

Standardisation of electronic health records in eye care

Key messages

- Standardised electronic health records (EHRs) are essential to safe and effective patient care, ensuring consistent, accurate, accessible data across healthcare settings. They enable digital interoperability, allowing eye care professionals in different settings to access the same up-to-date patient information.
- Standardisation refers to the consistent use of defined clinical data fields in EHRs to record patient histories. Interoperability is the ability of different IT systems to communicate and seamlessly exchange this standardised data.
- Current fragmentation of EHR systems in eye care – characterised by data silos and poor interoperability – compromises patient safety and care continuity. In England alone, NHS trusts use at least 21 different EHR systems, many of which are unable to share critical information.¹ Additionally, primary care optometrists face challenges accessing and updating EHRs and NHS IT systems.
- There is an urgent need for all EHR systems to meet defined industry standards. This will improve access to care, enhance outcomes, and increase efficiencies across eye care services.

Why do we need standardised records?

Ophthalmology is the busiest outpatient specialty in the NHS, with nearly nine million attendances in England in 2023/24.² As of March 2025, almost 600,000 people in England were awaiting an ophthalmology appointment – almost 8% of the entire NHS backlog.³

Eye care is typically delivered across multiple organisations including NHS providers, primary care optometrists and independent sector providers. Yet, the digital systems used to capture and store patient information are inconsistent, often incompatible, and rarely connected. As a result, essential clinical data is often incomplete or unavailable when needed.

Standardised clinical fields in EHRs support compliance across the eye care sector. Good Medical Practice guidance from the General Medical Council requires clinicians to “promptly share all relevant information about patients with others involved in their care, within and across teams”.⁴ General Optical Council standards expect registered professionals to “Maintain clear, legible and contemporaneous patient records which are accessible for all those involved in the patient’s care.”⁵

Ensuring that all providers can access and update consistent patient records is critical to delivering joined-up, high quality eye care. Standardisation enables two-way communication and care continuity across all settings of care, while reducing duplication and manual re-entry of data. The Professional Record Standards Body explains the need for consistency with its standards: “developing and using

digital care records, built on the same standards, means that information recorded during health or social care can be shared whenever and wherever appropriate”.⁶

Standardised EHRs can also prevent delays in treatment that lead to patients’ conditions worsening. By improving efficiency and reducing duplication, they help relieve pressure on clinical teams, facilities, and budgets – optimising healthcare spending.

What is the current situation?

Currently many optometrists and ophthalmologists lack access to complete patient records, hindering communication and collaboration – especially when patients move between providers. This can result in delays to care, growing waiting lists, unnecessary referrals and duplication of tests. It also limits eye care transformation and raises the risk of misdiagnosis and treatment errors, compromising patient safety and contributing to professional frustration.

The Royal College of Ophthalmologists and The College of Optometrists have developed datasets that provide the essential data fields required for standardised eye care records.^{7,8} However, EHR vendors are not currently obliged to align their software to national standards (such as Digital Imaging and Communications in Medicine (DICOM)) or these datasets, and the cost of doing so slows progress. Consequently, standardisation and interoperability remain inconsistent, with primary care optometrists and dispensing opticians unable to access or update the Summary Care Record.

Our position

The Royal College of Ophthalmologists, together with signatories from across the eye care and wider health sector, calls for urgent national action to standardise EHRs in eye care services.

As representatives of all the settings in which eye care services are provided, we believe a UK-wide commitment – backed by appropriate funding – is essential to improve services, outcomes and patient experience. We urge:

- Policymakers in each UK nation to commission eye care information standards based on datasets developed by the Royal College of Ophthalmologists and The College of Optometrists.
- Policymakers to require EHR vendors to align their systems with these standards, incorporating the datasets in full. Unless such datasets are comprehensively adopted, fragmentation will continue.
- Policymakers to provide the financial investment necessary for the eye care sector and EHR vendors to implement these standards and enable seamless data sharing between primary and secondary care.
- Policymakers in all UK nations to ensure that, once DICOM standards in ophthalmology have been established, EHR vendors are complying with them in full. This will facilitate the effective sharing of images such as OCT scans and visual field test outputs. This is essential for a specialty that relies heavily on diagnostic imaging.
- Eye care providers to ensure that all relevant staff are trained to collect and input patient information into EHRs where appropriate, so that colleagues across the sector have access to information in the format they need to make sound clinical decisions.

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This position statement was developed with and is co-signed by:



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