

Implementation of new non-disposable laceration trays in the University Emergency Department

Dino Maglic, MD; Jared Garlick, MD; Courtney Crombie, MD

PROBLEM STATEMENT

The majority of consultation seen by the Plastic Surgery Division in the Emergency Department includes patients with facial lacerations and hand trauma. Treating these patients usually requires surgical instruments.

Currently there are 2 types of laceration trays available in the Emergency Department:

1- Disposable

- Small
- Readily available
- Very poor quality

2- Non-disposable

- Large
- Only 2 sets available
- Superior quality, preferable

Objectives:

Have better quality instruments in the laceration trays, to provide better quality for patients visiting the ED

BASELINE ANALYSIS & INVESTIGATION

Data Collection: Sent a survey to plastic surgery residents to assess perception of quality between the disposable and non disposable laceration trays. Residents surveys showed a preference on the non-disposable trays, and there was a perception of higher quality.

Go and See: visited Central Sterile and collected prices for sterilization of non-disposable laceration trays, prices of the trays, and instruments included.

Talked with Value Analysis and collected prices for reusable trays and included instruments.

We found that costs could go down if we replaced the disposable trays with non-disposable ones was

Figure 1: Residents surveys showed a preference on non-disposable tray



Figure 2: Visit to Central Sterile to understand sterilization process

COUNTERMEASURE

- **We implemented new laceration trays in the Emergency Department.** A survey was first performed asking residents which instruments they feel are most important in a laceration tray. The goal was to create a tray with limited instruments.
- We created 10 "ED Plastics Laceration trays" which included 11 instruments
- We then compare pricing with the disposable set also available in the Emergency Department.
- Based on the usage of the available disposable kits, we estimated that the cost of sterilizing the new sets over a 5-year period would be \$22,137

RESULTS

When comparing the total cost of the disposable trays versus the new non-disposable trays, the cost savings over a 5-year period is estimated to be \$15,187.