Geriatric & Age Friendly

Project ECHO®

University of North Dakota
School of Medicine and Health Sciences

Addressing Functional Abilities through Interprofessional Collaboration to Reduce 30-day Hospital Readmission

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Poll

How many of you have seen older adults return to the hospital within 30 days for reasons that could have been prevented?

yes

no

Poll: Which of the following reasons for 30-day hospital readmission have you seen?

- Difficulty with functional mobility or falls
- Difficulty taking medication
- Malnutrition/dehydration
- Onset of new illness
- Difficulty following through on D/C plans for managing condition
- Difficulty with self-care activities
- Difficulty with cognitive functioning
- Failure to thrive

Problems

- High rates of 30-day readmissions for same condition
- Financial penalties (1-3% of total CMS reimbursement) for hospitals with high readmission rates to incentivize quality care and careful D/C and follow-up
- Health, well-being, and Quality of life is compromised for individuals who are re-admitted

Objectives

- Utilize interprofessional collaboration (IPC) to support pt engagement in functional abilities while in the hospital
- Implement key principles of patient education into hospital care, discharge planning, and follow-up care
- Integrate community services and resources into discharge planning

Hughes & Witham (2018)

- Readmission to acute care
- 30 and 180 days of D/C from inpt rehab
- Mean age 84.1

Hughes & Witham (2018) n = 3984 older adults

Pts often readmitted with same condition as initial hospitalization

- 30-day: 26.6%
  - most common were chest infection, falls/immobility, stroke
- 180-day: 21.1%
  - Most common were falls/immobility, cancer, & chest infection

Kassin, Owen, Perez, Leeds, Cox, Schnier, Sadiraj, & Sweeney (2012)

- Readmission after surgical procedure
  - GI issues (27.6%)
  - Surgical infection (22.1%)
  - Failure to thrive/malnutrition (10.4%)

Functional Challenges: Interactive (1 limitation causes another)

- Limitations at D/C from home health service = higher risk for preventable hospital readmission
- 4 Ms that affect function:
  - What Matters (meaningful activities)
  - Mobility
  - Medication
  - Mentation

Examples of Readmission related to Functional Challenges

Limited mobility → Dehydration → Cognitive Impairment → Fall

- Difficulty with ***toileting*** safely causes pt ***avoid drinking water***: Dehydration causes electrolyte imbalance that causes instability and cognitive impairment, thereby posing fall risk during toileting

Weakness due to malnutrition/not eating; Limited Self-Care/pressure injury

Difficulty with safe mobility causes them to *avoid meal preparation/eating* because it is hard to carry food items while having 2 hands on a walker

Image used with permission

Older adults report ***bathing/showering as the most difficult ADL*** to perform due to slippery surfaces and energy demand.

Medication Management

Literacy challenges, cognitive impairment associated with being very ill limits ability to plan, sequence, organize, and remember how to take medication.

Types of literacy challenges: health literacy, reading literacy, functional literacy

AMA Video on types of literacy challenges

Health Maintenance: Blood sugar dysregulation

- Pt living alone with low income can have difficulty with community mobility to shop for healthy food, which is typically more expensive than unhealthy food that can cause very high and low blood sugar levels. Also, chronic disease management affected: limited access to blood sugar monitoring equipment/education due to transportation and financial barriers.
- Social risk factors: socioeconomic status, living situation, home resources, and social support (Calvillo-King et al., 2013).

Solutions

Kirpalani, Theobald, Anctil, & Vasilevskis (2014) indicated solutions must be ***multifaceted***, including many strategies for planning, implementing, and monitoring interventions.

Solution: Programs

- Medicare's Hospital Readmission Reduction Program (HRRP) section 3025 of the Affordable Care Act, which started in 2013 (Centers for Medicare & Medicaid Services, 2021)
- Conditions: cardiac, respiratory, and hip/knee joint replacements

Solutions: Which Services?

- Johns Hopkins study 2016 (Rogers, Bai, Lavin, & Anderson, 2016)
  - 2,761 hospitals for HF analysis; 2,818 hospitals for PN analysis; 1,595 hospitals for AMI analysis
  - Occupational therapy was the ***only*** spending category that was associated with lower readmission rates because of the focus on ***functional abilities***
  - But OT does not own functional abilities; all IP team members can support pt participation in functional abilities

Solutions: IP Promotion of Performance in Functional Abilities

- Functional abilities: "People Learn What They Practice" with adaptations for the "just-right challenge"
  - Pts perform functional abilities while still IN the hospital, before D/C, transparency so that patients understand why they are being encouraged to perform functional tasks
  - Ongoing IP evaluation of those functional abilities while in the hospital

ADLs

- Toileting: D/C planning for raised toilet seat, rails
- Hygiene: Tub bench that goes over edge of tub so pt can sit and then swing legs over instead of stepping over edge of tub. Should practice in hospital

Image used with permission from OT Department, SMHS, UND

Safe Mobility

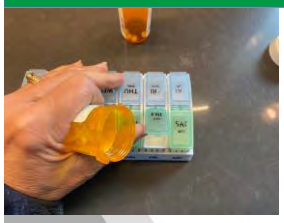
Image used with permission OT Dept, SMHS, UND

- Practice carrying items while using a walker; adapt the walker with tray table and attachment for a reacher.
- Safe use of walker; keeps walker handles close to body at all times, even when turning or reaching for items. Practice in hospital room.
- What are their resources for obtaining adaptive equipment?

Disease/condition/health management

- What special instructions will there be at D/C?
- Start having pt follow through days in advance of D/C
  - Lymphedema treatments (e.g. elevation, compression, massage, Epsom soaks).
  - Wound care: pts can practice dressing changes

Medication Safety



- Supervised education and guidance to practice their own medication routine with the actual supplies they will use at home
- Having pt set timers for medication and call nurse for supervision
- Have pt actually take pills out of pill bottle and load into pill organizer with supervision

Engagement in meaningful leisure

- Fosters cognitive orientation by exercising focusing ability and higher executive functioning such as sequencing steps, increasing attention span, decision-making
- Increased duration, repetition, and intensity of cognitive skills because it is meaningful
- Ask family to bring in a leisure activity
- Lifts mood and self-efficacy

Meal preparation

Image used with permission

- Pts make a sandwich in a kitchenette
- Practice safe walker placement while reaching for items
- Practice ways to transport items while using walker
  - Example: use tray hold items and slide tray across counter

Discussion

- What happens when a patient is too sick to perform functional activities while in the hospital but is supposed to be discharge the next day?
- What if pt does not want to perform functional activities while in the hospital?

Patient & Caregiver Education for Functional Abilities

- Compliance, Adherence, Ability to follow through: Which is the most ethical and responsible wording?
  - Answer: Ability to follow through or adherence
  - It is IP team's responsibility to ***identify barriers***, not the patient's. Then collaborate with pt on strategies to overcome the barriers
  - Hill, et al (2011)
    - Barriers: low self-efficacy, low motivation, medical challenges (e.g. pain).
    - Supports: 109/305 participants were engaging in a structured exercise program, most because: had perceived threat of fall-related injury, physiotherapist recommended it, and they lived with a partner

Pt/Caregiver Ed

Transparency: People must know "the reason" in order to be motivated to learn and participate

Types of literacy:

- Reading: grade level
- Functional: grade level and transfer of information to functional performance
- Health: Every profession has its own language. How can we expect pts to know each of our language?
- Health information/technology: Navigating Epic and Patient Portal systems and reading through the "noise" on the D/C forms

Pt/Caregiver Education Materials

- Pictures to represent main concepts on pt ed material
- Balance between images, white space, narrative text, bullet pts
- 6th grade reading level (word document, Options, Proofing, Show Readability Statistics; Review, Spelling & Grammar, ignore all errors repeatedly, See Flesch Kinkaid grade level; This ppt is at the 11th grade reading level)

- Good example of home safety checklist brochure

Cultural Considerations

- Language: interpreters (consider privacy), images, demonstrations, role modeling
- Role of Family
- Role of Practicing Functional Abilities: Some cultures teach people to learn and observe until they are ready to perform properly; therefore, some may decline to practice while in the hospital. This group would benefit from use of videos, demonstration, and role modeling
- Diversity of images of people on materials
  - Good example of home safety checklist brochure
- CDC Reducing Disparities in Readmissions

Home evals prior to and during D/C

- Financial strain and Productivity barrier
- But maybe we can't afford NOT to do home evals
- Scenario of home visit in rural NW Minnesota: Despite no indication of fall risk prior to D/C, this client did demonstrate a major risky behavior during the home eval because her environment prompted her to go back to old habits. This home evaluation caught this risk and remediated, thereby preventing a fall and possible hospital readmission.

Why can't an IP team member go home with a patient during D/C?

Supportive Services that Address Functional Abilities

- TCUs, SNFs, etc
- Home Health Nursing for medication management, meal prep, disease mgmt., hygiene, etc
- Pharmacists leading IP team for med safety eval and education (Bingham, 2019)
- OT and PT for ADL/IADL training, functional mobility, caregiver training
- Social Work to help access services and navigate health systems
- Others:

Community Services: IP Team Recommendations

- Service Providers for Seniors: Lists of Services
- Home Delivered Meals
- Companion programs
- Advocacy organizations for adaptive equipment (e.g. North Dakota Association for the Disabled and Options)
    - Free Adaptive Equipment loan programs
- Senior Citizens Center for social participation and community resources
- YMCA Senior Exercise Programs
- Follow-up visits social work: community resources, accessibility to financial support programs, etc

Follow-up Visits

- D/C Readmission risk level: use of analytics can determine if risk is low, medium, or high, which would direct needs for follow-up
  - Low: D/C education
  - Medium: D/C education, Telehealth follow up visit
  - High: D/C education, 2 apts with PCP, 1 telehealth follow-up visit, care coordinator monitoring
- Posthospital IP Care Team (Baldwin, Zook, & Sanford, 2018)
- Can use elements of annual wellness exam for geriatrics to conduct a thorough follow-up visit

Revisit Case Scenarios: Share additional IP strategies

What shall we do in hospital with patient to prevent these readmission scenarios?

Fall/dehydration/electrolyte imbalance/cognitive impairment:

- Difficulty with ***toileting*** safely causes pt ***avoid drinking water***: Dehydration causes UTI/electrolyte imbalance that causes instability and cognitive impairment, thereby posing fall risk during toileting

Weakness due to malnutrition/not eating:

- Difficulty with safe mobility causes them to ***avoid meal preparation/eating*** because it is hard to carry food items while having 2 hands on a walker

Limited self-care/pressure injury

- Older adults report ***bathing/showering as the most difficult ADL*** to perform due to slippery surfaces and energy demand.

Medication management

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Fine motor challenges to open containers

Cognitive challenges with filling pill containers

Blood sugar dysregulation

- Pt living alone with low income can have difficulty with ***community mobility*** to shop for healthy food, which is typically more expensive than unhealthy food that can cause very high and low blood sugar levels. Also, ***chronic disease management*** affected: limited access to blood sugar monitoring equipment/education due to ***transportation*** and ***financial barriers***

Summary

A multifaceted approach from an IP team with community partnerships can support patients to remain in their home and thrive.

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