

# Embedding EMR for a complete transformation in user experience

IN CONVERSATION WITH

**Mr Chris Canning,**

Chief Clinical Information Officer, Moorfields Eye Hospital, London

Informatics and IT projects in the NHS have a history of being over budget, delivered late and not fulfilling the design brief. "But it doesn't have to be that way," believes Chris Canning, Consultant Ophthalmologist and Chief Clinical Information Officer (CCIO), Moorfields Eye Hospital NHS Foundation Trust.

## Enterprise EMR for 32-site treatment facility

"My task as CCIO is to help take Moorfields to a paperless clinical environment," explained Mr Canning. "The first task to deliver this vision is to ensure we have the most appropriate clinical platform in place. Large hospital-wide multispecialty electronic patient record (EPR) systems are prohibitively expensive and not optimised for bespoke ophthalmology applications, so we are evaluating several smaller options that can meet our requirements.

"The first point to make is that we are all on a journey and nobody has got the complete answer yet. At Moorfields we have two particular time-pressures: the central government mandate that the entire NHS should have implemented electronic medical records by 2020, and our strategic plans for the development of a new build state-of-the-art fully integrated ophthalmic treatment, research and education centre by 2023. There is no provision for a paper storage system in this new facility, so we need to have got the EMR system right by then.

"There will be a large user engagement process involved in evaluating options. We hope to complete procurement towards the year end, with an agreed implementation strategy and roadmap in place to enable deployment to commence in Q4 16/17.

"Moorfields Eye Hospital is a 32-site facility across London and the south east dealing with over 700,000 patient contacts a year. Thirty-one Moorfields sites currently use OpenEyes, which requires further development although it is already paper-lite in cataract and increasingly in medical retina and glaucoma. Two Moorfields sites have a paper-lite environment across

all subspecialties with an ophthalmic EMR system: Moorfields Eye Clinic at Croydon (Medisoft Ophthalmology) and internationally Moorfields Eye Hospital Dubai (Focus\* from Hicom). At Croydon we continued to pull and access the legacy Croydon University Hospital paper system for as long as the clinicians continued to prove to us that they ever read them. It took about 18 months to transition away from paper records entirely."

## Clinical functionality is key

"For me the key evaluation requirements break down into three categories: clinical functional requirement, technical assurance requirements, and cost / financial considerations," added Mr Canning. "As a Chief Clinical Information Officer I would say of course that the key issue to get right first is clinical functionality.

"You need to understand what your users want and you need to find a way to deliver it. We are raising a detailed specification of need to secure responses from vendors, and plan to evaluate systems based around clinical scenarios in glaucoma, medical retina and cataract, and possibly A&E and paediatric ophthalmology. We will have users at all levels of the organisation contribute to the evaluation. If we can get the big three specialty areas sorted out in terms of clinical functionality – glaucoma, medical retina and cataract – we could achieve a fair amount of cost benefit and savings early on following implementation. Cataract for example accounts for half of all surgical throughput.

"Interoperability of an EMR system is naturally a given global standard. Audit functionality is one of the user requirements that will form part of the detailed specification of need. All clinicians want a flexible and sophisticated auditing tool, to analyse their own performance and their department's performance against others, and to evaluate outcomes across different treatment centres. This is part of the broader issue of quality assurance, benefit realisation and user acceptability.

"Part of the broader mandate is to go

much wider by embedding EMR throughout the organisation to achieve a complete transformation in user experience, including a single call centre and e-rostering system. We are on the cusp of a digital IT revolution here to really change the way we do business."

*\*Focus is an integrated modular web-based application incorporating a comprehensive ophthalmology dataset, managing clinical information and patient records from scheduling, consultation, outpatient visit and preoperative assessment and follow-up clinics.*

## TAKE HOME MESSAGE

- Specialty-driven EMR applications are proving increasingly popular in ophthalmology practice as interoperability capabilities extend.
- Key evaluation requirements in vendor / system selection are clinical functionality, technical assurance, cost / financial and strategic product direction considerations.
- Information officers need to understand what users want and need to find a way to deliver it, user engagement pre- and post-EMR deployment is essential.
- Open source systems can play a significant role alongside proprietary offerings in securing an effective, flexible and configurable EMR solution.
- Analyses of EMR databases support annual appraisal, revalidation, audit, research and service development initiatives.



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