

Read how **JAC's EPMA** delivers  
adult, 24-hour A&E and specialist  
children's services at **Chesterfield  
Royal Hospital NHS Foundation Trust**

**Electronic Prescribing and Beyond**

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**“The EPMA system is a reliable and  
effective method to help improve safety  
in prescribing and ensure trust-wide  
access to the medicines record,  
supporting the prescribing, administering  
and dispensing of medicines.”**

**Martin Shepherd**, Director of Pharmacy

in association with



## Customer needs met

- Replacement of paper-based prescribing with a full, electronic system
- Full delivery of the system via wireless technology and mobile devices – enabling bedside prescribing and administration
- Improved prescription legibility resulting in an overall reduction in drug dispensing & administration errors
- Integrated First DataBank industry-standard clinical decision support which automatically checks prescriptions and flags up potential medication errors or allergies
- EPMA system provides a single seamless medicines management solution across the Trust

## Executive summary

Chesterfield Royal Hospital NHS Foundation Trust (CRH) has successfully implemented JAC's leading e-prescribing and Medicines Administration (EPMA) system across the Trust. The Trust serves a population of over 375,000, providing a range of

acute services plus 24-hour accident and emergency care and specialist children's services.

The Trust decided to roll out the e-prescribing solution in May 2010, following an unsuccessful first attempt in 2005. Electronic prescribing is now live in the hospital's surgical, orthopaedic and medical wards, enhancing patient safety by reducing prescribing errors and providing positive financial benefits. The Trust plans to implement the e-prescribing solution into its remaining wards by March 2012, including obstetrics, gynaecology, paediatrics and day surgery.

JAC is the UK's largest provider of acute e-prescribing and integrated pharmacy stock control systems and has over 30 years' experience in the industry. Its EPMA solution provides inpatient and outpatient prescribing and medicines administration, ensuring that users have access to clinical information regarding prescriptions and administrations from any location within the Trust.

## Background and deployment

Chesterfield Royal Hospital NHS Foundation Trust originally selected JAC's EPMA in 2005, alongside the Pharmacy Stock Control System and electronic inpatient discharge letters, for its rich functionality and ability to

meet its specific needs. The Trust recognised that EPMA could help them meet the challenges they faced and improve the communication between hospital departments and pharmacies, resulting in more consistent care across the Trust.

During the initial phase of deployment in 2005, the Trust encountered a number of issues including hardware incompatibility and inefficient mobile technology, which, combined with low acceptability from staff, delayed the deployment indefinitely.

Martin Shepherd, Head of Medicines Management at Chesterfield Royal Hospital NHS Foundation Trust (CRH) said: *"The initial deployment of JAC's EPMA system was flawed, due in part to the resilience of the hardware at that time, with unreliable wireless networks and inefficient mobile technology. We found that the level of acceptance by staff, especially nursing staff, was inadequate and this, along with a degree of nervousness, transpired into a lack of compliance and eventually resulted in an indefinite delay for the deployment."*

In 2010, the Trust decided to embark on a second deployment of JAC's EPMA system. With advancements in mobile technology and better staff compliance due to widespread acceptance of technology in both personal and professional circles, the Trust believed this deployment would be more successful.

Martin said: *"Technology has become a big part of every day life, both in our work and private lives. I think this familiarisation with technology has aided the deployment and boosted user acceptability."*

*"We have been using JAC's electronic discharge letters and Pharmacy Stock Control System for the last three years and believe that this has supported a natural transition to EPMA, with a dedicated project team of clinicians, technicians and pharmacists working together to advocate the use of e-prescribing."*

Now deployed in over 75% of the Trust, EPMA enables clinicians to access or create a clinical patient medication record or prescription wherever they are within the Trust, whether using a PC or laptop.

In addition to the EPMA system, the Trust also invested in mobile workstations, which house laptops to enable the use of EPMA to prescribe and administer medicines at patients' bedsides. This enables staff to spend more time with patients, reducing prescribing errors and improving the patient experience.

Ian Gell, Medical director for Chesterfield Royal Hospital comments: *"We strive to provide our patients with safe services – and safe prescribing is a crucial part of our patient care pathways. Advancement in information and mobile technologies – particularly in Wi-Fi – has allowed us to embed a range of new services across our wards. Staff have fully supported the e-prescribing solution JAC supplied; and it is already paying dividends by reducing risk and creating efficiency."*

### **Patient benefits**

The benefits of access to accurate patient information across the Trust are many: cutting down the time spent on administration is just one of them. EPMA has proven to save time, reduce the occurrence of clinical errors and has sped up the entire prescribing process.

Martin said: *"Clinicians have been impressed with the ability to remotely access detailed medication information from anywhere in the hospital which enables on-call staff to view prescriptions from any ward, saving the time and energy wasted travelling from one ward to another."*

JAC's EPMA system incorporates First DataBank's industry-standard clinical decision support, which alerts users to potential interactions at the point of care.

The solution automatically checks prescriptions and flags up any potential medication errors or patient allergies, which is particularly helpful in supporting the complex prescribing required for paediatrics.

Martin said: *"It is widely acknowledged that electronic prescribing systems improve the legibility of prescriptions and removes the possibility of prescriptions being lost or misplaced. The EPMA system is a reliable and effective method to help improve safety in prescribing and ensure trust-wide access to the medicines record, supporting the prescribing, administering and dispensing of medicines."*

### About JAC's EPMA system

JAC has the largest installed base of Electronic Prescribing and Medicines Administration (EPMA) systems in UK hospitals. These systems improve patient safety by reducing prescribing and administration mistakes that could result in medication errors and adverse drug events.

EPMA also facilitates wider improvements in clinical practice, including: reductions in paperwork and transcriptions; improved audit trails for medication; performance monitoring and intelligence; enhanced reporting capability to review practice, improve future care and deliver management and financial information such as reporting for PbR; greater consistency and continuity of care between primary and secondary care settings; and more effective communication between hospital departments and pharmacies.

The system incorporates the UK's leading drug database, to support safe and effective electronic

prescribing through its clinical checking. This allows the system to check for drug-drug interactions, sensitivities, drug doubling and duplicate therapy, therefore reducing the risk of medication errors and increasing patient safety.

**Find out how JAC's electronic prescribing solution can deliver measurable benefits to your organisation. Visit [www.jac.co.uk](http://www.jac.co.uk) or call +44 (0) 1268 416348.**