Project Title

Improving the rate of frailty assessment within 24 hours of admission to Acute Medical Unit (AMU)

Project Lead and Members

Project lead: Dr John Soong Tshon Yit, Consultant

Project members:

- Tan Bee Ngoh, Senior Staff Nurse
- Amanda Chin, Medical Officer
- WenShen Yang, Physiotherapist
- Maria Teresa Kasunura-Cruz, Resident Physician
- Reshma Merchant, Senior Consultant
- Amelia Santosa, Senior Consultant

Organisation(s) Involved

National University Hospital

Project Period

Start date: August 2018

Completed date: March 2019

Aims

To standardize frailty assessment for older persons to the AMU

Background

Frailty contributes to the oldest patients having the longest lengths of stay, highest readmission rates, and highest rate of use of long-term care after discharge. Evidence shows early recognition and timely intervention prevents/reverses trajectory of deterioration, increasing independence and quality of life (health-span), and for some,

life-span with positive effects on overall healthcare costs. However, acute healthcare systems fail to reliably identify frail patients, and treat early.

Methods

See poster attached/ below

Results

See poster attached/ below

Lessons Learnt

There is a lag between implementation and improved performance with learning-curve for the bundle. Some issues (e.g. pharmacy capacity) will require longer term investment to be sustainable. Empowering junior front-line clinicians flattens hierarchy, contributing to improved overall performance.

Simple changes to practice, focused on human-factor issues, can improve performance at little cost. Systematic, timely and comprehensive frailty assessment for older persons in busy AMUs can feasibly be achieved and should be normal practice.

Conclusion

See poster attached/ below

Project Category

Care & Process Redesign

Keywords

Care & Process Redesign, Clinical Practice Improvement, Improvement Tools, Ishikawa Diagram, Pareto Chart, Inpatient Care, Acute Care, Effective Care, Nursing, Geriatric Medicine, Allied Health, National University Hospital, Frailty Assessment, Clinical Frailty Score

Name and Email of Project Contact Person(s)

Name: Dr John Soong Tshon Yit

Email: john_soong@nuhs.edu.sg

EQUIP

Enabling Quality Improvement in Clinical Practice

Improving the rate of frailty assessment within 24 hours of admission to Acute Medical Unit (AMU)

Dr John Soong, Ms Claudia Tan, Ms Tan Bee Ngoh, Dr Amanda Chin, WenShan Yang, Dr Maria Teresa Kasunuran-Cruz, Dr Reshma Merchant , Facilitator: Dr Amelia Santosa

Best project –Batch 4

1 The challenge/problem

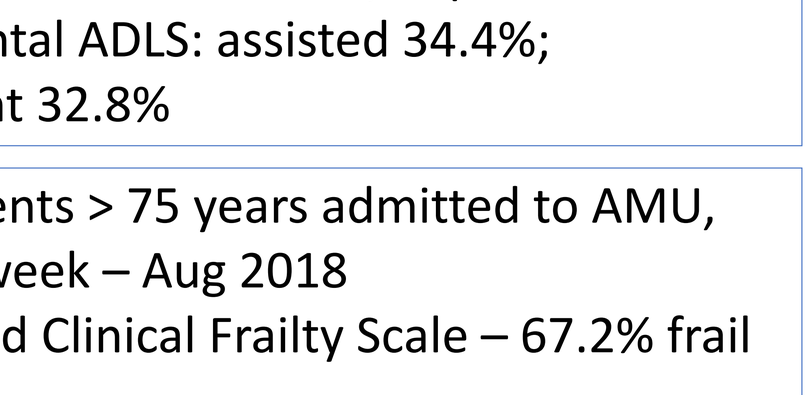
Prevalence of Frailty Syndromes:

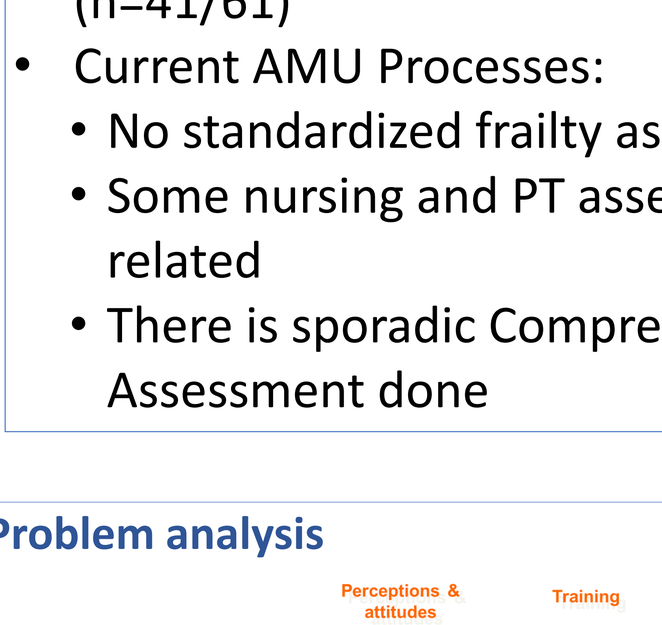
- Cognitive impairment - 36.1%
- Pressure Ulcers - 6.6%
- Falls - 24.6%
- Social/Carer issues - 19.7%
- Weight loss/nutritional concerns - 27.9%
- Basic ADLS: assisted 45.9%; dependent 4.9%
- Instrumental ADLS: assisted 34.4%; dependent 32.8%

Audit of patients > 75 years admitted to AMU, NUH over 1 week – Aug 2018

- Audit found Clinical Frailty Scale – 67.2% frail (n=41/61)
- Current AMU Processes:
  - No standardized frailty assessment on AMU
  - Some nursing and PT assessments are frailty related
  - There is sporadic Comprehensive Geriatric Assessment done

2 Problem analysis





Main root causes for poor frailty assessment in AMU :

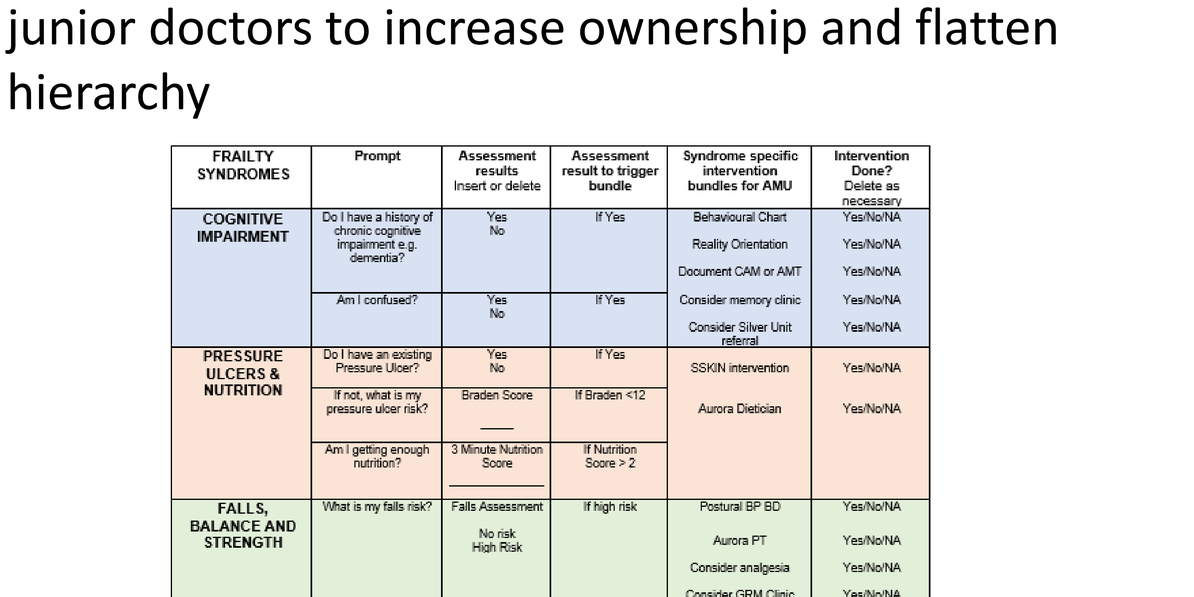
- Not sure what to measure- what assessment to use.
- Not sure what frailty is
- No established process to do frailty assessment
- (Junior doctors) perceive frailty not AMU issue

3 Interventions

- Introduced new **pathway with AMU Frailty Bundle**
- Nurses and junior doctors trained on ward rounds
- **Champions** identified to engage respective staff in AMU
- Increased awareness using **Frailty Posters**
- **'Check-and-challenge'** structure implemented for junior doctors to increase ownership and flatten hierarchy

FRAILTY SYNDROMES	Prompt	Assessment results Insert or delete	Assessment result to trigger bundle	Syndrome specific intervention bundles for AMU	Intervention Done? Delete as necessary
COGNITIVE IMPAIRMENT	Do I have a history of chronic cognitive impairment e.g. dementia?	Yes No	If Yes	Behavioural Chart	Yes/No/NA
				Reality Orientation	Yes/No/NA
				Document CAM or AMT	Yes/No/NA
	Am I confused?	Yes No	If Yes	Consider memory clinic	Yes/No/NA
				Consider Silver Unit referral	Yes/No/NA
PRESSURE ULCERS & NUTRITION	Do I have an existing Pressure Ulcer?	Yes No	If Yes	SSKIN intervention	Yes/No/NA
	If not, what is my pressure ulcer risk?	Braden Score ____	If Braden <12	Aurora Dietician	Yes/No/NA
	Am I getting enough nutrition?	3 Minute Nutrition Score ____	If Nutrition Score > 2		
FALLS, BALANCE AND STRENGTH	What is my falls risk?	Falls Assessment No risk High Risk	If high risk	Postural BP BD	Yes/No/NA
				Aurora PT	Yes/No/NA
				Consider analgesia	Yes/No/NA
				Consider GRM Clinic	Yes/No/NA
BOWELS & BLADDER	Am I constipated?	Consider DRE or AXR Faecal loading No faecal loading	If faecal loading suspected	Prescribe regular laxative	Yes/No/NA
				CIC Protocol (female)	Yes/No/NA
	Am I retaining urine?	First PVRU ____mls	If PVRU > 200mls	Consider IDC (male)	Yes/No/NA
				Regular potting	Yes/No/NA
MEDICATION RECONCILIATION & OPTIMISATION	Have my medications been reconciled?	Yes No	Have my medications been optimised?	'What medications can I stop?' e.g. STOPP Criteria	Yes/No/NA
APPROPRIATE LIMITS OF CARE	Have the appropriate limits of care been decided?	Yes No		Complete CAREFORM	Yes/No/NA
				Consider ACP	Yes/No/NA

4 Our success story



- 'Check-and-Challenge' allows flattening of hierarchy
- Interventions should follow the path of least resistance
- It is important to start with 'Why' and not rush into 'solution-ing'
- Not defining a problem well is creating a problem as well