



Reducing waste: The STAR project (Streamlining Theatre equipment And Resources)



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Background

- Healthcare is the world's 2nd largest landfill contributor after the food industry
- The operating room generates 20-70% of all hospital waste
- Our burns unit implemented a surgical planning sheet in 2016 to try to reduce surgical waste (see Fig.1)

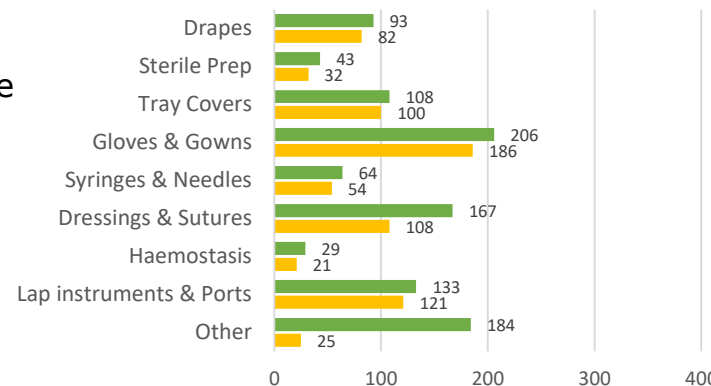
Methods

- Using the Define, Measure, Assess, Improve, Control (DMAIC) model of service improvement, consumables and surgical instruments in theatres were assessed
- All adult burns and acute general surgery theatre cases were directly observed over a 4-week period
- All consumables and surgical instruments opened and used during cases were recorded

Results

- 14 minor burn (<10% TBSA) operations and 22 general surgery operations were reviewed
- In burns theatres, 15% (n=113) of consumables opened went unused
- In general surgery theatres, 29% (n=298) of consumables opened went unused

Items **opened** and **used** in general surgery theatre



Items **opened** and **used** in burns theatre

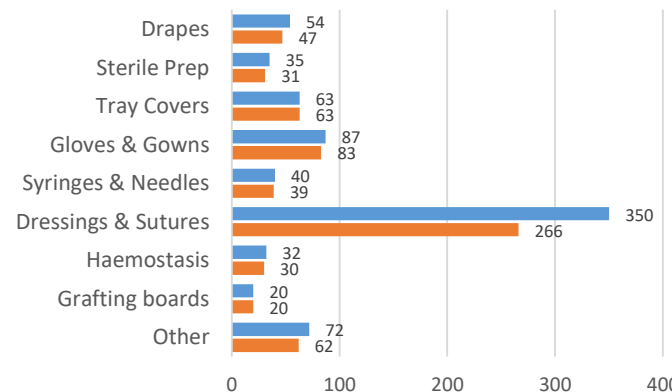


FIG. 1: Surgical Planning sheet

Fig.1: Surgical Planning sheet

Discussion

- 15-29% of consumables were wasted
- Waste in burns theatres where surgical planning sheets are used was ~50% of that in general theatres, where 'preference cards' are used
- The use of accurate surgical pre-planning sheets may help to reduce waste and costs