

## Medication Without Harm



WHO Global Patient Safety Challenge

## Practical examples - Addressing medication safety in high-risk situations at the organizational level

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# Addressing high-alert medication safety at the organizational level

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WHO Global Patient Safety Challenge: *Medication Without Harm*



## A Trusted Partner

**Strengthening medication safety through timely learning, sharing, and acting to improve health care.**

ISMP Canada is a national, independent, not-for-profit organization that purposefully partners with organizations, practitioners, consumers, and caregivers to advance medication safety in all healthcare settings.



For over 20 years...



# High-Alert and High Risk

Know your High-Alert Medications

Know your High-Alert Situations

Know your High-Alert Populations



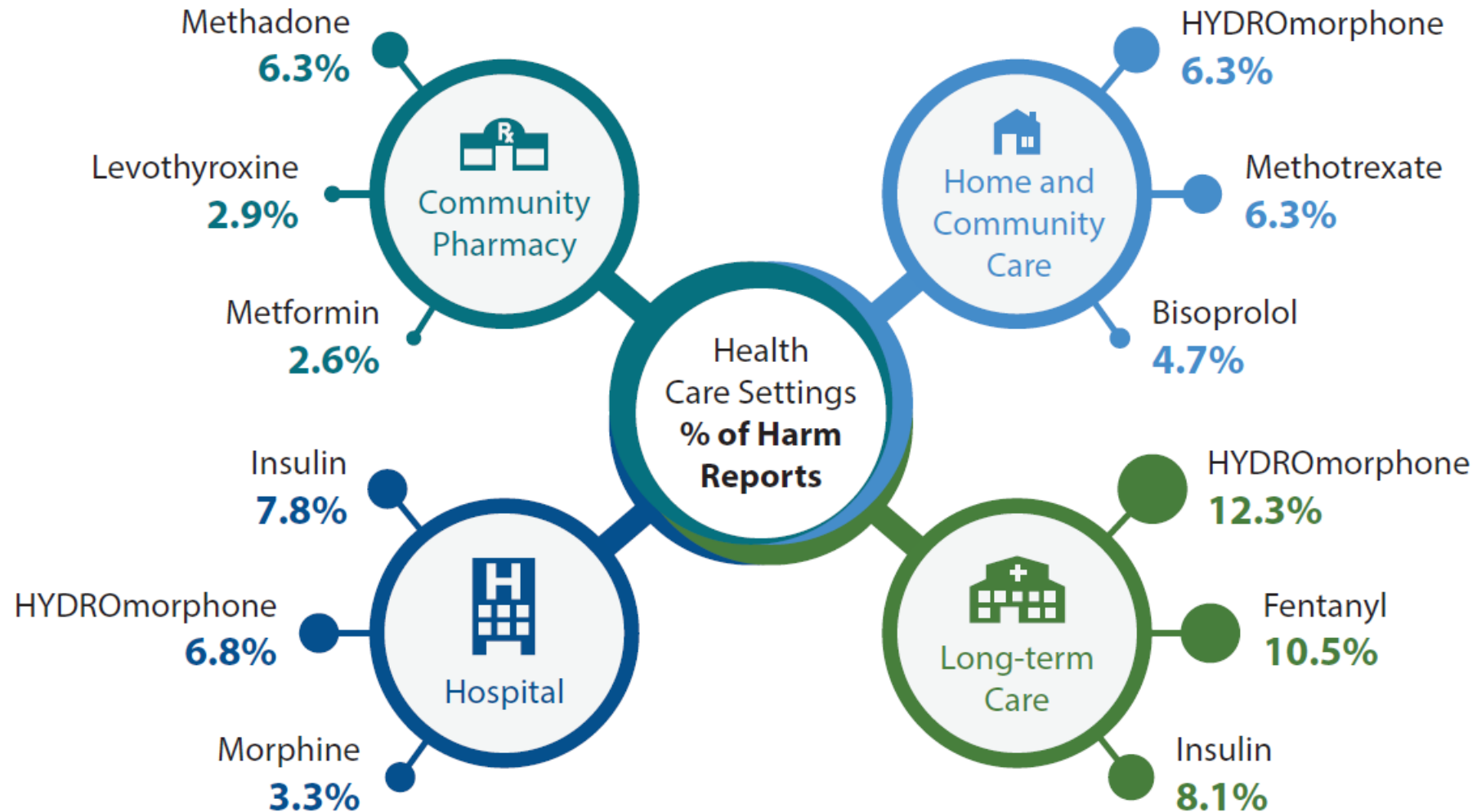
# High-Alert Medications

## Your list of High Alert/High Risk Medicines

- Create your organization's list based on your context
- Raise awareness
- Update regularly



# High-Alert Medications





# High-Alert Medications

Your High-Risk/High-Alert Medication List is only a list of your  
High-Risk/High Alert medications



# High-Alert Medications



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## FEATURED ARTICLES

# Your High-Alert Medication List—Relatively Useless Without Associated Risk-Reduction Strategies

April 4, 2013



**Problem:** Have you ever watched the 1993 movie, **Groundhog Day**? Bill Murray plays Phil Connors, a television news reporter who finds himself reliving the same day over and over again—a much-hated assignment covering the annual Groundhog Day event in Punxsutawney, PA. Well, at times it feels like “Groundhog Day” when we hear about the same types of errors happening over and over again. Another patient with diabetes receives a 5-fold overdose

ISMP 2013 April 4





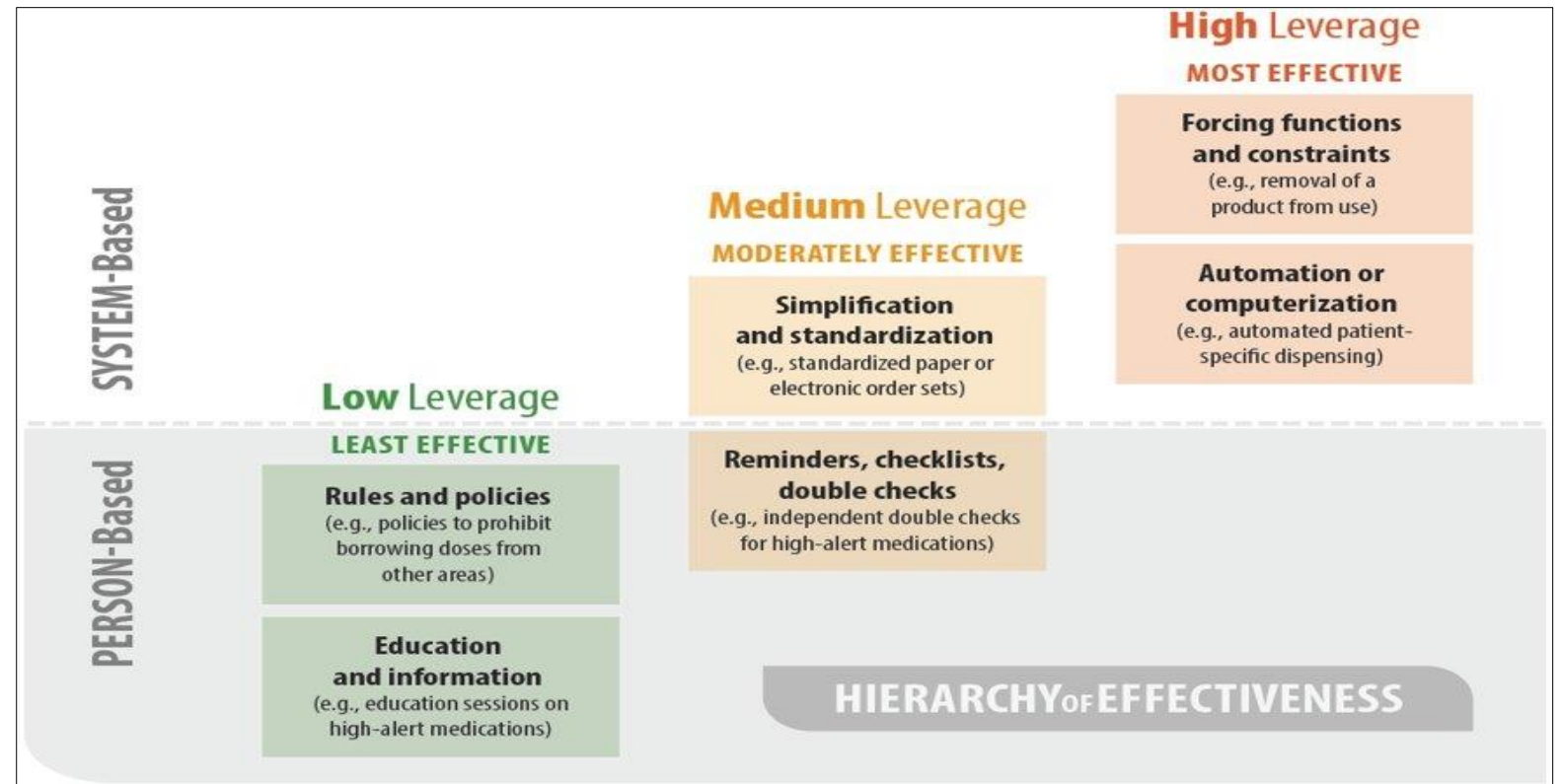
# High-Alert Medications Safeguards

To build effective strategies, you must understand  
why errors occur with these medications



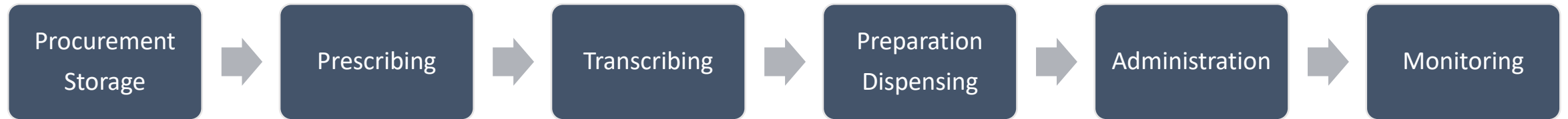
# High-Alert Medication Safeguards

The interventions must be effective and impactful



# High-Alert Medication Safeguards

You need multiple overlapping safeguards throughout the medication use process



**Upstream – Prevent error and harm**

**Downstream – Detect error and mitigate harm**



# High-Alert Medication Actions

- Safe Design
  - Forcing functions and fail safes
  - Barriers to mis-use
  - Limitation of access or use
  - Organizational factors
- Standardization
- Simplification
- Redundancies
- Checking procedures
- Reminders and alerts
- Person Centered
  - Training and practice
  - Situational awareness
  - Maintenance of competency
  - Performance factors
- Error Mitigation
  - Error detection
  - Error recovery
- Safety Culture Development



# High-Alert Medications



# High-Alert Medication IV Opioids

## Intravenous Opioids

Intrinsic potency and effects of medication

Often used in high alert situations

Often used in high alert populations





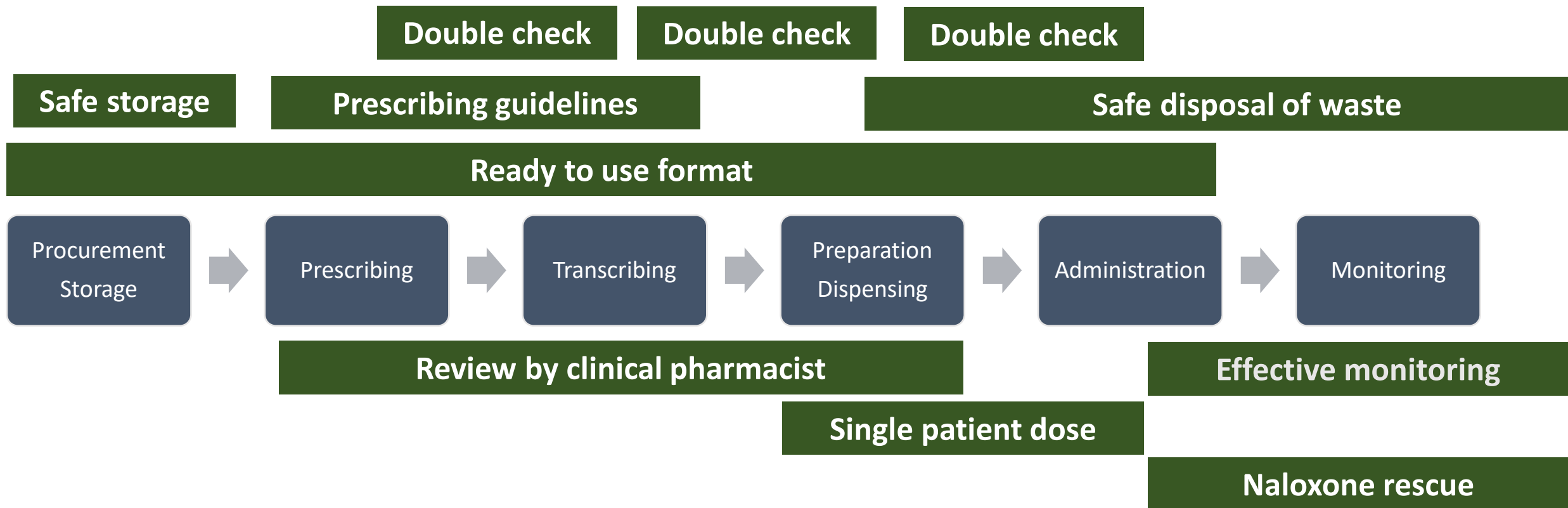
# High-Alert Medication IV Opioids

## Potential Interventions

- Purchase in ready to use form
- Store safely
- Prescribe according to guidelines and standards
- Review by clinical pharmacist
- Independent double check at dispensing
- Provided to nurse in single-patient unit-dose
- Independent double check at administration
- Robust monitoring protocols
- Safe and timely disposal of waste
- Availability of naloxone and rescue team



# High-Alert Medications



# High-Alert Medications

International Medication Safety  
Network (IMSN)

Global Targeted Medication Safety  
Best Practices



Global Targeted Medication Safety Best Practice 3

**Prevent inadvertent daily dosing of oral methotrexate for non-oncologic conditions.**

## Background

Methotrexate is a folate antimetabolite used in the treatment of neoplastic diseases and non-oncological conditions such as psoriasis, rheumatoid arthritis, and other conditions. When used to treat disorders such as psoriasis and rheumatoid arthritis, low doses are administered weekly by the oral route. However, for some cancer types, a more frequent or higher dose is used (1). At high doses, oral methotrexate is known to be associated with serious and sometimes fatal blood dyscrasias, but similar adverse outcomes have been associated with the



# High-Alert Medications

## Insulin

- Purchase in ready to use format
- Institute prescribing guidance
- Warning for duplicate therapies
- Dispense in smaller quantities
- Independent double checks during preparation, dispensing, and administration
- Ensure access to monitoring (capillary glucose, serum glucose)
- Ensure access to reversal agents (glucagon, dextrose, simple sugars)



# High-Alert Medications

## Anticoagulants

- Purchase in ready to use format
- Institute prescribing guidance
- Warning for duplicate therapies
- Dispense in smaller quantities
- Independent double checks during preparation, dispensing, and administration
- Ensure access to monitoring (INR)
- Ensure access to reversal agents



# High-Alert Medications Key Points

- Start with a High-Alert Medication list - do not end with a list
- Implement enhanced safeguards
  - Meaningful, impactful
  - Multiple, overlapping points in the process
- Evaluate, learn, and share





# High-Alert Medications

Thank you!

