

Medication Error Prevention

-its not a bitter pill to swallow

Melissa Bloomer

Nurse Educator, Peninsula Health VIC

Meagan Shannon

Nurse Educator, Peninsula Health VIC



Peninsula Health

- Located on the Mornington Peninsula
- Service a population of 300,000
- Over 2000 nurses (acute sector)



Background

- First developed in 2005 to address several issues within the organisation
 - Hospital incident forms and reporting mechanisms
 - The most common type of errors involving medications were practice related
 - Mandatory drug calculation package
 - Found to address drug calculation needs
 - NOT practice needs
 - Policies and Procedures
 - Did not address the practical needs of the nurse
 - Not utilised as a resource



Background

- Policies and procedures reviewed
 - Broken down to specific practice issues
 - Prescribing
 - Dispensing
 - Storage and safe keeping
 - Administration
 - Telephone orders
 - Nurse Initiation
 - Treatment of drugs of dependence



The prevention of medication errors in health care is the responsibility of all persons involved in the provision of medications.

The purpose of the Medication Error Prevention Program is *specifically* to address the nurse's roles and responsibilities in medication administration



Goals

1. To increase the nurses' understanding of the responsibilities of medication administration, and adherence to the 'Medication Management Clinical Procedures' at Peninsula Health
2. To improve nurses' practice in relation to medication administration
3. To improve patient safety



Program Design

Guy Wilkes -

Pharmacist

Medication Safety Officer

Meagan Shannon -

Nurse Educator



Program Design

Guy Wilkes -

Pharmacist

Medication Safety Officer

Meagan Shannon -

Nurse Educator

Melissa Bloomer -

Nurse Educator

Julie Metcalfe -

Pharmacist

Medication Safety Officer



Program Design

- Surveillance of nursing practice
 - Patient Identification
 - Doses Observed
 - Double checking
 - Telephone orders
 - Nurse Initiation



Program Design

- Surveillance of nursing practice

- Patient Identification
- Doses Observed
- Double checking
- Telephone orders
- Nurse Initiation



68% of doses were administered without adequate patient identification



Program Design

- Surveillance of nursing practice

- Patient Identification



68% of doses were administered without adequate patient identification

- Doses Observed



61% of doses were dispensed but ingestion was not observed

- Double checking

- Telephone orders

- Nurse Initiation



Program Design

- Surveillance of nursing practice

- Patient Identification



68% of doses were administered without adequate patient identification

- Doses Observed



61% of doses were dispensed but ingestion was not observed

- Double checking

- Telephone orders

- Nurse Initiation

- 'Medication Portfolio' Nurses



Program Design

- Allergy documentation
 - Poor practice issues across disciplines
 - Procedure reviewed and altered to reflect best practice in allergy documentation
- Nurse Initiation
 - Practice – *what is actually happening?*
 - Procedure reviewed and altered to reflect more stringent criteria for situations where nurses were able to nurse initiate



Program Design

- Role of the Medication Endorsed Division 2 RN
 - Review of Scope of Practice
 - Procedures altered to reflect their role in medication administration
 - Implications for practice
 - Team nursing vs. individual patient allocation
 - Appropriate allocation of patients



Implementation

- Bi-annual delivery
 - Sub-acute
 - Acute



Implementation

- Bi-annual delivery
 - Sub-acute
 - 2 months to complete
 - 99% attendance rate
 - Acute
 - 2000 nurses
 - Expected to take 12 months to complete



Implementation

- Two hour interactive education program
- Specifically addressed the needs of the RN Div 1 and Endorsed Div 2
- Uses actual incidents and 'real' data to illustrate the implications and importance of focussing on practice



Program Content

- Pre test
- Scenario workstations (4)
 - 'Blurb' to set the scene
 - Drug chart and associated documentation
 - Sample medications
- Workbook
- Group discussion
- Post test



Program Content

Scenario 1

*You are doing the 8am medicines on the 8th March.
Your next patient is Mrs Jones. Before giving the medications to Mrs Jones, you look them over one last time. Identify any problems.*



Program Content

Scenario 1

- Issues identified
 - Inadequate Patient identification
 - Observed ingestion
 - One patient at a time
 - Allergy documentation



Program Content

Scenario 2

- Issues identified
 - Error prone abbreviations
 - Micrograms
 - Units
 - Trailing and leading zeros
 - Action required
 - Nurse Initiated Medicines
 - Clinical Procedure



Program Content

Scenario 3

- Issues Identified
 - Double checking
 - Illegible orders

Humalog 44/24/64



Program Content

Scenario 4

- Issues Identified
 - Telephone orders
 - Role of the first and second nurse
 - Identification of medication
 - Incomplete packaging and Illegible labelling
 - Altering medications
 - Halving and crushing



Program Content

Workbook

- Resource
- Excerpts of clinical procedures
- Personal reflection on scenarios and practice



Evaluation

- Pre and Post testing
 - Addressed immediate knowledge deficit
 - Change showed impact of program
 - *Strongly positive results*
 - *Dramatic improvement from pre to post test*



Evaluation

- Staff evaluation
 - Satisfied with program
 - *Critically appraise their practice*
 - *Will result in practice changes*
 - *Appreciated the use of 'real data'*



Evaluation

- Incident forms

- ↑ Number of incident forms

- ↓ Medication errors

- ↑ Near miss reporting

- ‘Culture change’

- Reporting now viewed as a tool to impact practice positively



Health service change

- Improved systems
 - Policies and Procedures
 - Better education
- Improved communication
 - Drugs and Therapeutics committee
 - Pharmacy
 - Nurse Education
 - Nursing Management
 - Nurse workforce

→ *Quality patient care*



Thanks

Meagan Shannon

Nurse Educator, Peninsula Health

Julie Metcalfe

Medication Safety Officer, Peninsula Health

Further Information

mbloomer@phcn.vic.gov.au

