The Impact of Specialized Geriatric 5M Education on Mobilization of Older Adult Patients in Acute Care in 5 Hospitals in New Brunswick, Canada

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BACKGROUND

- Frailty is not a normal part of aging, but it is common among older adults (65+)(1)
- Older adults are likely to become more frail following hospital stay due to reduced mobilization and medication effects (2,3)

RESEARCH QUESTION

What is the impact of providing specialized geriatric education to front-line staff in acute care hospitals across New Brunswick, Canada?

METHODS

- 18 weeks of data collection in 5 New Brunswick (NB) hospital acute care family medicine units
- Front-line staff attended geriatric education sessions focusing on the Geriatric 5Ms (4)(Mind, Mobility, Medications, Multi-complexity and Matters Most) and frailty prevention
- A mixed methods approach was used to explore the knowledge base and experience of staff and the impact to patients of providing specialized education to staff
- Descriptive statistics and chi-square tests were conducted
- Open ended questions were examined using thematic analysis
- Follow up semi-structured interviews were conducted. Grounded Theory methodology was used to generate a core concept and associated sub-concepts

Table 1: Inclusion criteria and data collected

	PATIENT	STAFF
Participants	• Aged 60 or older • Not palliative/medically bedridden • Not designates Alternate Level of Care (ALC) • Cognitively Intact	• Registered Nurses (RN) • Licensed Practical Nurses (LPN) • Patient Care Attendant (PCA)
Data Collection	• **Observational Audits** ○ Mobility 3x/day, 2 days/week ▪ rated using I-MOVE scale (5) ○ Shift handover- 3x/week ▪ noted mobility mentions • **Chart Reviews**- 3x/week ○ Potentially Inappropriate Medications (PIMs) ○ Incidents of falls & delirium • **Demographic data** at time of recruitment	Collected at the education sessions Pre-Intervention: • **Demographic Survey** • Geriatric In-Hospital Nursing Questionnaire **(Ger-INCQ)** Pre & Post Intervention: • **Geriatric 5MS Knowledge Assessment**

WHERE IS NEW BRUNSWICK, CANADA?

RESULTS

PATIENT PARTICIPANTS

Table 2: Participant demographics

	PATIENTS
# of Participants	99
Average Age	76.2 ±9
Biological Sex (% F)	52.0%
Most Frequent Chronic Condition on Admission:	
High blood Pressure	49.5%
Heart disease	39.4%
Chronic Lung Disease	35.4%

Table 3: Frequence of patient mobility measures

	Pre (N=35)	During (N=38)	Post (N=26)
Number of Falls	5	2	3
Mobility Mentions	78.3%	96.9%	88.5%
Patients Mobilized in First Week	71.4%	65.8%	50%

Challenges in the clinical environment prevent staff from regularly mobilizing patients

STAFF PARTICIPANTS

Table 4: Staff participant demographics

	STAFF
# of Participants	64
Average Age	36.9 ±10.7
Gender (%F)	92%

Table 5: Staff participant knowledge test scores

	Pre- Intervention	Post- Intervention
Knowledge Test Scores	58.1%	58.2%

Table 6: Semi-structured interview participant demographics

QUALITATIVE PARTICIPANT DEMOGRAPHICS	
Number of Participants	26
Age, Mean	37.1
Graduation Year, Mean	2012
Gender (% F)	96%
Registered Nurse	12
Licensed Practical Nurse	11
Patient Care Attendant	3
Full Time	22
Part Time	1
Casual	3
Location- Rural	18
Location- Urban	8

Semi-Structured Interviews:

CORE CONCEPT: "One More Thing"
Staff report there is always **"One More Thing"**, reflective of larger, health system issues that staff had no control over

SUB-CONCEPT #1: Ongoing Adaptations
Chronic understaffing, Patent Mix, Patient Acuity, and Patient Flow require the need for **Ongoing Adaptations** to **"re-work"** their care delivery

SUB-CONCEPT #2: Mindset
Constant, ever-changing challenges affect staff's **Mindset**

- **Perseverance** and **Personal Coping Strategies** help staff to get through their shifts
- **Radical Acceptance** of the chaotic and work environment has occurred
- Staff recognize that they **can only do so much**

RESULTS- PARTICIPANT QUOTES

"We don't always have the amount of time that we need for the long- term care patients. When we have someone that's sick down the hall, we need to prioritize them before getting maybe a long- term care patient up in their chair or taking the for a walk."

"…we're so short that we don't really have time to be testing out if they can get up and walk or not, and they do stay in bed all weekend and it happens 'a lot'…and that just makes you feel shitty."

"…there [are] patients who wait an extraordinary amount of time when they could be elsewhere…it's very frustrating, challenging…It just seems that the system is too slow. There's just so many hurdles."

"A little bit of self-talk that I'm only one person and I can only do what I can do in a shift and just try my best is I guess, I don't know."

"You know, it's every hospital across the world right now…we just keep saying, 'I hope you know it's going to get better.' I think that's what every nurse does right now, you're just like, 'Yup, it's going to get better'."

KEY FINDINGS

- Patient mobilization did not differ between phases of intervention (p=0.08), nor was there any significant change in reporting mobility at shift handover
- Ger-INCQ indicated neutral responsibility for falls incidents and retention of patient mobility
- Staff had positive attitudes toward caring for older adults; however, their understanding and application of geriatric principles were limited and remained unchanged
- Interview participants stated their work environment limits their capacity to deliver the best care These findings suggest that education alone is unlikely to influence prioritization of mobility for frail older adults in a strained acute care setting

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