Baylor St. Luke's Medical Center





KNOWLEDGE & ADULT LEARNING STRATEGIES FOR IMPLEMENTING COMPONENTS OF INTRAOPERATIVE BUNDLETO REMICE CURRICAL IILDUL QUIUUHL SITE INFECTION

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REFLECTIVE OBSERVATION (reviewing/reflecting on the experience)



ABSTRACT CONCEPTUALIZATION (concluding/learning from the experience)



ACTIVE EXPERIMENTATION

(planning/trying out-what you have learned)

WHAT IS THE SIGNIFICANCE OF THIS INITIATIVE?

- Provides a strategy for nursing management that directly relates to practice improvement.
- Implementation of standardized, evidence-based intervention to teach operating room staff to prevent infections translates to reduced costs and better patient outcomes (Mahdi, 2014).

HOW DID WE KNOW IMPROVEMENT WAS NEEDED?

- A gap exists in research and practice concerning potential solutions to high incidences of surgical infections brought about by lack of uniform knowledge on an improvement initiative (Olsen, et al., 2018).
- This initiative addressed this particular gap using the foundational theory of Adult Learning.

WHAT DID WE TRY TO ACCOMPLISH

 Improve the knowledge base of Operating Room Staff regarding the use of an intraoperative bundle to reduce surgical site infection, through experiential learning.

Mahdi, H., Gojayev, A., Et Al. (2014). Surgical Site Infection In Women Undergoing Surgery For Gynecologic Cancer. International Journal Of Gynecologic Cancer, 24(4): 779-786. Olsen, M. A., Nepple, J. J., Et Al. (2018). Risk Factors For Surgical Site Infection Following Orthopedic Spinal Operations. Journal Of Bone Joint Surgery, 90(1), 62-69. Kearsley, G. (2010). Andragogy Of M. Knowles. San Francisco, Ca: Jossey-bass.

IMPROVE KNOWLEDGE

Utilize Kolb's Experiential Learning Cycle (Kearsley, 2010) to teach the components of the bundle:

ACTIVITY

Concrete experience on new techniques such as using separate instruments during fascia and skin closure; re-gowning and re-gloving at closing time; and, use of new suction tip and Bovie pencil.

ANALYSIS

Reflective observation on the experience; what went wrong, what went right and how things could be done better.

ABSTRACTION

Conceptualization of learning from the experience and tying it up with evidences.

APPLICATION

Active experimentation through planning and implementing learning as a new way of doing things.

OUR PLAN OF IMPLEMENTATION

- Design structured learning episodes on managing contamination of gloves, gowns, etc.; monitoring of scrubbed personnel movement, instruments, and sterile items during wound closure.
- Create pre-test and post-test questionnaire to measure knowledge base and knowledge acquired.
- Address potential areas for clarifications using test and content validity by in-house content experts.
- Arrange simulated sessions in a friendly and non-threatening atmosphere.

HOW DID WE KNOW IMPROVEMENT WAS MADE?

- Pre-test measured existing knowledge before the educational module
- Post-test measured knowledge after the educational module
- Significant improvement of knowledge was observed using paired t-test statistical instrument

IMPLICATIONS TO PERIOPERATIVE NURSING EDUCATION

- This initiative rolls out to other surgery service lines particularly colorectal surgery, urology, and general surgery service lines.
- Fully utilizing Experiential Learning Cycle significantly increased knowledge of the bundle.



