Co-funded by the European Union

HEALTHCHAIN

# HEALTHCHAIN STORIES

## OPHTALMOLOGY COLLECT: **STRUCTURING VISION CARE FOR BETTER OUTCOMES**

## THE NEED

Clinical registries and information are dispersed across multiple data sources, created by different teams using various instruments. This results in a high volume of unstructured and unstandardized data that prevents automatic extraction and complicates its use for research or evidence generation. In addition, the system lacks automated alerts for warning signs and fails to integrate active patient participation in tracking prescription adherence and treatment efficacy.

## THE HEALTHCHAIN SUPPORT

HealthChain supported Healthcare Organisations in identifying their innovation challenges and selecting companies to address them. They worked closely as an interregional team to co-create, test, and validate a solution aligned with real clinical workflows, patient needs, and organisational constraints. The project provided financial and business support to boost the solution's market-readiness and commercialisation.

# THE **SOLUTION**

Ophthalmology Collect solution leverages data collection via Patient Reported Outcomes Measures (PROMs) and Clinician-Reported Outcomes (CROs) to generate valuable insights for ophthalmology, enhance patient care, and improve clinical outcomes.

It addresses the “major challenge” of clinical information being dispersed in descriptive, unstructured language by providing an automated way to access and structure information for decision-making.

# IMPACT

- The platform transforms fragmented and unstructured clinical data into actionable insights, facilitating better clinical decision-making.
- It improves clinical workflows by automating data collection, which reduces the administrative burden on healthcare professionals.
- The solution enables more effective monitoring of neovascularization diseases, such as Age-Related Macular Degeneration and Diabetic Retinopathy, leading to optimized patient engagement.
- Real-world application in clinical studies has demonstrated the viability and effectiveness of the solution in practical healthcare settings.

# OUTCOMES

The solution pilot outcomes where:

- Measures the “Automated Variable Extraction Success Rate,” which tracks the proportion of predefined clinical variables successfully extracted and validated.
- Tracks the “Reduction in Manual Data Extraction Effort” by comparing clinician time spent on manual chart review against baseline manual workflows.

# SUSTAINABILITY

The plan involves strategically positioning the solution in new markets by participating in health congresses and pursuing public tenders for R&D funding.

Long-term financial sustainability is supported through various streams, including license fees, device sales (where applicable), and ongoing support fees.

Post-pilot strategies include continuous KPI tracking and user feedback loops to refine the system and adapt it to new clinical areas beyond ophthalmology.

# TESTIMONIALS

*"The collaboration within this project allowed us to explore innovative approaches to structured data collection and patient-reported outcomes in ophthalmology. The Ophthalmology Collect platform demonstrated strong potential to integrate PROMs, PREMs, and patient-generated data into existing clinical workflows, while ensuring compliance with data protection and regulatory requirements. The co-creation approach and close collaboration with the technical team were key to aligning the solution with real hospital needs."*

- PROMPTLY, Developer