

Improving Patient Flow: A Focus on Paediatric Critical Care

Authors: R Mc Vea, J Weitz, D O'Shea

OUH Future Leaders Program

Aims

- PCC cares for critical care patients in the region and high-cost supra-regional complex paediatric surgery.
- Timely discharge of patients no longer requiring critical care is vital to serve the necessary demand
- Services and Trust income is significantly threatened if underperforming in areas relating to surgical cancellations and patient refusal.

Key aims therefore to:

- Assess PCC bed state, including surgical cancellations
- Record discharge delays from PCC and individual factors contributing to delay
- Identify bottlenecks to flow & areas for improvement

What next?

- Improve PCC flow through repatriation, by prioritising patient discharges to their DGHs
- Escalate bed blockages to directors for review over surgical cancellations
- Root cause analysis of reasons for delayed discharges from PCC when beds *were* available on wards

Conclusions

- 1) Paediatric critical care consistently close to, or above, maximal staffed occupancy
- 2) Significant proportion of beds occupied by patients no longer requiring critical care interventions due to discharge delays (12.5-50%)
- 3) Discharge delays of up to 10 days (mean:3) affecting 46% PCC patients
- 4) Most common discharge destination from critical care: *home, due to lack of ward beds.*
- 5) Frequent occasions when beds sought for HDU discharges and *were* available on target inpatient wards (Toms, Melanie's, Bellhouse-Drayson), but not made available for critical care for unknown reasons

PLAN

Background

Patient flow is a focus for improvement in the Oxford Children's Hospital. Through an initial diagnostics phase, several key areas were highlighted including medical delayed discharges from critical care and inter-disciplinary communication. This arm of a multi-phase quality improvement project focuses on specific patient flow issues in the Paediatric Critical Care Unit (PCC)

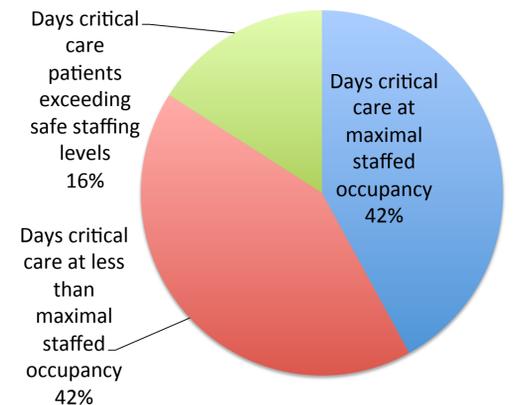
Method

- Data collected on 12 consecutive days from pICU/pHDU (PCC) & paediatric inpatient wards
- Data recorded from visits to PCC and wards twice daily (9am, 5pm), through discussion with senior staff, and correlation with critical care records:
 - Number of occupied and staffed beds on PCC
 - Patients fit for discharge + planned target destination
 - Actual discharges achieved
 - Number of surgical admissions to PCC: planned & cancelled
 - Bed state on paediatric inpatient wards

Results

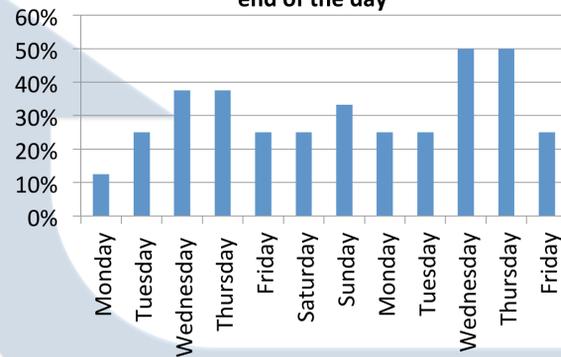
DO

Of planned surgical admissions to PCC, **30% cancelled in week 1** & **14% cancelled in week 2** due to lack of beds

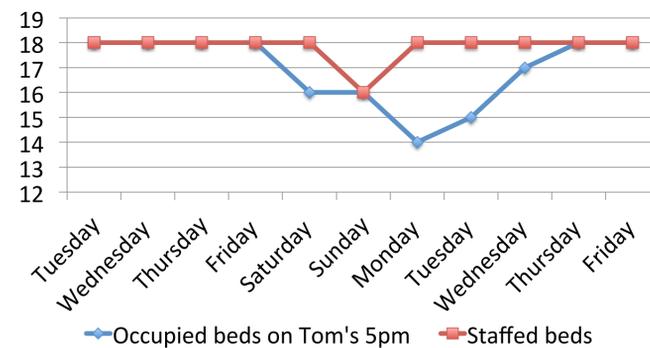


ACT

Percentage of beds occupied by PCC patients fit for discharge to wards at the end of the day



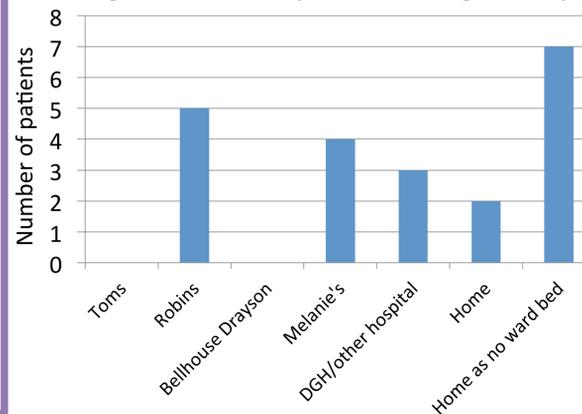
Bed state on Toms Ward on days beds required for PCC discharges



STUDY

Whilst 54% of PCC patients were discharged within 24h, delays ranging from 1-10 days affected 46% of patients (mean: 3 days)

Discharge destination for patients discharged from pHDU



Discharges from HDU: number of patients fit for discharge, actually discharged and delayed discharges per day of audit

