LETTERS

A FUNCTIONAL PUBLIC HEALTH SURVEILLANCE SYSTEM

Lenert and Sundwall identify opportunities and challenges of the Meaningful Use (MUse) incentive programs that advance standardized electronic reporting to health departments at a time when there is limited funding to upgrade systems. We concur that cloud-based Platform as a Service (PaaS) is a possible remedy. However, we disagree with their conclusion that "the security risks inherent in BioSense 2.0's public cloud implementation may make this effort better suited to a demonstration project than a national level biodefense system."[1]

BioSense 2.0[2] is a functional public health surveillance system, not a demonstration project, hosted in a highly secure Internet government cloud. Before going live in November 2011, the system was tested, certified, and accredited to meet requirements of the Federal Information Security Management Act and independent security stewards.

BioSense 2.0 is a PaaS; offers Software as Service (SaaS) to public health departments; and leverages Public Health Information Network (PHIN) standards and services such as PHIN Messaging, as well as new protocols such as Direct. BioSense 2.0 offers a low-barrier and low-cost approach that health departments can elect to offer to health care providers for reporting syndromic surveillance information. It accommodates secure data sharing among jurisdictions or with the Centers for Disease Control and Prevention (CDC), data exchange standards, jurisdictional information ownership, data sharing agreements, security and privacy rules, and data retention. BioSense 2.0 is user designed and governed in partnership with state and local health agencies, health care providers at the local and federal level, and national associations representing public health officials.[3-6] The data sharing model and community-driven governance create a sustainable surveillance ecosystem to maintain situation awareness from local to national levels. The replacement of expensive technological services with a cloud-computing platform has resulted in substantial savings, allowing increased funding for health departments. (More information is available at http://biosense2.org.)

CDC continues to work with health departments to enhance their capacity to receive and use information from MUse-prompted expansion in reporting of immunization services, laboratory test results for conditions of public health concern, and syndromic surveillance.[7] BioSense 2.0 provides a foundation of services suitable for a future public health platform while simultaneously supporting current MUse requirements. ■

The Afghan version of Conflict Kitchen is Bolani Pazi (www.conflictkitchen.org). Graphic design by Brett Yasko. Architectural design by Pablo Garcia of POiNT. Printed with permission.

Taha A. Kass-Hout, MD, MS
Kathleen Gallagher, DSc, MPH
Seth Foldy, MD, MPH
James W. Buehler, MD

About the Authors

Taha A. Kass-Hout, Kathleen Gallagher, Seth Foldy, and James W. Buehler are with the Public Health Surveillance and Informatics Program Office, Centers for Disease Control and Prevention (CDC), Atlanta, GA.

Letters to the editor referring to a recent Journal article are encouraged up to 3 months after the article's appearance. By submitting a letter to the editor, the author gives permission for its publication in the Journal. Letters should not duplicate material being published or submitted elsewhere. The editors reserve the right to edit and abridge letters and to publish responses.

Text is limited to 400 words and 10 references. Submit online at www.editorialmanager.com/ajph for immediate Web posting, or at ajph.edmgr.com for later print publication. Online responses are automatically considered for print publication. Queries should be addressed to the Editor-in-Chief, Mary E. Northridge, PhD, MPH, at men6@nyu.edu.

Correspondence should be sent to Taha A. Kass-Hout, Division Director, Centers for Disease Control and Prevention (CDC), Public Health Surveillance and Informatics Program Office, 1600 Clifton Road, NE, MS E-91, Atlanta, GA 30329 (e-mail: tik2@cdc.gov). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

This letter was accepted March 14, 2012.
doi:10.2105/AJPH.2012.300800

***Note**. The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of CDC.*

Contributors

All authors contributed equally to the letter.

References

1. Lenert L, Sundwall DN. Public health surveillance and meaningful use regulations: a crisis of opportunity. *Am J Public Health.* 2012;102(3):e1–e7.

2. Kass-Hout, TA, Spears, KL, Brownstein, JS, et al. CDC's BioSense 2.0: Bringing Together the Science and Practice of Public Health Surveillance [Internet]. *Am J Prev Med* Blog: Prevention in Practice. Available at: http://ajpmonline.wordpress.com/2011/11/15/cdc's-biosense-2-0-bringing-together-the-science-and-practice-of-public-health-surveillance-4. Accessed June 25, 2012.

3. Association of State and Territorial Health Officers. ASTHO Web site. Available at: http://www.astho.org. Accessed June 25, 2012.

4. National Association of County and City Health Officials. NACCHO Web site. Available at: http://www.naccho.org. Accessed June 25, 2012.

5. Council of State and Territorial Epidemiologists. CSTE Web site. Available at: http://www.cste.org. Accessed June 25, 2012.

6. International Society for Disease Surveillance. ISDS Web site. Available at: http://www.syndromic.org. Accessed June 25, 2012.

7. Centers for Disease Control and Prevention. Meaningful Use Web site. Available at: http://www.cdc.gov/ehrmeaningfuluse. Accessed February 23, 2012.

LENERT AND SUNDWALL RESPOND

We were glad to learn that Kass-Hout et al. also believe that cloud-based Platform as a Service (PaaS) technology is a potential solution to the crisis created by inadequate public health funding in the Meaningful Use (MUse) program. Centers for Disease Control and Prevention (CDC) leadership is needed to respond to this crisis. In their letter, Kass-Hout et al. go on to quote from a First Look version of our article that appeared on the *Journal* Web site from January 19, 2012, to February 8, 2012, regarding certain assertions about the security of pilot versions of the BioSense 2.0 system. These comments were deleted from the final version of the article, reflecting a change in our opinion based on the progress made by the program in the time between acceptance of our article and its final publication. We hope that readers of the final published version are not confused by the reference Kass-Hout et al. have made to the First Look version of our article.

We agree with Kass-Hout et al. that BioSense 2.0 is an important advance in the design of public health information systems—one that deserves careful evaluation and study. However, we are concerned that, even as CDC promotes its leadership in public health informatics in this letter, CDC is reducing the overall resources devoted to it. Nowhere is this more apparent than in the BioSense 2.0 program, in which funding resources that once supported Centers of Excellence in Public Health Informatics and pilots of public health integration with regional health information exchanges have been redirected to other priorities. This redirection has contributed to the crisis referred to in the title of our original article. Taking advantage of the opportunity will require CDC to reconsider its priorities with regard to public health informatics. ■

Leslie Lenert, MD, MS
David N. Sundwall, MD

About the Authors

Leslie Lenert is with the Departments of Internal Medicine and Biomedical Informatics, and David N. Sundwall is with the Department of Family and Community Medicine, University of Utah School of Medicine, Salt Lake City.

Correspondence should be sent to Leslie Lenert, MD, MS, Department of Internal Medicine, 30 North 1900 East, Room 4c104, Salt Lake City, UT 84132-2406 (e-mail: leslie.lenert@gmail.com). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

This letter was accepted April 5, 2012.
doi:10.2105/AJPH.2012.300851

Contributors

Contributors L. Lenert wrote the letter. D. N. Sundwall critiqued and commented the letter.