

2013 Updated American Society of Clinical Oncology/Oncology Nursing Society Chemotherapy Administration Safety Standards Including Standards for the Safe Administration and Management of Oral Chemotherapy

Michael N. Neuss, MD, Martha Polovich, PhD, RN, AOCN®, Kristen McNiff, MPH, Peg Esper, MSN, RN, ANP-BC, AOCN®, Terry R. Gilmore, RN, Kristine B. LeFebvre, MSN, RN, AOCN®, Lisa Schulmeister, MN, APRN-BC, OCN®, FAAN, and Joseph O. Jacobson, MD, MSc

Vanderbilt Ingram Cancer Center, Nashville TN; Duke Oncology Network, Durham, NC; University of Michigan Comprehensive Cancer Center, Ann Arbor MI; American Society of Clinical Oncology, Alexandria, VA; Oncology Nursing Society, Pittsburgh, PA; Oncology Nursing Consultant, New Orleans, LA; and Dana-Farber Cancer Institute, Boston, MA

In 2009, the American Society of Clinical Oncology (ASCO) and the Oncology Nursing Society (ONS) published standards for the safe use of parenteral chemotherapy in the outpatient setting, including issues of practitioner orders, preparation, and administration of medication. In 2011, these were updated to include inpatient facilities. In December 2011, a multistakeholder workgroup met to address the issues associated with orally administered antineoplastics, under the leadership of ASCO and ONS. The workgroup participants developed recommended standards, which were presented for public comment. Public comments informed final edits, and the final standards were reviewed and approved by the ASCO and ONS Boards of Directors. Significant newly identified recommendations include those associated with drug prescription and the necessity of ascertaining that prescriptions are filled. In addition, the importance of patient and family education regarding administration schedules, exception procedures, disposal of unused oral medication, and aspects of continuity of care across settings were identified. This article presents the newly developed standards.

Introduction

Antineoplastic chemotherapy provides great benefit to patients with both malignant and nonmalignant diseases. In general, these medications often have a narrow therapeutic window: the difference between the optimum therapeutic dose and doses that are too low to be effective and so high as to produce overwhelming toxicities is often small. To promote safe administration of this class of medication, the American Society of Clinical Oncology (ASCO) and Oncology Nursing Society (ONS) developed a set of standards addressing the prescription, preparation, and administration of these medications in 2009, using an integrated process including multistakeholder participation and public comments.¹ An update expanding the standards to include the inpatient setting was published in 2012.²

These standards only minimally addressed the use of oral chemotherapy. As opposed to more common medi-

cations used to treat chronic medical conditions, oral chemotherapy is often administered on a complex schedule of varied days of dosing, and varied dosing even on one day. When medication is administered outside of a controlled setting (whether by patients, their families, or other caregivers), issues of compliance are magnified as compared with the circumstance of treatment facilities, where drug delivery and drug administration are known and observed. In the worst case scenario, patients are given paper or electronic prescriptions and little instruction or help getting the prescriptions filled. At best, there is rarely documentation of medication being ingested, either by patient logs or metabolic testing.³⁻⁷

Further, the use of oral chemotherapy is increasing. During an average year, approximately 1.5% of insurance beneficiaries receive treatment with antineoplastic chemotherapy. Based on a Massachusetts claims analysis, in 2010, 16.1% of these patients received oral chemotherapy.⁸ It is estimated that this will soon