

Patients in the hematology-oncology and stem cell transplantation (SCT) setting are at high risk for functional decline and falls related to prolonged hospitalizations and inactivity during inpatient treatment. After underperforming on the Press Ganey National Database of Nursing Quality Indicators benchmark for falls in 2018, staff on a hematology-oncology and SCT unit implemented a practical and evidence-based fall prevention program. Fall rates from 2018 to 2019 ranged from 3.4 to 4.8 falls per 1,000 patient days. After the introduction of the unit-based gym program, early mobility increased and falls decreased to 2.57 per 1,000 patient days.

**AT A GLANCE**

- Interprofessional collaboration and communication supported by evidence-based approaches are essential to reduce falls on an inpatient hematology-oncology unit.
- Activity and exercise can be safely performed by older adult patients with hematology-oncology diagnoses, including those receiving complex cellular therapies.
- An innovative gym program is one intervention to promote early mobilization and activity on hematology-oncology inpatient units, despite limited space and social distancing requirements.

**KEYWORDS**

stem cell transplantation; fall prevention; gym program; hematology-oncology

**DIGITAL OBJECT IDENTIFIER**

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# Increased Mobility and Fall Reduction

An interdisciplinary approach on a hematology-oncology and stem cell transplantation unit

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Patients in the hematology-oncology and stem cell transplantation (SCT) setting are at high risk for functional decline during hospitalization related to medications (i.e., chemotherapy, opioids, corticosteroids, and anxiolytics), symptom burden (i.e., diarrhea and fatigue), and prolonged hospitalization (Black et al., 2018; Kullberg et al., 2014; McElroy & Schaffner, 2016; Ueki et al., 2014; Wood et al., 2014). Prolonged lengths of stay and inactivity can lead to muscle loss and orthostatic hypotension, both of which can increase the risk of falls in this patient population (Bell et al., 2021; Chang et al., 2018; Kullberg et al., 2014; Lizarondo, 2020; Ueki et al., 2014).

The 26-bed hematology-oncology and SCT unit at Ronald Reagan UCLA Medical Center in Los Angeles, California, is dedicated to treating complex patients receiving cellular therapies, clinical trials, and chemotherapy for hematologic malignancies. The average length of stay for patients on the unit is 16 days. Based on monthly data reviewed by unit leadership, it was noted that patients were experiencing high rates of falls, averaging four to five falls per month in 2018, which underperformed standards set by the Press Ganey (2021) National Database of Nursing Quality Indicators (NDNQI®). To preserve patient safety and improve quality of care, an evidence-based intervention to reduce falls in this specialized population was implemented.

**Evidence-Based Approach**

The unit-based nursing practice council first conducted a literature review to identify best practice interventions to reduce falls for patients treated in the hematology-oncology and SCT setting. Several themes emerged from the evidence:

- The role of multidisciplinary rounds (Bell et al., 2021; Black et al., 2018; Blackburn et al., 2016; McElroy & Schaffner, 2016)
- Early consultation with physical therapy and occupational therapy (Bell et al., 2021; Blackburn et al., 2016; Dermody et al., 2020; Lizarondo, 2020; McElroy & Schaffner, 2016)
- Dedicated mobility coordinators (Dermody et al., 2020; Jones et al., 2019; Lizarondo, 2020; Wood et al., 2014)
- Adoption of a culture that includes ambulation and mobility as a patient care standard (Bell et al., 2021; Black et al., 2018; Czaplinski et al., 2014; Dermody et al., 2020; Jones et al., 2020)

Organizations that incorporate these best practices experienced an increase in patient adherence with activity and mobilization during hospitalization, which led to a reduction in patient falls and readmission rates. For example, after implementation of an early mobility program on an acute care unit, fall rates reduced by an average of 1.9 falls per month (Lizarondo, 2020; Wood et al., 2014).

Historically, there was hesitation to create a formal mobility program among some interdisciplinary team members.