Implementation and Evaluation of a Palliative Care Inpatient Unit's Delirium Guidelines: A Service Improvement Project

Dr Catriona Jackson[1,2], Dr Amber Garnish[2], Catherine Malia[3], Dr Hannah Zacharias[3], Dr Judith Dyson[4], Professor Miriam Johnson[1]
1. Wolfson Palliative Care Research Centre, University of Hull; 2. Leeds Teaching Hospitals NHS Trust; 3. St Gemma's Hospice, Leeds;
4. Birmingham City University

Introduction

Aim

To produce a sustainable improvement in prevention, recognition and management of delirium in St. Gemma's Hospice inpatient unit.

Delirium is characterised by acute onset of fluctuating confusion and altered conscious level[1]. Recognition and management of delirium is supported poorly in palliative care inpatient units[2].

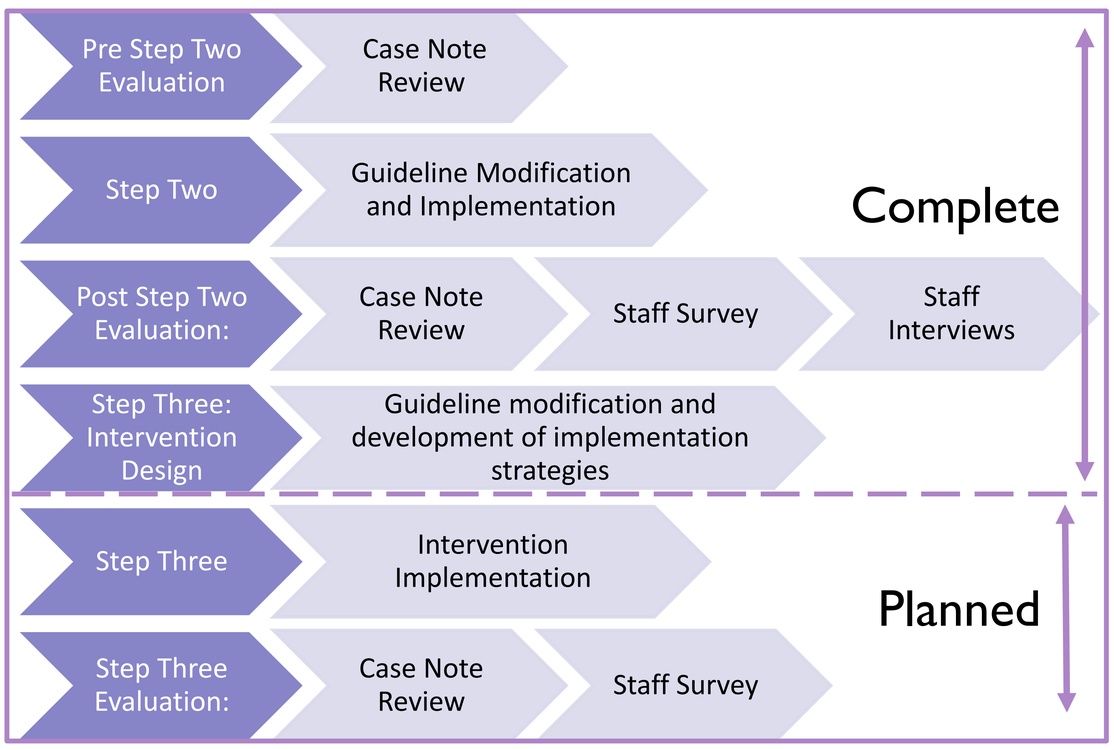
Delirium Matters

60% of specialist palliative care unit patients have delirium during admission[3]

Distressing for patients, families and clinical staff [4]

Associated with prolonged hospitalisation and increased mortality[5]

Methods



Guideline Modification

Guidelines include – prevention, recognition, assessment and management of delirium

4AT rapid clinical test[6] for delirium introduced for delirium screening

Delirium severity assessment replaced by formalised agitation assessment[7] alongside assessment of whether the patient has distressing hallucinations

Guideline Implementation

Guidelines advertised within hospice – email and intranet

Guidelines integrated onto electronic patient management system

Education and training

Delirium Champions

Data Collection

Case note review: To identify documented evidence of patient delirium, using a validated tool[8], and implementation of practice guidelines.
Staff survey: informed by normalization process theory[9] and behaviour change theory[10] to identify barriers and facilitators implementation of practice guidelines and the likelihood of sustainable implementation.
Staff interviews: Semi-structured interviews informed by behaviour change theory[10] to explore barriers and facilitators to implementation.

Results

Delirium recognition

	Pre-step two	Post-step two
Proportion of patients **screened** for delirium **at the point of admission**	27% (21/77)	61% (49/80)
Proportion of retrospectively identified delirium episodes **diagnosed** as delirium by clinicians	19% (11/58)	39% (14/44)

Delirious patients screened on admission were more likely to get:

A medical assessment	A documented diagnosis of delirium	Appropriate non-pharmacological management

Delirium **screening during inpatient stay** was not carried out either pre or post Step Two

Key barriers to delirium recognition:

- **Poor knowledge** of delirium features
- **Complexity** of delirium diagnosis in palliative care
- **Organisational culture** of using words other than 'Delirium'
- Delirium screening seen as a **doctor's role**, not a nursing one
- Staff **lacking skills and confidence** in their ability to complete delirium screening

Delirium management

Proportion of patients with delirium receiving **systematic assessment for reversible causes** of delirium

Pre-step two	Post-step two
33% (19/58)	52% (23/44)

Key Barrier to reversible cause assessment: Poor recognition of delirium → **Solution:** Focus on improving delirium recognition

Proportion of patients with delirium documented as receiving **appropriate non-pharmacological management**

Pre-step two	Post-step two
17% (10/58)	59% (26/44)

Key barriers to appropriate non-pharmacological management

- Staff **lacking skills or confidence**
- **Other care priorities** compete
- Creating a delirium care plan **is not usual practice**
- Management of delirious patients can be **distressing and stressful**

Delirium prevention

Proportion of **delirium risk assessments** completed on admission

Pre-step two	Post-step two
0% (0/64)	58% (38/65)

Of the risk assessments completed 89% showed risk factors for delirium

Only 15% of positive risk assessments were followed up with **appropriate preventative measures**

Key Barriers to delirium prevention: Poor understanding of: The purpose of risk assessment; Triggers to apply prevention strategies → **Solution:** Don't risk assess; Apply delirium prevention strategies to all inpatients

Intervention Design

Intervention co-designed with St Gemma's hospice staff using a theory led approach. The intervention targets barriers and facilitators to guideline implementation and focusses on sustainability. Feasibility was evaluated using APEASE criteria (Acceptability, Practicability, Effectiveness, Affordability, Side effects, Equity).

Planned Step 3 Intervention	
Teaching sessions: Knowledge, skills & motivation	Modifications to SystmOne patient management system
Delirium champions	Delirium patient leaflet
Role modelling by senior staff on ward rounds	Delirium screening during medical admissions to be observed by nursing staff
Posterboard knowledge campaign	
Environmental changes	Audit of guideline compliance

Conclusion

A **theory-driven approach to complex intervention design** and implementation is feasible in a hospice setting.

Given the high-risk for delirium in hospice in-patients, focusing on **applying delirium risk reduction strategies to *all* seems appropriate**

Delirium screening appears to be a "gateway" component of delirium care, facilitating delirium recognition and guideline-adherent delirium management

References

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Correspondence to: Dr Catriona Jackson, hycj11@hyms.ac.uk