



Organizational Barriers and Enablers to Using Electronic Health Records

ERICCA Project

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Presentation Overview

- Background
- Focus of research
- Methods
- Emerging themes and data
- Next steps

The project has several goals...

Implement a network for improving communication among health care providers

Diminish the rate of continuity of information errors

Improve adherence to guidelines for chronic management of asthma with computer-based decision support

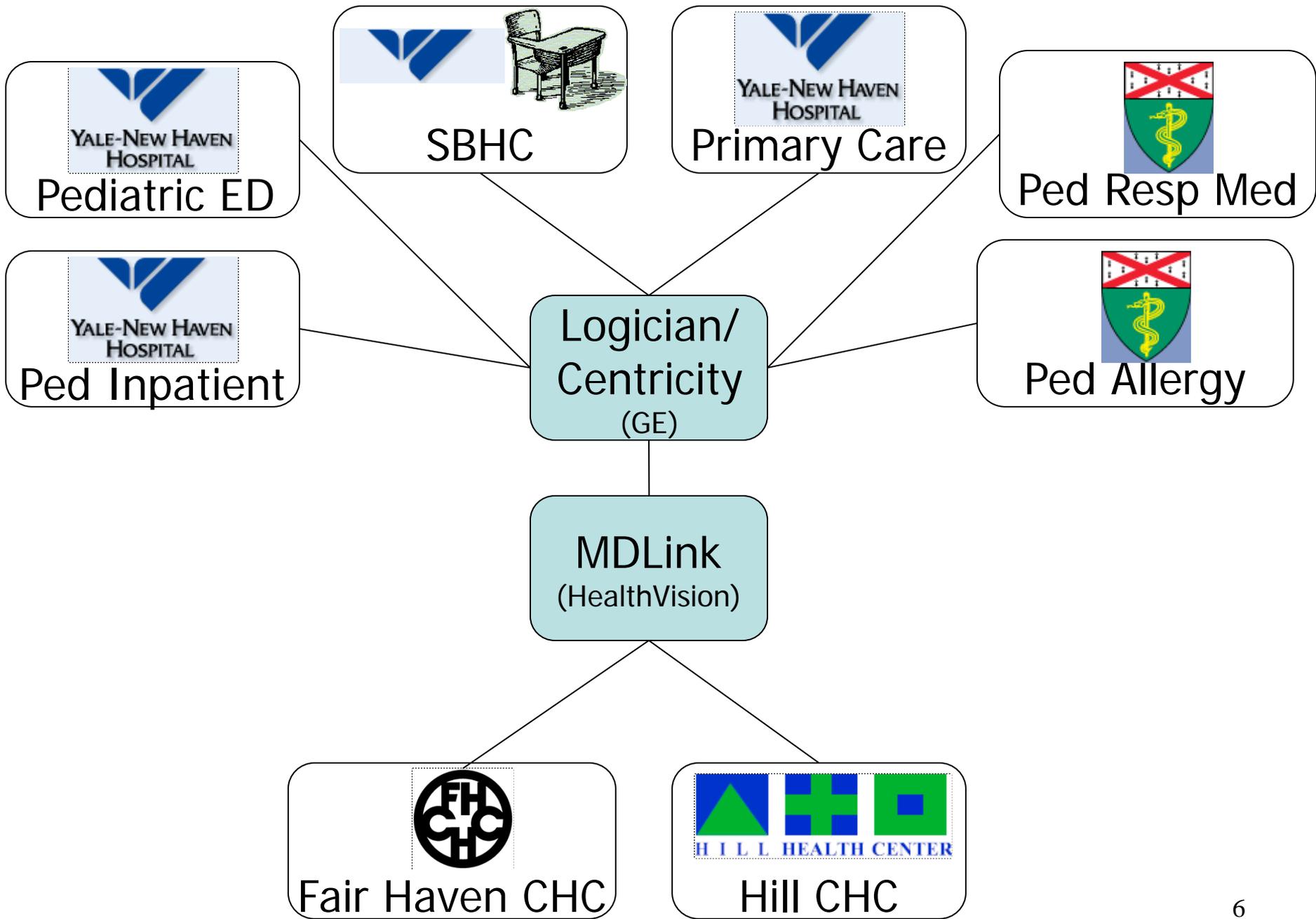
Understand organizational barriers and factors that enhance IT acceptance

Conceptual models...

- Complex adaptive systems – huge dilemma – how do you measure this?
- Change management
- IT acceptance and use

We are using quantitative and qualitative methods...

- Grounded theory using iterative design, categorical analysis of language, and a quantitative survey
- 7 sites – just finishing 3rd site
- Snapshots before, during, and post-implementation
- Data collection and analysis tools: SurveyMonkey, SPSS, NVivo



What people are talking about...

Total Concepts	71
Total Documents to Date	47
Total Passages Coded	987

Top ten emerging concepts = 39% of all coding

Four clusters emerged from the top ten concepts...

Barriers (17% of coded passages)

Scrap the entire system in favor of a true, coordinated (labs, radiology, notes) system, like CPRS at the West Haven VAH."

"...the computer is taking all the space on the desk...physically, it's an obstruction...should be more flexible...out of the way..."

Supports (8%)

"...need IT support day and night, not just day hours. We use Logician at all times of day and problems arise in the middle of the night..."

"...Provide ample opportunity for training and refresher courses that are pertinent to the user. Residents may find the technology daunting, and not realize how ultimately it could make their work ultimately more efficient and complete."

Four clusters...

Attitudes (7%)

"When I left that hospital, I was there for four months, they were touching upon it (EHR's) and it wasn't bad."

"While I support the general concept of EMR, and would love to see it really happen in the ED, piecing out just the discharge portion is duplicative, and therefor cumbersome."

"Like I said, I love them, because there's no looking for the chart."

Hopes (7%)

"It depends on what exactly the medical record would entail, what I would be able to access. Like the lab, we just got that about a year ago. Before we would have to walk all the way back to the lab, wait for someone to help us, look up the lab, go to a file cabinet, pull it out of drawer, make a copy and then give it to me. So having access to the lab right here is a miracle. I can't believe what we were doing before."

Areas of focus in surveys...

- Barriers
- Supports
- Hopes
- Concerns
- Influencers
- Attitude

From the survey, we saw some aspects change over time...

- People's hopes for the system's benefits increased
- Concerns about privacy and security went up
- Some barriers related to the system increased
- "Discouraging" colleagues had less effect, and encouraging peers had a greater effect
- Organizational supports stayed the same
- Attitudes didn't change

Emerging themes...

- System issues are paramount barriers
- Interviews showed that having a “consistent champion” enhances the odds of successful implementation.
- Some expected changes did not occur, e.g. prescription writing, legibility of records, all 4 attitude items.
- An individual’s level of comfort with the use of computers has mild to moderate impact on willingness to use EHRs.
- Confirming existing research, the perception of the “mandatory” nature of EHR’s impacts usage, as does the unit’s experience with research protocols.
- Work patterns matter. The type of medical care provided and the degree of control over patient load affect acceptance of the new technology.

THANK YOU!



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