Nevada OR Nurses gain big efficiencies using PREFcards Surgical Software

By modernizing the preference card process with a digital solution, a surgical facility in Nevada enabled real-time card edits instead of semi-annually. Over six months, the preference cards tied to the most popular surgical procedures saw a $16,046 improvement in cost accuracy.

The Problem

A twelve OR Nevada surgical facility was experiencing delays during surgical cases, shortages of needed supplies, and low nurse confidence when picking cases due to incorrect preference cards. The inventory manager explained that prior to using PREFcards digital solution, "Preference cards were mostly incorrect … and nurses would usually pick cases from their memory." When key nurses were unavailable to pick for a case that only they knew, non-standardized and often illegible paper cards were relied upon by other staff.

Nurses and surgical technicians at the facility are tasked with a variety of duties perioperatively including picking for cases, returning unused supplies to inventory, and intraoperative charting. Making requested edits to preference cards was a low priority compared to these tasks and would often be forgotten.

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Consequently, there was low compliance with real-time editing and updating of paper preference cards. The problems identified at this particular facility are common in OR's across the USA. One recent study by the American Nurse Journal[2] polled nurses about their current preference card protocols:

> **95% of those nurses stated preference card inaccuracy decreased their efficiency, with 24% of those nurses stating preference cards were only sometimes or rarely accurate.**

Comparison between paper card and PREFcards digital version of Vasectomy preference card

The Proposal

The proposal to simplify the preference card process including a specific focus on timely editing was the goal. After evaluating various solutions, PREFcards software was chosen due to its ability to efficiently edit cards at any time from any device or workstation, maintain a history of completed edits, and a robust reports engine that gave managers business intelligence analytics to improve decision-making about site performance goals.

In addition, because PREFcards can integrate real-time inventory information like costs, charge codes, and the quantity of every item used during a case, the ability to capture costs more accurately for each surgery is greatly improved.

The Results

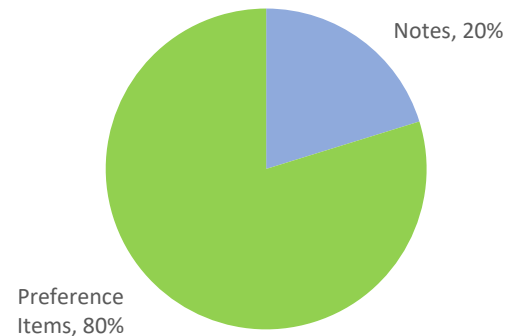PREFcards software overcomes the problems posed by traditional preference cards management process through easy editing and enhanced accuracy, which results in reduced wastage. **12% of nurses state that their OR's waste supplies in more than 25% of their surgical cases[2].**

This dollar amount is significant when considering surgical supplies make up 40-60% of total supply costs[3] in a hospital. By focusing on the top 20 most common procedures at this particular facility, PREFcards fostered consistent updates to these high-use preference cards, often by utilization of their "Card Edit Suggestions" report. The 20 preference cards tied to these procedures, which accounts for only 2.9% of the facility's total preference cards, were used for more than one third (36.6%) of the cases during the study period. The study revealed that these cards were updated, on average, every 33 business days, with an average of 4.5 changes per update. These alterations encompassed additions of supplies, adjustments in quantities, and updates to notes—changes, that led to lower supply costs.

This new ability to frequently and easily make updates contributed to reduced errors and ensured the alignment of the preference cards with the latest surgical requirements and requests from the surgeon.

Type of Change in Preference Cards

Notes, 20%

Preference Items, 80%

$16,046	**Total cost variance amongst 20 preference cards.**
$802	**Average cost accuracy disparity per case.**
$1.4M	**Potential annual savings.**

In addition to bolstering accuracy, **PREFcards demonstrated significant cost-saving potential.** The study compared the cost differential between outdated paper cards and their updated electronic counterparts. Each high-use preference card underwent an average of 14.55 changes during the study period. These 291 item changes resulted in a total cost variance of $16,046 amongst 20 preference cards. Moreover, these cards exhibited an average cost accuracy disparity of $802 per case. Given their frequent usage, PREFcards showcased potential annual savings of over $1.4 million.

To illustrate the financial impact a single inaccurate preference card can cost a facility in one year, here is an example of a Shoulder Arthroscopy RCR preference card from this facility. This card had $1,220.79 worth of open and hold items that were inaccurate per case. **Were this card never updated, it would waste over $153K a year** (assuming 125 cases yearly or 2.6% of total cases). Considering this is only 1 of the 20 high-use preference cards, total yearly cost savings due to the use of PREFcards software proved to be extremely valuable.

Conclusion

In conclusion, this case study emphasizes the value of PREFcards software in enhancing surgical card accuracy, reducing costs of surgical supplies, and optimizing operational efficiency. By enabling surgical facilities to maintain precise and up-to-date preference cards, PREFcards enhances communication among nurses and surgeons by ensuring consistent expectations of preference cards. Frequent updates also resulted in reduced disruptions and contributed to operational efficiency.

References

Abdulsalam, Y., & Schneller, E. (2019). Hospital Supply Expenses: An Important Ingredient in Health Services Research. Medical Care Research and Review, 76, 240-252. https://doi.org/10.1177/1077558717719928

Nurses: The Secret Factor for Better Supply Chains. (n.d.). American Nurse. Retrieved August 22, 2023, from https://www. myamericannurse.com/nurses-the-secret-factor-for-better-supply-chains/

Reigning in Hospital Supply Costs & Physician Preference Item Spending. (n.d.). Definitive Healthcare. Retrieved August 22, 2023, from https://www.definitivehc.com/blog/reigning-in-hospital-supply-costs-and-physician-preference-item-spending

Schead, M., Simonian, W., Joshi, N., & Bathke, M. (2021). Surgical & Perioperative Services-Internal Audit Report No. 12021-601. UCIrvine - Internal Audit Services.