, who control 97.5% of health resources.

A case in point is the 2012 Institute of Medicine (IOM) report, *Primary Care and Public Health: Exploring Integration to Improve Population Health*. This seminal document outlines five principles to help primary care and environmental health professionals, like us, to work together to reduce the costs and burden of disease I outlined earlier. The five principles include the following:

- A shared goal of population health
- Aligned leadership
- Community engagement
- Sharing and collaborative use of data and analysis
- Sustainability

What does this mean to us? We need to increasingly see ourselves as part of a larger health continuum and commit to working more effectively with our clinical counterparts. Refer to Figure 1 on page 61 as taken from the IOM report. Where along the continuum of integration with the clinical field do you see your role, independent of whether you are in the public or private sector? Are your activities isolated from the curative health care apparatus? Thinking broadly, that apparatus could be under the guise of human resources, employee benefit support systems, or the company physician or nurse. Alternately, in traditional governmental organizations, our counterparts might be the women,

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infants, and children clinics, federally-qualified health centers, or public hospitals. While no one is suggesting environmental health should merge with clinical medicine, we should continuously endeavor to consciously move our efforts to the right side of the figure, in a manner in which we are considered a meaningful partner with those in the clinical professions. This will take vision, planning, and plenty of patience.

I believe each of us aspire to the shared goal of improved population health, and in a perfect world would like to contribute to something larger than ourselves. The primary care public health integration conversation is an ideal place to start. Recall that under the social determinants of health model, 80% of a person's health status is unrelated to clinical care. That means environmental health professionals have an important role in the health of the nation. Listen, environmental health is a best buy for the nation. We save lives, save money, and protect the nation's future. When environmental health professionals work with physicians, nurses, and mental health professionals, the nation wins.

When I think about the challenges in the news, e.g., lead in water in Flint, Michigan, *Legionella* in New York commercial buildings, norovirus in retail food, and extensively drug-resistant tuberculosis, I see abundant opportunities for us to reintroduce ourselves and the value we bring to clinical decision making. There is no end to what we can accomplish if we blur the distinction between the work we do and the work of other health professionals. We are pre-poised to be a *force*

FIGURE 1

### Primary Care Public Health Integration Continuum



Figure reprinted with permission from *Primary Care and Public Health: Exploring Integration to Improve Population Health* (2012) by the National Academy of Sciences, courtesy of the National Academies Press, Washington, DC.

*majeure* in the health professions through the creation and delivery of solutions in ensuring every American reaches their full potential. In that journey we'll need to carefully articulate how people will be healthier because of our efforts and couple data with stories that illustrate our impact.

For my part I will be speaking publicly throughout the nation in 2016 on the increasingly important contributions you make to the health of the nation. I have accepted invitations to speak to physician's groups to raise awareness about us. I intend to illustrate our future roles in community health needs assessments, community health improvement plans, patient-centered medical homes, community health centers, and many other elements of the emerging health landscape.

I'd like to end with a quote from my friend Lloyd Michener, MD, of Duke University. Lloyd is professor and chairman at Duke Community and Family Medicine and director of the Duke Center for Community Research. "As primary care and public health

learn to work together, both are rediscovering the importance of the environment. Whether it's mold in housing projects, contaminants in soil, or air and water pollution, medical groups, working with public health, are finding that some health problems can be solved with less attention to medication, and more attention to the environment." Dr. Michener gets it. As a national public health influencer, he is an important ally in our efforts to be increasingly seen as important contributors to the health of American families.

In summary, environmental health 2.0 is about progress, not process. It's about the space between the professions; that's where meaningful progress will be made in our journey to be the healthiest nation on earth.

If you'd like to learn more about primary care-public health integration, I encourage you to visit [www.practicalplaybook.org](http://www.practicalplaybook.org). 🐼

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