ABM University Health Board	
5th April 2018 **Quality & Safety Committee** **Agenda item: 2.2**	
Subject	*Pharmacy & Medicines Management Report*
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1.0 Situation

To provide the Quality and Safety Committee an update on initiatives by Pharmacy and Medicines Management to improve patient safety and experience in the use of medication.
Specifically, this paper provides information on two areas of work:

- An update on Medication Safety work
- An update on pharmacy technician administration of oral medicines

2.0 Background

In recent years the acuity and complexity of patients admitted to hospital has increased and the proportion of patients with complex medication needs increased.
Clinical pharmacy services have evolved to adapt to the demands of accelerated patient flow whilst continuing to provide safe and efficient medicines management services. Improving skill mix through developing the roles of medicines management technicians and independent pharmacist prescribers have helped the service evolve and improve patient experience and safety.

The Lord Carter Report on Operational Productivity and Performance in English Hospitals[1], highlights the increasing spend on medicines in hospitals and recommends that *"more clinical pharmacy staff are deployed – working more closely with patients, doctors and nursing staff and independently – to deliver optimal use of medicines, make informed medicines choices, secure better value, and drive better patient outcomes ".* The report states that pharmacists and pharmacy technicians spend more time on medicines optimisation through patient facing clinical pharmacy services.

At the Chief Pharmaceutical Officer's Conference (March 2016), Lord Carter cited the growing evidence base for the cost effectiveness of Clinical Pharmacy, indicating a return of £5 for every £1 invested from:

- Reduced dose omissions
- Reduced length of stay (2 days)

• Reduced admissions (9-16%)
• Increased time to readmissions (20 days)
• Reduced medicines costs
• Reduced errors on discharge (25% - <1%)

3.0 Assessment

The two updates on work being taken forward by Pharmacy and Medicines Management in acute services are detailed below.

Medication Safety

The Medication Safety Group (MSG) is a multidisciplinary group that provides advice to the Medicines Management Board on implementing safe practice to manage identified risks from medication incidents. The MSG is a sub-group of the Medicines Management Board.

Core activities of MSG discussed are:

- Managing medication related Welsh Government Patient Safety Solutions within the Health Board
- Analysis of medication related incident reported via Datix
- Other ongoing work streams in response to *Trusted to Care* report.

Ensuring Health Board compliance with Medication related Welsh Government Patient Safety Solutions

Welsh government issues two types of Safety Solutions:

- Alerts: Requires prompt action with a specified implementation date to address high risks/significant safety problems.

- Notices: Ensures that organisations and all relevant healthcare staff are made aware of the potential patient safety issues at the earliest opportunity. A Notice allows organisations to assess the potential for similar patient safety risks in their own areas, and take immediate action. This stage 'warns' organisations of emerging risk. It can be issued in a timely manner, once a new risk has been identified to allow rapid dissemination of information for action. Notices may be re-issued as an Alert if increased risk or further action is identified / required.

Since April 2015 Welsh Government has released five Alerts and fifteen Notices that are related to medication.

The MSG has played an important role in ensuring the Health Board has declared compliance to Welsh Government against eighteen medication related Safety Solutions. One alert and one notice remains outstanding:

- *PSA 007 - Restricted use of open systems for injectable medication* is overdue (WG deadline, August 2017). To be able to declare compliance the following is required:

- Complete an open system questionnaire for each area that prepare injectable medicines
- Address any deficiencies identified from responses
- Radiology SOPs in place for the use of open systems for embolization procedures involving embolic agents that are required to be prepared in open systems.

  Completed questionnaires have been received from some, but not all, clinical areas. There are areas in the Health Board (other than radiology) using open systems. Further work is required to address these deficiencies is required. The lack of compliance with this alert has been escalated to the Executive Director of 'Therapies and Health Science' and the Health Board's Q&S Forum. Support has been provided to follow up with relevant areas, completion of these actions.

  Radiology SOPs have been produced for Morriston and Singleton info@pastduecredit.co.uk and is awaiting Health Board approval from MMB. A radiology SOP for POW is awaiting approval from their local radiology governance group before being submitted to MMB for approval. (NPTH do not require such an SOP as they do not carry out such procedures)

- *PSN 040 – Confirming removal or flushing of lines and cannulae after procedures* was issued in January-2018 and the date for completion is 12/09/2018. MSG are currently developing the Health Board wide response to this.

Currently, MSG are reviewing and updating their process for ensuring that the Health Board learns and shares necessary lessons from medication incidents reported via Datix.

Analysis of medication related incidents reported via Datix

The group now produces a bimonthly report, which highlights medication safety themes identified from incidents involving:

- High risk drugs (controlled drugs, anticoagulants and insulin)
- Those that have caused greater than no harm
- Any trends highlighted by the MSO through continuous monitoring of reported drug incidents.
- The report also presents the medication care metrics data.

To date, two reports have been produced and the latest report has been attached appendix 1. In addition to this, the medication safety care metrics dashboard is also available (appendix 2).

Other ongoing work streams in response to Trusted to Care report

Audit against All Wales Medicines Administration, Recording, Review and Storage (MARRS) policy

Welsh Government has instructed Health Boards to perform a self-assessment of compliance against the MARRS policy. This has been completed, returned and will be reviewed by the MARRS group in WG. The Health Board is currently awaiting feedback on the audit and proposals for next steps.

One issue already highlighted by an internal review has been concerns regarding IV storage and the Health Board wide has therefore proceeded with an audit to identify areas where storage of IV, peritoneal and topical fluids does not comply with Health Board policy. Data collection is expected to be completed by middle of April 2018.

Pharmacy technician - administration of oral medication pilot

Situation

A pilot has been undertaken to train a pharmacy technician to support nursing staff in the administration of medication on a surgical speciality ward. The aims of the pilot were to:

Competently train a pharmacy technician to administer ORAL medication.

Evaluate the impact of a pharmacy technician administering oral medication on a ward.

The relevant medicines policy guidance was followed in the training, documentation and appropriate sign off by the Health Board (MMB) in relation to the administration of medicines by health care professionals other than nurses and doctors.
After a 12 week training programme the pharmacy technician was signed off as competent in the administration of oral medication by the nurse mentor and lead pharmacist. Over a 5 week period the pharmacy technician independently administered medication to patients on ward R during the morning medication rounds on a daily basis Monday to Friday.

Data was collected before and during the pharmacy technician administration pilot and evaluated to measure the impact of the new and innovative role.

Background

Poor practice with regard to medicines administration was one area highlighted by the "Trusted to Care report". Following publication of the document, two Organisational *"Never Events"* were introduced as follows:

- **Patients being given prescribed medication but then not being observed taking it.**
- **Staff signing the medicines chart to say that a patient has taken medication when they have not seen this.**

The administration of medicines on ABMU hospital wards has always been the responsibility of qualified nursing staff. Numerous reasons may contribute to the poor practices seen with regard to medicines administration, including:

- Difficulty in recruiting nursing staff.
- Shifts being understaffed resulting in nurses not having sufficient time to dedicate to medicines rounds and patient care.
- Employing bank staff who may be unfamiliar with Health Board practices.
- Increasing demands of the medication round with many patients having complicated medicines regimens and polypharmacy.

One method of reducing the work burden on nurses would be to relieve them of some daily duties. With a prudent healthcare approach, being ward-based, having a familiarity with medication and daily contact with patients, pharmacy technicians may be considered well-placed to administer medications to patients. The administration role has been rolled out in other hospitals across the UK and a recent visit to Leighton Hospital in Mid Cheshire where the role has been established highlighted the benefits to patient care including

- reducing missed doses and medication related incidents
- increasing self-administration
- decreased number of falls and pressure sores

The pilot wards (Ward R) performance in relation to medicines management and related incidents made this an ideal area to pilot this innovative role and support the ward team.

Assessment

The pharmacy technician administered medication to 123 patients independently on Ward R between the 2/10/17 – 17/11/17.
Baseline and pilot data was collected by direct observation or from data which has already been recorded e.g. fundamentals of care.
The collected data was divided under the following headings.

i. Medication round observations
ii. Pharmacy technician interventions
iii. Feedback

i. Medication round observations

a. Timings of oral administration round – Average time the technician took vs nurse per patient

Average time/ patient (mins) - **Nurse**	Average time/ patient (mins) - **Technician**
6 mins	6.5 mins

b. Timings of controlled drugs (CD) – Average time the technician took vs nurse per patient

Average delay in CD administration/ patient (mins) - **Nurse**	Average delay in CD administration/ patient (mins) - **Technician**
50 mins	20 mins

NB: The delay in administration refers to the time taken from completion of administration of patient's medication (non-controlled drugs) to administration of the controlled drug.

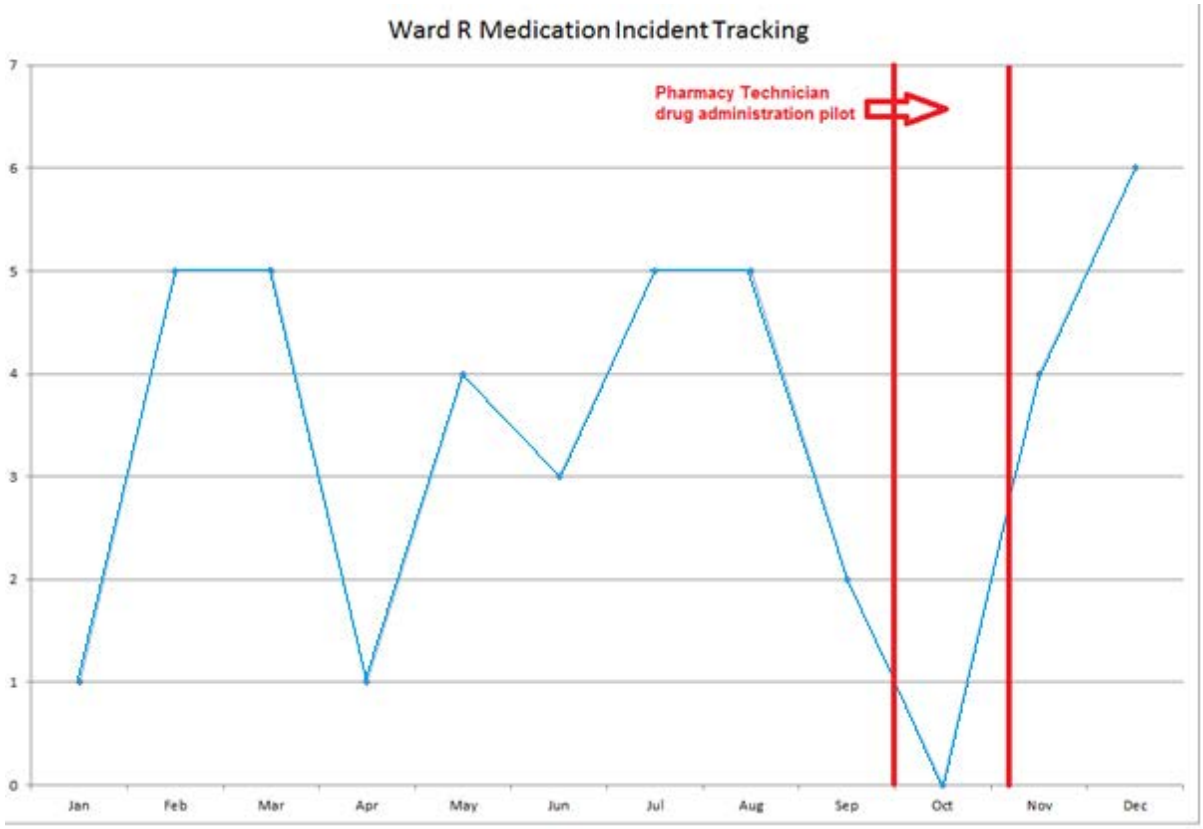
c. Missed doses – Fundamentals of Care data before and during pilot (Apr 2017 – Dec 2017)

Proportion of patients who did not experience medication unavailable or no code was documented (KPI target = 95%)

Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
80% (8/10)	80% (8/10)	60% (6/10)	40% (4/10)	70% (7/10)	70% (7/10)	100% (10/10)	90% (9/10)	60% (6/10)

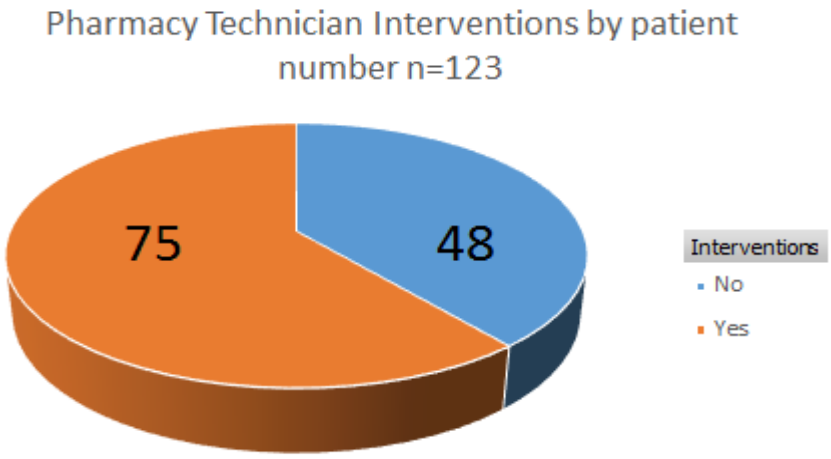
An improvement was noted in the intervention period in October and November.

d. Ward R Medicines related Datix Incidents – (Apr 2017 – Dec 2017)

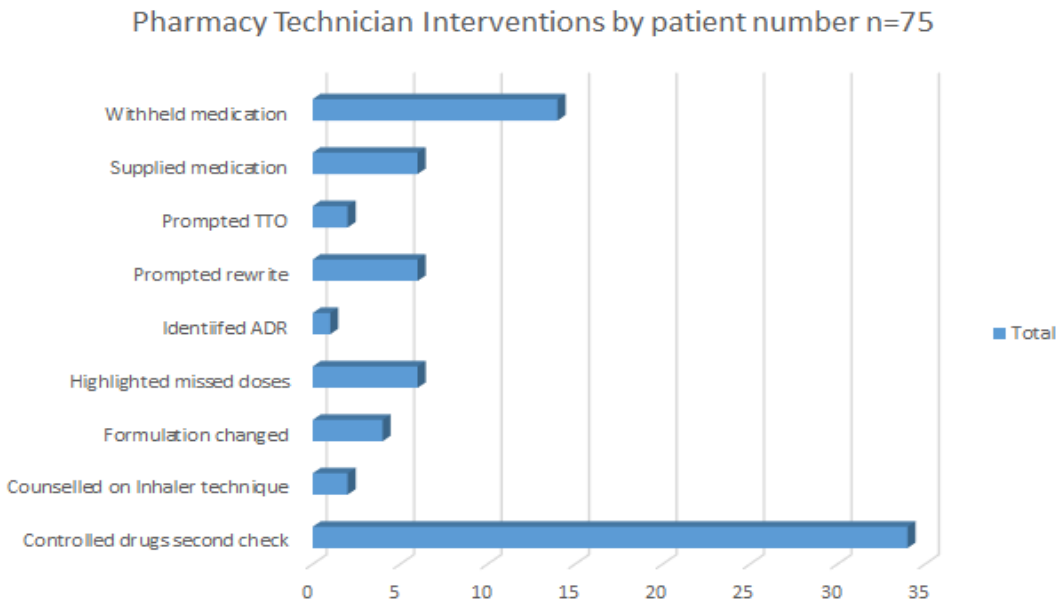


ii. Pharmacy technician interventions

The pharmacy technician recorded daily interventions made on patients during the medication administration round. The total number of patients who had interventions are shown below:



Of the 75 patients who the pharmacy technician made administration interventions on, the types of interventions are below:



iii. Feedback

Nursing staff and patients were given questionnaires to complete. General themes are listed below from the responses.

Nursing – Technician was integrated into the team, reduced the time of the administration round, reduced errors and missed doses, allowed nurses to focus on unwell patients, reduced “turn around” times of discharges, medications ordered quicker.

Patients – Recommend the service, the pharmacy technician knows what they are doing.

Summary

The results of the pilot have shown the impact of the pharmacy technician role, including:

- **Reduced missed doses and medicines related incidents**
- **More patients receiving pain relief on time**
- **Medicines management interventions as part of the administration round**
- **Positive feedback from nursing staff on the impact of the role on their workload and patient care.**
- **Positive patient feedback on the role**

The pilot's limited duration of 5 weeks was not long enough to measure the full impact of the role but showed a number of positive results suggestive that the role could make a significant impact on patient care. The pilot was not resourced and therefore the pharmacy technician undertook this role on top of their current duties, which limited the time on the ward; continuation of the role will require funded posts to allow the pharmacy technician to be based on the ward and expand the role to include:

- Administration of medication on morning **and** lunchtime medication rounds.
- Second checking/ preparing IV medications for administration. This role has been trialed in Birmingham children's hospital where they showed the involvement of a pharmacy technician reduced the number of medication safety incidents and lead to more timely administration of medicines.
- Administration of nebulizer and subcutaneous injections.
- Assessing all patients for self-administration.
- Educating and coaching patients to use their regular and new medicines correctly.

Current nursing vacancies allow an opportunity to prudently utilise the skills of pharmacy technicians to administer medication supporting the ward team to improve patient care. The pilot has highlighted the skills of the pharmacy technician in administering oral medicines supporting nurses and the wider MDT to improve the quality and safety of the medicines round and medicines management in general on the ward.

Based on missed doses from the monthly thermometer audit, number of medicines management related incident reports and nursing vacancies a number of wards would benefit from the service.
With current pharmacy staffing levels, two pharmacy technicians provide a service to four wards. With an additional two funded permanent Band 5 posts this would allow a service where a pharmacy technician would administer medication on the morning and lunchtime rounds on each of the four wards along with completing their medicines management duties.

4.0 Recommendations

The Quality and Safety Committee is asked to:

- Note the contents of this paper
- Support the initiatives being taken forward by Pharmacy and Medicines management