Improving the care of frail older patients in colorectal surgery

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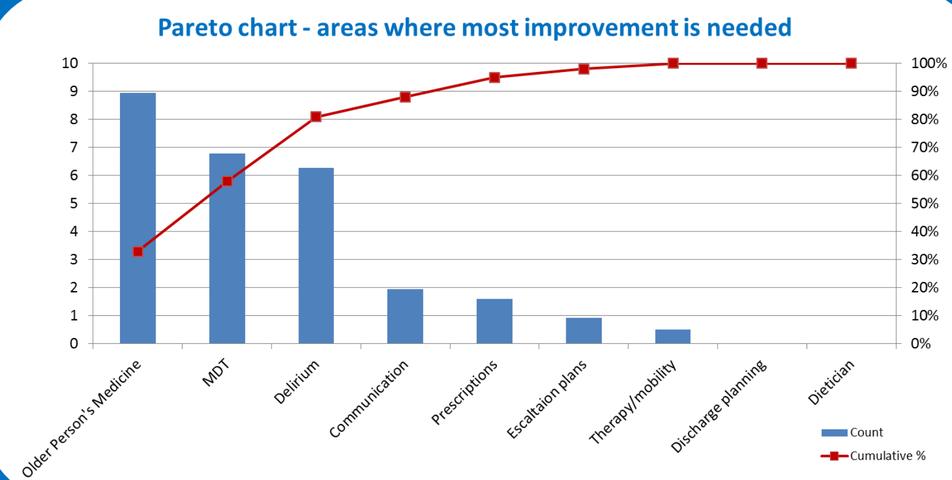
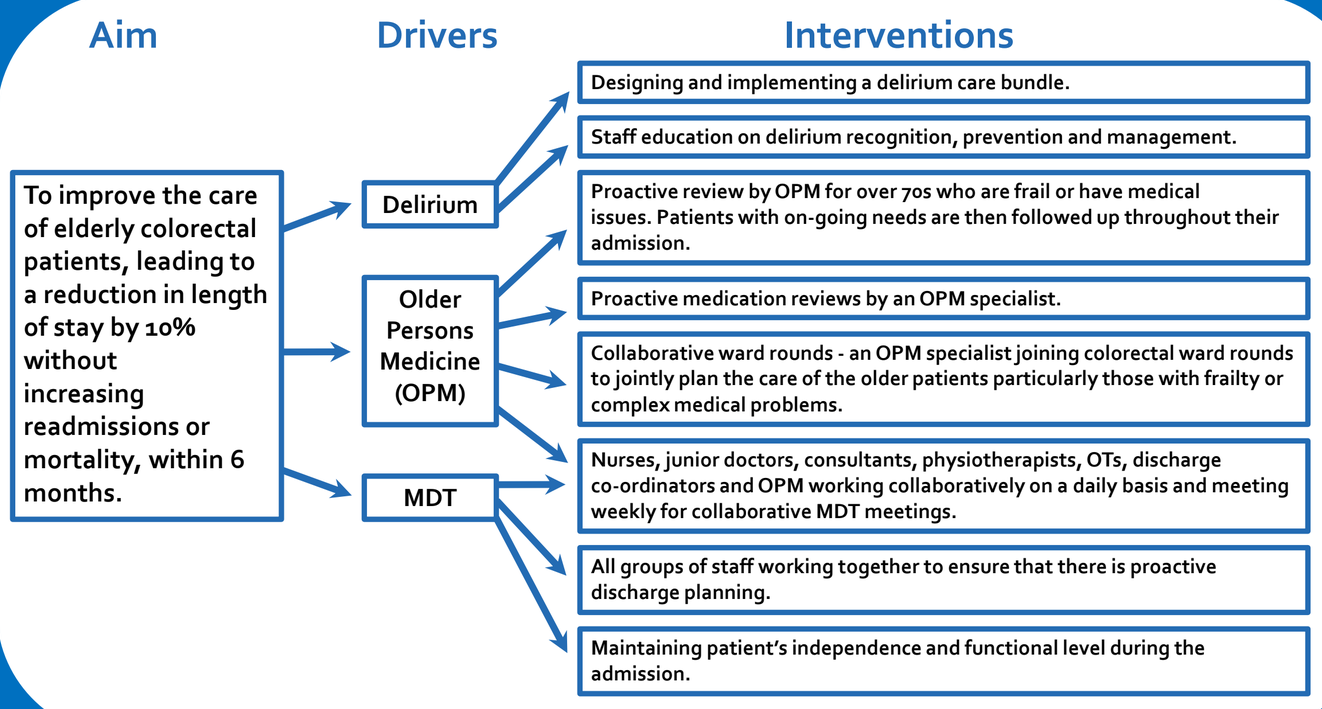
Background

The Royal Bournemouth Hospital colorectal surgery department have approximately 1500 emergency admissions per year and 30% of these are over 70 years old. This group of patients often have co-existent medical and social issues. Prior to the project there was very minimal input from Older Persons Medicine (OPM) specialists. There was minimal multidisciplinary team (MDT) working between the groups of staff in the department. First year foundation (F1) doctors made many decisions about the patients medical management and issues like delirium were not recognised or managed well.

Strategy for change

Semi-structured interviews were conducted with staff from across the MDT including nursing staff, junior doctors, consultants, physiotherapists, occupation therapists (OTs) and the discharge team. This ensured all the staff were aware of the project from the beginning; they were involved in setting the aim and the decision making process. Responses were graded on a Likert scale to identify the areas each staff member thought needed most improvement. The results are displayed on the Pareto chart opposite - availability of OPM input, MDT working and delirium management were identified as the main drivers for change. The MDT members developed strategies with specific actions to improve these areas (see driver diagram below). They were tested with iterative PDSA cycles to ensure the changes lead to an improvement.





Adapting interventions to the environment

Collaborative working - The components of the MDT were already working on the colorectal ward. The only additional resource was an OPM specialist registrar working part time (30% WTE). The main drive was to bring the members of the MDT together and work in new ways with closer collaboration. The therapy team deliver care to four surgical specialities. To improve continuity and collaborative working the team was restructured to consistently have the same therapist on the colorectal ward. There are three consultants working in the department each with a different schedule and no time where collaborative meetings could involve all three. Hence changes in the system were throughout the ward but the collaborative working was mainly with Mr Wijeyekoon who engaged with the collaborative meeting and ward rounds.

Education and training - Due to nursing shift patterns and time pressures it was not possible for teaching to be as a whole group. The delirium teaching was adapted into a 25 minute session delivered in nursing handovers and run four times to capture the majority of nurses. The junior doctors on colorectal surgery, all F1 level, rotate every three months. Education sessions were timed for the beginning of the rotation. The teaching targeted the most important things for older patients; fluid prescribing, medicines management, nutrition, recognising patients at risk of delirium, acute kidney injury and pneumonia.

The improvements

Outcome Measure - Length of stay - There was a significant reduction in the intervention group, 7.4 days to 5.7 days, a 23% reduction. The Statistical Process Control (SPC) chart opposite shows 3 runs of 7 below the previous mean level. In the intervention period only 4 patients stayed more than 12 days (7.7%) compared to 19 pre-intervention (15.6%).

Balancing Measures - Readmissions - 7.4% (9 of 122) pre-intervention and 3.8% (2 of 52) post-intervention. Mortality - 5.7% (7 of 122) pre-intervention and 7.7% (4 of 52) post-intervention. There are low numbers of deaths in both groups and this is not felt to be a significant change related to the interventions.

Sustainability

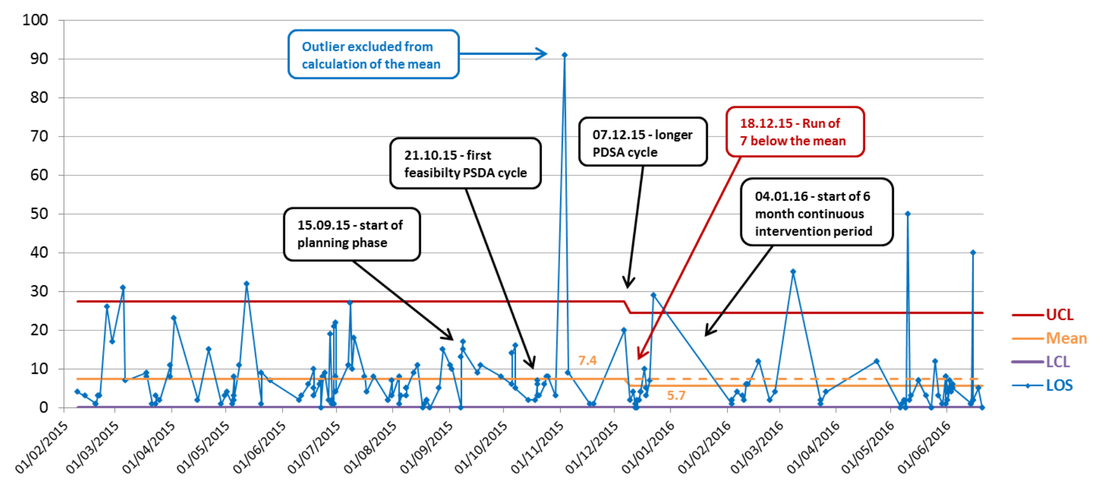
The interventions within the system remain in place including the MDT meeting and structure of the therapy team. From this project a business case has been agreed for a full time OPM specialist registrar. There is also agreement to recruit an OPM nurse practioner and a consultant in the future.

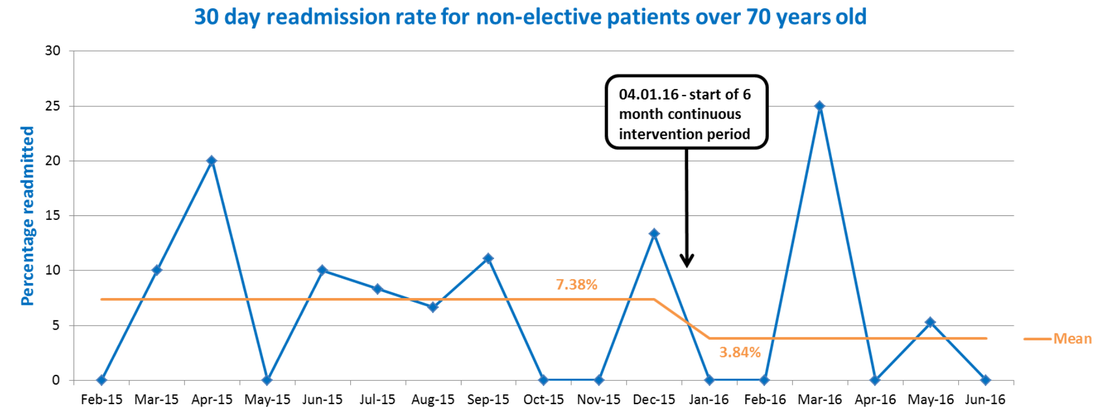
Next steps

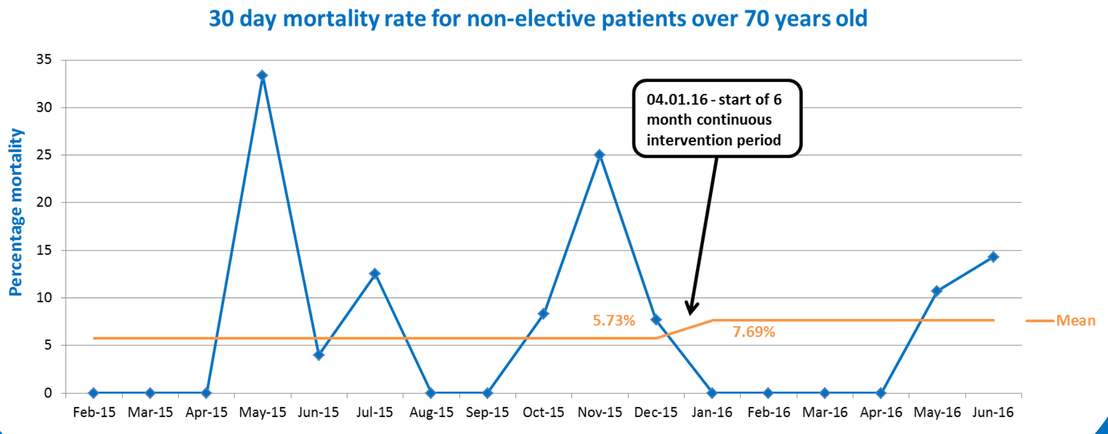
The increased hours of OPM specialist time will allow the service to expanded to cover the whole of general surgery. The aim is to build the service over the next 2 years to encompass the whole surgical directorate which includes the vascular and urology departments. The extra time will also allow the development of a joint preoperative clinic with the therapy team to review all frail older patients planned for major elective surgery. The posts will include running regular educational sessions for the nursing staff and junior doctors about the needs of older patients; discharge planning, delirium and maintaining independence.

Lessons learned

- The colorectal and OPM mind-sets are very different - it takes time for the staff to adapt to each other's way of working.
- Building up relationships and involving the staff from the beginning allowed successful collaboration.
- Without the key staff groups on board the improvements would not have been possible.
- By the end of the project all the staff groups including all three colorectal consultants felt positively about the service and wish for it to be continued long-term.







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