

**Supplemental Table 1 A, B, C. Patients' and interventions' characteristics**

**A.**

Characteristic	Appendectomy	Cholecystectomy	Herniorraphy	Gastric bypass	Colon surgery	Rectum surgery
No. of participating hospitals	94	61	60	15	116	25
No. of operations included	15439	20402	17030	3077	22889	1835
Mean age, years (Q1, median, Q3)	31.6 (16, 26, 45)	56.1 (43, 56, 70)	55.4 (44, 57, 69)	42.8 (34, 43, 51)	66.5 (58, 68, 77)	66.1 (58, 67, 76)
Female sex, %	47.5	60.6	16.6	73.3	50.5	48.2
NNIS/NHSN index category, %*						
NNIS/NHSN 0	7.2	51.2	79.3	50.9	24.7	12.5
NNIS/NHSN 1	52.0	30.9	18.8	45.0	41.6	46.3
NNIS/NHSN 2	37.9	14.6	1.8	3.9	26.8	33.0
NNIS/NHSN 3	3.0	3.4	0.1	0.3	6.9	8.2
ASA score, %*						
ASA 1	47.9	18.2	34.1	1.8	7.8	11.0
ASA 2	46.4	61.6	51.8	53.2	51.0	57.0
ASA 3	4.8	18.3	13.9	43.3	34.3	28.4
ASA 4	0.3	1.5	0.8	1.0	6.1	3.5
ASA 5	0.02	0.1	0.04	0.03	0.4	0.0
Wound contamination class, %*						
Class 1	---	---	97.3	---	---	---
Class 2	11.4	67.6	2.2	99.2	65.9	67.3
Class 3	59.2	26.3	0.3	0.7	17.0	19.7
Class 4	29.4	6.1	0.2	0.1	17.1	13.0
Mean duration of surgery, min. (Q1, median, Q3)	63 (42, 56, 75)	87 (55, 78, 108)	66 (40, 60, 81)	113 (77, 108, 138)	176 (120, 164, 219)	242 (175, 229, 295)
Mean hospital stay, days (Q1, median, Q2)						
Before intervention	0.3 (0, 0, 1)	1.1 (0, 1, 1)	0.3 (0, 0, 0)	0.6 (0, 1, 1)	2.0 (0, 1, 1)	1.8 (1, 1, 1)
After intervention	3.2 (2, 2, 3)	3.5 (2, 2, 3)	1.9 (1, 2, 2)	4.9 (3, 4, 5)	11.3 (6, 8, 14)	12.5 (8, 11, 14)
Overall	3.5 (2, 2, 4)	4.6 (2, 3, 5)	2.3 (1, 2, 3)	5.5 (4, 5, 6)	13.3 (7, 10, 16)	14.3 (9, 12, 17)
Unplanned operation, %	97.9	31.7	3.9	---	27.4	12.0

Antibiotics, %						
More than 1h before incision	17.6	14.1	5.1	15.7	28.3	49.5
Within 1h before incision	65.8	63.4	79.0	81.7	65.0	47.1
After incision	8.8	5.4	2.8	1.5	4.5	2.4
Multiple interventions, %	4.9	7.7	19.4	15.5	21.6	27.4
Re-intervention during follow-up for non-infectious complication, %	2.3	1.3	0.5	3.2	11.9	9.2
Laparascopy, %	88.7	91.3	33.8	93.7	42.1	51.6

**B.**

Characteristic	C-section	Hysterectomy abdominal	Hysterectomy vaginal	Laminectomy w/o implant	Laminectomy with implant
No. of participating hospitals	63	9	10	10	4
No. of operations included	32814	841	452	2050	430
Mean age years (Q1, median, Q3),	32.7 (29, 33, 36)	51.0 (44, 48, 55)	57.3 (47, 55, 68)	58.7 (46, 59, 72)	57.6 (47, 58, 70)
Female sex, %	100.0	100.0	100.0	42.6	46.3
NNIS/NHSN index categories, %*					
NNIS/NHSN 0	65.0	54.1	69.9	56.2	20.2
NNIS/NHSN 1	30.1	37.6	26.1	34.8	64.0
NNIS/NHSN 2	4.6	7.4	3.8	8.6	15.6
NNIS/NHSN 3	0.4	1.0	0.2	0.3	0.2
ASA score, %*					
ASA 1	22.9	30.3	28.5	17.2	12.8
ASA 2	71.9	59.1	62.4	63.0	69.5
ASA 3	4.9	9.6	8.6	18.7	16.5
ASA 4	0.2	0.4	0.4	0.9	1.2
ASA 5	0.02	---	---	---	---
Wound contamination class (%)*					
Class 1	---	---	---	98.7	98.4
Class 2	76.8	96.9	99.1	0.4	0.7
Class 3	22.4	2.7	0.9	--	---
Class 4	0.8	0.4	---	0.8	0.9
Mean duration of surgery, min. (Q1, median, Q3)	41 (30, 38, 50)	113 (76, 108, 156)	94 (55, 84, 120)	108 (71, 97, 132)	214 (126, 191, 279)

Mean hospital stay, days (Q1, median, Q2)					
Before admission	0.7 (0, 0, 1)	0.4 (0, 0, 1)	0.4 (0, 0, 1)	1.4 (1, 1, 1)	1.4 (0, 1, 1)
After admission	4.8 (4, 5, 5)	4.4 (3, 3, 5)	3.8 (3, 3, 4)	5.0 (3, 4, 6)	8.3 (4, 6, 10)
Overall	5.5 (4, 5, 6)	4.8 (3, 4, 5)	4.1 (3, 4, 5)	6.4 (4, 5, 7)	9.8 (4, 7, 12)
Unplanned operation, %	50.8	2.1	0.9	22.0	16.5
Antibiotics, %					
More than 1 hour before incision	6.0	7.6	7.4	11.3	35.3
Within 1 hour before incision	43.4	80.3	80.3	85.0	60.5
After incision	42.6	3.2	3.5	2.1	2.8
Multiple interventions, %	3.8	31.2	33.0	0.3	8.1
Re-intervention during follow-up for non-infectious complication, %	0.4	1.4	1.6	1.4	4.9
Minimal invasive technique, %	-	65.2	-	4.7	2.1

### C.

Characteristic	Cardiac surgery overall	CABG w/o other cardiac surgery	Hip arthroplasty	Knee arthroplasty
No. of participating hospitals	15	14	120	86
No. of operations included	11974	5541	32102	20625
Mean age, years (Q1, median, Q3)	66.1 (59, 68, 75)	66.8 (60, 68, 74)	68.0 (61, 69, 77)	69.2 (63, 70, 77)
Female sex, %	25.8	18.1	50.7	59.9
NNIS/NHSN index categories, %*				
NNIS/NHSN 0	4.1	3.5	64.9	54.6
NNIS/NHSN 1	78.0	80.5	30.9	38.3
NNIS/NHSN	16.7	15.8	4.3	7.1
NNIS/NHSN 3	1.1	0.3	0.01	0.01
ASA score, %*				
ASA 1	0.1	0.1	13.4	8.7
ASA 2	4.9	4.2	60.6	61.5
ASA 3	62.7	66.7	24.9	28.8
ASA 4	30.8	27.7	0.7	0.4
ASA 5	0.7	0.5	0.03	0.02

Wound contamination class, %*				
Class 1	96.6	99.0	99.5	99.6
Class 2	0.4	0.3	0.4	0.3
Class 3	1.3	0.5	0.06	0.07
Class 4	1.6	0.1	0.09	0.07
Mean duration of surgery, min. (Q1, median, Q3)	230 (180, 220, 270)	231 (187, 225, 265)	89 (66, 84, 105)	102 (80, 99, 120)
Mean hospital stay, days (Q1, median, Q2)				
Before intervention	2.3 (1, 1, 2)	2.2 (1, 1, 3)	0.9 (1, 1, 1)	1.0 (1, 1, 1)
After intervention	8.9 (7, 9, 12)	5.1 (7, 8, 11)	7.3 (5, 7, 8)	8.0 (6, 7, 9)
Overall	10.7 (9, 11, 14)	7.3 (9, 10, 14)	8.2 (6, 8, 9)	8.9 (7, 8, 10)
Unplanned operation, %	15.6	19.5	---	---
Antibiotics, %				
More than 1 h before incision	24.1	25.5	11.8	14.5
Within 1 h before incision	71.7	71.1	86.0	82.8
After incision	2.8	2.2	1.3	1.7
Multiple interventions, %	42.5	29.1	1.1	2.4
Re-intervention during follow-up for non-infectious complication, %	3.6	4.1	1.2	0.7
Minimal invasive technique, %	1.6	2.9	7.0	---

\* Total percentage may not equal 100 due to missing values or rounding

NNIS : National Nosocomial Infection Surveillance ; NHSN : National Healthcare Safety Network ; ASA : American Society of Anesthesiologists