

Enhancing patient safety as Jersey General Hospital deploys WellSky EPMA with FDB Multilex

Jersey Hospital Health and Community Services have successfully implemented WellSky's Electronic Prescribing and Medicines Administration (EPMA) solution across the majority of its wards within a month.

Despite being deployed during the COVID-19 pandemic, the implementation went smoothly and has achieved excellent results and feedback and is already delivering patient safety benefits for the hospital.

Moving towards a paperless system

Jersey General Hospital has used WellSky's Pharmacy system since 2011. When the team identified a need to move towards a more efficient medicines management system, they wanted to continue working with WellSky and chose to use the company's integrated EPMA solution. The solution is now live in nine wards at Jersey Hospital.

WellSky's EPMA solution enables the prescribing, administering and clinical verification of prescriptions to be carried out electronically at all locations within a healthcare setting. WellSky EPMA is the most widely used e-prescribing solution in hospitals and community care facilities across the UK.

WellSky's EPMA uses First Databank's (FDB) Multilex solution for its integrated clinical decision support, which improves patient care and flags up potentially problematic drug interactions, also warnings for drug duplication and allergies.

A complex landscape

The hospital services a population size of approximately 110,000 people, increasing significantly in summer months with added tourism.

The team at Jersey wanted to move towards a paper light - and eventually paperless - system and received the go ahead to move to the WellSky EPMA system. A cross-hospital team of in-house experts from across pharmacy, IT and nursing worked with the WellSky team to carry out the implementation. The initial pilot of the EPMA system started on two of the hospital wards in early 2020 and ran for several months successfully, but the pilot was halted due to the COVID-19 pandemic.

During this pause, the team worked on preparing for the implementation at the same time as modernising the hospital's IT infrastructure, to better support further digital implementation going forward. EPMA became the driver to sort out many of the IT legacy network issues and devices.

“Being able to pick up drug interactions, duplicates and allergies at the point of care is brilliant, as it saves time for both clinicians and pharmacists.”

ADAM NORTH Pharmacist, Jersey General Hospital



50% 

INTERACTIONS (WARNINGS) ACTED UPON*

35% 

DUPLICATE PRESCRIPTION WARNINGS HEADED*

As the hospital and island responded to the ongoing COVID-19 pandemic, the team continued to further develop and improve the system, whilst also preparing to use WellSky EPMA in the 180 bed Nightingale Hospital Wing. The Nightingale Wing of Jersey Hospital is now ready to be used if the need were to arise, with the full use of the EPMA system to ensure improved medication safety and paperless prescribing which cuts down virus transmission risks too.

As the cases of COVID-19 on the island reduced, the team were able to pick up the project again and successfully rolled out the system using a “big-bang” deployment approach to nine in-patient ward areas of the hospital, within a two week period.

Great sponsorship and excellent training and communications during deployment

The hardworking cross-department team did a lot of groundwork to prepare for the pilot project and subsequent rapid deployment. The team carried out many ‘one to two’ face-to-face training sessions, training the entire hospital in only two weeks. The team trained up some ‘champion’ nurses who supported the wards and were supported by nearly 24-hour support by the team.

Christopher Vale, Digital Health Project Manager at Jersey Hospital says: “We decided to go live with as many features as the EPMA system could offer including infusions. We were really keen to engage with the nursing and clinical community before and during the deployment and we took time to engage with the users via the EPMA prescribing and EPMA nursing forums. Their feedback was invaluable. Senior leadership have also been fantastic - having that level of quality improvement leadership at board level is great, and when we sought their help, they were supportive and quick to respond, which is really important.”

Clinicians at the hospital found the transition of moving to a paperless EPMA system unproblematic. Adam North, Pharmacist explains: “In fact, when the system was temporarily rolled back due to COVID-19, the clinicians wanted to go back to using WellSky EPMA. They were quite happy with using the new solution and when we had to take it away, they didn’t like it all as they lost all the benefits of going paperless.”

Advanced clinical decision support and patient safety benefits

WellSky uses FDB’s Multilex drug database for its clinical decision support.

Rob Tysall-Blay, chief executive of WellSky International said: “We have a long-term partnership with FDB because their Multilex drug database and clinical decision support is simply the most comprehensive on the market in the UK, and patient safety is our primary concern.”

When linked with a patient’s medication record, Multilex can check to see if the medication about to be prescribed, dispensed or administered interacts with the patient’s current medication. All drug-drug interactions are rated by severity with 4 severity levels (High, Significant, Moderate and Low) which can be configured within the system to trigger only the severity levels required by the users.

The Jersey team spent some time defining how the drugs needed to be set up and decided to turn off interactions at levels 1 and 2, and only kept the highest levels – 3 and 4 displaying, in a bid to avoid the well-recognised issue of alert fatigue.

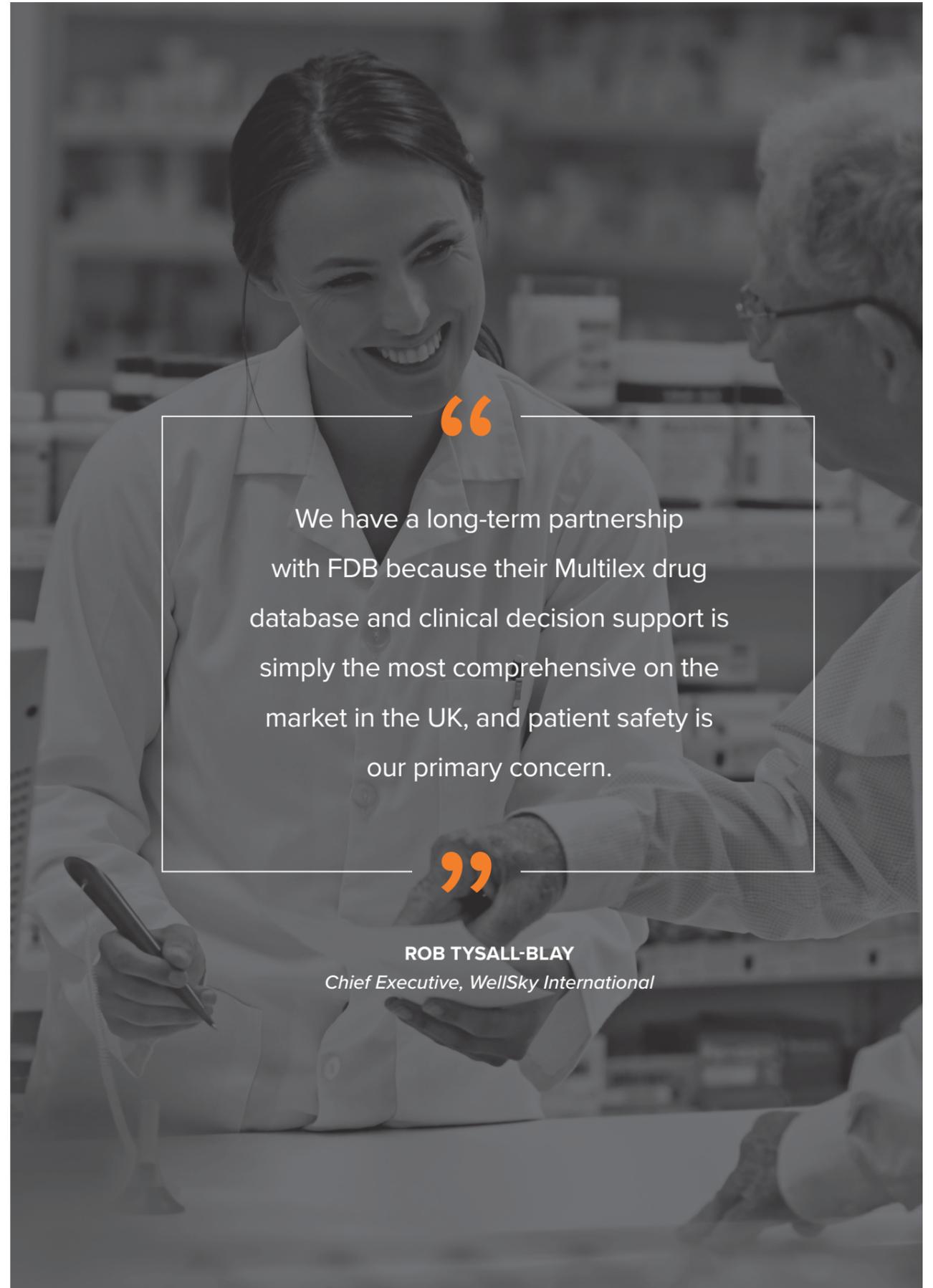
In the first weeks following go live numerous interactions were displayed – and of these, 50% of the interactions were acted upon.

See below eight weeks’ worth of data from go-live.

In the first 8 weeks of using the system over 3,200 level 3 and 4 interactions were acted upon. In addition, over 3,000 duplicate prescriptions were prevented.

Adam North explains: “The system is great as it is identifying drug interactions and potential allergy warnings earlier in the prescribing process, preventing these drugs being prescribed together. Before the system was implemented, the pharmacist might have picked these up at the checking and dispensing process – but being able to pick up at the point of care is brilliant, as it saves time for both clinicians and pharmacists. As well as interactions being displayed and heeded, there have also been many duplicate prescriptions flagged up – of these, 35% were heeded which has hugely reduced duplicate medication. In other patient safety areas, in terms of allergies, doctors are really reassured that the Multilex system does not allow them to prescribe medication that might cause anaphylactic shock.”

Adam continues: “We are really pleased that the pharmacy is now paper light and working towards paper free. What we are starting to see and appreciate is the way the system automates orders for us. They come into RXSelect and it prioritises the work and links into the dispensing process. It is a lot of quicker using RXDisp – and we are definitely seeing a reduction in time spent on dispensing.”



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ROB TYSALL-BLAY
Chief Executive, WellSky International

*During the first 8 weeks from go-live

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Improvement in workflow

Ricardo da Silva, Digital Nurse at Jersey Hospital says: “In terms of workflow, with EPMA we tried to replicate as much as we could the paper process to the computer process. **One of the key benefits for the nursing and pharmacy teams is that the drug chart is now readable, and we are able to read what the doctor prescribes!** We are really impressed with the reliance, safety and reassurances that EPMA provides.”

There has been an important improvement in workflow Adam North explains: “It is saving us time and the enhanced safety benefits has allowed us to go to a single checking of IV drugs. With the former paper process, we mandated double checking – we no longer need to do this, which is saving time and effort.”

Oliver De Gruchy continues: “We are also seeing the benefits of the IT infrastructure and WiFi works.”

Ricardo da Silva says: “**The system has completely changed the mindset here for the better. Feedback has been really positive and constructive.** We were expecting a lot of noise with the aggressive timescale of the roll out and having to cope with the COVID-19 pandemic, but we had nothing like it.”

Gareth Bate of WellSky says: “This is a key project for WellSky implemented with a big bang approach across the hospital. We were really pleased to work with the amazing team at Jersey.”

Futures Closed Loop

In the future, the hospital will be looking to include the rest of the hospital in-patient ward areas. The second phase of the project will happen later in 2020, with mental health one of the areas of focus.

Ricardo da Silva concludes: “In the future the hospital is looking to improve workflow with integration to link to EPMA with cabinets. We are also looking at closing the link between the prescription and the medication the nurses administer, which will be a game changer and having closed loop at the patient bedside.”

Dr Andrew Mitchell, Chief Clinical Information Officer for Jersey added: “The implementation of EPMA was one of our foundation digital services as we work towards our Digital Health aspirations for Jersey. The teamwork and commitment from the Digital Health and pharmacy teams has been amazing, particularly as the bulk of the rapid deployment occurred during a peak in the COVID-19 pandemic, with excellent support throughout from the WellSky team.”



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