

Operationalizing robotic-assisted surgery in an acute care setting

A case study featuring St. Elizabeth Healthcare
in Northern Kentucky and Southeast Indiana

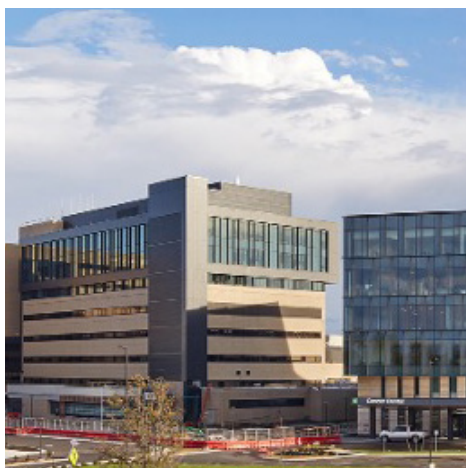


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Key elements to consider when starting a robotic-assisted acute care program

1. Total team alignment
2. Creative staffing and pipeline creation
3. Standardized processes and efficiency
4. Scheduling and access

Ready for the future



Over the last 15 years, da Vinci® surgeries have topped 22,000 at St. Elizabeth Healthcare, one of the largest providers in the Cincinnati region with six facilities throughout Northern Kentucky and Southeast Indiana. In 2022, leaders initiated a program to ensure 24-hour access to da Vinci surgery for acute patients from the ER and ICU, a move driven by St. Elizabeth's philosophy to give all patients the best care possible and achieve equitable access to care.

With more than 1,000 acute da Vinci surgeries completed in two years, leadership credits a combination of well-aligned planning and innovative staffing strategies for the program's success.



Key elements

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Key elements

1. Total team alignment

There are many factors to consider when building a robotic-assisted acute care service line within your hospital, and it starts with the team.

- **Total team alignment starts at the top.** All leaders, from the CEO and down, aligned toward the goal to transition from daytime only to 24-hour access and supported the team through the challenges of change management as they looked to develop new processes.
- **Bottom-up empowerment follows.** Throughout the transition to 24/7 access to da Vinci surgery, four concepts emerged that empowered not only staff but the entire robotics program:
 1. **Consistency and standardization** – Consistency and standardization are key pillars in areas such as managing block scheduling, da Vinci OR setup, and supplies – but also the way in which staff is trained. Leaders established clear, consistent training and cross-training processes to ensure that all staff is robotically trained and that the ORs run predictably. While acute care is anything but consistent, it is essential to control the controllable.
 2. **Leadership** – Actively present leaders, engaged in the day-to-day activities, helped boost team morale and alignment.
 3. **Communication** – Sharing the program vision and results with staff, including the impact of their work on patient outcomes, helped emphasize the benefit of transparent and effective communication.
 4. **Accountability** – Holding a high level of accountability, with a clear process for addressing progress within the Robotic Committee, helped the team maintain high standards of performance and patient care.

2. Creative staffing and pipeline creation

St. Elizabeth was able to expand access to da Vinci in the face of healthcare's staffing challenges through several creative strategies:

- **Expand perioperative nurse fellowships.** This 6-month onboarding program went from three times to four per year, increasing graduates from 15 to 25+ and eliminating long, discouraging wait times.
- **Establish a scrub tech pipeline.** Partnering with a local university, St. Elizabeth now pays tuition for a two-year associate degree program in exchange for a 2-year work contract. The pipeline has gained 23 new scrub techs in two years.



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- **Incorporate patient care assistants (PCAs) into the team.** A 10-week training program prepares PCAs to prep, handle supplies, carry specimens, pull up cases, and help nurses and circulators, freeing other staff for highly skilled work.
- **Add an overnight shift.** Overnight OR staff in two locations are trained in da Vinci surgery for 24-hour access.
- **Implement a perioperative float pool.** A float pool of 12 to 20 registered nurses exclusive to da Vinci ORs work at six facilities weekdays, weekends, and holidays, increasing access to da Vinci surgery and eliminating travelers.

3. Standardized processes and efficiency

To be operationally efficient at all times, particularly with staff moving between facilities, St. Elizabeth made several changes to standardize processes across the system:

- Standardize case setup and procedure cards
- Establish a lean inventory
- Maintain consistent turnover times and processes, communicating with the sterile processing department about higher case volumes
- Empower anesthesia to contribute to da Vinci growth

4. Scheduling and access

St. Elizabeth's program started with one acute-care surgeon and no dedicated acute care da Vinci OR. Schedulers switched any open robotic OR to the acute care block. They also made room for the surgeon's requests by combining rooms and moving other cases to non-robotic ORs. The surgeon changed case sequences to fit open times.

When a second and third acute care surgeon joined the program, St. Elizabeth added a da Vinci system in a dedicated acute care OR.

Adopting block guidelines can help guide you through the unpredictability of scheduling and access management of acute care surgery.

- Establish clear guidelines and expectations from the start
- Review block privileges for specific specialties in steering committee meetings
- Track case console times
- Review historical case times for future scheduling
- Manage OR availability for emergent cases and add-ons
- Send block release updates through email blasts



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2. Creative staffing and pipeline creation
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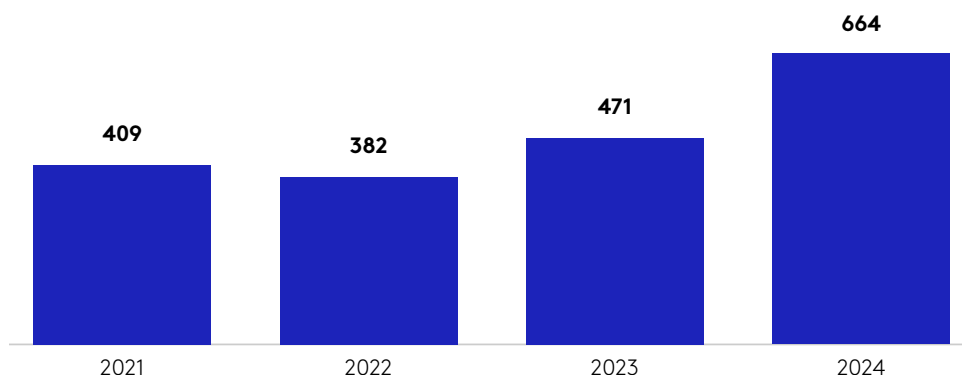
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In the early days of this process, the St. Elizabeth leadership team adopted a can-do culture—say yes to making changes necessary to fulfill their mission, then determine how to accomplish them. The "how" encompassed many things, perhaps most of all the initiatives related to staffing. The payoff goes a long way to supporting the future of their da Vinci program, with scores of well-trained staff, the new PCA role, nearly double the perioperative RN fellowships, and a steady pipeline of scrub techs. This can-do culture and total team approach to staff and training helped grow their acute care program by 41% year-over-year, 2023-2024. St. Elizabeth credits their success to remaining focused on the mission and vision and continually communicating how the two are directly connected to facilitating 24-hour access to da Vinci surgery.

St. Elizabeth da Vinci ASC Program

General Surgery year-over-year growth



Disclosures

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