



# OPHTHALMOLOGY GROUP REDUCES COSTS AND SAVES TIME WITH AUTOMATED CARE ORCHESTRATION

## SUMMARY

Bringing glaucoma screening and diagnosis services out of the clinic and into the community through a fleet of mobile vans is an ambitious and complex undertaking. One UK ophthalmology group initiated such a service several years ago. To make it possible, they turned to Lumeon for an automated care orchestration solution that coordinates processes between administrators, optometrists, and off-site ophthalmologists. Lumeon's solution also reduces the administrative burden behind data collection, diagnosis, risk assessment and recall processes, as well as scheduling and patient communications. The results have been dramatic:

**Care Orchestration:** An automated approach to care coordination that integrates real-time data from multiple sources, applies clinical knowledge, and employs intelligent automation to individualize the care of every patient, at scale.



# 75%

reduction in typical patient appointment time;



# 88%

88% time saving for ophthalmologists



# 20%

20% cost saving per patient

## BACKGROUND

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 among aging populations in rural communities. Facilities in the UK's National Health Service (NHS) are already at capacity, and it typically takes four separate appointments, each lasting an hour, to get a reliable diagnostic result.

An ophthalmology service provider wanted to solve this problem by taking care out into the community, using mobile diagnostic screening operated from special "i-Vans", so patients could be screened more regularly.

## SOLUTION

Lumeon allowed the provider to create patient journeys within the care orchestration platform that dictate operational processes from appointment creation through to testing, monitoring, and recall.

For example, one streamlined workflow transformed the standard business model by allowing optometrists to complete the initial assessment and analysis, which were 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 new workflow 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' calendars and guides them through all necessary consultation processes. Once scans are completed, they use a unique risk profiling algorithm in the Lumeon platform to help assign each patient to their respective care journey. The platform notifies off-site ophthalmologists who log in remotely to approve the optometrists' recommended course of treatment.

For each patient, automation rules dictate what happens next. The most at-risk patients are referred for priority treatment at a hospital, while medium risk patients receive regular follow-up, and low-risk patients are transferred onto lists for annual check-ups.

At every stage, Lumeon's care orchestration 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

The overall result of using Lumeon care orchestration has been quicker consultations, a more convenient patient experience and, most importantly, an easier way to prioritize the monitoring of a large patient population.

### 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 a reduced backlog of patients awaiting recall.



### Improved customer service and access to treatment

Our cloud platform allows remote access to staff calendars 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 Lumeon system, saved £500,000 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.