Change of Condition in Nursing Facility Residents

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Acute Change of Condition (ACOC)

“A sudden, clinically important deviation from a patient’s baseline in physical, cognitive, behavioral or functional domains that, without intervention, may result in complications or death”

- AMDA Clinical Practice Guideline

Background

- ~25% of 1.5 million NF residents admitted to hospital annually
- ~2.2 million ED visits annually from NH
- CMS focus on avoidable admissions, and readmissions within 30 days of discharge
- NF and providers will need to improve their ability to manage residents of higher acuity
Successful Management of ACOC

- Nursing expertise and staffing levels
- Availability of diagnostic radiology and laboratory services
- Emergency pharmacy services or “E -box”
- Availability of iv services and fluids
- Provider assessment/supervision and willingness to manage acute illness
- Advance Care Planning and Goals of Care discussions

Essentials

- Process for assessing residents regularly by interdisciplinary team
- Nursing education and back up supervision
- Protocols for high risk diseases
- High quality nursing assessment of resident, and ability to communicate information accurately
- Standardized process for data gathering

Identify high risk residents

- Develop a process for assessing residents and their potential problems
- Some conditions are associated with particular complications, and the daily assessment should focus on these
- Each chart could contain a “prompt” for charting that includes assessment of the high likelihood complications
- Residents with recurrent issues should be identified so that if unfamiliar staff are present it is clear that this resident is at high risk (eg for recurrent CHF or aspiration pneumonia)
Example:
- 87 yr old man with hip fracture s/p ORIF
- Admission assessment should look for
  - DVT prophylaxis, delirium, pain control, wound
- Daily assessment should include
  - Wound, swelling of leg, cognitive assessment, pain control, and function
- Staff should have clear knowledge of abnormal parameters to call provider

Protocols
- Many NF now have standardized order sets that gather data routinely for particular diseases
- Congestive Heart Failure
- Diabetes
- These prompt all staff even those who are unfamiliar with residents (or disease states!) to collect appropriate data and notice change early

Communication
- Interdisciplinary team should assess residents for ACOC;
- Technological approaches
- All staff should be empowered to look for changes and there should be a defined process as to who should be informed and how that will be done
  - Tools such as STOP and WATCH
  - Electronic triggers
Communication

- Use of a tool to collect information will help accurate communication to the provider who may not know the resident
- The responsibility to communicate with the provider should be delineated and clear
- Some issues may not require immediate attention and there should be a system to aid this decision

Reporting Changes

- ACOC CPG, Know it All Before you call and INTERACT 2 have frameworks to help staff decide on level of urgency
Communicating the Change

- Accurate delineation of the change is essential
- High quality nursing assessment and ability to convey all of the relevant information to the provider
- Standardized process for data gathering
  - INTERACT SBAR
  - Know it all Before you call (AMDA)
  - ACOC Clinical Practice Guideline

Descriptors

- Not “the resident is not herself”
  - But “She only ate 25% of breakfast and lunch, she did not go to Bingo which she loves and needed help of two to toilet”
- Not “he is weak”
  - But “he has fallen twice in the last 2 days, is dropping things with his left hand and could not dress himself today”
Determining the cause of ACOC

- Some problems are easily identifiable on clinical grounds
- Remember the possible role of medication changes
- Availability of laboratory studies, Xray and other tests and drugs/iv fluids should be clear and reliable

Sometimes hospital transfer is necessary!

Focus on reducing readmissions and avoidable hospitalization does not mean that we should consider all transfers as an error

- Residents are transferred because of critical illness that cannot be managed in NF or the need for urgent test results, or a test that cannot be performed there
  - Chest pain unrelieved by NTG x3 in CAD
  - Severe abdominal pain with intractable vomiting
  - Fall with obvious serious fracture

Can we treat it here?

- Nurse availability and skill set
- Availability of drugs/equipment
- Provider availability (and willingness!)
- Comfort with the diagnosis .....or uncertainty
Emergency Supplies

- iv fluids and staff who can administer them
- Oxygen, nebulizers, suction
- An "e-box" with essentials including
  - im antibiotics and im diuretics for those who can't take po
  - Rectal benzodiazepine for seizures
  - Glucose and glucagon
  - Pain medications (DEA considerations)

Choosing Antibiotics

- Providers should have knowledge of antibiotic sensitivity in the NF
- Lab can provide antibiogram of resistance patterns and guide presumptive treatment
- For example if 50% of E coli from facility is resistant to quinolones, this would not be good presumptive choice for UTI
Hypodermoclysis

Infusion of fluid into subcutaneous space via small gauge needle

Hypodermoclysis (HDC)
- Rehydration when oral hydration is not feasible and iv rehydration is problematic
  - Acute febrile illness, influenza, gastroenteritis
  - Delirium (including clearance of opioid metabolites)
  - Acute neurologic events
- Contraindications
  - Urgent need for volume resuscitation
  - Active pulmonary edema/ severe CHF
  - Coagulopathy, bleeding disorders
  - Major electrolyte disorder

Hypodermoclysis
- Abdomen, thighs, back (interscapular), anterior chest or arms
- Out of reach if confused!
- Replace catheter every 24-72 hours
- <25ml/hr clogs occur; >75ml/hr edema at the site
- Iso-osmotic fluid
- NSS or D5 NSS
- Can add up to 40mEq of potassium per liter
- Maximum 3 liters daily
- Transparent dressing to observe for bleeding or infection

- Maximum 3 liters daily
**Hypodermoclysis**

Side effects (11-16%) most after 72 hours
- Local inflammation, pain, swelling, edema, bruising and extravasation

“As effective as iv rehydration of older adults with mild to moderate dehydration. …it remains unclear why HDC is used infrequently in the US”

Remington R, Hultman T.

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**Management of ACOC**

- Regular reassessment essential
- Monitor progress and document
- Process for follow up of culture results or labs and adjust treatment if needed
- Assess for development of complications (requires staff know which ones to look for!)
- Reconsider goals of treatment based on response

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**Other considerations**

- High risk for delirium
- Recent JAMDA study showed 17.7% rate (Boockvar K JAMDA Sep 2013)
- Expectations of staff and family
Goals of care

- "No patient should be hospitalized because a staff member or practitioner failed to review or consider a patient’s documented wish not to be hospitalized in the event of an acute illness"

  - AMDA Clinical Practice Guideline ACOC

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Goals of care

- Implement a system to determine the resident or surrogate goals of care
- Regular discussion of these goals should be incorporated into “standard work”
  - eg at admission, Annual Care Plan and for changes in condition
- Much better conversations if not held at time of emergency!
QAPI opportunities

- Review the management of all ACOC
  - Follow up of complications
- Unplanned hospital transfers should be evaluated in a systematic manner
  - Time of day of transfer
  - Review of any signs and symptoms prior to transfer and management in the NF
  - Identification of obstacles or problems that contributed to transfer

QAPI

- “What did they do in the hospital that we couldn’t do here?”
- Process to address issues identified
  - Education
  - Equipment
  - Skills training
- Tracking to see if things are improving!
Other Issues

- "Culture"
- Provider concerns
  - Medico-legal
  - Lack of knowledge of NF capabilities
  - Finding time for sick visits and phone calls
- Education
- Financial and Staffing issues
- Family expectations and knowledge

Resources and References

- www.interact2.net
  Multiple tools and care paths
- www.amda.com
  Clinical practice guidelines and the Know it all before you call series
- www.americangeriatrics.org
  Educational resources for providers
- Boockvar K. JAMDA 2013 14(9): 656-660
  Delirium During Acute Illness in Nursing Home Residents
- Tena-Nelson R. JAMDA 2012 13(7):651-6
  Reducing potentially preventable hospital transfers