Improving Patient Safety in the Inpatient Setting Through Risk Assessment and Mitigation

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This article describes a working tool for clinicians in an inpatient oncology unit, aimed at preventing adverse events and increasing the clinical safety of patients with cancer. With the development of a catalog of adverse events and a risk map, healthcare providers are able to implement safe, best practices in daily activities.

At a Glance
- Identifying the magnitude and significance of risks to patients and clinicians is a key focus for assessment and improvement.
- The author’s institution used the Oncology Patient Care Process, a catalog of adverse events, and developed a risk map of the cancer center to identify areas for improvement.
- Making a graphic representation of the patient care process can help patients newly admitted to the inpatient unit.

The care process for patients with cancer is particularly complex and affected by multiple factors that can impact patient safety. A detailed analysis of the entire care process allowed the author’s institution to identify critical points that affect patient safety and to implement safer practices. The treatment of patients with cancer is unique in that it requires numerous, successive, and interrelated interventions by different healthcare professionals (pharmacists, doctors, nurses, nursing assistants). These clinicians are responsible for the administration of antineoplastic chemotherapy, which requires special handling (Jiménez Torres, Albert Mari, Almenar Cubells, & Vandenbroucke, 2009). These drugs (a) have a narrow therapeutic range, (b) are administered in varying doses, (c) are administered in protocols that combine multiple agents, (d) have doses and numbers of cycles that are variable, and (e) are often high in cost. The risk of high-severity medical errors is great with these agents, and adverse effects from errors are disproportionate to those from other drugs.

Risk Map

The safe handling and administration of antineoplastic drugs is a priority for achieving maximum safety and quality of care. Antineoplastic agents can result in adverse events (AEs) with serious consequences (e.g., 23% result in permanent disabilities), and it has been shown that 50% of the AEs are preventable (Jiménez Torres et al., 2009). The use of a risk map can facilitate the prevention of AEs (Aranaz-Andrés et al., 2008, 2009). A risk map is a tool that healthcare institutions can use in care planning processes to identify high-risk patients, procedures, and staff behaviors, and to establish prevention priorities. The risk map identifies critical points described in the care process for patients with cancer and supports the design of a plan to improve safety.

Becoming aware of the risks inherent in care processes is vital to avoiding errors. In an oncology unit, the risks of serious consequences associated with making a mistake are greater because the procedures used are considered high risk. Drug handling is subject to errors and any mistakes in writing, reading, calculation, or preparation can have potentially serious or fatal consequences. Therefore, minimizing the number of medication errors reaching the patient and creating a culture of safety by eliminating punitive approaches and facilitating error prevention and in-depth analysis techniques are vital.

Quality Care Plan

The author’s institution developed and implemented a quality care plan from 2009–2010 (Andalusian Consejería de Salud, 2005, 2010; HUVN Management Quality Unit, 2009), which articulated the Project for Patient Safety, developed in the Strategy for Patient Safety from the Andalusian Public Health System (Barrera Becerra, Del Río Urenda, Dotor Gracia, Santana López, & Suárez Alemán, 2011).

The aim of this project was to design a working tool for clinicians in the oncology unit that would decrease the...