



THE IMPACT OF GERIATRIC RESOURCE NURSES ON HOSPITAL ACQUIRED DELIRIUM

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PURPOSE

As part of Duke University Hospital System's initiative to develop a center of excellence in geriatric nursing care, NICHE, Nurses Improving Care for Health System Elders was implemented. Staff nurses were educated to serve as GRNs, Geriatric Resource Nurses. As GRNs, they were taught evidenced-based practices that focused on caring for our geriatric patients. GRNs were given the opportunity to focus on an area of need on their units. One of the medical-surgical GRN teams chose to focus on nursing interventions that can improve outcomes of patients with hospital-acquired delirium.

The population to be addressed can best be described by Mrs. R.:

Case Study:

Mrs. R. was admitted on one of Duke University Hospital's General Medicine units. She was admitted with a UTI. She was alert and oriented and able to walk to the bathroom with no problem. She had a Foley catheter placed and intravenous fluids started. Two days later, Mrs. R. awakened during the night calling her daughter's name and trying to climb over the side rail. She was hypervigilant and inattentive as well as disoriented. Mrs. R. fits into a rising population of 25% to 60% of elderly persons who develop delirium while hospitalized.

WHY IT IS IMPORTANT

Delirium is a **common, reversible syndrome** in hospitalized patients characterized by:

- A rapid onset of change in mental status and behavior
- Which is often in response to infections, pain (and its management), and sensory deficits
- And is often accompanied by confusion, fear, and agitation or lethargy

Quote:

"Delirium is a marker of poor hospital care for older people: it is associated with serious complications; it often goes unrecognized by physicians and nurses; and its occurrence is integrally linked with processes of hospital care, such as overuse of medications and iatrogenic events. Unfortunately, delirium is common and can lead to increased mortality, morbidity, and loss of independence" (Inouye, 2004)

Hospital-acquired Delirium :

- Often goes undiagnosed
- Becoming a safety issue
- Prevalence questionable
- Sitters ordered but often unavailable
- Nursing staff see the problem increasing

DATA SUPPORTING CHANGE

According to researchers, like Inouye, Shank, & Ratchford, hospital-acquired delirium is associated with:

- increased length of stay
- increased hospital costs
- increased morbidity & mortality
- increased burden of care
- 2.5 million hospitalized elderly persons
- \$6.9 billion per year cost to Medicare
- CMS proposed "No-pay list of hospital acquired conditions"

WHAT WE DID TO CHANGE PRACTICE

Through the GRN studies, we knew that delirium could be prevented or managed with a few simple interventions. We needed to come up with a tool that could do several things at once: identify clients with or at risk for delirium, educate staff, and offer undemanding, practical solutions

To educate staff about the prevalence of delirium, the risk factors involved, and the evidence-based interventions available, we developed a nursing care plan and a structured focus note.

The nursing care plan offers knowledge about how to identify those at risk and how to intervene once identified to prevent or manage delirium using a structured approach easily individualized to each patient.

The structured focus note offers a fast and easy way to address the problem, to know what actions to take, to know the expected outcomes and response, while being able to add more insightful information as needed. It also lends itself to documentation of a growing problem.

Tools of change:

Nursing Care Plan:

- Risk factors
- Rationales
- Interventions

Structured Focus Note:

- Data=Assessment
- Action=Interventions
- Response=Outcomes

Duke University Hospital
DUKE UNIVERSITY HEALTH SYSTEM

Patient Plan of Care
Acute Confusion
For All patients ≥ 65 years of age

Initiate this plan of care by entering DATE, KEY and nurse INITIALS next to each "Problem" appropriate for the individual patient. Use the KEY: I = initiated, M = modified and R = resolved. Then, individualize the interventions for the problems identified by checking and/or placing the date in front of the appropriate intervention used or modified.

Plan of Care Initiated, Modified or Resolved	Problem	Interventions (Includes plan for patient and family education)
	Acute Confusion	Establish a baseline: Talk with patient's family or caregiver and review the chart. _____ Assess for risks: _____ <input type="checkbox"/> Prevention _____ <input type="checkbox"/> Management _____ <input type="checkbox"/> Expected Outcome: _____ <input type="checkbox"/> Acute Confusion _____ <input type="checkbox"/> Will not develop _____ <input type="checkbox"/> Is resolving _____ -Alert _____ -Oriented _____ -Calm _____ -Sleeping _____ -Clear _____ -Cooperative _____ Implement preventive measures: _____ Educate patient/family regarding High Risk for acute confusion and prevention strategies. _____ Communication for high risk for acute confusion includes: Place "delirium question mark" on the wall over the head of patient's bed. _____ Use positive physical approach: _____ Provide continuity: _____ Provide safety: _____ Avoid restraints: _____ Review medications: _____

DUKE UNIVERSITY HOSPITAL
STRUCTURED FOCUS NOTE FOR ACUTE CONFUSION
PREVENTION AND/OR TREATMENT
For All patients ≥ 65 years of age

DATE/TIME: _____

PROBLEM: _____

PROGRESS NOTE: _____

PROCEDURE/REVIEW: _____

DATA: _____

Patient is at risk for hospital-acquired delirium (acute confusion) because of: (check all that apply)

- Altered Mental Status
- Impaired vision/hearing
- Lack of mobility
- Increased BUN/Cr ratio
- any acute illness
- Untreated Pain
- Vest or wrist restraints
- Indwelling bladder catheter
- Weight loss or serum decline in albumin (malnutrition)
- Polypharmacy or more than 3 medications added in a 24 hour period (dehydration, decreased renal failure)
- Interrupted sleep due to: noise level, lights, vital signs, medication times, Q2hr checks/ turns

ASSESSMENT: Patient currently has acute confusion state: (check all features that apply)

- 1. **Acute Onset & Fluctuating Course:** evidence of an acute change in mental status from baseline; did (abnormal) behavior fluctuate during the day—come and go or increase and decrease in severity?
- 2. **Inattention:** difficulty focusing attention, is easily distractible or has difficulty keeping track of what is said
- 3. **Disorganized Thinking:** Thinking disorganized or incoherent such as rambling or irrelevant conversation, and/or illogical flow of ideas, or unpredictable switching between subjects
- 4. **Altered Level of Consciousness:** Rate overall level of consciousness:
 - Vigilant (hyperalert)
 - Stupor (difficult to arouse)
 - Lethargic (drowsy, easily aroused)
 - coma (unarousable)
- disoriented
- restless
- insomnia
- incoherent
- uncooperative

Observed Behavior: _____

ACTION: Implemented following interventions: (check all that apply)

- Put eye glasses on patient
- Used positive physical approach and structured reminiscence
- Updated and reviewed the white board with patient
- Had patient fold washcloth or introduced activities from activity cart
- Anabated patient or gave ROM exercises
- Offered fluids every 2 hours along with toiletting
- Monitored electrolytes and BUN/Cr ratio
- Reduced noise unit-wide (signs placed to remind)
- Turned on relaxation music
- Consulted MD to:
 - Reschedule medications and procedures to allow sleep (clustered nursing care)
 - Discuss adverse meds: benzodys or any other anticholinergics, ativan, or phenazone
 - Suggest haldol or risperidol only after all else fails
 - Discontinue foley catheters
 - Discontinue restraints
 - Order and monitor electrolytes and BUN/Cr ratio

RESPONSE: The patient is: (check all features that apply)

M NM alert & oriented | M NM calm | M NM sleeping | M NM clear | M NM cooperative

Signature: _____

IMPACT ON POPULATION

The impact of using the structured tools was quick and obvious. The tools were given out randomly to staff on the medical surgical unit to use on all patients age 65 or older who met the criteria. Inattentiveness, hypervigilance, insomnia, lethargy, restlessness/agitation were measured pre and post-intervention. Immobility, indwelling catheter use, and restraint use were also measured pre and post-intervention. There was improvement in all areas post-intervention.

Thirty percent of hospital acquired delirium in older persons can be prevented or managed just by adding some basic interventions of care.

Remember Mrs. R with the UTI...

Case Study:

Mrs. R. was approached using the positive physical approach—go slow at eye level and speak simply and slowly. She was offered a five minute back rub while encouraging her to reminisce. Loud television was replaced with low soft music. The lights were turned low. It was explained to her that it was after 9:00 PM and time for sleep. Mrs. R. became calm and reported she was sleepy. She was able to sleep through the night.

IMPLICATIONS OF PRACTICE

The implications of practice, although still in the early stages of use, have already proven helpful. Staff learned risk factors to look for in the elderly. They were able to choose from a list of 13 evidence-based interventions and experience the ease with which they could be implemented. Staff discovered how simple and fast the interventions could be implemented, but most importantly staff learned the outcomes were what was expected from the evidence-based practice. The tools were easy to use and they worked. The outcomes were positive for managing and possibly even preventing acute delirium in the hospitalized elderly.

Certainly none of the patients' mentation and behavior was made worse by the use of the interventions. Although it cannot be said that the interventions improved the delirium or shortened its course since it fluctuates, it was obvious that the implementation of the interventions seemed to calm the patients thus changing their behavior. Some of the nurses used the CAM algorithm to determine the presence of delirium, but even this tool without adding the CAM Severity Score does not determine its severity or its improvement. Even so, the results were promising to staff who felt they were gaining some control over this problem of altered mental status a.k.a. acute confusion a.k.a. delirium.

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IDENTIFIED DATA

