



Cataract Clinical Care Standard

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Cataract Clinical Care Standard

Quality statements

- Primary care assessment and referral
 - A patient with visual problems and suspected cataract has an initial assessment in primary care of their visual impairment, vision-related activity limitations, comorbidities and willingness to have surgery. When referral is appropriate based on these criteria, the patient is referred for consideration for cataract surgery, and this information is included in the referral form.
- Patient information and shared decision making A patient with suspected or confirmed cataract receives information to support shared decision making. Information is provided in a way that meets the patient's needs, and is easy to use and understand. The patient is given the opportunity to discuss the likely benefits and potential harms of the available options, as well as their needs and preferences.
- Access to ophthalmology assessment A patient who has been referred for consideration for cataract surgery is prioritised for ophthalmology assessment according to clinical need, based on a locally approved protocol and following receipt of a detailed referral.
- **Indications for cataract surgery** A patient is offered cataract surgery when they have a lens opacity that limits their vision-related activities and causes clinically significant visual impairment involving reduced best corrected visual acuity, disabling glare or contrast sensitivity.
- **Prioritisation for cataract surgery** A patient is prioritised for cataract surgery according to clinical need. Prioritisation protocols take into account the severity of the patient's visual impairment and vision-related activity limitations, the potential harms of delayed surgery, any relevant comorbidity and the expected benefits of surgery.
- Second-eye surgery Options for a patient with bilateral cataract are discussed when the decision about first-eye surgery is being made. Second-eye surgery is offered using similar criteria as for the first eye, but the potential benefits and harms of a delay in second-eye surgery are also considered, leading to a shared decision about second-eye surgery and its timing.
- Preventive eye medicines A patient receives an intracameral antibiotic injection at the time of cataract surgery, in preference to postoperative topical antibiotics and according to evidencebased guidelines. After surgery, a patient receives anti-inflammatory eye drops when indicated.
- **Postoperative care** A patient receives postoperative care that ensures the early detection and treatment of complications of cataract surgery, and the patient's visual rehabilitation. Postoperative care is provided by the operating ophthalmologist or a designated team member. The patient is informed of the arrangements for postoperative care.

Indicators for local monitoring

Indicators to support monitoring of the care described in this clinical care standard have been developed to support implementation.

Indicator 3a: Evidence of a locally approved protocol to allocate appointments for patients considering cataract surgery.

The protocol should define the:

- Patient information required to be included in incoming referrals
- Criteria for accepting referrals for ophthalmology assessment
- Pathways for patients who do not meet the referral criteria
- Criteria for prioritising appointments for ophthalmology assessment.

Indicator 3b: Proportion of referrals for consideration for cataract surgery received that included the required patient information.

Indicator 3c: Proportion of patients referred for consideration for cataract surgery that did not meet the criteria for referral.

Indicator 3d: Proportion of patients referred for cataract surgery who had cataract surgery.

Indicator 5: Evidence of a locally approved protocol to prioritise patients for cataract surgery according to clinical need.

Indicator 7: Proportion of patients who received intracameral administration of antibiotics at the end of surgery.

More information about these indicators and the definitions needed to collect and calculate them can be found online at METeOR: https://meteor.aihw.gov.au/content/index.phtml/itemId/711408.

See Appendices A and B for further details about the indicators.

Meeting the requirements of the National Safety and Quality **Health Service (NSQHS) Standards**

How does your health service organisation ensure evidence-based care and monitor healthcare variation? Implementing this clinical care standard as part of a quality improvement activity can help health service organisations meet the requirements of the NSQHS Standards.

The Clinical Governance Standard in the NSQHS Standards requires health service organisations to:

- Provide evidence-based care (Action 1.27)
- Monitor and respond to unwarranted clinical variation (Action 1.28).

Health services organisations should regularly review and improve the appropriateness of clinical care. Variation in performance can be reviewed:

- In comparison to other health service organisations, evidence-based guidelines or clinical care standards
- Within the organisation (for example comparing clinical teams), or at the organisation level (for example, with other local health networks).

More information about clinical care standards and the NSQHS Standards can be found in Appendix C and on the Commission's website www.safetyandquality.gov.au/clinical-governance-standard.

About the clinical care standards

Clinical care standards aim to support the delivery of appropriate evidence-based clinical care, and promote shared decision making between patients, carers and clinicians.

A clinical care standard contains a small number of quality statements that describe the clinical care that a patient should be offered for a specific clinical condition or when undergoing a specific procedure. Some of the quality statements are linked to indicators that can be used by health service organisations to monitor how well they are implementing the care recommended in the clinical care standard.

A clinical care standard differs from, and is not intended to be, a clinical practice guideline. Rather than describing all the components of care recommended for managing a clinical condition or performing a certain procedure, a clinical care standard addresses areas of the patient pathway where the need for quality improvement is greatest. Clinical care standards aim to support key groups of people in the healthcare system by:

- Educating the public about the care that the healthcare system should offer, and helping people to make informed treatment decisions in partnership with their clinicians
- Providing clear information to clinicians to help them make decisions about appropriate care
- Outlining the systems required by health service organisations so that they are better able to review their performance and make improvements in the care that they provide.

The Australian Commission on Safety and Quality in Health Care (the Commission) developed the Cataract Clinical Care Standard in collaboration with consumers, clinicians, researchers and health service organisations. The clinical care standard complements existing efforts, including state- and territory-based initiatives that support the provision of cataract care.

For more information about this clinical care standard, visit www.safetyandquality.gov.au/ccs.

About the Australian Commission on Safety and Quality in Health Care

The Commission is an Australian Government agency that leads and coordinates national improvements in the safety and quality of health care based on the best available evidence. By working in partnership with the Australian Government, state and territory governments, the private sector, clinical experts, and patients and carers, the Commission aims to ensure that the health system is better informed, supported and organised to deliver safe and high-quality care.

Background

Key points

- Cataract is the most common elective surgery diagnosis in Australia.
- Around 70% of cataract surgery is performed in private hospitals.
- In public hospitals, 90% of patients have surgery performed within 334 days, but these statistics do not include the time spent waiting for a first specialist assessment.
- Access to cataract surgery in the public system could be improved with better referral, initial assessment and prioritisation processes.
- The extent of both visual impairment and patient-reported limitations in vision-related activities should be used to determine the need and priority for surgery.

Cataract is a condition that can cause problems with vision when the lens of the eye becomes cloudy. It is more common in older people¹, and is a considerable problem for Aboriginal and Torres Strait Islander populations.^{2,3} The impact of cataract on a person's vision and their ability to carry out their daily activities can vary considerably between people. Cataract usually worsens over time, but how quickly this happens is difficult to predict for an individual.4

People with cataract may experience blurriness, poor distance vision, difficulty seeing in strong light (glare sensitivity) or difficulty seeing in low light conditions. The position of a cataract in the lens can affect the type of visual problem - a cataract in the central part of the lens is more likely to impair distance vision, whereas other types of cataract (for example, a posterior subcapsular cataract) can cause considerable problems with glare without affecting sharpness (visual acuity).5

Cataract that is identified during routine eye examination but is not causing problematic symptoms can be managed with watchful waiting and non-surgical measures, such as prescription

glasses, tinted lenses for glare sensitivity and other visual aids. 4,6,7 Some medical indications may increase the need for surgery, including angle closure glaucoma. Surgery may also be needed to allow monitoring or treatment of other eye problems. However, in general, surgery is recommended when visual changes significantly interfere with activities.4,7

The surgical procedure involves removing the cloudy natural lens and replacing it with a clear synthetic lens, usually under local anaesthetic and performed as day surgery.8

Cataract surgery in Australia

Cataract is the most common elective surgery diagnosis in Australia.9 In 2016–17, there were 9.3 cataract surgeries per 1,000 population a total of 258,954 hospital separations.9 Almost 70% of cataract surgery is performed in private hospitals¹⁰, an option that is not accessible for all Australians. Admission rates to public hospitals for cataract surgery in areas with socioeconomic disadvantage are more than double those in areas with socioeconomic advantage (3.4 and 1.3 per 1,000 population respectively).9

Cataract care and **Aboriginal and Torres Strait** Islander peoples

There is disparity in the cataract care provided to Aboriginal and Torres Strait Islander peoples compared with non-Indigenous Australians. The cataract surgery coverage rate is 62.8% for Aboriginal and Torres Strait Islander people living in major cities, compared with 86.7% for non-Indigenous Australians.11* Barriers to care include remoteness, access to eye health services, and a lack of cultural safety and responsiveness which may discourage people from Aboriginal or Torres Strait Islander communities from interacting with health services. Considering how to provide care that takes culture into account and creates a welcoming environment to Aboriginal and Torres Strait Islander peoples is an important aspect of improving cataract care. 12, 13

The cataract surgery coverage rate is the proportion of people with cataracts, vision impairment or blindness, who had cataract surgery.11

Cultural safety and patient safety

Cultural safety is about overcoming the cultural power imbalances of places, people and policies to contribute to improvements in Aboriginal and Torres Strait Islander health.¹³

Health consumers are safest when clinicians have considered power relations, cultural differences and patients' rights. Part of this process requires clinicians to examine their own beliefs and attitudes.12

Recognising that culture is a source of strength, resilience, happiness, identity and confidence for Aboriginal and Torres Strait Islander peoples, and that the protection of culture is linked to health and wellbeing, is essential for reducing the disparities in health experienced by Aboriginal and Torres Strait Islander peoples.13

The National Safety and Quality Health Service (NSQHS) Standards User Guide for Aboriginal and Torres Strait Islander Health¹² describes six Aboriginal and Torres Strait Islander-specific actions which aim to help health services improve the quality of care and health outcomes for Aboriginal and Torres Strait Islander peoples.

Improving access to care

In Australia, as in other high-income countries, rates of cataract surgery have increased markedly in the past 25 years.^{5,14} This has been attributed to improved surgical methods, lower thresholds for surgery and the ageing population. 15,16 Interest has therefore increased in identifying:

- When surgery is clinically warranted and appropriate^{4,17,18}
- How public health services can provide equitable and efficient access to surgery in a way that takes into account individual patient circumstances and health service resource constraints 19-21
- Whether some patients are more likely to benefit, or be at risk, from a delay than others. 17, 22-24

Tools and prioritisation systems developed in New Zealand, Spain, Sweden and Canada aim to provide surgery according to clinical need, and to improve the equity, appropriateness and timeliness of access.²⁵

Studies of these prioritisation systems suggest that they can achieve these aims more effectively than 'first in, first out' systems.21,26-31

Each tool was developed with clinical input and validated for how well it approximated clinical decision-making. Some were further improved after experience and evaluation. 21,27,31,32 Broadly speaking, the tools determine appropriateness of, and priority for, surgery according to the degree of visual impairment, and the impact of poor vision on daily activities and social function (including the ability to work and live independently). However, the weight given to each parameter and the way it is measured differs between tools.27

Visual acuity is a useful objective measure of visual impairment that is included in most assessment tools, but it is not recommended as the only criterion for determining visual impairment.^{4,5,7,8,15} Even with good visual acuity, some people can have disabling visual impairment due to cataract-related glare sensitivity or contrast sensitivity. The impact of visual deficits can vary according to individual needs and a person's reliance on their vision for work, or to maintain independence or quality of life. As a result, vision-related limitations in activity – as reported by patients - are as important as visual acuity in determining the likely benefit of surgery.^{4,7}

Improving referral and initial assessment

Better referral and triage practices could improve overall waiting times. A study of referral practices in New South Wales found that almost half of patients assessed by ophthalmologists in two public hospitals did not proceed to surgery because of insignificant cataract, minimal functional loss or unwillingness to undergo the procedure. Similar patterns are reported elsewhere 15,29,33, suggesting considerable scope to improve both the appropriateness and management of referrals.

It is important to recognise that although 90% of public hospital patients in Australia have surgery performed within 334 days³⁴, these statistics do not include the time patients spend waiting for a first specialist assessment, and therefore underestimate the true waiting time between referral and surgery. Awareness of the relative priority of referrals when determining appointments could help clinicians and health service organisations to identify patients at high risk from delayed surgery.

Purpose

Why this is needed

With increasing demand for cataract surgery, it is important that care pathways are optimised so that surgery is provided according to clinical need, when appropriate, in a transparent and consistent way.

Many patients referred to public hospital clinics do not proceed to surgery, because they are either not willing to have surgery or it is not indicated. This can delay access to surgery for those with higher clinical need. At the same time, variation has been identified in cataract surgery rates between the public and private sectors, urban and remote areas, and for Aboriginal and Torres Strait Islander peoples compared with non-indigenous Australians.

Current referral and triage approaches can lead to unnecessarily long waiting lists for ophthalmic assessment, before patients join the elective surgical waiting lists that are measured and reported on.

There are valid explanations for increasing demand - such as the ease of the procedure, and the ageing population. Nonetheless it remains important to consider the appropriateness of surgery for each patient.

Other aspects of quality care addressed in the standard include postoperative care, the appropriate use of preventive ocular medicines and second-eye surgery.

Goal

This clinical care standard aims to support clinicians and health service organisations to improve their pathways of care and access for people with clinically significant cataract. It aims to ensure that patients with cataract are offered cataract surgery or non-surgical alternatives according to their clinical needs, and that they have the opportunity to make an informed choice suitable to their individual situation, in the appropriate environment which includes primary care.

Scope

Pathway of care

This clinical care standard relates to the care of patients with cataract aged 18 years and over. It covers the assessment of patients, decisions about cataract surgery and postoperative care.

The standard articulates some key elements for an improved pathway of care, including referral, assessment and surgery. These include:

- Using consistent, clinically sound criteria for determining when cataract surgery may be appropriate
- Ensuring that referral of patients from primary care is informed by these criteria
- Allocating ophthalmic assessments before surgery according to clinical need, using essential information provided in the referral
- Prioritising patients for surgery according to clinical need and based on transparent criteria.

Healthcare settings

This clinical care standard applies to all healthcare settings where care is provided to patients with cataract, including primary care, hospitals, Aboriginal health services and privately operated eye clinics.

Evidence that underpins this clinical care standard

Kev evidence sources for the Cataract Clinical Care Standard include:

- Royal Australian and New Zealand College of Ophthalmologists - Preferred Practice Patterns: Cataract and intraocular lens surgery⁸
- National Institute for Health and Care Excellence (United Kingdom) guideline - Cataracts in Adults: Management⁴
- Evidence-based guidelines for cataract surgery: guidelines based on data in the European Registry of Quality Outcomes for Cataract and Refractive Surgery database³⁵
- American Academy of Ophthalmology Cataract in the Adult Eye Preferred Practice Pattern³⁶
- Canadian Ophthalmological Society evidence-based clinical practice guidelines for cataract surgery in the adult eye.7

Supporting documents

A suite of supporting documents for this clinical care standard is available on the Commission's website at www.safetyandquality.gov.au/cataract-ccs.

How to use this clinical care standard

This clinical care standard describes the key components of care for clinicians and health service organisations to improve their pathways of care and provide equity of access for people with clinically significant cataract. It should be used as part of providing high-quality, evidence-based care, taking into account the context in which care is provided, local variation in care, and the quality improvement priorities of the individual health service organisation.

When implementing the clinical care standard, health services and clinicians should consider the following:

- Indicators for the Cataract Clinical Care Standard. These are listed with each quality statement see Appendix A
- Other quality measures such as patient-reported outcome measures and patient experience measures - see Appendix B
- The National Safety and Quality Health Service (NSQHS) Standards - see Appendix C.

General principles of care

Clinicians are advised to use clinical judgement and consider an individual patient's circumstances, in consultation with the patient, or their carer or guardian, when applying the information in this clinical care standard.

Health service organisations are responsible for ensuring that local policies, processes and protocols to guide clinical practice are in place. This enables clinicians and health service organisations to apply the information described in the clinical care standard, monitor the delivery of appropriate care, and address unwarranted variation.

Person-centred care

Person-centred care is health care that is respectful of, and responsive to, the preferences, needs and values of patients and consumers.37

Clinical care standards support the key principles of person-centred care, namely:

- Treating patients with dignity and respect
- Encouraging patient participation in decision-making
- Communicating with patients about their clinical condition and treatment options
- Providing patients with information in a format that they understand so they can participate in decision-making.38

For Aboriginal and Torres Strait Islander patients, care should be provided in a way that is respectful of, and responsive to, cultural beliefs and practices, while recognising the disparities faced by Aboriginal and Torres Strait Islander people.39

Multidisciplinary care

In this document, the term 'clinician' refers to all types of health professionals who provide direct clinical care to patients including nurses, doctors and allied health professionals.

Multidisciplinary care refers to comprehensive care provided by different clinicians (for example, Aboriginal and Torres Strait Islander health practitioners, doctors, nurses, optometrists, orthoptists and other allied health professionals) from one or more organisations, who work collectively with the aim of addressing as many of a patient's health and other needs as possible. 40 A coordinated multidisciplinary team approach can improve health outcomes, and offers more efficient use of health resources. Planning, coordination and regular communication between clinicians are essential components of multidisciplinary care.

Carers and family members

Carers and family members play a central role in prevention, early recognition, assessment and recovery relating to a patient's health condition. They often know the patient very well and can provide detailed information about the patient's history, routines or symptoms, which may assist in determining treatment and ongoing support.

Although this clinical care standard does not specifically refer to carers and family members, each quality statement should be understood to mean that carers and family members are involved in clinicians' discussions with patients about their care, if the patient prefers carer involvement.

Integrated approach to care

An integrated, systems-based approach supported by health service organisations and their networks is central to the delivery of person-centred care as identified in this clinical care standard.

Key elements of this approach include:

- Understanding the capacity and limitations of each component of the healthcare system across metropolitan, regional, rural, remote and very remote settings
- Developing clear lines of communication between primary care, hospital, subacute and community services
- Ensuring appropriate coordination so that people receive prompt access to the best care, regardless of how or where they enter the system.

Health service organisations implementing this standard may need to:

- Deploy an active implementation plan and feedback mechanisms
- Include agreed protocols and guidelines, decision support tools and other resource material
- Employ different incentives and sanctions to influence behaviours, and encourage compliance with policies, protocols, regulations and procedures
- Integrate risk management, governance, and operational processes and procedures, including education, training and orientation.41

The Royal Victorian Eye and Ear Hospital Case Study

Using referral guidelines to increase cataract surgery rates

Many public ophthalmology services experience a high volume of demand for cataract surgery. However, Australian research shows that despite long waiting times for first clinic visits, many patients do not proceed to surgery.⁴² This case study describes how redesigning its referral and triage processes allowed a tertiary eye hospital to increase the number of patients proceeding to cataract surgery and reduce overall waiting times.

The case study is referred to throughout this document to illustrate what can be achieved and how.

The hospital

The Royal Victorian Eye and Ear Hospital (The Eye and Ear), Melbourne, is the only specialty eye hospital in Victoria. In 2014–15, more than 200,000 patients attended specialist clinics at *The Eye and* Ear, most of whom were from metropolitan areas.

Why was change needed?

Several issues were affecting the hospital's ability to provide services efficiently and to meet community needs. These included:

- Growing waiting lists for clinic visits (more than doubled from 2011 to 2013)
- Low conversion rates (patients proceeding to surgery after a clinic assessment)
- Lengthening waiting times for cataract surgery

A lack of reliable data to monitor clinic activity and outcomes.

Before the redesign, The Eye and Ear accepted most ophthalmology referrals received, and ran several different eye clinics, each with different decision-making processes. Although a triage process was in place, decision-making was based mainly on clinical judgement, and timeframes were inconsistent. Inadequate information in referrals often made it difficult to identify higher-priority patients, or distinguish more straightforward cataract patients from more complex cases and other ophthalmic presentations. On assessment, patients who were not ready for surgery (for clinical or personal reasons) were put back on the list for later review. In 2012–13, the maximum waiting time for a clinic visit was 2,093 days.

What actions were taken? The Eye and Ear model of care

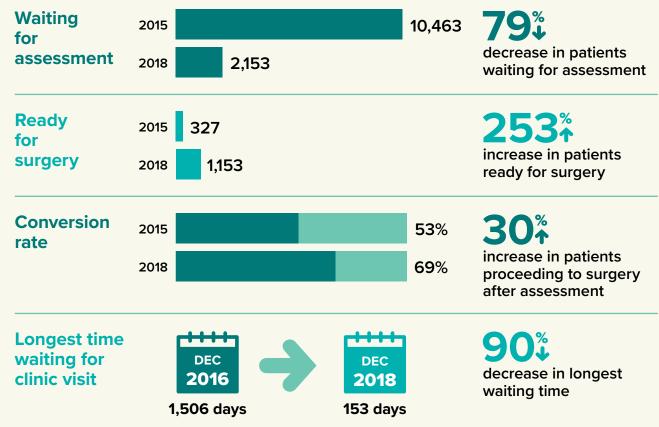
The Eye and Ear redesigned its model of care to establish the Surgical Ophthalmology Service in 2014, predominantly managing patients requiring cataract surgery. The new model included a more structured triage process accompanied by clear, formalised referral guidelines.

The Eye and Ear's Ambulatory Services leadership team continually monitors processes such as conversion rates to surgery and time between referral and first clinic appointments. Using a continual quality improvement cycle helps the service troubleshoot unexpected issues and make sure that its goals are being met.

Figure 1: Process of referral and triage

Referral using Triage by First clinic Surgery Day 1 Post-op review standardised a clinician telehealth (3-4 weeks): assessment: referral form according Diagnostics post-op clinic Consent for (visit by and guidelines to defined completed second eye or criteria includes pre-admission exception discharge opthalmic procedures, - 10% of assessment consent patients)

Figure 2: Changes in outcomes – 2015 to 2018



Outcomes

There has been a clear relationship between shorter waiting times for first clinic appointments and conversion rates to surgery. The Surgical Ophthalmology Service's referral guidelines are regularly reviewed ensure that surgery is likely to be appropriate for patients accepted by the hospital. Outcomes include:

- Patient flow is better managed
- The new patient waiting list for clinic visits has decreased by 80% – from 10,463 to 2,153 patients between January 2015 and January 2018
- The maximum waiting time for a clinic visit in decreased from 1,506 in 2016 to 153 days in 2018
- More patients seen in clinic are proceeding to surgery
- Conversion rates continue to increase each year, from 53% to 69% between January 2015 and January 2018.



Recommendations for other health services

"It's really important to have a clearly documented approach so you have the right information to triage patients based on their clinical needs, and can assign a consistent, evidence-based clinical priority to each referral. Criteria have to be clear, and consistently applied.

Being able to access key data sets is vital so that we can monitor agreed indicators, as is being willing to regularly evaluate progress and find alternative solutions when necessary. Having great collaboration across the clinical team and guidance from medical staff has been pivotal in helping us identify alternative approaches to a long-standing problem."

-Surgical Ophthalmology Service Unit management staff, The Royal Victorian Eye and Ear Hospital



Quality statement 1

Primary care assessment and referral

A patient with visual problems and suspected cataract has an initial assessment in primary care of their visual impairment, vision-related activity limitations, comorbidities and willingness to have surgery. When referral is appropriate based on these criteria, the patient is referred for consideration for cataract surgery, and this information is included in the referral form.

Purpose

To ensure the appropriate management and referral of patients with suspected cataract in primary care and that, when patients are referred, enough information is provided to support triage by the receiving clinician or health service organisation.

What the quality statement means

For patients

Cataract is a common eye problem as people get older. General practitioners (GPs), Aboriginal health practitioners, optometrists and orthoptists are all primary care clinicians who may be your first point of contact for eye problems.

Cataract may be found as part of a routine eye test or because you are having trouble with your vision. Vision tests and an eye examination can identify whether you have cataract. These tests can be carried out by an optometrist or orthoptist, or by a specialist eye doctor (ophthalmologist). If you do have cataract, it is important for your clinician to understand how your visual problems are affecting your life, including the sorts of things that you can no longer do.

If cataract is not affecting your ability to carry out your usual activities, you may not need to consider surgery yet. Prescription glasses, or other equipment or aids might be worth considering - an optometrist, GP or low-vision service provider can advise you about the services available.

If cataract surgery is a suitable option for you and you are willing to consider surgery, your clinician can refer you to a specialist eye doctor for further assessment and to discuss possible surgery. Some specialist eye clinics will ask for specific information in your referral before they offer you an appointment. This might include eye test results from an optometrist, and information about other medical conditions and treatments from your GP or another clinician.

For clinicians

A patient with visual problems due to suspected cataract requires an ocular examination, preferably performed using a slit lamp biomicroscope or direct ophthalmoscope, and an assessment of how their visual problems are affecting their life. Optometry referral may be a suitable initial option for assessment of cataract.

Discuss the possible options to manage the patient's symptoms and advise them that the presence of cataract alone is not an indication for surgery. Patients with lens opacities that do not cause visual symptoms or limit daily activities can continue to be managed and monitored in the primary care setting.

Consider referral for possible cataract surgery when patients have visual impairment that interferes with their ability to carry out their usual daily tasks, considering the possible impact on their ability to live independently. Ocular or medical comorbidities may affect the urgency of referral. Visual impairment can include reduced visual acuity, or disabling glare or contrast sensitivity. Vision-related activity limitations may include a loss of ability to work. drive, carry out daily tasks, or care for themselves or others - for example, an increased risk of falls in older people with risk factors. Box 1 provides information about assessment of vision-related activity limitation and some examples of assessment tools.

Discuss the potential benefits and harms of cataract surgery, including the disadvantages of poor vision and the risks of complications. Assess the patient's willingness to proceed with surgery if it is offered. Ophthalmology assessment can confirm whether patients with ocular comorbidity are more likely to benefit from surgery, or have an increased risk of complications.7

If referral is appropriate, check the referral criteria for the receiving service you are referring to, because requirements may differ between services. Ensure that all required information is provided; use a standardised cataract referral template if one is available. Both general practice and optometry assessment may be needed to provide the information required. 43-46 Improving the quality of the referral 46 can reduce delays for patients by helping ophthalmology services triage access to ophthalmology services and assess medical suitability for surgery.^{42,47} Elements of a comprehensive referral that may be required by local referral guidelines are listed in Box 2.

If the patient does not to want to consider cataract surgery and there are no other indications for ophthalmology assessment, referral to an ophthalmology service may not be appropriate. Provide support for patients to reduce the impact of their visual problems, including refractive correction, tinted lenses to reduce glare, or use of suitable equipment to optimise vision and improve the patient's capacity for activities of daily living. 7 Refer to an optometrist, orthoptist, occupational therapist, vision clinic or other provider of low-vision services, if appropriate.

For health service organisations

Primary care services making referrals should maintain awareness of any local referral guidelines or criteria for referral to ophthalmology or other eye services and have protocols to ensure that relevant information is included in the patient referral. Patient information about cataract and its management should be available for primary care clinicians to provide to patients. Information on any alternative community-based referral options should also be available.

Ophthalmology services receiving referrals should have guidelines that describe what information is required in referrals from primary care, and, where relevant, describe any criteria for accepting and prioritising referrals. This will usually be determined locally and take into account the availability of services, particularly in regional locations. Box 2 provides some of the components to consider in referral guidelines. Referral guidelines should be published online in an accessible, relevant location, and made readily available to referring clinicians and through Primary Health Networks.

A standardised referral template can be effective for improving the appropriateness of referral, as well as improving the quality of information needed to triage patients for ophthalmology appointments. 15,42,47



The Eye and Ear Case Study

Ensuring high-quality referrals

Key steps in improving *The Eye and Ear* referral process included:

- Developing referral and triage guidelines in close consultation with senior medical staff
- Defining criteria for accepting referrals (such as severity of visual impairment and impact on daily living)
- Communicating with referring clinicians: a standardised referral form and referral guidelines are available on the hospital website. The guidelines include information about monitoring of patients in the community and when to refer.

The referring clinician and patient each receive a letter acknowledging receipt of referral and feedback about the outcome (accept, reject or clarify).



"Having a standard, documented approach means that referring clinicians know what information to provide and what to expect in terms of acceptance thresholds.

Referring clinicians soon became familiar with the new approach after we promoted the referral guidelines on local GP networks' websites and on our own website, and made a referral template available online. Our overall aim is to make it easier to access the hospital's services and make the process more transparent for everyone."

Extra information for assessing and referring patients with cataract

Vision-related activity limitation

Vision-related activity limitation refers to the impact of poor vision on usual activities⁴⁸, which differs from quality of life. It is a useful assessment for measuring potential and actual benefit from surgery.

Many scales and tools can be used to measure vision-related activity limitation^{48,49}; two useful, validated measures that correlate with benefit from cataract surgery are described in Box 1.

Box 1: Assessment of vision-related activity limitation using patient-reported outcome measures.

Question domains	Assessment tool	
	Catquest-9SF ⁵⁰⁻⁵² No. of items (√)	Cat-PROM5 ^{53,54} No. of items (√)
Global ratings of visual difficulty		
Visual problems that interfere with normal activities		
Overall self-rating of vision or ability to see well (corrected with usual glasses or lenses)	✓✓	\ \ \ \ \
Satisfaction with sight		
Specific activities (corrected with usual glasses or lenses)		
Reading normal print/text (such as newspapers, books, price tags, medicine labels)	$\checkmark\checkmark$	✓
Recognising faces because of sight	✓	n/a
Seeing on uneven surfaces because of sight	✓	n/a
Seeing to do handicrafts, woodwork or hobbies	✓✓	n/a
Reading text on TV	✓	n/a
Validation	Validated in Australia and Sweden. Adopted by International Consortium for Health Outcomes Measurement ⁵⁰	Validated in the United Kingdom for use by the National Health Service

^{1.} Catquest-9SF: validated in Australia and Sweden. Adopted by International Consortium for Health Outcomes Measurement.⁵⁰

^{2.} Cat-PROM5: Validated in the United Kingdom for use by the National Health Service.

Box 2: Key components for referral guidelines to support triage and prioritisation processes

Key questions¹⁵ These factors should be considered before referral. Does the cataract affect the patient's sight and quality of life? Studies show that many patients are referred to clinic who are inappropriate for, or not willing to consider, Does the patient wish to have surgery surgery. if it is offered? **Purpose of referral** 1. Reason for referral Knowing the reason for referral can help assign resources and appointments/clinic times. ☐ Ophthalmic assessment ☐ Consideration for first cataract surgery ☐ Second-eye surgery Patient information and vision-related needs 2. Patient details, including Aboriginal and Torres These factors can influence the patient's priority for Strait Islander status, interpreter needs assessment and surgery, and local triage processes. 3. Social circumstances (e.g. support at home, Consider using a validated patient-reported falls risk, distance from care [remoteness]) outcome measure (PROM) such as the Catquest 9SF 4. Patient willingness to consider cataract surgery or Cat-PROM5 to measure the impact of cataract on daily living (see Box 1). 5. Vision-related activity limitations, including impacts on: Activities of daily living Ability to care for self and others Driving Occupational, educational and recreational activities **Medical history** 6. Medical history and previous ocular diagnoses Comorbidity (e.g. diabetes) and ocular conditions (e.g. glaucoma) may affect priority of treatment. 7. Current medications 8. Allergies Ocular/ophthalmic history Include the date and results of the most recent This information can be used by services to determine optometry or ophthalmology assessment. appropriateness and urgency of referral. 9. Cataract details (including severity of disease/ Much of this information will require ocular grade of cataract, if available) examination by an ophthalmic clinician (ophthalmologist, optometrist or orthoptist) 10. Extent of visual impairment, including: before referral. ☐ Best corrected visual acuity (in each eye and both eyes) When determining referral guidelines, health service organisations should consider their local population, ☐ Glare or contrast sensitivity (based on location and access to specialised services. clinical assessment) 11. Other assessment results: Subjective refraction results Intra-ocular pressure - Ocular diagnoses made or suspected, including previous ocular surgery or trauma,

glaucoma, acute macular degeneration,

macular oedema, amblyopia



Quality statement 2

Patient information and shared decision making

A patient with suspected or confirmed cataract receives information to support shared decision making. Information is provided in a way that meets the patient's needs, and is easy to use and understand. The patient is given the opportunity to discuss the likely benefits and potential harms of the available options, as well as their needs and preferences.

Purpose

To ensure that patients with cataract receive accurate and balanced information about the surgical and non-surgical options available to them, and the likely benefits and potential harms of each option to enable an informed decision about whether to have cataract surgery.

What the quality statement means

For patients

Your clinician will talk to you about cataract and its treatment in a way that you can understand, and is respectful of your cultural needs and individual situation. Written information will be presented in a format that is easy for you to use. You will be informed about the available options, including their expected benefits and possible adverse outcomes – these might include unsatisfactory changes in your vision and more serious complications. You will be asked about the effect that vision problems are having on your life, and have the opportunity to discuss the advantages and potential disadvantages of surgery for your individual circumstances. Other options, including visual aids and watchful waiting, should also be discussed.

For clinicians

Provide patients who have cataract with clinically accurate, evidence-based information about their options, both verbally and in a written format that is easy to use - for example, in large font or electronically. Suitable options may include surgical or non-surgical options, such as visual aids or watchful waiting. Ask the patient about their needs, preferences, quality-of-life concerns and any psychosocial issues, to help you to support them in shared decision making.

Provide care that is culturally safe and respectful for Aboriginal and Torres Strait Islander people.

For health service organisations

Ensure that policies support shared decision making and the competence of clinicians, who should be appropriately trained in shared decision making and have access to suitable resources. Ensure that any patient information resources provided are clinically accurate, balanced and evidence-based, and suitable to your patient population. These resources should include information about surgical and non-surgical options, be easy to understand, and be presented in a format that is easy to use for patients with impaired vision.

Provide a culturally safe environment for your patient community.⁵⁵ The level of comorbidities in Aboriginal and Torres Strait Islander people, their age at diagnosis and disparities in their health outcomes means that health care for this population needs to be refocused to meet the unique needs of each patient.¹²



Quality statement 3

Access to ophthalmology assessment

A patient who has been referred for consideration for cataract surgery is prioritised for ophthalmology assessment according to clinical need, based on a locally approved protocol and following receipt of a detailed referral.

Purpose

To ensure that a patient's first clinic appointment is allocated in a timely manner appropriate to their clinical need, based on documented and approved protocols that specify how patients will be assessed and prioritised.

What the quality statement means

For patients

When you are referred to a specialist eye doctor, you will usually be given the next available appointment. However, some clinicians or health services may use the information in your referral to decide when you receive an appointment. This means that people with more urgent needs may be seen more quickly. If you are referred to a health service or specialist eye doctor using this type of system, they will check the information in your referral to decide when you will receive an appointment. If key information is missing from your referral, they will ask you or the referring clinician to provide the missing details. If you are not ready for surgery, an optometrist may be able to suggest ways for you to manage your eye problems.

If your eyesight worsens or other circumstances change while you are waiting for an appointment, get in contact with the clinician who referred you and let them know.

For clinicians

Use an agreed local protocol to allocate appointments for referred patients, prioritising them according to clinical need, including social and cultural circumstances and barriers to accessing care. This is particularly important if there are waiting times for the first specialist assessment.

Assessment of clinical need includes both visual impairment and resulting limitations in vision-related activities. Social factors, including the impact of poor vision on the person's ability to work and live independently, should also be considered.

If the referral is incomplete, the referring clinician should be prompted for further information. The assessment should be scheduled in a time frame that is consistent with agreed health service protocols to ensure that patients are assessed in a timely way.

Referrals should be reviewed by a credentialed ophthalmic clinician who can use the information in the referral to make an initial assessment about the appropriateness of referral, severity of symptoms and relative priority for ophthalmological assessment. Use of standardised criteria and tools allows consistency of assessment, and assists when prioritising patients within a health service or system. 27,31

For health service organisations

When patients are referred for consideration for cataract surgery, appointments are allocated using protocols that prioritise patients based on clinical need, including social circumstances, based on adequate information about the referred patient. This is particularly important in health service organisations that have substantial waiting lists for the first specialist assessment.

These protocols should describe criteria for accepting referrals and prioritising patients for ophthalmology assessment. They should include any tools to be used for providing standardised information, and allow for a credentialed ophthalmic clinician to review referrals to determine the priority and timing of ophthalmology assessments. In some states and territories, these protocols may be determined at a health department level for public hospital clinics.

Where referral criteria apply, these should be readily available and communicated to referring clinicians and patients. Consider providing a standardised referral template for referrals from the community to help ensure that adequate information is provided.

Protocols should include pathways for patients who do not meet referral criteria, who choose non-surgical options, or for whom surgery is considered unsuitable or inappropriate at ophthalmologic assessment. These pathways may include reassessment or follow-up, or referral to other services such as optometry, orthoptist, occupational therapy, providers of low-vision services or vision clinics. Provide information back to the referring clinician.

Processes should be in place to monitor patients waiting for first ophthalmology appointments in case their clinical needs and priority change.

Monitor and audit outcomes within a quality improvement framework to assess whether desired outcomes are being achieved, including the time frame from referral to assessment and surgery.

Indicators for local monitoring

Indicator 3a: Evidence of a locally approved protocol to allocate appointments for patients considering cataract surgery.

The protocol should define the:

- Patient information required to be included in incoming referrals
- Criteria for accepting referrals for ophthalmology assessment
- Pathways for patients who do not meet the referral criteria
- Criteria for prioritising appointments for ophthalmology assessment.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/711410

Indicator 3b: Proportion of referrals for consideration for cataract surgery received that included the required patient information.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/711431

Indicator 3c: Proportion of patients referred for consideration for cataract surgery that did not meet the criteria for referral.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/711433

Indicator 3d: Proportion of patients referred for cataract surgery who had cataract surgery.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/711429

More information about these indicators and the definitions needed to collect and calculate them can be found online at METeOR.



The Eye and Ear Case Study

Timely and consistent triage of referrals

Clinical prioritisation of referrals at *The Eye and Ear* is based on set criteria outlined in the Primary Care Referral Guidelines - Opthalmology. Referrals are triaged to assess the urgency of a patient's clinical condition. If a referral is accepted, the patient is placed on the new patient waiting list and allocated a clinic appointment.

Key elements of the triage process include:

- Administration staff log all referrals and the date received
- Clinical staff triage referrals *The Eye and Ear* trains and credentials orthoptists to carry out the triage process and document the triage outcome
- Referrals are checked to ensure they include required details including
 - Ophthalmic assessment results (community optometrist or ophthalmologist)
 - Impact of symptoms on the person's life and social circumstances (daily activities, occupation, driving, risk of falls)
 - Confirmation that the patient is willing to have surgery.

Referrals are rejected if patients do not meet the set acceptance thresholds for clinically significant cataract, or are sent back to the referrer if required information is missing. If uncertain, the triaging orthoptist will consult medical colleagues.

Referrals are accepted if they meet the criteria. Once patients are on the new patient waiting list they are offered an appointment based on their clinical prioritisation.

Monitoring used to support quality improvement

- All referrals are logged in the system so that timeliness and outcomes can be tracked
- For example, *The Eye and Ear* can monitor
 - Waiting times from referral to the first clinic appointment
 - Waiting times from referral to surgery
 - Waiting time for surgery (Elective Surgery Waiting List) from their first clinic appointment
 - The proportion of referred patients who proceed to surgery (conversion rates).

A continual improvement cycle helps the service troubleshoot unexpected issues and make sure that its goals are being met. For example, The Eye and Ear originally established its own key performance indicator (KPI) for timeliness of triage, and now adheres to the Specialist clinics in Victorian Public Hospitals: Access policy (2013).56

"While most services monitor the Elective Surgery Waiting List and time to surgery, we also monitor specialist clinic waiting lists and the waiting time to a first clinic appointment. This allows us to measure the effect of implementing our structured triage process, which we found has had a significant positive impact on waiting times."



Quality statement 4

Indications for cataract surgery

A patient is offered cataract surgery when they have a lens opacity that limits their vision-related activities and causes clinically significant visual impairment involving reduced best corrected visual acuity, disabling glare or contrast sensitivity.

Purpose

To ensure that patients with clinically significant cataract are offered cataract surgery when appropriate according to clinical criteria.

What the quality statement means

For patients

Cataract surgery is usually recommended when you have trouble seeing well enough to carry out your normal daily activities. As part of your assessment, your clinician may test how clearly you can read an eye chart (visual acuity). They will also take into account other visual problems, including any difficulty you have seeing in bright or dim light.

You will be asked about how your eye problems affect your daily activities. What this means may differ from person to person. Daily activities include working, driving and reading, as well as your ability to live independently and safely with your visual problems (for example, whether you are at risk of falls). The clinician may ask you to complete a questionnaire.

The likely benefits and possible harms of surgery might depend on whether you have any other health conditions, including other eye problems. Your clinician will consider these factors when discussing the possibility of cataract surgery with you, and will let you know if you have a condition that means that surgery is not recommended or there is a higher risk of complications.

Sometimes cataract surgery is recommended for medical reasons rather than for improving vision. This includes surgery for people who need regular check-ups of the retina (back of the eye) but the retina cannot be seen because of the cataract.

For clinicians

Note: This statement applies to people having cataract surgery primarily to improve vision. It does not apply to other indications for cataract surgery including angle closure and phacolytic glaucoma, or to allow monitoring of retinal conditions.

The clinical decision about whether to offer cataract surgery takes into account the patient's level of visual impairment, the impact of visual deficits on their daily life, and the potential benefits and harms associated with surgery.

Visual acuity of 6/12 or worse may provide a useful objective measure of visual impairment, but may significantly underestimate function – for example, in conditions of high or low light. Glare or contrast sensitivity may be disabling without an impact on visual acuity. Some patients will have higher visual acuity needs, such as for occupational activities.

Vision-related activity limitations include activities of daily living, which are specific to the individual's social circumstances and occupation. Validated tools for assessing visionrelated activity limitations, and the impact of visual problems on activities and social functioning are described in Box 1. Some of these tools correlate well with positive patientreported outcomes after cataract surgery. 50-52,54,57

Use of standardised criteria and tools allows consistency of assessment, and assists when prioritising patients within a health service or system.^{27,31} These criteria do not replace the need for an individualised clinical assessment or clinical judgements about the severity of impairment and the appropriate treatment options.

Most patients have an improvement in visual function after surgery. Patients most likely to report a poor outcome after surgery include those with good self-assessed preoperative visual function.^{7,57,58} Consider conditions that increase the risk of complications or a poor outcome from cataract surgery (such as diabetes, diabetic retinopathy or uveitis) or limit the extent of visual gain (such as age-related macular degeneration).7

If the patient chooses not to have surgery or is not considered suitable for surgery at this time, offer details of other healthcare providers who can help, such as an occupational therapist, optometrist or provider of low-vision services..

For health service organisations

Ensure that protocols support the use of suitability criteria for cataract surgery, and that cataract surgery is offered to patients who meet agreed criteria. Protocols should allow other compelling indications for surgery to be considered, based on clinical judgement, and should cater for patients who choose non-surgical options.

Consider implementing common clinical criteria or tools into protocols to enable standardised assessment, documentation and prioritisation. Box 3 provides examples of tools that could be considered. Implement tools and protocols within a quality improvement framework, monitoring their use and impact to ensure that desired outcomes are being achieved. Such outcomes may include whether criteria are being consistently applied, equity of access, timeliness of access and patient-reported outcomes.



Quality statement 5

Prioritisation for cataract surgery

A patient is prioritised for cataract surgery according to clinical need. Prioritisation protocols take into account the severity of the patient's visual impairment and vision-related activity limitations, the potential harms of delayed surgery, any relevant comorbidity and the expected benefits of surgery.

Purpose

To ensure that patients with clinically significant cataract are prioritised for surgery according to their clinical needs, including consideration of the possible adverse outcomes if surgery is delayed.

What the quality statement means

For patients

If you and your eye surgeon agree that you are likely to benefit from cataract surgery, and you agree to have surgery, this will be arranged.

Where there is a high need for services, you will be put on a waiting list for surgery. Most hospitals use a system that makes sure that patients with the greatest need for surgery are scheduled for cataract surgery first. This means that the severity of your vision problems and their impact on your life should be taken into account. For example, poor eyesight can affect your ability to work, drive, cook, read and write, or your ability to care for yourself or others. Your clinicians will also consider any other health conditions you have and your risk of falls. Some health conditions may make it more urgent for you to have cataract surgery, while others could mean that surgery is less likely to help you.

Let your GP, optometrist or eye specialist know if your vision worsens or other circumstances change while you are on a waiting list for cataract surgery.

For clinicians

Take into account organisational protocols for prioritising patients in your local health service, and provide information to assist structured and consistent prioritisation. Assess and document visual impairment and vision-related activity limitations, using a standardised tool if required.

At an individual patient level, the benefit of, and relative priority for, surgery are usually based on expert clinical judgement, taking into account the degree of visual impairment, the impact of visual impairment on activities of daily living (vision-related activity limitations), the risks of delayed surgery, any relevant comorbidity and the expected benefit of surgery.

When patients are being prioritised for surgery across a health service organisation, standardised protocols may be used to assess these factors systematically. Prioritisation protocols should enable those patients at greatest risk of harm from delayed surgery and those who are most likely to benefit from surgery to be treated first. Potential harms associated with delayed surgery include risks of falls or traffic accidents, or increased complexity of later surgery – for example, in patients with densely brunescent or white cataract.4 Social factors that may affect the ability of patients to access care, should also be considered, including remoteness, language and culture.

Comorbid conditions that may increase the urgency of cataract surgery should be considered in the prioritisation process. These include acute angle glaucoma and posterior segment disease, where fundal access is required for monitoring or treatment.

For health service organisations

Ensure that protocols are in place to support prioritisation of patients according to their clinical needs and other key factors, based on a full ophthalmology assessment. Prioritisation protocols should include consideration of the patient's visual impairment and vision-related activity limitations, comorbidity, potential harms from delayed surgery and potential to benefit. Social factors that may affect the ability of patients to access care should also be considered in protocols where relevant locally, including remoteness, language and culture. Surgery is scheduled based on this protocol. Monitor and, if necessary, reassess patients while they are on the waiting list in case their circumstances change.

Consider using validated tools or agreed clinical criteria to enable standardised assessment and documentation. Implement prioritisation protocols as per the requirement of the health service, or the state or territory health department.⁵⁹ Examples of tools that could be considered and adapted are listed in Box 3. Implement tools and protocols within a quality improvement framework, monitoring their use to ensure that desired outcomes are being achieved. These include whether criteria are being consistently applied, timeliness of surgery, clinician perceptions and patient-reported outcomes. Where there is variation, assess the effectiveness of prioritisation protocols in the context of NSQHS Action 1.28.

Indicator for local monitoring

Indicator 5: Evidence of a locally approved protocol to prioritise patients for cataract surgery according to clinical need.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/711426

More information about this indicator and the definitions needed to collect and calculate it can be found online at METeOR.

Box 3: Tools and measures for assessing and prioritising patients with cataract

Tool	Description of use	
NIKE national tool for indications for cataract extraction ^{18,31}	For prioritising patients determined appropriate for cataract surgery, along with waiting time guarantees, in Sweden and Denmark. Patients are prioritised into four groups from greatest to least need for surgery.	
National Clinical Priority Assessment Criteria (New Zealand) ²¹	Patients are referred by GP using online system. If referral is accepted, patient receives a first specialist assessment. Specialist assigns priority score. Different local area District Health Boards in New Zealand have different systems for assessing and prioritising, based on common criteria. 60	
Manitoba Cataract Waiting List Program ⁶¹	Uses a centralised database to track and prioritise all patients waiting for cataract surgery after initial ophthalmology assessment.	
IRYSS Cataract Priority Score (Spain) ^{20,27,62}	Can be used to determine appropriateness and priority. Two tools were developed (IRYSS Appropriateness of indication and IRYSS Cataract Priority Score); they were found to be highly correlated and similar for prioritising.	
Cataract Impact Model ²⁸	Model for establishing relative surgical priority, integrating clinical and questionnaire data.	

Visual impairment measure	Measures of vision-related activity limitations	Comments	
Best corrected visual acuity in each eye and symptoms (glare, binocularity)	Priquest: considers difficulty in performing daily activities (work, drive, manage without assistance	Not in English	
Medical indications for surgery (e.g. mature cataract)	or care for others)		
Comorbidity that might reduce potential benefit of surgery			
Best corrected distance visual acuity in operative eye	Impact on life questionnaire: Social interaction Personal interaction Ability to fulfil responsibilities to others Personal care Personal safety Leisure activities		
Best corrected binocular distance visual acuity		 Ability to fulfil responsibilities to others Personal care Personal safety Leisure activities 	
Presence of axial posterior subcapsular lens opacity			
Potential visual acuity in the operative eye after surgery (considering comorbidity, such as maculopathy, keratopathy, optic neuropathy, amblyopia)			
Clinical assessment of need for surgery	Visual Function Index (VF-14) ⁴⁸	VF-14 provides an objective measure for prioritising patients once the appropriateness of surgery is determined. Waiting time is tracked in the system	
Ocular comorbidity Best corrected visual acuity in both eyes Surgical complexity of cataract extraction Laterality of cataract Anticipated visual acuity after extraction	Visual function: Impairment level Glare Recreational difficulties Difficulties with activities of daily living Social dependence (Priority tool)	Appropriateness was rated as necessary, appropriate, uncertain or inappropriate, and priority using a numeric score	
Visual acuity in the eye undergo- ing surgery, the fellow eye, the better eye	Catquest-9SF ⁵⁰ Priquest	Proof of concept but not currently in use	



Quality statement 6 Second-eye surgery

Options for a patient with bilateral cataract are discussed when the decision about first-eye surgery is being made. Secondeye surgery is offered using similar criteria as for the first eye, but the potential benefits and harms of a delay in second-eye surgery are also considered, leading to a shared decision about second-eye surgery and its timing.

Purpose

To ensure that patients with bilateral cataract who have a higher risk of poorer visual function after first-eye surgery are identified, the options for surgery are discussed, and a decision about timing is made, appropriate to their individual clinical circumstances and personal preferences.

What the quality statement means

For patients

If you have cataract in both eyes, your eye surgeon will discuss whether you would benefit from having surgery in both eyes. For many people, having cataract surgery in one eye is enough to improve vision. If your eye surgeon thinks you may need operations on both eyes, the options include:

- Having surgery on the second eye weeks or months after the first eye has recovered from surgery
- Having surgery on the second eye on the same day as the first eye or the day afterwards.

The option most suitable for you will depend on a number of factors. Some of the factors you should take into account include:

- How your overall vision is expected to change after surgery in the first eye if one eye is very different from the other (for example, much more short-sighted), it may be hard to see clearly
- The risks of an infection or another complication. Although the risk of complications is small, having complications in both eyes could be very serious. If you are at high risk of complications or have other eye problems, having operations on both eyes at the same time may not be recommended
- Your general health, any other eye problems, and your personal circumstances and preferences.

Discussing these issues with your eye surgeon, and understanding the potential harms and benefits will help you decide if and when you want to arrange surgery for your second eye, and how to go about doing so.

For clinicians

Discuss second-eye surgery and its timing when first-eye surgery is being planned. Similar criteria apply when assessing the need for second-eye surgery as for the first eye⁶³ (clinically significant visual impairment, vision-related activity limitations and comorbidities – see quality statements 4 and 5). In addition, consider existing or anticipated anisemotropia (a significant difference in refractive error between the two eyes) after first-eye surgery, and its impact on vision and visual function, including stereopsis (depth perception), stereoacuity and falls risk.

Advise patients of the options available and appropriate in their clinical circumstances. This may include no surgery, surgery on two separate days some time apart or second-eye surgery on the same or next day. Explain to patients what they can expect from having, or not having, second-eye surgery, and discuss the benefits and potential harms with them to help decide between options.

Having second-eye surgery later allows complete postoperative recovery (and, if needed, treatment of postoperative complications) from first-eye surgery, and the opportunity to assess and plan surgery based on the results of first-eye surgery. Make arrangements for second-eye surgery as soon as it is appropriate for the patient's preferences and circumstances.

There is limited evidence to support second-eye surgery on the same or next day.⁶⁴ It may be considered for patients^{4,8}:

- At low risk of complications during and after surgery, or at risk from delayed secondeye surgery
- To avoid a second general anaesthetic, when general anaesthetic is required
- For whom distance and travel are considerable barriers, such as in remote and very remote areas.

Ensure that patients are informed of the consequences of complications, including the risk of potentially blinding complications in both eyes, such as endophthalmitis or toxic anterior segment syndrome.⁴ Second-eye surgery may not be appropriate for some patients. As well as individual preference, some patients may have another eye condition that makes it too risky for them, or makes an improvement in vision less likely.

For health service organisations

Provide access to current evidence-based guideline recommendations for second-eye surgery and support use of these recommendations by clinicians. Ensure the availability of protocols relating to decisions about second-eye surgery and its timing. For patients having delayed second-eye surgery, prioritise surgery according to clinical need.

If second-eye surgery on the same or next day is carried out in the health service, ensure that facilities are appropriately equipped, and that local protocols are in place to minimise the risk of complications and manage them should they occur.4



Quality statement 7 Preventive eye medicines

A patient receives an intracameral antibiotic injection at the time of cataract surgery, in preference to postoperative topical antibiotics and according to evidence-based guidelines. After surgery, a patient receives anti-inflammatory eye drops when indicated.

Purpose

To improve patient care by ensuring appropriate use of surgical antibiotic prophylaxis and postoperative topical anti-inflammatory medicines.

What the quality statement means

For patients

Antibiotics are used in cataract surgery to prevent eye infections (called endophthalmitis). Although these infections are very rare, they can be very serious. Injecting an antibiotic into the eye during surgery is one of several things your eye surgeon will do to prevent infection. This is called an intracameral antibiotic. Antibiotic eye drops after surgery are usually not necessary if you have an injection.

Another type of eye drop (anti-inflammatory eye drops) may be used to reduce the risk of serious inflammation or swelling in the eyes. If your eye surgeon wants you to use anti-inflammatory eye drops, they will discuss this with you and explain how to use the eye drops. With any eye drops, follow the dosing instructions carefully and only use them as long as you need to, to avoid using more than necessary.

For clinicians

Evidence-based guidelines recommend use of intracameral antibiotics^{4,36,65} for endophthalmitis prophylaxis in preference to topical pre- or postoperative antibiotic eye drops. Therapeutic Guidelines: Antibiotic recommend cefazolin intracamerally as a single dose at the end of surgery, and avoiding use of quinolones or vancomycin, which lack evidence⁶⁵; consider the risk of antibiotic resistance. Prophylactic use of topical antibiotic solutions or eye drops is not recommended, and there is little evidence to support their use.^{4,65} If no commercially prepared intracameral formulation is available, antibiotic eye drops may be considered to avoid the risk of dilution errors and contamination. Seek advice in the case of patients with hypersensitivity to penicillin or cephalosporins.⁶⁵ If postoperative antibiotic eye drops are used, chloramphenicol 0.5% eye drops are recommended. Stipulate the duration (maximum seven days) to avoid overuse.65

Consider postoperative anti-inflammatory eye drops (corticosteroid eye drops, with or without non-steroidal anti-inflammatory drugs) for patients at high risk of developing cystoid macular oedema after cataract surgery, such as patients with diabetic retinopathy or other high-risk ocular comorbidities.^{4,36} Discuss the possible benefits and harms of these eye medicines with the patient. If they are used, provide clear instructions for their use, including duration of use.

Potential adverse effects include allergic reactions to antibiotics, increased intraocular pressure with corticosteroids and, rarely, epithelial damage with non-steroidal anti-inflammatories.36

For health service organisations

Ensure that clinicians have access to current evidence-based guideline recommendations for intracameral antibiotics and other postoperative eye drops, such as Therapeutic Guidelines: Antibiotic. Develop processes to measure compliance with guidelines. 65 Intracameral use of cefazolin is off-label, and its addition to the formulary will need to be approved by the local Drugs and Therapeutics Committee under routine use of an off-label medicine.

Indicator for local monitoring

Indicator 7: Proportion of patients who received intracameral administration of antibiotics at the end of surgery.

METeOR link: meteor.aihw.gov.au/content/index.phtml/itemId/711446

More information about this indicator and the definitions needed to collect and calculate it can be found online at METeOR.



Quality statement 8

Postoperative care

A patient receives postoperative care that ensures the early detection and treatment of complications of cataract surgery, and the patient's visual rehabilitation. Postoperative care is provided by the operating ophthalmologist or a designated team member. The patient is informed of the arrangements for postoperative care.

Purpose

To ensure that a patient remains under the care of the operating ophthalmologist (or, where necessary, that this care is delegated to an appropriately qualified clinician) until they have recovered from cataract surgery.

What the quality statement means

For patients

Your eye surgeon (and members of the eye team) will see you regularly while you recover from cataract surgery, until your eyes have fully recovered from the surgery. Usually, this will mean a check-up in the first 48 hours and again 2-4 weeks after surgery. They will look at your eye to check how well it is healing and how well you can see. They will provide information about:

- What you can expect while your eye is healing
- How to look after your eye while it is healing, including any eye drops needed
- When to have your eyes checked after the operation so that any problems can be treated early, even though the risk of complications after surgery is usually low
- When to get new glasses, if this applies to you.

It is important that you know who to contact if you have any concerns or questions, or if your vision changes unexpectedly. If you have cataract in your non-operated eye, your eye surgeon will talk to you about your options for future surgery, usually based on the recovery of your operated eye.

For clinicians

Ensure appropriate postoperative care by regularly reviewing the patient's postoperative recovery. Determine the exact frequency of postoperative review, taking into account the surgical technique, any operative or postoperative complications, and the person's ability to access care.8 Early review (within 24 hours) may be warranted for patients at high risk of complications, but may be deferred for up to two weeks in uncomplicated cataract surgery in patients not at risk of intra-ocular pressure increase.^{4,8,36} Inform patients about the need for follow-up appointments and how to recognise potentially important visual changes. Provide details of who to contact in case of concerns.

Postoperative care is the responsibility of the operating ophthalmologist. If this is not possible - for example, for some rural and remote patients - care should be delegated to an appropriately qualified clinician with adequate clinical handover, considering the patient's ability to access services. Ensure that this team member has the patient's preoperative assessment and details of the surgery performed, is able to recognise complications, and can access urgent referral and specialist support if needed.

Provide patients with information about what to expect during the postoperative period, how to care for their eye postoperatively, use of medications, second-eye surgery (where relevant) and when to get new glasses (if appropriate). Include this information in reports back to the referring clinician, including details of intracameral antibiotics administered during surgery.

For health service organisations

Ensure that clinicians have access to local guidelines or protocols for appropriate postoperative care, and that processes are in place to promptly identify and manage complications.

When postoperative care will be provided by a clinician other than the operating ophthalmologist, ensure appropriate handover of clinical information required to provide postoperative care. Ensure that systems are in place to provide patients with access to emergency specialist ophthalmology services as needed.

Ensure that policies and procedures for information management and communication support the reporting of surgical outcomes to referring clinicians, other relevant clinicians and the patient, and that responsibilities are clearly delineated.

Appendix A: Indicators to support local monitoring

The Commission has developed a set of indicators to support clinicians and local health service organisations in monitoring how well they implement the care described in this clinical care standard. The indicators are a tool to support local clinical quality improvement activities. No benchmarks are set for any of the indicators.

The process to develop the indicators specified in this document comprised:

- A review of existing local and international indicators
- Consultation with the Cataract Clinical Care Standard Topic Working Group.

Most of the data underlying these indicators are collected from local sources, mainly through prospective collection or a retrospective chart review. Where an indicator refers to 'local arrangements', these can include clinical guidelines, policies, protocols, care pathways or any other documentation providing guidance to clinicians on the care of patients with cataract.

Monitoring the implementation of the clinical care standard will help organisations to meet some of the requirements of the NSQHS Standards. See Appendix C.

In this document, the indicator titles and hyperlinks to the specifications are included with the relevant quality statement under the heading 'Indicator for local monitoring'. Full specifications of the Cataract Clinical Care Standard indicators can be found in the Metadata Online Registry (METeOR).

METeOR is Australia's web-based repository for national metadata standards for the health, community services and housing assistance sectors. Hosted by the Australian Institute of Health and Welfare, METeOR provides users with online access to a wide range of nationally endorsed data and indicator definitions.

The full set of indicators and the definitions needed to collect and calculate them can be found online at METeOR: meteor.aihw.gov.au/content/index. phtml/itemId/711408.

Appendix B: Measuring and monitoring patient experiences

Systematic, routine monitoring of patients' experiences of health care is an important way to ensure that the patient's perspective drives service improvements and patient-centred care. This is the case in all health services.

Patient-reported outcome measures

In Australia, patient-reported outcome measures (PROMs) are an emerging method of assessing the quality of health care. The Commission is leading a national work program to support the consistent and routine use of PROMs to drive quality improvement.

PROMs are standardised, validated questionnaires that patients complete, without any input from health professionals. They are often administered at least twice to an individual patient – at baseline and again after an intervention or at regular intervals during a chronic illness. The information contributed by patients filling out PROMs questionnaires can be used to support and monitor the movement of health systems towards person-centred, valuebased health care.

PROMs are being used to evaluate healthcare effectiveness at different levels of the health system, from the individual level to service and system levels. There is growing interest across Australia and internationally in the routine interrogation of patient-reported outcome information for evaluation and decision-making activities at levels of the health system beyond the clinical consultation.

PROMs for cataract surgery

A number of questionnaires and measures have been developed to assess the impact of cataract on patients' daily lives and the benefit of cataract surgery. Although some have serious limitations, 48,49 others have been validated and evaluated in English-speaking cataract populations:48,49,66

- Catquest-9SF is a nine-item questionnaire that is recommended for pre- and post-surgery measurement of patient-reported outcomes by the International Consortium of Healthcare Improvement^{50,66}; it has been validated in Australia
- Cat-PROM5 is a five-item questionnaire recently developed in the United Kingdom for use in the National Health Service that compares favourably with CatQuest-9SF, but has not been validated in Australia.53,54

Patient experience measures

This clinical care standard does not include indicators specific to measuring patient experiences. The Commission strongly encourages organisations to adopt the Australian Hospital Patient Experience Question Set (AHPEQS). AHPEQS is a 12-question generic patient experience survey that has been validated in both day-only and admitted hospital patients across many clinical settings. The AHPEQS question set is available for both private and public sector health services, and has been translated into 20 languages. It can be downloaded at: www.safetyandquality.gov.au/ahpeqs.

Appendix C: Integration with the National Safety and Quality Health Service Standards

The Commission developed the National Safety and Quality Health Service (NQSHS) Standards in collaboration with the Australian government, state and territory governments, clinical experts, and consumers. The NSQHS Standards aim to protect the public from harm and improve the quality of health service provision. They provide a quality assurance mechanism that tests whether relevant systems are in place to ensure that expected standards of safety and quality are met.

The second edition of the NSQHS Standards was launched in November 2017, and health service organisations have been assessed against the new standards since January 2019.

In the NSQHS Standards (2nd ed.), the Clinical Governance Standard and the Partnering with Consumers Standard combine to form the clinical governance framework for all health service organisations.

The Clinical Governance Standard aims to ensure that systems are in place within health service organisations to maintain and improve the reliability, safety and quality of health care.

The Partnering with Consumers Standard aims to ensure that consumers are partners in the design, delivery and evaluation of healthcare systems and services, and that patients are given the opportunity to be partners in their own care, to the extent that they choose.

Under the NSQHS Standards (2nd ed.), health service organisations are expected to support clinicians to use the best available evidence, including clinical care standards such as the Cataract Clinical Care Standard (see Action 1.27b of the NSQHS Standards).

Health service organisations are expected to implement the NSQHS Standards in a way that suits the clinical services provided and their associated risks. Other aspects of the NSQHS Standards (2nd ed.) that are relevant to the Cataract Clinical Care Standard include those listed in Table 1.

As part of the suite of documents supporting the NSOHS Standards (2nd ed.), the User Guide for Aboriginal and Torres Strait Islander Health¹² is of particular relevance to the Cataract Clinical Care Standard, given the eye health disparities between Aboriginal and Torres Strait Islander people and non-Indigenous Australians, and treatment inequities in the health system.

Table 1: Actions in the NSQHS Standards relevant to this clinical care standard

NSQHS Standard	Actions
Clinical Governance Standard	Governance, leadership and culture (1.01 and 1.02)
	Policies and procedures (1.7)
	Safety and quality monitoring, including incident reporting systems (1.08 and 1.11)
	Credentialing and scope of clinical practice (1.23 and 1.24)
	Evidence-based care, including clinical care standards (1.27)
	Variation in clinical practice and health outcomes (1.28)
	Actions focussing on Aboriginal and Torres Strait Islander people (1.02, 1.04, 1.21) including demonstrating a welcoming environment that recognises the importance of the cultural beliefs and practices of Aboriginal and Torres Strait Islander people (1.33)
Partnering with Consumers Standard	Informed consent (2.03–2.05)
	Sharing decisions and planning care (2.06 and 2.07)
	Information for consumers (2.09)
	Communication of clinical information (2.10)
Preventing and Controlling Healthcare-Associated Infection Standard	Infection prevention and control systems (3.5–3.9)
	Antimicrobial stewardship (3.15 and 3.16)
Communicating for Safety Standard	Communication of critical information (6.09 and 6.10)
	Documentation of information (6.11)

Glossary

Term	Definition
adverse effect	A side effect, or an unwanted symptom caused by medical treatment. ⁶⁷
assessment	 A clinician's evaluation of the disease or condition, based on: The patient's report of the symptoms and course of the illness or condition Information reported by family members, carers and other members of the healthcare team The clinician's objective findings (including data obtained through tests, physical examination and medical history.⁶⁸
best corrected visual acuity	The best possible vision a person can achieve with corrective lenses, measured using a visual acuity chart.
bilateral simultaneous cataract surgery	See also visual acuity See immediately sequential bilateral cataract surgery
brunescent	A brown-coloured appearance which can indicate hardness of the lens and/or advanced cataract that may be more difficult to remove. ³⁶
cataract	A dense, cloudy area that forms in the lens of the eye. It develops slowly and eventually interferes with vision.
clinician	A qualified and trained health professional who provides direct patient care (that is, the diagnosis or treatment of patients, including recommending preventive action). In this document, it may refer to a doctor; an ophthalmic specialist such as an ophthalmologist, optometrist or orthoptist; or a nurse or nurse practitioner, depending on the care that is being described and the individual's scope of professional practice. 68,69
clinically significant cataract	Occurs when opacity of the lens causes visual impairment and significant vision-related activity limitations.
credentialing	The formal process used to verify the qualifications, experience, professional standing and other relevant professional attributes of health practitioners, to form a view about their competence, performance and professional suitability to provide safe, high-quality health services within specific organisational environments. ⁷⁰
cultural respect	Recognition, protection and continued advancement of the inherent rights, cultures and traditions of Aboriginal and Torres Strait Islander people. Cultural respect is achieved when the health system is accessible, responsive and safe for Aboriginal and Torres Strait Islander people, and cultural values, strengths and differences are respected. ⁷¹

Term	Definition
cultural safety	Identifies that health consumers are safest when health professionals have considered power relations, cultural differences and patients' rights. Part of this process requires health professionals to examine their own realities, beliefs and attitudes. Cultural safety is not defined by the health professional, but is defined by the health consumer's experience—the individual's experience of care they are given, ability to access services and to raise concerns. The essential features of cultural safety are: a) An understanding of one's culture b) An acknowledgment of difference, and a requirement that caregivers are actively mindful and respectful of difference(s) c) It is informed by the theory of power relations; any attempt to depoliticise cultural safety is to miss the point d) An appreciation of the historical context of colonisation, the practices of racism at individual and institutional levels, and their impact on First Nations people's living and wellbeing, both in the present and past e) Its presence or absence is determined by the experience of the recipient of care and not defined by the caregiver. ⁷¹
health service organisation	A separately constituted health service that is responsible for implementing clinical governance, administration and financial management of a service unit or service units providing health care at the direction of the governing body. A service unit involves a group of clinicians and others working in a systematic way to deliver health care to patients. It can be in any location or setting, including pharmacies, clinics, outpatient facilities, hospitals, patients' homes, community settings, practices and clinicians' rooms. ⁴¹
hospital	A licensed facility providing healthcare services to patients for short periods of acute illness, injury or recovery.
immediately sequential bilateral cataract surgery	When surgery is performed on both eyes on the same day but as separate procedures. The term simultaneous bilateral cataract surgery might also be used. Regardless of terminology, if surgery on both eyes is performed on the same day, it is important that the procedures are performed separately and that strict hygiene protocols are used to reduce the risk of infection. ⁶⁴ The term used in this document is 'second-eye surgery on the same or next day'.
intracameral injection	Administration of a medicine into the anterior chamber of the eye (the front part of the eyeball near the lens). 65
lens opacity	Cloudiness of the natural lens, which is part of the eye.
medicine	A chemical substance given with the intention of preventing, curing, controlling or alleviating disease, or otherwise improving the physical or mental wellbeing of people. These include prescription, non-prescription, investigational, clinical trial and complementary medicines, regardless of how they are administered. ⁷²
ophthalmologist	Medical doctor who has taken further specialist training in the diagnosis and management of eye disorders and disorders of the visual system. ⁷³ Cataract surgery is performed by an ophthalmologist.
optometrist	Eye healthcare professional who checks eyes, gives advice on visual problems, and prescribes and fits glasses or contact lenses. If eye disease is detected, an optometrist will refer a patient to an ophthalmologist for further management.
orthoptist	Eye healthcare professional who is trained to diagnose and manage disorders of eye movements and associated vision problems, and to perform investigative testing of eye diseases.

Term	Definition
primary care	The first level of care or entry point to the health care system, such as general practice clinics, community health practice (for example, clinics, outreach or home visiting services), ambulance services, pharmacists, or services for specific populations (for example Aboriginal medical services, women's health services, or refugee health services).
quality of life	An overall assessment of a person's wellbeing, which may include physical, emotional and social dimensions, as well as stress level, sexual function and self-perceived health status. ⁶⁸
refractive error	A very common eye disorder. It occurs when the eye cannot clearly focus the images from the outside world. The result of refractive error is blurred vision, which is sometimes so severe that it causes visual impairment.
refractive implications	How well the eye can focus on objects after surgery and lens insertion. ⁴
risk factor	A characteristic, condition or behaviour that increases the possibility of disease, injury or loss of wellbeing. ⁶⁸
shared decision making	A consultation process in which a clinician and a patient jointly participate in making a health decision, having discussed the options, and their benefits and harms, and having considered the patient's values, preferences and circumstances. ⁷⁴
system	The resources, policies, processes and procedures that are organised, integrated, regulated and administered to provide health care. Systems enable the objectives of healthcare standards to be accomplished by addressing risk management, governance, operational processes and procedures, implementation and training, and by influencing behaviour change to encourage compliance.
visual acuity	The clarity and sharpness with which objects are seen – in particular, the ability to see fine details. 4
	See also best corrected visual acuity
visual acuity chart	An eyechart commonly used to measure a person's visual acuity. It consists of a series of letters of decreasing size and is viewed at a distance. A commonly used type of visual acuity chart is the Snellen Chart. Other similar but more reproducible and scientifically valid charts are beginning to supersede the Snellen (such as the logMAR chart). ⁴
visual impairment	A limitation of one or more functions of the eye (or visual system). ⁷⁵ In cataract, the most common impairment is in the sharpness or clarity of vision (visual acuity). Patients might also experience other impairments in vision, including trouble seeing at night, seeing colours as faded, increased sensitivity to glare, halos surrounding lights or double vision in the affected eye. ⁷⁶
vision-related activity limitations	The difficulty people have performing daily activities because of their vision. Sometimes called visual functioning or visual disability. ⁴⁹

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The Cataract Clinical Care Standard has been endorsed by the following organisations:















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