

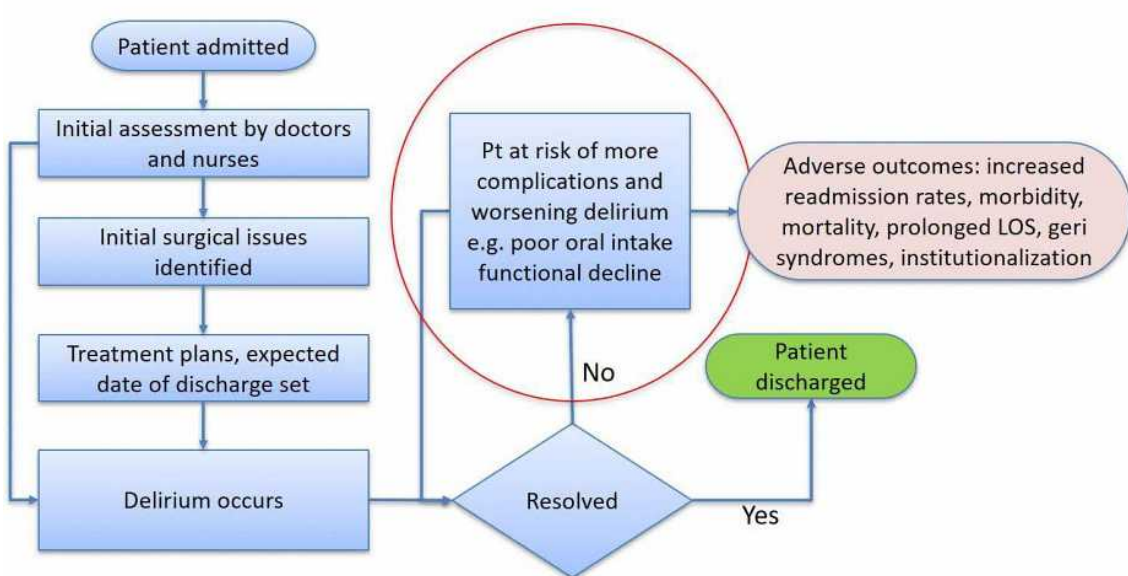
Background

Delirium is a common condition in elderly in perioperative care ranging from 30-90% of patients and is associated with adverse healthcare outcomes.

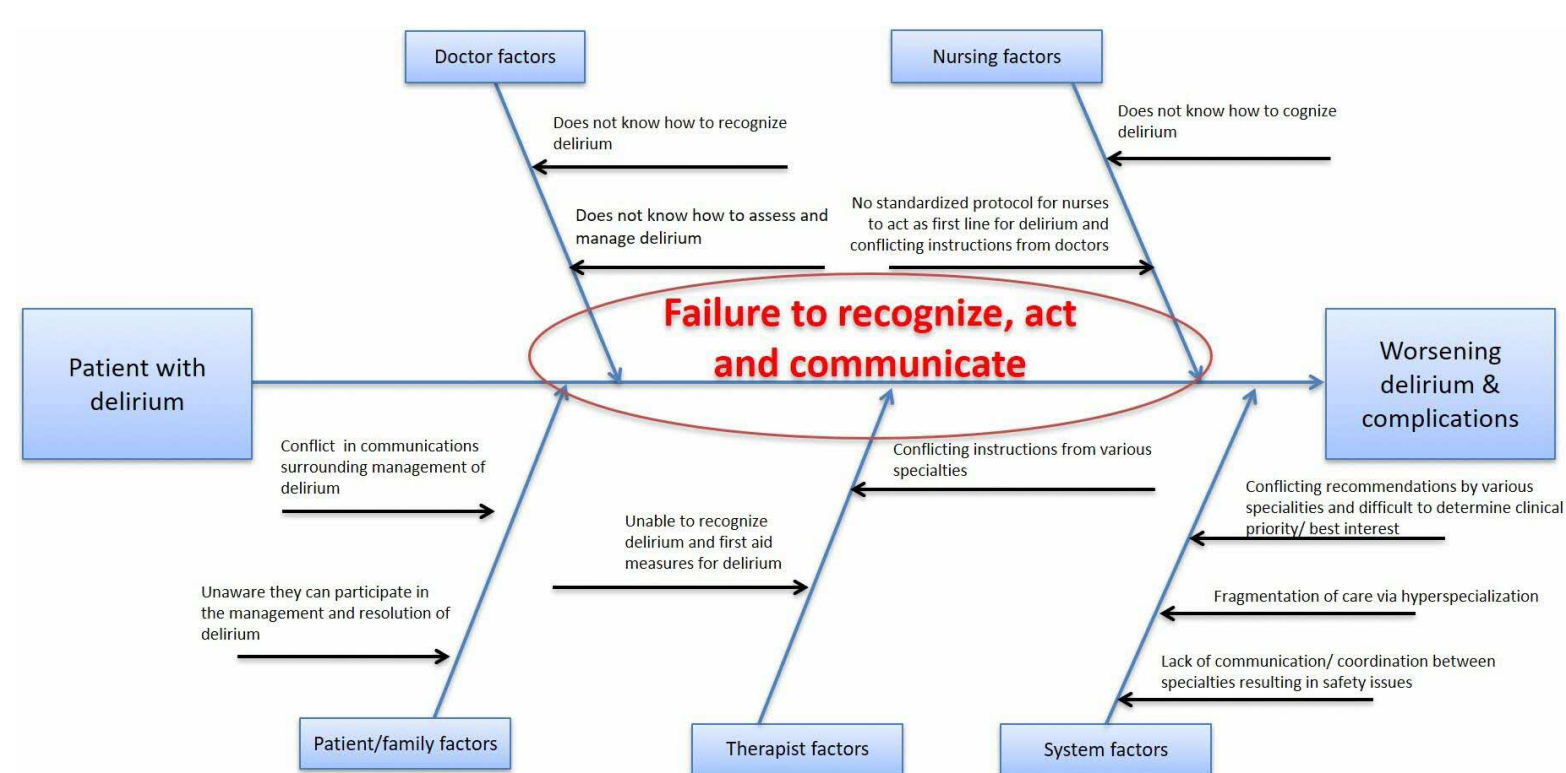
Perioperative management of patients with Geriatricians is an evidence-based established practice in many countries.

Current State

Delirium is an under-diagnosed condition with adverse healthcare outcomes. The mean pre-intervention 30d unplanned readmission rate was **18.6%** (ward level).



Root Cause Analysis



Results / Follow up

Before-after analysis with **matched** before-intervention controls showed significant ($p < .05$) improved (a) **90day postoperative mortality from 22.7% to 8.0%** (reduce by 64.8%) and (b) **30day readmission rates from 33.3% to 14.0%** (reduce by 57.8%), this is consistent with improved intermediate outcomes such as reductions in **nascent acute coronary syndromes (22.7% to 6%), arrhythmias (26.7% to 12%), congestive cardiac failure (16% to 4%), urinary tract infections (17.3% to 4%)**. This is explained by significant improvements in our work process resulting in **less dehydration episodes (40% to 14%), less Nil-by-mouth orders for more than 3days (42.7% to 16.0%) and less indwelling urine catheters after 3 days (66.7% -> 42.0%)**, and non-statistically significant albeit clinically significant reductions in overall length of stay (**median LOS 17days to 12.5days**) as well as **less severe (≥ 4) Clavien-Dindo complications (32% -> 18%)**.

Acceptability and patient satisfaction data are shown in the histograms and the pie charts on the right respectively and the changes are statistically significant ($p < .05$)

Target/ Goals

Reduce 30-day unplanned readmission by 30% in targeted wards from Apr 2023 – Dec 2023 amongst in-patients aged **70 years** and above who are **planned for surgery or post-operatively**, whom also are diagnosed with delirium or have prior **cognitive impairment** or dementia

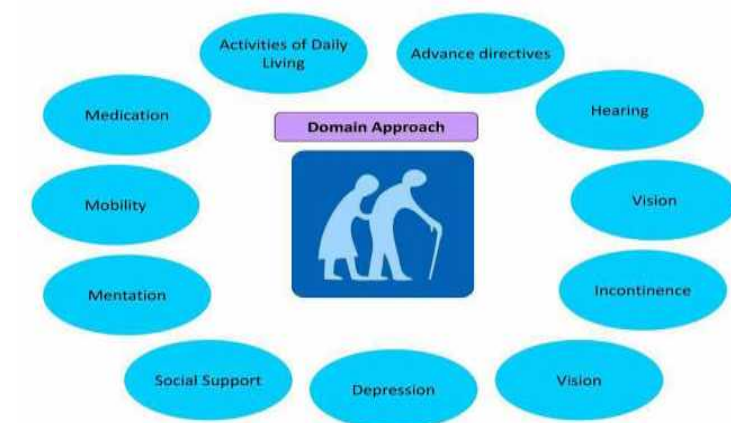
Interventions / Initiatives

Develop Geriatric Perioperative service (GPS) for perioperative care which helps to optimize care for elders going for surgery in the inpatient setting.

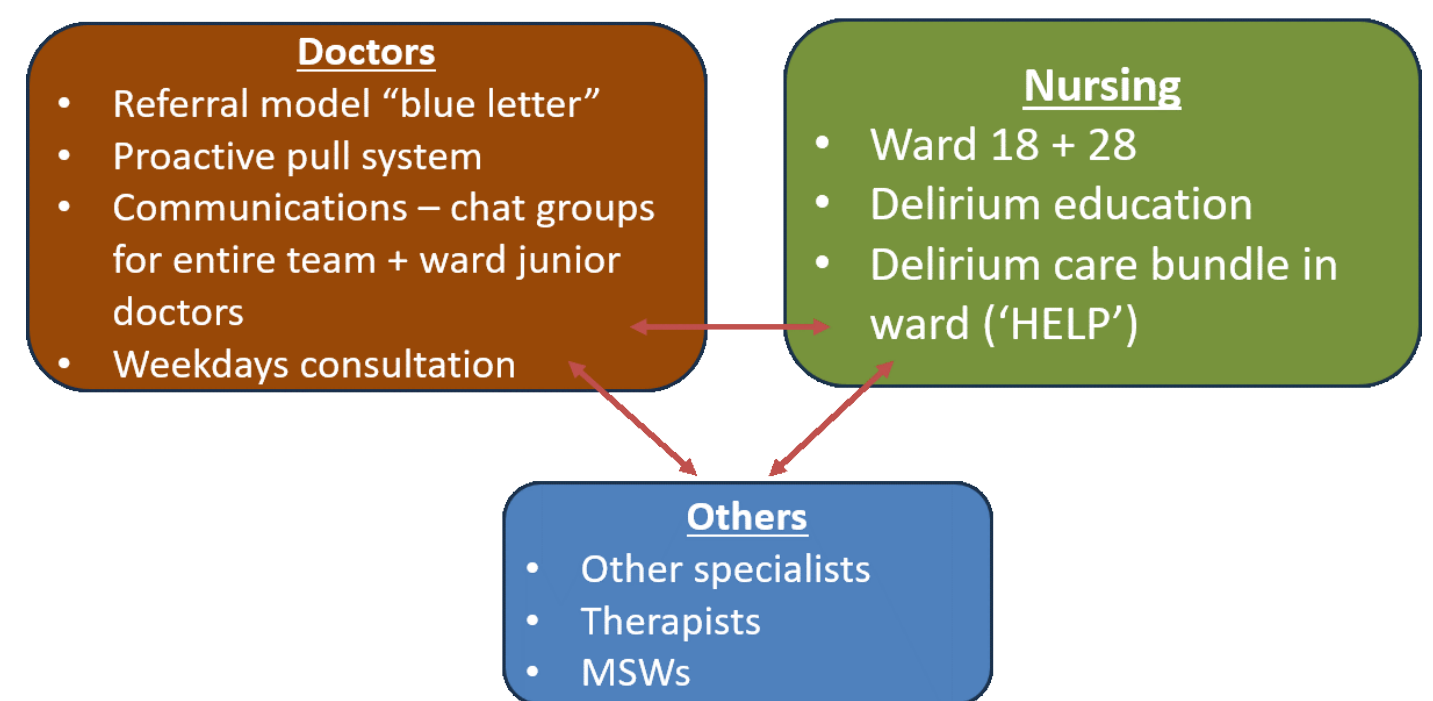
Nursing: To undergo Delirium education, training and team building

- (1) Didactic sessions - detect, diagnose, and manage delirium
- (2) VITAL-S for team building, focusing on aspects of interprofessional education and communications
- (3) Early education/use of the hospital-wide 4AT.
- (4) Early Delirium care bundle rollout in targeted wards.

Doctors: Referral letter to dedicated peri-op geriatricians



Multi-disciplinary Care Plan:



After GPS has been implemented in your ward, how would you rate the support that GPS has given to your team? (1-10). The pre-GPS average of General Medicine support is 6.0.



After GPS has been implemented in your ward, how would you rate your current confidence in managing and caring for geriatric patients? (1-10). The pre-GPS average is 6.3.



After GPS has been implemented in your ward, how often do you use your current confidence in managing or caring for your patients and their general medicine conditions e.g. blood sugars, BP issues, pain, electrolyte imbalances, fevers etc? (1-10). The pre-GPS average is 6.6.



After GPS has been implemented in your ward, how often do you end up seeing your patients having prolonged length of stay or complications for non-surgical conditions? (1-10). The pre-GPS average is 6.6.



Do you feel that GPS allows the care to be more comprehensive (i.e. more all rounded care)? (1 - 10)



Do you feel that GPS allows the care to be more consolidated (i.e. A single team cares for multiple problems instead of many different disciplines)? (1 - 10)



Do you feel that GPS allows care to be more coordinated (i.e. able to proceed in a certain direction instead of conflicting paradigms of care)? (1 - 10)



Do you feel that GPS makes you feel more supported? (1 - 10)

