Implementing an Electronic Prescribing and Medication Administration System to Paediatric and Neonatal Wards

Stuart Spence, Senior Clinical Pharmacist, County Durham and Darlington NHS Foundation Trust
e-mail: stuartsplane@nhs.net

Overview
Electronic Prescribing and Medicines Administration (EPMA) systems have been shown to reduce medication errors and lead to safer medicines management processes. County Durham and Darlington NHS Foundation Trust (CDDFT) successfully rolled out EPMA to adult inpatient wards in 2015 but this was not extended to paediatric and neonatal units during that process.

Systems developed for use in adults may be sub-optimally designed for use in paediatrics due to the added complexity of prescribing in this patient cohort. The need to calculate doses on an individual patient basis using age, weight and surface area and further factors such as dilutions and manipulations means that medication errors during prescribing and administration are more frequent when compared to adults. Children and adolescents are at greater risk of adverse effects from medication errors and the incidence of errors was shown to be 27% in a US Systematic Review.

The need to improve prescribing safety in paediatrics is evident and some hospital trusts in the UK have successfully developed and tailored existing EPMA programmes for use on inpatient paediatric wards. The trust has secured funding to further extend EMPA to paediatric and neonatal wards as part of the CDDFT Health Informatics Strategy and NHS Five Year Forward View. This poster outlines how I plan the delivery of this project and how my CLIP journey will help to implement change.

Project Planning
The implementation of EPMA to paediatric and neonatal inpatient wards will require detailed project planning and collaborative working with numerous stakeholders within CDDFT and external to the trust. Using the project planning cycle covered on day 4 of CLIP, the following strategy has been devised to assist with the implementation.

INITIATION
- Stakeholder Mapping, Analysis and Engagement
- Project scoping and outline
- Timeline
- Cost benefit analysis

PLANNING
- SMARTER objectives
- Gantt Chart
- Quality Control
- Risk and Contingency Planning
- Effective Communication

IMPLEMENTATION AND MONITORING
- Monitor and record project progress
- Implement any contingency plans if required
- Frequent, succinct communication with stakeholders and sponsors

CLOSE AND REVIEW
- Review success and challenges encountered
- Regular audit to ensure safe and effective prescribing and administration of medicines
- Identify further training needs

My CLIP Toolkit
- Myers-Briggs Type indicator
- Leadership self-assessment and 360° feedback
- My communication style

Increased Self-awareness
- Adaptable and assertive communication
- Conflict Management
- Negotiation Skills
- Resilience

Enhanced Interpersonal Skills
- Peer development
- Skill-Will Matrix
- Coaching
- Mentoring

Collaborative Working
- Flexible Leadership
- Project Management
- Developing High Performing Teams

References
1 Ahmad Z et al. Impact of electronic prescribing on patient safety in hospitals: implications for the UK. Clinical Pharmacokinetics 2016, 45(9)
7 Yusuf A and Choudhury C. P24 Developing a paediatric electronic prescribing system. Archives of Disease in Childhood 2018;103:a1