Supplemental Online Content

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eTable 1. *Current Procedural Terminology* (*CPT*) Codes and *International Classification of Diseases Ninth and Tenth Edition* (*ICD-9* and *ICD-10*) Codes for Ventral Hernia

ICD-9 Diagnosis Codes	551.1, 551.2, 551.20, 551.21, 551.29, 552.1, 552.2, 552.20, 552.21, 552.29, 553.1, 553.2, 553.20, 553.21, 553.29
ICD-9 Procedure Codes	53.4, 53.41, 53.42, 53.43, 53.49, 53.5, 53.51, 53.59, 53.6, 53.61, 53.62, 53.63, 53.69
ICD-10 Diagnosis Codes	K42, K42.0, K42.1, K42.9, K43, K43.0, K43.1, K43.2, K43.6, K43.7, K43.9
ICD-10 Procedure Codes	0WQF0ZZ, 0WMF0ZZ, 0WQF0ZZ, 0WQF3ZZ 0WQF4ZZ, 0WQFXZZ, 0WUF07Z, 0WUF0JZ, 0WUF0KZ, 0WUF47Z, 0WUF4JZ, 0WUF4KZ
CPT Codes	49560, 49561, 49585, 49587, 49652, 49653, 49654, 49655, 49570, 49572

eTable 2. Number of Patients by Year and Operative Approach

Year of surgery	All	Robotic	Laparoscopic	Open
	Number (% within year)			
• 2010	20,074 (100.0)	414 (2.1)	4,773 (23.8)	14,887 (74.2)
• 2011	19,385 (100.0)	515 (2.7)	4,517 (23.3)	14,353 (74.0)
• 2012	18,072 (100.0)	574 (3.2)	4,240 (23.5)	13,258 (73.4)
• 2013	16,621 (100.0)	622 (3.7)	3,835 (23.1)	12,164 (73.2)
• 2014	15,080 (100.0)	785 (5.2)	3,262 (21.6)	11,033 (73.2)
• 2015	14,184 (100.0)	1,030 (7.3)	2,792 (19.7)	10,362 (73.1)
• 2016	13,645 (100.0)	1,417 (10.4)	2,533 (18.6)	9,695 (71.1)
• 2017	13,206 (100.0)	1,758 (13.3)	2,186 (16.6)	9,262 (70.1)
• 2018	11,585 (100.0)	1,821 (15.7)	1,774 (15.3)	7,990 (69.0)
• 2019	10,763 (100.0)	1,956 (18.2)	1,517 (14.1)	7,290 (67.7)
• 2020	7,915 (100.0)	1,730 (21.9)	942 (11.9)	5,243 (66.2)

eMethods

We conducted a sensitivity analysis using 4-year reoperation rates for hernia recurrence, based on index surgeries from 2011 to 2017, to capture the full duration of the patient follow-up period. Surgeons needed to perform 15 robotic-assisted ventral hernia repairs to achieve outcomes equivalent to the national laparoscopic benchmark (eFigure). For the open approach, 12 robotic-assisted repairs were required to reach equivalent reoperation rates for hernia recurrence. Using this benchmark, only 7.4% of surgeons achieved lower patient reoperation rates than those with the laparoscopic approach, and 10.79% surpassed the rates of the open approach. However, this approach is limited as it may estimate artificially short learning curves due to smaller differences in reoperation rates for hernia recurrence with shorter follow-up periods.

eFigure. Learning Curves Generated by the Linear Spline Approach for Robotic-Assisted Ventral Hernia Repair (4-Year Reoperation Rates for Hernia Recurrence, 2011-2017)