

DEVELOPING INNOVATIVE CARE PATHWAYS FOR OPHTHALMOLOGY

BACKGROUND

A leading provider of ophthalmology services approached Lumeon to help them develop a new care pathway that would help transform glaucoma diagnosis. Around 500,000 people in England are known to have glaucoma, and with roughly 500,000 more suspected cases, the condition accounts for more than 14% of registered blindness in the UK.

The challenge is getting patients in front of highly skilled ophthalmologists for regular screening, so any degeneration that is likely to require surgery is caught as soon as possible. This is especially difficult amongst aging populations in rural communities. Facilities in the UK's NHS are already at capacity and it typically takes four separate appointments, each lasting an hour, to get a reliable diagnostic result.

The healthcare provider wanted to solve this problem by taking care out into the community, using mobile diagnostic screening operated from special 'i-Vans'. This would allow patients to be screened more regularly.

They needed software to help them consistently guide operators in the i-Vans through this new workflow and coordinate processes between administrators, optometrists and off-site ophthalmologists. They also wanted to reduce the administrative burden behind data collection, diagnosis, risk assessment and recall processes, as well as scheduling and patient communications.



4hr → 1hr

**4hrs of separate appointments
consolidated to just 1hr**

through smarter scheduling and
guided workflows



88%

**88% time saving for
ophthalmologists**

using Lumeon's remote reviewer
portal, ophthalmologists can
spend 3 minutes per patient
rather than 25



20%

20% cost saving per patient

by consolidating appointments
and focussing ophthalmologists'
time on value-adding tasks

SOLUTION

Lumeon allowed the provider to assign patients to pathways that dictate operational processes from appointment creation through to testing, monitoring and recall. The result has been quicker consultations, a more convenient patient experience and most importantly, an easier way to prioritize the monitoring of a large patient population.

Together we modelled an innovative pathway that was created on our Care Pathway Management (CPM) platform. This transformed the standard business model by allowing optometrists to complete the initial assessment and analysis-tasks usually performed by ophthalmologists. This meant the platform could support the diagnosis of patients in remote communities via mobile units, rather than relying on expensive hospital slots with long waiting lists.

The pathway, created automatically, collates some data upfront by asking patients to complete e-forms or prompting administrators to capture this - thereby saving time in the appointment. It schedules optometrists' diaries and guides them through all necessary consultation processes. Once scans are completed they use a unique risk profiling algorithm to help assign patients to various new pathways. The platform notifies off-site ophthalmologists who log in remotely to approve the optometrists' choice of pathway allocation.

Each pathway contains automation rules that dictate what happens next. The most at risk patients are referred for priority treatment at hospital. Medium risk patients are kept on pathways that prompt regular follow-up and low-risk patients are transferred into lists for annual check-up.

At every stage, Lumeon's Care Pathway Management platform displays real-time information relevant to each user and automates administration so they can deliver care more rapidly. By combining better workflow and intelligent automation, Lumeon and the provider are pioneering new ways of delivering better outcomes for the NHS and its patients.

OUTCOMES



Faster treatment for patients

Average total appointment time for patients has been reduced from four hours to just one hour through smarter clinical data capture. An average of 20 patients can have all their scans completed in a single day, as opposed to patients having to attend an average of 2.75 appointments, often over different days. There is also reduced backlog of patients awaiting recall.



Improved customer service and access to treatment

Our cloud platform allows remote access to diaries and clinical notes for optometrists in mobile units. This allows our client to provide appointments at a greater choice of locations. It also provides text and email reminders and clusters appointments to minimize waiting times.



Increased efficiency and cost savings

The provider has been able to deliver eye care services at scale, generating substantial efficiency savings for the NHS. Treatment costs have been reduced by an average of 20% per patient. One NHS CCG, who were first to pilot the scheme, saved £500k in its first year.



Advanced business reporting

The provider can now easily report on any aspect of the patient journey, monitor service level agreements for NHS managers and objectively assess the strengths and weaknesses of each ophthalmology network.



Quick implementation and minimal service disruption

As Lumeon's platform is a 'connect all', rather than a 'replace all' solution, there was no disruption to service quality and little disruption to staff using the system.