Welcome ASCO Practice Leadership!

Quality and Safety in Chemotherapy Administration

Foundation for evidence-based processes that help ensure safety and quality in chemotherapy administration

October 15, 2020
Quality and Safety in Chemotherapy Administration

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Quality and Safety in Chemotherapy Administration During COVID-19 Pandemic

• Objectives:

- Review quality and safety standards in chemotherapy administration

- Describe healthcare facility recommended policies and procedures for chemotherapy administration

- Identify opportunities for standardization and consistency in patient care delivery
Quality and Safety in Chemotherapy Administration During COVID-19 Pandemic

2016 Updated American Society of Clinical Oncology/Oncology Nursing Society Chemotherapy Administration Safety Standards, Including Standards for Pediatric Oncology

Michael N. Neuss, MD, Terry R. Gilmore, RN, Kristin M. Belderson, DNP, Amy L. Billett, MD, Tara Conti-Kalchik, MSN, Brittany E. Harvey, ...

Why are chemotherapy administration safety standards important?

Provides standards and standardization in care. Standards to minimize the risk of errors in chemotherapy ordering, preparation, and administration, including both oral and parenteral therapy.

- **Errors happen.** Betsy Lehman, an award-winning health journalist, died on December 3, 1994, after receiving an inappropriately high dose of cyclophosphamide chemotherapy for breast cancer

- **Errors happen.** December 2015, a 49-year-old man died as a result of a chemotherapy overdose, two decades after attention was first focused on chemotherapy administration safety initiatives

2016 Updated American Society of Clinical Oncology/Oncology Nursing Society Chemotherapy Administration Safety Standards, Including Standards for Pediatric Oncology

Why are chemotherapy administration safety standards important?

• **Errors happen.** In a survey, 63% of nurses who administer parenteral chemotherapy reported personal knowledge of medication errors

• **Errors happen.** As chemotherapy-related errors are intercepted at rates of approximately 2% to 5%, it is important to note that some types of errors are virtually undiscoverable without continuous monitoring of the preparation process

2016 Updated American Society of Clinical Oncology/Oncology Nursing Society Chemotherapy Administration Safety Standards, Including Standards for Pediatric Oncology


Why are chemotherapy administration safety standards important?

- Prescribing errors were more likely in patients who had more than three injected chemotherapy drugs.

- Prescribing errors were more likely in patients who had at least one dose modification.

- Prescribing errors were more likely in patients who protocols including carboplatin.

- Inadvertent intrathecal chemotherapy administration is a rare but well documented phenomenon.

- Prescribing errors related to oral chemotherapy regimens:
  - wrong or missed doses, wrong drug, and wrong number of days supplied.

Chemotherapy Medication Errors (The Lancet Oncology, April 2018)
https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(18)30094-9/fulltext#text=Chemotherapy%20errors%20occur%20at%20a%20particular%20area%20of%20growing%20risk.

Why are chemotherapy administration safety standards important?

• Error types included:
  - dose errors
  - failure to acknowledge electronic alert
  - errors involving medication choice, duplicate orders, or failure to validate an order that had been entered by a junior physician

• Risk factors for severe prescription errors included:
  - occasional users of the electronic prescribing system
  - junior physicians

Chemotherapy Medication Errors (The Lancet Oncology, April 2018)
https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(18)30094-9/fulltext#:~:text=Chemotherapy%20errors%20occur%20at%20a,particular%20area%20of%20growing%20risk.
Why are chemotherapy administration safety standards important?

Cancer care is a complex, tightly connected system, in which interdependencies are inherent and failures can have catastrophic results.

- Patients with cancer may be compromised by their disease and treatment effecting their physiological reserves.
- Many antineoplastic therapies are toxic, with narrow therapeutic indices.
- Therapies might include novel agents or combinations and require multiple dose adjustments and precise monitoring of laboratory parameters.
- Care is delivered over weeks or months by interprofessional care teams that might work in different clinical settings—a scenario that increases the risk of miscommunication.

Chemotherapy Medication Errors (The Lancet Oncology, April 2018)
https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(18)30094-9/fulltext#:~:text=Chemotherapy%20errors%20occur%20in%20a,particular%20area%20of%20growing%20risk.
ASCO/ONS Chemotherapy Administration Safety Standards

- 4 Domains
- Standards
- Standards elements

Creating a Safe Environment – Staffing and General Policy

Treatment Planning Patient Consent and Education

Ordering Preparing Dispensing and Administering Chemotherapy

Monitoring After Chemotherapy is administered, including adherence, toxicity, and complications

2016 Updated American Society of Clinical Oncology/Oncology Nursing Society Chemotherapy Administration Safety Standards, Including Standards for Pediatric Oncology
ASCO/ONS Chemotherapy Administration Safety Standards
Domain 1: Creating a Safe Environment—Staffing and General Policy

Before the first administration of a new chemotherapy regimen, chart documentation includes at least the following eight elements:

- Pathologic confirmation or verification of initial diagnosis.
- Initial cancer stage or current cancer status.
- Complete medical history and physical examination, including pregnancy status, as applicable.
- Presence or absence of allergies and history of hypersensitivity reactions.
- Assessment of the patient’s and/or caregiver’s comprehension of information regarding the disease and treatment plan.
- Initial psychosocial assessment, with action taken when indicated.
- The chemotherapy treatment plan, including, at a minimum, the patient diagnosis, drugs, doses, duration of treatment, and goals of therapy.
ASCO/ONS Chemotherapy Administration Safety Standards
Domain 1: Creating a Safe Environment—Staffing and General Policy

On each clinical encounter or day of treatment, a patient assessment includes at least the following eight elements documented and takes appropriate action:

- **Functional status** and/or performance status.
- Vital signs.
- Weight is measured at least weekly when present in the health care setting.
- **Height** is measured at least weekly when present in the health care setting and when appropriate to the treatment population.
- Allergies and previous treatment-related reactions.
- Treatment toxicities.
- Pain assessment.
- **Patient’s medications are updated** at every visit and reviewed by a practitioner when a change occurs.
- **Assesses and documents psychosocial concerns and need for support with each cycle** or more frequently as indicated, with action taken when indicated.
• Provides information and financial resources and/or refers patients to psychosocial and other cancer support services.
ASCO/ONS Chemotherapy Administration Safety Standards
Domain 2: Treatment Planning, Patient Consent, and Education

• Patients are provided with verbal and written or electronic information as part of an education process before the first administration of treatment of each treatment plan. The content of this educational material will be documented.

• Education includes family, caregivers, or others on the basis of the patient’s ability to assume responsibility for managing therapy. Educational activities will be performed on the basis of the patient’s learning needs, abilities, preferences, and readiness to learn.
Patient Education Verbal and Written

- **Patient’s diagnosis.**
- **Goals of treatment**, that is, cure disease, prolong life, or reduce symptoms.
- **Planned duration of treatment**, schedule of treatment administration, drug names and supportive medications, drug-drug and drug-food interactions, and plan for missed doses.
- Potential long-term and short-term adverse effects of therapy, including infertility risks for appropriate patients.
- Symptoms or adverse effects that require the patient to contact the health care setting or to seek immediate attention.
- Symptoms or events that require immediate discontinuation of oral or other self-administered treatments.
ASCO/ONS Chemotherapy Administration Safety Standards
Domain 2: Treatment Planning, Patient Consent, and Education

Patient Education Verbal and Written

- Procedures for handling medications in the home, including storage, safe handling, and management of unused medication.
- Procedures for handling body secretions and waste in the home.
- Follow-up plans, including laboratory and provider visits.
- Contact information for the health care setting, with availability and instructions on when and who to call.
- The missed appointment policy of the health care setting and expectations for rescheduling or cancelling.

Chemotherapy orders include at least the following elements:

- The patient’s name.
- A second patient identifier.
- The date the order is written.
- Regimen or protocol name and number.
- Cycle number and day, when applicable.

- All medications within the order set are listed by using full generic names.
- Drug dose is written following standards for abbreviations, trailing zeros, and leading zeros.
- The dose calculation, including:
  - The calculation methodology.
  - The variables used to calculate the dose.
Chemotherapy orders include at least the following elements:

- The frequency at which the variables are re-evaluated.
- The changes in the values that prompt confirmation of dosing.
- Date of administration.
- Route of administration.
- Allergies.
- Supportive care treatments that are appropriate for the regimen, including pre-medications, hydration, growth factors, and hypersensitivity medications.

- Parameters that would require holding or modifying the dose, for example, laboratory values, diagnostic test results, and patient’s clinical status.
- Sequencing of drug administration, when applicable.
- Rate of drug administration, when applicable.
- An explanation of time limitation, such as the number of cycles for which the order is valid.
Chemotherapy drugs are labeled immediately upon preparation, and labels include the following 10 elements at a minimum:

- Patient’s name.
- A second patient identifier.
- Full generic drug name.
- Drug dose.
- Drug administration route.
- Total volume required to administer the drug.
- Date the medication is to be administered.
- Expiration dates and/or times.
- A warning or precautionary label or sticker, as applicable, to storage and handling; may be included within the label or on an auxiliary label.

Sequencing of drug administration, when applicable, and total number of products to be given when medication is provided in divided doses—each product should be labeled with the total number of products to be administered and the individual products sequence within that total grouping, for example, one of five, two of two, etc.
A second person—a practitioner or other personnel approved by the health care setting to prepare or administer chemotherapy—performs **three independent verifications**

#1 verification

**Before preparation, a second person**—a practitioner or other personnel approved by the health care setting to prepare or administer chemotherapy—individually verifies:

- Two patient identifiers.
- Drug name.
- Drug dose.
- Route of administration.
- Rate of administration
- The calculation for dosing, including the variables used in this calculation.
- Treatment cycle and day of cycle.
#2 verification

Upon preparation, a second person approved by the health care setting to prepare parenteral chemotherapy verifies:

- The drug vial(s).
- Concentration.
- Drug volume or weight.
- Diluent type and volume, when applicable.
- Administration fluid type, volume, and tubing.
#3 verification

**Before each chemotherapy administration**, at least two practitioners approved by the health care setting to administer or prepare chemotherapy **verify and document** the accuracy of the following elements:

- Drug name.
- Drug dose.
- Infusion volume or drug volume when prepared in a syringe.
- Rate of administration.
- Route of administration.
- Expiration dates and/or times.
- Appearance and physical integrity of the drugs.
- Rate set on infusion pump, when used.
#3 verification documentation

✓ **Documentation of chemotherapy administration confirms the verification of the eight elements of standard and also includes the patient’s clinical status during and upon completion of treatment.**
At least two individuals, in the presence of the patient, verify the patient identification by using at least two identifiers.

Before initiation of each chemotherapy administration cycle, the practitioner who is administering the chemotherapy confirms the treatment with the patient, including, at a minimum, the name of the drug, infusion time, route of administration, and infusion-related symptoms to report—for example, but not limited to, hypersensitivity symptoms or pain during infusion.
ASC0/ONS Chemotherapy Administration Safety Standards
Domain 4: Monitoring After Chemotherapy Is Administered, Including Adherence, Toxicity, and Complications

• Cumulative doses of chemotherapy are tracked for agents associated with cumulative toxicity.
Quality and Safety Standards Policies and Procedures

2020 QOPI Certification Standards Manual

• Qualifications of clinical staff who order, prepare, and administer chemotherapy
• 24/7 triage to a practitioner
• Standardized process for obtaining and documenting chemotherapy consent or assent.
• Intrathecal medication administration
• Extravasation management
• Emergent treatment
• Procedure to assess patients’ ability to adhere to chemotherapy that is administered outside of the healthcare setting
• Assessment of each patient’s chemotherapy adherence at defined clinically meaningful intervals

2020 QOPI Certification Standards Manual


Quality and Safety Standards Policies and Procedures

Additional policies from 2016 Chemotherapy Administration Safety Standards

• Follow-up for patients who miss or cancel scheduled visits and/or chemotherapy treatments

• Evaluation and documentation of treatment-related toxicities, dose modification related to toxicities

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ASCO QOPI Certification

About QOPI Certification

- QOPI Certification Application Webinar
- QOPI Certification Standards and On-site Survey Webinar
- QOPI Certification Program Standards

Resources


• ASCO Cancer.net
  ▪ https://www.cancer.net/

• Chemocare.com
  ▪ http://chemocare.com/

• Chemotherapy Medication Errors (The Lancet Oncology, April 2018)
  ▪ https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(18)30094-9/fulltext#:~:text=Chemotherapy%20errors%20occur%20at%20a,particular%20area%20of%20growing%20risk.

• Oncology Nursing Society
  ▪ https://www.ons.org/

• Oncology Nursing Society Nursing Roles and Professional Practice
  ▪ https://www.ons.org/explore-resources?display=topic&topic=916&ref=RO

• Oral Chemotherapy Education Sheets
  ▪ https://www.ncoda.org/ce/

• QOPI Certification/QOPI Certification Standards
Questions?
Practice Operational Assessment

A comprehensive practice review

- Operational Assessment Tool
- Process Efficiency
  - Patient Flow
  - Practice Layout
  - Patient Education
  - Effective use of technology
- Staffing Efficiency
  - Staff Roles
- Financial Management
  - Revenue Cycle Operations
  - Financial Toxicity, Financial Navigation
- Focus on measurement
Clinical Care Delivery Assessment

• Comprehensive review of clinical care services
• Medical oncology and radiation oncology
  ▪ Quality patient care
  ▪ Safe patient care
  ▪ Patient-centered care
  ▪ Patient navigation
  ▪ Access to care
  ▪ Team-based care
  ▪ Continual Improvement
Radiation Oncology Services

• Care Delivery Assessment
  • Enhanced Access
  • Clinical Expertise
  • Quality and Safety
  • Team-Based Care
  • Patient-Centered Care

• Quality Assessment
  • Safe Environment
  • Patient Consent and Education
  • Ordering, Planning and Administering Treatment
  • Monitoring after Treatment, Including Toxicities and Complications
Additional Clinical Care Delivery Services

- **Staff Education Training Programs (Medical Oncology)**
  - Quality and safety in chemotherapy administration

- **Advanced Practice Provider Program**
  - Development and optimization of APP model

- **Quality Recognition**
  - ASCO/ONS Chemotherapy Administration Safety Standards readiness assessment/readiness support
  - ACR and APEx accreditation readiness assessment/readiness support
  - Oncology Medical Home recognition readiness
Staff Educational Training Programs (Medical Oncology)

• ASCO/ONS Chemotherapy Administration Safety Standards
• Oncology nursing resource
• Establish and Implement
  ▪ Chemotherapy administration policies and procedures
  ▪ Nurse orientation and training programs
  ▪ Nursing role job descriptions
  ▪ Nursing role competency assessments
  ▪ Infusion nurse personal protective equipment policies
  ▪ Specific practice needs (e.g., COVID-19 response and care delivery, patient navigation, care coordination)
Advanced Practice Provider Program
Access to Care, Team-based Care, and Overall Support for Patient Care

Exploring Roles, Responsibilities, and Care Models

- Specialty Roles (e.g., survivorship, palliative care, genetic counseling)
- Hospitalized Patient Support
- Patient Family Counseling
- Advance Care Planning
- Care Planning/ Patient Education
- Treatment & Follow-up Visits
- Oral Oncolytic Management
- Same Day Urgent Visits

ASCO Consulting Services

Summary

• Expertise in Oncology
• Comprehensive Evaluation
• ASCO and Practice Engagement
• Report & Optimization Plan

For more information regarding ASCO Consulting Services, contact the program manager at veronica.gorman@asco.org
Questions?
2020 Survey of Oncology Practice Operations

Comprehensive reporting on staffing, resources, productivity, expenses, and revenue

Open now through Friday, October 16

For more information, email David.Harter@asco.org or visit: practice.asco.org >> Practice Support >> Practice Benchmarking
Upcoming Events

• Next Practice Leadership Call
  ▪ Thursday November 19
  ▪ 4:00pm EST
  ▪ Topic: Preparing For 2021
    o Previous speakers will return to review their previous presentations and help practices prepare for the impact:
      • Deactivate old codes
      • Add new codes and factors
      • Training practice providers
      • Updating EMR systems
    o (Tentative) CMMI’s new Radiation Oncology (RO) Model
Practice Leadership Calls

The PracticeNET program hosts Practice Leadership calls on the 3rd Thursday of many months to address issues relevant to oncology practice. Anyone is welcome to join, but these calls are primarily aimed at practice administrators and other practice leadership.

Click here to view and register for upcoming Practice Leadership calls.

See below for archives of past calls.

August 2020 Practice Leadership Call

• Slides from the August 2020 Practice Leadership call
• Watch the full video of the August 2020 call
• Visit the CMS 2021 Proposed Rule for MPFS Page
• Visit the CMS 2021 Proposed Rule for OPPS Page