Insulin Administration Errors in Adult Community Nursing

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Organisational Background, Changes and Context

- Prior to April 2011 Brent, Ealing and Harrow Community Services were working autonomously and independently of the PCT and each other.

- In April 2011 Ealing Integrated Care Organisation (ICO) formed through the merger of Brent, Ealing and Harrow Community Services with Ealing Hospital.

- In October 2014 LNWH formed through the merger of Ealing ICO and North West London Hospitals NHS Trust.

- Organisational changes have had significant impact on processes, practices and cultures.
Medication Incident Reporting

- **Up to April 2012** – relatively low levels of medication incident reporting

- **April 2012** - web based Datix incident reporting system introduced into the community setting

- **April 2013 to March 2014**: 140 medication related incidents reported

- **April 2014 to March 2015**: 150 medication related incidents reported
Insulin Incidents 2014/15

Number of Incidents

- Apr-14: 3
- May-14: 3
- Jun-14: 0
- Jul-14: 6
- Aug-14: 1
- Sep-14: 2
- Oct-14: 2
- Nov-14: 3
- Dec-14: 4
- Jan-15: 3
- Feb-15: 2
- Mar-15: 3
Insulin Administration Errors and Concerns (1)

- Delayed and omitted doses
  - Insulin dose omitted for 7 days due to allocation errors
  - Insulin doses omitted due to breakdown in communication from secondary care
  - Several occasions where dose have been omitted due to failure in allocation procedure

- Wrong type of Insulin administered
  - Patient administered 22 units of Levemir instead of 22 units of Novorapid

- Wrong dose of Insulin administered
  - Patient administered 20 units of Humulin M3 instead of 10 Units
  - Patient administered 40 units of Actrapid instead of 4 units
  - Patient administered 22 units of Novorapid instead of 12 units
Insulin Administration Errors and Concerns (2)

- **Duplicated administration of Insulin**
  - Patient administered 40 units Humulin M3 twice due to duplication of visits by nurses within the same team
  - Patient visited by DN team and Hospital at Home team to administer Insulin

- **Incorrect patient administered Insulin**
  - Nurse administered 46 units of Humulin M3 mistakenly to a non-diabetic patient (bedded unit)
  - Nurse administered 18 units of Humulin M3 to a non-diabetic patient in a residential home

ALL THE ABOVE INCIDENTS OCCURRED WITH RELATIVE FREQUENCY

ALL THE ABOVE OCCURRED ACROSS ALL THREE BOROUGHS
Insulin Administration Errors and Concerns (3)

INSULIN IS A HIGH RISK MEDICATION

- NPSA/2010/RRR013 - Safer administration of Insulin
- NPSA/2011/PSA003 - The adult patient’s passport to safer use of insulin
- DH Never Ever Event - Maladministration of Insulin: Death or severe harm as a result of maladministration of insulin by a health professional
- Insulin is frequently included in the list of top ten high alert medicines worldwide. It is a high risk medication in that it has the potential to cause significant harm even when used as intended
Investigation of Insulin Administration Errors

- Root Cause Analysis (RCA) conducted on Insulin incidents
- Several incidents categorised as Internal Critical Incident (ICI) and panels convened to investigate incidents
- Task and finish group established to review Insulin administration by adult community nurses
- Risk of maladministration of Insulin by adult community nurses placed on the trust risk register
- Action Plan in place to reduce risks
Action Plan (1)

Strengthening Processes

- Development of a Policy for Prescribing, Storage and Administration of Insulin
- Development of a self assessment and competency framework
- Strengthening the allocation procedure for nursing visits
- Obtaining assurances that agency and bank nurses are competent and can practice safely in the community
- Induction processes for new staff strengthened
- Community drug chart reviewed and revised to include a separate section for Insulin
Action Plan (2)

Education and Training

- Implemented a rolling diabetes education training programme led by the Diabetic Nurse Consultants
- Trust purchased diabetes e-learning modules from NHS Improving Quality

Managing Incidents

- All incidents relating to insulin are escalated to the Diabetic Nurse Consultants
- All incidents are recorded and uploaded onto Datix within 24 hours
Joint Effort: Nursing and Pharmacy

- Policy Development
- Training
- Drug Chart Design
- Incident Management
- Internal Critical Incidents Panel
- Staff Performance Management
- Task and Finish Group
Development of a community nursing drug chart

Jennifer Cassam and colleagues describe what they learned from auditing drug administration across three community nursing services.

Abstract
In April 2011, three providers of community services in North East England, the London Trust, and the Australian Government, through audits of medications administered to patients in hospital and in the community, identified opportunities to improve the management of medications. A pilot audit was conducted in North East England, and a full audit was conducted in the London Trust. The audit was conducted in three phases: Phase 1 focused on identifying the types of medications administered to patients, Phase 2 focused on identifying the reasons for the administration of medications, and Phase 3 focused on identifying the methods used to administer medications. The audit found that medications were administered in a variety of ways, including oral, topical, and intravenous routes. The audit also found that medications were often administered without evidence of the patient's ability to understand the instructions for administration. The audit concluded that there were opportunities to improve the management of medications to ensure that patients receive the correct medications at the correct time and in the correct way.

Keywords: community nursing, drug charting

PRESCRIBING

Medicines optimisation: an agenda for community nursing
Chesn Shah, PhD, Leanne, Stuart Richardson

At its heart, medicines optimisation can be considered an approach that seeks to maximise the benefit of clinical outcomes for patients from medicines. The approach focuses on safety, governance, professional and patient engagement. The National Institute for Health and Care Excellence (NICE, 2010) defines medicines optimisation as:

• requiring evidence-informed decision-making about medicines, including effective patient engagement and professional collaboration to improve an individual patient's medicines optimisation plan.

In 2011 (Office of Health Economics, 2011), research shows that only 35% of patients are prescribed a new medicine that is not prescribed, experience no problems or concerns with their medicines, and only 9% of patients are prescribed a new medicine that is not prescribed, experience no problems or concerns with their medicines. The results indicate that many patients are not prescribed medicines that are effective, safe, and appropriate for their needs. This means that many patients are not receiving the benefit of medicines optimisation.

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Medicines management programme for non-medical prescribers
Chesn Shah and Tracey Coyne describe the introduction of continuing education sessions on prescribing after the merger of community and primary care services as part of a service reorganisation.

Abstract
The National Prescribing Centre has developed a comprehensive framework for prescribing, including medicines management. The framework demonstrates the need for keeping up to date with the knowledge and skills associated with medicines management and prescribing. The implementation of this framework has been a key component of the newly formed community and primary care services as part of the service reorganisation. The framework has been implemented through continuing education sessions on medicines management for non-medical prescribers. The sessions have been designed to meet the needs of the newly formed community and primary care services and to ensure that all prescribers have the knowledge and skills required for effective medicines management.

Keywords: non-medical prescribers, medicines management, continuing education sessions