

**Sigma's VIRTUAL 31st International Nursing Research Congress (Wednesday, 22 July - Friday, 24 July)**

## **Minimizing Infection in Colorectal Oncology Patients: Advanced Surgical Recovery (ASURE) program**

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**Purpose:** The purpose of this study and program evaluation was to determine if utilizing the Advanced Surgical Recovery program (ASURE) protocol was associated with fewer clinical postoperative complications, such as infections, in colorectal oncology patients thereby minimizing or eliminating delays in initiation of adjuvant chemotherapy within 6-8 weeks despite the age of the patient. There were 111 surgical cases examined retrospectively comparing 55 pre- and 56 post- implementations of ASURE. The study was implemented to explore improving surgical infections among oncology patients.

**Methods:** John Ketter's change model (Golson, 2016) was the theoretical foundation for the study. The study and program evaluation used quantitative methodology with a quasi-experimental design to investigate the efficacy of the ASURE program. Program evaluations help organizations collect information to determine judgments about the program; inform decisions regarding future program development; and improve program effectiveness (Moore, et al, 2014).

**Results:** Pearson's Chi-Square Test of Independence and an Independent Sample T-Test were used to answer the clinical questions. The results indicated that there were no significant associations between the ASURE program and postoperative complications. Additionally, this study/program evaluation did not determine any associations between the ASURE program and receipt of adjuvant chemotherapy. Lastly, patients who did not have any postoperative complications did not significantly differ in age from patients who had postoperative complications. However more importantly, the data did indicate a decline individually regarding postoperative complications. A practical implication exists in relations to the individual postoperative complications (i.e. infections) that indicate improvement secondary to the ASURE program. Individually, the data indicated that there was a fifty percent decrease in the amount of infections for patients who participated on the ASURE program.

**Conclusion:** Advancing scientific knowledge plays a fundamental role in the health research arena through connecting gaps between research clinics, the bench, and communities by converting the findings into practice (Grady, 2017). This study expanded the knowledge regarding the influence of ERAS® programs like ASURE to improve postoperative complications, and thus, overall care by providing the opportunity for colorectal oncology patients to receive adjuvant chemotherapy in a timely manner to further eradicate microscopic cancer cells within their system. Given that the data did indicate a decline individually regarding the postoperative complications, a future implication should include considering expanding the ASURE program to the other

facilities. This should be considered once further investigation is determined on why the overall findings did not indicate a decrease in postoperative complications despite the noted individual decrease. Ultimately, utilizing the ASURE protocol may result in fewer clinical postoperative infections in colorectal oncology patients and should be explored further.

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**Title:**

Minimizing Infection in Colorectal Oncology Patients: Advanced Surgical Recovery (ASURE) program

**Keywords:**

advance surgical recovery, colorectal and postoperative complications

**Abstract Summary:**

A program evaluation was done with the Advanced Surgical Recovery (ASURE) program regarding decreased postoperative complications among 111 surgical oncology patients comparing pre- and post- implementations of ASURE program. Although there was no statistical significance, data indicated an individual decline regarding postoperative complications secondary to the ASURE program.

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