Designing in reliability: the use of a ward round checklist

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BACKGROUND

- Daily ward rounds represent the major opportunity for influencing patient care through structured review of care and appropriate communication with patients.
- Important decisions are made and the quality of these decisions is dependent on reliable utilisation of all the information available at that point in time.
- Ward rounds and the team’s thought processes are interrupted frequently and patients are often reviewed by different grades of doctors each day, resulting in increased variability and reliability of care.
BACKGROUND

- A prior attempt to test a ward round checklist in York Hospital was unsuccessful.
- Feedback from staff suggested that a checklist as a regular part of the continuation sheet might be more likely to succeed.
- Previous introduction of a checklist to the Acute Medical Unit admission pro forma supported this hypothesis.

METHODS

- A new test version of a continuation sheet including a tick box list with items that were considered as relevant for the renal team was designed (group A).
- Another list of relevant items was formed but not included to the continuation sheet (group B).
METHODS

- **Group A:**
  - observations, glucose, drugs, antibiotics, fluids, cannula, pathology, radiology, plan, ceiling of care and whether discussed with family

- **Group B:**
  - weight, nutrition, catheters, lines, drains, wounds, skin, mobility, oxygen, discharge planning and MDT
METHODS

- 22 renal ward rounds were observed while using the old continuation sheet (without checklist)
- Performance in regards of checking/addressing items as well as documentation of that activity was measured
- Another 22 renal ward rounds were evaluated after implementation of new continuation sheet
- Doctors at ward round aware of auditing process but not in detail

RESULTS

% reliability with which items checked by team (as opposed to box ticked)
RESULTS

% of items pre and post sheet introduction group A

% of items pre and post sheet introduction group B
RESULTS

- Improvement for group A with checklist
  - checking/addressing (pre: 51%, post: 88%)
  - documentation (pre: 38%, post: 50%)

- No difference for group B
  - checking/addressing (pre 21%, post 24%)
  - documentation (pre 14%, post 11%)

% of Checking/addressing per item pre and post checklist introduction

![Graph showing % of Checking/addressing per item pre and post checklist introduction]
RESULTS

- ‘observations’ and ‘plan’ both achieved 100% and ‘pathology’ 86% pre checklist introduction
- Improvement for items:
  - ‘glucose level’ (pre: 45%, post: 95%)
  - ‘antibiotics’ (pre: 45%, post: 91%)
  - ‘cannula’ (pre: 5%, post: 86%)
  - ‘fluids’ (pre: 23%, post: 82%)
  - ‘radiology’ (pre: 23%, post: 95%)

SUMMARY

- Checklists have been used in other industries to improve performance
- There are ‘check-do’ lists such as the pre-take off checklist in the airline industry
- There are the ‘do-check’ lists to ensure that nothing has been missed and this is one such list
- Introduction of the new continuation sheet improved checking and addressing of ward round items as well as documentation compared to ward round items not listed within the checklist
SUMMARY

- It did not reduce the doctor’s attention for other items
- To use a checklist with items most important to a particular specialty such as surgery might provide further improvements by incorporating specialty specific requirements (i.e. check surgical drains)
- The checklist does not undermine the doctor’s clinical autonomy and intellect and is not meant to lead the process of the ward round but rather acts as a memory aid and safety net in an increasingly complex working environment

WHAT HAPPENED NEXT

- Checklist was adjusted to needs in renal department
- Trial and re-audit of checklist in other wards in York Hospital
- Trial of a ‘perfect ward round’ concept