Improving compliance with the pre-theatre checklist to improve patient safety.
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Aim
Surgical checklists have been proven to improve patient safety1; however, the pre-theatre checklist in Ninewells Hospital, Dundee, was found to be inadequately completed in surgical wards.

• Improve compliance with the pre-theatre checklist by 10% for patients going to the Main Theatres and West Block Theatres, by the 21st of February 2014.

Methods
Baseline data from 24 patients was collected over one week, and showed that only 66% of the original checklist was completed on average (see Figure 1). Changes were tested on 12 patients over two weeks, in the Main Theatres and West Block Theatres.

• Outcome measures = number of fully completed checklists.
• Process measures = assessed the extent of completion of each checklist.
• Balancing measures = time taken to complete the checklist and staff satisfaction.

PDSA cycle 1: re-designed layout of pre-theatre checklist.
• colour-coding
• clearer wording
• more logical order

PDSA cycle 2: simplified content of pre-theatre checklist.
• removed irrelevant content
• colour-coding

Results
Percentage completion of the pre-theatre checklist increased to 88%, from an average baseline of 66%, following two tests of change (see Figure 4). However, no individual checklist was fully completed in either test of change.

PDSA cycle 1: Average percentage completion improved by 11% to 77% after changes to the layout.

PDSA cycle 2: Average percentage completion improved again by 11%, achieving 88% completion, after changes to the content.

Balancing measures: Time taken to complete the checklists reduced from an average of 11 minutes to 7 minutes. Staff satisfaction improved due to a clearer layout, less duplication of signatures and exclusion of non-essential elements.

Conclusions
The study showed that a change in layout and content of the pre-theatre checklist improved percentage completion by 22%. Correct completion of the checklist improves patient flow, reduces workload of ward and theatre nursing staff and ensures patient safety1.

Following this study, recommended further work includes evaluation of the effects on patient flow through theatre, incidence of theatre-associated patient complications and patient satisfaction. Staff education regarding a revised checklist would likely be required to achieve sustainability.

References