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Health System Leaders Working Toward High-Value Care Through Integration of Care and Research— Workshop in Brief

In April 2014, the Institute of Medicine's (IOM's) Roundtable on Value & Science-Driven Health Care and the Patient-Centered Outcomes Research Institute (PCORI) convened the first of two workshops aimed at engaging health system leaders in accelerating progress toward the seamless integration of clinical practice and research, one of the fundamental concepts of a continuously learning health system.

Ongoing real-time assessment of the effectiveness and efficiency of care is basic to a continuously learning and constantly improving health care system (see Figure 1). Advancements in the digital infrastructure and development of innovative methods for research and learning now make this aim achievable in health care. As described by Eric Larson of Group Health in his introductory comments, the workshop brought together health care system leaders, both administrative and clinical, and researchers, including grantees of PCORI's National Patient-Centered Clinical Research Network (PCORnet, see Box 1) to

- broaden and deepen health system leadership's awareness of the prospects for and from a continuously learning health system;
- foster the development of a shared commitment, vision, and strategy among health system leaders for building and maintaining the networked capacity;
- identify common approaches in meeting health systems responsibilities for science, technology, ethics, regulatory oversight, business, and governance;
- consider and learn from models and examples of productive integration of research with care delivery programs; and
- explore strategic opportunities for executive, clinical, and research leaders to forge working partnerships for progress.

BOX 1 PCORnet

PCORnet is a large, highly representative national network of health care information networks—11 Clinical Data Research Networks and 18 Patient-Powered Research Networks—that will conduct large-scale clinical outcomes research by establishing a resource of clinical data gathered in real time and in real-world settings such as hospitals and clinics. A hallmark of PCORnet is its requirement that patients, clinicians, and health care systems that provide the research data housed in each constituent network be involved in the governance and use of the data. PCORnet aims to advance the shift in clinical research from investigator-driven to patient-centered studies, and by the end of its first 18-month phase, PCORI expects that a fully functional research network will be in place and ready to support comparative effectiveness research. PCORnet hopes to be a unique opportunity to make a real difference in the lives of patients and their families by building clinical research into the health care process to provide the answers that patients need quickly, efficiently, and at lower costs than previously possible.

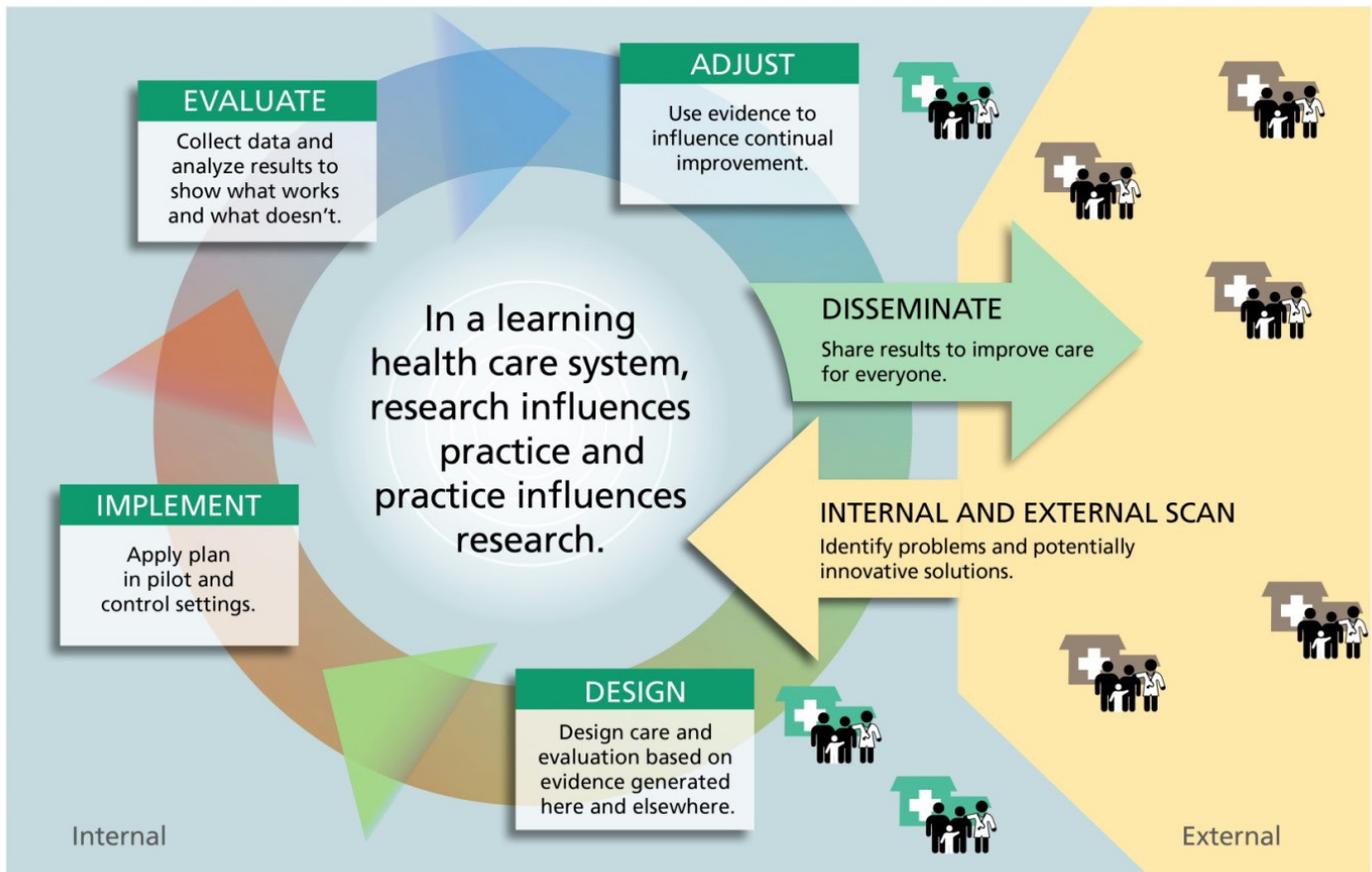


FIGURE 1 The “virtuous cycle” of a learning health care system.

SOURCE: Greene SM, Reid RJ, Larson EB. Implementing the learning health system: from concept to action. *Ann Intern Med.* 2012 Aug 7;157(3):207-10. doi: 10.7326/0003-4819-157-3-201208070-00012. PubMed PMID: 22868839.

This workshop in brief summarizes the major topics of the workshop’s presentations and discussions. In June 2014, a second workshop will convene health system chief executive officers (CEOs) on opportunities for leadership in building, growing, and making full use of the infrastructure necessary for greater integration of research and practice. A detailed summary of both workshops will be published after the June session.

Throughout the workshop, sessions focused on the value proposition, sustainability, ethics, governance, and stakeholder engagement, and individual workshop participants identified specific issues captured in the sections below. Statements, recommendations, and opinions expressed are those of individual presenters and participants and are not necessarily endorsed or verified by the Roundtable or the IOM, and they should not be construed as reflecting any group consensus.

The role of leaders

Throughout the course of the workshop, many speakers and commenters, including Russ Waitman of the University of Kansas Medical Center and Raymond Baxter from Kaiser Permanente, stressed the need for CEOs to take the lead in getting all stakeholders, including patients and families, involved as partners in a continuously learning health system. “CEOs need to be out front in enlisting patients and families as active allies, particularly with vulnerable populations. This can bring a community perspective and research perspective together with the health system perspective and have the potential to generate great solutions,” said Waitman.

The observation was made by several speakers that every organization has a limited bandwidth, not only in terms of the research it can support financially but also with respect to institutional energy. Therefore, it was suggested that it is critical to align research initiatives with institutional improvement priorities to maximize the impact of research. “It is important when judging whether to move forward with a research project to consider whether it takes up too much intellectual capital in the context of its place in the institution’s priorities,” said Brent James of Intermountain Healthcare.

Peter Knox of Bellin Health stated in his presentation that “creating a culture that creates value at speed is critical.” Health care systems face tremendous financial pressures today, placing a premium on research that can be deployed rapidly to increase system efficiency, improve patient outcomes and satisfaction, and reduce costs, he said. Demonstrating that PCORnet can enable fast, focused studies will be key to winning CEO support for creating a sustainable learning system, commented Mary Brainerd of HealthPartners, Inc.: “We need performance change and time horizons that are more rapid than those created by the standard research structure.”

Brainerd noted that from her standpoint as a CEO, “I want to bring patientness to everything that we do, everything we design, every way we think about what we are going to do in research and what we need to learn so that patient/family member partnership is hugely important.” “Without the patient’s perspective, a continuous learning health system will not be sustainable,” said Sally Okun of PatientsLikeMe, voicing a sentiment echoed by almost all of the workshop’s speakers.

Value proposition and sustainability

Several speakers, including Baxter and David Labby from Health Share of Oregon, noted that given the financial pressures facing health systems today, it is imperative that knowledge generation activities, whether through PCORnet or under other institutional auspices, have a viable value proposition if they are to be sustainable over the long term. As Baxter put it, “CEOs want speed and they want relevance, so unless we can organize our research and analytic capabilities in a way that builds on core functions and demonstrates impact on improving care and improving health, that will be a cost that the health system cannot afford to bear.”

Sarah Greene from PCORI noted that creating a meaningful value proposition requires specifying the factors that are important to the customers and impact the customers’ belief that they are getting value. As Thomas Graf from Geisinger Health system put it, “If we want to be successful and we want to maintain that value proposition long term, it has to be tied to the things that intrinsically create value for the folks that are delivering that care.”

Organizational alignment was raised by several speakers and discussants, both with respect to the functional alignment of infrastructure capacities needed for financial and management tracking, quality improvement, and knowledge generation, as well as how to align an organization around a value proposition and deliver on that value proposition using the energy that the organization has. “I would argue that unless we can align research around that value proposition and help organizations to deliver value, that we won’t integrate research in practice,” said Knox.

“Transformation of a research enterprise requires a transformation of governance,” said John Steiner of Kaiser Permanente Colorado. Effective, skillful governance is needed to promote sustainability of research, both in terms of being able to develop shared research assets to conduct studies and developing a community of researchers and stakeholders who reuse and develop those assets.

Quality can be a competitive advantage, and those generating data to support improvement may not want to share because it could erode their competitive advantage and negatively impact an organization’s value proposition. “Knowledge can be a public good or a private commodity where people are setting up infrastructure for financial incentives that provide a competitive advantage,” warned Trent Haywood of the Blue Cross Blue Shield Association.

Research will be sustainable when the findings it generates are integrated into clinical workflow, so that “best care” is the default choice that happens automatically unless modified for a specific patient, said James. One of the challenges for researchers and quality improvement staff in most health systems is that they are not skilled at making value propositions using the financial language that chief financial officers understand, noted Stephen Grossbart of Catholic Health Partners. “There is a need for finance and quality improvement groups to work collaboratively, and that can be a real challenge,” Grossbart said.

Implementation at scale

Insights and knowledge not captured or applied do little to advance the development of a continuously learning health care system. As Jean Slutsky of PCORI said, “Where the rubber meets the road is integrating learning into the delivery of care.”

“We need to advance the science of how to implement what we know,” said Robert Dittus of Vanderbilt University Medical Center. Jonathan Tobin of the Clinical Directors Network noted that “PCORnet provides the opportunity to collect the information needed to advance that science in a rigorous manner.” David Posch of Vanderbilt University Hospital and Clinics suggested that PCORI should study the science of execution and added that “the pressing issue today is how do we execute and implement at scale what we already know, because as CEO, I have to make cost cuts now.”

A challenge that must be addressed is how to balance the needs of researchers to publish their work and the needs of health care systems to deploy improvements as rapidly as possible, said Susan Huang of the University of California, Irvine, and others. Janice Nevin of Christiana Care Health System also cast light on the tension that exists between the questions that interest researchers and those that are priorities for health system leaders.

Patrick Conway of the Centers for Medicare & Medicaid Services wondered how to make the individual examples of success the rule rather than the exception. He suggested that one solution might be to integrate streams of revenue and incentives in a way that is standard in most industries and that can provide solid evidence to support a value proposition.

Improvement as an ethical imperative

“There is an ethical imperative to improve the system and to the extent that we impede improving the system [through unresponsive oversight], we are doing something that is probably unethical,” said Edward Havranek of Denver Health. He noted that health systems and their internal review boards (IRBs) need to recognize when it is appropriate to have an expedited process for demonstrating that quality-directed research poses little risk to individual patients. Agreeing with Havranek, Huang asked, “How do we get more uniformity in the way IRBs treat minimal risk studies aimed at quality improvement?”

In a learning health care system, ethics-relevant policies must be transparent about ongoing learning, engage patients to help decide which studies need consent and further protections, and be accountable, said Nancy Kass of Johns Hopkins.

Partnership and respect

A hallmark of successful, continuously learning health systems is the partnership that develops among clinicians, patients, and health system leaders, said Peter Margolis of Cincinnati Children’s Hospital Medical Center. Strong partnerships, particularly those that include patients, based on ethical principles and respect, will be just as important for realizing the full potential of PCORnet to generate the data needed to inform a learning health system.

“We need structure that deliberately and purposefully includes patients and families in designing care in a meaningful way; otherwise we’re not going to get it right,” commented Nevin. “CEOs need to embrace the idea of partnership with patients and families as a core business strategy, and then they can start to provide an infrastructure that not only gives patients a seat at the table but a voice at the table,” she said. “Engaging patients around the definition of value is an interesting way of framing patient engagement and a real opportunity,” said Holly Peay of the National Human Genome Research Institute. Margolis noted that one of the keys to engaging physicians in learning is understanding what incentives, economic as well as social and intrinsic, are important to them. He added that these can vary and are often reflective of the institutional cultures in which they practice.

Shared data plus shared decision making equals shared accountability, said Okun. She added that “patients want to see their data coming to life in a way that is going to be useful to you. If you begin to embrace that notion, you will find that patients are ready, willing, and able to participate in a variety of research studies.” Margolis noted that to achieve shared learning, more work is needed on how to inform patients about comparative effectiveness research and how being part of a network can benefit them.



Integration of research and practice is fundamental to progress toward a health system that continuously learns and improves care, outcomes, and value. Individual workshop presentations and discussions highlighted the importance of engaging health system leaders as essential partners and leaders in building the necessary and sustainable infrastructure, such as PCORNet, needed to achieve this integration. The challenges identified will inform future discussion, including the second part of this two-workshop series focusing on opportunities for CEO leadership. 

PLANNING COMMITTEE ON HEALTH SYSTEM LEADERS WORKING TOWARDS HIGH VALUE CARE THROUGH INTEGRATION OF CARE AND RESEARCH**

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This workshop in brief was reviewed by **John Steiner**, Kaiser Permanente, and **David Ballard**, Baylor Scott & White Health. **Chelsea Frakes**, Institute of Medicine, served as review coordinator to ensure that the workshop in brief meets institutional standards for quality and objectivity.

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DISCLAIMER: This workshop in brief has been prepared by **Claudia Grossmann** and **Joe Alper** as a factual summary of what occurred at the meeting. The statements made are those of the authors or individual meeting participants and do not necessarily represent the views of all meeting participants, the planning committee, or the National Academies.

**IOM planning committees are solely responsible for organizing the workshop, identifying topics, and choosing speakers. The responsibility for the published workshop in brief rests with the institution.

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