

# Healthcare Innovation NEWS

## Catching Up With ...



**Harvey V. Fineberg, M.D., Ph.D.**, serves as president of the Gordon and Betty Moore Foundation, a grantmaking foundation that fosters scientific discovery, environmental conservation, patient care improvements and preservation of the special character of the San Francisco Bay Area.

- Board Chair, Carnegie Endowment for International Peace
- Board Member, William and Flora Hewlett Foundation; China Medical Board
- Former Presidential Chair, University of California at San Francisco
- Former President, Institute of Medicine, 2002-2014
- Former Provost, Harvard University, 1997-2001
- Former Dean, Harvard T.H. Chan School of Public Health, 1994-1997
- Cofounder and Past President, Society for Medical Decision Making
- Former Consultant, World Health Organization
- Coauthor, *Clinical Decision Analysis, Innovators in Physician Education and The Epidemic That Never Was*
- Recipient of numerous honorary degrees and prizes, including the Frank A. Calderone Prize in Public Health, the Henry G. Friesen International Prize in Health Research and the Harvard Medal
- Degrees: A.B., psychology; Master's in public policy; M.D.; and Ph.D., government/public policy, Harvard University

**Healthcare Innovation News:** *Since the Institute of Medicine's 2000 groundbreaking book, To Err Is Human: Building a Safer Health System, how would you rate the U.S. healthcare system in reducing avoidable medical errors?*

**Harvey Fineberg:** *To Err is Human* helped illuminate the need to focus on safety. Since its release, the United States has made significant strides, including reducing hospital-acquired conditions. An Agency for Healthcare Research and Quality study found that between 2010 and 2014, there was a 17% reduction in these types of errors, including adverse drug events, pressure ulcers, falls and infections. This is a huge accomplishment translating into more than two million fewer people harmed and billions in savings. Yet many safety challenges remain. For example, diagnostic errors are getting greater national attention thanks to a 2015 National Academy of Medicine report estimating that in any given year, 5% of adults seeking outpatient care experience a diagnostic error.<sup>1</sup> Increased attention is also being paid to errors that represent unintended consequences of health information technology (IT).

Most work on patient safety to date has focused on hospital settings. We have barely scratched the surface when it comes to care provided in physician offices, clinics and patient homes. These are essential areas of focus if we are to continue to reduce avoidable medical errors, such as with medications. Nearly one in four prescriptions written in physician offices and clinics contains an error in dosing, frequency or patient instructions.<sup>2</sup> Not all of these errors result in patient harm, but many do.

Overall we are making progress in hospital safety, but a tremendous amount of work remains to make all of healthcare as safe as it should be.

**Healthcare Innovation News:** *How have medical and information technologies helped clinicians provide safer and higher quality care? Which technologies and medical innovations stand out as having the most influence on decreasing medical errors?*

**Harvey Fineberg:** A number of technologies have helped clinicians provide safer, higher quality care. One of the most influential examples is in the practice of anesthesiology, where the application of technology and innovation dramatically reduced medical error—from one in 1,000 in the 1940s to one in 100,000 in the early 2000s.

The practice of anesthesia requires active engagement prior to surgery and vigilant monitoring during and after surgery. Too often things went wrong. Some describe the experience as “boredom punctuated by panic.” Progress in the field was the result of a broad-gauge systems approach. Professional associations recognized the inherent risks, raised awareness, collected data and published information about errors. Analysis of the data showed opportunities for improvement.

As a result of examining evidence, the field expanded training for nurse anesthetists; developed new technologies, such as pulse oximetry that confirms proper oxygenation of the blood; ushered in medical equipment design changes to increase uniformity of design; and introduced fail-safe linkages that ensure the right tubes are linked to the right valves.

*(continued on page 2)*

**Healthcare Innovation News**  
**September Second Edition 2016,**  
**Volume 3 Issue 18**  
 ISSN Print 2372-1553  
 ISSN Electronic 2372-1561

#### Editorial Advisory Board

##### **Sam Basta, M.D., MMM, FACP, CPE**

Senior Medical Director, Clinical Integration,  
 Sentara Healthcare/Optima Health Plans  
 Founder and President, Healthcare Innovation  
 by Design, Virtual Chief Innovation and Medical  
 Officer, Venture Partner, Virginia Beach, VA

##### **Lyle Berkowitz, M.D.**

Associate Chief Medical Officer of Innovation  
 and Primary Care Physician, Northwestern  
 Memorial Healthcare;  
 Director, Szollosi Healthcare Innovation  
 Program; Founder/Chairman, healthfinch;  
 Associate Professor, Clinical Medicine, Feinberg  
 School of Medicine, Northwestern University,  
 Chicago, IL

##### **Glenn D. Braunstein, M.D.**

Vice President, Clinical Innovation, Cedars-Sinai  
 Health System; Director, Cedars-Sinai Thyroid  
 Cancer Center; James R. Klinenberg, M.D.  
 Chair in Medicine, Cedars-Sinai Medical Center  
 Los Angeles, CA

##### **Joanne Conroy, M.D.**

Chief Executive Officer  
 Lahey Hospital & Medical Center  
 Burlington, MA

##### **Molly Joel Coye, M.D., MPH**

Social Entrepreneur in Residence, NEHI,  
 San Francisco, CA

##### **Wendy Everett, Sc.D.**

CEO of NEHI; Former Director, Institute for the  
 Future, Cambridge, MA

##### **Roy M. Rosin, MBA**

Chief Innovation Officer, Penn Medicine's  
 Center for Innovation, University of  
 Pennsylvania Health System, Philadelphia, PA

##### **Barbara Spurrier, MHA, CMPE**

Administrative Director, Center for Innovation,  
 Mayo Clinic, Minneapolis-St. Paul, MN

##### **Larry Stofko, M.S.**

Executive Vice President, The Innovation  
 Institute, St. Joseph Health System,  
 Orange County, CA; Bon Secours Health  
 System, Marriottsville, MD

#### **Publisher**

Clive Riddle, President, MCOL

#### **Editor**

Mari Edlin

#### **Healthcare Innovation News**

1101 Standiford Avenue, Suite C-3  
 Modesto CA 95350  
 Phone: 209-577-4888

[info@healthcareinnovationnews.com](mailto:info@healthcareinnovationnews.com)  
[www.healthcareinnovationnews.com](http://www.healthcareinnovationnews.com)

*Healthcare Innovation News* is published  
 monthly by Health Policy Publishing LLC.  
 Newsletter publication administration is provided  
 by MCOL.

Copyright © 2016 by Health Policy Publishing  
 LLC. All rights reserved. No part of this  
 publication may be reproduced or transmitted by  
 any means, electronic or mechanical, including  
 photocopy, fax or electronic delivery, without the  
 prior written permission of the publisher.

## Catching Up With Harvey Fineberg...continued from page 1

**Healthcare Innovation News:** *How has technology improved public and community health in this country?*

**Harvey Fineberg:** If we consider the definition of technology as the application of knowledge for practical purposes, there are countless ways that it has advanced the practice of public health in the United States.

Water sanitation is one of the earliest and most revolutionary advances in community and public health. In the early 19th century, inadequate clean water supplies and waste disposal systems in rapidly expanding cities led to repeated outbreaks of diseases such as cholera, typhoid and tuberculosis. Collective efforts at the local, state and federal levels helped to improve U.S. waste disposal, water treatment and other sanitation leading to overall health improvement and reduction in mortality.

We also have seen sweeping public health benefits with the elimination of smallpox and prevention of many other infections through vaccines; the ability to cure bacterial infections with the use of antibiotics, such as penicillin; and drastic reduction in infant mortality through better prenatal care and nutrition.

Today, epidemiological studies have illuminated the health burden of tobacco use, poor diet, lack of physical activity and gun violence. This knowledge is fueling new public health innovations focused on incentivizing behavior change.

In turn, that knowledge is informing the creation of consumer technologies supporting healthy behaviors. Examples include online forums that provide support for people who want to quit smoking, apps that simplify calorie counting, wearable devices that track physical activity and the use of fingerprint technologies that prevent guns from firing in the hands of kids or other unauthorized users.

**Healthcare Innovation News:** *In evaluating vaccines and their use, how do you allay the fears of many parents who believe there is a causal association between immunizations and several conditions, including autism?*

**Harvey Fineberg:** The simple answer here is “with great difficulty.”

The evidence on the safety and benefits of vaccines is clear. Unfortunately, anecdotes about the onset of autism coinciding with the timing of immunizations fuel myths and fears. Add to that the relative rarity of diseases like measles, mumps and pertussis, and it can be easy to understand why a parent might choose to opt out. The recent outbreaks of childhood diseases that we believed we had controlled are important reminders that herd immunity is fragile. As a society, we have an obligation to others.

Public policy is an important tool for addressing this challenge. We can narrow the grounds for which parents can opt out of immunizing their children. We may also want to take a different approach to “informed consent.” Right now, parents sign consent forms verifying they understand the risks and benefits of the vaccines being administered. Bill Foege, an epidemiologist and one of the modern heroes of public health, suggests flipping the approach: Ask parents who opt out to sign informed non-consent, acknowledging that they are willingly putting their child and others in their community at risk.

**Healthcare Innovation News:** *As Zika raises its head in the United States, are there processes our healthcare system has learned in addressing similar viruses? What decisions must be made in quelling what could become a larger problem?*

**Harvey Fineberg:** We know how the disease is transmitted and some means to protect against that risk. It can be a challenging problem though some efforts, including mosquito abatement, public awareness, bug spray and condoms, can make a real difference. Local and state governments need access to funding that will enable them to take the necessary steps to protect their communities.

We also need to invest in scientific research to better understand the disease. That knowledge can inform the development of vaccines and, hopefully, lead to treatments that will prevent the birth defects caused by Zika. The failure to date of the U.S. Congress to pass funding is putting politics above the public interest.

<sup>1</sup> “Improving Diagnosis in Health Care.” Report in Brief. Institute of Medicine. September 2015.

<sup>2</sup> Abramson EL, Bates DW, Jenter C, et al. “Ambulatory Prescribing Errors Among Community-Based Providers in Two States.” *Journal of the American Medical Informatics Association*. 2012;19:644-648.

## Thought Leaders' Corner

### Q. What Part Does Healthcare Innovation Play in Change Management?

The two really go hand in hand. The more the core premise changes, such as moving from fee-for-service to value-based care, the more you need innovative solutions. And the more innovation you introduce, the more change management you have to apply to ensure everyone sees the value and gets on board. Just ask any health system that has replaced paper records with an electronic health record or that has started or joined an accountable care organization or even attempted to standardize care across facilities or providers.

In the months and years ahead, the conservative “safe” strategy of sticking with the tried and true is likely to become the riskiest approach of all. Reimbursements based on clinical outcomes and value rather than volume, the consumerization of healthcare combined with high-deductible health plans and rising copays, changing regulations and ever-greater cost pressures—these transformative and radical shifts in the market all but guarantee the healthcare industry’s future will not be like its past.

That said, it can certainly be challenging to innovate within the ever-shifting constraints of the healthcare industry. Healthcare often tends to be a highly structured environment, and innovation doesn’t tend to occur naturally in these types of organizations unless they are specifically designed to encourage it. It is critical to nurture a culture of innovation in order to deliver meaningful and beneficial improvements that help healthcare organizations manage change, both from within and without.

The bottom line is healthcare organizations must embrace innovation to manage change or face decline. It’s that stark—and that simple.



**Jim Lacy**  
Chief Financial Officer/General Counsel  
ZirMed  
Chicago, Ill.

Community health centers (CHCs) have a rich history of serving as the primary and preventive care hub for community-based medicine. Given increasing healthcare costs and high rates of uninsured, sensitivity to out-of-pocket costs has always been a part of health center culture. With millions now qualifying for health insurance as a result of the Affordable Care Act, improving outcomes and controlling costs are more important than ever as the healthcare system strains to adjust to rising demand.

CHCs are reengineering to accommodate for 25% year-over-year growth in visits and the need to create convenient access for patients new to insurance and used to receiving primary care in emergency rooms. CHCs are seeking patient-centered medical home accreditation and moving to team-based care as a means of providing efficient, person-centered care for their communities to serve an unprecedented diversity in cultures, socioeconomic status, prior health status and access to preventive care.

Health centers are also forming networks to leverage resources and experience, thereby accelerating their ability to innovate. Reports demonstrate that networked CHCs—which belong to a regional consortium that provides advocacy and training—perform better than unaffiliated centers. Enhanced outcomes are fueled by the ability to share resources and best practices in the evolving healthcare ecosystem.

Networked CHCs are working with community partners to identify patients inappropriately accessing emergency rooms. Collaboration amongst local health information exchanges, hospitals, emergency service providers and CHCs offer a viable opportunity to bend the cost curve and meet the medical needs of our communities.



**Sabra Matovsky**  
Executive Vice President  
Integrated Health Partners  
San Diego, Calif.

## Thought Leaders' Corner

Innovation usually requires major changes for individuals within organizations. The implementation of new ways of working requires people to explore unknown ways of doing their jobs and adopting these as their new day-to-day responsibilities. Changes such as these do not come easily and need to be supported by change management practices.

Healthcare organizations face a number of challenges, including increasing pressure on budgets and growing demands for care, that are forcing them to change. The necessary changes range from incremental changes to radical transformation. More radical changes of course have a more significant impact on an organization and its members. This is especially true for the healthcare sector, which has a number of complicating characteristics, such as a wide range of roles, responsibilities and disciplines, complex legislation and regulations, professionals who are trained to follow protocols and the high costs in case of failure.

The magnitude of the challenges in healthcare cannot be faced with small adjustments but require radical changes in the form of innovations.

Cultivating an environment conducive to change entails gaining commitment and overcoming resistance—understanding the motives of those affected by the change and determining whether they view it positively or negatively. In order to secure commitment to any innovation, a healthcare organization must ensure that all employees perceive positive factors associated with change as outweighing the negatives. The presence of strong leadership and the ability to establish cooperation will play an important role in the transformation.

Ultimately, change must be undertaken with patients' interests at the center. The emerging drive towards patient-centered care demands a level of care that responds to individuals' needs and is delivered and coordinated among all care providers. Transformational change will help refocus the healthcare system to build a culture of patient-centered care. But to realize this vision, effective change management strategies are needed. This means strategies that set a clear and firm direction but are flexible enough to respond to changing environments, allowing for ongoing improvement of the practice care model.



**Magna Hadley**  
Global Head  
Healthcare Domain Practice  
Tata Consultancy Services  
Edison, N.J.

As technology advances, it is imperative that companies keep up with its ever-changing nature. This is especially important within the healthcare industry as the patient and doctor relationship is what drives the well being of institutions and practices.

It is time for healthcare professionals to leverage new technologies that can help them understand the needs and wants of their patients more than ever before.

One very simple—yet extremely effective way for doctors and healthcare organizations to gather these data—is to look at online patient reviews. These review sites are a meeting place for patients to connect with others, voice their experiences and learn about the experiences of others. Deciding on a facility or doctor to care for you or your loved ones is an important decision in which consumers are more than willing to do the research in an effort to make sure they are making the right decision. With these review sites driving tons of patient traffic and conversations, it is the best place for healthcare professionals to find authentic insights straight from their patients' mouths about the quality of their facility or the comfort their doctors are/are not providing.

Patient reviews hold information that can help these companies evolve within operations, patient support, marketing and patient experience.



**Mandy Yoh**  
Head of Communications  
ReviewTrackers  
Chicago, Ill.