Appendix

Variable description:

1. Age - Patient's age
2. Gender
    a. F (as reference) - Female
    b. M - Male
3. BMI - Body Mass Index
4. ASA - American Society of Anesthesiologist score
    a. Class 1 (as reference)
    b. Class 2
    c. Class 3
    d. Class 4
5. Procedure
    a) TKA (as reference) - Total Knee Arthroplasty
    b) THA - Total Hip Arthroplasty
    c) TSA - Total Shoulder Arthroplasty
6. PSH
    a. No (as reference) - Did not visit PSH clinic or followed the PSH system pathway
    b. Yes - Visited PSH clinic before the surgery and followed the PSH system pathway
7. Insurance
    a. Public (as reference) - Patients who had public insurance as their payer
    b. Private - Patients who had private insurance as their payer
8. LOS - Length of Stay
9. Discharge Disposition
    a. No (as reference) - Discharged to home
    b. Yes - Discharged to other facility

Supplementary Table 1 Adjusted analysis of PSH and C1-PSH

Variables	Length of Stay			Discharge Disposition			90-Day Readmission		
	Estimated risk (95% CI)	Z value	P value	Estimated risk (95% CI)	Z value	P value	Estimated risk (95% CI)	Z value	P value
Age	1.01 (1, 1.02)	31.46	<0.01	1.08 (1.05, 1.10)	6.96	<0.01	0.99 (0.97, 1.01)	-0.82	0.41
Gender, M	0.85 (0.84, 0.86)	- 27.03	<0.01	0.50 (0.35, 0.70)	-3.95	<0.01	1.26 (0.87, 1.83)	1.24	0.22
BMI	1.01 (1, 1.02)	8.50	<0.01	1.02 (0.98, 1.04)	1.07	0.28	0.99 (0.96, 1.02)	-0.55	0.58
ASA, Class 2	1.06 (1.03, 1.10)	3.76	<0.01	3.50 (0.46, 26.2)	1.22	0.22	1.30 (0.39, 4.32)	0.43	0.67
ASA, Class 3	1.26 (1.21, 1.30)	13.16	<0.01	5.67 (0.74, 42.8)	1.68	0.09	2.05 (0.60, 6.99)	1.15	0.25
ASA, Class 4	1.78 (1.67, 1.89)	18.68	<0.01	8.34 (0.74, 93.7)	1.72	0.08	4.92 (0.86, 28.3)	1.78	0.07
Procedure, Hip	1.14 (1.12, 1.15)	20.28	<0.01	1.06 (0.74, 1.50)	0.34	0.73	0.71 (0.46, 1.09)	-1.58	0.11
Procedure, Shoulder	1.17 (1.15, 1.19)	19.63	<0.01	0.43 (0.26, 0.71)	-3.30	<0.01	0.88 (0.53, 1.47)	-0.49	0.62

PSH, Yes	*0.90 (0.88, 0.91)*	*17.43*	*<0.01*	*0.089 (0.05, 0.14)*	*-9.26*	*<0.01*	*0.72 (0.48, 1.09)*	*-1.57*	*1.09*
Insurance, Private	0.87 (0.88, 0.90)	16.40	<0.01	0.51 (0.28,0.92)	-2.21	0.03	0.73 (0.43, 1.23)	-1.19	0.24
LOS	-	-	-	1.02 (1.01, 1.03)	10.46	<0.01	1.00 (1.01, 1.02)	1.91	0.06
Discharge, Yes	-	-	-	-	-	-	0.84 (0.45, 1.55)	-0.57	0.57

BMI: Body Mass Index, ASA: American Society of Anesthesiologist Score, PSH: Perioperative Surgical Home, LOS: Length of Stay.

Supplementary Table 2 Adjusted analysis of PSH and C2-PSH

Variables	Length of Stay			Discharge Disposition			90-Day Readmission		
	Estimated risk (95% CI)	Z value	P value	Estimated risk (95% CI)	Z value	P value	Estimated risk (95% CI)	Z value	P value
Age	1.01 (1.0, 1.02)	21.04	<0.01	1.12 (1.07, 1.17)	4.59	<0.01	0.99 (0.95, 1.03)	-0.51	0.61
Gender, M	0.83 (0.81, 0.84)	-23.26	<0.01	0.94 (0.51, 1.76)	-0.19	0.85	1.76 (0.95, 3.27)	1.80	0.07
BMI	1.01 (1, 1.02)	18.33	<0.01	1.05 (0.99, 1.11)	1.65	0.10	1.00 (0.95, 1.06)	0.01	0.99
ASA, Class 2	0.88 (0.84, 0.92)	-4.96	<0.01	0.38 (0.06, 2.33)	-1.04	0.30	1236211 (0, Inf)	0.02	0.98
ASA, Class 3	1.09 (1.03, 1.15)	3.20	<0.01	0.56 (0.09, 3.40)	-0.63	0.53	1850634 (0, Inf)	0.02	0.98
ASA, Class 4	1.61 (1.44, 1.79)	8.53	<0.01	5.23 (0.28, 97.2)	1.11	0.27	0.85 (0, Inf)	0.00	1.00
Procedure, Shoulder	1.47 (1.44, 1.50)	37.99	<0.01	1.03 (0.45, 2.36)	0.07	0.94	0.61 (0.26, 1.43)	-1.13	0.26
Procedure, Hip	1.32 (1.30, 1.35)	28.71	<0.01	2.61 (1.29, 5.27)	2.67	0.01	0.96 (0.48, 1.93)	-0.10	0.92

PSH, Yes	*0.91 (0.89, 0.92)*	*-11.34*	*<0.01*	*0.38 (0.18, 0.80)*	*-2.54*	*0.01*	*1.29 (0.70, 2.39)*	*0.83*	*0.41*
Insurance, Private	0.85 (0.82, 0.87)	-13.12	<0.01	0.65 (0.14, 2.99)	-0.56	0.58	0.50 (0.18, 1.40)	-1.32	0.19
LOS	-	-	-	1.03 (1.02, 1.03)	7.33	<0.01	1.00 (1, 1.01)	0.81	0.42
Discharge, Yes	-	-	-	-	-	-	1.09 (0.27, 4.43)	0.13	0.90

BMI: Body Mass Index, ASA: American Society of Anesthesiologist Score, PSH: Perioperative Surgical Home, LOS: Length of Stay.