MEDICATION MISTAKES AND MISUSE ENDANGER OUR HEALTH

TOGETHER, WE CAN FOSTER CHANGES THAT IMPROVE PATIENT SAFETY

Medication errors harm at least **1.5 million** people in the U.S. every year.¹

7,000 to **9,000** people in the U.S. die each year due to a medication error.²

**9.7 million** patients misused prescription pain relievers in 2019 alone³, and more than **14,000** died that year from an overdose.⁴

We’re working to enable healthcare providers to electronically access and share timely, accurate information to help prevent medication errors and misuse of high-risk drugs such as opioids.
A medication error, according to a frequently cited definition, is any preventable event that may cause or lead to inappropriate medication use or patient harm, while the medication is in the control of the healthcare professional, patient, or consumer. Errors can occur at any point—from when the medication is prescribed to monitoring a patient’s response to the therapy. There are many causes. Some stem from human error and some result from technology or software issues.

Inadequate communication and monitoring systems, poor information flow, unavailable or inaccurate patient information, and inaccurate patient identification are all causes of errors. These issues also impact the ability to identify and intervene in medication misuse and abuse.

These standards-based technology solutions could further increase patient safety

Standards are critical to each of these solutions, making it possible for providers across the healthcare system to access and exchange timely and reliable information essential for medication safety.

- **CancelRx Transaction in NCPDP’s SCRIPT Standard for ePrescribing**
  - Prevents patients from mistakenly receiving prescriptions their doctors intended to discontinue.
  - An electronic transaction is already available in the ePrescribing standard, but not widely used.
  - Enables prescribers to easily and quickly send an electronic message to the pharmacy to cancel a prescription that is no longer useful to the patient and may even be harmful.
  - Phone and fax communication methods currently used are not effective.

- **NCPDP Standards-based Facilitator Model for Prescription Drug Monitoring Programs**
  - National solution to combat the opioid crisis, available to be implemented.
  - Real-time, proactive notification to providers that a patient exhibits patterns of opioid abuse.
  - Enables providers to intervene before an opioid is prescribed and dispensed.
  - Helps ensure access to pain medication for patients with valid medical needs.
  - Uses existing NCPDP standards widely used in the healthcare industry and addresses deficiencies in current prescription drug monitoring programs (PDMPs) across the U.S.

- **Universal Patient Identifier (UPI), powered by Experian Health UIM and NCPDP Standards™**
  - Vendor- and provider-neutral solution for accurately managing patient identification across the healthcare system.
  - Helps prevent misidentification of patients and the medical and medication errors that can result.
  - Every person in the U.S. population has been assigned a unique UPI, powered by Experian Health UIM and NCPDP Standards. The UPI is not known to patients or providers in an effort to prevent misuse of the identifier.
  - The UPI is a key asset to NCPDP’s National Facilitator Model for PDMP.

Widespread use of standardized information technology has reduced some errors

Data standards and information technology have proven useful in decreasing medication errors. The most well-known example is ePrescribing, which enables physicians and other prescribers to send prescriptions electronically to the pharmacy, using standardized data inputs. The National Council for Prescription Drug Programs (NCPDP) developed the standard that makes ePrescribing possible and effective. Today, ePrescribing is used for 80% of all prescriptions, significantly reducing the rate of medication errors from things like illegible prescriber handwriting. However, some of the transactions available in ePrescribing are still not widely used and could further reduce medication errors.

Enhancing patient safety is an NCPDP Foundation key initiative

The NCPDP Foundation, a nonprofit charitable organization, funds research to validate the effectiveness of standards-based solutions that can help reduce medication errors, misuse and abuse, and increase patient safety. Proving value helps accelerate adoption of these solutions.

- **Foundation-funded research proves value of this underused standards solution**
  - The NCPDP Foundation recently funded two research pilots of the underused CancelRx ePrescribing transaction that enables prescribers to send an electronic message to the pharmacy to cancel a prescription that patients should no longer use. Here’s what we learned to support increased adoption of this transaction.

  - Prior to implementing CancelRx, 3.8% of prescriptions cancelled by prescribers still got into the hands of patients. (Johns Hopkins Medicine study)
  - Absent the use of CancelRx, this translates to more than 10 million prescriptions annually being dispensed to patients when their physician intended them to be cancelled.
  - Use of CancelRx also prevents unnecessary opioid dispensing.
  - After implementing CancelRx, 100% of physicians contacted pharmacies when cancelling controlled substance prescriptions, while only 47% did so before CancelRx was implemented. (University of Wisconsin-Madison School of Pharmacy study)

- **More research and industry education is needed**
  - We’re looking to fund a research pilot to study the NCPDP Standards-based Facilitator Model for PDMP. We also want to fund a pilot to demonstrate that patients are accurately identified using the UPI, powered by Experian Health UIM and NCPDP Standards. And there will be more as we identify other standards-based opportunities to increase patient safety and protect all of us from medication mishaps.

In a world facing new health challenges every day, your support of the NCPDP Foundation has never been more important.

1. Institute of Medicine, Preventing Medication Errors, 2006
2. National Center for Biotechnology Information, Medication Dispensing Errors and Pre
3. Substance Abuse and Mental Health Services Administration (SAMHSA), 2019 Survey on Drug Use and Health
4. National Institute on Drug Abuse, Trends & Statistics, Overdose Death Rate

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