

## Pooled analysis of WHO Surgical Safety Checklist use and mortality after emergency laparotomy

## GlobalSurg Collaborative

**Table S1 Pattern of missing data for 30-day mortality by other patient and operative characteristics.** Data are n (%) unless otherwise stated. P-values are for comparisons across non-missing data and are chi-squared or Kruskal-Wallis (\*) tests. HDI, human development index; ASA, American Society of Anesthesiologists Physical Classification System; SD, standard deviation.

Missing data analysis:				
Mortality (30 days)		Not missing	Missing	p-value
Urgency	Emergency laparotomy	4863 (98.0)	98 (2.0)	<0.001
	Elective surgery	7564 (95.9)	323 (4.1)	
HDI (tertile)	High	7112 (98.3)	122 (1.7)	<0.001
	Middle	3746 (94.0)	239 (6.0)	
	Low	1569 (96.3)	60 (3.7)	
Age (years)	Mean (SD)	52.1 (19.8)	44 (18.5)	<0.001
Gender	Male	5767 (97.2)	164 (2.8)	0.001
	Female	6084 (96.2)	242 (3.8)	
ASA	Under 3	8691 (96.4)	325 (3.6)	<0.001
	3 and above	3528 (97.9)	75 (2.1)	
Smoking	No	8973 (96.7)	306 (3.3)	<0.001
	Yes	2553 (98.3)	44 (1.7)	
Diabetes	No	10925 (96.6)	387 (3.4)	0.013
	Yes	1502 (97.8)	34 (2.2)	
Disease classification	Abdominal wall	583 (99.5)	3 (0.5)	<0.001
	Other	4937 (95.1)	255 (4.9)	
	Benign foregut	1738 (96.5)	63 (3.5)	
	Benign midgut/hindgut	1983 (98.5)	31 (1.5)	
	Malignancy	2587 (98.4)	43 (1.6)	
	Trauma/injury	512 (95.5)	24 (4.5)	
Bowel resection	No	7387 (97.5)	191 (2.5)	<0.001
	Yes	5035 (95.6)	230 (4.4)	
Malignancy	No	9840 (96.3)	378 (3.7)	<0.001
	Yes	2587 (98.4)	43 (1.6)	
Contamination	Clean/Contaminated	9515 (96.8)	316 (3.2)	<0.001
	Contaminated	1206 (94.7)	67 (5.3)	
	Dirty	1590 (98.3)	28 (1.7)	

**Table S2 Pattern of missing data for reported WHO Surgical Safety Checklist use by other patient and operative characteristics.** Data are n (%) unless otherwise stated. P-values are for comparisons across non-missing data and are chi-squared or Kruskal-Wallis (\*) tests. HDI, human development index; ASA, American Society of Anesthesiologists Physical Classification System; SD, standard deviation.

Missing data analysis: Checklist		Not missing	Missing	p-value
Urgency	Emergency laparotomy	4940 (99.6)	21 (0.4)	<0.001
	Elective surgery	7765 (98.5)	122 (1.5)	
HDI (tertile)	High	7166 (99.1)	68 (0.9)	<0.001
	Middle	3916 (98.3)	69 (1.7)	
	Low	1623 (99.6)	6 (0.4)	
Age (years)	Mean (SD)	51.9 (19.8)	47 (21.1)	0.012
Gender	Male	5868 (98.9)	63 (1.1)	0.467
	Female	6250 (98.8)	76 (1.2)	
ASA	Under 3	8917 (98.9)	99 (1.1)	0.003
	3 and above	3584 (99.5)	19 (0.5)	
Smoking	No	9193 (99.1)	86 (0.9)	0.867
	Yes	2572 (99.0)	25 (1.0)	
Diabetes	No	11195 (99.0)	117 (1.0)	0.021
	Yes	1510 (98.3)	26 (1.7)	
Disease classification	Abdominal wall	586 (100.0)	0 (0.0)	0.002
	Other	5122 (98.7)	70 (1.3)	
	Benign foregut	1771 (98.3)	30 (1.7)	
	Benign midgut/hindgut	1997 (99.2)	17 (0.8)	
	Malignancy	2606 (99.1)	24 (0.9)	
	Trauma/injury	534 (99.6)	2 (0.4)	
Bowel resection	No	7498 (98.9)	80 (1.1)	0.454
	Yes	5202 (98.8)	63 (1.2)	
Malignancy	No	10099 (98.8)	119 (1.2)	0.272
	Yes	2606 (99.1)	24 (0.9)	
Contamination	Clean/Contaminated	9709 (98.8)	122 (1.2)	0.015
	Contaminated	1263 (99.2)	10 (0.8)	
	Dirty	1610 (99.5)	8 (0.5)	

**Table S3 Procedures by human development index group**

Elective	High	Middle	Low	Total
Cholecystectomy	1891 (43.9)	1375 (56.3)	257 (36.6)	3523 (47.3)
Colonic resection/manipulation	845 (19.6)	239 (9.8)	74 (10.5)	1158 (15.5)
Stomach/duodenum resection/repair	428 (9.9)	242 (9.9)	64 (9.1)	734 (9.8)
Rectal resection	334 (7.8)	71 (2.9)	38 (5.4)	443 (5.9)
Small bowel resection/closure	255 (5.9)	105 (4.3)	55 (7.8)	415 (5.6)
Abdominal wall/peritoneum	98 (2.3)	114 (4.7)	108 (15.4)	320 (4.3)
Liver/Biliary Tree	111 (2.6)	83 (3.4)	28 (4.0)	222 (3.0)
Appendectomy	72 (1.7)	98 (4.0)	31 (4.4)	201 (2.7)
Other	111 (2.6)	51 (2.1)	16 (2.3)	178 (2.4)
Pancreas	63 (1.5)	21 (0.9)	5 (0.7)	89 (1.2)
Laparotomy/ Laparoscopy	33 (0.8)	36 (1.5)	20 (2.8)	89 (1.2)
Oesophageal resection/repair	66 (1.5)	7 (0.3)	7 (1.0)	80 (1.1)

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Emergency	High	Middle	Low	Total
Colonic resection/manipulation	335 (43.3)	129 (28.2)	72 (17.1)	536 (32.4)
Small bowel resection/closure	208 (26.9)	134 (29.3)	161 (38.2)	503 (30.4)
Stomach/duodenum resection/repair	96 (12.4)	57 (12.4)	73 (17.3)	226 (13.7)
Abdominal wall/peritoneum	81 (10.5)	41 (9.0)	63 (14.9)	185 (11.2)
Laparotomy only	20 (2.6)	69 (15.1)	38 (9.0)	127 (7.7)
Other	22 (2.8)	24 (5.2)	13 (3.1)	59 (3.6)
Rectal resection	11 (1.4)	4 (0.9)	2 (0.5)	17 (1.0)

**Table S4 Patient and operative characteristics by type of surgery.** Data are n (%) unless otherwise stated. P-values are for comparisons across non-missing data and are chi-squared or Kruskal-Wallis (\*) tests. HDI, human development index; ASA, American Society of Anesthesiologists Physical Classification System; SD, standard deviation.

Dependent: Emergency vs elective		Emergency laparotomy	Elective surgery	p-value
HDI (tertile)	High	2741 (56.6)	4307 (57.8)	<0.001
	Middle	1242 (25.6)	2443 (32.8)	
	Low	860 (17.8)	703 (9.4)	
Checklist	No	1272 (26.3)	2143 (28.8)	0.003
	Yes	3571 (73.7)	5310 (71.2)	
Age (years)	Mean (SD)	55.5 (19.8)	49.9 (19.4)	<0.001*
Gender	Male	2847 (58.8)	2860 (38.4)	<0.001
	Female	1900 (39.2)	4116 (55.2)	
	Missing	96 (2.0)	477 (6.4)	
ASA	Under 3	2712 (56.0)	5892 (79.1)	<0.001
	3 and above	2092 (43.2)	1417 (19.0)	
	Missing	39 (0.8)	144 (1.9)	
Smoking	No	3111 (64.2)	5785 (77.6)	<0.001
	Yes	1507 (31.1)	1021 (13.7)	
	Missing	225 (4.6)	647 (8.7)	
Diabetes	No	4235 (87.4)	6585 (88.4)	0.130
	Yes	608 (12.6)	868 (11.6)	
Disease classification	Abdominal wall	583 (12.0)	0 (0.0)	<0.001
	Other	687 (14.2)	4185 (56.2)	
	Benign foregut	739 (15.3)	974 (13.1)	
	Benign midgut/hindgut	1560 (32.2)	408 (5.5)	
	Malignancy	702 (14.5)	1861 (25.0)	
	Trauma/injury	489 (10.1)	21 (0.3)	
	Missing	83 (1.7)	4 (0.1)	
Bowel resection	No	3585 (74.0)	3729 (50.0)	<0.001
	Yes	1253 (25.9)	3724 (50.0)	
	Missing	5 (0.1)	0 (0.0)	
Malignancy	No	4141 (85.5)	5592 (75.0)	<0.001
	Yes	702 (14.5)	1861 (25.0)	
Contamination	Clean/Contaminated	2751 (56.8)	6653 (89.3)	<0.001
	Contaminated	621 (12.8)	576 (7.7)	
	Dirty	1454 (30.0)	128 (1.7)	
	Missing	17 (0.4)	96 (1.3)	

**Table S5 Patient and operative characteristics by country human development index for emergency laparotomy.** Data are n (%) unless otherwise stated. P-values are for comparisons across non-missing data and are chi-squared or Kruskal-Wallis (\*) tests. HDI, human development index; ASA, American Society of Anesthesiologists Physical Classification System; SD, standard deviation.

Dependent: HDI (tertile): Emergency laparotomy		Human development index tertile			p-value
		High	Middle	Low	
Checklist	No	286 (10.4)	489 (39.4)	497 (57.8)	<0.001
	Yes	2455 (89.6)	753 (60.6)	363 (42.2)	
Age (years)	Mean (SD)	63 (17.7)	47.6 (18.8)	43.4 (16.9)	<0.001*
Gender	Male	1444 (52.7)	801 (64.5)	602 (70.0)	<0.001
	Female	1253 (45.7)	416 (33.5)	231 (26.9)	
	Missing	44 (1.6)	25 (2.0)	27 (3.1)	
ASA	Under 3	1259 (45.9)	841 (67.7)	612 (71.2)	<0.001
	3 and above	1463 (53.4)	384 (30.9)	245 (28.5)	
	Missing	19 (0.7)	17 (1.4)	3 (0.3)	
Smoking	No	1713 (62.5)	774 (62.3)	624 (72.6)	<0.001
	Yes	900 (32.8)	399 (32.1)	208 (24.2)	
	Missing	128 (4.7)	69 (5.6)	28 (3.3)	
Diabetes	No	2374 (86.6)	1075 (86.6)	786 (91.4)	0.001
	Yes	367 (13.4)	167 (13.4)	74 (8.6)	
Disease classification	Abdominal wall	337 (12.3)	201 (16.2)	45 (5.2)	<0.001
	Other	366 (13.4)	162 (13.0)	159 (18.5)	
	Benign foregut	314 (11.5)	226 (18.2)	199 (23.1)	
	Benign midgut/hindgut	1097 (40.0)	247 (19.9)	216 (25.1)	
	Malignancy	494 (18.0)	132 (10.6)	76 (8.8)	
	Trauma/injury	85 (3.1)	260 (20.9)	144 (16.7)	
	Missing	48 (1.8)	14 (1.1)	21 (2.4)	
Bowel resection	No	1848 (67.4)	1018 (82.0)	719 (83.6)	<0.001
	Yes	889 (32.4)	223 (18.0)	141 (16.4)	
	Missing	4 (0.1)	1 (0.1)	0 (0.0)	
Malignancy	No	2247 (82.0)	1110 (89.4)	784 (91.2)	<0.001
	Yes	494 (18.0)	132 (10.6)	76 (8.8)	
Contamination	Clean/Contaminated	1718 (62.7)	647 (52.1)	386 (44.9)	<0.001
	Contaminated	287 (10.5)	181 (14.6)	153 (17.8)	
	Dirty	725 (26.5)	413 (33.3)	316 (36.7)	
	Missing	11 (0.4)	1 (0.1)	5 (0.6)	

**Table S6 Patient and operative characteristics by country human development index for elective surgery.**

Data are n (%) unless otherwise stated. P-values are for comparisons across non-missing data and are chi-squared or Kruskal-Wallis (\*) tests. HDI, human development index; ASA, American Society of Anesthesiologists Physical Classification System; SD, standard deviation.

Dependent: HDI (tertile): Elective surgery		Human development index tertile			p-value
		High	Middle	Low	
Checklist	No	809 (18.8)	1007 (41.2)	327 (46.5)	<0.001
	Yes	3498 (81.2)	1436 (58.8)	376 (53.5)	
Age (years)	Mean (SD)	55.4 (18.1)	43.3 (17.8)	38.9 (20.2)	<0.001*
Gender	Male	1747 (40.6)	785 (32.1)	328 (46.7)	<0.001
	Female	2273 (52.8)	1504 (61.6)	339 (48.2)	
	Missing	287 (6.7)	154 (6.3)	36 (5.1)	
ASA	Under 3	3157 (73.3)	2108 (86.3)	627 (89.2)	<0.001
	3 and above	1102 (25.6)	242 (9.9)	73 (10.4)	
	Missing	48 (1.1)	93 (3.8)	3 (0.4)	
Smoking	No	3181 (73.9)	1977 (80.9)	627 (89.2)	<0.001
	Yes	654 (15.2)	313 (12.8)	54 (7.7)	
	Missing	472 (11.0)	153 (6.3)	22 (3.1)	
Diabetes	No	3766 (87.4)	2171 (88.9)	648 (92.2)	0.001
	Yes	541 (12.6)	272 (11.1)	55 (7.8)	
Disease classification	Other	2074 (48.2)	1677 (68.6)	434 (61.7)	<0.001
	Benign foregut	530 (12.3)	313 (12.8)	131 (18.6)	
	Benign midgut/hindgut	300 (7.0)	79 (3.2)	29 (4.1)	
	Malignancy	1403 (32.6)	358 (14.7)	100 (14.2)	
	Trauma/injury	0 (0.0)	12 (0.5)	9 (1.3)	
	Missing	0 (0.0)	4 (0.2)	0 (0.0)	
Bowel resection	No	2344 (54.4)	970 (39.7)	415 (59.0)	<0.001
	Yes	1963 (45.6)	1473 (60.3)	288 (41.0)	
Malignancy	No	2904 (67.4)	2085 (85.3)	603 (85.8)	<0.001
	Yes	1403 (32.6)	358 (14.7)	100 (14.2)	
Contamination	Clean/Contaminated	3896 (90.5)	2148 (87.9)	609 (86.6)	<0.001
	Contaminated	286 (6.6)	228 (9.3)	62 (8.8)	
	Dirty	57 (1.3)	48 (2.0)	23 (3.3)	
	Missing	68 (1.6)	19 (0.8)	9 (1.3)	

**Table S7 Univariable and multivariable logistic regression analysis of reported WHO Surgical Safety Checklist use.** Data are n (%) unless otherwise stated. HDI, human development index; ASA, American Society of Anesthesiologists Physical Classification System; SD, standard deviation. Number in data frame = 12296, Number in model = 11911, Missing = 385, AIC = 12598.8, C-statistic = 0.717, H&L = Chi-sq(8) 67.60 (p<0.001).

Dependent: Checklist		No	Yes	Odds ratio (95% CI)	
				Univariable	Multivariable
Emergency laparotomy / HDI tertile	Emergency laparotomy/High	286 (8.4)	2455 (27.6)	-	-
	Elective surgery/High	809 (23.7)	3498 (39.4)	0.50 (0.44-0.58, p<0.001)	0.53 (0.45-0.63, p<0.001)
	Emergency laparotomy/Middle	489 (14.3)	753 (8.5)	0.18 (0.15-0.21, p<0.001)	0.17 (0.14-0.21, p<0.001)
	Elective surgery/Middle	1007 (29.5)	1436 (16.2)	0.17 (0.14-0.19, p<0.001)	0.19 (0.16-0.23, p<0.001)
	Emergency laparotomy/Low	497 (14.6)	363 (4.1)	0.09 (0.07-0.10, p<0.001)	0.08 (0.07-0.10, p<0.001)
	Elective surgery/Low	327 (9.6)	376 (4.2)	0.13 (0.11-0.16, p<0.001)	0.14 (0.11-0.17, p<0.001)
Age (years)	Mean (SD)	47.7 (19.2)	53.8 (19.7)	1.02 (1.01-1.02, p<0.001)	1.00 (1.00-1.00, p=0.603)
Gender	Male	1612 (48.9)	4095 (48.6)	-	-
	Female	1682 (51.1)	4334 (51.4)	1.01 (0.94-1.10, p=0.729)	-
ASA	Under 3	2598 (77.8)	6006 (68.5)	-	-
	3 and above	743 (22.2)	2766 (31.5)	1.61 (1.47-1.77, p<0.001)	1.05 (0.94-1.18, p=0.353)
Smoking	No	2594 (79.5)	6302 (77.2)	-	-
	Yes	670 (20.5)	1858 (22.8)	1.14 (1.03-1.26, p=0.009)	-
Diabetes	No	3076 (90.1)	7744 (87.2)	-	-
	Yes	339 (9.9)	1137 (12.8)	1.33 (1.17-1.52, p<0.001)	1.23 (1.07-1.43, p=0.004)
Disease classification	Abdominal wall	174 (5.1)	409 (4.6)	-	-
	Other	1567 (46.3)	3305 (37.5)	0.90 (0.74-1.08, p=0.257)	1.52 (1.19-1.95, p=0.001)
	Benign foregut	478 (14.1)	1235 (14.0)	1.10 (0.89-1.35, p=0.369)	1.64 (1.28-2.10, p<0.001)
	Benign midgut/hindgut	410 (12.1)	1558 (17.7)	1.62 (1.31-1.99, p<0.001)	1.63 (1.28-2.07, p<0.001)
	Malignancy	569 (16.8)	1994 (22.6)	1.49 (1.22-1.82, p<0.001)	1.37 (1.07-1.75, p=0.011)
	Trauma/injury	190 (5.6)	320 (3.6)	0.72 (0.56-0.92, p=0.010)	1.76 (1.30-2.37, p<0.001)
Bowel resection	No	1879 (55.0)	5435 (61.2)	-	-
	Yes	1535 (45.0)	3442 (38.8)	0.78 (0.72-0.84, p<0.001)	0.72 (0.64-0.80, p<0.001)
Contamination	Clean/Contaminated	2564 (76.2)	6840 (77.6)	-	-
	Contaminated	324 (9.6)	873 (9.9)	1.01 (0.88-1.16, p=0.885)	1.11 (0.95-1.29, p=0.184)
	Dirty	476 (14.1)	1106 (12.5)	0.87 (0.78-0.98, p=0.020)	0.87 (0.75-1.02, p=0.085)

**Table S8 Univariable and multivariable logistic regression analysis of 30-day mortality.** Data are n (%) unless otherwise stated. HDI, human development index; ASA, American Society of Anesthesiologists Physical Classification System; SD, standard deviation. Number in data frame = 12296, Number in model = 11916, Missing = 380, AIC = 3947.7, C-statistic = 0.87, H&L = Chi-sq(8) 14.28 (p=0.075).

Dependent: Mortality (30 days)		Alive	Died	Odds ratio (95* CI) Univariable	Odds ratio (95% CI) Multivariable full	Odds ratio (95% CI) Multivariable reduced
Emergency laparotomy / HDI tertile	Emergency laparotomy/ High	2429 (88.6)	312 (11.4)	-	-	-
	Elective surgery/ High	4271 (99.2)	36 (0.8)	0.07 (0.05-0.09, p<0.001)	0.12 (0.08-0.18, p<0.001)	0.12 (0.08-0.17, p<0.001)
	Emergency laparotomy/ Middle	1047 (84.3)	195 (15.7)	1.45 (1.19-1.76, p<0.001)	2.75 (2.14-3.54, p<0.001)	2.80 (2.20-3.56, p<0.001)
	Elective surgery/ Middle	2407 (98.5)	36 (1.5)	0.12 (0.08-0.16, p<0.001)	0.40 (0.26-0.61, p<0.001)	0.45 (0.30-0.66, p<0.001)
	Emergency laparotomy/ Low	746 (86.7)	114 (13.3)	1.19 (0.94-1.49, p=0.138)	2.20 (1.61-2.98, p<0.001)	2.43 (1.81-3.25, p<0.001)
	Elective surgery/ Low	681 (96.9)	22 (3.1)	0.25 (0.16-0.38, p<0.001)	0.94 (0.55-1.54, p=0.811)	0.99 (0.59-1.59, p=0.973)
Checklist	No	3171 (92.9)	244 (7.1)	-	-	-
	Yes	8410 (94.7)	471 (5.3)	0.73 (0.62-0.86, p<0.001)	0.55 (0.45-0.68, p<0.001)	0.60 (0.50-0.73, p<0.001)
Age (years)	Mean (SD)	51.4 (19.6)	63.1 (19.5)	1.03 (1.03-1.04, p<0.001)	1.03 (1.02-1.04, p<0.001)	1.03 (1.02-1.04, p<0.001)
Gender	Male	5308 (93.0)	399 (7.0)	-	-	-
	Female	5719 (95.1)	297 (4.9)	0.69 (0.59-0.81, p<0.001)	1.01 (0.84-1.22, p=0.911)	-
ASA	Under 3	8406 (97.7)	198 (2.3)	-	-	-
	3 and above	3003 (85.6)	506 (14.4)	7.15 (6.05-8.49, p<0.001)	4.16 (3.40-5.11, p<0.001)	4.26 (3.51-5.18, p<0.001)
Smoking	No	8415 (94.6)	481 (5.4)	-	-	-
	Yes	2343 (92.7)	185 (7.3)	1.38 (1.16-1.64, p<0.001)	0.87 (0.71-1.07, p=0.198)	-
Diabetes	No	10231 (94.6)	589 (5.4)	-	-	-
	Yes	1350 (91.5)	126 (8.5)	1.62 (1.32-1.97, p<0.001)	1.10 (0.86-1.38, p=0.443)	-
Disease classification	Abdominal wall	554 (95.0)	29 (5.0)	-	-	-
	Other	4755 (97.6)	117 (2.4)	0.47 (0.31-0.73, p<0.001)	2.33 (1.48-3.76, p<0.001)	2.12 (1.36-3.40, p=0.001)
	Benign foregut	1619 (94.5)	94 (5.5)	1.11 (0.73-1.73, p=0.635)	1.82 (1.13-2.98, p=0.015)	1.80 (1.14-2.93, p=0.014)
	Benign midgut/hindgut	1739 (88.4)	229 (11.6)	2.52 (1.72-3.82, p<0.001)	2.77 (1.83-4.33, p<0.001)	2.73 (1.81-4.24, p<0.001)
	Malignancy	2391 (93.3)	172 (6.7)	1.37 (0.93-2.10, p=0.123)	3.60 (2.34-5.70, p<0.001)	3.33 (2.17-5.24, p<0.001)
Bowel resection	Trauma/injury	447 (87.6)	63 (12.4)	2.69 (1.72-4.31, p<0.001)	2.75 (1.62-4.74, p<0.001)	2.89 (1.74-4.91, p<0.001)
	No	6799 (93.0)	515 (7.0)	-	-	-
Contamination	Yes	4778 (96.0)	199 (4.0)	0.55 (0.46-0.65, p<0.001)	0.83 (0.68-1.01, p=0.068)	-
	Clean/Contaminated	9064 (96.4)	340 (3.6)	-	-	-
	Contaminated	1101 (92.0)	96 (8.0)	2.32 (1.83-2.93, p<0.001)	1.05 (0.78-1.40, p=0.720)	1.24 (0.94-1.61, p=0.118)
	Dirty	1305 (82.5)	277 (17.5)	5.66 (4.78-6.70, p<0.001)	2.08 (1.67-2.58, p<0.001)	2.06 (1.67-2.54, p<0.001)



**Table S9 Probability of 30-day mortality by surgery type, human development index group and WHO Surgical Safety Checklist use.** The multivariable logistic regression model for 30-day mortality (Figure 2 and supplementary table 5) was used to generate adjusted predicted probabilities of death using bootstrap replication.

	Checklist	Adjusted probability of mortality (95% CI)	Absolute risk difference (95% CI, p-value)
Emergency laparotomy/High	No	0.057 (0.039 to 0.078)	-
Emergency laparotomy/High	Yes	0.035 (0.025 to 0.047)	-0.021 (-0.035 to -0.012, p<0.001)
Emergency laparotomy/Middle	No	0.144 (0.102 to 0.190)	-
Emergency laparotomy/Middle	Yes	0.092 (0.065 to 0.124)	-0.051 (-0.078 to -0.029, p<0.001)
Emergency laparotomy/Low	No	0.128 (0.088 to 0.174)	-
Emergency laparotomy/Low	Yes	0.081 (0.054 to 0.114)	-0.046 (-0.070 to -0.027, p<0.001)
Elective surgery/High	No	0.007 (0.004 to 0.011)	-
Elective surgery/High	Yes	0.004 (0.003 to 0.007)	-0.003 (-0.005 to -0.001, p<0.001)
Elective surgery/Middle	No	0.026 (0.016 to 0.040)	-
Elective surgery/Middle	Yes	0.016 (0.009 to 0.024)	-0.010 (-0.017 to -0.005, p<0.001)
Elective surgery/Low	No	0.056 (0.032 to 0.087)	-
Elective surgery/Low	Yes	0.035 (0.019 to 0.055)	-0.021 (-0.036 to -0.010, p<0.001)

<TYPESETTER: PLEASE TAG ALL NAMES BELOW TO APPEAR ON PUBMED>

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