The *da Vinci*® Surgery Experience

Over the past decade, more than 1.5 million surgeries have been performed worldwide using the *da Vinci*® Surgical System

Finding out that you need surgery can be unsettling and even frightening. Discussing all surgical options with your doctor is an important step in understanding what is right for you. If your doctor recommends *da Vinci* Surgery as one of your options, this document will help to answer some of your questions.

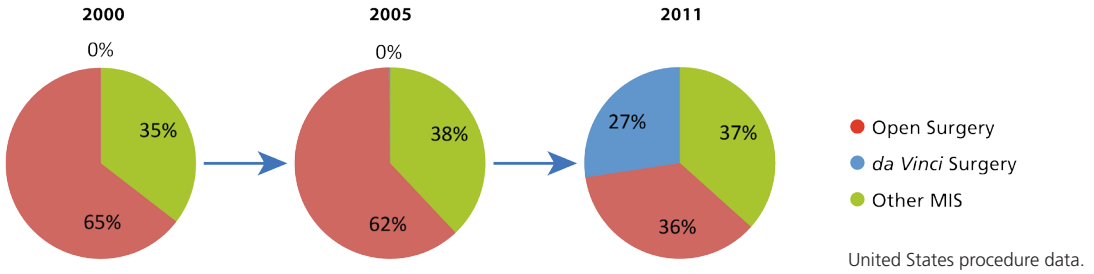
What is *da Vinci* Surgery and how can it help me?

da Vinci Surgery is a less invasive technique than traditional surgery. With *da Vinci* Surgery, the cuts (incisions) made in your body by your surgeon are much smaller than the cut made during traditional (also called "open") surgery. Compared with open surgery, having *da Vinci* Surgery may offer you:*

- A shorter hospital stay[1,2,3,4]
- Less blood loss[2,3,4,5]
- Fewer complications[2,3,4,6,7]
- Less need for narcotic pain medicine[1,6,8,9]
- A faster recovery[1,2,10,11]
- Smaller incisions for minimal scarring[3,5,6]

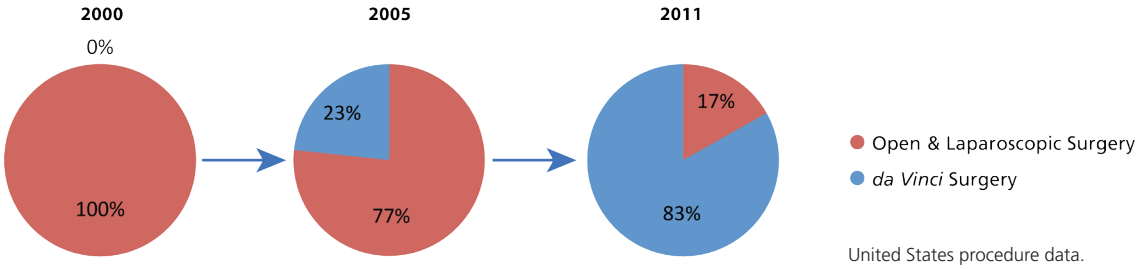
Since its launch, *da Vinci* Surgery has greatly reduced the number of open surgeries for common operations (such as hysterectomy[12] and prostatectomy[13]), as shown below. Thanks to *da Vinci* technology, more patients have been offered minimally invasive surgery (MIS) than at any other time in history.

da Vinci Hysterectomy for benign conditions[12] (Commercially available for gynecologic surgery in 2005)



United States procedure data.

da Vinci Prostatectomy[12] (Commercially available for urologic surgery in 2001)



United States procedure data.

What is the *da Vinci* Surgical System?

The *da Vinci* Surgical System is a tool that utilizes advanced, robotic technologies to assist your surgeon with your operation. It does not act on its own and its movements are controlled by your surgeon. The *da Vinci* Surgical System has a 3D high definition (3D-HD) vision system, special instruments and computer software that allow your surgeon to operate with enhanced vision, precision, dexterity and control. The 3D-HD image can be magnified up to 10 times so your surgeon has a close-up view of the area he or she is operating on. The *da Vinci* instruments have mechanical wrists that bend and rotate to mimic the movements of the human wrist – allowing your surgeon to make small, precise movements inside your body. And, *da Vinci* software can minimize the effects of a surgeon's hand tremors on instrument movements.

What kinds of surgery can be done using the *da Vinci* System?

A range of operations can be done using the *da Vinci* Surgical System which is commercially available for use in the following specialties:

- Gynecologic Surgery
- Urologic Surgery
- General Surgery
- Cardiac Surgery
- Thoracic Surgery
- Head & Neck Surgery

In the United States, *da Vinci* Surgery is the #1 option chosen by women with gynecologic cancer.[12]
In men with prostate cancer, *da Vinci* Surgery is used in 4 out of 5 surgeries to remove the prostate.[13]

Is *da Vinci* Surgery safe?

Over the past decade, hundreds of studies have been published on the use of the *da Vinci* Surgical System demonstrating improved surgical outcomes when compared to open surgery. To date, more than 1.5 million surgeries have been per worldwide using the *da Vinci* Surgical System.

Talk with your doctor about all treatment options, as well as the risks and benefits of each. If surgery is the option you choose, talk with your doctor about whether *da Vinci* Surgery is right for you. Your doctor's training, experience and judgment are important factors to consider when making this decision.

Is *da Vinci* Surgery covered by insurance?

Surgery with the *da Vinci* Surgical System is a type of minimally invasive surgery. Most insurance plans include *da Vinci* Surgery in their minimally invasive coverage. Major insurance plans, including United, Aetna and Blue Cross Blue Shield, cover *da Vinci* Surgery. Check with your insurance provider to confirm coverage.

"I put off a traditional hysterectomy due to the six week recovery period. As a self-employed person, the da Vinci Hysterectomy allowed me to get back on my feet in two weeks."

- Kristine, *da Vinci* Hysterectomy Patient

"The surgery went amazingly well considering my high PSA. The doctor told my wife he was very pleased and expected a full recovery. I was walking about 5 hours after surgery and only spent a day in the hospital."

- Edward, *da Vinci* Prostatectomy Patient

To learn more about the *da Vinci* Surgical System, visit www.davincisurgery.com

All surgery presents risk, including *da Vinci* Surgery. Results, including cosmetic results, may vary. Serious complications may occur in any surgery, up to and including death. Examples of serious and life-threatening complications, which may require hospitalization, include injury to tissues or organs, bleeding, infection, and internal scarring that can cause long-lasting dysfunction or pain. Temporary pain or nerve injury has been linked to the inverted position often used during abdominal and pelvic surgery. Patients should understand that risks of surgery include potential for human error and potential for equipment failure. Risks specific to minimally invasive surgery may include: a longer operative time, the need to convert the procedure to other surgical techniques, the need for additional or larger incision sites, a longer operation or longer time under anesthesia than your surgeon originally predicts. Converting to open surgery could mean a longer operative time, long time under anesthesia, and could lead to increased complications. Patients who bleed easily, have abnormal blood clotting, are pregnant or morbidly obese are typically not candidates for minimally invasive surgery, including *da Vinci* Surgery. Other surgical approaches are available. Patients should review the risks of all surgical approaches as well as the risks of *da Vinci* procedures to decide if *da Vinci* Surgery is right for them. Patients should also talk to their doctor about his/her surgical experience. For complete information on surgical risks, safety and indications for use, please refer to www.davincisurgery.com/safety. © 2013 Intuitive Surgical. All rights reserved. All product names are trademarks or registered trademarks of their respective holders. PN 1005195 Rev B 12/13

*Potential benefits are specific to the procedure referenced in the footnoted publications. Long-term data for head & neck procedures are not yet available. [1]Park JS, et al. S052: a comparison of robot-assisted, laparoscopic, and open surgery in the treatment of rectal cancer. Surg Endosc. 2011 Jan;25(1):240-8. Epub 2010 Jun 15. [2]Poston RS, et al. Comparison of economic and patient outcomes with minimally invasive versus traditional off-pump coronary artery bypass grafting techniques. Ann Surg. 2008 Oct;248(4):638-46. [3]Health Information and Quality Authority (HIQA), reporting to the Minister of Health-Ireland. Health technology assessment of robot-assisted surgery in selected surgical procedures, 21 September 2011. [4]Landeen LB, et al. Clinical and cost comparisons for hysterectomy via abdominal, standard laparoscopic, vaginal and robot-assisted approaches. S D Med. 2011 Jun;64(6):197-9, 201, 203 passim. [5]de Souza AL, et al. A comparison of open and robotic total mesorectal excision for rectal adenocarcinoma. Dis Colon Rectum. 2011 Mar;54(3):275-82. [6]Cerfolio RJ, et al. Initial consecutive experience of completely portal robotic pulmonary resection with 4 arms. J Thorac Cardiovasc Surg. 2011 Oct;142(4):740-6. Epub 2011 Aug 15. [7]Shaligram A, et al. How does the robot affect outcomes? A retrospective review of open, laparoscopic, and robotic Heller myotomy for achalasia. Surg Endosc. 2012 Apr;26(4):1047-50. doi: 10.1007/s00464-011-1994-5. Epub 2011 Oct 25. [8]Lowe MP, et al. A comparison of robot-assisted and traditional radical hysterectomy for early-stage cervical cancer. Journal of Robotic Surgery 2009:1-5. [9]Menon M, et al. Prospective comparison of radical retropubic prostatectomy and robot-assisted anatomic prostatectomy: the Vattikuti Urology Institute experience. Urology. 2002 Nov;60(5):864-8. [10]Bell MC, et al. Comparison of outcomes and cost for endometrial cancer staging via traditional laparotomy, standard laparoscopy, and robotic techniques. Gynecologic Oncology III 2008:407-411. [11]Miller J, et al. Prospective evaluation of short-term impact and recovery of health related quality of life in men undergoing robotic assisted laparoscopic radical prostatectomy versus open radical prostatectomy. J Urol. 2007 Sep;178(3 Pt 1):854-8; discussion 859. Epub 2007 Jul 16. [12]Market share data on file at Intuitive Surgical. [13]National Cancer Institute. NCI Cancer Bulletin. Tracking the Rise of Robotic Surgery for Prostate Cancer. Aug. 9, 2011 Vol. 8/Number 16; from www.cancer.gov, URL: http://www.cancer.gov/ncicancerbulletin/080911/page4. Sample. Eur Urol. 2012 Jun;61(6):1239-44. Epub 2012 Mar 30.