

P018

## P018 -"Traffic Light" Water Jug Lids: A Hydration Quality Improvement Project in Older Patients

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### INTRODUCTION

Inadequate hydration is widely demonstrable amongst hospital inpatients, particularly in the elderly. Clinical dehydration is a major predictor of morbidity and mortality in admitted patients (1,2) and it has been suggested ~12,000 deaths could be prevented annually by treating such 'avoidable' causes of acute kidney injury (3). Unfortunately, older adults are particularly susceptible to dehydration due to age-related pathophysiological changes and this can often go undetected and unmanaged (2). Interventions to highlight and mitigate this problem are therefore warranted.

### METHODOLOGY

A "traffic-light" system of water jug lids was devised and piloted on a general gerontology ward (32 patients) to improve recognition and management of reduced fluid intake. Patients deemed medically suitable were issued with a red-topped 750ml water jug at 08:00. At 12:00, every patient's jug was assessed; if empty it was refilled and replaced with an orange-topped lid. The process was repeated at 14:30 and if empty, replaced with a green version. If the jug lid had not been refilled during the day and hence was still red at this time, support workers informed nursing staff and encouragement was given to achieve the daily water intake minimum of 1500ml. Nursing care records were reviewed before and after the intervention on both the study and adjacent ward to assess the impact of the project.

### RESULTS

A stepped change with demonstrable improvement in quantified fluid intake was observed on the ward following the project's introduction. Costs were negligible (£110 for 32 red/orange/green water jug lids and jugs from NHS suppliers) and the project was paper-light. The system was very well received by staff and patients, although highlighted an educational need regarding sub-optimal hydration on gerontology wards and the best methods for tackling this issue.

### CONCLUSION

A simple, and likely cost-effective, quality improvement project demonstrated a marked increase in quantified fluid intake. Plan-Do-Study-Act (PDSA) cycles continue to refine the project, with targeted education surrounding assessment and management of this common but under-recognised problem. After further iterations, there is potential to roll out the project more widely, with incorporation of metrics such as AKI, fall frequency and pressure ulcer rates. Efforts so to do are currently ongoing.