Implementation of an Electronic Handover Tool: Learning from Program Evaluation.

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Educating students to shape their lives, their professions, and their societies.

Disclosures

No financial compensation was received from any parties or organizations involved in this work. There are no conflicts of interest to disclose. Any reference to a specific model, product, or method is only one example of many potential options to consider.

Thank you

http://www.asm-aetna.com/blog/wp-content/uploads/Thank-you.jpg

Introduction and Background

- Significance of problem (i.e. patient safety, communication failures)

- Issue within organizations globally (i.e. worldwide initiatives)

- One organizations intervention (implementation of electronic bedside tool)

Program evaluation

"critical examination, collecting and analyzing information about a program's activities, characteristics, and outcomes to make judgments about the program, improve its effectiveness, and inform programming decisions"
(Patton, 1987)[1]

– formative or summative in nature

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Program Evaluation Continued

- Why do it?
  - Up to 70% of change initiatives fail[2]
  - Fail forward[3]
  - What gets measured. . .[4]

  "Success is stumbling from failure to failure with no loss of enthusiasm." (*Winston Churchill)*[5]

Fail early, fail often, but always fail forward.

John C. Maxwell

http://stefanowiczclass.blogspot.com/2017/04/embrace-fail.html

Program Evaluation Continued

A JOB
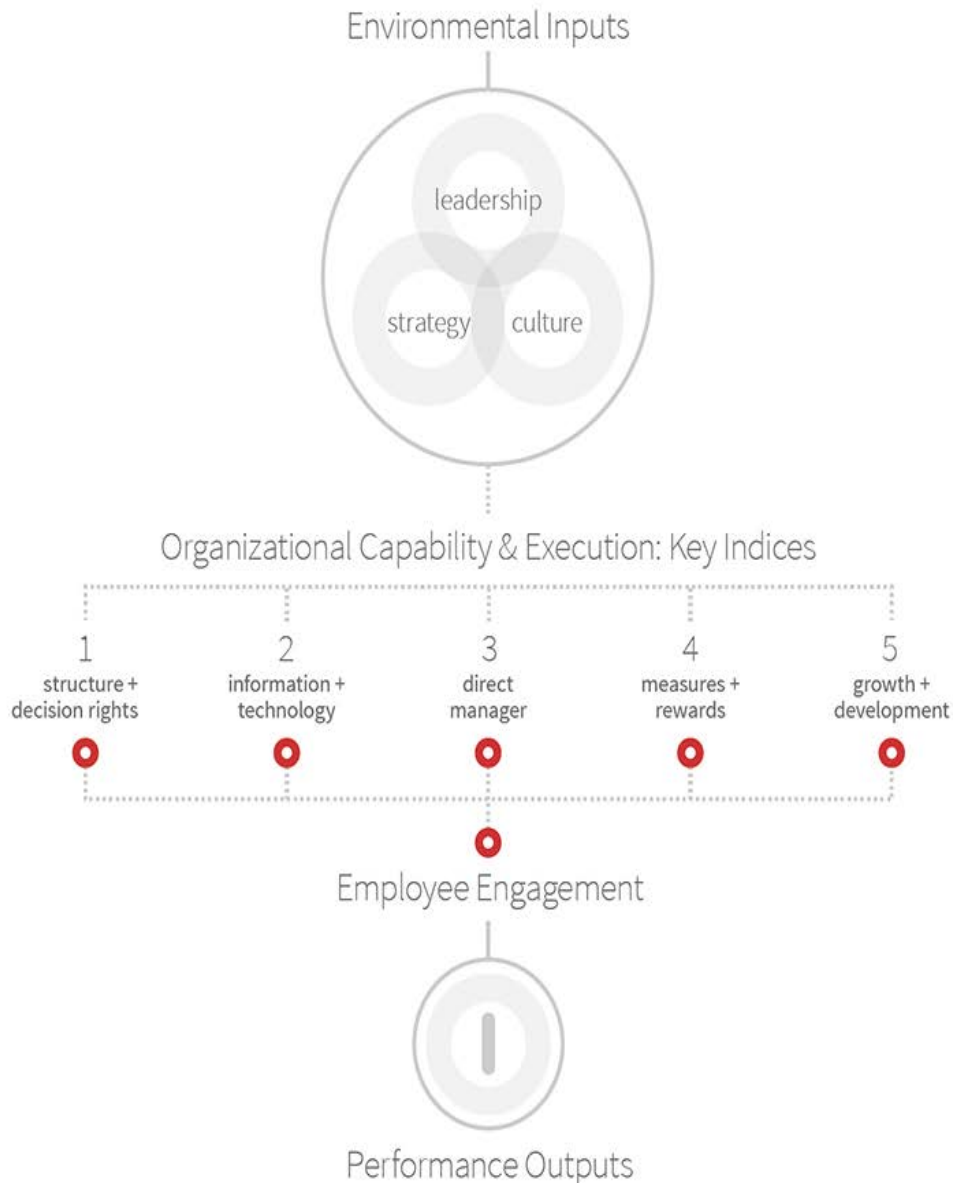WELL DONE
TODAY IS THE BEST
PREPARATION FOR
TOMORROW

YOU®
CAN
WIN

How is it done?[6]
- Address specific goals
- Inclusive
- Honest
- Replicable & Rigorous

Application from DNP project examples following

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Organizational Intelligence Model™

Environmental Inputs

leadership

strategy   culture

Organizational Capability & Execution: Key Indices

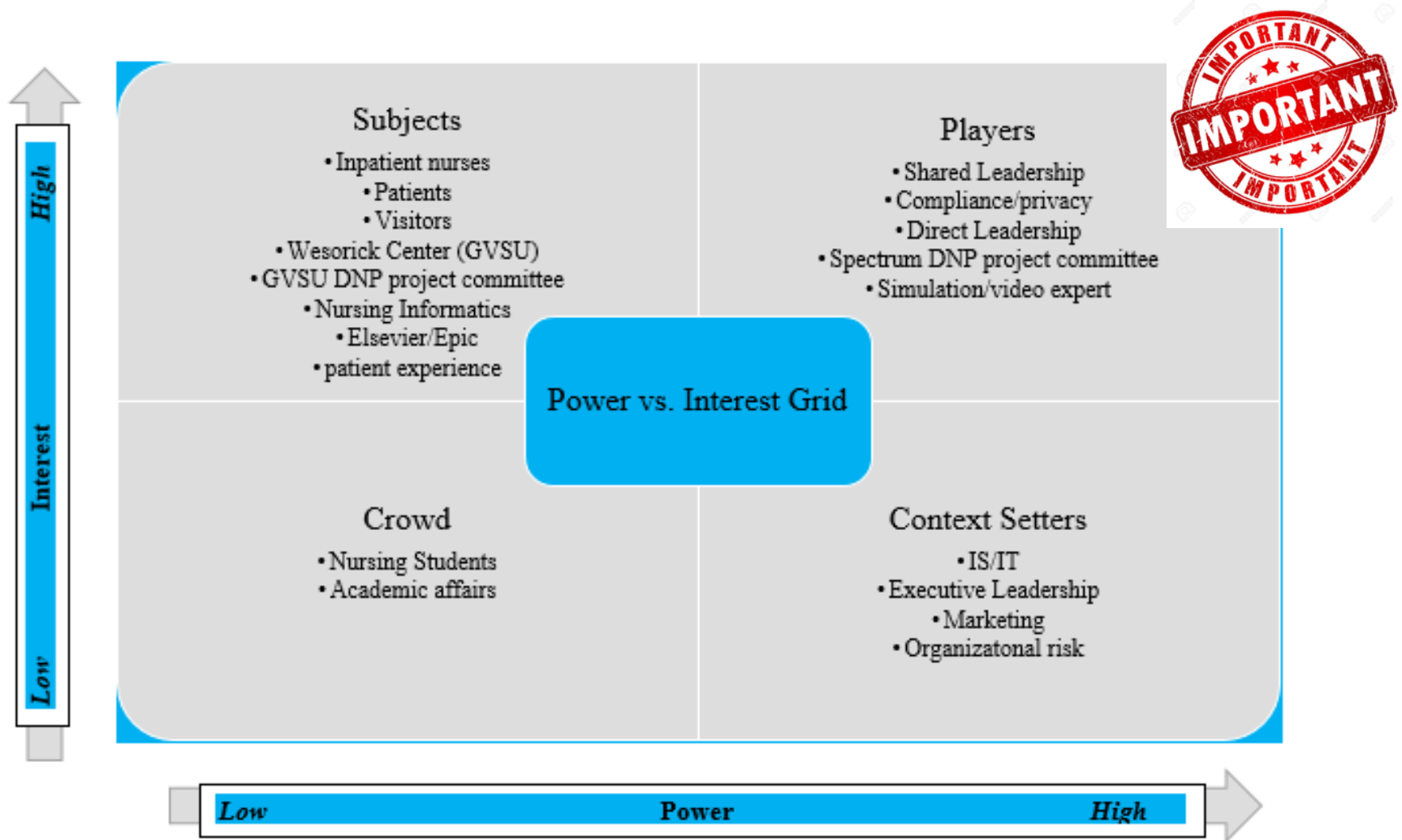| 1	2	3	4	5
structure + decision rights	information + technology	direct manager	measures + rewards	growth + development

Employee Engagement

Performance Outputs

- Environmental factors: health policy, competition

- Strong leadership support of strategy to support culture shift

- Evidence of employee engagement

- Performance output: use of new report tool embedded in the EHR (Electronic Health Record)

Organizational Assessment[7]

Stakeholder Analysis Example[8]

Power vs. Interest Grid

Interest (vertical axis: Low → High)
Power (horizontal axis: Low → High)

Subjects (High Interest, Low Power)
- Inpatient nurses
- Patients
- Visitors
- Wesorick Center (GVSU)
- GVSU DNP project committee
- Nursing Informatics
- Elsevier/Epic
- patient experience

Players (High Interest, High Power)
- Shared Leadership
- Compliance/privacy
- Direct Leadership
- Spectrum DNP project committee
- Simulation/video expert

Crowd (Low Interest, Low Power)
- Nursing Students
- Academic affairs

Context Setters (Low Interest, High Power)
- IS/IT
- Executive Leadership
- Marketing
- Organizatonal risk

IMPORTANT

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SWOT Example[8]

- Strengths (internal-helpful to objectives)

Handover toolkit
Current policy
Leadership support
Video equipment
DNP student
Integrated training
Evidenced based tools in new EHR

- Weaknesses (internal-harmful to objectives)

Inconsistent practice
Competing projects
Large scale changes
Tight timeline
Focus not all-inclusive
Limited video experience
Perception of not valuing toolkit work

No similar video
Collaboration with GVSU
Wesorick Center
May improve patient experience

Competing priorities
May hinder patient experience
Perceived privacy risk
Other products or evidence may be better

- Opportunities (external-helpful to objectives)

Threats (external-harmful to objectives)

Review of Literature

Articles retrieved from GVSU databases: MEDLINE, PUBMED, CINAHL, EBSCOhost, OVID, and COCHRANE (N= 5668)

Did not meet inclusion criteria (N = 5631)

Met inclusion criteria and reviewed (N = 37)

Not relevant to topic; reasons not included were pediatric population, setting was surgical, emergency or non-adult inpatient, tool was not truly electronic based, or full article unable to be retrieved. (N = 22)

Relevant to topic (N = 15)

Retrieved secondary source (N = 12)

Relevant to topic (N = 27)

Not relevant to topic; reasons not included were pediatric population, setting not inpatient or tool was not truly electronic based (N = 7)

Final articles in review (N = 20)

- Search for "electronic handoff tools" or methods

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Additional Literature Support

- Bundled educational interventions evidence based[9]

- Video/media methodology evidence based generationally[10]

- Classroom practice evidence based[11]

- Communication, multiple formats, multiple times supported

- "At the elbow" support crucial in technology implementation[12]

Consolidated Framework for Implementation Research (CFIR)[13]
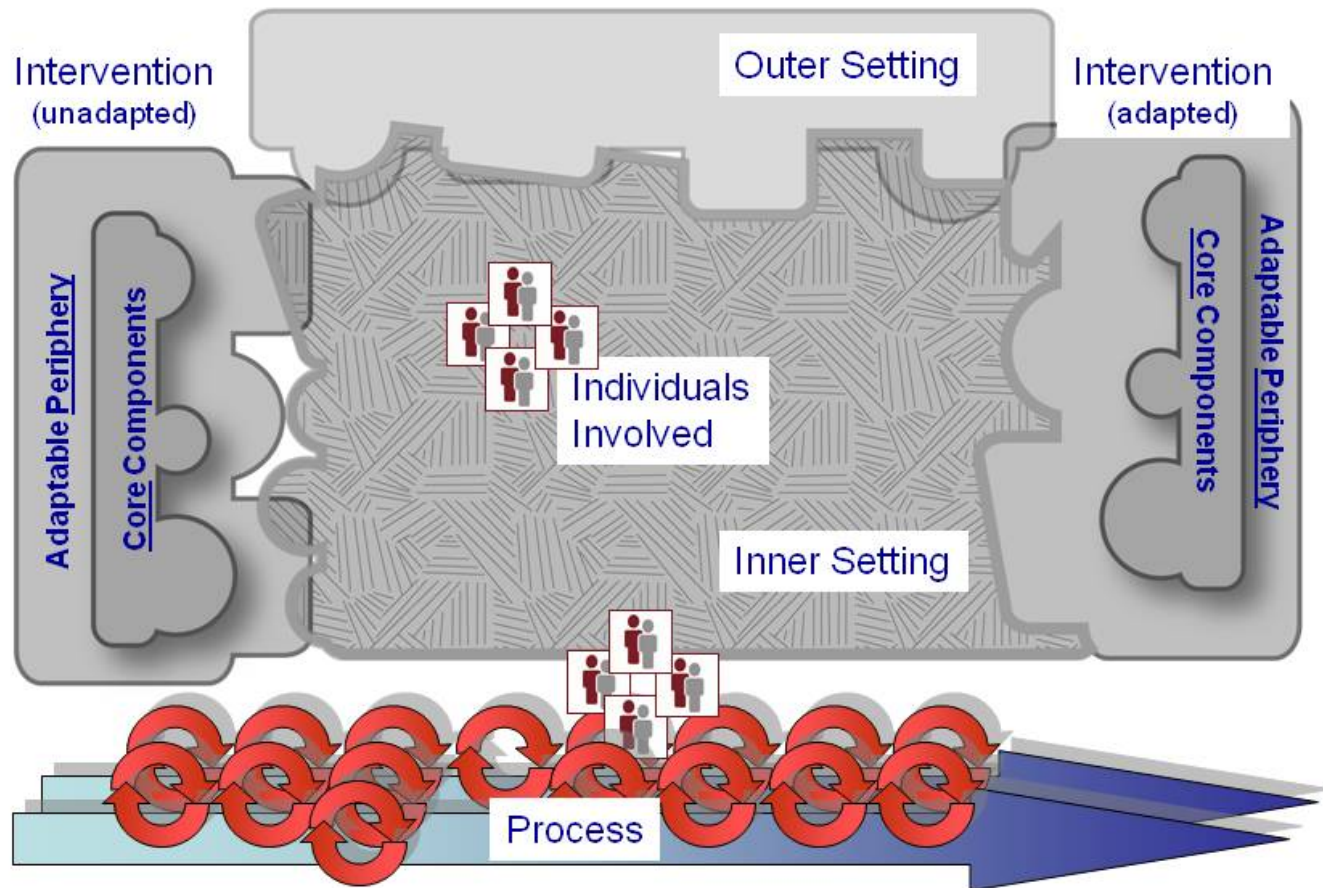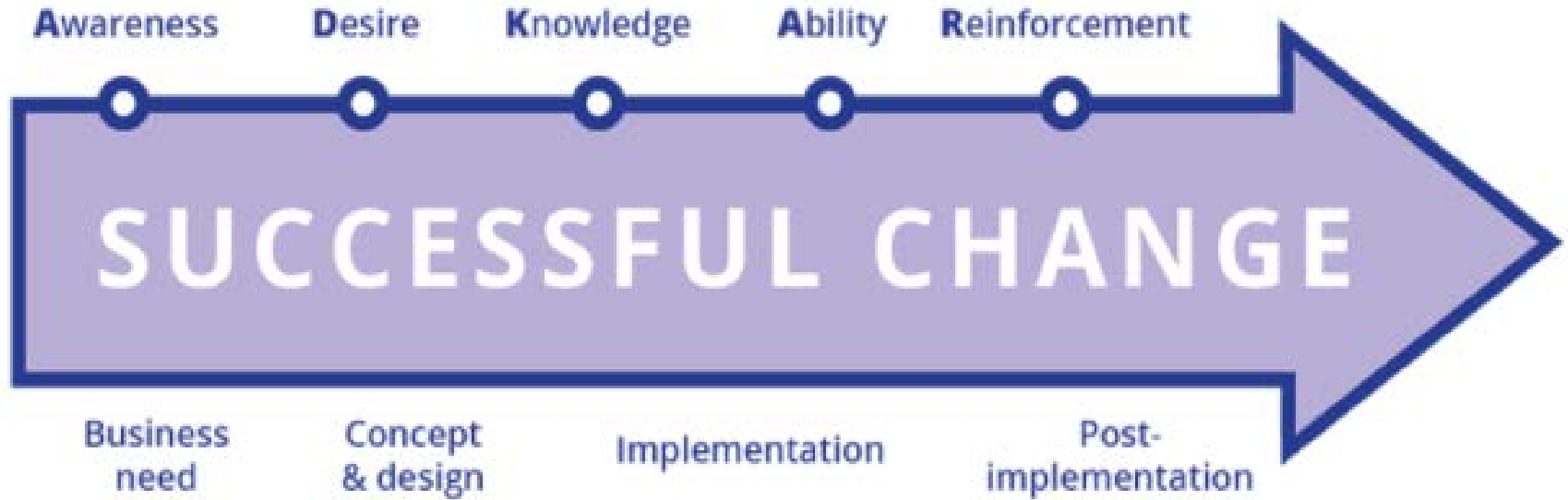
ADKAR[14, 15]

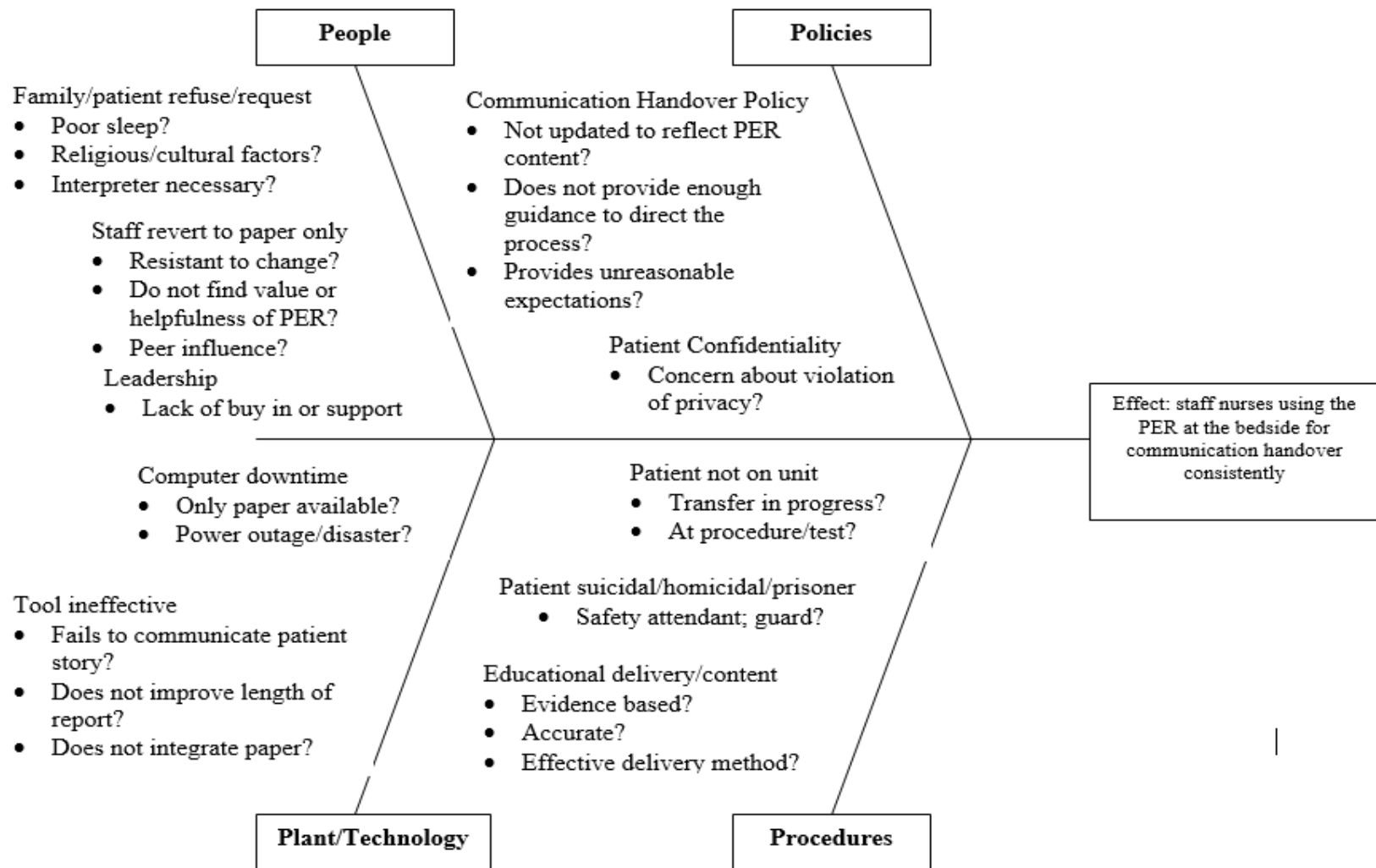Perform an evidence based evaluation of the educational interventions to implement tool
- Determine how education was planned
- Determine how education and tool were implemented
- Determine how the system evaluated the process

Determine the impact of implementing tool
- Determine any change in avg. length of report
- Determine any change in perception of report
- Determine any change in practice at bedside or use of EHR during report

Project Objectives

Evaluation (Process Domain CFIR[13])

- Planning: timing, quantity and quality, consistency, risk reduction

- Engaging: who and to what degree involved, formal and informal leaders, champions, external change agents

- Executing: adherence to the plan

- Evaluating: qualitative and quantitative feedback

People

Family/patient refuse/request
- Poor sleep?
- Religious/cultural factors?
- Interpreter necessary?

Staff revert to paper only
- Resistant to change?
- Do not find value or helpfulness of PER?
- Peer influence?

Leadership
- Lack of buy in or support

Policies

Communication Handover Policy
- Not updated to reflect PER content?
- Does not provide enough guidance to direct the process?
- Provides unreasonable expectations?

Patient Confidentiality
- Concern about violation of privacy?

Effect: staff nurses using the PER at the bedside for communication handover consistently

Computer downtime
- Only paper available?
- Power outage/disaster?

Patient not on unit
- Transfer in progress?
- At procedure/test?

Tool ineffective
- Fails to communicate patient story?
- Does not improve length of report?
- Does not integrate paper?

Patient suicidal/homicidal/prisoner
- Safety attendant; guard?

Educational delivery/content
- Evidence based?
- Accurate?
- Effective delivery method?

Plant/Technology

Procedures

Cause & Effect Analysis (Quality Improvement tool example)[16]

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Reflecting & Evaluating Examples

- Pre- and post-classroom training surveys
- Pre- and post- go-live o... perception of...
- Interviews
- O...

Professional Exchange Report Post-Video Survey

By completing this survey, you are contributing to knowledge of practices around communication handover. There is no obligation to completing the survey or compensation for participation. Your responses are anonymous, only aggregate data will be reported and there is no foreseeable harm to participation. Thank you for your responses! If you have any questions or concerns regarding this survey, please contact Luanne Shaw, (RHS contact email was inserted here.)

1) What is your current unit of practice?_____
2) How many years have you been a nurse?
    <1 year   1-3 years   4-7 years   8-10 years   >10 years
3) I am aware that the practice of communication handover is changing with EPIC.
    Yes   No
4) I understand why the practice of communication handover is changing.   Yes   No
5) I desire to make changes to my current practice of communication handover.   Yes   No
6) I am knowledgeable of the specific changes to the process of communication handover.
    Yes   No
7) I have the ability to make the specific changes for communication handover.   Yes   No
8) I need reinforcement to help me change my practice of communication handover.
    Yes   No
9) How helpful did you find the video demonstration?

    Not at all (1)   Somewhat (2)   Helpful (3)   Very (4)

10) Please share any additional comments, concerns, or questions you may have about professional exchange report:

Date: _____

| Unit Observed |
| Report at bedside |
| EHR opened during report |
| Other resources used durin... report (other than paper report sheet or EHR)? |
| Length of report (defined i... conclusion of information |
| Patient invited to participa... |
| Did patient participate? |
| Was environment of care physically addressed? (saf... checks, white board, equipment, etc.) |

Anecdotal field notes: (any ... or unresponsive, any deviat... include major deviations su... appearance or hospitalizatio... through the shift.)

By completing t...
communication handov...
participation. Your resp...
foreseeable harm to par...
concerns regarding this...
here.)

What is your current un...

How many years have y...

I perform communication ha... bedside.
I open and use the Electronic... communication handover.
I invite the patient to particip...
Typically, my report per patie... 30 min. or less for ICU.
At the end of report, I know ...
After report, I need to go to ... the patient's full story.
I am satisfied with the way communication handover takes place on my unit.

Additional comments:

Impact of Implementation

- No change in length of report

- No change in nurse perception or consistency of practice

- EHR opened 68% more often during observed report

- Statistically significant increase in "yes" responses to awareness of, understanding why, knowledge of and ability to make specific practice changes post education

- Create formal evaluation plan

- Plan to adapt interventions

- Clarify desired outcomes

- Consider pilot studies

- Monitor progress and impact on practice and culture

- Celebrate success

- Reinforce positive behaviors and desired practice

- Re-evaluate often

Recommendations

Nursing Implications

- Include key stakeholders throughout

- Never underestimate practice culture

- Mitigate risks and acknowledge limitations

- Framework, such as CFIR, helpful in planning, implementing and evaluating

- Change models, such as ADKAR, helpful in identifying and explaining reaction to change and effectiveness of interventions

- Program evaluation can inform future implementation

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