Standardization of the Verification Nurse Role in the Delivery of Chemotherapy and Biotherapy

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After a chemotherapy overdose in 1994 resulted in the death of one patient and the permanent injury of another, the role of the verification nurse was created at a National Cancer Institute-designated comprehensive cancer center. Recently, a task force was formed to assess and standardize the verification nurse's unique role, which serves as the first check in preventing chemotherapy or biotherapy prescribing errors from reaching the patient.

AT A GLANCE

- Timely identification and resolution of prescribing errors directly affects patient safety, quality of care, patient wait times, and unnecessary drug waste.
- Event reporting systems help identify trends and allow institutions to take corrective action.
- The creation of a checklist for the verification nurse works to standardize workflows, onboard inexperienced staff, and achieve annual competencies.

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n 1994, a chemotherapy overdose at a prominent cancer center led to the death of one patient and the permanent injury of another (Altman, 1995). As a result of these highly publicized events, this institution, Memorial Sloan Kettering Cancer Center (MSK), sought to evaluate its chemotherapy processes. An internal interprofessional committee was formed and included key stakeholders from the departments of nursing, medicine, pharmacy, and hospital administration. The committee's recommendation led to MSK creating and implementing the role of the verification nurse (VN). Initially, the VN's purpose was to ensure the accuracy and completeness of templated handwritten chemotherapy order sheets, as well as that proper laboratory parameter checks were completed prior to drug preparation. Over time, the VN role evolved, in part, because of the following factors: (a) a shift in oncology care from acute to ambulatory care settings; (b) the implementation of electronic chemotherapy or biotherapy order entries; (c) outpatient infusion appointment delays; and (d) the complexity of oncolytic drugs, regimens, and research protocols. In 2022, more than 309,000 chemotherapy or biotherapy treatments were administered via IV at MSK's inpatient and outpatient settings, spanning 13 sites in two states (J. Gordon, personal communication, January 9, 2023).

Currently, the verification of chemotherapy, biotherapy, and investigational IV medications is a multistep electronic process. MSK worked with its electronic health record vendor to customize electronic order entry, particularly building a multitiered verification process that updates the order status with each step of verification (see Figure 1). MSK's VNs work in the inpatient and outpatient settings for adult and pediatric patients. Because of the rapid growth and complexity of the organization and variations in operational workflows, a VN Task Force (VNTF) consisting of 11 nurses was created with a unique opportunity to assess and standardize the VN role.

Purpose

The purpose of this article is to describe the process of evaluating practice and standardizing the VN role at MSK. A review of the literature and external interviews with outside institutions were conducted to gather data about