

Implementation for EMR and beyond

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Introduction and Background

Health care is rapidly evolving
 Challenging for everyone, especially bedside clinicians
 Those affected need to have access to information and be engaged in knowledge sharing (AONE, 2012)
 HITECH Act – set into motion a national plan for mandatory EMR adoption

\$40 billion is available for assistance to meet required stages of EMR development

After 2015, penalties will be enforced for noncompliance

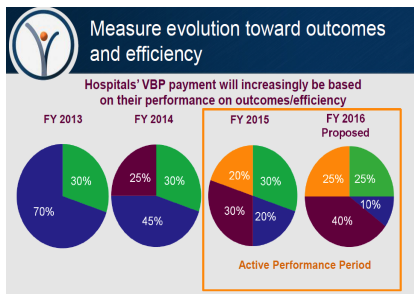
Abundance of information on EMR applications but no organized process for change!

Project focus: develop an implementation plan for EMR development that was sustainable for continued growth and applicable in any kind of change environment that actively engages frontline staff.

Specific goal: improve baseline EMR usability scores 30% through a series of strategic interventions, measured with the System Usability Scale (SUS)

(Brooke n.d.)

Value Based Purchasing (Daughter's of Charity Board of Quality report, 2013)



Theoretical Framework and relation to other evidence

Rogers's Diffusion of Innovation Theory

Stages of diffusion occur interchangeably *****	Types of Adopters to change
Knowledge	Innovators
Persuasion	Early adopters
Decision	Early majority
Implementation	Late majority
Confirmation	Laggards

Evidenced Based Practice

Establishing end user buy-in is a forerunner of success (Chisolm, Purnell, Cohen, & McAlearney, 2010; Noah, 2011; Gold, et al., 2012)

Nurses' attitudes should be not underestimated and their opinions do matter (Sassen, 2009).

Early in the EMR project, leadership should be actively engaged, especially nursing leaders (Scott, & Van Norman, 2009; Gold, et al., 2012).

It is essential for leadership to give the team that vision and create a shared agenda to improve acceptance (Chisolm, Purnell, Cohen, & McAlearney, 2010; Gold, et al., 2012; Noah, 2011)

Over time, documentation will be faster and more accurate, reflect the care given and more specifically, improved satisfaction with technology

(American Nurses Association, 2006; Chisolm, Purnell, Cohen, & McAlearney, 2010; York & Green, 2010)

The Project intervention

Needs assessment completed – had no focused resources at facility, no set agenda

- Project ready for development
- Benefits two fold

1. met criteria of project for DNP
2. administrative involvement at facility

Focus on end user acceptance

Developed some processes that we felt were necessary to increase staff acceptance:

1. Bedside nurses involved in development of product
2. A larger group of bedside nurses brought in as superusers
3. Peer training
4. Super user support during go-live
5. COMMUNICATION

Assessments with SUS survey pre and post phases of EMR development

Project Tools

1. EMR issues log

Issue/Change Request Form

Date/Time: _____ Department: _____
 User Name: _____ Call Back number: _____
 Patient Name and Visit #: _____
 Issue Description: _____

2. System Usability Scale (SUS) (Brooke, n.d)

3. Open ended questions for discussions

What is working well?

What needs improvement?

What are the top 5 priorities that need to be addressed?

Analysis

- SUS scores a composite number, representing an overall usability of the system being studied.
- Themes identified from issues logs and subsequent meeting.
- The EMR issues log helpful in making changes to the system and mitigating risk.
- the project was not simple process that we could just put in place – much more complex – delays caused disengagement
- Usability scores rose 17% between pre go- live of Phase I and pre go-live of Phase II
- Decline 1 month post Phase II to 16% over baseline

Overall increase in Usability 17% - goal not met but significant improvement!

Barriers

- Biggest barrier to the project was the constantly evolving timetable
- Physician disengagement
- Careless completion of surveys
- CNA union – Objection to Technology

Positive results

- The most objective improvement
 - Increase of 17% among users perception of the usability of the system.

- Improved accuracy of documentation
- Ease of auditing
- Improved patient safety
- Phase II – limited problems – plan working
- Development of action plan

Lessons Learned

- Entire change in work flow and NOT just bedside
- The need for ancillary staff communication was critical
- Delays should be dealt with quickly and clearly
- Communication needs to be constant
- Full disclosure of components of EMR, both positive and negative

Conclusions

- Success of EMR lies not only in the product, but in the process in which it is implemented
- Favorable staff attitudes and acceptance directly impacts the environment of care and makes the work getting there more rewarding
- Involvement of key staff can ensure the change will meet their needs
- With buy in, employees will be stronger, more confident and successful