Learning Health Communities: Design and Infrastructure

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Outline

- WIIFM
- M
- Community Design
- Infrastructure
Community Motivation

WIIFM (and mirror neurons)
Technology Adoption Model

WIIFM

– Usability
– Usefulness

Venkatesh (1999) Creation of Favorable User Perceptions: Exploring the Role of Intrinsic Motivation
Funding Model

WIIFM
Sustainability Plan

WIIFM
Learning-System Design

• Identify the needs of each team (community) member.
M: The Patient’s Care Teams
M: The Health Team

- Researchers
- Care Teams
- Americans
- Public Health
- Patients
- Regulators
Learning-System Design

• Identify the needs of each team (community) member.

• Prioritize the needs.
  • The difference between a food fight and a project
  • Criteria
    • Patient and public needs and preferences
    • Health impact
    • Feasibility

• Infrastructure: Meet needs in priority order.
Infrastructure Criteria

- Useful to each community member
- Usable by each community member
- Standards-based
Infrastructure Criteria

• Useful to each community member
• Usable by each community member
• Standards-based
• Cost-effective for each community member
Cost-Effective

- Standards adherence requires implementation decisions.
- Implementation decisions are expensive.
- Divergent implementation decisions limit interoperability.
- The Care Connectivity Consortium is co-implementing the required standards for information sharing and preparing a freely available implementation guide.
Care Connectivity Consortium

15 million patients covered across 18 states

Kaiser Permanente
Information-sharing Services

• The CCC is also developing federated information-sharing services. . .
• and preparing to make them available as cheaply as possible.
• Initial services are to providers.
  – First new members join 2012.
  – 700 have expressed interest.
Care Connectivity Consortium 1.0

- Employer(s)
- Lay Caregivers
- Nurse(s)
- Doctor(s)
- Patient
- Care Manager
- Insurer(s)
- Public Health
**Information-sharing Services**

- The CCC is also developing federated information-sharing services.
- and preparing to make them available as cheaply as possible.
- Initial services are to providers.
- Expanded services for patients and other care-team members are under development.
Information-sharing Services

• Clinical Documents (e.g., Discharge Summary)
• Identity Management
• Patient Consent
• Digital Certificate Management
• Terminology Services
Care Connectivity Consortium

- **Shared Services**
  - Terminology Services
  - Digital Certificate Management Services
  - Advanced Patient Consent & Authorization Services

- **Identity Management Services**
- **NwHIN Gateways**
- **Sharing Documents**
- More Data, Discrete Data
- More Discrete Data with Rules

**CCC Basic 1.0**
- 5 partners
- Year 1

**CCC Basic 2.0**
- 5-100 partners
- (as soon as practical)

**Future**
- 100+ partners
- 5+ years

**Step 1: Foundation**
- CCC Basic 1.0
- NwHIN Gateways

**Step 2: Foundation & Identity Management**
- CCC Basic 2.0
- (as soon as practical)

1. internal services only
2. shared services required
Care Connectivity Consortium

Lower barriers

Expand participation
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