Reducing harm from high-risk medicines

Webinar 3: Preventing error and harm
• Make sure you have your pc and phone connected (see instructions emailed to you)
• You will be muted during the webinar to reduce background noise
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Reducing harm from high-risk medicines
Webinar 3: Preventing error and harm

Chair: Gillian Bohm
Panel: Sandy Blake, Karen O’Keefe and Beth Loe
Introduction

• Campaign topic has focused on:
  – Identify error and harm
  – Mitigate error and harm
  – Partner with patients and whanau

• Now focusing on preventing error and harm specifically:
  – Learning from incidents
  – Considering human factors
  – Implementing system changes
Outline of webinar

• Panel will present on
  – Learning from incidents
  – Human factors
  – Systems change

• Discussion on two medication-related cases
  – Panel discussion
  – Opportunity for questions from the audience
Learning from events

Critical information when reporting an event/near miss

• Demographic and medication information
• What actually happened in detail
• Why it might have happened – contributory factors
• What do you see preventing it happening again
Learning from event review?

What changes are needed to prevent the same event /near miss

Recommendations:

• Need to be doable
• Include long term goals and immediate actions
• Try for a mix of low, medium and high leverage actions.
Human factors refer to environmental, organisational and job factors and individual characteristics that influence behaviour at work and may have an effect on health and safety.

Reason, 1990
Factor groupings

- **Patient factors**
  (What is there about this individual patient that increased the likelihood an error could occur?)

- **Task factors**
  (Were the tasks completed as per medication procedures/ policies?)

- **Care environment /workplace factors**
  (Was the failure of a barrier that may have protected the patient a possible factor?)

- **Staff factors**
  (Were staff numbers/skill mix or training a possible factor in this event?)

- **Communication factors**
  (Was lack of or misinterpretation of communication a factor in this event?)

- **Teamwork factors**
  (Did the team work together in a way that might have prevented this event?)

- **Organisational factors**
  (Did the culture/resource/policies of the organisation influence this event?)
Case 1: Methadone

- Adult patient admitted on and prescribed methadone 30mg twice a day
- Patient was in the process of being transferred to theatre and time was short
- Clinician administering the medicine was experienced, checker confirmed the dose without really looking
- Methadone liquid available in the Controlled Drug cupboard on the ward is 5mg/mL
- Patient is given a dose of 30mL methadone
- Patient required naloxone dose
Case 1 discussion

• What were some of the human factors within this case?
• What other factors not obvious could be considered?
• How does understanding the human factors help us prevent a similar case happening again?
What we know about making errors

- All of us make errors
- Errors are not made on purpose
- No one wants to admit errors if they know punishment is the result
- Error ≠ bad behavior
- Errors happen for a reason

Lucian Leape, MD
We look but often don’t see

• Aocddrnig to a rscheearch at Cmabrigde Uinervtisy, it deosn't mttae in waht oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht the frist and Isat ltteer be at the rghit pclae. The rset can be a toatl mses and you can sitll raed it wouthit porbelm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe.
Our medication systems are complex

- Important to focus on harm reduction.
- Improve the understanding of the human condition –
- Need to target multiple points in the process to improve safety
- Resilience engineering
Safety 2 thinking

“It is the dilemma of Safety Management and Risk Assessment that we inadvertently create the Problems of the Future by trying to solve the Challenges of the Present with the Mind-set (models, theories & methods) of the Past.”

Erik Hollnagel 2011
Case 2: Heparin open book

- Patient prescribed 3,000 units of heparin intravenously in an operating theatre
- Clinician administering was more familiar with 1mL ampoules of heparin (containing 5,000 units)
- Only ampoules available were 5mL (containing 25,000 units)
- Clinician misread label on the ampoule to be 2,500 units in 5mL
- Administered 6mL (30,000 units)
- Patient had excess bleeding and was administered reversal agent with no further harm
Case 2 discussion

• What were some of the system failures within this case?
• What other factors not obvious could be considered?
• What error-prevention strategies could be used?
• How does implementing system changes help us prevent a similar case happening again?
Summary

We’ve looked at ways to prevent error and harm through:

– Learning from incidents
– Considering human factors
– Implementing system changes
Links to other sources

Next webinar

• 24 March 8-9am
• Dr Alan Davis and Catherine Gerard will discuss the recently released opioids atlas of variation