



Preference Card Optimization Study Reveals Savings Over 3.7 Million Dollars

The operating room is one of the most expensive and chaotic parts of a healthcare organization. Inefficiencies within the systems used at these facilities can lead to avoidable expenses. Researchers studying the impact of preference card optimization at the University of California, San Diego, recently published a study that revealed savings of over \$3,700,000 in a multi-hospital health system. These savings stemmed from a reduction in unused items, total cost per card, and items requested mid-surgery.

Preference cards catalog the supplies needed for a surgery and are used by staff to stock the room with the necessary surgical supplies. Inaccuracies in these cards can cause items to be overpicked, not picked at all, and thrown away. When items are needed but are absent from the card, OR staff must leave the room to retrieve them, causing potential for case delays that snowball throughout the day.

Methodology

The study, which spanned five years, aimed to discover how much money can be saved by optimizing surgical preference cards. To do this, they analyzed the number of items to be opened on the card, historical item quantity data, and the timestamps for each procedure. They implemented the study in three surgical service departments: colorectal, oncology, and urology. The following three methods were used for card optimization:

- 1 Surgical preference cards alone
- 2 Procedure identification cards alone
- 3 Unique surgical preference card-procedure combinations

Pre-test

Before implementing the optimization, the mean cost per case for unused items was at a staggering \$1294, which over five months amounted to costs of \$3,716,251. All three methods of optimization reduced this number, but the greatest results showed a 31.1% decrease in unused items cost, or savings of \$1,157,443.65. This is a significant improvement, demonstrating the true savings potential of preference card management.

Results

The average total cost per card before implementation was \$4,138.29, which, after the improvements, was lowered to an average of \$3,812.84 (this is about 8% savings per case on average). The lowest number, however, was \$2,882.77. This is a 30% decrease, meaning that every case going forward is already saving almost one-third of the original cost. This suggests that many unoptimized preference cards have unnecessary items on them that either do not get used or are thrown away at the end of surgery.

Before optimizing the cards, an average of 32.4 items were ordered mid-surgery per case because they were absent from the preference card. This average dropped to 23.8 items, meaning that surgical staff spent less time grabbing new items and more time focusing on surgical care. Not only is this more beneficial for the patient, but it can also reduce case delays, which contribute to a higher labor cost.

The results of this study highlight what is possible when surgical preference cards are actively managed using data rather than manual updates or periodic reviews. PREFcards brings these evidence-backed benefits into everyday operating room workflows by digitizing and continuously optimizing preference cards in real time. By reducing unused supplies, minimizing missing items, and lowering overall card costs, PREFcards helps hospitals translate the type of savings demonstrated in this study into scalable, system-wide improvements.

To book a free personalized demo of the PREFcards platform, please click the link below or contact info@prefcards.com

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Sources

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