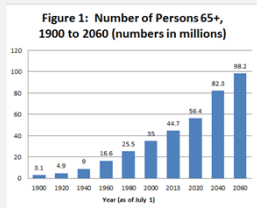


Background



The general population is aging. Every day until 2031, ten thousand Baby Boomers will turn 65.

Healthcare expenditures will increase by 25% for older adults by 2030. Medicare spending will go from \$555 billion yearly to \$903 billion by 2020. Frail elders have a greater risk of complications from hospitalization.



Purpose



Systems Addressing Frail Elders (SAFE) Care Collaborative

- Nurse-led interprofessional team model
- Identifies high-risk vulnerable patients
- Interprofessional unit-based team approach to decrease frailty risk for vulnerable older adults
- Goal: Decrease length of stay (LOS), ICU transfers and adverse events
- Multiple organization case study
- Intervention unit implemented the SAFE Care program with multidisciplinary huddles
- Comparison unit continued usual care

Leverage the electronic health record (EHR) to

- Identify patients for the huddle
- Document assessments, interventions and outcomes
- Determine overall effectiveness of the model

Methods

Nursing Informaticist (NI) involved in development and implementation

EHR Components

Daily report created using EHR data to identify patients

- Older than 65 years
- Positive for 2 or more of Fullmer's SPICES criteria
 - Sleep disorders
 - Problems eating/feeding
 - Incontinence
 - Confusion
 - Evidence of falls
 - Skin breakdown

LAST NAME	FIRST NAME	MRN	DOB	ADMISSION DATE	DISCHARGE DATE	AGE	SEX	RACE	ETHNICITY	ADMISSION SOURCE	ADMISSION TYPE	ADMISSION UNIT	ADMISSION DATE	ADMISSION TIME	ADMISSION STATUS
MR	MR	1234	1920-01-01	2018-01-01	2018-01-01	98	M	W	W	ED	Admission	ICU	2018-01-01	11:00	Admitted
MR	MR	5678	1920-01-01	2018-01-01	2018-01-01	98	M	W	W	ED	Admission	ICU	2018-01-01	11:00	Admitted

S1 = Skin Integrity problem
 P = Problems Eating
 I = Incontinence
 C = Confusion
 E = Evidence of Falls
 S2 = Sleep disturbances

Banner to identify these patients when chart opened
Frailty assessment flowsheet
Frailty note to document multidisciplinary huddles
Care Plan for goals and interventions

CAUTION: Spices Positive

Multidisciplinary huddles

Huddles done on second and third hospital day
Participants: RN, Social worker, Pharmacist, Care Coordinator, Residents
First huddle

- Multidisciplinary assessment findings discussed
- Goals and interventions to prevent adverse events and decrease the length of stay identified
- Plan and recommendations documented in Frailty note and care plan

Second huddle

- Status update on patient, goals and interventions
- Discharge planning needs discussed

- Frailty note updated

Data collection

- Six month period before starting huddles
- Twelve month period after implementation
- Intervention and Comparison units

Skin Integrity
Braden Scale Score
Pressure Ulcer or Non-Healing Wound
Problems Eating
> 4 Days of Poor Oral Intake Prior to Admission
Home Tube Feeding or Total Parenteral Nutrition (TPN)
Dysphagia with Swallow Evaluation ordered

Skin Integrity
Braden Score <16 indicates risk for pressure ulcers: 16
Interventions: Support Surface/Mattress
Outcome: Pending, Completed, Not applicable
Problems Eating
Problems Eating: Positive
Interventions: Nutrition Consult ordered
Outcome: Pending, Completed, Not applicable
Incontinence
GU Method: (has not voided in hospital yet - will bladder scan)
Interventions: Nurse Driven Protocol for removal of Foley
Outcome: Pending, Completed, Not applicable
Bowel Incontinence: No
Interventions: None needed
Confusion
Level of Consciousness: Alert
Orientation Level: Oriented x4
Interventions: Frequent Cognitive Reorientation
Outcome: Pending, Completed, Not applicable
Evidence of Fall Risk
Score (2-45 = High Risk): 35
Interventions: Bed Alarm
Outcome: Pending, Completed, Not applicable
Sleep Disturbance
Sleep Disturbance: Positive
Interventions: Sleep Hygiene
Outcome: Pending, Completed, Not applicable

Results



- Comparison group more likely to be discharged home
- No difference in readmission at 7 or 14 days
- More readmissions by day 30 for the intervention group
- Intervention group older and more frail
- Intervention group more likely to have a prior hospitalization in the last 30 days, skin problems and incontinence
- Intervention group
 - Decrease in length of stay by 0.8 days
 - Decrease in ICU transfers
 - No adverse events (increase in patient safety) such as falls, hospital-acquired pressure ulcers, catheter-associated urinary tract infections and other "never" events for intervention group, 6 events for comparison, group
- Report identified patients for intervention
- Banner provided a visual reminder of intervention patients
- Frailty flowsheet easy to use to document assessment
- EHR functionality lessened documentation burden
- Easy to identify goals, interventions and status of each
- Plan viewable and used by all members of the care team

Implications for Practice



The SAFE Care model is successful in identifying frail elders and intervening with a multidisciplinary team approach to decrease LOS, ICU transfers and adverse events

Leveraging the EHR assisted with identifying patients for intervention, enhanced communication of the frailty assessments and plan of care to the multidisciplinary team and contributed to the success of this model

NI participation helped facilitate the development and implementation of EHR functionality and workflows early on, decreasing the amount of rework needed.