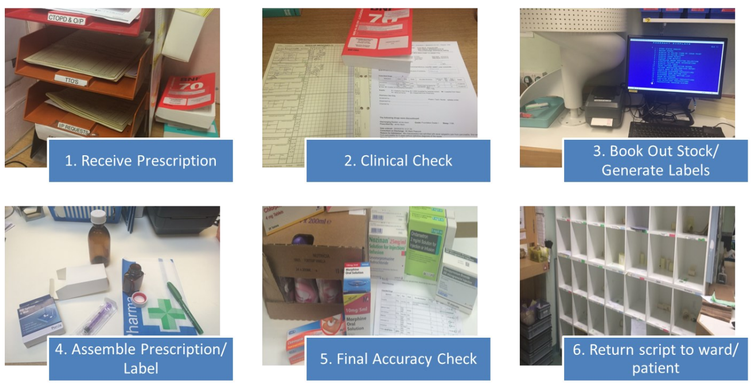
Reducing Dispensing Errors in Cheltenham General Hospital Pharmacy: A Quality Improvement Project

Elisabeth Cook, Jacqui Liddle, Delyth Morton, Menna Jeffreys, Rebecca Mustow and Mike Watson
Pharmacy Department, Cheltenham General Hospital

Gloucestershire Hospitals NHS
NHS Foundation Trust

1. Context

What is the dispensing process?

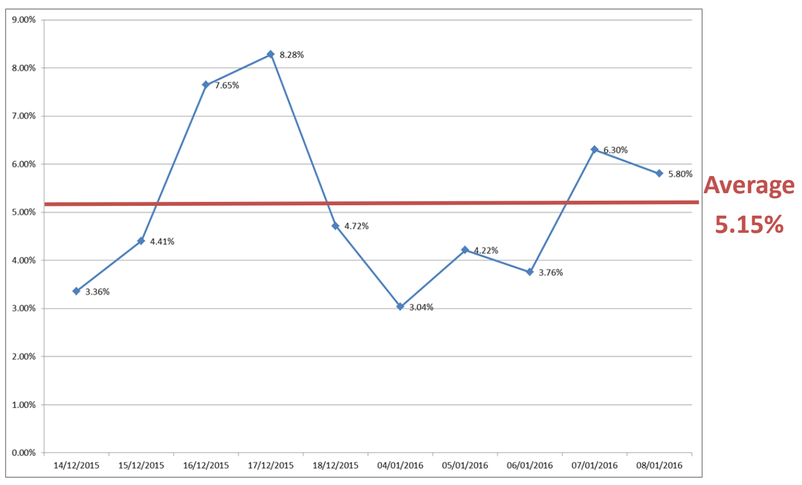


Dispensing Error: "Any deviation from the prescription order, whether that by drug, label or contents"

"Prevented" Error or Near Miss: any dispensing error picked up at the final accuracy check BEFORE items leave the pharmacy department.

2. Baseline Data

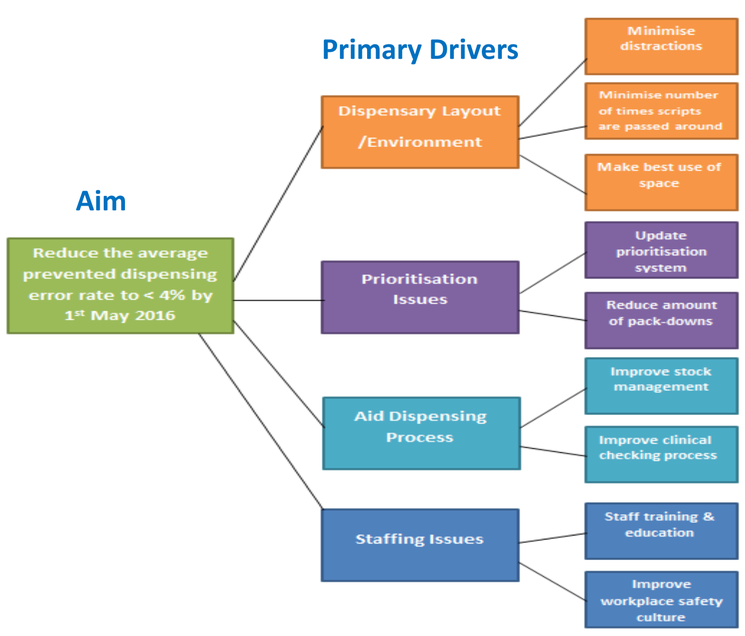
Two weeks of baseline data was collected measuring number of near misses per day.



3. The Problem

- A near miss rate of >5 % (1 in 20 items) is quite high
- CGH dispensary processes approx. 560 items per day, therefore approx. 28 near misses per day
- Pressure on the final accuracy checker to detect a high error frequency (ranging in severity from missing signature to wrong drug/dose etc.)
- Sending items back to be changed disrupts dispensing process and reduces efficiency
- Measuring actual error rate (via incident reports) not reliable

4. Aim & Driver Diagram



5. Measures & Change Ideas

Main outcome measure: prevented error/near miss rate (%)

Balancing measures:

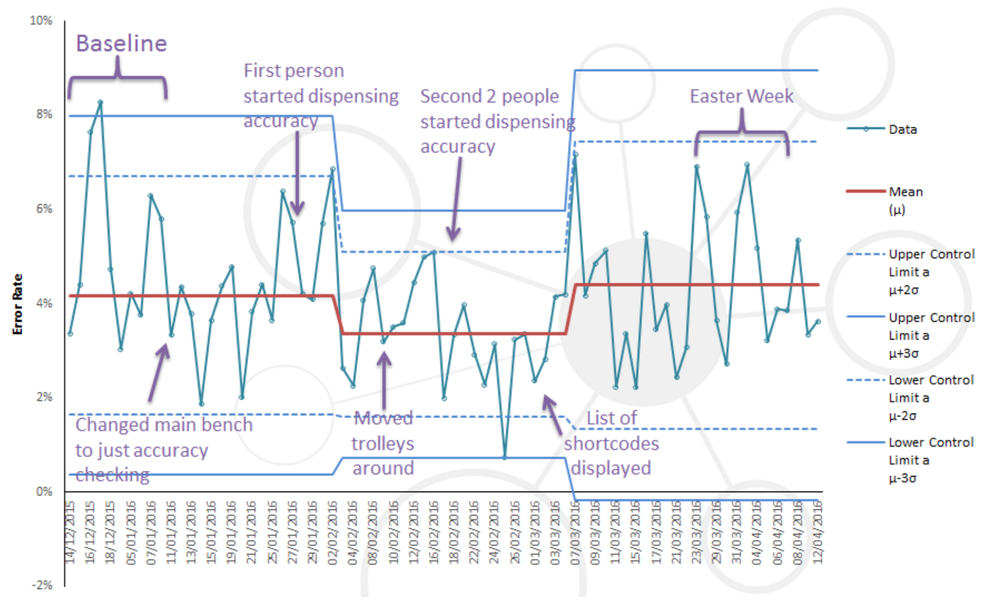
- Time taken to dispense TTOs
- Staff feedback (qualitative)

How we chose change ideas:

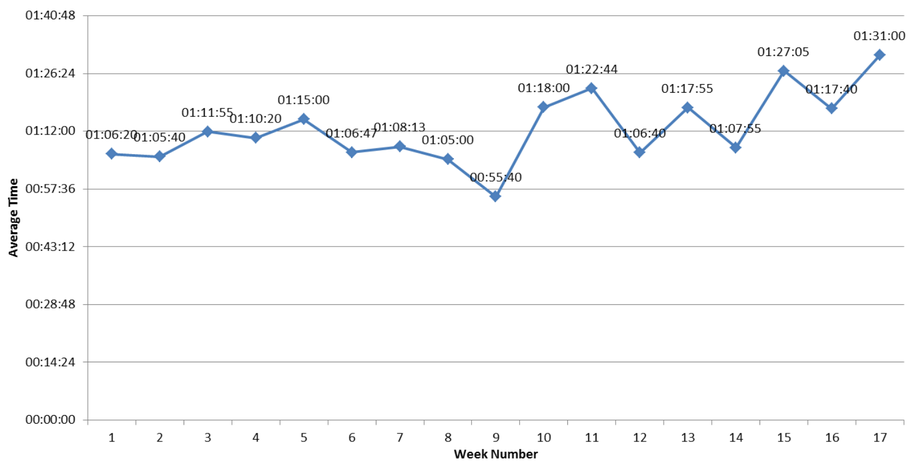
- Prioritised cost-effective changes
- Easy to make (quick wins)
- Changes that had support of dispensary team

6. Results

Main Outcome Measure (Prevented Error Rate %):



Balancing Measure: Average Time Taken to Dispense Discharge Prescriptions:



7. Discussion

Changes initially caused a downwards shift in error rate to <4% but not sustainable—why?

- Reason for high near miss rate more process related?
- Changes in department i.e. staff shortages, bank holidays?
- Process very complicated with many interacting factors?

Next Steps:

- Analyse existing data in more detail, considering staffing, training etc.
- Restart project ~ Sept 2016
- Continue to do monthly snapshot audits
- Consider major process re-design (incorporating LEAN), more drastic work area changes, implement barcode scanning as in GRH.

8. Acknowledgements

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