

# Workshop Plan

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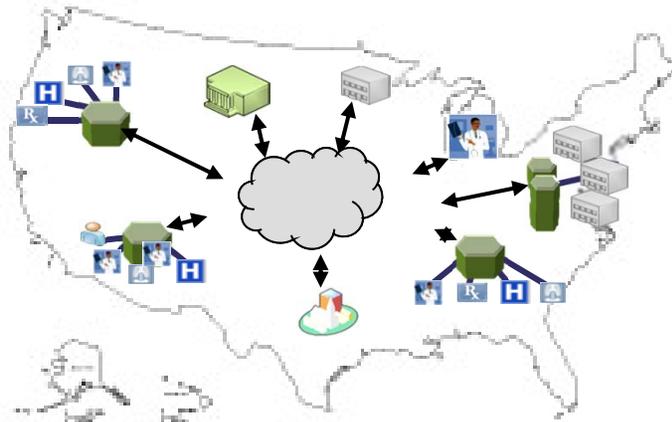
NSF-LHS Workshop

April 11-12, 2013



# Goal of the Workshop

To identify the **research challenges** that must be addressed to realize the **large scale, high functioning LHS** of the future.



# We're Playing Jeopardy!

Our Product is Questions, Not Answers



PHOTO: JULIANNE PEPITONE/CNNMONEY

# Envisioning the High Functioning Future LHS

- We have a better idea of what the future LHS needs to do than what it will look like.
- So we articulated:
  - Four LHS Use Cases with specific requirements
  - Four LHS system level requirements

*Fully recognizing that future LHS will do things that no one anticipated*

# The Workshop Plan is a Tapestry



# The Warp: Four LHS Use Cases

1. Health care quality
2. Public health
3. Consumer empowerment
4. Biomedical research



# The Woof: Four System-Level Requirements

1. Trusted and valued by the public
2. Economically sustainable
3. Stable, certifiable, adaptable, and self-improving
4. Capable of generating valid knowledge



# Workshop Sequence

1. Introductory sessions
2. Breakout groups to identify research challenges along the **warp**
  - Focus on **use cases**
  - Heterogeneous groups
3. Breakout groups to identify research challenges along the **woof**
  - Focus on **system-level requirements**
  - Homogeneous groups
4. Closing sessions

# Each Group will be Asked:

**Thursday:** What are the **research challenges** that must be addressed in order to achieve the requirements expressed in their assigned **use case**?

**Friday:** What are the **research challenges** that must be addressed in order to achieve their assigned **system-level requirement**?

# Describing a Research Challenge

- Title/Name of the Challenge
- The relevance of the Challenge to the high-functioning Learning Health System
- One or more research questions

## Optional

- Scientific disciplines or perspectives that must be mobilized to address the Challenge.
- Relationship to past or ongoing work:

# Example of a Research Challenge

## 1. Title/Name of the Challenge

Standards for Digital Knowledge Objects

2. The relevance of the Challenge to the high-functioning Learning Health System. Why is this challenge important?

The knowledge produced by the efferent arm of the LHS must be actionable and, ideally, direct implementable in the information systems of end-users who are making health decisions about themselves, their patients, or their organizations.

*Relevant to UC1: R6, 7; UC2: R3, 5, 6; UC3: R8; UC4: R10.*

# Example Challenge, Continued

3. One or more research questions, written in the form of questions, that express the lines of investigation that must be pursued to address the challenge.

Q1: What is the minimum metadata needed for these digital knowledge objects?

Q2: What existing metadata standards for knowledge objects can be inherited into the architecture of knowledge objects for the LHS?

Q3: How can these standards be curated at national scale?

# Breakout Group Process

*Each group has a note-taker.*

- Review of task by facilitator
- Identification of research challenges
- Plenary presentation to full workshop group
- Groups reconvene to revisit and revise their identified challenges

# After Lunch Today

We reconvene in “use case” groups

- Group 1: One side of this room
- Group 2: Other side of this room
- Group 3: Thomas Room
- Group 4: DuPont H