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Robotics on the Rise: Expansion of Minimally Invasive Robotic Surgery and Implementation of a Standardized Training Curriculum Across Multiple Campuses

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INTRODUCTION

- Robotic Surgery began at Lehigh Valley Health Network in 2008 with the purchase of the da Vinci® Surgical System and has since expanded to three systems in 2012 and a planned eight systems by September 2017.
- With the acquisition of three new systems and expansion of LVHN as a whole, the robotics program can now exceed the current case volumes, with over 10,000 cases to date, utilizing a standardized training curriculum to train staff and clinicians.
- Benefits of robotic surgery include enhanced three-dimensional visualization and improved dexterity, which leads to smaller incisions, less pain, and faster recovery.1,2

METHODOLOGY

Intuitive Surgical, Inc. Credentialing Pathway

RESULTS

- Adoption of Robotic Surgery
  - 2016
  - 2008

CONCLUSION/FUTURE DIRECTION

- LVHN to serve as the leading center of robotic surgery

DISCUSSION

Maintaining Quality
- Rigorous and standardized training curriculum set by Medical Staff Services and robotic leadership to ensure quality with increasing case volumes
- C-SATS and B-Line SimCapture recording systems introduced to develop benchmarks and provide objective feedback for performance improvement
- Simulation of surgical skills required for annual credentialing (dv-trainer/backpack)

Minimizing Cost
- With improved outcomes, shorter recovery time, decreased length of hospitalization, and reduced complications, cost of a patient’s entire treatment is minimized which benefits both the hospital and the patient
- Several studies have yielded that robotic surgery renders shorter hospitalization, less intraoperative bleeding, faster recovery, and fewer complications.3,4
- Improved technologies (Firefly)

REFERENCES