

ASHP Survey: Adoption of Tech Solutions Increasing in Hospital Pharmacies

Hospital pharmacies continue to adopt technology solutions to facilitate safe, accurate and efficient dispensing and management of drugs, according to the 2023 ASHP National Survey of Pharmacy Practice in Hospital Settings: Operations and Technology ([Am J Health Syst Pharm](#) 2024 May 23. doi:10.1093/ajhp/zxae118). This ranges from the near-universal adoption of automated dispensing cabinets (ADCs) to the growing use of barcode scanning, radiofrequency identification (RFID) tags and workflow management solutions for sterile compounding.

Only 2.2% of hospitals do not have ADCs on patient care units, a decline from 5.9% in 2020. Most hospitals with ADCs (78.7%) use individually secured lidded pockets as the primary storage configuration; in 2008, only 51.5% of hospitals used lidded pockets. “These locked lidded pockets are more secure than the matrix drawer configurations, in which you may have 20 to 30 medications to select from, even after you have keyed in the drug correctly to open the ADC,” said Michael Ganio, PharmD, ASHP’s senior director of pharmacy practice and quality. “Not only are they useful for preventing errors by limiting selection to the correct medication, but they are also excellent in managing controlled substances and preventing drug diversion.”

New to the survey this year is a question about the adoption of automated anesthesia workstation cabinets in operating rooms. The researchers found that 64.7% of all hospitals employ such workstations, and many of them (45.9%) have a label printer. “This is a relatively new technology, and important in an area that can be very busy,” Dr. Ganio said. “ORs have lots of safety controls, but when medications are needed quickly, sometimes in an emergency, having technology to guide the correct medication selection can significantly enhance safety.”

Nearly three-quarters (73.6%) of hospitals surveyed use some form of machine-readable coding to verify doses during dispensing in the pharmacy, with larger facilities using scanning during dispensing more than smaller facilities. Overall, 22.3% of hospitals use RFID tags, with 17.0% using RFID tags in medication kits or trays, 8.0% in a contracted consignment system, and 0.8% for medication location and delivery tracking.

Hospitals are also continuing to adopt technology solutions for sterile compounding at a rapid pace, Dr. Ganio said. When ASHP first included this question in 2017, 64% of hospitals did not use any technologies for sterile product preparation. “This year, we found that only 37% of them were not doing so,” he said. “That’s pretty remarkable, since that time period included the COVID-19 pandemic.”

He sees even more extensive technology adoption on the horizon. “Given the recent implementation of [USP’s] updated General Chapter <797>, we might also anticipate even more stepped-up adoption of barcode scanning, IV workflow management software and gravimetrics in sterile compounding going forward,” Dr. Ganio said. “That new chapter contains requirements for master formulation and compounding records, and these technologies make it much more standardized and streamlined to capture exactly what ingredients are going into a compounded preparation.”

Report: Illegal Online Pharmacies Pose Serious Patient Risk

By Gina Shaw

Pharmacists should be aware of the risk to their patients from illegal online “pharmacies,” warned experts with managed intelligence company Nisos, which recently published a report highlighting how illegal pharmaceutical sellers on social media avoid detection and moderation by redirecting users to messaging apps and illegitimate online pharmacies (bit.ly/4cCgnf9).

The Nisos report identified several common tactics used by these online sellers, including:

- avoiding overt advertising and drug sales on public social media platforms such as Instagram, X and Meta by providing off-platform redirects to messaging apps, including Snapchat, Telegram and Wickr;

- sellers in the same network operating accounts across multiple social media platforms to reach a wider audience; and
- use of common drug names in posted content and account information, because drug names are searchable across most traditional social media platforms.

Drugs recently offered on one Telegram channel ranged from antibiotics such as amoxicillin and doxycycline to stimulants commonly used for ADHD, including Concerta (Janssen) and Ritalin (Novartis) (both methylphenidate formulations), as well as many opioids and other drugs that are misused commonly, such as fentanyl, hydrocodone and oxycodone. “This illegal online drug trade is definitely not focused on drugs that are illegal in the U.S.,” said Vincas Cižiunas, an intelligence fellow at Nisos. “It typically involves drugs that are readily available at pharmacies via prescription.”

Particularly risky is the online sale of Farmapram, a Mexican version of alprazolam (Xanax, Pfizer). “Unlike the [FDA’s] regulation of Xanax, the Mexican government does not regulate Farmapram, commonly known as Mexican Xanax bars or Mexican Xanax,” Mr. Cižiunas explained. The Nisos report notes that Farmapram is available for purchase without a prescription, is significantly cheaper than Xanax and can legally be brought across the U.S.-Mexico border under certain amounts. “Mexican cartels are also known to manufacture counterfeit Farmapram laced with fentanyl and sell it at their pharmacy fronts. Consumers could put themselves in serious danger purchasing this counterfeit drug.”

In 2019, the Drug Enforcement Administration (DEA) released a Public Safety Alert warning about counterfeit prescription pills containing deadly amounts of fentanyl, most of which originate in Mexico ([bit.ly/3zykudA](https://www.dea.gov/public-safety-alert-counterfeit-prescription-pills-containing-deadly-amounts-of-fentanyl)). “Based on a sampling of tablets seized nationwide between January and March 2019, DEA found that 27 percent contained potentially lethal doses of fentanyl,” the warning said.

Mr. Cižiunas advised pharmacists to be alert to signs that a patient might be seeking medication under the table—such as growing concerns over the high cost of their prescriptions, or suddenly stopping refills of ongoing prescriptions—and inform them of the risks. “There is serious danger that most of these nonprescription medications from illegal online pharmacies are counterfeit and laced with dangerous substances,” he said.

A 2021 survey conducted by the American Pharmacists Association found that some pharmacists had experience with such risks affecting their patients (*Med Access Point Care* 2021 Apr 18. <https://doi.org/10.1177/23992026211005642>). “Twenty-three pharmacists reported knowledge of an adverse impact experienced by a patient related to medications obtained online; examples include a patient receiving ‘counterfeit Eliquis [apixaban, Bristol Myers Squibb/Pfizer] confirmed by the manufacturer,’ a patient experiencing ‘liver toxicity,’ and a patient receiving a benzodiazepine derivative powder that was estimated to have ‘ten times the recommended prescription dose.’”

But in the same survey, more than half of pharmacists (58%) reported a lack of confidence in their ability to counsel patients on the identification of illegal pharmacy websites, and fewer than 60% of pharmacists were able to accurately identify the legitimacy of a webpage based on visual characteristics.

News Source:

<https://www.pharmacypracticenews.com/Pharmacy-Technology-Report/Article/08-24/ASHP-Survey-Adoption-of-Tech-Solutions-Increasing-in-Hospital-Pharmacies/74415>