OptimiseRx: patient-specific guidance for GP prescribing

Gita Mendis

OptimiseRx is a new decision support system produced by First Databank. Here, the author explains what it does and how it can aid GP prescribing decisions.

OptimiseRx, a new decision support system for medicines prescribing that provides GPs with patient-specific guidance, has just launched in a number of GP practices in Lincolnshire East and Warrington clinical commissioning groups (CCGs). Early results from the practices using OptimiseRx suggest this new prescribing support system has the potential to reduce variation, drive up formulary adherence and reduce costly and ineffective prescribing.

First Databank’s (FDB’s) system takes a comprehensive view of patient data including factors such as age, conditions, a wide range of observations and test results and allergies, as well as other medications the patient may be taking. This approach ensures that any GP prompts regarding safety or any suggestions to use alternative drugs are appropriate and specific to the patient in question.

OptimiseRx contains national evidence-based best-practice policies, but can be tailored to include local CCG prescribing policies. Although messages can be overridden by doctors they can provide FDB with their reason for doing so, which will support continued refinement of the system.
Dr Catherine Doyle, Medicines Management Lead at Warrington CCG said: ‘OptimiseRx displays information about best practice in prescribing with the ability to see why it has been presented for a particular patient. Workflow is interrupted only when there is something directly relevant and GPs have found it to be nonintrusive while prescribing. Although it is early days, we already consider OptimiseRx an extremely helpful enhancement to TPP’s SystmOne.’

Development

The system was developed following FDB research on validated data taken from over 450,000 patients across 12 CCGs and assessed against best practice guidelines, safety guidelines and cost alternatives. The results showed that in an average practice of 5000 patients, 1 in 10 patients had safety issues with their current prescription combination and over 5 per cent of patients had best practice issues.

This paints a similar picture to research into prescribing errors in general practice by the GMC last year, which found errors in one in six prescriptions, particularly elderly patients with multiple prescriptions and dosing errors for children. Although the vast majority of errors were not classed as severe, the GMC recommended more effective use of clinical computer systems in GP practices to aid safe prescribing.

According to market research with hundreds of GPs undertaken by FDB, some prescribers are suffering from ‘alert fatigue’ and ignoring system-generated messages. GPs told researchers they did not want to be interrupted unless alerts were relevant and covered all aspects of prescribing decision-making: in short, they wanted a more sophisticated system.

Mark Treleaven, FDB’s director of product and marketing, said: ‘The prescribers were clear – they wanted messages to be patient-sensitive and to relate to their overall patient profile. They told us there was no point presenting information that didn’t relate to the patient. We developed OptimiseRx with 15 medicines management teams (MMTs) at both CCGs and Commissioning Support Units (CSUs). They wanted the product to help prescribers to be more consistent, cost-effective and follow best practice standards.’

MMTs saw the potential in FDB’s product as it is integrated into the GP workflow as part of the practice IT system. What was particularly attractive to the MMTs involved in the product development was how it could reach GPs at the point of prescribing and can be tailored to reflect local cost management and RAG/traffic light initiatives.

FDB recently worked with MMT members in Greater East Midlands (GEM), one of the largest CSUs in the country. GEM currently serves 20 CCGs with a population of around five million to provide excellent prescribing advice and support to its extensive clinical customer base.

Susan Ferguson, prescribing and medicines optimisation head of service delivery and development at GEM, said: ‘During GEM’s recent involvement with OptimiseRx in Lincolnshire East CCG it became clear that FDB has developed a truly transformational tool which is unrivalled in its functionality. OptimiseRx is going to be an invaluable tool in supporting high-quality prescribing and will play a significant part in supporting the Medicines Optimisation agenda in Primary Care.’

How does OptimiseRx work?

OptimiseRx looks at the medication history of a patient, including historic conditions, patient measures and observations, and the presenting complaint. It then applies over 700 rules covering best-practice guidance, eg Quality, Innovation, Productivity and Prevention (QIPP), NICE, Medicines and Healthcare products Regulatory Agency (MHRA) and Cochrane (see Figure 1).

FDB databases are constantly updated and the processes used to maintain them have been independently accredited by NICE so GPs can be assured all prompts, wherever they appear, will be based on the very latest evidence.

OptimiseRx uses the Screening Tool of Older Persons’ Prescriptions (STOPP), with criteria for potentially inappropriate drugs, and Screening Tool to Alert doctors to the Right Treatment (START), with criteria for potentially appropriate indicated drugs.

Safety indicators are offered based on high-profile safety incidents taken from sources such as the King’s Fund Improving Quality Care General Practice recommendations on prescribing and the Pharmacist-led Information Technology Intervention for Medication Errors (PIN-CER) trial findings on reducing prescribing errors.

Finally, cost-saving messages indicate if a more cost-effective medicine is available, such as therapeutic interchanges, brand or generic switches or an alternative formulation. Prescribers can see explicitly why the prompt has presented, be it for cost or clinical reasons, and can still overrule them and proceed if he or she wants to.

AnalyseRx

Following demand from CCGs and prescribers who wanted access to prescribing data at an organisation level, FDB also now provides detailed prescribing information for commissioners and managers. The analytics function, AnalyseRx Population View, provides ‘real time’ data insight into prescribing activity including safety compliance, variations in prescribing and cost and value.

In addition, for case management, AnalyseRx Patient View allows CCGs to identify optimal drug regimens for long-term condition patient cohorts, condition case finding, clinical audits and patient-specific medication plans or interventions.

Conclusion

It is early days for the first tool of its kind to consider the full patient history, taking into consideration polypharmacy issues, multiple morbidities, observations and measurements. However, the early adoption of OptimiseRx has been smooth. FDB is in the final stages of refining the system before general release under licence to CCGs and CSUs. For more information visit www.fdbhealth.co.uk.

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