

Learning Health Systems: Reflections from the C-Suite

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An observational and not necessarily evidence-based perspective

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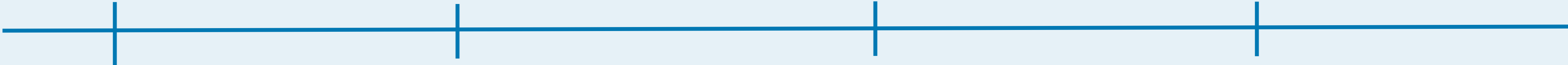
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My roles related to Learning Health Systems

Health services researcher



Federal agency director / Funder



Journal editor



Health system CMO



Defining a Learning Health System

A Learning Health System applies a conceptual approach wherein science, informatics, incentives, and culture are aligned to support continuous improvement, innovation, and equity, and seamlessly embed knowledge and best practices into care delivery (NAM).

Learning Health Systems (AHRQ):

- Have leaders who are committed to a culture of continuous learning and improvement
- Systematically gather and apply evidence in real-time to guide care
- Employ IT methods to share new evidence with clinicians to improve decision-making
- Promote the inclusion of patients as vital members of the learning team
- Capture and analyze data and care experiences to improve care
- Continually assess outcomes refine processes and training to create a feedback cycle for learning and improvement

Additional Learning Health System benefits



Lower cost learning

Potential to leverage automated processes and data collected as a part of routine care within electronic health records rather than custom built solutions for clinical trials.



More generalizable findings

Patient population tends to be less narrowly defined and managed in a manner that is more typical than in a traditional clinical trial.



Faster learning

Performance of research within a health system has the potential to increase visibility and relevance of the findings among those who can turn the knowledge into care improvements.

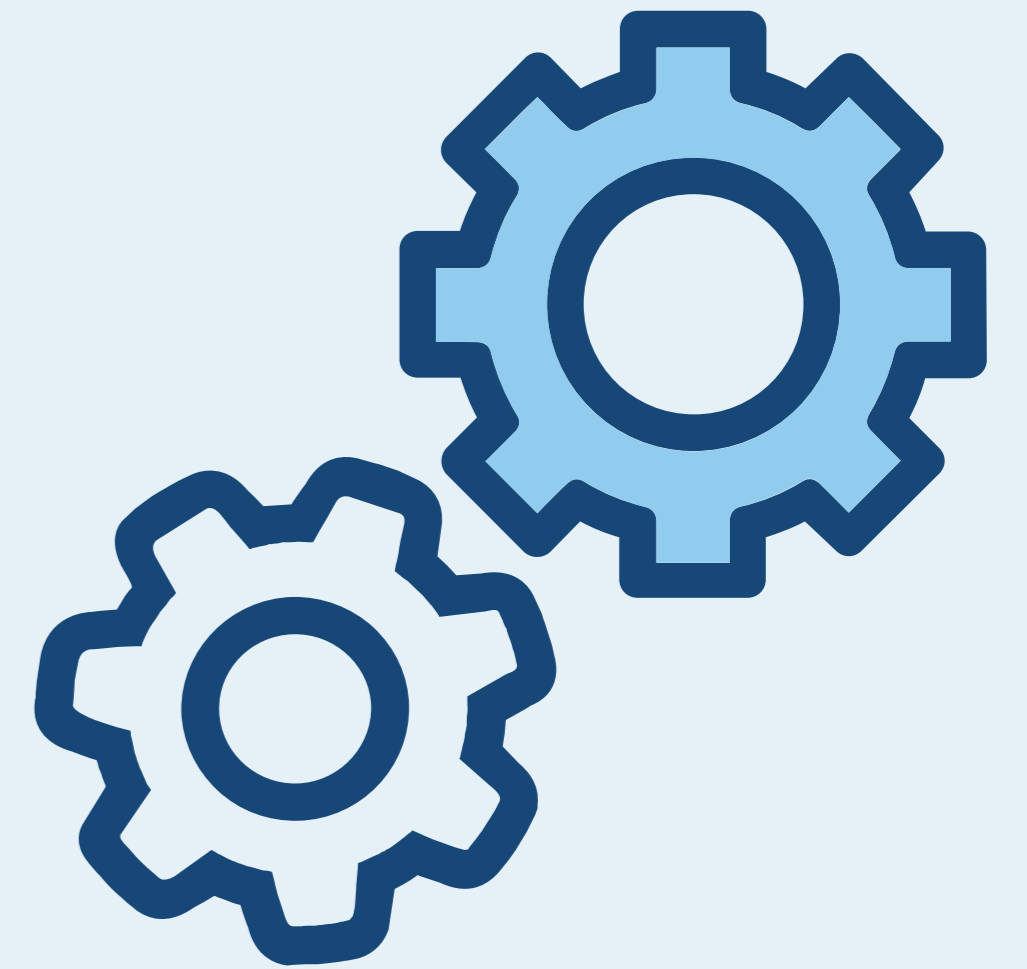
Informational barriers

- Challenge of separating noise from signal in findings of external research
- Internally-generated data not necessarily a short cut
- Publication/systematic reviews establish legitimacy
- Legal/reputational risk if too far out in front of practice change



Implementation barriers

- Clinical workflow/impact on other activities
- IT support/automation
- More complicated when there is “joint custody” over components of an intervention
 - Physicians control clinical practice
 - Hospital or health plan may control IT, non-physician staff, etc.



Learning Health Systems: Timely adoption and spread

What is working?

- Meaningful clinical questions from research-clinician partnerships
- Methods to create real world evidence
- Clinician acceptance of findings as relevant
- Primary focus is on care effectiveness

What are the challenges?

- Expanding the learning potential beyond clinicians to the health system
- Addressing broader questions of how to make care more efficient, affordable, patient-centered, safe, and equitable

Who needs to do the learning in an LHS?

- The focus on clinicians is too narrow
- There needs to be a more intentional approach to including health system leaders throughout the learning process:
 - Questions
 - Design
 - Findings
 - Next steps



Addressing the gap between knowing and doing



Health systems don't have researchers' undivided attention.

Extramural funding comes with autonomy and prestige.



Researcher independence is a strength and a threat to health systems.

This creates potential for conflicting priorities and messages.



Intellectual property rights can be a point of contention.

Health system investment in innovation may complicate perceptions of ownership.

Learning Health System: Future directions

- Real world evidence generation is poised to grow with impact on physician practice
 - Push available through traditional funders
 - Pull from clinicians, FDA
- Broader health system learning and implementation is lagging
 - Researchers may require stronger incentives to change their focus
 - Health system leaders have not moved to provide these incentives because of limited experience in using evidence to improve their decision-making