



## **Cost containment initiatives for da Vinci surgeries succeed across multiple modalities**

Learn how a Midwestern, multi-state healthcare organization managing 14 hospitals performing over 82,000 outpatient surgeries annually identified cost-saving opportunities and scaled five tools to reduce costs across five da Vinci procedures and 25 non-robotic surgeries.

# Innovative tools serve patients, surgeons, and the bottom line

“Our robotic surgery program has been our best foot forward for improving, enhancing and piloting processes that have scaled to the rest of our perioperative environment.”

Director of Utilization Management

## Getting started: Data collection first

With hospitals located in multiple states, this health system began by collecting baseline data, and then they developed programs to reduce unnecessary OR time and efficiently manage supplies.

### Robotic data tracked and reported

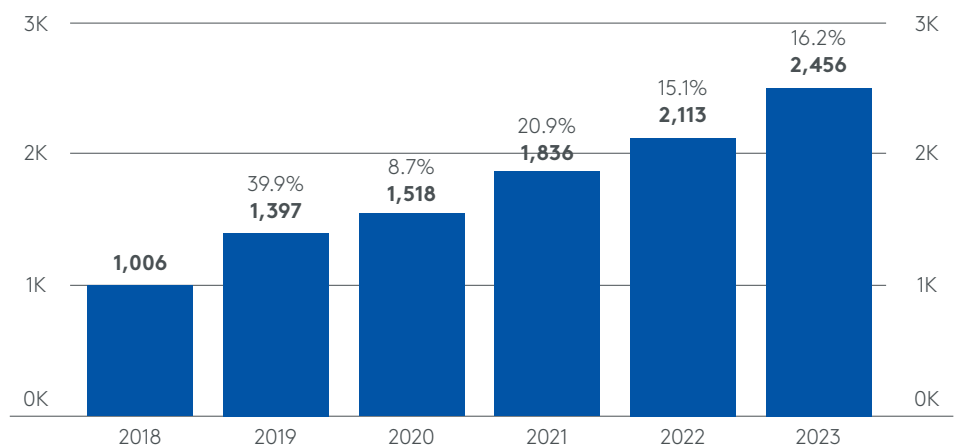
<b>Volume:</b>	Monitoring program growth
<b>Productivity:</b>	Surgeon and service utilization
<b>Capacity planning:</b>	Block management, resource utilization
<b>Efficiency:</b>	Scheduling accuracy, turn over efficiency
<b>Cost:</b>	Procedural expense

## The result

Using the tools and strategies outlined in the following pages, the network has grown their da Vinci® surgery program from 15% of potential cases to 35% over seven years, averaging 20% year-over-year growth for the past five years. They have also stabilized costs: the average procedure cost was \$2,732 in 2016 and \$2,765 in 2023.

“This is proof that we can manage supplies really effectively while we take better care of patients in a minimally invasive format,” reflects the director of utilization management.” To us, that is real progress.”

### Da Vinci annual growth trend



Tool	Implementation strategy	Result
<h2 data-bbox="77 243 142 306">#1</h2> <p data-bbox="77 323 412 399">Share data and solicit feedback</p>	<p data-bbox="581 233 1032 537">Automated reports were developed for the nursing, anesthesiology, and surgery teams that shared turnover data and solicited feedback on slower cases. Based on the responses, the organization identified systemic delays and improved workflows (average turnaround time dropped from 40 minutes to 32 minutes).</p> <p data-bbox="581 564 1032 798">Leadership also analyzed which cases were scheduled accurately vs. under- or over-scheduled by 20% or more of the case time. They sent reports to surgeons, who were then able to schedule patients more accurately for smoother workflow.</p>	<p data-bbox="1081 233 1511 365">These two successes established their robotic surgeons as champions for developing transparent new processes systemwide.</p>
<h2 data-bbox="77 898 159 961">#2</h2> <p data-bbox="77 978 506 1054">Reconfiguration of da Vinci instrument trays</p> <p data-bbox="77 1066 506 1117">Overstocked instrument trays waste money, space, instrument lives, and staff time.</p>	<p data-bbox="581 930 1032 1024">To reduce waste, leadership gathered data about instrument usage through Intuitive’s Customer Portal.</p>	<p data-bbox="1081 930 1495 1094">They moved instruments used in fewer than 80% of cases into peel pack inventory, reducing unnecessary tools on the trays and associated time.</p>
<h2 data-bbox="77 1230 159 1293">#3</h2> <p data-bbox="77 1310 428 1390">Optimize the Inventory Management System</p>	<p data-bbox="581 1230 1032 1499">The newly optimized system showed staff all peel-packed inventory across the campus, which could be updated in real time. New plain-language item descriptions were loaded into the Enterprise Resource Planning and Electronic Medical Record (EMR), making inventory easier for staff.</p>	<p data-bbox="1081 1230 1511 1465">In 4 months, the system reduced non-essential items, removed never-used items, and changed inventory locations based on need, producing a one-time savings over \$170K with no impact to patients or the OR experience.</p>
<h2 data-bbox="77 1629 159 1692">#4</h2> <p data-bbox="77 1709 412 1789">Standardized surgeon preference cards</p>	<p data-bbox="581 1629 1032 1898">The organization used historical documentation to set thresholds for labeling instruments: items used 90% of the time were “open,” items used 20% or less were removed, and all others were labeled “available” and supplied in separate yellow bags to be used or returned unopened.</p>	<p data-bbox="1081 1629 1425 1793">They saw a 5.2% supply cost reduction. Cards got 20% more accurate, requiring less intraoperative retrieval and postoperative returns.</p>

# #5

## Cost transparency mechanisms

Implemented to show surgeons how their supply choices affect costs

Cost-per-case scorecards were created based on intraoperative usage data and updated daily pricing. Each surgeon received a quarterly report for their top five procedures that listed total costs, number of cases, average room time, and cost per case, with trends and variability among network surgeons for comparative context.

Network leadership worked with its EMR provider to send surgeons a receipt after every case, listing all items used and wasted.

Lastly, the organization developed a supply heat map that showed each surgeon’s costs per item.

The program has lowered costs for common da Vinci procedures and served as a double check for documentation. Surgeons were shown why their costs varied, based on a system-wide, procedure-by-procedure analysis. It showed, among other trends, that higher-volume surgeons had lower costs, but more expensive supplies did not help surgeons “work faster.”

The first time they shared the developed heat map (surgeon’s cost per item), it showed surgeons brought down variation in cost per case resulting in a reduction of 7% (or \$86K), for robotic prostatectomy.

**To learn more about how Intuitive can work with you to discover what your surgical trends and cost data reveal, contact:**

[Perioperative.Education@intusurg.com](mailto:Perioperative.Education@intusurg.com)

### **Intuitive perioperative resources**

Scan the QR code to access a portfolio of perioperative resources from Intuitive.



### **Disclosures**

#### **Important safety information**

For product intended use and/or indications for use, risks, cautions, and warnings and full prescribing information, refer to the associated user manual(s) or visit <https://manuals.intuitivesurgical.com/market>. For summary of the risks associated with surgery refer to [www.intuitive.com/safety](http://www.intuitive.com/safety).

Intuitive’s Privacy Notice is available at [www.intuitive.com/privacy](http://www.intuitive.com/privacy)

© 2024 Intuitive Surgical Operations, Inc. All rights reserved. Product and brand names/logos are trademarks or registered trademarks of Intuitive Surgical or their respective owner.