Infection Prevention Long-term Care Boot Camp

Large Group Outbreak Work Session

Appleton, Wisconsin 2019

Scenario:

Happy Acres is a 75 bed long-term care facility. The structure of the facility consists of two wings with a central nursing station and a shared dining room. Activities also take place in a central activity room shared by all residents.

On Saturday evening, resident Joe, who resides on the Blue Wing, stated to the Certified Nursing Assistant (CNA) Mary that he was not feeling well and did not want to eat supper. CNA Mary notified the agency lead nurse who instructed her "to keep an eye on Joe". Staffing was short due to two other CNA's calling in sick. Mary assisted the other residents in the dining room with supper and came back to check on Joe. He had been incontinent of stool, which was **not typical** for him, and had soiled his clothing and bedding. He told Mary it was the third episode that day. Mary assisted Joe, changed the bedding and put Joe to bed for the evening. As Mary took the soiled linen to the dirty utility room, she commiserated with Sarah, another CNA, who stated another resident two doors down from Joe, Helen, had experienced sudden onset of vomiting right after supper and had experienced three episodes of loose stools during the day.

Facility was short staffed due to two staff calling in. Mary and Sarah struggled to assist the other residents to get ready for bed. Joe's call light went off and Mary returned to his room. He had experienced another episode of loose stools and was currently vomiting in the bathroom. Mary assisted Joe, got him back to bed and went on to answer the next call light.

When Mary's shift was finally over, she gave report to Juan, the oncoming CNA, regarding Joe and advised him to watch him closely.

What do we know so far? (Discussion by table or large group)

Two residents on same wing with acute gastroenteritis
Two staff called in sick (reasons were not given in phone message)

- What is our threshold (definition) for outbreak?
- Can you identify any breaches in protocol?
- Should any additional actions have been taken at this point?

Juan had a very busy shift. Joe had another episode of incontinence. Juan was not aware that Helen had thrown up again. Juan was very glad when his shift was over and gave report to the morning CNA regarding Joe.

The staffing situation the next morning was again short as the first two CNA's to call in were still out. Mary had called in sick with "what Joe had". A very quick morning huddle was held where the agency lead nurse instructed everyone to do the best they could with the staff that was there. The details about the staff calling in were not relayed to Paula, the Sunday morning charge nurse.

Paula placed Joe in contact transmission-based precautions but since Helen had not had an episode of loose stools that morning, she did not place her in precautions.

What do we know so far? (Discussion by table or large group)

Two residents on Blue wing with acute gastroenteritis
Unknown reasons why first two CNAs called in
CNA Mary called in with gastrointestinal (GI) symptoms

- What is our threshold (definition) for outbreak?
- Can you identify any breaches in protocol?
- Should any additional actions have been taken at this point?

Report to the Sunday evening charge nurse was given. They were not aware of any facility policies or protocols regarding who should be contacted or what measures should be taken. They wondered if they needed to call anyone but by the time they had a free moment, they did not want to wake anyone up.

When Tom, the Infection Preventionist, got to work on Monday morning, he attended morning huddle and learned that there were now 10 residents throughout the building with GI symptoms and there had been numerous staff call ins. Tom **recognizes** that the situation meets the definition of an outbreak and notifies the Director of Nursing and Medical Director.

What are the next steps? (Discussion by table or large group)

- Which of these **containment** measures should be put into place?
  - Restrict ill resident's activities until 48 hours after symptoms resolve
  - Place all symptomatic residents in transmission-based precautions
  - Limit movement of residents from affected unit until 48 hours after last symptomatic
  - Limit staff movement from affected to non-affected areas if possible
  - Dedicated staff to ill residents if possible
  - Evaluate need to cancel all communal activities including communal meals and activities
  - Confirm cleaning and disinfection of equipment between residents, consider dedicated equipment if possible
  - Initiate special cleaning protocols
    - Increase frequency
    - Bleach based product or other Environmental Protection Agency (EPA) approved disinfectant
    - Enhanced cleaning and disinfection should continue for 7two hours after last documented cases have recovered
  - Observe Personal Protective Equipment (PPE) usage, gown and gloves (mask and goggles or face shield if vomitus present)

- Confirm quantities of PPE are readily available
- Consider limiting new admissions until all cases are asymptomatic for 48 hours
- Others?

- Who should be **notified** of the outbreak?
  - Leadership, who does this include in your facility? Medical Director, board, etc.
  - Providers (not only of symptomatic residents, but all providers)
  - Local public health department – they can be of great assistance and help with specimen collection and testing if indicated
  - "Sister facilities"
  - Contracted services, for example therapy that comes into facility
  - Residents and Families
  - If any residents are transferred to another facility, notify EMS and receiving facility of outbreak
  - Others?

What additional steps should Tom take?

- Review guide (Prevention and Control of Acute Gastroenteritis Outbreaks in Wisconsin Long-Term Care Facilities, Wisconsin Division of Health Services, P-00653, released December 2017) and checklist guide
  - Line list of symptomatic residents (page 17 of guide)
    - Ill resident symptoms, date when they became ill, date they became well, location in facility, etc.
  - Line list of symptomatic staff (page 18 of guide)
    - Ill staff symptoms, date when they became ill, date they became well, date they returned to work
- Plot ill residents location on a facility map
- Staff education:
  - On outbreak protocols/procedures
  - Need for soap and water hand hygiene
  - Indication for PPE, donning and doffing procedures
- Work with Employee Health to counsel ill employees regarding when they are able to come back to work (48 hour symptom free)
- Work with local and/or state public health to determine what testing should be done and what additional measures should be taken
- Monitor PPE usage, gown and gloves (Mask and goggles or face shield if vomitus present)
- Management of visitors and families
  - Place signage for visitors
  - Encourage non-essential visitors to delay visit
  - Visitors that do decide to visit should be provided education on outbreak, recommendations they need to follow etc.

What Opportunities for Improvement (OFIs) can you identify and take to the Quality Assessment and Assurance (QAA) committee to review?

- Early recognition of outbreak
- Missed combined ill staff numbers with ill residents to meet definition of outbreak
- Containment not initiated (contact transmission-based precautions)
- PPE not used per protocol
- Notification of appropriate people did not occur
- Staff knowledge of protocols to follow is lacking
- Staff illness policy needs to be reviewed
- Others?

Infection Preventionist should write up summary of outbreak event and report to QAA Committee including:

- Scope of outbreak
- Lessons learned
- Corrective measures taken
- Plans to audit compliance

This step is often missed and can yield valuable information to improve practice.

Two most valuable resources related to outbreaks:

1. Prevention and Control of Acute Gastroenteritis Outbreaks in Wisconsin LTC Facilities, Wisconsin Division of Health Services, P-00653, released December 2017 https://www.dhs.wisconsin.gov/publications/p0/p00653.pdf
2. Reporting, Prevention and Control of Acute Respiratory Illness Outbreaks in LTC Facilities https://www.dhs.wisconsin.gov/dph/memos/communicable-diseases/bcd-2017-04.pdf

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