

Drug Shortage Management in Community Oncology: Ensuring Access to Vital Medications

Cassandra Perkey, Pharm.D., BCOP; Brooke Peters, Pharm.D., BCOP; Bradley Winegar, Pharm.D.; Manale Maksour, Pharm.D., BCPS;
Melody Chang, RPh, MBA, BCOP; Camilo Rodriguez, CPhT-Adv, CSPT, PRS; Darell Connor, MHA, FWSPA; Jenny Li, Pharm.D., BCPS, BCOP
Department of Pharmacy Operations



Introduction

Shortages of backbone chemotherapy drugs such as carboplatin, cisplatin, and paclitaxel make a profound impact on the healthcare system as they treat several types of cancer, often with curative intent.^{1,2} Scarcity of chemotherapy affects quality of patient care as providers find themselves delaying treatment, reducing doses, or choosing alternative regimens unaffected by shortages, potentially sacrificing efficacy.

Community oncology practices can be disproportionately affected as larger health systems often have more persuasion with distributors.³ Thus, it is crucial that community practices have plans in place for shortage management and communication. This report summarizes the management strategies used by AON in the setting of recent chemotherapy shortages.

Collaboration

Drug Shortage Committee

Quick action by the drug shortage committee at AON is vital to the success of the network amid a shortage. The committee brings together all key stakeholders in shortage management to bring an efficient, organized approach and consistent communication across the network (see figure 1).

Figure 1: Drug Shortage Committee stakeholders



Inventory Management and Clinical Optimization

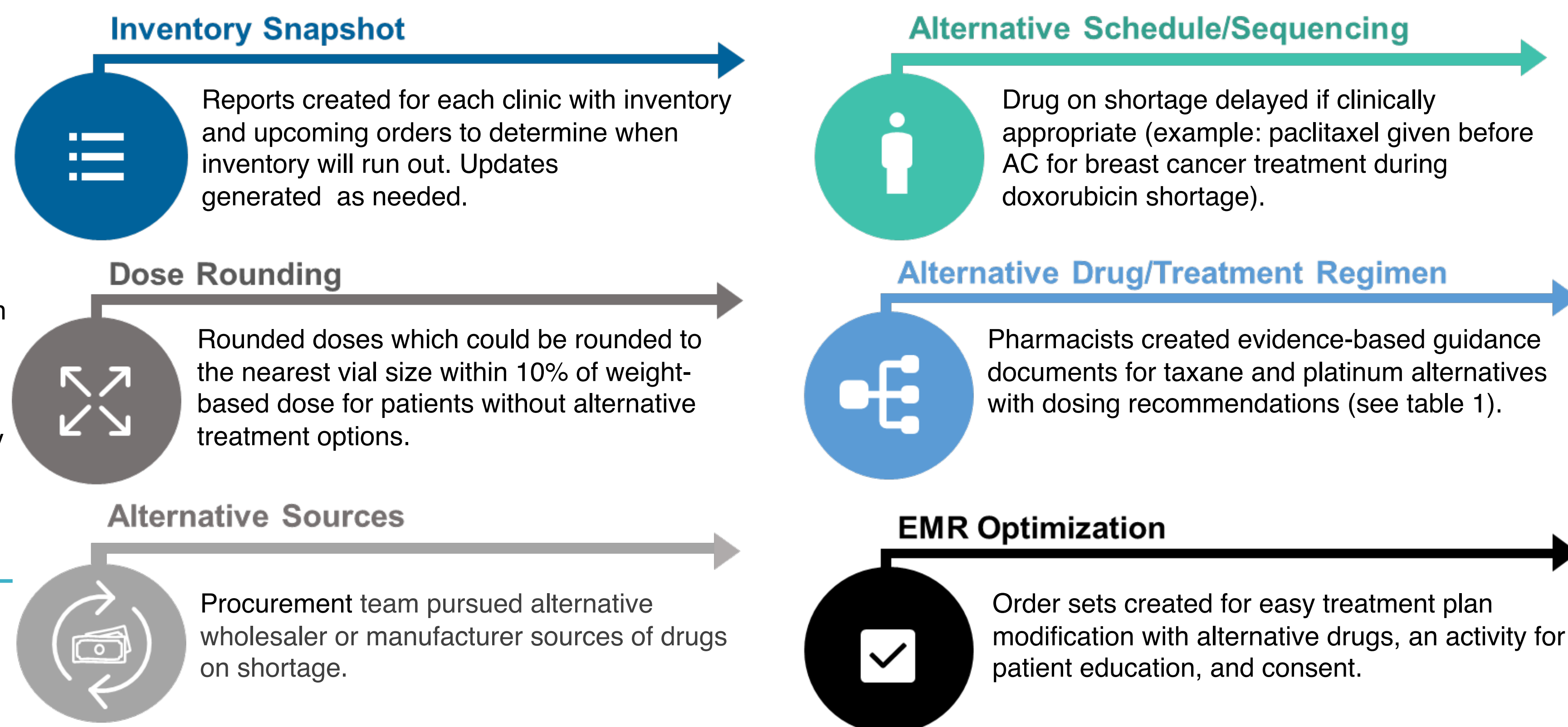


Table 1: Sample disease state from alternative therapies guidance for platinum shortage with NCCN evidence blocks

Disease State	Cisplatin Regimen	Carboplatin Regimen	Oxaliplatin Regimen	Non-platinum Regimen
Ovarian Platinum Sensitive Recurrence	<p>Cisplatin 30 mg/m² D1,8 and gemcitabine 600-750 mg/m² D1,8 q 3 weeks</p> <p>Cat 2A pref. v1.2023</p> <p>Cisplatin 75 mg/m² D1 q 3 weeks</p> <p>Cat 2A v1.2023</p>	<p>Carboplatin AUC 4 D1 and gemcitabine 800-1000 mg/m² D1,8 ± bevacizumab 15 mg/kg D1 q 3 weeks</p> <p>Cat 2A pref. v1.2023</p> <p>Carboplatin AUC 5 D1 and liposomal doxorubicin 30 mg/m² D1 ± bevacizumab 10 mg/kg D1,15 q 4 weeks</p> <p>Cat 2A pref. v1.2023</p> <p>Carboplatin AUC 5-6 D1 and paclitaxel 175 mg/m² D1 ± bevacizumab 7.5 - 15 mg/kg D1 q 3 weeks</p> <p>Cat 2A pref. v1.2023</p>	<p>Oxaliplatin 130 mg/m² q 3 weeks</p> <p>Cat 2A v1.2023</p> <p>Phase 2 trials data: Paclitaxel 175 mg/m² and oxaliplatin 130 mg/m² q 3 weeks (Ann Oncol. 2006)</p> <p>Gemcitabine 1000 mg/m² D1,8 and oxaliplatin 100 mg/m² D1 q 3 weeks (Br J Cancer. 2009; J Egypt Natl Canc Inst. 2016)</p>	<p>Bevacizumab 15 mg/kg D1 q3 wk</p> <p>Cat 2A pref. v1.2023</p> <p>See NCCN guidelines for additional single agent cytotoxic chemotherapy options.</p> <p>Mucinous carcinoma: see Ovarian 1L non-platinum regimens</p> <p>Hormone therapy Anastrozole, letrozole, exemestane, leuprolide, megestrol, tamoxifen Cat 2A v1.2023</p> <p>Immunotherapy Dostarlimab for dMMR/MSI-H Pembrolizumab for dMMR/MSI-H or TMB-high Cat 2A v1.2023</p>

Communication

Clinic Communication

- Urgent messages sent to all providers, pharmacy staff, clinical nurse managers, office managers, financial managers, revenue cycle, and nurses with critical updates from the drug shortage committee.
- Shortage status provided biweekly through Pharmacy and Therapeutics committee newsletter, and weekly provider newsletter.

Patient Education

- Created a standard patient letter explaining various shortage causes, potential impact on plan of care, and if applicable, option for use of FDA-approved imported chemotherapy drugs from overseas manufacturers.

Payor Communication

- Provided financial teams with national shortage communications for payor appeals.

Conclusion

Pharmacists play a pivotal role in mitigating the impact of chemotherapy shortages by ensuring patients have access to vital medications and optimizing regimens.⁴ Their expertise in drug substitution, dosage adjustments, and patient support is essential for maintaining the continuity and effectiveness of cancer treatments during these challenging times.

References

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Figure 2: American Oncology Network Locations

