

Issue Brief

When is the Most Popular Procedure the One with the Worst Outcomes?

François de Brantes, MS, MBA | Amita Rastogi, MD | Andrew Wilson, MPH, MA

There are two main routes to performing a hysterectomy, vaginally and abdominally. In addition, for each of these routes, there are two modes, laparoscopic and regular. Recommendations from the American College of Obstetrics and Gynecology as well as research from leading specialists focus on the benefits of routine vaginal hysterectomy,¹ which include a faster return to normal activities and lower complication rates.

Recent research also has highlighted some of the shortcomings associated with an abdominal hysterectomy, which include:

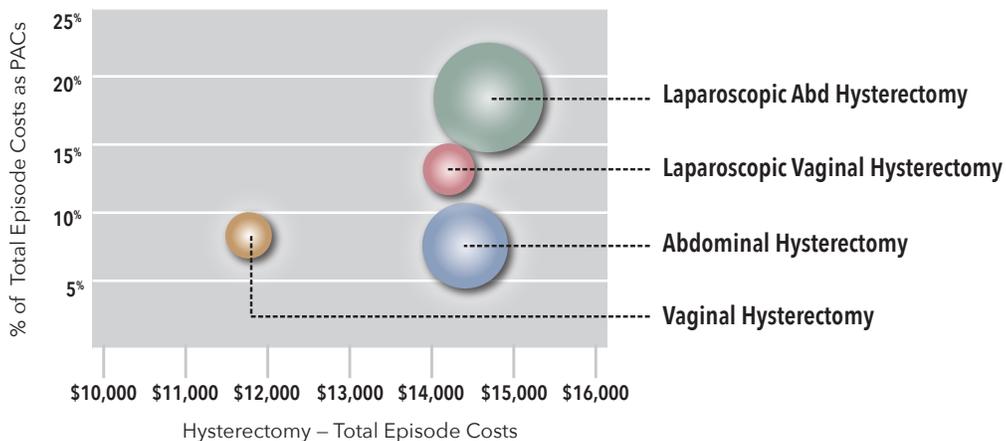
- longer operating time,
- longer time to recovery and
- higher incidence of complications particularly related to urinary tract injuries²

Given the strong recommendations for vaginal hysterectomies over abdominal ones, we analyzed a large regional claims dataset of commercially insured plan members covering over 230,000 individuals with medical claims from April 2012 through December 2014. The results of that analysis, which was done using version 5.4 of the PROMETHEUS Analytics,[®] yield several concerning findings:

1. Abdominal hysterectomies are the preferred route, commanding an 81 percent share of all hysterectomy procedures.
2. The preferred mode for all hysterectomies, whether abdominal or vaginal, is laparoscopic.
3. Costs associated with potentially avoidable complications (PAC) are statistically significantly higher for laparoscopic surgeries than regular ones ($p < 0.05$).
4. Costs for regular vaginal hysterectomies are approximately \$3,000 lower than all other options.

PROCEDURE TYPE	N	% OF EPISODES	AVERAGE COSTS			PAC % OF TOTAL \$	DIFF FROM ABD HYSTERECTOMY (P-VALUE)		
			TOTAL	TYPICAL	PAC		TOTAL	TYPICAL	PAC
ABDOMINAL HYSTERECTOMY	2,141	32%	\$14,392	\$13,281	\$1,111	8%	-	-	-
LAPAROSCOPIC ABD HYSTERECTOMY	3,209	49%	\$14,705	\$11,995	\$2,710	18%	NS	< 0.001	< 0.001
LAPAROSCOPIC VAGINAL HYSTERECTOMY	702	11%	\$14,191	\$12,314	\$1,877	13%	NS	< 0.05	< 0.05
VAGINAL HYSTERECTOMY	550	8%	\$11,763	\$10,779	\$984	8%	< 0.001	< 0.001	NS

Hysterectomy Subtypes: Frequency, Costs and Complications



PACs: Potentially Avoidable Complications | Size of the Bubble: Frequency of the Procedure Subtype

Despite clear recommendations to the contrary, our analysis suggests that women are being harmed both physically and financially with laparoscopic abdominal hysterectomies. While the complication rates for regular abdominal or vaginal hysterectomies are the same, the base cost of the procedure isn't, with abdominal hysterectomies significantly more expensive than vaginal ones.

There is a popular myth that laparoscopic surgery is always safer than regular surgery because it reduces the potential for wound infections and complications associated with longer lengths of stays. In many instances, that myth is validated. However, for this particular surgery, the opposite is true, with laparoscopic surgeries yielding significantly higher costs of complications than regular surgery.

Commercial payers and employers should understand the importance of these findings and develop mechanisms to encourage significant reductions in costs of complications as well as the reduction in the disparity between the costs of abdominal and vaginal hysterectomy. To a large extent, the current situation in hysterectomy surgery is not that different from that of deliveries where the rate of C-sections has increased rapidly and, with it, complications for women and higher costs of procedure. Payers, both public and private have started to explore ways of changing the payment for deliveries, including creating blended rates that encourage reductions in unwarranted C-sections.³ A similar approach should be explored for hysterectomies. ■

¹ ACOG Committee Opinion No. 444: choosing the route of hysterectomy for benign disease. *Obstet Gynecol.* 2009;114(5):1156. ACOG Position Statement on Route of Hysterectomy: Hysterectomies are performed vaginally, abdominally, or with laparoscopic or robotic assistance. When choosing the route and method of hysterectomy, the physicians should take into consideration how the procedure may be performed most safely and cost-effectively to fulfill the medical needs of the patient. Evidence demonstrates that, in general, vaginal hysterectomy is associated with better outcomes and fewer complications than laparoscopic or abdominal hysterectomy. When it is not feasible to perform a vaginal hysterectomy, the surgeon must choose between laparoscopic hysterectomy, robot-assisted hysterectomy, or abdominal hysterectomy. Experience with robot-assisted hysterectomy is limited at this time; more data are necessary to determine its role in the performance of hysterectomy. The decision to electively perform a salpingoophorectomy should not be influenced by the chosen route of hysterectomy and is not a contraindication to performing a vaginal hysterectomy.

² Surgical approach to hysterectomy for benign gynaecological disease. Aarts JW, Nieboer TE, Johnson N, Tavender E, Garry R, Mol BW, Kluijvers KB. *Cochrane Database Syst Rev.* 2015;

³ See HCP LAN Report on Maternity Episode of Care Payment at <https://hcp-lan.org/groups/cep/maternity-care/>