



Healthcare  
Improvement  
Scotland

**Evidence**  
Advice, guidance  
and intelligence

# Cataract Surgery

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Standards for all healthcare settings

December 2023

We have a commitment to advancing equality, promoting diversity and championing human rights. These standards intend to enhance improvements in health and social care for everyone, regardless of their age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation, socio-economic status or any other status. Suggested aspects to consider and recommended practice throughout these standards are inclusive of everyone living in Scotland.

We carried out an equality impact assessment (EQIA) to help us consider whether everyone accessing health and social care services will experience the intended benefits of these standards in a fair and impartial way. A copy of the EQIA is available on request.

Healthcare Improvement Scotland is committed to ensuring that our standards are up-to-date, fit for purpose and informed by high quality evidence and best practice. We assess the validity of our standards by working with partners across health and social care, the third sector, and people with lived and living experience. We encourage you to contact the standards and indicators team at [his.standardsandindicators@nhs.scot](mailto:his.standardsandindicators@nhs.scot) to advise us of any updates that might require consideration by the project team for the cataract surgery standards.

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# Introduction

## Background to the cataract surgery standards

Ophthalmology is one of the busiest services in the NHS.<sup>1</sup> Treatment is required for a variety of ophthalmic conditions that may be either sight-threatening or sight-limiting. Since the majority of conditions are age-related, the demand for ophthalmic services continues to increase as the population lives longer.<sup>2, 3</sup>

Cataract surgery can significantly improve a person's visual function. It is offered when there is a lens opacity that causes clinically significant visual impairment with a reduction in best corrected visual acuity, disabling glare or contrast sensitivity.<sup>3</sup> The procedure is associated with low morbidity and mortality.<sup>4</sup>

In Scotland, while there have been recent improvements in the way services for cataract surgery are provided, standards of care are not consistent.<sup>5</sup>

An evidence-based approach to providing cataract surgery services will ensure the best clinical outcomes for people who have cataracts.<sup>6</sup>

## Policy context

The Scottish Government commissioned the Centre for Sustainable Delivery (CfSD) to address the challenges that influence the national delivery of cataract surgery. The CfSD has published a blueprint for improving the delivery of cataract surgery across Scotland. The aim of the blueprint is to maximise the number of cataract surgical procedures safely completed during each operating theatre session.<sup>5</sup> These standards will support implementation of the blueprint.

The standards will also address variations in the provision of cataract surgery services, promote national consistency and support implementation of Value Based Health & Care – Realistic Medicine.<sup>7</sup> For patients, this will improve outcomes and quality of life, with reduction of the avoidable harm associated with impaired vision, such as falls.<sup>8</sup>

## Key principles

These standards aim to ensure that:

- the rights of all people are upheld
- people with cataracts have fair and timely access to high quality cataract surgery services.

The standards are supported by a human rights approach and seek to provide better outcomes for everyone. The standards promote and uphold the:

- International Covenant on Economic, Social and Cultural Rights<sup>9</sup>
- United Nations Convention on the Elimination of Discrimination Against Women<sup>10</sup>
- United Nations Convention on the Rights of Disabled People<sup>11</sup>
- General Comment No. 22 from the UN Committee on Economic, Social and Cultural Rights.<sup>12</sup>

## Scope of the standards

The cataract surgery standards have been developed by Healthcare Improvement Scotland to ensure that there is a fair and consistent approach to the provision of cataract surgery services across Scotland.

The process of developing the standards is summarised in [Appendix 1](#) and the membership of the standards development group is outlined in [Appendix 2](#).

The standards will apply to:

- all healthcare facilities within NHSScotland
- independent sector healthcare providers.

The standards for cataract surgery cover the following areas:

- leadership and governance
- staff education and training
- person-centred care and shared decision making
- referral from primary care
- theatre planning and facilities
- pre-operative assessment and management of comorbidities
- surgery, recovery and discharge
- post-operative care.

## Format of the standards

All Healthcare Improvement Scotland standards follow the same format. Each standard includes:

- an overarching standard statement
- a rationale explaining why the standard is important
- a list of criteria describing what is needed to meet the standard
- what the standards mean if you are a person who needs cataract surgery
- what the standards mean if you are a member of staff
- what the standards mean for organisations
- examples of evidence for meeting this standard.

## Implementation

Healthcare Improvement Scotland has published these standards to support and inform self-evaluation, assessment and improvement. All facilities providing cataract surgery services will work towards implementing these standards to assure themselves and relevant governance structures that they are delivering safe, effective and person-centred services across the cataract surgery pathway. These standards complement existing Healthcare Improvement Scotland quality assurance programmes.

The [Healthcare Improvement Scotland Quality Management System \(QMS\) Framework](#) supports health and social care organisations to apply a consistent and coordinated approach to management of the quality of health and care services. More information about this framework is available on the Healthcare Improvement Scotland website.

Shared care between NHS boards and national services is a key component of cataract surgery services. Whilst delivery of the standards rests with NHS boards, the pathway to full implementation of these standards requires the development of existing shared care mechanisms. The QMS Framework highlights the role of clear vision, leadership and collaboration at all levels for the planning, improvement and redesigning of services.

## Terminology

Wherever possible, generic terminology that can be applied across all settings has been used.

**Cataract** refers to a clouding of the crystalline lens in a person's eye.

**Cataract surgery** is the removal of the crystalline lens of the eye that has developed a cataract. The procedure usually involves replacement with an artificial intraocular lens.

**Cataract surgery pathway** refers to the patient journey from identification of the need for cataract surgery through to referral from primary care, pre-operative assessment, surgical procedure and post-operative review.

**Independent healthcare** is healthcare that is not provided by the National Health Service. Sometimes 'independent healthcare' is referred to as 'private healthcare.'

**Optometrist** refers to a healthcare provider who is trained to examine the eyes.

**Organisation** refers to any service or provider that delivers cataract related healthcare, including primary care services, hospital settings and independent healthcare providers.

**Person or People** refers to all individuals accessing services and receiving care or support across the cataract surgery pathway.

**Person-centred care** care is personalised, coordinated care that provides what matters to people. It ensures that people who use services are at the centre of decision making and enables them to make choices, manage their own health and live independent lives, where possible.

**Primary care** includes general practitioners, community nurses, pharmacists and allied health professionals such as optometrists. 'Primary care' is often the person's first point of contact with the NHS.

**Representative** refers to any individual the person wishes to be involved in their care. This includes, but is not limited to, a family member, friend, neighbour or an individual who can speak on the person's behalf.

# Summary of standards

## **Standard 1: Leadership and governance**

Each organisation demonstrates effective leadership and governance in the management and delivery of cataract surgery services.

## **Standard 2: Staff education and training**

Each organisation delivering cataract surgery demonstrates a commitment to the education, training and support of all staff involved, appropriate to their roles and workplace setting.

## **Standard 3: Person-centred care and shared decision making**

People who need cataract surgery can access information that is right for them and are supported to participate in decisions about their care.

## **Standard 4: Referral from primary care**

People who need cataract surgery are referred to an appropriate facility within agreed timelines, using a standardised referral template.

## **Standard 5: Theatre planning and facilities**

Each cataract surgery facility meets agreed national standards for space, staffing and equipment.

## **Standard 6: Pre-operative assessment and management of comorbidities**

Arrangements for pre-operative assessment and management of comorbidities are safe, effective and person-centred.

## **Standard 7: Surgery, recovery and discharge**

Each organisation ensures that surgery, recovery and discharge are safe, effective and person-centred.

## **Standard 8: Post-operative care**

Each organisation ensures that people receive effective, coordinated and person-centred post-operative care.



# Standard 1: Leadership and governance

## Standard statement

Each organisation demonstrates effective leadership and governance in the management and delivery of cataract surgery services.

## Rationale

Effective leadership is essential for the provision of safe, person-centred and high quality cataract surgery services.

Effective governance provides assurance that organisations have robust measures in place to deliver and manage cataract surgery. These measures include, risk and adverse event management, escalation procedures, and data monitoring and response.<sup>13</sup> Organisations should also demonstrate their commitment to the safety and quality of services through addressing complaints or concerns raised by staff. This should be in line with Duty of Candour procedures and whistleblowing policies.<sup>14, 15</sup>

A transparent assurance and accountability framework, with clearly defined roles and responsibilities, is necessary to support strategic and operational decision making. It is important that staff are aware of the accountability and reporting structures within their organisation, including which team(s) to contact for leadership and expertise in cataract surgery.

Organisational commitment to a culture of quality improvement encourages teams to continuously assess their performance, identify areas for improvement, and take measures to achieve and maintain high quality care. Community primary care clusters also provide a mechanism for primary care practitioners to engage in peer-led quality improvement activity across practices.<sup>16</sup>

The collection, use and sharing of personal data should be fully explained and should occur in line with national policies and procedures.<sup>17</sup>

With the person's consent, information should be appropriately shared between public health, primary care, secondary care, laboratories, third sector, local authority and independent healthcare providers.

## Criteria

- 1.1** The organisation can demonstrate robust governance arrangements, with clear lines of leadership and accountability, covering all aspects of the cataract surgery pathway.<sup>18</sup>
- 1.2** The organisation can demonstrate commitment to quality planning and assurance through:
- effective data collection, including data on health inequalities
  - local and national standards measured against agreed outcomes
  - clear alignment of strategic policy objectives and implementation schemes.
- 1.3** The organisation has an assurance and accountability framework that specifies, as a minimum:
- designated clinical leads for the cataract surgery service
  - defined staff roles and responsibilities
  - arrangements for monitoring quality and assurance
  - structures for reporting and escalation of adverse events.
- 1.4** There are well-defined and locally agreed processes to enable:
- an effective multi-disciplinary and multi-agency approach to cataract surgery
  - cross-organisational support including access to specialist advice, where indicated
  - compliance with mandatory reporting, where required
  - implementation and monitoring of relevant staff policies, procedures, guidance and standards
  - accurate and prompt communication within and between services, with the informed consent of the patient, where applicable.
- 1.5** The organisation shares information, data and learning from a variety of internal and external sources to support good practice and continuous quality improvement in cataract surgery.
- 1.6** The organisation takes measures to improve services by receiving and responding to regular feedback through continuous engagement with:
- people that use services, as well as their representatives
  - staff, including referring practitioners.

- 1.7** Clear and structured processes exist for the management of adverse events, which detail:
- accountability and responsibility mechanisms for reporting any adverse events
  - a consistent approach to reporting adverse events
  - a documented escalation process for adverse events in cataract surgery
  - systems for sharing organisational learning from adverse events.
- 1.8** Information management structures and governance processes are developed to support:
- national reporting using a database such as the National Ophthalmology Database Audit
  - monitoring performance against agreed standards
  - routine sharing of identifiable personal data between care providers, with informed consent from the patient.
- 1.9** There are agreed pathways and processes to ensure that:
- cataract surgery is accessible and responsive
  - timely management options are consistently available
  - information is shared appropriately, and with permission, between public health, primary care, secondary care, and independent healthcare providers
  - there are resilience plans for service disruption
  - there is timely assessment, communication of results, and onward referral for diagnosis, management and support as required
  - pathways and processes are in place to prioritise those most in need.
- 1.10** Organisations work in collaboration with national services and other organisations, to collect and share data as appropriate to support research and clinical excellence.
- 1.11** Organisations commit to reducing inequalities by developing protocols and procedures that support shared decision making and enable all patients to access care that is timely, fair, appropriate for their individual circumstances, and within a facility that is able to provide their ongoing needs.

### What does the standard mean for the person receiving care?

- The treatment you receive will be inclusive and rights-based.
- You will have meaningful opportunities to offer feedback and participate in decisions about the provision of cataract surgery services.
- Information about you and your care, including personal data, will be shared only with your consent and in line with national information sharing guidance.
- You can be confident that the cataract surgery service monitors and reviews its performance to keep improving.
- You can be confident that staff work collaboratively and share good practice to provide you with a high quality service.

### What does the standard mean for staff?

Staff, in line with their roles, responsibilities and workplace settings:

- can access and implement care pathways, standards, and guidance
- actively participate within the multi-disciplinary team
- receive clear information about the leadership and governance structure
- are aware of how to report and escalate adverse events
- are proactive in raising, and responding to, identified concerns that might impact on patient safety and care
- can share feedback to inform service improvements.

## What does the standard mean for the organisation?

### The organisation:

- ensures development and implementation of coordinated person-centred pathways for access and delivery of cataract surgery
- has effective leadership and is committed to quality improvement
- has governance arrangements in place to determine roles, responsibilities and lines of accountability, including for the management of adverse events
- supports a culture that allows concerns to be raised and responses to be appropriate
- routinely monitors cataract surgery outcomes to improve service delivery
- engages with staff, people who use services, and their representatives, to identify areas for improvement
- records and monitors data
- ensures that data is shared safely
- undertakes quality improvement and assurance activities to ensure performance against standards
- works collaboratively and effectively with other cataract surgery providers to ensure high quality care
- ensures effective communication between primary care, secondary care, independent healthcare providers and public health
- encourages research and clinical excellence.

### Examples of evidence for meeting this standard *(NOTE: this list is not exhaustive)*

- Local strategies and/or documentation outlining local implementation of national strategies for cataract surgery.
- Documentation describing lines of accountability, roles and responsibilities, and escalation of adverse event reporting.
- Management system for reporting, reviewing and learning from all types of adverse events.
- Documentation describing monitoring and reporting systems for local strategic aims and objectives, quality improvement, and service delivery objectives.
- Local and national care pathways, and standard operating procedures demonstrating multi-disciplinary working.
- Collaboration through multi-disciplinary community primary care clusters.
- Improvement work, including action plans, data collection, review of data such as feedback from service users and staff members, measurement of performance against national standards, and evidence of timeliness of processes.
- Evidence of research activity.

## Standard 2: Staff education and training

### Standard statement

Each organisation delivering cataract surgery demonstrates a commitment to the education, training and support of all staff involved, appropriate to their roles and workplace setting.

### Rationale

To ensure that cataract surgery is safe, effective and person-centred, all staff groups should be provided with training appropriate to their role, responsibilities and workplace setting.<sup>19-21</sup> This includes referring practitioners, as well as staff in administrative and non-patient facing roles. All staff should treat patients with respect and compassion.

Each organisation should offer accessible education and training that enables staff to develop and maintain their knowledge, skills and competencies in line with national guidance.<sup>22-24</sup> Access to Mandatory and Statutory Training (MAST) should be provided, together with role-specific resources such as NHS Education for Scotland (NES) specific training.<sup>25-27</sup> This will support further development of staff in areas essential to their role, responsibilities and workplace setting.<sup>28</sup>

Training and support for the cataract surgery team will ensure continuous development of the cataract surgery service.<sup>29</sup> The cataract surgery team should be responsive to the additional needs of patients who require cataract surgery. The team should be able to respond appropriately to medical emergencies and unanticipated clinical deterioration of patients.<sup>30</sup>

The effectiveness of education and training programmes should be evaluated, with regular assessment of staff knowledge and competence. There should be a regular review of how knowledge and skills are incorporated into routine practice.<sup>31</sup>

High quality, person-centred health care is promoted by empowering staff to act autonomously, confidently and skillfully within their professional and organisational codes, with opportunities to evaluate their experiences.<sup>32</sup>

## Criteria

- 2.1** The organisation implements a comprehensive and multi-faceted education and training programme that:
- includes an assessment of staff training needs
  - is responsive to staff roles, responsibilities and workplace setting
  - supports continuous professional development, with opportunities for upskilling to advanced roles
  - promotes the use of quality improvement methods and tools
  - supports the implementation of existing guidance, policies and standards
  - is aligned to professional development frameworks
  - includes an evaluation of the provision, quality and uptake of training.
- 2.2** The organisation has a training plan to ensure that continuing professional development (CPD) is available to clinical and non-clinical staff in public-facing roles across the entire cataract surgery pathway.
- 2.3** Staff are provided with time, resources and support to access and complete training and education appropriate to their roles, responsibilities and workplace setting.
- 2.4** The organisation supports staff to attend training sessions appropriate to their role, such as:
- MAST and
  - NES specific training.<sup>25-27</sup>
- 2.5** The organisation encourages and supports staff to participate in events organised by relevant national groups, such as:
- the College of Optometrists<sup>33</sup>
  - the Royal College of Nursing<sup>34</sup>
  - the Royal College of Ophthalmologists<sup>35</sup>
  - third sector organisations.<sup>34, 35</sup>
- 2.6** The organisation is proactive in establishing an effective and resilient workforce by creating development opportunities and supporting new entry points into key roles.<sup>36</sup>

### What does the standard mean for the person receiving care?

- You will be treated with respect and compassion.
- Your care and support will be provided by staff who are trained and competent.

### What does the standard mean for staff?

Staff, in line with their roles, responsibilities and workplace settings:

- can demonstrate knowledge, skills and competencies
- provide safe, effective and person-centred care
- are supported to participate in relevant training, and to achieve and maintain the required competencies and qualifications
- are aware of their role within multi-disciplinary and multi-agency teams and are supported to fulfil their responsibilities
- receive current, accurate and evidence-based information to enable them to support people
- treat individuals with dignity and compassion.

### What does the standard mean for the organisation?

The organisation provides staff with:

- the necessary knowledge and skills, appropriate to their roles and responsibilities, to provide high quality care and support
- ongoing support for CPD
- opportunities to participate in personal and peer support.

### Examples of evidence for meeting this standard *(NOTE: this list is not exhaustive)*

- Evidence of availability and uptake of staff training to continuously improve the support, care and treatment provided.
- Evidence of promotion and implementation of existing guidance, policies and standards, including the Health and Social Care Standards.<sup>37</sup>
- Consistent staff appraisal and use of professional development frameworks.
- Evaluation of training needs and assessment of training programmes.
- Evidence of attendance at national groups for training and shared learning, including groups led by national third sector organisations.
- Audit of provision and uptake of training in cataract surgery.
- Evidence of responding appropriately to medical emergencies and unanticipated clinical deterioration of patients.



# Standard 3: Person-centred care and shared decision making

## Standard statement

People who need cataract surgery can access information that is right for them and are supported to participate in decisions about their care.

## Rationale

Each organisation should provide high quality, inclusive information about cataract surgery, including information about the benefits and risks of proposed management options. The provision of high quality, inclusive, person-centred information in a range of formats and languages is essential to empower and support people to make decisions that are right for them about what matters to them.<sup>38</sup> This supports the principles of realistic medicine and shared decision making.<sup>39</sup>

Each cataract surgery facility should have an agreed pathway for referral with relevant information readily available within all healthcare settings. Pathways for referral should be similar for all healthcare facilities.

At the time of initial referral, people should be provided with adequate information to enable shared decision making regarding management options, including whether treatment is required for one or both eyes.<sup>38</sup> People should have access to accurate information on choices for surgical or non-surgical treatment. Alternative management options should be discussed in detail with the person, rather than making a default referral for cataract surgery.

People accessing cataract surgery should be given appropriate time and resources to discuss their treatment in full, with their choices and concerns acknowledged and addressed. People should receive details about the expected duration of cataract surgery, what the procedure involves, and any anticipated limitations to lifestyle following surgery.

## Criteria

- 3.1** At the time of initial consultation for cataract surgery, people are provided with appropriate information on all aspects of their care, including details about the healthcare facility to which they will be referred.
- 3.2** People are:
  - supported to be equal partners in their care
  - fully involved in all decisions about their cataract surgery, with their opinions considered and their concerns addressed.

**3.3** People receive information that is timely, relevant, and in a language and format that is right for them.

**3.4** Care and treatment plans:

- are developed in partnership with the person and, if appropriate, their representative
- record shared decisions
- are holistic
- reflect the particular needs of the person, such as support for cognitive impairment or specific communication requirements
- record frailty or comorbidities
- are accessible to the person, their representative where appropriate, and any staff involved in their care.

**3.5** People can discuss clinical results, treatment and management options with appropriately trained staff, and are supported to participate in shared decision making.

#### What does the standard mean for the person receiving care?

- You will receive the care that is right for you.
- You will be listened to and fully involved in all decisions.
- You will receive information in a language and format that is right for you.
- You will receive the results of any tests performed, as well as information about the treatment options available to you, and how long you will have to wait.
- You will be offered support and time to discuss the benefits and risks of the treatment options available to you.
- You will be informed, and asked to give your consent, if information about you will be shared in order to ensure continuity and consistency in your care.

### What does the standard mean for staff?

Staff, in line with their roles, responsibilities and workplace settings:

- offer a responsive and person-centred service
- demonstrate effective and compassionate communication
- can readily access information to support those receiving cataract surgery
- have knowledge of the agreed processes and protocols for managing cataracts
- have access to current referral templates for consistent documentation and sharing of information
- offer evidence-based information in a range of formats and languages appropriate to the needs of the person
- are able to understand and communicate the outcomes or results of clinical investigations
- can support people to make informed decisions.

### What does the standard mean for the organisation?

Organisations have systems and processes in place to ensure:

- the provision of timely, appropriate and easily accessible information and support
- communication of management protocols for people who access cataract surgery services
- adequate monitoring of services to ensure continuing improvement.

### Examples of evidence for meeting this standard (*NOTE: this list is not exhaustive*)

- Evidence of information provided in alternative formats and languages, which also considers the needs of people who may be digitally excluded.
- Evidence of effective communication, tools for shared decision making, and patient involvement in decision making.
- Audit of provision of written information about cataract surgery, or documentation of appropriate signposting.
- Evidence of patient information resources providing details about the proposed healthcare facility, including the number of attendances required, quality outcome metrics (where available), access via public transport, car parking and signposting to information on prices within independent healthcare facilities (where applicable).

## Standard 4: Referral from primary care

### Standard statement

People who need cataract surgery are referred to an appropriate facility within agreed timelines, using a standardised referral template.

### Rationale

Most referrals to the Hospital Eye Service (HES) are from a community optometrist.<sup>40</sup> Information about how to access community optometry services should be widely available within all healthcare settings. Communication pathways should exist between the HES and community optometry services. This should include information on current waiting times and service provision.

Each cataract surgery facility should use agreed referral pathways and protocols to ensure timely access to cataract surgery.<sup>5</sup> This will enable prioritisation of those in greatest need.<sup>40</sup>

Standardised referral templates should be used to minimise variation and promote national consistency for referrals from optometry and hospital ophthalmology clinics.<sup>41</sup> Referral templates should include sufficient information to determine whether the referral is appropriate and any further management that should be planned. Appropriate clinical information should be recorded, including an assessment of best corrected visual acuity.<sup>3</sup>

The person's choice for management of their cataracts should also be documented. Other options for the management of people with cataracts should be consistently available within each healthcare facility.

Assessment of people with cataracts should include consideration of quality of life, individual goals and outcomes, and the requirement for additional care following surgery. Once referred for cataract surgery, people should be seen at an appropriate facility within agreed timelines. Implementation of a ratified points based scoring system may be of use to prioritise people who would benefit from earlier intervention.<sup>5</sup>

Information sharing with the person and their General Practitioner (GP) will contribute to shared decision making, effective pre-operative assessment and safe cataract surgery, as well as continuity of care post-operatively.

A mechanism for regular feedback should exist between the cataract surgery facility and the source of referral, in order to facilitate continued learning and support consistency in care. Collaboration should be maintained post-operatively to allow timely communication and management of any adverse outcomes.

## Criteria

- 4.1** The organisation has protocols to ensure that people are referred to an appropriate facility for treatment within agreed timelines, informed by the following:
- confirmation of visual deficit from cataracts
  - existence of comorbidities
  - degree of prioritisation
  - potential requirement for general anaesthesia or hospital in-patient facilities.
- 4.2** There are protocols for documentation of referrals from:
- optometry
  - hospital ophthalmology clinics.<sup>41</sup>
- 4.3** Inappropriate referrals are minimised by regular review of completed referral forms, with feedback shared between the cataract surgery facility and the source of referral.
- 4.4** Agreed pathways and processes are in place to ensure that:
- timely management options are consistently available
  - information is shared appropriately between public health, primary care, secondary care, laboratories, third sector, local authority and independent healthcare providers
  - people in greatest need are prioritised.

### What does the standard mean for the person receiving care?

- You will know who to contact if you are concerned that you have developed cataracts.
- You will receive information about your cataracts, and any possible treatment, in a language and format that is right for you.
- You will have the opportunity to discuss treatment options, including any benefits and risks.
- You will be advised about whether cataract surgery is suitable for you.
- You will be referred to an appropriate facility, if cataract surgery is the right treatment for you.
- You will know how long you will need to wait for your appointment.

### What does the standard mean for staff?

Staff, in line with their roles, responsibilities and workplace settings:

- understand referral pathways and ensure that people who need cataract surgery are referred to an appropriate facility within agreed timelines
- have access to standardised referral templates and sources of relevant information for people with cataracts
- receive regular feedback about the referral process.

### What does the standard mean for the organisation?

The organisation will:

- have clear management protocols for people who access cataract surgery services
- have mechanisms to ensure that all people who need cataract surgery are referred to an appropriate facility within agreed timelines
- monitor services to ensure continuing improvement
- have clear pathways of communication between patients and healthcare practitioners, as well as between healthcare providers
- have procedures for recording discussions between healthcare practitioners and the person or, if appropriate, their representative
- have robust mechanisms for communication and provision of regular feedback between referring optometrists and the cataract surgery facility.

### Examples of evidence for meeting this standard *(NOTE: this list is not exhaustive)*

- Standard operating procedures for the referral process, with evidence of version control.
- Standardised referral documentation with evidence of appropriate referrals.
- Electronic patient records demonstrating appropriate sharing of information between healthcare providers.
- Feedback from patients on timelines for referral.
- Integration of primary and secondary care via online national systems such as the Scottish Care Information Gateway.<sup>42</sup>

# Standard 5: Theatre planning and facilities

## Standard statement

Each cataract surgery facility meets agreed national standards for space, staffing and equipment.

## Rationale

Cataract surgery facilities should have the space and layout required to facilitate efficient pathways and protocols. Each organisation is responsible for the provision of adequate facilities, equipment and ancillaries to ensure patient safety at all stages of the cataract surgery pathway. Levels of staffing and the availability of necessary equipment, including post-operative care facilities, should meet current evidence-based standards and guidance.<sup>1, 43</sup>

Each organisation should take measures to maximise the use of operating theatres in terms of time and resources. Planning of care and treatment should include strategies to reduce the number of operations cancelled on the proposed day of surgery.<sup>5, 44</sup> This will contribute to a reduction in waiting times and an improved patient experience.<sup>44, 45</sup> Policies and procedures should be in place to efficiently use operating theatre time that becomes available at short notice.

Cataract surgery should ideally be performed within a dedicated operating theatre.<sup>46</sup> In circumstances where it is necessary for other surgical procedures to be performed within the same facility, operating theatres should be thoroughly cleaned and ventilation should comply with agreed national protocols.<sup>47</sup> The organisation should ensure it meets all relevant national guidance and standards for infection prevention and control (IPC).<sup>48-52</sup> Appropriate adjustments should also be made to ensure that the environment remains fit for the respective purpose.<sup>53</sup>

Staffing levels for cataract surgery should conform to the general principles for delivering high quality day surgery.<sup>28</sup> It is important to establish cataract surgery teams that are committed to driving service improvement.<sup>28, 36</sup>

Each organisation should consider the environmental impact of cataract surgery services and take appropriate measures to limit direct carbon emissions.<sup>54</sup> Appointments held via telephone or video will reduce unnecessary travel, as will performing Immediate Sequential Bilateral Cataract Surgery (ISBCS), where appropriate.<sup>55-57</sup> Similarly, limiting the use of single-use items will reduce the consumption of resources and the production of waste.<sup>58, 59</sup> If general anaesthesia is required, an intravenous method or minimal flow inhalation technique should be employed, if appropriate.<sup>60</sup>

## Criteria

- 5.1** The organisation has, and fully implements, policies and procedures to minimise the risk of infection across all areas of the healthcare environment in line with:
- statutory legislation and regulations<sup>50</sup>
  - national guidance, standards and processes.<sup>49, 52</sup>
- 5.2** The organisation complies with current recommendations for operating theatre and recovery facilities.<sup>61, 62</sup>
- 5.3** The organisation ensures staffing levels for cataract surgery are appropriate and safe.
- 5.4** The organisation develops and fully implements policies to minimise the environmental impact of delivering cataract surgery including reduction in:
- consumption of resources
  - production of waste.
- 5.5** Policies and procedures exist to minimise cancellations on the proposed day of surgery.

### What does the standard mean for the person receiving care?

- You can be confident that the cataract surgery theatre will be safe, clean and well maintained.
- You can be confident that the theatre and waiting rooms will have the right equipment and staff.
- Your care and treatment will use resources efficiently and avoid unnecessary waste.

### What does the standard mean for staff?

Staff, in line with their roles, responsibilities and workplace settings:

- are confident that the facilities and equipment are adequate for the safe management of patients who require cataract surgery
- understand the risks associated with the healthcare environment and how to mitigate these
- have the training required to safely optimise resources and limit the production of waste
- understand and are able to implement local policies and procedures to minimise cancellations on the proposed day of surgery and effectively manage operating theatre sessions.



## What does the standard mean for the organisation?

The organisation has effective systems and processes in place to ensure:

- the provision of a safe, clean and well maintained environment for cataract surgery
- that the facilities, staffing and equipment are appropriate for the safe provision of cataract surgery
- compliance with legislation, guidance and technical requirements associated with the healthcare environment
- safe optimisation of resources and limited production of waste
- effective management of operating theatre sessions
- minimal cancellations on the proposed day of surgery and monitoring of the reasons for cancellations.

## Examples of evidence for meeting this standard *(NOTE: this list is not exhaustive)*

- Compliance with legislation, national guidance and standards.<sup>49, 50, 52</sup>
- Documentation describing maintenance, quality assurance checks and rolling replacement schedules for equipment and peripherals.
- Evidence of performing ISBCS, where clinically appropriate.<sup>55</sup>
- Evidence of using telephone and video appointments to reduce unnecessary travel.<sup>57</sup>
- Evidence of reduction in energy usage by switching of heating, ventilation and gas scavenging systems when the operating theatre is not in use.<sup>47</sup>
- Evidence that non-clinical waste is segregated and recycled appropriately.<sup>58</sup>
- Evidence that, if general anaesthesia is required, an intravenous method or minimal flow inhalation technique is used, where appropriate.<sup>60</sup>
- Evidence of increased use of reusable instruments and reduced use of single-use items.<sup>59</sup>
- Regular audits and improvement plans for IPC and sustainability.
- Evidence of policies and procedures to effectively manage theatre sessions by reducing cancellations on the proposed day of surgery and maximising theatre usage in the event of unanticipated cancellations.

# Standard 6: Pre-operative assessment and management of comorbidities

## Standard statement

Arrangements for pre-operative assessment and management of comorbidities are safe, effective and person-centred.

## Rationale

A safe, effective and person-centred cataract surgery service is achieved by multi-disciplinary input from a range of professionals including optometrists, ophthalmic surgeons, anaesthetists, ophthalmology nurses, and staff from appropriate support services. There should be timely communication between healthcare practitioners.

A pre-operative multi-disciplinary team assessment allows the identification of frailty and comorbidities, with recognition of each patient's individual needs. Supporting informed decision making enables person-centred care and treatment to be planned with the patient. Patients should be given adequate time to consider the benefits and risks of different treatment options.

The organisation should ensure that each patient has access to the necessary healthcare specialists and services required to provide all aspects of their care. This will avoid delays in scheduling cataract surgery for patients with additional needs.

Timely access to an appropriate healthcare facility should be planned to reduce inequalities in waiting times for patients who require additional support, general anaesthesia or admission overnight for their cataract surgery procedure.

## Criteria

- 6.1** Patients have a holistic, multi-disciplinary pre-operative assessment.
- 6.2** Patients have timely access to support from other healthcare specialists and services, for all aspects of their care.
- 6.3** Patients are provided with adequate time to consider different management options for their comorbidities.

- 6.4** Individual patient needs are identified, recorded in their care plan and shared appropriately, including:
- the requirement for any additional pre-operative medication
  - additional support for frailty and comorbidities
  - arrangements for transport of the patient to and from the cataract surgery facility, on the day of surgery
  - the requirement for someone to accompany the patient for the journey to and from the healthcare facility, on the day of surgery
  - the requirement for specific surgical adjuncts
  - the requirement for general anaesthesia or hospital in-patient facilities
  - details of post-operative care, including arrangements for obtaining and administering additional prescribed medication
  - arrangements for assistance with administration of post-operative eye drops at home, if required
  - signposting to third sector agencies that offer post-operative information and support.
- 6.5** Patients receive accessible information which includes:
- pre-operative management of any comorbidities
  - administration of necessary pre-operative medication
  - pre-operative fasting regimes, if appropriate
  - advice about management of ocular conditions, relevant comorbidities and frailty, if required
  - arrangements for obtaining and administering additional post-operative prescription medication, if required.
- 6.6** Patients have their pre-operative condition optimised prior to cataract surgery, in accordance with relevant national standards.<sup>63</sup>
- 6.7** If local anaesthesia is unsuitable, patients are:
- provided with the opportunity to discuss the benefits and risks of general anaesthesia
  - referred in a timely manner to an appropriate facility that provides general anaesthesia, with access to in-patient ward facilities
  - assessed by an anaesthetist who is experienced in cataract surgery.

### What does the standard mean for the person receiving care?

- You will be involved in the decisions about your cataract surgery.
- Your healthcare team will take into account any other medical conditions that you have and you will receive the care and treatment that is right for you.
- You will be provided with enough time to consider the benefits and risks of different treatment options.
- You can be confident that your cataract surgery will not be delayed because you have additional needs.
- You will be supported to access other services if they are suitable for you.

### What does the standard mean for staff?

Staff, in line with their roles, responsibilities and workplace settings:

- work in partnership to undertake pre-operative assessment of patients
- provide information on pre-operative and post-operative care, as well as support to manage frailty and comorbidities
- can refer to other specialists if the patient requires additional support
- can access services to support patients to attend for surgery.

### What does the standard mean for the organisation?

The organisation:

- ensures that there is a multi-disciplinary approach to the pre-operative assessment of patients with cataracts
- has effective systems and processes in place to ensure that patients are adequately assessed, and receive appropriate management of frailty and comorbidities, prior to cataract surgery
- supports patients to attend for their surgical procedure, and arranges transport where appropriate
- ensures that there is timely communication between healthcare practitioners
- addresses potential inequalities in care and has procedures in place to provide the specific requirements of each patient, with involvement of other healthcare specialists and services, if required.

Examples of evidence for meeting this standard *(NOTE: this list is not exhaustive)*

- Documentation of multi-disciplinary team discussions.
- Evidence of provision of appropriate support for patients who require cataract surgery, including access to general anaesthesia services and hospital in-patient facilities, if required.
- Evidence of provision of appropriate support for patients to attend on the day of surgery, including arrangements for transport to and from the healthcare facility, with an accompanying person, if appropriate.
- Feedback from patients and/or their representatives on their experience of pre-operative assessment.

# Standard 7: Surgery, recovery and discharge

## Standard statement

Each organisation ensures that surgery, recovery and discharge are safe, effective and person-centred.

## Rationale

Clinical care and patient outcomes are improved through local and national monitoring of surgical practice, as well as clinical audit.<sup>64</sup> Frameworks for quality assessment include the six domains of healthcare quality established by the Institute of Medicine.<sup>65</sup> The collection and analysis of data provides information on the performance of cataract surgery facilities, highlighting areas where improvements are required. The CAT-PROM5 cataract surgery patient outcome measure has been developed for use in high-volume surgical services.<sup>66, 67</sup>

Cataract surgery procedures and post-operative recovery should meet current evidence-based standards and guidance for ophthalmic surgery.<sup>68</sup> The most appropriate lens implant should be selected to optimise post-surgical refractive outcomes, with consideration of toric lenses if indicated.<sup>69</sup>

In order to maintain continuity of care post-operatively, patients should be discharged to the care of the referring optometrist where possible.

Each organisation should ensure that the results of surgery are communicated in a timely manner to the patient, their community optometrist and their GP.

## Criteria

- 7.1** Cataract surgery is monitored at both a local and a national level with regular feedback provided for each facility.
- 7.2** Standards for recovery facilities following cataract surgery comply with those for other surgical procedures.<sup>61, 70</sup>
- 7.3** Clear criteria for discharge are established, with arrangements made for follow up in primary care, including:
  - which optometrist the patient will be discharged to
  - what the patient should expect at their follow up appointment
  - the procedure for referral back to the surgical facility, if required.
- 7.4** The referring optometrist receives post-operative information on:
  - the outcome of surgery
  - required post-operative management
  - arrangements for aftercare, post-operative prescriptions and follow up appointments

- plans for surgery to the second eye, where appropriate.

|   |
|---|
| <p><b>What does the standard mean for the person receiving care?</b></p>  |
| <ul style="list-style-type: none"> <li>• You can be confident that you will have the surgery and follow up that is right for you.</li> <li>• You will receive the information and support you need for your surgery and recovery.</li> <li>• You will be discharged back to the care of your referring optometrist, if this is possible and appropriate.</li> </ul> |
| <p><b>What does the standard mean for staff?</b></p>  |
| <p>Staff, in line with their roles, responsibilities and workplace settings:</p> <ul style="list-style-type: none"> <li>• understand the importance of monitoring and reviewing people who have experienced cataract surgery</li> <li>• are confident that, following cataract surgery, post-operative outcomes of patients are monitored and reviewed.</li> </ul>  |
| <p><b>What does the standard mean for the organisation?</b></p>   |
| <p>The organisation:</p> <ul style="list-style-type: none"> <li>• ensures that cataract surgery facilities record the relevant data for quality assurance and audit processes</li> <li>• monitors, reports and reviews post-operative outcomes relative to the key performance indicators for the national cataract surgery programme.</li> </ul>                   |
| <p><b>Examples of evidence for meeting this standard</b> <i>(NOTE: this list is not exhaustive)</i></p>   |
| <ul style="list-style-type: none"> <li>• Audit of post-operative outcomes following cataract surgical procedures.</li> <li>• Evidence of data on post-operative outcomes submitted to relevant national bodies.</li> <li>• Evidence of improvement work, including action plans, data collection and review of data such as CAT-PROM5.<sup>71</sup></li> </ul>      |

## Standard 8: Post-operative care

### Standard statement

Each organisation ensures that people receive effective, coordinated and person-centred post-operative care.

### Rationale

Personalised, well-coordinated post-operative care and support enables people to live as independently as possible. A well-defined pathway for post-operative care should be agreed between the HES, the community optometrist and the GP. This should involve use of an online reporting system, where available. Consideration should be given to standardising instructions for post-operative medication, such as using templates for post-operative letters, with generic or formulary-based prescriptions.

Post-operative information should be provided for patients in a range of languages and formats. Patients should also receive an adequate supply of all necessary post-operative medication, with instructions and support for administration, if required.

Clear information should be provided about the signs and symptoms of post-operative complications. This should include details about who to contact if the patient has concerns or if further care is urgently required after the patient is discharged.

Following cataract surgery, patients should be supported to arrange a post-operative review appointment for a full ophthalmic examination with an optometrist in primary care. The results of this ophthalmic examination should be communicated to both the patient and the cataract surgery facility. The optometrist should also provide the cataract surgery facility with information about the patient's progress following discharge, and any concerns identified.

To promote a culture of clinical safety, data on post-operative complications should be regularly monitored. This should be in accordance with the Royal College of Ophthalmologists' Cataract Surgery Guidelines.<sup>72</sup> Organisations should also participate in evaluations and review (including failure mode analysis) to reduce risks and improve patient safety.<sup>73</sup>



## Criteria

- 8.1** Following cataract surgery, people will:
- receive information about the outcome of their surgical procedure in a format and language that is appropriate for their needs
  - be provided with advice about how to recognise post-operative complications, if they occur.
- 8.2** People requiring post-operative medication will be provided with the necessary prescriptions, with information in an appropriate language and format.
- 8.3** People will be offered support to obtain and administer post-operative medication, if required.
- 8.4** Post-operative care needs will be assessed and provided for people as necessary.
- 8.5** People with additional requirements or comorbidities can access other healthcare specialists or services, as required.
- 8.6** People will be:
- supported by staff, with signposting and referral to appropriate multi-agency services, if required
  - provided with details about accessible points of contact, should concerns arise post-operatively.
- 8.7** People will be offered a post-operative ophthalmic examination to record:
- levels of unaided vision
  - levels of refraction
  - best corrected visual acuity
  - the occurrence of any post-operative complications
  - the requirement for further intervention at a healthcare facility.
- 8.8** The organisation has protocols in place to support community healthcare teams to:
- raise clinical issues or concerns
  - identify post-operative complications and take action as necessary
  - triage patients effectively and arrange for further intervention, if required.
- 8.9** The organisation ensures monitoring systems and processes are in place to review data on post-operative complications in accordance with the Royal College of Ophthalmologists' Cataract Surgery Guidelines.<sup>72</sup>

### What does the standard mean for the person receiving care?

- You will receive the post-operative medication you need, together with the information and support required to take the medication correctly.
- You will be supported to arrange a post-operative ophthalmic examination with an optometrist.
- You will know who to contact if you have any concerns after you are discharged from the cataract surgery facility.

### What does the standard mean for staff?

Staff, in line with their roles, responsibilities and workplace settings:

- can access high quality and reliable information, in a range of formats and languages, on post-operative care and follow up
- work with pharmacy teams to ensure that patients have the necessary post-operative medication and the support to administer this at home, if required
- can access protocols to ensure effective communication across teams and settings
- understand their role in quality assurance and improvement.

### What does the standard mean for the organisation?

The organisation:

- has systems and processes to ensure the delivery of responsive post-operative care and support
- supports teams to work together (including surgery, pharmacy and primary care teams)
- has policies and protocols in place to identify and manage complications, including follow up and further referral, if required.

### Examples of evidence for meeting this standard *(NOTE: this list is not exhaustive)*

- Evidence of written information on how people can access post-operative support following cataract surgery.
- Evidence of monitoring data on post-operative complications.
- Evidence of compliance with relevant national standards and guidelines including the Royal College of Ophthalmologists' Cataract Surgery Guidelines.<sup>72</sup>

# Appendix 1: Development of the cataract surgery standards

The cataract surgery standards were developed in accordance with current evidence, best practice recommendations and group consensus.

## Evidence base

A systematic review of the literature was carried out using an explicit search strategy devised by an Evidence and Information Scientist from the Research and Information Service. Databases searched include Medline and the Cochrane Library. The year range covered was 2000-2022.

Additional internet searches were carried out on websites including SIGN, NICE, NHS Evidence and Department of Health. The main searches were supplemented by material identified by individual members of the development group. This evidence was also used to inform equalities impact assessments.

## Development activities

A standards development group, chaired by Dr Zac Koshy, Ophthalmologist and Vitreoretinal Specialist, NHS Golden Jubilee and NHS Ayrshire and Arran, was convened in January 2023 to consider the evidence and to develop the standards for cataract surgery.

Membership of the development group is outlined in [Appendix 2](#).

Each standard reflects the views and expectations of people accessing cataract surgery services, healthcare staff, third sector representatives and the public. Information has been gathered from a number of sources and activities, including:

- consultation on the proposed scope of the standards in December 2022
- three development group meetings in February, March and April 2023
- engagement activities involving people with living experience.

## Consultation feedback and finalisation of standards

Following consultation, the standards development group reviewed all the comments received and made final decisions and changes to the standards. More information can be found in the consultation feedback report [www.healthcareimprovementscotland.org/](http://www.healthcareimprovementscotland.org/)

## Quality assurance

All development group members were responsible for advising on the professional aspects of the standards. Clinical members of the development group also advised on clinical aspects of the work. The chair had lead responsibility for providing formal clinical assurance of the standards for cataract surgery. The chair approved the technical and professional validity of the standards, as well as the acceptability of any reports or recommendations from the group.

All development group members made a declaration of interest at the initial stages of the project. Members also reviewed and agreed to the Terms of Reference for the project. More details are available on request from: [his.standardsandindicators@nhs.scot](mailto:his.standardsandindicators@nhs.scot)

Healthcare Improvement Scotland performed a final review of the standards document to ensure that:

- the standards were developed according to agreed Healthcare Improvement Scotland methodologies
  - the standards document addresses the areas to be covered within the agreed scope
  - the risk of bias was minimised throughout the process of standards development.
- For more information about the role, direction and priorities of Healthcare Improvement Scotland, please visit: [www.healthcareimprovementscotland.org/](http://www.healthcareimprovementscotland.org/)

## Appendix 2: Membership of the cataract surgery standards development group

| Name                | Position  | Organisation  |
|---------------------|---|---|
| Zac Koshy (Chair)   | Consultant Ophthalmologist and Vitreoretinal Specialist         | NHS Golden Jubilee and NHS Ayrshire & Arran         |
| Elaine Abernethy    | Senior Charge Nurse   | NHS Ayrshire & Arran                                |
| James Adams         | Director<br>(Deputy for Gillian Hallard)                        | RNIB Scotland                                       |
| Linda Barr          | Charge Nurse  | NHS Fife  |
| Kenny Crosbie       | Assurance Directorate Inspector<br>(Deputy for Winifred McLure) | Healthcare Improvement Scotland                     |
| Charles Diaper      | Consultant Ophthalmologist                                      | NHS Greater Glasgow & Clyde                         |
| Jacqueline Dougall  | National Eyecare Performance Lead                               | Centre for Sustainable Delivery, NHS Golden Jubilee |
| Adelle Elliot       | Business Support Manager,<br>Surgical & Critical Care           | NHS Lanarkshire                                     |
| John Ellis          | Consultant Ophthalmologist                                      | NHS Tayside   |
| Ore-Oluwa Erikitola | Specialty Trainee   | NHS Golden Jubilee                                  |
| Rachel Fulton       | Consultant Anaesthetist   | NHS Greater Glasgow & Clyde                         |
| Michael Gardner     | Consultant Anaesthetist<br>(Deputy for Rachel Fulton)           | NHS Greater Glasgow & Clyde                         |
| Gillian Hallard     | NHS Engagement Manager  | RNIB Scotland                                       |
| Rory Mackenzie      | Interim Deputy National Clinical Director                       | Centre for Sustainable Delivery, NHS Golden Jubilee |
| Rosanne Macqueen    | National Improvement Advisor                                    | Centre for Sustainable Delivery, NHS Golden Jubilee |
| Karon McEwing       | Head Optometrist  | NHS Grampian  |
| Winifred McLure     | Senior Inspector  | Healthcare Improvement Scotland                     |
| David Miller        | Consultant Ophthalmologist                                      | Royal College of Ophthalmologists                   |

| Name             | Position   | Organisation  |
|------------------|--|---|
| Whitney Meldrum  | Charge Nurse   | NHS Tayside   |
| Douglas Orr      | Community Independent Prescribing Optometrist            | Orr & Simpson Eye Care Ltd and NHS Ayrshire & Arran |
| Janet Pooley     | Chief Optometric Adviser (Deputy for Jacqueline Dougall) | Centre for Sustainable Delivery, NHS Golden Jubilee |
| Laura Quate      | Specialist Pharmacist, Ophthalmology                     | NHS Grampian  |
| Alison Smith     | Senior Inspector (Deputy for Winifred McLure)            | Healthcare Improvement Scotland                     |
| Lorna Stephen    | Senior Charge Nurse                                      | NHS Grampian  |
| Rosalind Stewart | Consultant Ophthalmologist                               | NHS Grampian  |
| Peter Strachan   | Lead Pharmacist – Ophthalmology                          | NHS Lothian   |
| Karen Thomson    | Deputy Charge Nurse (Deputy for Elaine Abernethy)        | NHS Ayrshire & Arran                                |
| Diane Williamson | Deputy Charge Nurse (Deputy for Elaine Abernethy)        | NHS Ayrshire & Arran                                |
| Emma Whyte       | Project Support Officer                                  | Centre for Sustainable Delivery, NHS Golden Jubilee |

The standards development group was supported by the following members of the standards and indicators team at Healthcare Improvement Scotland:

- Lola Adewale – Programme Manager
- Anne Marie Hunter – Administrative Officer (November 2022 – April 2023)
- Stephanie Kennedy – Administrative Officer (April 2023 – July 2023)
- Dominika Klukowska – Administrative Officer (July 2023 – December 2023)
- Carol Ann Mulgrew – Project Officer (November 2022 – March 2023)
- Carolyn Roper – Project Officer (March 2023 – December 2023)
- Fiona Wardell – Team Lead

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