

Read how **JAC's EPMA** has extended the reach of medicines management with a 2nd generation e-prescribing system at **Winchester and Eastleigh Healthcare NHS Trust**

Electronic Prescribing and Beyond

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“We didn’t have the luxury of finding our feet slowly – the JAC solution had to be deployed correctly first time, and quickly. Careful planning with JAC meant we were able to go live hospital-wide in four days.”

Damien Kelly, Lead Pharmacist Electronic Prescribing

in association with



Customer needs met

- Trust-wide replacement of legacy e-prescribing system with a second generation solution
- Full solution deployed hospital wide in just 4 days
- Using electronic prescribing data as audit & reporting tool on infection control and more
- Supports innovative 'computers on wheels' mobile terminals for bedside medication management
- Replace electronic drug administration recording with a second electronic system
- Deployment of decision support

Executive summary

Winchester and Eastleigh Healthcare NHS Trust became the first organisation in England to deploy electronic prescribing over 20 years ago, thus being the first NHS trust to replace its paper (drug chart) prescribing system with a full Electronic Prescribing and Medicines Administration (EPMA) solution.

In 2006, JAC's EPMA solution was chosen to replace the trust's legacy electronic prescribing system. A rapid deployment and go-live of the second generation solution was required to minimise

handover risks between the old and new systems. From contract to go-live took just six months, with the transition from the legacy system to the new system completed in just four days.

The JAC EPMA solution has extended the benefits of electronic prescribing enjoyed by the Trust, delivered integrated medicines management in conjunction with the hospital's pharmacy system and added powerful medicines administration, auditing and reporting tools to help key staff monitor prescribing patterns and infection control.

Royal Hampshire: an e-prescribing pioneer

Winchester and Eastleigh Healthcare NHS Trust manages both the Royal Hampshire County Hospital in Winchester and the Andover War Memorial Hospital. The Royal Hampshire County Hospital holds a special status as the first site in England to have implemented an electronic prescribing system (1988).

The previous system deployed was the TDS Desktop 7000, which introduced the Trust to some of the core benefits of e-prescribing. But by the end of 2001 the system was approaching the end of its functional life; the interface was not user friendly compared with latest generation software; it lacked modern features, such as decision support and detailed

reporting; the version in place was no longer supported by the software supplier and so support was expensive to buy. It was no longer cost-effective for the trust to support and maintain.

The trust decided to invest in a new system instead of continuing to support the legacy product. This decision coincided with the start of the Connecting for Health programme, which included ePrescribing as part of its core offering.

However, at this early stage in the new National Programme for IT the Trusts LSP was unable to deliver an ePrescribing solution that met the Trusts needs and so the Trust sought an alternative. As the Pharmacy Management module of JAC's Medicines Management solution was already being used by the Trust, the Trust's IT team evaluated the JAC EPMA module among others.

The JAC module offered the immediate benefits of a complete, integrated medicines management solution, more advanced features and the ability to maintain existing pharmacy stock records. As a result the Trust began planning the transition to the new EPMA system.

Preparing for Rapid Trust-wide Transition

The Trust found itself in a unique position in having to replace an established electronic prescribing solution. Damien Kelly, the trust's current Lead Pharmacist Electronic Prescribing and Pharmacy Systems IT manager said: *"Unlike the majority of Trusts, which don't have e-prescribing solutions in place, we were already using it as an integral part of operations throughout the hospitals."*

"The usual approach to deployment is an initial roll-out of e-prescribing on a few wards, and building up from there. But we were already reliant on e-prescribing, so we needed to have the entire system commissioned and running as quickly as possible, to minimise crossover time between old and new systems – we needed to avoid data duplication and the potential risks this entails. This dictated the rapid-transition approach across all the wards that were using e-prescribing."

The Trust wanted the second generation solution to deliver richer functionality and efficiency gains that were not available, or not supported by the legacy system. These included key features such as decision support, improved formulary management, audit trails, detailed reporting features, and the ability to prescribe, administer and perform

other clinical tasks at patients' bedsides using mobile PCs.

Planning for changeover

"In some ways, our task was easier than implementing e-prescribing from scratch, as it was already a core part of our procedures and staff were already familiar with e-prescribing. But we also knew that we didn't have the luxury of finding our feet slowly – the solution had to be deployed correctly first time, and quickly," said Damien.

"With such a large deployment – the Royal Hampshire County Hospital has over 450 beds – attention to detail was crucial. JAC helped a great deal in developing the plan and ensuring any questions or potential issues were resolved before we went live," he added.

The project team embarked on a meticulous five-month planning and management process, working towards the intended system transition date. This approach paid off, with the EPMA solution deployed and running across the hospital in just four days, minimising the handover between systems.

According to Damien, users quickly adapted to the new system's features, and it helped that training for the JAC system was relatively easy.

The benefits of EPMA

As the EPMA module is fully integrated with the trust's existing Pharmacy Management module, it gives end-to-end medication processes that handle the complete cycle from prescribing, clinical verification and supply, to nurse administration.

One of the biggest advancements in improving patient care following the deployment has been the Trust's use of mobile terminals with wireless connectivity, enabling staff to prescribe and administer medicines at the bedside.

These terminals, known as Computers on Wheels, replace the previous fixed terminals, enabling staff to spend more time with patients, reducing errors and improving the patient experience.

Another key enhancement is the system's decision support capability, using First Data Bank's Multilex database. This provides access to detailed, real-time information and alerts on drug interactions, potential side-effects and duplications. Clinical staff use this information during the prescribing process to minimise risks to patients.

"Our prescribers had been asking for this capability for a number of years, and it saves them a lot of time because all the necessary information is available where it is needed most, at the patient's bedside," says Damien

Getting value from data and reporting

The JAC solution's reporting functions have been particularly welcomed by staff, according to Damien, and have proven useful for auditing and management.

“Users like the on-screen prescribing charts and full access to detailed patient information from the main screen – it's very easy to use. The built-in standard reports also fulfil most needs for reporting on prescribing actions,” he said.

For more in-depth analysis, users can export data from the JAC EPMA database using the system's reporting tools to derive values and display results in a range of easy-to-use formats. These reports produced from EPMA data are also used to help monitor and manage appropriate and prudent use of antibiotics on wards.

Clinicians are able to use the reports to get an immediate overview of patients with prescribed antibiotics, and then see how quickly treatment was administered. This also gives the hospital a detailed record of any restricted antibiotics or combination regimes, allowing further follow-up of these patients by specialised teams

The future of e-prescribing at the Trust

Following the deployment across the wards in the Royal Hampshire, the Trust plans to roll the solution into Andover Community Hospital in 2009. A future deployment in the Outpatient clinics at the Royal Hampshire is also being considered to help with managing repeat prescriptions and to further extend the benefits of e-prescribing.

Damien says: *“Our situation was quite unique, and meant that there was no room for error in the system migration. With JAC's help, we were able to make the transition in an unprecedented timescale.”*

The system gives staff what they have been asking for, for many years – the ability to prescribe at the patient's bedside, decision support, detailed records of prescribing actions and more, to help them with medicines management.

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 or call +44 (0) 1268 416348.