

From the President's Desk: Our role in population health, 4/16



Richard C. Friedberg, MD, PhD

April 2016—In late January, I represented the CAP at MEDLAB, the medical laboratory conference and exhibition held each year in Dubai, United Arab Emirates. MEDLAB was held in conjunction with Arab Health, a multidisciplinary conference attended by more than 130,000 people from 163 countries. I was asked to present six separate talks in Dubai; the one on precision medicine in pathology drew more than 1,200 attendees.

The CAP booth had a steady stream of visitors. CAP accreditation and proficiency testing are the gold standard worldwide, and many of those we met were intent on finding ways to boost their menu of sophisticated laboratory services. The CAP is held in high regard in the Middle East, as was immediately evident upon arrival in the Dubai airport, where I was impressed to see the “CAP Accredited” checkmark displayed prominently on a massive billboard sponsored by one of our customers for all international visitors to see.

In settings like MEDLAB, one can learn a great deal from spontaneous encounters with colleagues. While we knew that pathologists were scarce in many parts of the world, for example, conversations with pathologists from impoverished countries provided an unsettling picture of what that can mean. Personal accounts of deaths caused by diseases that are readily managed in the United States provide sound humanitarian reasons for us to be involved in global health initiatives.

There are also practical and scientific reasons to embrace global health. Expanding international travel and trade continue to shrink the globe. Zoonotic pathogens such as Zika, Ebola, dengue, chik-ungunya, SARS, and West Nile encephalitis may not be new in the animal kingdom but they are becoming increasingly prominent causes of morbidity and mortality among humans. Medical personnel need to investigate these agents if we are to identify them properly, evaluate the risk to patients, and limit the potential for harm. Which is what pathologists do.

These agents can travel as fast as passengers flying on an airplane, and all are naturally capable of mutating to adapt to novel environments and hosts. According to the Centers for Disease Control and Prevention, the first transmission of chikungunya in the Western Hemisphere was recorded in 2013; since then, 18,000 confirmed (and 900,000 suspected) cases have been reported in the Americas alone. These discoveries lend urgency to

surveillance and should drive the development of screening tests. They give new meaning to slogans like “think global, act local.”

In the 19th century, Rudolph Virchow, the eminent German pathologist who was 34 when he established the science of cellular pathology (famously writing *omnis cellula e cellula*—every cell stems from another cell), was deeply committed to public health concerns. Virchow also recognized the connection between trichinosis in humans and consumption of undercooked pork, coining the term “zoonosis” to describe it. Virchow was not the only investigator working with human and animal microbial pathogens at the time, but it was he who initially recognized the connection and set the scientific foundation for diagnosis and management of transmissible microbial diseases.

But population health encompasses much more than transmissible microbial diseases and biothreats. The health of populations is assessed and monitored through vehicles as diverse as point-of-care testing, Pap tests, screening tests, health fairs, education, and community services. Improving the health of populations is one of three core concepts that frame the rationale for U.S. government efforts to reconfigure our health care system. The Triple Aim initiative of the Institute for Healthcare Improvement incorporates measures to: 1) improve the experience of care, 2) improve the health of populations, and 3) reduce per capita costs of health care.

This emphasis on evidence-based care and population-based thinking is encouraging; both are clearly in our wheelhouse. I hope it will drive greater interest in the power of informatics when thoughtfully employed to monitor and protect patient well-being. Those who shape priorities for CAP Learning projects understand this. Recently, they helped launch the Pathology Informatics Essentials for Residents, or PIER, project in collaboration with the Association for Pathology Informatics and the Association of Pathology Chairs. The current iteration of their new curriculum incorporates training tools to build capabilities in pathology informatics. PIER grew out of concern among pathology faculty (and prescient program directors) about the sparsely populated pipeline of residents with sufficient informatics knowledge and skill to meet current and anticipated needs. The project is ongoing; PIER Release 2 is expected this summer.

These experiences prompt speculation about where medicine is going. We’re in transition now, but a lot of what we’re seeing plays to our strengths. Last year, the University of Massachusetts School of Medicine announced that a new medical school focused on population health would be based at my health system, Baystate Health, in 2017. Trends in undergraduate and graduate medical education are a column for another day, but CAP Learning has just launched a project aimed at better understanding member learning needs, so we’ll be talking about it soon.

However, we still need to determine how to appropriately pay for population health services, which do not fall under the traditional Part B rubric. CAP leaders have worked with the U.S. Department of Health and Human Services to identify measures that can put a number on the value of pathologist services for purposes of Medicare reimbursement. Sometimes I think that regulators and hospital administrators just don’t understand what we do, let alone how we think. The truth is, they’re not the only ones, and I worry that we haven’t found the right way to explain ourselves.

The “think global, act local” quick fix could be to take on challenges and responsibilities in our hospitals and communities that put us in a position to show why the Triple Aim concept makes infinite sense while demonstrating the critical importance of pathology and laboratory services in bringing it to fruition.

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Dr. Friedberg welcomes communication from CAP members. Write to him at president@cap.org.