Manitoba
Health, Seniors and Active Living

Manitoba Health, Seniors and Active Living (MHSAL) supports reporting and learning from patient safety events. The focus of a patient safety review is to closely look at the health care system that surrounds and interacts with those giving and receiving care. The goal is to identify risks to patient safety and recommend the most effective ways to minimize risk and improve the delivery of healthcare.

Patient Safety Learning Advisory

Healthcare Acquired COVID-19 Infection

Summary:

A COVID-19 outbreak was declared during the third wave of the global pandemic at a rural healthcare facility. There were nine in-patient deaths related to contracting the COVID-19 infection while under the provision of health care services.

An aggregate review was completed of the nine (9) in-patient deaths to look at any commonalities or contributing factors related to the spread of the virus.

As the world remains to be in a pandemic to date, with no full eradication of the virus, we continue to learn daily with and from others around the globe. The findings and learnings are shared to assist in mitigation strategies to prevent future outbreaks from occurring in healthcare facilities.

Keywords: Healthcare acquired COVID-19 infection

(This review is based on a multiple number of events)

Findings of the Review:

An environmental scan was completed during the COVID-19 outbreak that identified areas for improvement. The ventilation system was not functioning properly as there was one air filter in place instead of two in the air handling unit. A large gap was discovered that allowed some unfiltered air to re-circulate in the facility. It is unknown whether this re-circulation of air contributed to the spread of the virus. The building was built in the early 1980s and there were different building codes in place at that time in comparison to the current building requirements for the air ventilation system.

There was a portable fan in use in a double patient room located in the middle of the ward where there were COVID-19 positive patients. The air circulated from the fan may have increased the probability of spreading the virus to others.

A cognitively impaired patient had wandered into a COVID-19 positive patient room increasing the potential of spreading the virus to others.

The nursing station desk needs to be repaired. There is exposed wood showing in areas due to the veneer finishing coming off. Exposed damaged wood can not be properly cleaned and may harbor bacteria/viruses within the wood grains. The nursing station desk & area is a high traffic area that poses a risk to staff who could unknowingly spread the virus to others by touch.

There were breaches in Personal Protective Equipment (PPE) (e.g.) Touching masks, eye-shields on top of head, taking sips of water that may unknowingly spread the virus.

An essential care partner to a COVID positive patient removed his/her personal protective equipment (PPE) upon exiting the red zone (COVID unit) and placed the contaminated PPE on top of a designated clean stocked cart of PPE. It is unknown if the cart was replaced.

System Learning:

Complete an environmental scan at all facilities to ensure (Heating, Ventilation & Air Conditioning) systems are operating as designed and have the appropriate health care facility grade air filters in place.

Review & Revise the scheduled monthly preventative maintenance checks (e.g. HIPPO program) for Air Handler Units to include a visual inspection of filters on a monthly basis to confirm seals and filters are installed properly and are in good physical working condition.

Educate a minimum of 80% of all regular nurses, health care aides, housekeeping and maintenance staff at all acute care and personal care home facilities that portable fans are not to be utilized during an outbreak as per regional Policy and Procedure on *"Portable Fan Usage in Healthcare Facilities"* (CLI.8011.SG.005).

Forward the following recommendations to Provincial Infection Prevention and Control for COVID-19 Respiratory Outbreak Management documents to include the following and not limited to:

- a notation for an environmental scan to identify removal of portable fans, closing of doors and windows.
- Consideration of management strategies for the wandering cognitively impaired patient(s) in acute care settings

- Utilize laminated floor plans at facility for rapid assignment of patient placement and zones

Monitor if the above recommendations submitted to the Provincial Infection Prevention and Control for COVID-19 Respiratory Outbreak Management documents have been implemented.

Replace the counter at the nursing station at the site in accordance with Infection, Prevention and Control standards.

Review and revise the regional policy Personal Protective Equipment (PPE) Observer (CLI.8011.PR.001) and other regional/provincial policies on PPE use to ensure there is direction for monitoring PPE compliance of visitor(s) during outbreaks.

Implement any revised Personal Protective Equipment (PPE) policies/documents at all sites.

Date of Posting: