

Chemotherapy Stewardship

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In response to the increasing complexity of oncolytic agents, the associated economic burden on the patient and health system, and the intricacies associated with alternative payment

models (APMs), I suggest the need for widespread establishment of chemotherapy stewardship services. An example of effective stewardship practice in healthcare is antimicrobial stewardship, which aims to define appropriate antimicrobial agents for use in patients and decrease patterns of the emergence of resistance and cost. The Centers for Disease Control and Prevention states, "Antimicrobial stewardship interventions have been proven to improve individual patient outcomes, reduce the overall burden of antibiotic resistance, and save healthcare dollars."¹ Outside of curbing rates of resistance, I suggest that the foundational scope of chemotherapy stewardship mirror that of antimicrobial stewardship, with the goal of improving patient outcomes and controlling cost by decreasing waste and improving resource utilization.

Pharmacist review and intervention with patients in the outpatient setting has been shown to reduce the total cost of cancer care.² Specifically, pharmacists can prospectively review treatment plans to:

- Determine whether there are any clinical issues (dose reductions or modifications) that may lead to inappropriate therapy or augmented toxicity.
- Identify safety issues with chemotherapy and under- or over-utilization of supportive care medications.
- Review off-label use and appropriately referenced data to help improve the reimbursement process, reducing waste for the hospital system, and potentially saving patients from denial of treatment.
- Confirm that the appropriate structures and processes are in place to ensure that treatment regimens can be provided safely in the outpatient setting. Transitioning certain chemotherapy regimens from the inpatient setting to the outpatient setting can lead to cost reductions.³

These review methods are becoming increasingly important since the advent of APMs, which require education and counsel-

ing that pharmacists are uniquely qualified and positioned to provide.

Chemotherapy stewardship is a process in which a pre-selected list of chemotherapy agents is restricted to approval for use by the stewardship team. It should include:

- **Clinical Assessment:** Is the use of this agent within established evidence-based guidelines? Is there an established and recognized clinical benefit for use? If not, is there a published rationale supporting its use? Is supportive care maximized to prevent toxicity and the potential need for healthcare resources to manage adverse events? Is the dose appropriate based on organ function to prevent toxicity and the potential need for healthcare resources to manage sequelae?
- **Cost Assessment:** Is the agent the most cost-effective medication available to treat the patient's indication (while maintaining prescriber authority and autonomy)? Can the therapy be given in an ambulatory setting? Can the dose be rounded to the nearest vial size increment? Is there documentation of insurance approval? If not or if the patient has a burdensome co-pay, are programs available to help alleviate the financial burden to patients and the health system?

Pharmacy steward champions can also assess goal(s) of therapy and weigh the benefits of aggressive therapy as part of end-of-life care. In short, widespread adoption of oncology pharmacist-driven chemotherapy stewardship programs would help ensure safe and effective treatment of oncology patients, while managing limited healthcare resources.



References

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3. McBride A, et al. Implementation of a pharmacy-managed program for the transition of chemotherapy to the outpatient setting. *Am J Health Syst Pharm*. 2018;75(9):e246-e258.

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