DESCRIPTION

Patients receiving cancer systemic therapy with chemotherapy drug Fluorouracil (5FU) have a portion of the treatment protocol administered as an intravenous (IV) continuous infusion in the home setting. Humber River Health (HRH) has been collaborating with Home and Community Care (HCC) for specialized oncology trained home care nurse to start and disconnect SFU infusions using Continuous Ambulatory Drug Delivery (CADD) pumps. From January 2022 to May 2023, recurring challenges with supply and drug delivery, home care nurse staffing resources, and CADD pump infusion related issues resulted in 15 patient safety incident reports requiring follow-up investigation.

OBJECTIVE

To use a collaborative approach to improve infusion safety with Elastomeric Infusor Pumps at HRH Cancer Care Clinic.

ACTIONS TAKEN

The team completed the following:

1. Environmental scan and business case proposal to implement elastomeric infusor pumps at HRH Cancer Care Clinic.
2. Stakeholder meetings with program leaders, nursing, pharmacy, elastomeric infusor vendor, and HCC (to provide chemo drug spill kits and infusor disconnects).
3. Revision of treatment plan order sets by informatics analysts and stakeholder testing.
4. Pharmacy and nursing education.
6. Communication plan to internal and external stakeholders (e.g., Emergency Department & HCC).
7. Policy update and continued monitoring post implementation.

SUMMARY OF RESULTS

In October 2023, 525 elastomeric infusor pumps have been dispensed. Post four-month implementation of this change has eliminated the previously reported patient safety incidents related to supply and drug delivery, home care nursing staff resources, and CADD pumps. Two-infusor related patient safety incidents has led to reinforcement of nursing education/safety checks. Telephone calls are made to patients after their first infusor starts to review understanding of education received.

LESSONS LEARNED

Collaboration and commitment among stakeholders to implement elastomeric infusor pumps has eliminated previously reported patient safety incidents.