

Supplementary material

	SensiumVitals® +NEWS (n=140)	NEWS alone (n=86)
Number of patients with complications (all ^a)	100 (71.4%)	57 (66.3%)
Anastomotic leak	1	1
Bowels not opened	7	5
Chest pain	3	2
Confusion	3	1
Electrolyte disturbance	8	2
Increased stoma output	1	2
Loose stools	3	0
Nausea and vomiting	10	8
Pain	4	5
Pyrexia	5	1
Sepsis	24	12
Rectal bleeding	1	2
Respiratory complication	3	4
Stroke	1	0
Urinary tract infection	5	2
Wound complication	3	3
Other	18	7
Number of patients with major complications (Clavien-Dindo >2 ^b)	8 (5.7%)	5 (5.8%)
Sepsis events	24 (17.1%)	12 (14.0%)
<i>Intra-abdominal collection</i>	4	0
<i>Ischaemic bowel</i>	1	0
<i>Venous access infection</i>	1	1
<i>Respiratory tract infection</i>	3	3
<i>Urinary tract infection</i>	2	1
<i>Wound infection</i>	5	2
<i>Unknown source</i>	7	4
<i>Other</i>	1	1
^a All complications includes any deviations from the normal post-operative course, from minor (such as nausea) to major (such as death). ^b A Clavien-Dindo score >2 indicates that that the complication required critical care admission or further surgical/radiological intervention, or resulted in death.		

Complication rates between intervention and control arms

	SensiumVitals +NEWS (n=140)	NEWS alone: incl non-randomised bays (n=210)	NEWS alone: only randomised bays (n=86)
Males	76 (54.3%)	77 (36.7%)	39 (45.4%)
Females	64 (45.7%)	133 (63.3%)	47 (54.6%)
Age			
Mean	65.2 years	60.5 years	63.7 years
Range	24-94 years	19-93 years	21-92 years
ASA			
1	9 (6.4%)	19 (9.0%)	9 (10.5%)
2	62 (44.3%)	97 (46.2%)	35 (40.7%)
3	42 (30.0%)	50 (23.8%)	22 (25.6%)
4	3 (2.1%)	5 (2.4%)	3 (3.5%)
Not documented	24 (17.1%)	39 (18.6%)	17(19.8%)
Emergency admissions	70 (50%)	113 (53.8%)	44 (51.2%)
Elective admissions	70 (50%)	97 (46.2%)	42 (48.8%)
Surgical intervention	103 (73.6%)	154 (73.3%)	62 (72.1%)
Medical outliers	19 (13.6%)	27 (12.9%)	14 (16.3%)
Number of complications (all ^a)	102 (72.9%)	143 (68.1%)	57 (66.3%)
Number of major complications (Clavien-Dindo >2 ^b)	8 (5.7%)	17 (8.1%)	5 (5.8%)
Sepsis events	24 (17.1%)	33 (15.7%)	12 (14.0%)
Time to antibiotics in cases of sepsis	n=22	n=32	n=12
Mean	626.0 minutes	900.0 minutes	1012.8 minutes
95% confidence interval	431.7-820.3	621.6-1178.4	95% CI 425.0-1600.6
Level II/III admissions	3 (2.1%)	5 (2.4%)	2 (2.3%)
95% confidence interval	0%-4.54%	0.319%-4.44%	0%-5.51%
Length of stay in hospital			
Mean	13.3 days	15.5 days	14.6 days

	95% confidence interval	11.3-15.3	10.1-20.9	11.5-17.7
	Readmissions	16 (11.4%)	38 (18.1%)	18 (20.9%)
	95% confidence interval	6.16%-16.7%	12.9%-23.3%	12.3%-29.5%
	Inpatient deaths	1 (0.7%)	0 (0%)	0 (0%)
<p>^a All complications include any deviations from the normal post-operative course, from minor (such as nausea) to major (such as death).</p> <p>^b Clavien-Dindo is a scale for the severity of complications. A Clavien-Dindo score >2 indicates that that the complication required critical care admission or a further surgical procedure, or resulted in death.</p>				

Summary of outcome measures including exploratory analysis

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Comfort					
The SensiumVitals® Patch was comfortable to wear.					
Quality of Care					
I felt safer because my vital signs were being monitored constantly.					
<p>We welcome any additional comments you may have:</p>					

Patient questionnaire