



Keeping you “in the know” in the ASC industry

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Medication Shortages and How to Handle Them

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The Reality



Medication Shortages are **REAL**
and not getting any better



Have a plan



Take a
systematic
approach



Communicate



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The Statistics



Medication Shortages are **REAL**
and not getting any better



2017 = 146

2018 = 186



27%

*Injectable medications = 55%



Shortages may add \$230 million to annual U.S. drug costs



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Why is this happening?

- Increase in regulatory enforcement
- Disruption in supply of raw materials
- Recalls
- Manufacturing discontinuing product lines



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Have a Plan

- Secure multiple vendors
- Tap into local Network (DQSA - Pedigree/Recalls)
- Find clinical alternatives
- Inform Staff/MD/Providers (Communicate)



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Emergency Cart Medication Shortage

- Inform Leadership
- Identify Alternative
- Quarantine
- When was it last ordered?



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Put a System in Place

- Is the person in charge of ordering trained in clinical decision making and aware of the use of the medications?
- Monitor status of current shortages
 - <https://www.ashp.org/Drug-Shortages/Current-Shortages>
- Track with Medication Shortage Monitor
- Communicate



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ASHP: Monitor and Report Shortages

The screenshot shows the ASHP website interface. On the left, there is a section titled "Current Drug Shortages" with a "VIEW RELATED LINKS" dropdown, "Drug Shortages and Management" text, a "REPORT A SHORTAGE" button, and a "Drug Shortages" dropdown menu with a "SELECT" option. On the right, there is a search bar and a table of drug shortages.

GENERIC NAME	REVISION DATE
0.9% Sodium Chloride Small Volume Bags (< 150 mL)	Oct 04, 2019
14.6% Sodium Chloride Concentrated Solution for Injection	Nov 05, 2019
23.4% Sodium Chloride Injection	Nov 15, 2019
25% Dextrose Injection	Oct 22, 2019
5% Dextrose Injection (PVC-free and DEHP-free)	Nov 06, 2019
5% Lidocaine and 7.5% Dextrose Injection	Sep 19, 2019
50% Dextrose Injection	Nov 04, 2019
Acetazolamide Injection	Oct 22, 2019
Acetylcysteine Oral and Inhalation Solution	Nov 07, 2019
Acyclovir Injection	Nov 15, 2019

Showing 1 to 10 of 207 entries
Previous 1 2 3 4 5 ... 21 Next

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Medication Shortage Monitor

The screenshot shows a "Medication Shortage Monitor" form. It features a table with the following columns: Medication, Strength, Supplier, Date of Attempt, Date of Attempt, Date of Attempt, Date of Attempt, and Resolution Date. The table is currently empty.

Medication	Strength	Supplier	Date of Attempt	Date of Attempt	Date of Attempt	Date of Attempt	Resolution Date

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Communication is Key



Atropine 0.4mg/ml
Normally Stocked

Atropine 1mg/ml
Unusual/New
Concentration



These look almost identical except the color. If you haven't been informed that it is now coming in a new concentration, you may figure its just a different color cap.



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Communication is Key



Midazolam 2mg/2ml
Normally Stocked

Midazolam 10mg/2ml
Unusual
Concentration



These look almost identical except the color. If you don't know the color correlates to the concentration, you may figure its just a different color cap.



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Warning Labels

Midazolam has a black box warning not to exceed 2.5mg/dose



- Create your own warning labels.
- Consider making each one unique!



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References

- New drug shortages rose 27% in 2018, Becker's Hospital Review, Alia Paavola, January 18, 2019
- Changes in Drug Pricing After Drug Shortages in the United States, Inmaculada Hernandez, PharmD, PhD; Shivani Sampathkumar, BS; Chester B. Good, MD, MPH; Aaron S. Kesselheim, MD, JD, MPH; William H. Shrank, MD, MSHS, Ann Intern Med. 2019;170(1):74-76.
- <https://www.ashp.org/Drug-Shortages/Current-Shortages>
- Why Are Generic Drugs Getting More Expensive?, February 20, 2015 Retrieved from <http://www.drugchannels.net/2015/02/why-are-generic-drugs-getting-more.html>
- Elsevier Clinical Solutions, White Paper on Generic Drug Price Increases: Causes and Impact, February 2015 Retrieved from www.clinicaldecisionsupport.com



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Thank you!



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MEDICATION MANAGEMENT: OVERVIEW

CMS Conditions for Coverage require ASCs to comply with the following standards:

§416.48 Condition for Coverage: Pharmaceutical Services

The ASC must provide drugs and biologicals in a safe and effective manner, in accordance with accepted professional practice, and under the direction of an individual designated responsible for pharmaceutical services.

§416.48(a) Standard: Administration of Drugs

Drugs must be prepared and administered according to established policies and acceptable standards of practice

- (1) Adverse reactions must be reported to the physician responsible for the patient and must be documented in the record.
- (2) Blood and blood products must be administered only by physicians or registered nurses.
- (3) Orders given orally for drugs and biologicals must be followed by a written order and signed by the prescribing physician.

This condition covers a lot. We recommend that you read the specific interpretative guidelines at [Compliance/Regulations/CIC Overview](#).

CMS requires a consulting pharmacist who is "routinely present". We recommend quarterly visits. The link below provides an example of the documentation that should be captured during each visit.

SEARCH

MEDICATION MANAGEMENT

Overview

- ASC Pharmacy Newsletter
- Compounding
- Controlled Substances
- Eye Drops
- Formulary
- Medication Labeling
- Medication Safety
- Resources



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The 2019 Webinar Line Up!

DATE		CE	WEBINAR TOPIC	SPEAKER
December 20	60 min	✓	Informed Consent	Debra Stinchcomb Will Miller

www.ProgressiveSurgicalSolutions.com/webinars

2020 Line up coming soon!



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