Ophthalmic Services Guidance

Measuring follow up timeliness and risk for performance reporting, improvement actions and targeting failsafe procedures in England

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1 Introduction

This guidance has been developed by The Royal College of Ophthalmologists, supported by NHS England Elective Care Transformation Programme and High Impact Intervention Programme/EyesWise, GIRFT Ophthalmology and the HSIB and with advice from NHS Digital.

Ophthalmology is now the busiest outpatient specialty\(^1\) and demand is outstripping capacity. Patients are experiencing delays across the UK and this is leading to recurrent episodes of harm, particularly for glaucoma patients\(^2\)\(^-\)\(^4\). National professional organisations and NHS transformation programmes recommend the use of:

- models of care incorporating referral refinement or ongoing care in the community
- the full range of multidisciplinary ophthalmic team, virtual (telemedicine) and consultant led care delivery
- IT and data systems to ensure up to date understanding of the level and details of any delays
- failsafe processes to protect patients from being harmed by delays.

All of these are recommended to be based on understanding and acting upon measurements of delay, particularly for follow-up patients, and to incorporate clinical risk stratification, particularly the risk of permanent visual loss\(^5\)\(^-\)\(^13\). There is a recommended method for measuring follow-up delays in ophthalmology originally published in 2018 jointly by the RCOphth and NHS Digital\(^14\). However, currently there is no nationally agreed system for how to undertake this risk stratification consistently. In addition, for outpatients, there is no mandatory diagnostic coding beyond *ophthalmology* and *paediatric ophthalmology*. Units without electronic patient records or very strict division of patients into subspecialty non-mixed clinics cannot easily identify which patients have high risk conditions such as glaucoma and retinal conditions.

This document describes the recommended method for ophthalmology providers to measure delays to follow-up care using a patient administration system (PAS) field which can submit data to NHS Digital to assess national performance, provide data for managing individual patients and services, and allow reporting to commissioners and trust executive teams. This allows the calculation of the Portfolio of Eye Health & Care follow up indicator of % of hospital outpatient appointments that occur within 25% of their intended follow up period, including rescheduling or hospital initiated cancellations\(^14\). In order to ensure consistency across providers on derived metrics, it is essential that data collected from any PAS has been recorded in a consistent and equitable manner.

Trusts and commissioners need to use this metric to help ensure that Hospital Eye Services (HES) develop and/or review local pathways, guidelines, policies and procedures to ensure that patients receive follow up review and treatment from the right person, in the right place, within 25% of their individual intended schedule for follow up.

The document also presents a new risk stratification coding framework to support local and national systems to develop consistent risk based reporting. The risk framework in combination with the 25% follow up indicator will help to ensure delayed patients at high
risk of visual loss or serious harm can be identified on patient administration systems. This ensures that failsafe procedures can be targeted at the patient’s at the highest risk of harm rather than at the whole ophthalmic cohort which will contain many lower risk patients.

We will continue to work with NHS Digital to support the development of a national reporting system for providers to submit data on risk as well as follow-up delays.

2 How to measure the 25% delay target

Every trust needs to actively monitor and take action on the following key outcome measure:

<table>
<thead>
<tr>
<th>Portfolio Indicator</th>
<th>Minimum Standard</th>
<th>Achievable standard</th>
<th>Reporting Frequency</th>
<th>Data source</th>
<th>Evidence/policy base</th>
<th>Purpose/application</th>
<th>Domain and Population Group</th>
<th>Indicator Definition</th>
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<td>Percentage of hospital appointments that occur within 25% of their intended follow up, including rescheduling of hospital initiated cancellations and non-attendance.</td>
<td>85%</td>
<td>95%</td>
<td>Quarterly</td>
<td>Data source: Local trust or service provider</td>
<td>NPSA alert for glaucoma (2009)</td>
<td>Would monitor delays in continuity of management and losses to follow up, arising from capacity issues (clinical and administrative) – especially for chronic diseases (Glaucoma, AMD, Diabetic Eye Disease).</td>
<td>Safety Experience Age</td>
<td>Booking interval applied to any changes to planned appointments i.e. if planned follow up interval cannot be accommodated, or for booking DNA (did not attend) Trust or Patient cancellation.</td>
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To achieve this, trusts will need to support their clinical and non-clinical staff to work with their PAS and clinical system suppliers. It is acknowledged that ophthalmology services are delivered and administered differently within providers and also that a number of different electronic patient record and PAS are in use across the country. For these reasons, it is not possible to give definitive “how to” instructions but we provide a set of guiding principles that will allow for local variations in role and system.

Which patients does this apply to?  
This advice applies to all ophthalmology outpatients requiring a follow-up visit.

What data needs to be collected? Identifying the target date

Following a consultation in clinic, if a patient requires a return visit, the clinician will use his/her knowledge of the patient, the patient’s diagnosis, the patient’s individual clinical situation and clinical risk of harm (most commonly permanent visual loss), and understanding of national guidelines such as those from NICE and the RCOphth, to make a decision about the clinically appropriate timing for that visit to occur. This should be recorded in the health records.

How should the data be inputted?

The Earliest Clinically Appropriate Date (ECAD) field on the PAS should be completed with the clinically-appropriate timescale, to generate the target date for follow-up for each patient. This field can be found in the outpatient’s data set (as defined in the NHS Data Dictionary) (https://www.datadictionary.nhs.uk/data_dictionary/data_field_notes/e/earliest_clinically_appropriate_date_de.asp?shonav=0)
This is a seldom used field and for ophthalmology patients should now be used for the purpose of outpatient follow up monitoring. It is also acceptable to use a different field for data entry as long as it can and will be mapped to ECAD when the data is submitted to NHS Digital via SUS (secondary uses services).

Ensuring the data is inputted.
Trusts will use a variety of clinical and administrative systems to convey the clinically desired timescale from the clinician to the ECAD field on the PAS. This may be possible to do directly by the clinician, or via an administrator, and may involve data transfer by electronic means or, in some trusts, by paper. However, whether direct or indirect and whether by clinician or administrator, this data must be entered as soon as possible into PAS for all patients needing a return visit, even if the appointment is not actually scheduled or provided to the patient at that time.

Who needs to do what?
In general, four separate functions will need to be delivered:
1. A clinical decision about the desired timescale for a follow-up clinic appointment will need to be made and recorded in the patient’s health records or electronic patient record.
2. The follow-up target date will need to be recorded within the PAS.
3. The system administration teams will need to support clinical and administrative colleagues to identify how and where the date should be entered within their local systems.
4. Administrative and information teams will need to calculate the key outcome metric by comparing the target date with the actual date AND the system can also be used by staff to identify individual patients with a delay and ensure failsafe processes are set into motion to action where a patient may be high risk.

Guidance for clinicians
As the assessing clinician, you should record a timescale for a clinically appropriate and safe follow-up appointment. This should be based on a clinical opinion of the most suitable time period, taking into account the diagnosis, the individual patient’s clinical situation and the individual patient’s risk, and be compliant with key national guidance from NICE and the RCOphth where available.
If you are a clinician who uses clinical information or PAS systems directly then:
- Liaise with the hospital system administration team and ask them where you can enter data into the ECAD field.
- Ensure that when you have seen a patient who requires a return visit you are noting a date for follow-up that is appropriate to the condition and the patient in the ECAD field.

If you are supported by a clinical administration team who enter information to a system on your behalf then:
- Liaise with that team to ensure that they know how you will communicate the desired timescale for review.
- Ensure with your ophthalmology clinical lead that the admin team are being supported by the trust to record the target date into the PAS.
Guidance for system administration teams
In order to be able to identify patients who have been lost or delayed to follow-up, clinical teams need to be able to identify and record the target follow-up timescale. To achieve this without the need for changes to existing patient administration systems, NHS Digital are using an existing field from the national dataset. Our analysis shows that these data items are seldom used but should be available within existing PAS. The field is called the Earliest Clinically Appropriate Date (ECAD) (https://www.datadictionary.nhs.uk/data_dictionary/data_field_notes/e/earliest_clinically_appropriate_date_de.asp?shownav=0)
In order to support this initiative, we ask that you do the following:
• Identify where in your clinical systems the above data items can be accessed. They should be part of the outpatient appointment module of functionality. It may be necessary to configure existing screens to include these data items. If necessary, liaise with your system suppliers to achieve this.
• Once identified or included, please append additional guidance notes and screenshots to this set of guidelines so that your colleagues know where and how to access the data items.

Guidance for clinical administration teams
If you support a clinical team by entering information within a PAS and/or electronic patient record then:
• Please familiarise yourself with the purpose of this initiative
• Please liaise with your system administration team to find out where to record the target review date in the ECAD field
• Liaise with your clinical team to agree the method by which they will transfer the information to you.

Performing the calculation
The key outcome measure is: What % of all ophthalmology follow up patients are seen within 25% of the target timescale? This requires a calculation for each patient, based on declared target date and actual appointment date (or if no appointment booked, the date calculation is undertaken) recorded in PAS:
1. What is the time period between the last appointment and the target date (as recorded on ECAD) e.g. target = 160 days (data from PAS)
2. What is the time period between the between the last appointment and actual date of appointment booked/undertaken (or, if no date booked, the date the calculation is done) e.g. actual = 190 days (Data from PAS)
3. Where there is a delay, what is the delay: actual – target = 30 days (Derived metric)
4. Does this delay exceed 25% of the planned timescale: actual – target / target i.e. 30/160 x 100% (Derived metric)

This calculation then needs to be performed for the population of patients:
1. Identification of number of all patients requiring follow up care = all follow up patients (Accumulated via PAS sources, validated using HES)
2. Identification of number of patients with 25% or more delay (Derived as defined above)
3. Number of delay patients/ number of all follow-up patients = % delayed (Derived metric)
By using HES data, the number of all patients requiring follow up care can be cross-referenced as a means of validating the population of patients. This can be done using a combination of service provider, appointment dates and diagnosis or specialty codes related to each outpatient episode.

Agreed checkpoints would be recommended in early stages of this process to ensure that:
- Effective data collection is taking place
- Indicated outcome measures can be sense checked
- “Teething trouble” such as discrepancies between PAS/suppliers can be identified.

3 Risk stratification coding framework for follow up ophthalmology patients

To date, there is no nationally agreed risk stratification coding system for diseases such as glaucoma and macular degeneration. Therefore, this straightforward risk stratification coding framework has been developed by the RCOphth working with GIRFT Ophthalmology and the NHSE/I EyesWise team, using established successful models of risk stratification and existing publications. It is aimed at outpatient ophthalmology local units and to support national systems to develop consistent risk based reporting.

The framework in combination with the follow up indicator of % of hospital outpatient appointments that occur within 25% of their intended follow up period, including rescheduling or hospital initiated cancellations will help to ensure patients at high risk of visual loss or serious harm can be identified on patient administration systems, especially those patients whose appointment is delayed. This ensures that failsafe procedures can be targeted at them rather than at the whole ophthalmic cohort which will contain many lower risk patients. It is important to note that no such list can be completely comprehensive for every possible variation of diagnosis and patient circumstance. Consultant input will be required to code individual patients whose risk is not adequately captured by the standard framework list.

Each patient seen in ophthalmology clinics requiring a follow-up appointment should have a clinical decision made as to whether high, medium or low risk, based on this framework, and this should be recorded in the patient records (paper or electronic) and ideally, if possible, in PAS.

It is additionally recommended that each regional system works with their local hospitals and providers, to develop a more detailed clinical risk stratification system that directs patients to suitable risk stratified care models, in conjunction with all local stakeholders and clinicians. How such a system will operate depends on the region’s patient population characteristics, the different models of available care delivery, local providers and their system of staffing, training, IT systems and internal processes.
High risk: Patients may suffer serious irreversible harm from delays
- Wet age related macular degeneration (AMD)
- Other conditions on an active intravitreal injection pathway
- Glaucoma and glaucoma related conditions
- Referable diabetic eye disease
- Paediatric patients at risk of amblyopia e.g. those under 7 years with squint, ptosis, refractive error
- Paediatric patients with conditions that could affect sight e.g. cataract, glaucoma, ocular surface disease
- Paediatric patients with systemic conditions where there is a risk of ocular pathology
- Ocular and adnexal cancers
- Severe thyroid eye disease
- Post-operative patients
- Ocular inflammation
- Cataract patients with significant ocular co-morbidity
- Cataract patients with vision bad enough to cause significant safety concerns e.g. injury or falls
- Neuro-ophthalmology conditions with risk visual loss or mortality
- Rapidly progressive keratoconus
- Other individual patients at consultant discretion

Medium risk: Patients who may suffer reversible harm from delayed appointments
- Most cataracts
- Posterior capsular opacification
- Macular holes

Low risk: Patients who may be inconvenienced or suffer mild/reversible consequences from delayed appointments
- Most squints in adults or older children
- Most dry eyes
- Most watery eyes
- Most chronic lid irritation (blepharitis)
- Most adnexal cysts and benign eyelid lesions
- Most hereditary retinal conditions
- Most epiretinal membranes
- Most ptosis and eyelid malpositions
- Non sight threatening conditions
- Non treatable conditions
- Non progressive conditions
- Conditions which often resolve with time or conservative or minor treatment
The framework only pertains to patients who require ongoing care and cannot be discharged. Many patients in the low risk group may not require ongoing hospital care. All units should have robust discharge processes and policies to ensure optimal use of limited capacity for higher risk or complex patients who can only safely be managed in hospital settings. For example:

- cataract patients should usually be either booked for surgery or discharged;
- posterior capsular opacification patients should be booked for laser or discharged;
- many diabetic retinopathy patients will be monitored under the diabetic eye screening programme.

**Timetable for implementation**

The sooner that we can start to identify patients who are at risk due to delay, the sooner we can start to make changes that will help reduce the levels of unnecessary sight loss from delays and lack of capacity. The likely constraints for this initiative will be the flexibility and set up of patient administration and electronic patient record systems. If at your trust the local system can be already used or rapidly modified using the existing provision for recording the target review date into the ECAD for outpatient appointments then there is no reason not to start using this immediately. If not, this should be urgently addressed to make the necessary modifications to enable use as soon as possible.

The recording of ECAD for all ophthalmology outpatients was a necessary criterion for HES to achieve compliance with Action 1 of the 2018/19 High Impact Intervention. The 2020/21 NHS Operational Planning and Contracting Guidance to commissioners (released in January 2020) sets out, in the operational requirements section, the requirement for systems ‘to ensure that all hospital eye services can report compliance with the Portfolio of Indicators for Eye Health and Care follow-up performance standard’.

NHS England/Improvement are working closely with NHS Digital to establish ECAD as a mandatory field within the updated National Commissioning Data Set (CDS). The current application will seek formal approval by the end of March 2020. Once ECAD has been agreed for inclusion, a phased approach to rationalising all new submissions to CDS will commence throughout the remainder of 2020/21, with the expectation ECAD will go live as a mandatory data field from April 2021.

In the meantime, NHS England/Improvement & NHS Digital will work closely with the Royal College of Ophthalmologists and GIRFT to ensure that the necessary support function is in place and strongly encourage all HES to work closely with their PAS suppliers and local IT support departments to work towards implementing the actions set out in this guidance document.
References

3. Surveillance of sight loss due to delay in ophthalmic treatment or review: frequency, cause and outcome, Foot B, MacEwen C]. Eye (2017); 31: 771–775