PROFILE – Preventing Early Unplanned Acute Hospital Admission Following Critical Illness

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Background

- 70% to 80% of intensive care patients survive to hospital discharge.
- The burden of physical, psychological and psychosocial morbidity during recovery is high.
- 23% of these patients will require an early unplanned hospital readmission within 90 days of hospital discharge (Lone et al, 2013).
- The reasons for this are not well understood but are likely to include both modifiable and non-modifiable factors.

Background

- Mixed methods study design
  - Quantitative: Large cohort study utilising large healthcare databases including routinely collected data available in Scotland (NL; TW; RL).
  - Qualitative: Interviews with patients, and their carers, who have required a recent unplanned hospital readmission following a hospital episode that required ICU care (ED; JR; PR; LS).

Qualitative Study Research Questions

1. What are the reasons early unplanned readmission occurs?

2. What factors are potentially modifiable through early intervention?

Qualitative Study Methods

- Conducted semi-structured face-to-face interviews with 29 patients and 29 carers.
- Across 3 health-boards (Lothian; Fife; Tayside).
- Interviewed patient and carer within 3 months of the unplanned readmission.
- Interview location was dependent on participant preference (predominantly took place in own home).
- Interviews were digitally recorded and transcribed verbatim.
- Thematic analysis was used to code and theme the data.

Inclusion and Exclusion Criteria

Inclusion Criteria

1. Invasive mechanical ventilation for 48 hours or more during their primary admission in the ICU.
2. Emergency readmission to an acute hospital within 90 days of hospital discharge from primary ICU admission.
3. Family members/carers only. Family member/carer of a patient who fulfilled inclusion criteria 1 & 2.
4. Aged 18 years or over
5. Capacity to give informed consent

Exclusion Criteria

1. Elective surgery for organ transplantation
2. Primary neurological admission diagnosis (brain trauma; intracerebral bleed; stroke)
3. Palliative care
4. Unable to speak English
5. Too ill to participate (GP advice)

Rating Scales

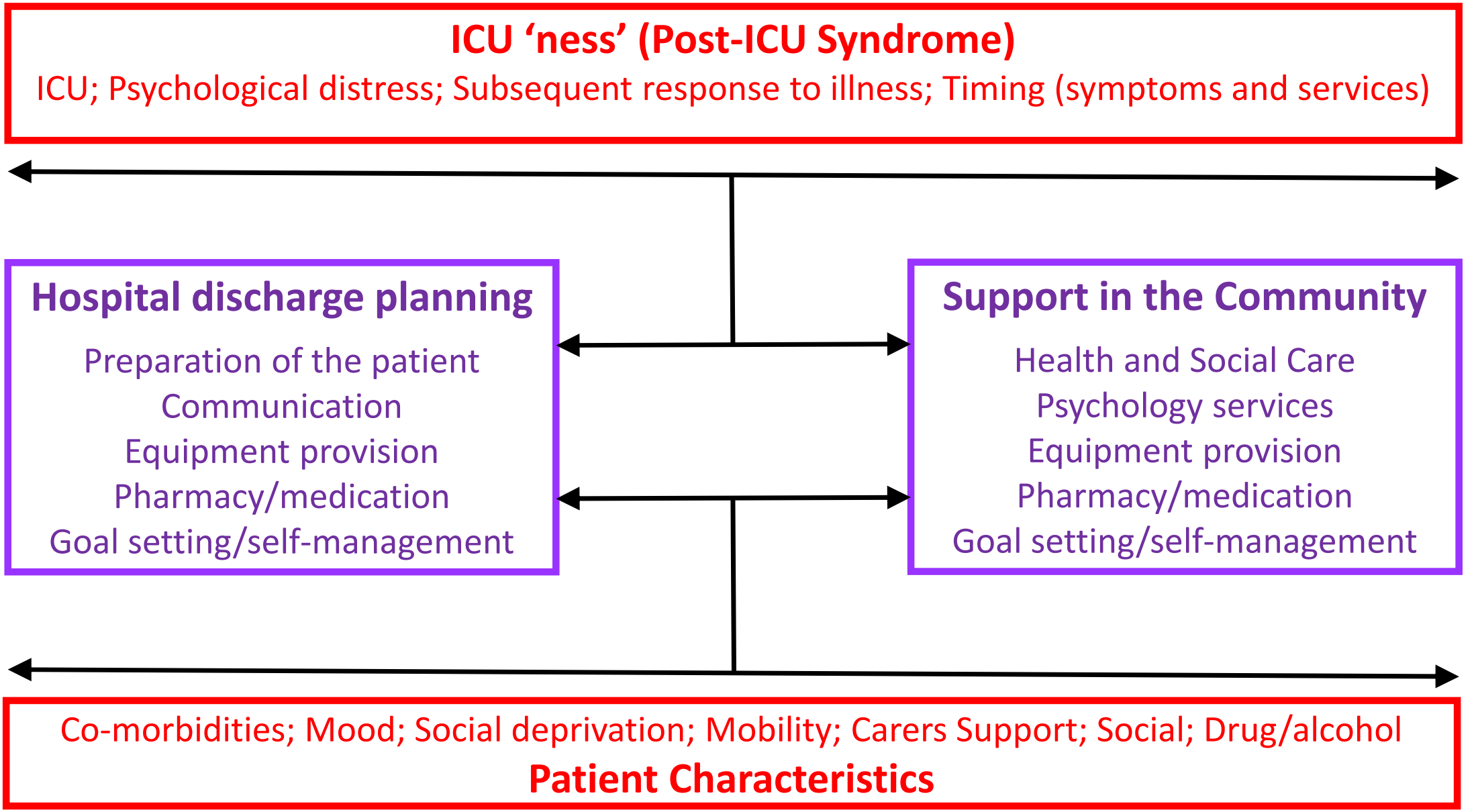
Scale 1. From Patient/Carer perspective on a scale of 0-10 how would you grade the following in terms of supporting you at home after hospital discharge (0 = very weak, 10 = very strong)

Scale 2. From Patient/Carer perspective how much did the following play a part in the acute re-admission (0 = none, 10 = very large part).

- Quality of information provided to myself and family by hospital staff
- Communication between hospital & GP after discharge
- Communication between hospital and family
- What to expect/do after discharge back home
- Health care support from GP in the community
- Health care support from nurses in the community
- Psychological issues being addressed
- Support in community from social services
- Social support from family/friends
- Any other factors

Results

- Two main themes emerged from the interviews of factors that impacted on patient readmission
  - SYSTEMIC: Hospital discharge planning and Support in the community
  - PATIENT-CENTRED: Patient Characteristics and ICU "ness" (Post-ICU Syndrome)


ICU 'ness' (Post-ICU Syndrome)
ICU; Psychological distress; Subsequent response to illness; Timing (symptoms and services)
Hospital discharge planning
Preparation of the patient
Communication
Equipment provision
Pharmacy/medication
Goal setting/self-management
Support in the Community
Health and Social Care
Psychology services
Equipment provision
Pharmacy/medication
Goal setting/self-management
Co-morbidities; Mood; Social deprivation; Mobility; Carers Support; Social; Drug/alcohol
Patient Characteristics

Hospital Discharge Planning

"But to have one doctor take five minutes and sit and go, right, this is what's happened. This is what we've done. This is what we hope to do. I need your input here. I need you to do these exercises at home with the Baby Bird. I need you to continue doing that. I need you to go and get the pneumonia jag in November when it comes out. If you do that…you do that from your end, I'll do this from my end and we'll work together."

Support in the Community

"I think if people were contacted more in the community by the hospital just to check how things are going, even by phone just to see if everything is going ok. How is the medication, or how are the dressings, whatever or how are the exercises, have you got that appointment with this or that health professional arranged yet – no well let's try and prioritise that then or do you need to talk to someone about carers allowance. Things like that."

ICU “ness”

“Part of it is you can’t remember anything, you can’t remember appointments, that’s all hand in hand with depression, your confusion from being in ICU, remember you were delirious”

Patient Characteristics

“The hospital and GP being aware of my psychological history of depression and how when your depression is really bad that that can affect how you look after yourself and do the necessary maintenance on things like my stoma bag, or doing my exercises to help my recovery. So being aware and addressing the whole of me not just my physical needs. Even if you are OK at the hospital end things can collapse a bit when you get home as happened to me and everything sinks in, how this is literally life changing.”

Rating scales

Scale 1. From Patient/Carer Perspective on a Scale 0-10 how would you grade the following in terms of supporting you at home after hospital discharge (0 = very weak, 10 = very strong)

Scale 2. From Patient/Carer Perspective how much did the following play in the acute re-admission (0 = none, 10 = very large part).

- Dichotomy of Experience from the 29 Patients/Carers on both the scales.
  - Good experience (13/29)
  - Poor experience (13/29)
  - Average experience (3/29)

ICU 'ness' (Post-ICU Syndrome)

ICU; Psychological distress; Subsequent response to illness; Timing (symptoms and services)

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Patient Characteristics

Where to next?

- Readmission to hospital after critical illness is complex and multi-faceted
- Any intervention to address the issue will likely need to reflect this complexity
- Currently developing a toolkit/checklist/intervention using qualitative and quantitative data which will be explored with experts at a knowledge exchange event (29th Sept 2016)

Thank you

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