



CASE STUDY: JAC AND FDB

Electronic Prescribing Improves Patient Safety at Doncaster and Bassetlaw Hospitals.

The JAC prescribing system incorporates the Multilex Drug Knowledge Base from First Databank (FDBTM), which provides active clinical checking against the patient's medical record. Doncaster and Bassetlaw Hospitals NHS Foundation Trust has rolled out the system across a number of wards and it has proved of benefit to both patients and clinicians.

Staying ahead of the game

In 1999, DRI identified a need to implement an electronic prescribing system within the hospital trust to improve clinical risk management, enhance operational efficiency and comply with national standards. Reports have shown that the introduction of electronic prescribing and associated online decision support can reduce serious adverse drug events by 55 per cent (Bates et al, JAMA 1988).

The first phase of the project began at Montagu Hospital, part of the Doncaster and Bassetlaw Hospitals NHS Foundation Trust. Following the success of the initial implementation, the electronic prescribing and administration was rolled out to a further three wards over the next year.

The system, which counts nurses, doctors, and pharmacy staff among its users, has been extended to a further six medical wards at Bassetlaw Hospital.

Benefits of Clinical Decision Support

In July 2003 DRI started using FDB's Multilex within the electronic prescribing system. When linked with a patient medical record, the clinical decision support functionality within Multilex checks information in the patient record against medication about to be prescribed or dispensed and generates an alert message if there are potential problems.

DRI chose to implement Multilex clinical checks for allergies, drug interactions and duplicate therapy. This decision support provides prescribers with timely, relevant information and is vital for patient safety.

Rob Blay, Chief Executive of JAC.

"Doncaster and Bassetlaw was one of the first hospital trusts in the UK to provide data proving the benefits of JAC's electronic prescribing and FDB's clinical decision support systems. We are delighted to be working with such a dynamic team."

"We chose to work with JAC and FDB because of the combined expertise in the field of electronic prescribing and patient safety. We were using the JAC pharmacy system already and it seemed the logical step to use their electronic prescribing system because it is the most advanced in the marketplace."

ANDREW BARKER

Clinical Director – Pharmacy & Medicines Management
at Doncaster Royal Infirmary

Throughout the rollout, the project team monitored results, with particular reference to the decision support. One of the key improvements recognised was compliance with trust policy. The transcription of accurate prescriptions rose from 37 per cent to 96 per cent and the quality of medicines administration increased from 65 per cent to 100 per cent.

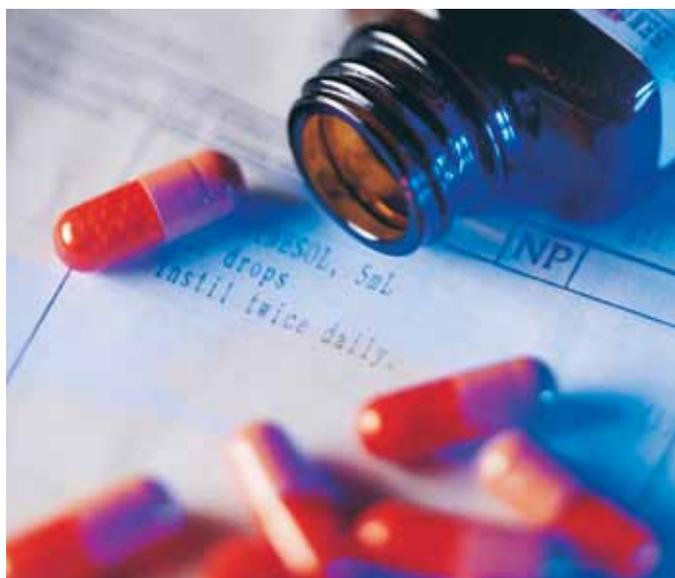
An initial audit of decision support identified how many times a warning or alert made a prescriber reconsider their decision. On 74 occasions (1 in every 97 orders) the prescriber did not complete their initial prescribing intention. A further audit of the effect of electronic prescribing and associated clinical decision support has shown that the system can reduce potential adverse drug events by up to 60 per cent.

Benefits of working with FDB

The DRI's results and analysis of the electronic prescribing system have shown clear and measurable benefits. Most importantly, it has been proved to enhance patient safety. The introduction of electronic prescribing has reduced clinical risk by producing clear prescriptions and administration records and links to the hospital's formulary, protocols and pathways.

The clinical decision support within Multilex has provided integral safety checks against the patient medical record, as well as access to useful monographs providing more comprehensive information about UK drugs and appliances. Darren Nichols, Managing Director of FDB comments:

“These results clearly demonstrate the vital role IT systems such as e-prescribing and clinical decision support play in reducing medication errors and improving patient safety.”



For more information, contact Sales today at 01392 440 100. Or, visit fdbhealth.co.uk

First Databank (FDB), a subsidiary of Hearst Corporation, is the UK's leading provider of drug knowledge bases and active clinical decision support.

As the company that helped to launch the medication decision support industry, we offer more than three decades of experience in helping transform drug knowledge into actionable, targeted and effective solutions geared to improving patient care, patient safety and outcomes.



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NICE has accredited the process used by First Databank to develop content used in Multilex drug knowledge. More information on accreditation can be found at www.nice.org.uk/accreditation. Accreditation evaluates only the processes used to develop content and excludes recommendations displayed by decision support systems in specific clinical settings as these are dependent on technical algorithms which are outside of the scope of NICE accreditation. Accreditation can be used to inform compliance with ISB 0129 – Clinical Safety Risk Management System – Manufacture of Health Software and ISB 0160 – Clinical Safety Risk Management System – Deployment and Use of Health Software, but cannot be used in isolation to release any product for clinical use.