

Use of Technology to Reduce Errors

Portuguese Association of Hospital Pharmacists
Medicamentos: Risco mínimo, Segurança Máxima!

October 28, 2018
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Presented by:

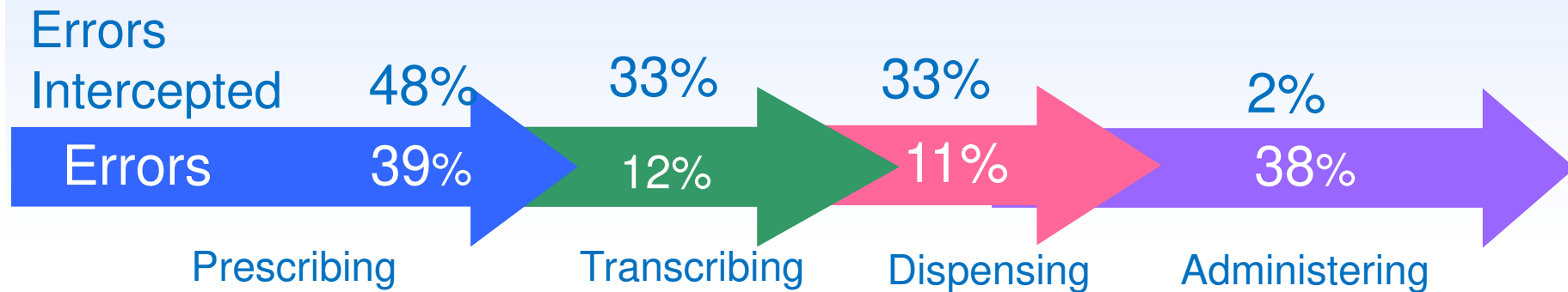
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Institute for Safe Medication Practices



Medication Administration



Barcode Medication Administration

- Provides a check immediately prior to administration
- Offers decision support at the point of administration
- Identifies many more errors than previously reported



Barcode Medication Administration

- Unique identifier(s) linked to medications in electronic medical record
- Barcode added to patient identification band
- During medication administration, the nurse, respiratory therapist or other practitioner scans the medication package as a final verification
- Alerts to wrong drug, dose, time



154,976

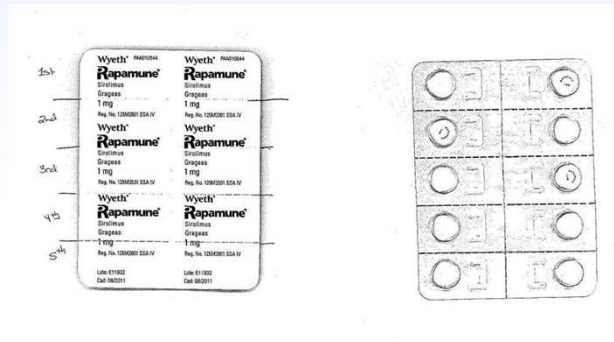
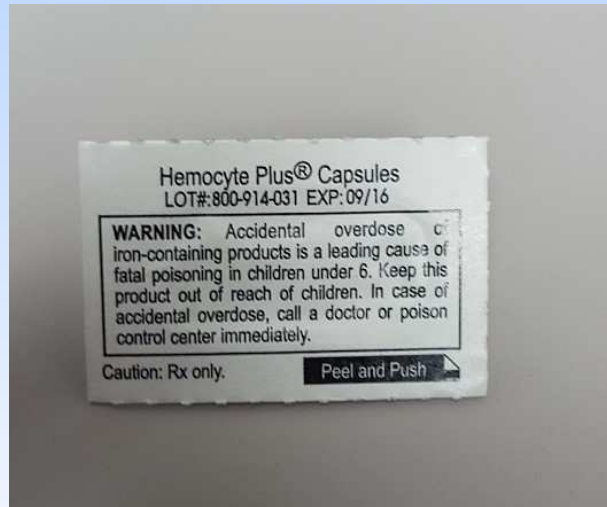
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Barcode Challenges Due to Packaging



Challenges

- Printers
 - Label size, print resolution
- Identification bands
 - Specific patients: neonates, pediatric, psychiatry, burn
 - Extra bands
 - Reprinting of bands



Challenges

- Scanners
 - Battery life
 - Durability
 - Speed
 - Tethered or cordless
- Computers
 - Mobile
 - Fixed
 - Movable arms
- Wireless network



BCMA Risks

- No barcode or wrong barcode
 - Pharmacy applies barcode label to wrong product
- “Back” scanning
- “Listening for the beep”
 - Scanning without looking at the alerts
- Timing
- Staff may not recognize alerts as warnings
- Will not prevent all errors
- Must still use clinical judgement



Best Practices

- Scan the identification band that the patient is wearing
- Provide a barcode for all medications
- Resolve barcode issues/problems quickly
- Measure scanning rates
 - Identify barriers to scanning
- Measure good catches