New and Emerging Roles for Pharmacy Staff

Marie Slimm, Chief Pharmacy Technician

Pharmacy Technicians Support the Administration of I.V’s

Marie Slimm, Chief Pharmacy Technician
There is no conflict of interest with respect to financial relationships to disclose in this presentation

QUESTIONS

🤔 Could Pharmacy Technicians partner Nurses to prepare, second check IV medicines for administration?
🤔 Does the introduction of a Checklist for the IV medicine process improve patient safety?
🤔 Could this be the start of a defined clinical support role for Pharmacy Technicians?
INTRODUCTION

- A project was planned to explore the practicality of using pharmacy technicians to support the workload of nursing teams, to release nursing time to care.
- A new approach to medicines administration was needed.
- Time to rethink how we work as pharmacy technicians.
- It was time for innovation and to challenge traditional working practices of pharmacy technicians.

BACKGROUND

- Busy, complex oncology ward, increasing activity, high acuity, high risk medicines, time pressures on nurses.
- Paediatric practice, Two nurses each required to independently check medicines, a double check.
- Medicine workload is time consuming, resulting in less patient facing time.
- Project planned to focus on the partnership of a nurse and Pharmacy technician to prepare and second check I.V medicines for administration.
Introducing ‘lean strategies’, review tasks and skill mix to release nursing time to care for their patients

Improve patient safety by introducing a quality system approach to medicines administration

Improve medicines management on the ward

Integrate the Technician role into the ward team

What roles do Pharmacy Technicians have now in the U.K?

- Dispensing
- Accuracy Checking, national accreditation
- Ward Based Service, national accreditation
- Medicines Information, national accreditation
- Clinical Trials
- Purchasing of Medicines, including Unlicensed
- Aseptic Preparation
Pharmacy Technician Profession Reviewed

- A 2 year qualifying period
- A competency and knowledge qualification
- Many technicians now have degrees/ masters
- Registration with General Pharmaceutical Council
- Skilled in medicine management systems and processes
- Willing to engage
- Costs similar to a nurse

RISK ASSESSMENT

- The Project team was clear that as a minimum, the project would need to demonstrate that the involvement of a Pharmacy technician was equally as safe as the current service
- A detailed Risk Assessment was carried out
- Contacted interested organisations
STANDARD OPERATING PROCEDURES

- To be written for each process, approved by a pharmacist
- To be reviewed regularly, due to anticipated changes within the project
- Essential that staff work to approved drug monographs

CHECKLIST
An innovative approach at ward level and in health service delivery

- Regularly used in the aviation industry
- A visual cue, outlining the process, focus on task
- An audit trail
- A critical tool at times of high demands and interruptions, offering reassurance
**Checklist based on the 5 RIGHTS**

- RIGHT PATIENT
- RIGHT DRUG
- RIGHT DOSE
- RIGHT ROUTE
- RIGHT TIME

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**Checklist**

<table>
<thead>
<tr>
<th>PROMPTS</th>
<th>Prescription</th>
<th>Preparation</th>
<th>Administration</th>
<th>5 RIGHTS CHECK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right Patient</td>
<td>Patient details on prescription chart complete</td>
<td>Drug is labelled with name &amp; dose</td>
<td>Patient ID matches prescription chart</td>
<td>RIGHT PATIENT</td>
</tr>
<tr>
<td>Right Drug</td>
<td>Prescription is complete</td>
<td>Drug is labelled with name &amp; dose</td>
<td>Drug is labelled with name &amp; dose</td>
<td>RIGHT DRUG</td>
</tr>
<tr>
<td></td>
<td>Not contraindicated for allergies</td>
<td>Drug is labelled with name &amp; dose</td>
<td>Drug is labelled with name &amp; dose</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prescribed drug is selected &amp; is in date</td>
<td>Drug is labelled with name &amp; dose</td>
<td>Drug is labelled with name &amp; dose</td>
<td></td>
</tr>
<tr>
<td>Right Dose</td>
<td>Dose is within range referenced in BNFC or Oncology Guidelines for route &amp; indication for age &amp; weight of child</td>
<td>Calculated dose volume added</td>
<td>(Burette) Correct Diluent volume added</td>
<td>RIGHT DOSE</td>
</tr>
<tr>
<td></td>
<td>Calculations of dose volume match</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right Route</td>
<td>Route correctly prescribed</td>
<td>Technique appropriate for route</td>
<td>(Burette) Correct Diluent volume added</td>
<td>RIGHT ROUTE</td>
</tr>
<tr>
<td>Right Time</td>
<td>Prescribed time matches &amp; has not previously been signed as administered</td>
<td>Administration time appropriate for dose or volume</td>
<td>Administration time (device rate) correctly set up</td>
<td>RIGHT TIME</td>
</tr>
<tr>
<td></td>
<td>Administration time (device rate)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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TECHNICAL CHECK

Medicines administration requires clinical decision-making. Pharmacy Technicians do not have the clinical assessment skills to be able to make decisions.

To ensure each professional, both Technician and Nurse, was clear of the boundaries of their practice, professional responsibilities were defined.
Criteria for Pharmacy Technician Check

- Within check of RIGHT DRUG
  - Prescription is complete
  - Allergy status, Drug not contraindicated
  - Right Drug selected, in date
  - Calculation check
  - Drug name label added
  - Appropriate flushes/diluents
  - Right Drug & flush, diluent selected
  - Correct pump rate selected

Teamwork, working in partnership

It was vital to get the engagement of nurses:

- Technicians spent time shadowing nurses in order to gain an understanding of their role
- Ongoing discussions between Senior Nurses, Pharmacists and Technicians on joint working practice
- Posters in the Treatment Room and ongoing communications with nurses
HUMAN FACTORS

- Staff attended training to understand how human factors impact on day to day practice and the potential for error
- To integrate key human factor learning points within the project to improve safety
- Emulating the air line industry on safe working practice, where two staff went to visit easyJet

- SoPs and preparation
- Situational awareness
- Visual cues and aids
- Teamwork
- Flattening of hierarchies
- Professional decision making
- A set language, giving clarity and understanding
**TRAINING FRAMEWORK**

Development of a training programme:

- Identify gaps in knowledge and skills
- Develop a training plan
- Nurse trainers identified
- Person specification for role, technicians with the right qualities and skills

**TRAINING PROGRAMME - underpinning**

- Attend IV clinical skills & drug admin study day
- Complete e learning modules
- Attend Human Factors Training Day
- Read Trust Policies & SOP’s, Trust, Ward and Pharmacy
TRAINING PROGRAMME – Supervised Practice on Ward

- Observation and supervised practice of dose checking, IV preparation, checking & administration including pump checking
- Completion of Checklist
- Reflections on practice and weekly 1:1’s
- Complete a log & Competency assessment
- Sign off
Day to Day – Initial Visit

- Planning and preparation – key part of the process
- Identify workload and priorities
- Review prescriptions:
  - weight, allergy status, dose, dilutions, infusion fluid, calculations
  - Liaise with pharmacists

Checklist

Day to Day - IV Round

- Identify role
- Clarify and confirm process
- Patient status
- Dilution options
- Flow rates
- Calculations
- Checklist
- Mutually agreed process
Day to Day - Administration

- Accompany nurse to the bedside
- Confirm patient ID
- Checks, pump rate, correct fluid, timings of bolus injections
- Checklist
- Nurse administers
- Records complete
- Getting to know the patient

Feedback

- **Patients and Parents** — They have shown a real interest in the project and think that it is a ‘good idea’
- **Nursing Staff** — Technicians offer reassurance and confidence particularly to junior staff when faced with complex calculations. Protocol-driven approach is welcomed. The team are well integrated
- **Technicians** — ‘Working on the IV project has been at times scary, exciting and eye opening. I have gained new skills and developed my knowledge. Working with the nurses so closely has increased collaboration and a deeper understanding of the important roles we all carry out on the wards to help to achieve an outstanding level of patient care’. 
Outcomes

- A Grant awarded to study the project over the next 12 months, after a review of the initial data collected

**Enhanced Safety**
- Clinical screening pre dose increased
- A reduction of interruptions observed
- Additional cohort of medicines related errors trapped
- A significant reduction in Medication Safety Incidents

Medication Safety Incidents

The arrow indicates the start of the project. You can see that there has been a noticeable reduction in Medication Safety Incidents since that time on the project ward. It is too soon to draw conclusions. Nevertheless the data is dramatic.
Outcomes

- New Approach
  - Protocol driven
  - Controlled environment
  - Calculations finalised at onset, not at the bedside
  - A transferrable model to other wards
- Timely administration of medicines, a collaboration of the Team
- A truly multi professional skill mix approach to patient care
- Improved medicines management on wards
- Technician skills broadened

What next?

- To extend the project to Oral Medicines
- To manage and co-ordinate the treatment room
- Patient counselling, preparing for discharge
- To further extend the project to surgical wards
Conclusion

- Technicians can safely partner a nurse in the I.V medicine process, releasing time to care
- Improving patient safety by introducing a quality systems approach
- Benefit of inter professional skill mix
- Potential to adopt across all ward areas
- Improved Medicines Management on the ward
- Uniquely a pharmacy technician development

With Special thanks to the Nurse/Pharmacy Team:

- Heather Petts  Lead Oncology Nurse
- Dawn Forbes  Nurse trainer
- Jo Correa  Senior nurse, Medicines Management
- Anthony Sinclair  Chief Pharmacist
- Jason Patel  Lead Oncology Pharmacist
- Ruth Shuard  Lead Pharmacy technician
- Maya Patel  Senior Pharmacy technician
- Katie Mudd  Pharmacy technician
- Daniel Pygall  Pharmacy Technician
- Debbie Butler  Quality lead Technician
QUESTIONS

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