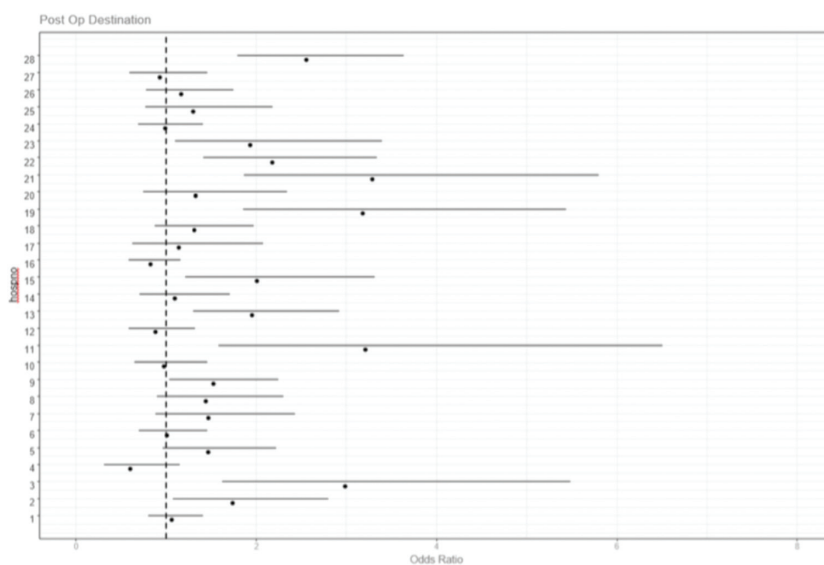


**Abstract 1040 Figure 3** SPC charts from one hospital showing improvement in senior anaesthetist presence in theater and increase in number of patients going to critical care after surgery. Dotted line marks start of intervention.



**Abstract 1040 Figure 4** Odds ratios showing the increased likelihood of a patient receiving the implementation or outcome. Where the horizontal line is no longer in touch with the vertical line, a significant change has taken place. This chart shows how the change in post-op critical care has been replicated across the majority of hospitals. The chart includes analysis of historic data and the first 15 months of prospective collected data.

stay. The collaborative promoted innovation with ideas such as ‘virtual peer review’ emerging.

**Conclusions** Implementation of the ELPQuIC care bundle improved process delivery resulting in better outcomes for emergency laparotomy patients across 25 NHS Trusts. QI promotion through a BTS model fostered collaboration and innovation.

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#### DECREASING UNNECESSARY BLOOD BANK TESTING FOR LAPAROSCOPIC HYSTERECTOMY

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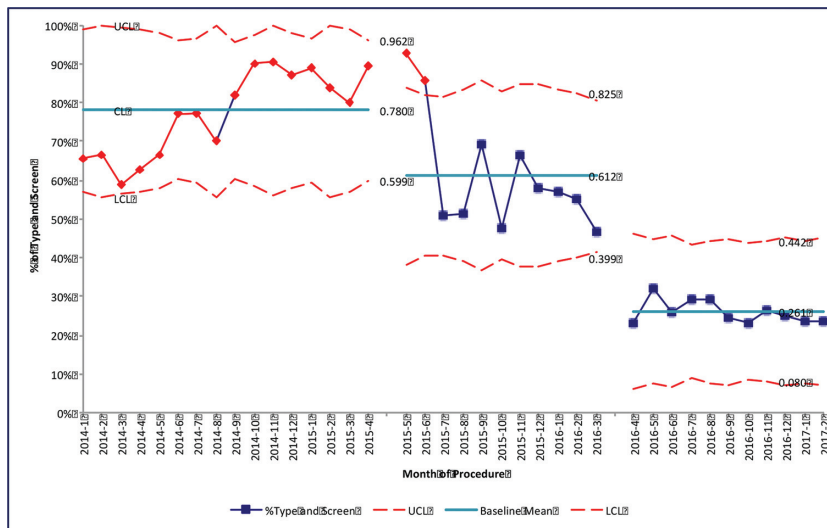
10.1136/bmjoc-2017-IHL28

**Background** Reducing unnecessary preparation of blood components decreases cost and improves value. Standard surgical blood order schedules (SSBOS), which make recommendations on which procedures require a type and screen (T and S), have been shown to help reduce variability and improve patient safety. We explore how evidence-based interventions preoperatively optimise the process.

**Objectives** Our aim was to standardise the process and implement an evidence-based process improvement to reduce unnecessary T and S samples for laparoscopic hysterectomy cases.

**Methods** After IRB approval, we reviewed data from January 2014 to February 2016. Outcomes followed were: 1) T and S samples and 2) blood transfusion rates. Interventions were: 1) termination of routine ordering of T and S samples by pre-anaesthesia evaluation team (4/2015); and 2) implementation of a SSBOS guideline within a new EHR system (4/2016). We used statistical process control and descriptive statistics for analysis.

**Results** At baseline, of 615 laparoscopic hysterectomy procedures, T and S obtained for 490 procedures (78%), 21 patients (3%) received at least 1 unit of blood. Of 490 procedures after Intervention-1, T and S obtained for 300 cases (61%), 18 patients (3%) received transfusion. Of 552 procedures after Intervention-2, T and S obtained for 144 cases



Abstract 1050 Figure 1 Percentage of type and screen drawn for laparoscopic hysterectomy procedure p chart, sigma

(21%), 5 patients (1%) received transfusion (Table 1). Figure-1 shows a process control chart plotting the T and S samples over time with interventions at 5–2015 and 4–2016 which show a significant decrease in mean T and S samples.

Abstract 1050 Table 1

	Laparoscopic Hysterectomy Baseline (1/2014 - 4/2015)	Laparoscopic Hysterectomy Intervention 1 (5/2015 - 3/2016)	Laparoscopic Hysterectomy Intervention 2 (4/2016 - 2/2017)
Total	615	490	552
Type and Screen	490 (78%)	300 (61%)	144 (26%)
Transfusion	21 (3%)	18 (3.6%)	5 (<1%)

**Conclusions** Unnecessary preparation of blood products for operations with historically low rates of transfusion represents wasted phlebotomy, labour, and expense. Using laparoscopic hysterectomy as an example, we decreased unnecessary T and S using data to guide pre-operative testing.

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**REDUCING UNWANTED AND UNWARRANTED ED AND HOSPITAL UTILISATION FOR FRAIL ELDERLY IN RURAL SKILLED NURSING FACILITIES: A HYBRID IMPROVEMENT-IMPLEMENTATION APPROACH**

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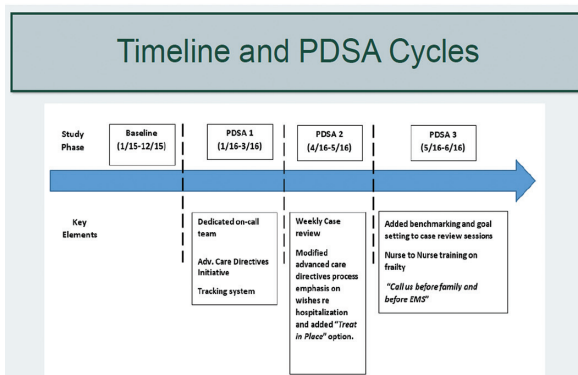
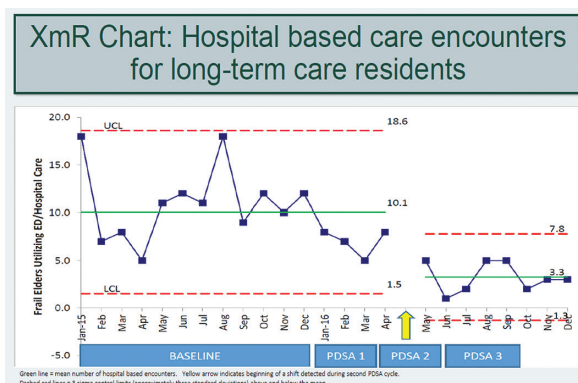
**Background** Frail elders in residential skilled nursing facilities (SNFs) have high rates of emergency department (ED) utilisation and hospitalizations. We sought to implement and iteratively specify an intervention to improve utilisation and cost outcomes for frail elders in rural SNFs.

**Objectives** (1) To reduce unwanted and avoidable ED utilisation and hospitalizations; (2) to reduce related costs.

**Methods** Adopting evidence based practices, we iteratively developed an implementation approach including the following key elements: (1) advanced directives; (2) a dedicated closed-

call team of providers following SNF residents; (3) a biweekly case review of all ED referrals and hospitalizations; and (4) a standardised triage communication process. We conducted three PDSA cycles over a 6 month period and assessed clinical and cost outcomes using inferential statistics and statistical process control (SPC) methods.

**Results** Three rural SNFs participated in the intervention from January-June 2016. Three PDSA cycles were conducted. Monthly hospital-based care utilisation for long term care (LTC) residents reduced from 10 to 3.3 episodes (p<0.05). ED transfers reduced by 59% (p<0.05), and hospitalizations reduced by 62% (p<0.05), without associated changes in



Abstract 1057 Figure 1