

## DIGITAL LEARNING COLLABORATIVE (DLC) MEETING

DECEMBER 1, 2016 • MEETING HIGHLIGHTS

**MEETING FOCUS:** The potential, and rate-limiting steps, of clinicians serving as partners and leaders in the digital learning community

### Core questions:

1. *Potential:* What is the unrealized potential of clinicians' use of electronic health data to enhance safety, quality, and value?
2. *Continuous learning:* How might enhanced clinician engagement in digital learning accelerate discovery and evidence development?
3. *Barriers:* What are the current regulatory, organizational, cultural, and user-design challenges that limit clinicians as they interface with electronic health data and tools?
4. *Strategies:* What are the strategies that can serve as models for clinicians engaging with, contributing to, and learning from the digital dividend?
5. *Collaboration:* What policies and implementation initiatives, within and beyond the Academies, should be supported by the DLC and others to enhance clinician engagement with digital learning?

**Anticipated outcome:** Identification of action steps that the DLC should support to accelerate progress

### REPRESENTATIVE OBSERVATIONS

- Current barriers to clinicians' engagement and leadership in a continuously learning system include:
  - Increased productivity burdens resulting in busy work days and additional hours of work in the evenings. 54% of physicians report being burnt out (Shanafelt. Mayo Clin Proc. 2015; 90(12):1600-1613). When designing learning activities, consider how they might impact clinicians, how the activities might be imbedded within current work flow, and how the activities might also fulfill other regulatory requirements (e.g. MACRA or Meaningful Use) or provide incentives (e.g. CME credits).
  - Obligations to clinical care, which allow little time, reimbursement, or opportunity to engage in learning activities. Therefore, initiatives to engage and train clinicians for learning activities should be provided within the delivery setting and web-based when possible.
- EHRs were not originally designed to enhance care and quality or to enable secondary analysis.
  - Instead, these systems were primarily constructed for administrative/billing functions, but are now being asked to perform multiple tasks for administration, billing, clinical care management, clinical outcomes, QI initiatives, regulators, population health, and research.
  - To accommodate these requests, vendors and delivery systems have customized the data systems to meet emerging needs.
  - As a result of this evolution, purchasing decisions must take into account multiple, and sometimes competing, requirements.
- Because EHRs are so customized to meet the needs of distinct delivery systems, a common set of components (e.g. core data elements such as discrete labs, care gaps, and demographics) are needed across vendors to promote interoperability.
- Engaging clinicians in continuous learning requires the engagement of the entire clinical team. Non-physicians, including nurse practitioners and community health workers, regularly interface with digital tools with less support, reimbursement options, and infrastructure.
- Despite their barriers, EHRs make medicine quantifiable and provide new opportunities for innovated care delivery.
  - As an example, the [Community Worker Resources](#) project (a partnership between Johns Hopkins and TrustNetMD, Inc) is providing a knowledge exchange for community health workers through the use of social media technologies and organizational learning principles.
  - Through Project CORE, specialists and primary care doctors communicate directing through electronic consults and referrals and sharing reimbursement for their efforts. It is expected that across the participating AMCs, over 1.2 million primary care patients will benefit from Project CORE through timely clinical input, greater convenience, improved access, and lower costs.
- One strategy to address the barriers of digital tools is greater focus on usability to improve clinicians' experience. User design research focuses on redesigning the environment (not the individual) to enhance use and adoption; explores team cognition, seeks to learn what clinicians need; calls for a human-engineering approach; and applies a technical and social/cultural understanding to digital tool design. The question remains how to best translate user-design research into product and to disseminate to clinicians, vendors, and professional societies.

### COLLABORATIVE ACTIVITIES FOR CONSIDERATION

Of the extensive list of ideas compiled from the discussion, the following were particularly noteworthy for ongoing collaborative actions:

- **Semantic interoperability.** *A workgroup to develop a NAM meeting to explore semantic interoperability efforts.* If a case can be made for a NAM role, the meeting would bring together the various entities involved in developing semantic definitions and standards. Participants will demonstrate their efforts, discuss options for collaboration, explore the role of government in semantic interoperability efforts, and discuss a path forward.
- **Use optimization for EHR.** *A workgroup to develop a NAM meeting to discuss the statuses of best practices and standards related to EHR and clinician workflow.* The meeting would focus on how data systems can enhance patient outcomes while also meeting the needs of its multiple users (in finance, administration, regulation, research, etc.). The meeting would bring together researchers, executive leadership, clinicians, and vendors to discuss user-design research related to specific topics, such as workflow and task allocation; strategies for engaging clinicians in the design, purchasing, and use of digital tools; and approaches for translating research into products and disseminating results to end-users and decision-makers.



THE LEARNING HEALTH SYSTEM SERIES

## Meeting participants

Reed Tuckson (Tuckson Health Connections) – co-chair, Charlee Alexander (National Academies of Science, Engineering, and Medicine), Kathy Blake (American Medical Association), Carlos Blanco (National Institute on Drug Abuse), Daniel M. Campion (QuintilesIMS), James Cimino (University of Alabama at Birmingham), Jeffrey Cohn (Fairfax Family Practice), Heather M. Colvin (Duke-Robert J. Margolis Center for Health Policy), Karen DeSalvo (Department of Health and Human Services), Rollin “Terry” Fairbanks (MedStar Institute for Innovation), David B. Flannery (American College of Medical Genomics and Genetics), Andrew Gettinger (Office of the National Coordinator for Health IT), Gail Graham (Central Iowa VA Health Care System), Ayse Gurses (John Hopkins University School of Medicine), Adrian F. Hernandez (Duke University), Marty S. Kohn (Sentrian, Remote Patient Intelligence), Sean McCormick (Epic), Dawn Milliner (Mayo Clinic), Mary P. Nix (Agency for Healthcare Research and Quality), Janis Orłowski (Association of American Medical Colleges), Richard Platt (Harvard University), David Price (American Board of Medical Specialties), Murray Ross (Kaiser Permanente), Christina Silcox (Duke-Robert J. Margolis Center for Health Policy), Richard Singerman (TrustNetMD), Jan Towers (American Association of Nurse Practitioners), Jeff Weinfeld (MedStar/Georgetown), Barbara Wells (National Institutes of Health), Teresa Zayas Cabán (Office of the National Coordinator for Health IT)

## DIGITAL LEARNING COLLABORATIVE

### Participating Organizations

AAMC	Duke University	Outcome Sciences Inc.	Vanderbilt University
AANP	Epic Systems	Optum Labs	WHISCON
ABMS	Fairfax Family Practice	Partners HealthCare	
ACMG	Georgetown University	PCORI	<b>Federal agencies:</b>
AstraZeneca	Harvard University	Quintiles, Inc.	NSF
AHIP	ICER	TrustNetMD	U.S. DHHS
AHA	Institute Hlthcre Imprvmt	Tufts University	– Office of the Secretary
AMA	Intermountain Healthcare	Sanofi	– AHRQ
Baylor Scott & White	Temple University	UC Davis	– CDC
Blue Cross and Blue Shield	John Hopkins University	UC, Irvine	– CMS
Brigham and Women’s	Johnson & Johnson	UCLA	– FDA
Bristol-Myers Squibb	Kaiser Permanente	Univ of Alabama Birmingham	– NIH
Brookings Institution	Mayo Clinic	University of Minnesota	– ONC
Cedars-Sinai Medical Center	MedStar Health	University of Pennsylvania	U.S. DOD
CMTIP	Montefiore Medical Center	University of Pittsburgh	U.S. DVA
Christiana Care	Mount Sinai Health System		

## NAM LEADERSHIP CONSORTIUM FOR A VALUE & SCIENCE-DRIVEN HEALTH SYSTEM

<b>Chair</b>	Brent C. James	Richard J. Pollack	Reed V. Tuckson
Mark B. McClellan	Intermountain Healthcare	AHA	Tuckson Health Connections
Duke University			
<b>Members</b>	Gary Kaplan	Peter J. Pronovost	Debra B. Whitman
David Blumenthal	Virginia Mason Health System	Johns Hopkins Medicine	AARP
The Commonwealth Fund			
	Gregory F. Keenan	Murray N. Ross	<b>Ex-Officio</b>
	AstraZeneca	Kaiser Permanente	AHRQ
Paul Chew			Andrew B. Bindman
Sanofi US	Darrell G. Kirch	John W. Rowe	
	AAMC	Columbia University	CDC
Susan DeVore			Thomas Frieden
Premier, Inc.	Richard E. Kuntz	Craig E. Samitt	Chesley Richards
	Medtronic	Anthem, Inc.	
Judith Faulkner			CMS
Epic Systems	Peter Long	Lewis G. Sandy	Andy Slavitt
	Blue Shield of CA Foundation	United Health Group, Inc	Patrick Conway
David Feinberg			
Geisinger Health System	James L. Madara	Leonard D. Schaeffer	DoD
	AMA	USC	Karen Guice
Joseph F. Fifer			
Healthcare Financial Mgt Assn	Mark E. Miller	Joe Selby	DHHS
	MedPAC	PCORI	Karen DeSalvo
Patricia A. Gabow			
Former, Denver Health	Mary D. Naylor	Mark D. Smith	VA
	University of Pennsylvania	Former, CA HealthCare Fdn	David Shulkin
Atul Gawande		UCSF	Carolyn M. Clancy
Brigham and Women’s	William D. Novelli		
Hospital	Georgetown; C-TAC	Harrison Spencer	FDA
		ASPPH	Robert Califf
Julie L. Gerberding	Harold Paz		
Merck & Co., Inc.	Aetna	Jennifer Taubert	HRSA
		Johnson & Johnson	James Macrae
Paul Grundy	Jonathan B. Perlin		
IBM	HCA, Inc.	Marta Tellado	NIH
		Consumers Union	Francis Collins
Sally Okin	Richard Platt		Kathy Hudson
PatientsLikeMe	Harvard Medical School		