EHRs + human + communication + technology.
Understanding How Human, Communication, and Technology Factors Influence Effective and Efficient Electronic Health Records (EHRs) Use

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Background and Rationale.

Mixed Findings

Mixed Findings on usefulness of EHRs, especially with regard to their impact on workflow

Lack of Shared Standards

Lack of shared technology standards, training, and regulations for EHR use

Everyday Practices

Efficiency and effectiveness depends on how medical personnel incorporate EHR into everyday practice
incentives offered via the HITECH policy for “meaningful use” of certified EHRs.
The effectiveness and efficiency of EHRs depend on how individuals adopt and adapt EHRs everyday in mundane ways.
1. To **IDENTIFY** and **EXAMINE** the nuanced ways doctors and nurses adopt and adapt EHRs to address competing goals and/or motivations in everyday practice.

2. To **EVALUATE** the degree to which EHR uses are considered consistent with employer and/or funding organizations’ goals and intents.
3. To **EXPAND** effective, efficient EHR use by identifying human, communication, and technology barriers, opportunities, and motivations influencing how and when individuals use EHRs.

4. To **IMPROVE** EHR use by actively disseminating findings to public, medical, and academic communities to inform better policies and effective and efficient practices.
Our Research Process.

PHASE 1  Ethnographic Observations of EHR Use
Our Research Process.

PHASE 2

Short Mobile Ready Survey

15 min

Berkelaar & Bernhardt
current stage
Ethnographic Observations of EHR Use

PHASE 1

2 MDs
2 Nurse/Nurse Practitioner

~15 hours observation
200 pages of field notes
>25 patient/family interactions
Ethnographic Observations of EHR Use

PHASE 1

- 2 MDs
- 2 Nurse/Nurse Practitioner
- 2 EHR systems
- ~15 hours observation
- 200 pages of field notes
- >25 patient/family interactions

Starting data collection next week
KEYWORD SEARCH of 8 RESEARCH AREAS

- Communication
- Health informatics
- Health information management
- Health social science
- Information systems and management
- Management of technology & innovation
- Medicine

2000 to 2014
Offer nuanced insights into effective and efficient individual appropriations of EHR given multiple, competing short-term and long-term health service goals.

Identify and disseminate best practices, challenges, drivers or satisfaction and dissatisfaction in individual use behaviors.
EHRs + human communication + technology.