

# Chemo Checker: Transforming Care and Increasing Patient Safety by Reducing Nurse Distractions

Jennifer Adams, BSN, RN, OCN®, Kelly Waldo, MSN, RN, CNML, Margaret Brodie, MSN, RN, OCN®, and Timothy Clark, BSN, RN

On a high-volume academic ambulatory chemotherapy unit, a medication error triggered an evidence-based practice nursing work group to initiate a pilot “chemo checker” role as part of a new chemotherapy verification process. The group implemented two interventions to minimize nurse distractions and a 17-point chemotherapy verification label. An independent verification role was created to perform the first check for chemotherapy. Six months into the pilot project, medication administration errors and nurses’ distractions during the chemotherapy verification process decreased, and nurses’ perception of safety during the process increased (N = 22).

## AT A GLANCE

- Implementing a chemotherapy verification label, using a clear and concise checklist, enhances patient safety.
- A dedicated nurse can check chemotherapy prior to administration to decrease medication errors.
- Engaging nurses to evaluate patient workflows can enhance practice and outcomes.

## KEYWORDS

chemotherapy verification; patient safety; nurse distractions; medication errors

## DIGITAL OBJECT IDENTIFIER

10.1188/22.CJON.100-103

The American Society of Clinical Oncology and the Oncology Nursing Society (ONS) published standards for the safe administration of chemotherapy that are intended to reduce errors unique to high-risk medications (Neuss et al., 2017). As the final link in the administration chain, oncology nurses perform multiple safety checks for hazardous medications to ensure appropriate care for patients.

Nurse distractions can cause medication errors during any phase of a medication task, including administration (Kellogg et al., 2018). Examples of distractions for an ambulatory infusion nurse in the chemotherapy unit include managing patient infusion reactions, IV pumps alarming, patient call bells, competing patient care priorities, and telephone calls from the pharmacy, providers, or the patient care team. Clinical errors during medication administration and an interruption during any step of the chemotherapy verification process may harm a patient (Prakash et al., 2014). Therefore, minimizing nurse distractions during chemotherapy verification and administration can facilitate safe treatment. Reducing nurse distractions aligns with the Joint Commission’s National Patient Safety Goals® to improve medication safety in hospitals and ambulatory clinics (Agency for Healthcare Research and Quality, 2019).

## Background

The ambulatory chemotherapy infusion unit at the Mayo Clinic in Phoenix, Arizona, provides outpatient infusion to 80–120 patients per day, five days a week. The unit has 36 chairs and 7 beds available for patient infusion appointments; the infusion nurse works four 10-hour shifts. The unit is supported by an on-site pharmacy dedicated to dispensing oncologic medications. The volume of chemotherapy dispensed daily depends on individual treatment regimens but typically ranges from one to four chemotherapy or immunotherapy medications per patient.

## Medication Error

A medication error, involving a pharmacy label with the wrong volume of diluent, became the catalyst for change on the chemotherapy infusion unit. The infusion nurse realized that the total volume in the bag was larger than