

How UC BRAID Can Build a Learning Health System Across California (Short Version)

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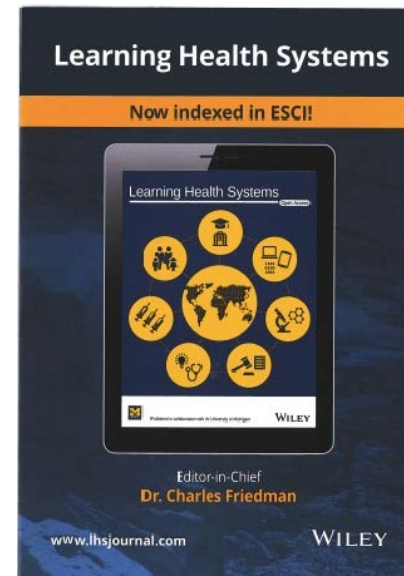


Disclosure

I serve on the Board of Directors of the Learning Health Community, a non-profit corporation promoting Learning Health Systems.

Learning Health Systems

Health systems--at any level of scale--become learning systems when they can, continuously and routinely, study and improve themselves



<https://nam.edu/programs/value-science-driven-health-care/learning-health-system-series/>

lhsjournal.com

Annu Rev Public Health. 2017 Mar 20;38:467-487. doi: 10.1146/annurev-publhealth-031816-044255. Epub 2017 Jan 11.

Moving From Discovery to System-Wide Change: The Role of Research in a Learning Health Care System: Experience from Three Decades of Health Systems Research in the Veterans Health Administration.

Atkins D¹, Kilbourne AM^{1,2}, Shulkin D¹.

The Goal: A Health System That Can *Discover & Improve*

- ✓ Every **participating** person's characteristics and experience are available to **learn** from (Data to Knowledge)
- ✓ Best practice knowledge is **immediately available** to support decisions (Knowledge to Performance)
- ✓ Improvement is **continuous** through ongoing study
- ✓ An **infrastructure** enables this to happen routinely and with economy of scale
- ✓ All of this is part of the **culture**

Learning Systems Can Exist at Any Level of Scale

Single Organization



Network of Organizations



States/Provinces/Regions



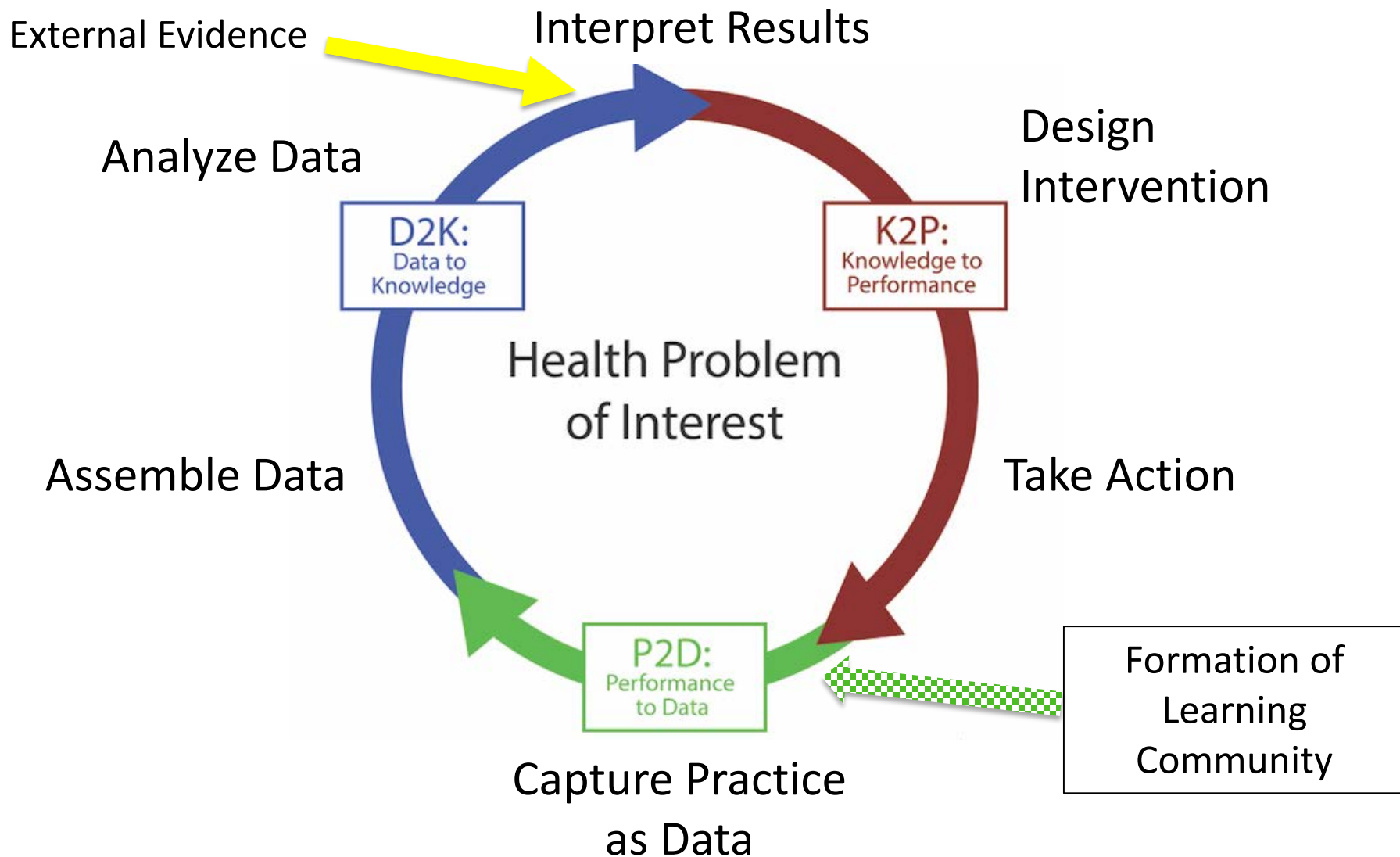
Nation



Planet



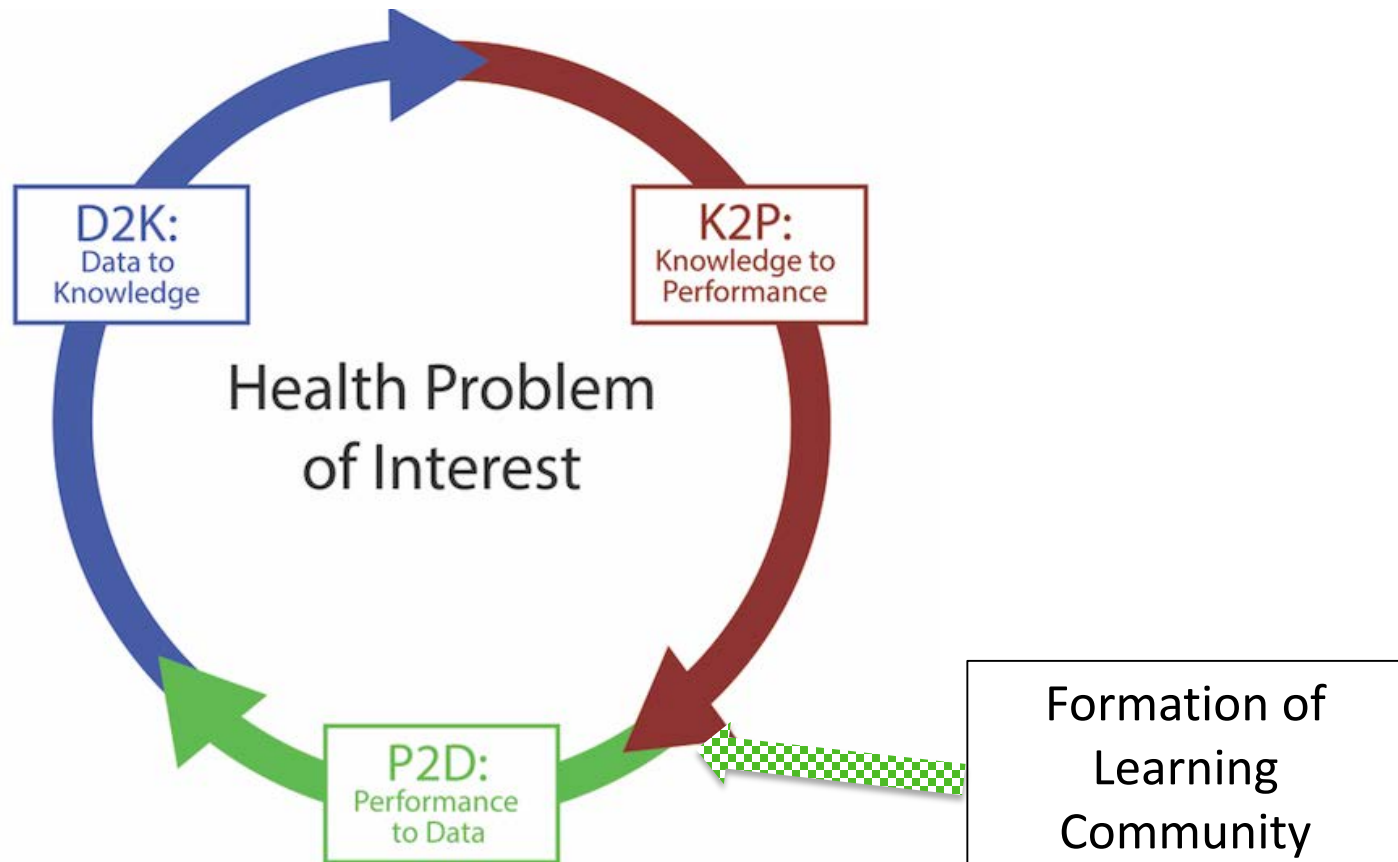
The Fundamental Activity: Community-Directed Cycles of Study and Change



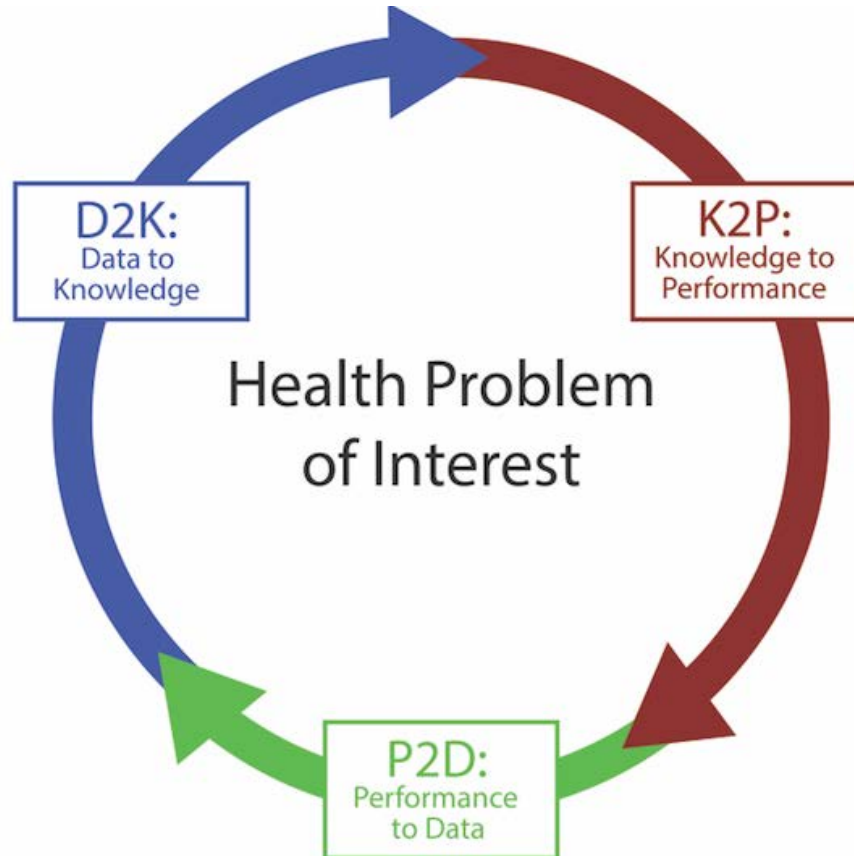
The LHS and CTSA are Aligned: Integrating Discovery with Practice!

Better Health = P2D -> D2K -> K2P -> P2D ...

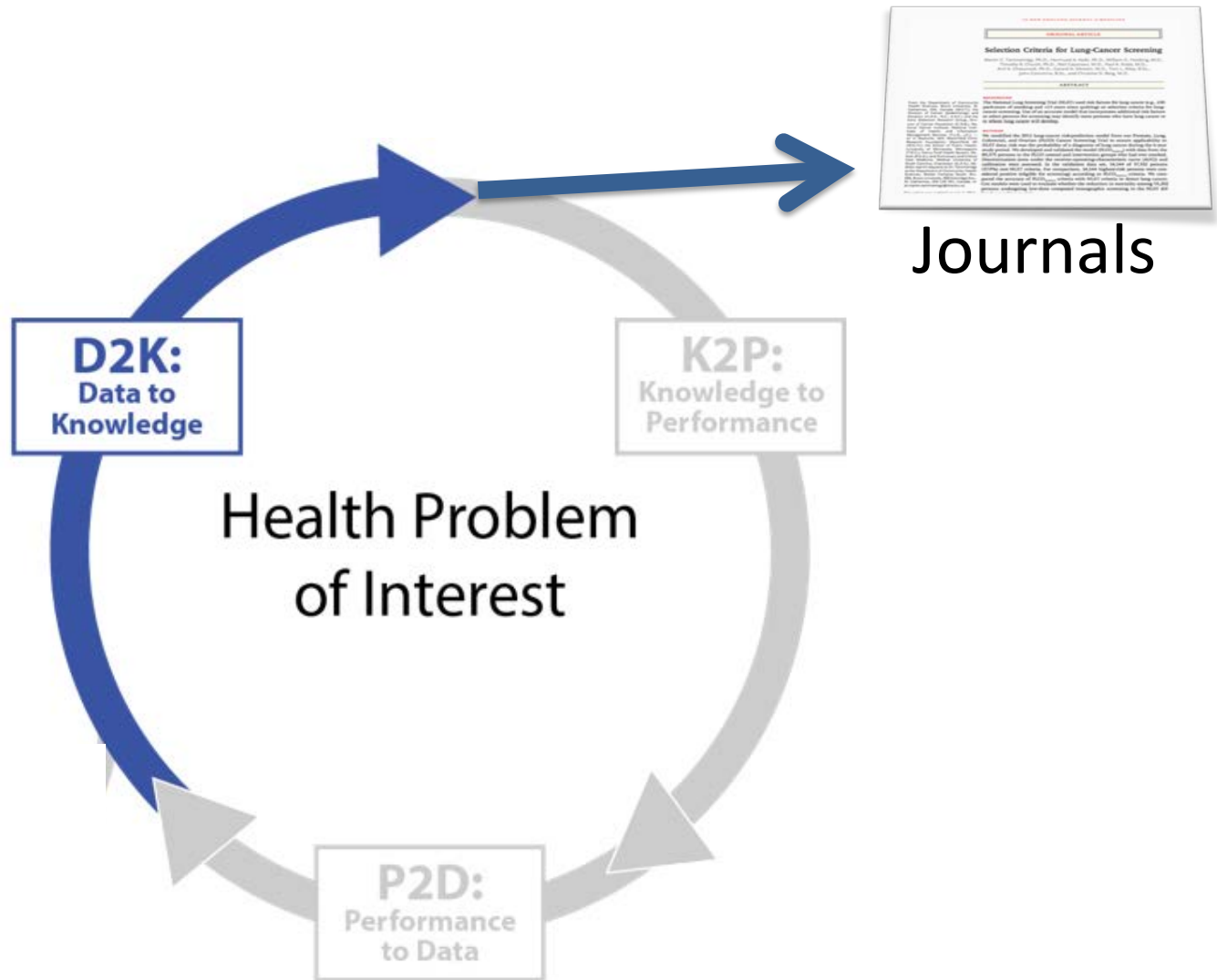
The community that discovers is also the community that implements.



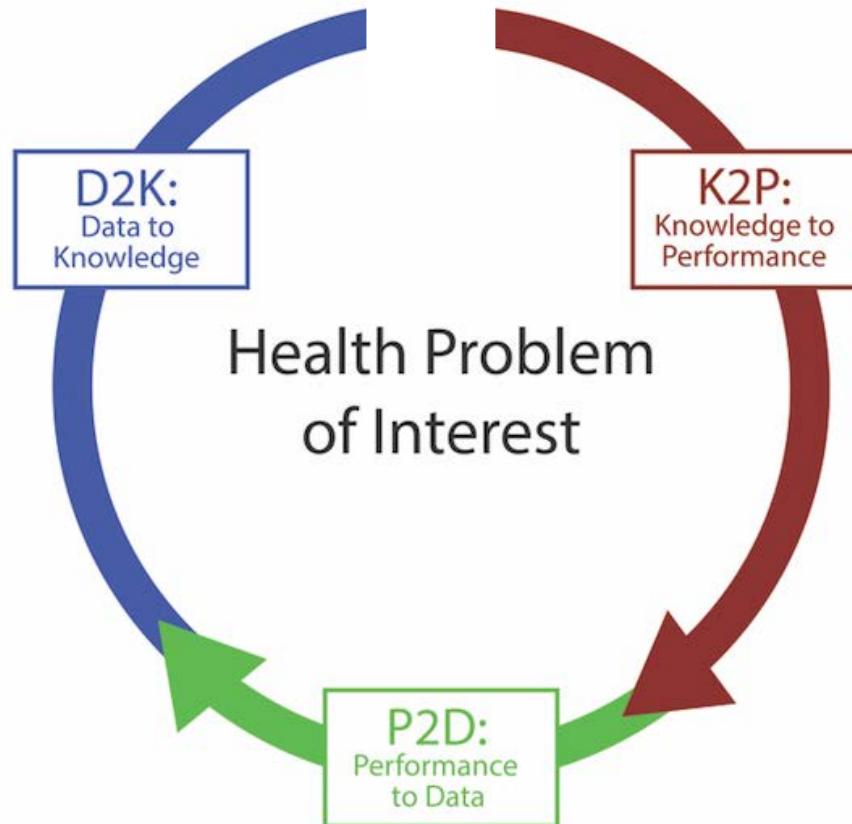
Better Health Requires This



Not Just This



Or This



LHS Exemplars at all Scales!

Single Organizations



In the US:

- Intermountain
- Geisinger
- Kaiser-Permanente
- Mayo
- VA

Networks



In the US:

- PCORI networks (Improve Care Now)
- CancerLINQ
- NIH networks (Epinet)
- High Value Collaborative

States/Provinces/Regions



- Quebec & BC
- Michigan & Indiana
- Northern England

Nation



- **Switzerland**
- Scotland
- Taiwan
- Saudi Arabia

Planet

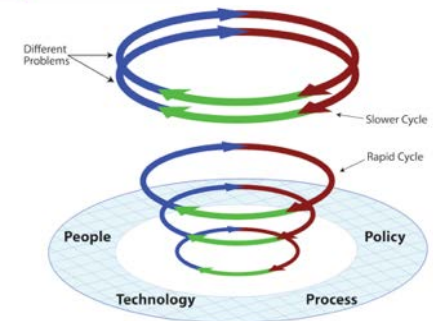


Someday

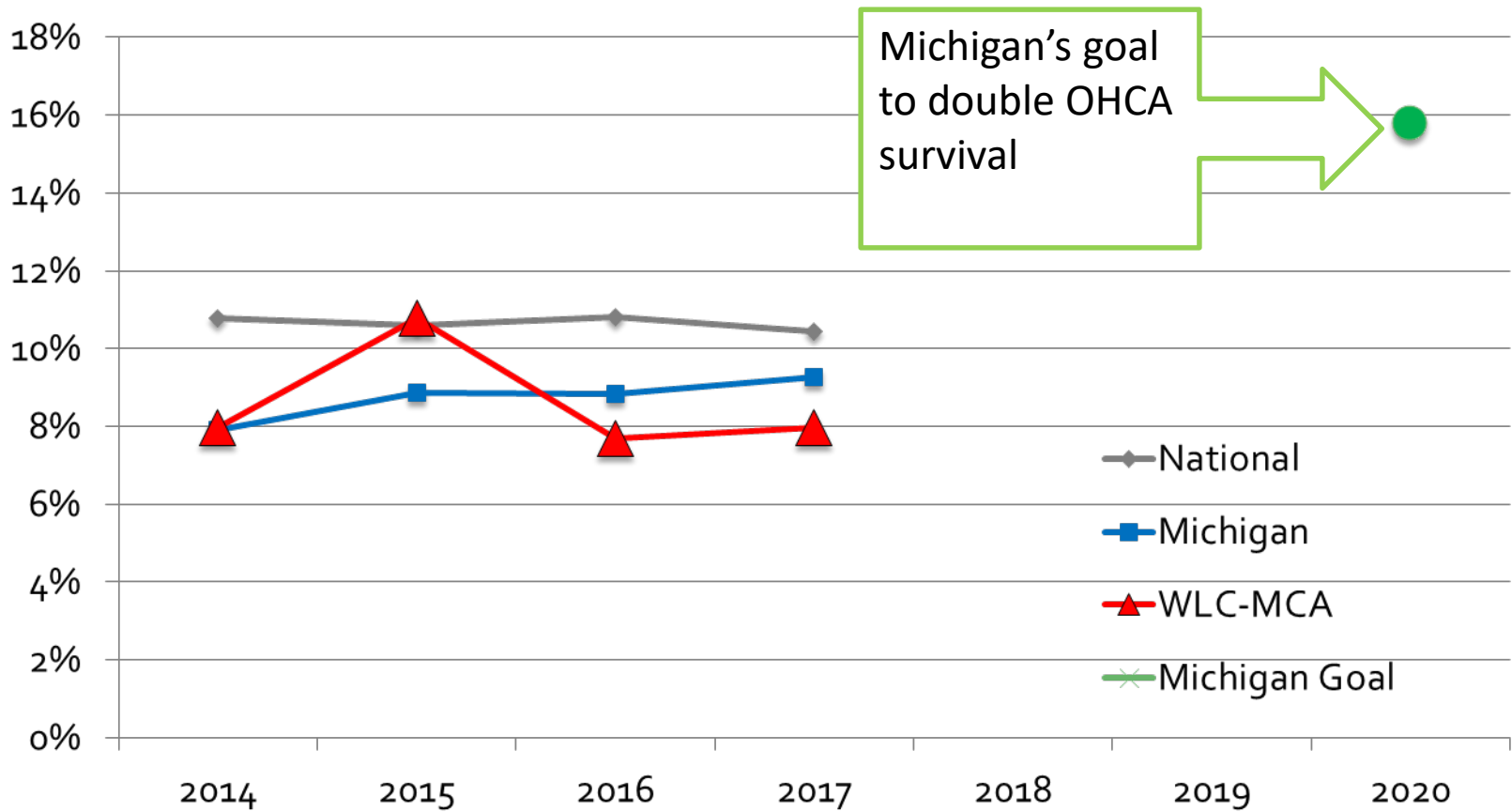
LHS Approaches are Different...

... From other approaches to health improvement.

- Embraced uncertainty: discovery is required
- Infrastructure: multiple learning cycles share services
- Learning communities: all stakeholders are engaged



Michigan Example: Out of Hospital Cardiac Arrest (OHCA)



Red Line: Washtenaw-Livingston County Medical Control Authority (WLC-MCA)
Source: Cardiac Registry to Enhance Survival (CARES)

OHCA Learning Community

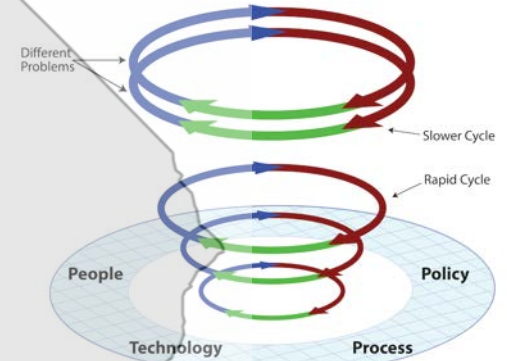
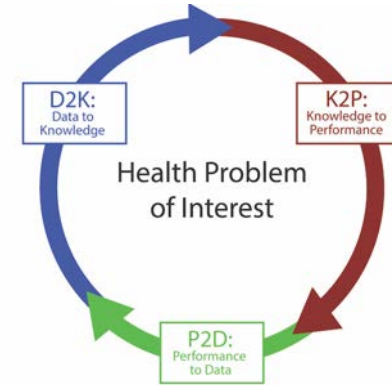
- Initial Scale: Two counties forming a medical control district
- Stakeholders across the whole chain of survival:

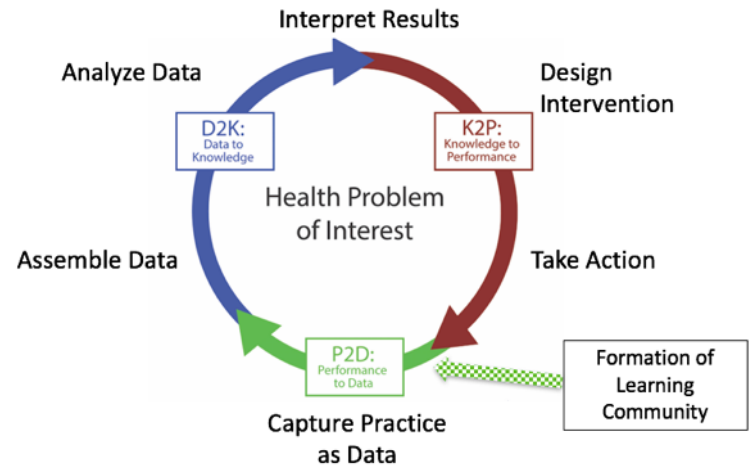


- Now funded by the American Heart Association

A Recipe for California

- Rests on:
 - The assumption that LHS and CTSA are aligned in merging discovery and practice
 - Ten general principles for starting an LHS
- The specific CA-LHS recipe has three parts:
 1. Work at state scale
 2. Initiate learning cycles
 3. Build infrastructure





Thanks and Write to Me
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