Electronic Prescribing and Medicines Administration – experiences and lessons from BSMHFT – so far

Nigel Barnes
Chief Pharmacist and EPMA project lead
BSMHFT

• One of the largest MH trusts in UK
• Covers entire Birmingham & Solihull area
• Combination of general and specialist MH services
  – Regional & national services
  – Perinatal, neuropsychiatry, secure care, deaf services etc
• Around 50 sites across the city
  – Old & new builds
  – Small & large
• Large in-house pharmacy service over two sites
BSMHFT

- Progress with digitisation
  - Bighand Digital Dictation - 2010
  - RiO – 2011
  - IAPTUS - 2012
  - Mobile enabling – 2012 / 3
  - Illy CarePath – 2014 /5
  - Mobile working – 2014/ 5
  - EMIS / Ascribe EPMA – 2016
  - Hybrid mail and Single Sign on 2018
Initial Exploration

• EPMA relatively uncommon in secondary care
• Rarer still in MH trusts
• Some initial visits / discussions with other Trusts
• Largely uncharted territory
• Market relatively immature and few comparative examples
Procurement

- Usual NHS procurement process
- Tendered for combined pharmacy & EPMA system
- Integration with RiO
- Requirements difficult to write
  - Strict requirements need definition
  - Answers need careful consideration
  - Often only realise what should have said long afterwards!
Requirements

• Inpatient prescribing & admin
• Community prescribing & admin
• MHA-specific functions
  – Specific rules around certain drugs for detained patients
  – T2 & T3 certificates
  – Common area of error & criticism
  – depots
  – No equivalent in acute hospitals
Challenges

• Most systems based on acute systems & inpatients
• Community functionality limited
• Depots very limited
• Some do only pharmacy or only EPMA
• Interoperability capabilities variable
• UI / UX often lacking
• Cost
Integration

- RiO as master index
- Translate concepts of referrals into episodes
- ADT data for ward stay and trigger discharge summary
- View of EPMA screens directly from RiO
Implementation

• Programme Management Office led project
• Dedicated PM time with suitable support
• Lengthy pilot phase on one ward
  – Generally went well
  – Transition points challenging
  – Generally good feedback
• Challenges
  – Infrastructure
  – Equipment
  – UI
Inpatients

• Rolled out across 54 wards
• Functionality broadly good
• Fewer transition points
• Ordering / supply much easier
• Medical/Nursing/Pharmacy time freed up
• New challenges emerging
  – Timing, doses etc
  – Paper charts highly flexible!
Inpatient evaluation

• Significant time savings
  – E.g. No longer search for missing charts, transcribing/rewriting charts
  – No more photocopying/faxing charts to Pharmacy
  – No more travel time to wards to write prescriptions
  – No more searching for charts by pharmacy

• Time saving – 1 hr 46 mins per day per ward
Inpatient evaluation (2)

• Less time spent on these:
  – Less time clarifying prescriptions
  – Nurse ordering of prescriptions
  – Pharmacist prescription review (increased)

• Overall time saving 1 hr 5 mins per day
Inpatient evaluation (3)

• Other benefits
  – Reduced use of paper
  – Improved access to medication records
  – Increased ability to undertake audits
  – Easier tool to case find for research studies
  – Improving ability to make appropriate prescribing decisions
Community

- Pilot phase in a single community team
- Highlighted issues in practice and gaps in the system
- Addressed through changes in practice and system development
- Full scale roll out commenced May 2017 after improved system functionality agreed with pilot team
Depot administration

• Prescribing on EPMA system
  • maintains full medication record

• Administration via depot card
  • Easier to handle early/late administration
  • Easier to plan next injection
  • Easier for home visits
Community - What works well

• Outpatient prescribing
  – Outpatient prescribing
  – FP10s

• Community administration in clinics

• Depot administration (only if on time!)
Functionality improvements

• Ability to record community supplies

• Depot administration and dose planning
  – Resorted to depot cards

• Home administration (connectivity)

• Advanced electronic signatures to enable electronic transfer to a registered pharmacy
Lessons Learnt

• Staff engagement, particularly medical staff

• Over delegation of tasks by medical staff, particularly to NMPs

• Some staff used training sessions to voice concerns over the system
Lessons Learnt (2)

• ICT support during rapid roll out

• Need simple process for authorising users including bank and agency staff

• Ditto for PC activations
Lessons Learnt (3)

• System prints FP10s but can only deal with one trust NHS BSA account

• Need to ensure all paper prescription charts are transcribed and cancelled

• Need better systems for recording home administrations
Current Challenges

• Various usability items of mixed importance
  – Addressed through developments & workarounds
  – Mostly niggles rather than big problems
  – Evolving understanding of how the system works

• Depot injections
  – Long acting injections
  – Problems encountered when given early or late
  – Calculation of due dates
Current Challenges

• MHA functions
  – Immature but developing
  – National approach has changed recently
  – Proving quite difficult to understand and translate practice

• Community Administration
  – Does not really exist as a concept in acute trusts
  – Community supplies of medicines to patients
Other Challenges

• Staff engagement

• Practice makes perfect – remembering the finer points of the system

• Mobile working

• Home administration

• Bank/Agency staff – addressed through e-learning module

• Staff impatience as the EPMA system becomes the norm
Conclusion

• Early adoption of EPMA across a large MH Trust including community services
• Pioneering in many areas
• Joint learning with developer about how best to implement system
• Integration with existing systems very important and achievable
• More integration – more benefits