Patients in outpatient oncology settings are highly susceptible to falls. Because clothing can hide a patient's wrists, fall-alert risk bands may not be not consistently visible. Using an inexpensive, innovative, and visually accessible color-coded flag system placed outside of each infusion room decreased the outpatient oncology patient fall rate from 5% to 0% within six months.

## AT A GLANCE

- Falls with injury cause emotional and physical distress in patients with cancer.
- An effective strategy to prevent patient falls in the outpatient infusion center is to implement a color-coded flag system.
- The inexpensive color-coded flag system used in this project helped to reduce the rate of falls.

#### **KEYWORDS**

fall prevention; outpatient setting; oncology; flag system; treatment-related fatigue

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# Patient Falls Prevention

Assessing the use of an innovative color-coded flag system in an outpatient oncology infusion center

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Database he National of Nursing Quality Indicators (NDNQI, 2020) defines a patient fall as an unplanned descent to the floor with or without injury. A fall occurs in 30%-50% of hospitalized patients with cancer in the United States (Jatoi, 2017). According to the Joint Commission (2015), the average cost of each fall with injury in the United States was about \$14,000 to the healthcare system, averaging about \$50 billion annually (Kartiko et al., 2020). Fall-related injuries to patients can result in additional treatment, hospital admissions, prolonged hospital stays, delays in cancer treatment, immobility, pain, emotional distress, caregiver fatigue, and depression (Joint Commission, 2015). Patients with cancer are highly susceptible to falls because of the neurologic deficits caused by chemotherapy treatments, medications given to prevent side effects, allergic reactions to the chemotherapy medications, increasing age, cognitive status, disease site, and cancer- and treatment-related fatigue (Jatoi, 2017). The high financial costs to patients and healthcare providers, as well as the physical and mental impact on patients, led to this pilot project.

In an outpatient oncology setting, patients do not wear hospital gowns. Because clothing can hide a patient's wrists, fall-alert risk bands are not consistently visible. According to the Northwestern Medicine Delnor Cancer Center's (NMDCC, 2016) policy on fall risk, clinical staff must perform a visual screening of patients when they arrive at the infusion center. A fall-alert risk band is applied to patients who are deemed a fall risk by the clinical staff (NMDCC, 2016). Despite this policy, the fall rate of patients with or without injury at NMDCC was 5%. The purpose of this project was to reduce the rate of patient falls with injury in the infusion center at NMDCC in Geneva, Illinois.

A modified fall risk assessment tool (FRAT) in the infusion center's electronic health record (EHR) instrument is used to screen for risk. Patients who meet the inclusion criteria are assessed for fall risk at each infusion encounter by the nurses. If any of the nursing assessment questions result in a "yes" response, a yellow wrist band is placed on the patient's wrist.

# Methods

The NMDCC infusion center includes 15 private rooms and six infusion bays with curtains separating each bay. Patients in the project were ambulatory adults, aged 21–95 years, diagnosed with cancer, and receiving chemotherapy as treatment. Those excluded from the project were individuals who did not have a cancer diagnosis or who were not ambulatory.

### Intervention

Based on an initiative from the NMDCC Shared Governance Council, a system of color-coded flags was established in the infusion center to reduce the rate of patient falls with injury. The choice of colors