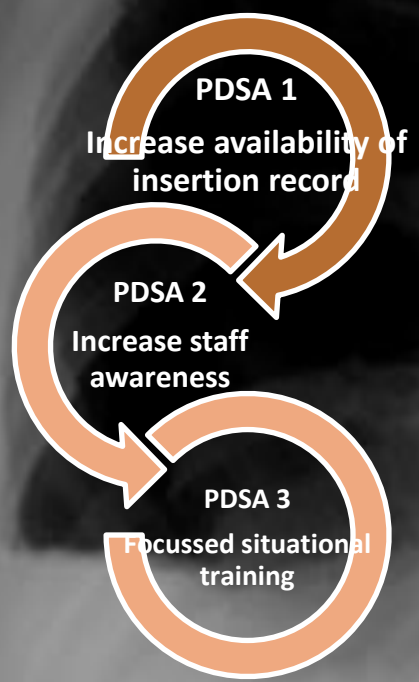
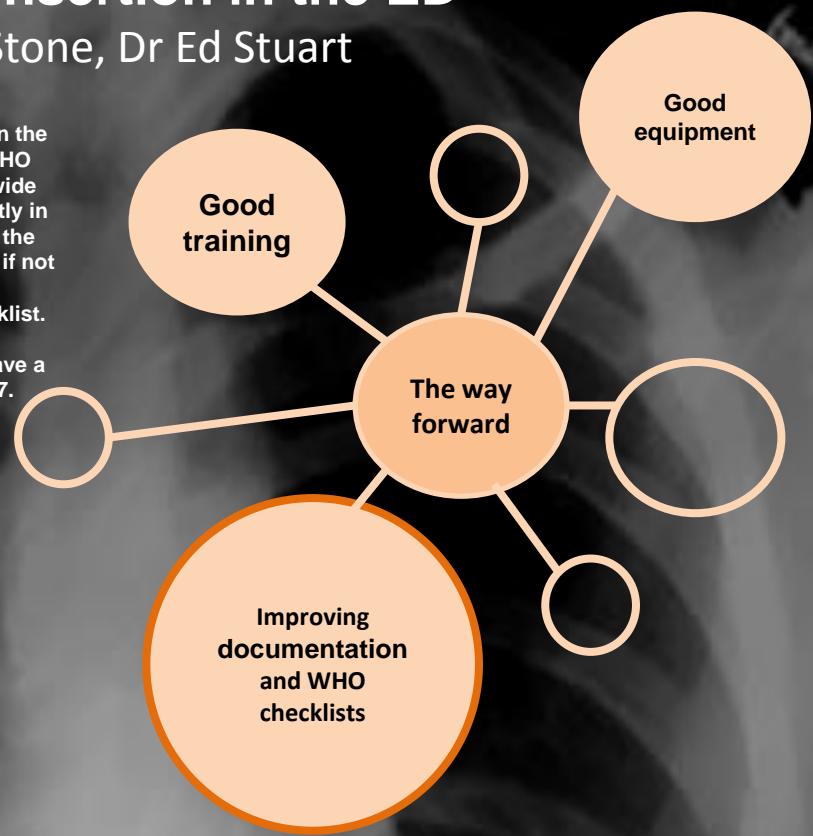


Improving Chest Drain insertion in the ED

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Background & Problem:
Chest drain insertion is an invasive procedure performed in the ED. All patients should have a drain inserted in line with WHO checklist standards and as described by the BTS. A trust wide chest drain checklist was available but not used consistently in the ED as identified by M and M cases and audit. This puts the patients and staff at risk through risk of harm and scrutiny if not following local and national guidance. One of several improvement strategies was to embed the use of this checklist.
Aim:
80% of patients receiving a chest drain in the ED should have a pre-procedure checklist undertaken by the end of July 2017.



Method:
Prior to the start of this QIP equipment had been changed and E learning videos were made to demonstrate the use of the equipment. Process mapping and driver diagrams helped identify further barriers, generate change ideas and process, balancing and outcome measures;
PDSA 1 - Increase availability of the record - with the kit, on the stocking checklist and on the guidelines site
PDSA 2 - Increase staff awareness via 1:1 interactions, handover teaching etc.
PDSA 3 - Focussed situational training including insitu sim and procedural training
Outcome measure - % of chest drains inserted in the ED that had an accompanying insertion record.
Process measures - spot checks of equipment, questionnaires of staff awareness and number of educational initiatives undertaken
Balancing measures - time taken to use the tool

Results:
Outcome measure; baseline=30%, Nov 2016=100% with an overall trend of improvement seen on a run chart.
Process measures; Staff awareness - sustained improvement in awareness of Drs, baseline = 0%, Nov 16 = 67% with overall improved trend. Continued poor awareness of nursing staff
Equipment checks, was the insertion record present? - baseline = 0%, Nov 16 = 100%. There was no change in trend however for the number of missing essential items.
Balancing measures; Users feel it actually take less time to complete than writing free hand!

Challenges to come:

- Keeping the standards high despite regular staff change over.
- Improving the use of the checklist by non ED clinicians inserting chest drains in the ED.

