SCARF
Supporting Community Recovery and Reducing Readmission Risk Following Critical Illness

Jo Thompson
On Behalf of SCARF
Key Outcomes:

• Reduce readmission rates
• Create an assessment tool to find those at risk of readmission
• We have established good communication networks with the Integrated Joint Board hubs.
PROFILE:
Preventing early unplanned hospital admissions following critical illness

Chief Investigator: Professor Tim Walsh.
Research Team: Naz Lone, Janice Rattray, Eddie Donaghy, Robert Lee, Pam Ramsay, Lisa Salisbury
Background: Critical Illness in UK

- 140,000 patients admitted to UK Intensive Care Unit’s each year
- 30,000 patients admitted to Scottish Intensive Care Unit’s each year
- 70% of patients survive
- Healthcare costs per patient/year @ £49,000
- Lone et al (2013) in Scotland 25% have an early unplanned hospital admission within 90 days, 40% within 6 months

*Lone NI et al (2013a) Surviving Intensive Care: A Systematic review of Healthcare Resource Use after Hospital Discharge. Critical Care Medicine, Vol. 41. No.8, August*
Human Cost of Critical Illness
Post Intensive Care Syndrome (PICS)

Psychological
- Anxiety
- Depression
- PTSD

Physical
- Muscle wasting
- Fatigue
- Weight Loss
- Joint Pain/stiffness
- Impaired mobility

Cognitive
- Amnesia
- Delirium
- Cognitive Impairment

Social
- Late return to work
- Money concerns
- Reduced social participation
- Health & wellbeing of carers
- Relationship strain
Complex Health and Social Care Issues
PROFILE: Risk Factors Associated with Unplanned Readmissions:
Prior to Critical Illness

Patient Level Issues
1. Multi morbidity and polypharmacy
2. Psychological problems and drug dependency
3. Fragile Social Support
4. Problems with specialist equipment
5. Poor mobility

System Level Issues
1. Preparation for hospital discharge
2. Communication between acute and community care
3. Psychological support
4. Medication Support
5. Goal setting
Potentially Avoidable Readmissions

- Drug Related
  - Medication errors in polypharmacy patients
- Mobility
  - Fall at home. Mobility aid not delivered to home in time for discharge
- Carer Support
  - Carer absent due to work/holiday/unforeseen circumstance
  - Precipitated general collapse: not eating properly, not medicating correctly
- Medical Support
  - Nephrostomy bag blocked
  - Hickman line infected

All potentially preventable with controlled intervention
Goals

- Have quicker and better feedback to healthcare providers
- Improve Community Recovery of ICU Survivors
- Reduce early unplanning admissions by 20%
In Hospital Patient Assessment

- GP
- Pharmacy
- Hubs
- Family engagement

Ward Support and Discharge Planning

Community follow up

- Pharmacy
- Hubs
- 2 & 8 week follow up
- GP

Edinburgh Health & Social Care Partnership Locality Hubs (MATT) and Edinburgh Mental Health & Substance Misuse Hubs

Quicker and More efficient feedback
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
<th>Other</th>
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<tbody>
<tr>
<td>Multiple hospital admissions in last 12 months?</td>
<td>Yes/No</td>
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<tr>
<td>Number of co-morbidities greater than 4?</td>
<td>Yes/No</td>
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<tr>
<td>Number of concurrent medications greater than 4?</td>
<td>Yes/No</td>
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<tr>
<td>Previous history of mental health?</td>
<td>Yes/No</td>
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<tr>
<td>Previous history of substance abuse?</td>
<td>Yes/No</td>
<td></td>
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<tr>
<td>Concurrent antidepressants or psychiatric medication?</td>
<td>Yes/No</td>
<td></td>
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<tr>
<td>Significant help required for AoDLs pre admission?</td>
<td>Yes/No</td>
<td>POC?</td>
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<td>Lives alone</td>
<td>Yes/No</td>
<td></td>
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<tr>
<td>SIMD Decile?</td>
<td></td>
<td><a href="http://www.simd.scot">www.simd.scot</a></td>
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Patient and System Impact

**Patient**
- Is more supported
  - Feels heard and understood
- ICU Discharge sheet
  - Assurance
- Signposting
  - Counselling
  - ICU steps support group

**System**
- Counselling
  - Resource for staff, relatives and patients
  - Being established into the department
  - Integrated into support groups

**Family**
- Feels they have a part and are heard
Progress to date

- 302 patients
- PDSA Cycle- High proportion of Substance Misuse/Serious Mental Health Issues, approximately 30%
- We have reduced relative readmissions by 15% and absolute by 4%
- Our assessment tool found 50% of the patients who are most at risk of readmission
- Contact with 14 hubs
  - 7 Integrated health care
  - 7 Mental health and substance misuse hubs
- Applying for funding to continue the service on
Special thanks to:

• Healthcare Improvement Scotland
• Dr Eddie Donaghy – Project Manager
• Dr James Marple – Clinical Lead
• Julie Fenton- Administrator
Thanks for listening

Any Questions?