# Contents

1. Cataract Clinical Care Standard ........................................................................................................ 4
2. About the clinical care standards ........................................................................................................ 5
3. Introduction ............................................................................................................................................. 6
4. General principles of care in relation to this clinical care standard ..................................................... 9
5. Using the clinical care standard .......................................................................................................... 10
6. Quality Statement 1: Primary care assessment and referral ............................................................. 14
7. Quality Statement 2: Patient information and shared decision making ........................................... 18
10. Quality Statement 5: Prioritisation for cataract surgery .................................................................. 24
12. Quality Statement 7: Preventive eye medicines .............................................................................. 29
13. Quality Statement 8: Postoperative care ......................................................................................... 31
14. Glossary .............................................................................................................................................. 33
15. References ........................................................................................................................................... 36
Cataract Clinical Care Standard

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.

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.

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.

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 visual acuity of 6/12 or worse, or disabling glare or contrast sensitivity.

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.

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. 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.

Quality Statement 7: Preventive eye medicines
A patient receives an intracameral antibiotic injection at the time of cataract surgery, according to evidence-based guidelines. After surgery, a patient receives antibiotics or anti-inflammatory eye drops only when indicated.

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 complete 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.
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. Many 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 therefore is not intended to be, a clinical practice guideline. Rather than describing all the components of care recommended for managing a clinical condition, a clinical care standard addresses priority areas of the patient pathway where the need for quality improvement is greatest.

Clinicians are advised to use clinical judgement and consider an individual patient’s circumstances, in consultation with the patient and/or their carer or guardian, when applying the information in the clinical care standard. Health service organisations are also responsible for ensuring that local policies, processes and protocols to guide clinical practice are in place so that clinicians can apply the information described in the clinical care standard and to enable clinicians and health service organisations to monitor the delivery of appropriate care.

Clinical care standards intend to support key groups of people in the healthcare system by:

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

This Cataract Clinical Care Standard was developed by the Australian Commission on Safety and Quality in Health Care in collaboration with consumers, clinicians, researchers and health service organisations. It complements existing efforts, including state and territory-based initiatives, which support the provision of cataract care.

For more information about the development of this clinical care standard visit www.safetyandquality.gov.au/ccs.
Introduction

Context

Cataract is a condition in which the lens of the eye becomes cloudy and can cause problems with vision. It is more common in older people and is a significant issue for Aboriginal and Torres Strait Islander populations. 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.

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 the 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, while other types of cataract, for example a posterior subcapsular cataract, can cause significant problems with glare without affecting sharpness (visual acuity).

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. There are some medical indications that may increase the need for surgery including angle closure glaucoma, or to allow monitoring or treatment of other eye problems, but in general, surgery is recommended when visual changes significantly interfere with activities.

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

Cataract surgery rates

Cataract is the most common elective surgery diagnosis in Australia. In 2016-17 there were 9.3 cataract surgeries per 1000 population, a total of 258,954 hospital separations. Almost 70% of cataract surgery is performed in private hospitals, 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 1000 population respectively).

In Australia, as in other high income countries, rates of cataract surgery have increased markedly in the past 25 years. This can be attributed to ageing populations coupled with improved surgical methods. Interest has therefore increased in identifying:

- When surgery is clinically warranted and appropriate
- 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
- Whether some patients are more likely to benefit, or be at risk from a delay, than others

Improving access to care

Tools and systems have been developed in New Zealand, Spain, Sweden and Canada which aim to provide surgery according to clinical need and to improve the equity and timeliness of access. Studies of these prioritisation systems suggest that they can achieve these aims more effectively than 'first-in first-out systems'.
Each tool was developed with clinical input and validated in terms of how well it approximates clinical decision-making, and some were further improved based on experience and evaluation. Broadly speaking, appropriateness and priority for surgery are determined based on similar components – 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.

Most tools include visual acuity as a useful objective measure, but it is not recommended as the only criteria for determining visual impairment. Even with good visual acuity some people can have disabling visual impairment due to cataract-related glare or contrast sensitivity. Since 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, vision-related activity limitations – as reported by patients – are an important aspect of the likely benefit from surgery.

Improving referral and initial assessment

A study of referral practices in NSW 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 being unwilling to undergo the procedure. Similar patterns are reported elsewhere suggesting considerable scope to improve both the appropriateness and management of referrals, and hence the use of health resources. This is important because while 90% of public hospital patients in Australia have surgery performed within 334 days, these statistics underestimate the true waiting time, as the time waited for a first specialist assessment is not routinely reported. Waiting times vary between states and territories. Awareness of the relative priority of referrals when determining appointments could help clinicians and health service organisations to identify patients at high risk while waiting.

Why this clinical care standard is needed

This clinical care standard aims to support clinicians and health service organisations to improve their pathways of care and provide equity of access for people with clinically significant cataract. It 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
- Referral of patients from primary care that is informed by these criteria
- Allocating ophthalmic assessments prior to 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.

Other aspects of quality care included in the standard are considerations about second-eye surgery and post-operative care including the appropriate use of post-operative eye drops.
Evidence sources that underpin this clinical care standard

Key evidence sources for the Cataract Clinical Care Standard include:

- Royal Australian and New Zealand College of Ophthalmologists (RANZCO) - Preferred practice patterns: cataract and intraocular lens surgery.
- NICE (UK) guideline - Cataracts in adults: management.
- American Academy of Ophthalmology - Cataract in the adult eye preferred practice pattern.

Goal of this clinical care standard

To ensure that patients with cataract are offered cataract surgery or non-surgical alternatives, according to their clinical needs. Patients have the opportunity to make an informed choice suitable to their individual situation.

Scope

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

Patient-centred care

Clinical care standards support the key principles of patient-centred care. Patient-centred care is health care that is respectful of, and responsive to, the preferences, needs and values of patients and consumers.

Person-centred care is care that is respectful of, and responsive to, the preferences, needs and values of the individual patient. Person-centred care involves seeking out, and understanding what is important to the patient, fostering trust, establishing mutual respect and working together to share decisions and plan care.

Key dimensions of person-centred care include respect, emotional support, physical comfort, information and communication, continuity and transition, care coordination, involvement of carers and family, and access to care.

Carers and families

Carers and family members have a central role in the prevention, early recognition, assessment and recovery relating to patients’ health conditions. 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.

Multidisciplinary care

In this document, the term “clinician” refers to all types of health professionals who provide direct clinical care to patients. Multidisciplinary care refers to comprehensive care provided by a range of clinicians (for example, 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. A coordinated multidisciplinary team approach can improve health outcomes, and offers more efficient use of health resources.
Using the clinical care standard

An integrated approach to delivering care

Central to the delivery of patient-centred care identified in this clinical care standard is an integrated, systems-based approach, supported by individual health services and networks of services with resources, policies, processes and procedures.

Key elements of this approach include:

- An understanding of the capacity and limitations of each component of the health system across metropolitan, regional and remote settings
- Clear lines of communication between components of the healthcare system including primary care, hospital, sub-acute and community services
- Appropriate coordination so that patients receive timely access to optimal care regardless of how or where they enter the system.

To achieve these aims, 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 a range of incentives and sanctions to influence behaviours and encourage compliance with policy, protocol, regulation and procedures
- Integrate risk management, governance, operational processes and procedures, including education, training and orientation.

Integration with the National Safety and Quality Health Service Standards

The National Safety and Quality Health Service (NSQHS) Standards were developed by the Commission in collaboration with the Australian government, states and territories, clinical experts, and consumers. The primary aims of the NSQHS Standards are 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 expected standards of safety and quality are met.

The second edition of the NSQHS Standards was launched in November 2017 and has been used to assess health service organisations since January 2019. In the NSQHS Standards (2nd ed.), the Clinical Governance Standard and Partnering with Consumers Standard combine to form the clinical governance framework for all health service organisations.

The Clinical Governance Standard aims to ensure that there are systems 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.

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

Health service organisations are expected to implement the NSQHS Standards in a manner that suits the clinical services provided and their associated risks. Other aspects of the NSQHS Standards (2nd ed.) which are particularly relevant to the *Cataract Clinical Care Standard* include, but are not limited to, those listed in Table 1.

**Table 1: Relevance of NSQHS Standards to the Cataract Clinical Care Standard**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance, leadership and culture (1.1 and 1.2)</td>
<td>Informed consent (2.3, 2.4 and 2.5)</td>
<td>Infection prevention and control systems (3.5–3.9)</td>
<td>Clinical governance and quality improvement to support medication management (4.1 to 4.4)</td>
<td>Communication of critical information (6.9, 6.10)</td>
<td>Responding to deterioration (8.10–8.13)</td>
</tr>
<tr>
<td>Policies and procedures (1.7)</td>
<td>Sharing decisions and planning care (2.6 and 2.7)</td>
<td>Antimicrobial stewardship (3.15-3.16)</td>
<td>Documentation of patient information (4.5 to 4.9)</td>
<td>Documentation of information (6.11)</td>
<td></td>
</tr>
<tr>
<td>Safety and quality monitoring, including incident reporting systems (1.8, 1.11)</td>
<td>Information for consumers (2.9)</td>
<td></td>
<td>Continuity of medication management (4.10 to 4.12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credentialing and scope of clinical practice (1.23 and 1.24)</td>
<td>Communication of clinical information (2.10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence-based care (1.27), including clinical care standards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variation in clinical practice and health outcomes (1.28)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safe environment (1.29) including for Aboriginal and Torres Strait Islander people (1.33)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information about the NSQHS Standards is available at: [nationalstandards.safetyandquality.gov.au](http://nationalstandards.safetyandquality.gov.au)
Indicators to support local monitoring

The Commission has developed a set of indicators to support healthcare providers and health service organisations to monitor how well they implement the care described in the clinical care standard. The indicators are a tool to support local clinical quality-improvement activities. There are no benchmarks set for any of the indicators.

Monitoring the implementation of the clinical care standard will assist in meeting some of the requirements of the National Safety and Quality Health Service (NSQHS) Standards.

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 require collection from local sources, mainly, through prospective collection or a retrospective chart review. Where an indicator refers to ‘local arrangements’, these can include clinical guidelines, protocols, care pathways or any other documentation providing guidance to clinicians on the care of patients with cataract.

Measuring and monitoring patient experience and outcomes

Systematic routine monitoring of patients’ experiences of healthcare and patient-reported outcomes is an important way to ensure that service improvements and patient-centredness are driven by the patients’ perspective. This is the case in all health service organisations, including those providing cataract surgery.

Patient-reported outcome measures (PROMs)

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, value-based health care.

PROMs are being used to evaluate healthcare effectiveness at different levels of the health system, from the individual 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.

A number of questionnaires and measures have been developed to assess the impact of cataract on patient’s daily lives and to assess the benefit of cataract surgery and although some have serious limitations, others have been validated and evaluated in English-speaking cataract populations.33-35
- The CATQuest-9SF is a 9-item questionnaire that is recommended for pre- and post-surgery measurement of patient-reported outcomes by the International Consortium of Healthcare Improvement35,36 and which has been validated in Australia.
- The CAT-PROM5, is a 5 item questionnaire recently developed in the UK for use in the NHS that compares favourably with the CATQuest-9SF, but has not been validated in Australia.37,38
**Patient experience measures**

While there are no indicators in this standard specific to patient experience measurement, the Commission strongly encourages health service organisations to adopt the *Australian Hospital Patient Experience Question Set* (AHPEQS). The AHPEQS is a short 12 question generic patient experience survey which has been tested and found reliable and valid for both day-only and admitted hospital patients across a wide variety of clinical settings. The instrument is available free of charge to both private and public sector health service organisations. The Commission’s website contains more information about this tool at: [www.ahpeqs.safetyandquality.gov.au](http://www.ahpeqs.safetyandquality.gov.au).
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, adequate 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, especially as people get older. General practitioners (GPs), Aboriginal health workers, 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. When assessing you, your clinician will ask whether your eyesight has changed and whether your visual problems are affecting your life, including the sorts of things that you can no longer do. Vision tests and an eye examination to confirm cataract can be carried out by an optometrist or orthoptist, or by a specialist eye doctor (ophthalmologist).

Your primary care clinician(s) will discuss the possible ways to manage your symptoms. If cataract is not affecting your ability to carry out your usual activities, then you may not need to consider surgery yet. Prescription glasses or other equipment or aids might be worth considering – your GP or optometrist 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 need 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 other clinician.

For clinicians

If a patient has visual problems that you suspect are due to cataract, test their vision and ask them how their visual problems are affecting their life. Ocular examination can confirm the presence of cataract, and optometry referral may be a suitable initial option.

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.

Assess visual impairment in terms of visual acuity and other impacts such as 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. Falls risk is a significant consideration particularly in older people with multiple risk factors. Box 1 provides information about assessment of vision-related activity limitation and lists some examples of assessment tools.

Refer patients for consideration of cataract surgery when they have visual impairment which interferes with their ability to carry out important daily tasks and live independently. Consider any ocular or medical comorbidities and whether these affect the urgency of referral. Ophthalmology assessment can confirm whether patients with ocular comorbidity are more likely to benefit from surgery, or have an increased risk of complications. Discuss the potential benefits and harms of cataract surgery.

Check the referral criteria for the receiving organisation and ensure that all required information is provided; use a standardised cataract referral template if available. Both general practice and optometry assessment may be needed to provide the information required. Improving the quality of the referral can reduce delays for patients by helping ophthalmology services triage access to ophthalmology services and assess medical suitability for surgery. Elements of a comprehensive referral are listed in Box 2.

Assess the patient’s willingness to proceed with surgery if offered. If the patient does not want to consider cataract surgery and there are no other indications for ophthalmology assessment, then 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. Refer to an optometrist, orthoptist, occupational therapist or a vision clinic 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, as well as any alternative community-based referral options. 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. 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.
**Additional information for assessing and referring patients with cataract**

**Vision-related activity limitation**

Vision-related activity limitation is:
- An assessment of the impact of poor vision on usual activities.\(^{33}\)
- Different to quality of life
- A useful assessment for measuring potential to benefit from surgery.

There are many scales and tools measuring vision-related activity limitation\(^{33,34}\); two useful, validated measures which correlate with benefit from cataract surgery are listed below.*

**Box 1: Assessment of vision-related activity limitation – patient-related outcomes**

<table>
<thead>
<tr>
<th>Question domains</th>
<th>Catquest-9(^{36,45,46})</th>
<th>CAT-PROM-5(^{37,38})</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global ratings of visual difficulty</strong></td>
<td>No. of items (✓)</td>
<td>No. of items (✓)</td>
</tr>
<tr>
<td>Visual problems interfere with normal activities</td>
<td>✓ ✓</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Overall self-rating of vision or ability to see well (corrected with usual glasses or lenses)</td>
<td>✓ ✓</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Satisfaction with sight</td>
<td>✓ ✓</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td><strong>Specific activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty reading normal print/text (such as newspapers, books, price tags, medicine labels)</td>
<td>✓ ✓</td>
<td>✓</td>
</tr>
<tr>
<td>Recognising faces because of sight</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Seeing on uneven surfaces because of sight</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Seeing to do handicrafts, woodwork or hobbies</td>
<td>✓ ✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reading text on TV</td>
<td></td>
<td>Validated in Australia and Sweden. Adopted by International Consortium for Health Outcomes Measurement. (^{36})</td>
</tr>
</tbody>
</table>

* The Priquest tool has been validated and shown to predict benefit from cataract surgery. It is used in Sweden and other Scandinavian countries, but an English version has not been validated.\(^{15,22}\)
Box 2: Key components of referrals for ophthalmology assessment and consideration of cataract surgery

<table>
<thead>
<tr>
<th>Referral information for cataract patients</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key questions</strong></td>
</tr>
<tr>
<td>• Does the cataract affect the patient’s sight and quality of life?</td>
</tr>
<tr>
<td>• Does the patient understand the risks and wish to have surgery if it is offered?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purpose of referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reason for referral</td>
</tr>
<tr>
<td>• Ophthalmic assessment</td>
</tr>
<tr>
<td>• Consideration for first cataract surgery</td>
</tr>
<tr>
<td>• Second eye surgery.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Patient details including Indigenous status, interpreter needs</td>
</tr>
<tr>
<td>3. Consent for referral and for sharing relevant information</td>
</tr>
<tr>
<td>4. Social circumstances (support at home, employment-related needs)</td>
</tr>
<tr>
<td>5. Patient willingness to consider cataract surgery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ocular/ophthalmic history</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Include the date and results of the most recent optometry or ophthalmology assessment</em></td>
</tr>
<tr>
<td>6. Cataract details including severity of disease (grade of cataract)</td>
</tr>
<tr>
<td>7. Extent of visual impairment such as*;</td>
</tr>
<tr>
<td>• Best corrected visual acuity (in each eye and both eyes)</td>
</tr>
<tr>
<td>• Glare or contrast sensitivity (based on clinical assessment).</td>
</tr>
<tr>
<td>8. Other assessment results*</td>
</tr>
<tr>
<td>• Subjective refraction results</td>
</tr>
<tr>
<td>• Intra-ocular pressure.</td>
</tr>
<tr>
<td>9. Ocular diagnoses made or suspected including:</td>
</tr>
<tr>
<td>• Previous ocular surgery or trauma, glaucoma, acute macular degeneration, macular oedema, amblyopia.</td>
</tr>
<tr>
<td>10. Vision-related activity limitations including falls risk, impact on activities of daily living, ability to care for oneself, driving, recreational, educational and occupational activities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General medical history*</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Other medical history, including comorbidities such as diabetes</td>
</tr>
<tr>
<td>12. List of current medication</td>
</tr>
</tbody>
</table>

*May require assessment by an ophthalmic clinician (ophthalmologist, optometrist, or orthoptist) prior to referral.
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 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 will provide written information in a way that is easy for you to use. This will include information about the available options including the expected benefits, as well as the possible adverse outcomes, including 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 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 and their quality of life concerns, and any psychosocial issues to help support them in shared decision making.

For health service organisations

Ensure that policies support shared decision making and the competence of clinical staff, who should be appropriately trained 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 presented in a format that is easy to use for patients with impaired vision. Provide a culturally safe environment for your patient community.
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 approved protocols which 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 may check the information in your referral to decide when you will receive an appointment. If key information is missing from your referral they may ask you or the referring clinician to provide the missing details.

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. If you do not meet the requirements, they may suggest other ways for you to manage your eye problems.

For clinicians

Use local protocols to allocate appointments for referred patients, prioritising according to clinical need, including social circumstances. This is particularly important where 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 timeframe that is consistent with agreed health service protocols.

Referrals should be reviewed by a credentialed ophthalmic clinician who can make an initial assessment about the appropriateness of referral, severity and relative priority for ophthalmological assessment based on the information contained in the referral. Use of standardised criteria and tools allows consistency of assessment, and assists when prioritising patients within a health service or system.
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. This is particularly important in health service organisations where there are 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 options may include reassessment or follow-up, or referral to other services such as optometry, orthoptist, occupational therapy 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 changes.

Monitor and audit outcomes within a quality improvement framework to assess whether desired outcomes are being achieved.

Indicators for local monitoring

Indicator 1

A locally approved protocol in place to allocate appointments for patients considering cataract surgery, based on standardised referral criteria and according to clinical need.

Evidence that locally approved protocols are in place to assess referrals and allocate first ophthalmology appointments for patients with cataract based on clinical need.

- A healthcare setting that provides cataract surgery and which has a documented process should record ‘Yes’. Otherwise, the healthcare setting should record ‘No’.

Indicator 2

Proportion of referrals for possible cataract surgery received which include required information (as defined by the local protocol).

The proportion of referrals received for patients with cataracts, which have all the relevant information provided (as defined by the local protocol)

- **Numerator**: Number of referrals for patients referred for consideration of cataract surgery in which all required information is provided
- **Denominator**: Number of referrals for patients referred for consideration of cataract surgery
Indicator 3

Proportion of referrals not meeting referral criteria for an appointment for cataract surgery.

The proportion of referrals received for patients with cataract, that provided the information required by the locally approved protocol), but did not meet criteria for a first appointment for assessment for cataract surgery.

- Numerator: Number of referrals for cataract patients with all relevant information provided, that did not meet criteria for cataract surgery.
- Denominator: Number of referrals for consideration of cataract surgery with all relevant information provided

Indicator 4

Proportion of patients referred for cataract surgery who progress to cataract surgery

The proportion of patients referred for consideration of cataract surgery who are assessed as suitable for surgery (conversion rate)

- Numerator: Number of patients who were referred, assessed as suitable for cataract surgery and went on to have surgery.
- Denominator: Number of patients referred for cataract surgery.
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 visual acuity of 6/12 or worse, or 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 light or dim light.

Your clinician will ask you questions about the effect of your eye problems on your daily activities. What this means may differ from person to person. Your clinician may ask about activities such as working, driving, and reading as part of your daily life as well as your ability to live independently and safely with your visual problems (for example, whether you are at risk of falls). They may ask you to complete a questionnaire.

The likely benefits and possible harms of surgery might also 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 surgery is not recommended or there is a higher risk of complications.

There are some people to whom this statement may not apply. These include people who need very good vision to carry out their daily activities, such as professional drivers. 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 it cannot be seen because of the cataract.

For clinicians

Note: This statement applies to people having cataract surgery primarily to improve vision. Some of these patients will have an indication for cataract surgery at better levels of visual acuity, for example professional drivers complying with licence requirements. Other clinical scenarios may exist where these criteria do not apply, for example, people having cataract surgery for other reasons such as to enable monitoring of retinal conditions. Some patients will have a contraindication which will prevent surgery from being offered.

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 is a useful objective measure of visual impairment, however glare or contrast sensitivity may be disabling without an impact on visual acuity.

Vision-related activity limitations include activities of daily living, which are specific to the individual including occupational requirements and social circumstances. Validated tools for assessing vision-related activity limitations and the impact of visual problems on activities and social functioning are described in Box 2. Some of these tools correlate well with positive patient-reported outcomes after cataract surgery.\textsuperscript{36,38,45,46,49}

Use of standardised criteria and tools allows consistency of assessment, and assists when prioritising patients within a health service or system.\textsuperscript{21,25} 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.

While 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.\textsuperscript{7,49,50}

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 or optometrist.

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 also allow for consideration of other compelling indications for surgery, based on clinical judgement, as well as catering for patients who choose non-surgical options.

Consider implementing common clinical criteria and/or tools into protocols to enable standardised assessment, documentation and prioritisation. Examples of tools that could be considered are listed in Box 2. 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 could 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 to help make 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 how much they affect your ability to carry out your daily activities should be taken into account. These include activities such as working, driving, cooking, reading and writing, as well as 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 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’re on a waiting list for cataract surgery, as this may affect your priority on the waiting list.

For clinicians

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

At an individual patient level, the benefit and relative priority for surgery is 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 patients at greatest risk of harm and who are most likely to benefit from surgery to be treated first. Potential harms associated with delayed surgery include risks of falls, traffic accidents or increased complexity of later surgery, for example, in patients with densely brunescent or white cataract.
Some comorbid conditions may increase the need for cataract surgery, such as where fundal access is required for monitoring or treatment of posterior segment disease. Other conditions may 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).

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 their 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. 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 in accordance with health service and/or state or territory health department requirements. 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.

Indicators for local monitoring

Indicator 5

Protocol in place to prioritise patients for cataract surgery according to clinical need.

Evidence of a local protocol in place to prioritise patients for cataract surgery based on clinical need.

The protocol should specify that patients will be prioritised according to clinical need using a systematic, transparent method that takes into account the patient’s visual impairment and vision-related activity limitations, co-morbidity, potential harms from delayed surgery and potential to benefit. The method for prioritising and ranking patients should be stated. This protocol should apply where there is a waiting list for surgery.

Use of the Elective surgery prioritisation criteria alone is not sufficient evidence, as even within those categories, prioritisation should apply.

- A healthcare setting where surgery is provided to patients with cataract which has a documented process should record ‘Yes’. Otherwise, the healthcare setting should record ‘No’.
### Box 3: Tools and measures for assessment and prioritisation of patients with cataract

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description of use</th>
<th>Visual impairment measure</th>
<th>Vision-related activity limitation measures</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NIKE National tool for indications for cataract extraction</strong></td>
<td>For prioritising patients determined appropriate for cataract surgery, along with waiting time guarantee in Sweden and Denmark. Patients are prioritised into 4 groups from greatest to least need for surgery</td>
<td>Includes best corrected visual acuity in each eye, symptoms (glare, binocularity). Medical indications for surgery (e.g. mature cataract) Comorbidity reducing potential benefit of surgery</td>
<td>PriQuest Takes into account difficulty in performing daily activities, work, drive, manage without assistance or care for others</td>
<td>Not in English</td>
</tr>
<tr>
<td><strong>New Zealand - National Clinical Priority Assessment Criteria (CPAC)</strong></td>
<td>Patients are referred by GP using online system. If referral is accepted, patient receives first specialist assessment. Specialist assigns priority score. Different District Health Boards (have different systems for assessing and prioritising based on common criteria)</td>
<td>Best corrected distance visual acuity in operative eye Best corrected binocular distance visual acuity Presence of axial posterior sub-capsular lens opacity Potential visual acuity in the operative eye after surgery (taking into account comorbidity, such as maculopathy, keratopathy, optic neuropathy, amblyopia)</td>
<td>Impact of life questionnaire:  - Social interaction  - Personal interaction  - Ability to fulfill responsibilities to others  - Personal care  - Personal safety  - Leisure activities.</td>
<td></td>
</tr>
<tr>
<td><strong>Manitoba Cataract Waiting List Program</strong></td>
<td>Uses a centralised database to track and prioritize all patients waiting for cataract surgery after initial ophthalmology assessment</td>
<td>Clinical assessment of need for surgery</td>
<td>Visual Function Index (VF-14)&lt;sup&gt;33&lt;/sup&gt;</td>
<td>VF-14 provides an objective measure for prioritising patients once the appropriateness of surgery is determined. Waiting time is tracked in the system.</td>
</tr>
<tr>
<td><strong>IRYSS-Cataract Priority Score (ICPS) (Spain)</strong></td>
<td>Can be used to determine appropriateness and priority. Two tools were developed (IRYSS Appropriateness of indication and IRYSS Cataract Priority Score) but were found to be highly correlated and similar for prioritising.</td>
<td>Ocular comorbidity BCVA in both eyes Surgical complexity of cataract extraction Laterality of cataract Anticipated VA after extraction</td>
<td>Visual function – 4 items  - Impairment level  - Glare  - Recreational difficulties  - Difficulties with activities of daily living.  - Social dependence (Priority tool)</td>
<td>Appropriateness was rated as necessary, appropriate, uncertain or inappropriate and priority using a numeric score.</td>
</tr>
<tr>
<td><strong>Cataract Impact Model</strong></td>
<td>Model for establishing relative surgical priority integrating clinical and questionnaire data</td>
<td>Visual acuity in the eye undergoing surgery, the fellow eye, the better eye</td>
<td>Catquest-SF&lt;sup&gt;39&lt;/sup&gt; Priquest</td>
<td>Proof of concept but not currently in use</td>
</tr>
</tbody>
</table>
**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. 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.

**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 sometime 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 to the other one (for example much more short-sighted) then it may be hard to see clearly with both eyes, even if the operated eye is much better than it was previously.
- The risks of an infection or another complication. 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. While the risks of complications are small, having complications in both eyes could be very serious.
- 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. The same criteria apply when assessing the need for second-eye surgery as for the first eye (clinically significant visual impairment, vision-related activity limitations and comorbidities - see Quality statements 4 and 5). In addition, consider the likelihood of 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 to them including no surgery, surgery on two separate days some time apart or immediately sequential bilateral cataract surgery (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 for complete postoperative recovery (and where 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. If the patient chooses to have second-eye surgery on a separate occasion, make arrangements for it as soon as it is appropriate for the patient's preferences and circumstances.

While there is limited evidence for immediately sequential bilateral cataract surgery it may be considered for patients:

- At low risk of complications during and after surgery and/or at risk from delayed second-eye surgery
- To avoid a second general anaesthetic where this is required
- For whom distance and travel are significant barriers.

Explain to patients considering this option that while they may experience improved vision in both eyes sooner, they may need extra support at home after surgery. Ensure 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.

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 by clinicians. Ensure adequate protocols regarding decisions about second-eye surgery and its timing. For patients having delayed second-eye surgery, prioritise surgery according to clinical need.

If immediately sequential bilateral cataract surgery 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.
Quality Statement 7: Preventive eye medicines

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

Purpose

To improve patient care by ensuring appropriate use of intracameral antibiotics and post-operative eye drops such as antibiotics and anti-inflammatory medicines.

What the quality statement means

For patients

During cataract surgery, most patients will receive an antibiotic which is injected into the eye during surgery. The technical term for this is an intracameral antibiotic. Most people who have this antibiotic during surgery will not need to use eye drops after surgery. However antibiotic eye drops may be recommended for you if you have certain health condition(s), or if you develop complications after cataract surgery. If this is the case, your eye surgeon will discuss this with you and explain how to use the eye drops. Follow the dosing instructions carefully.

For clinicians

Evidence-based guidelines recommend use of intracameral antibiotics; Therapeutic Guidelines Antibiotic recommends cefazolin intracamerally as a single dose at the end of surgery. Routine use of post-operative antibiotic eye drops is not required and there is little evidence to support their use. Prescribe post-operative antibiotic eye drops according to a patient’s clinical circumstances, consistent with evidence-based guidelines such as Therapeutic Guidelines Antibiotic. If post-operative antibiotic eye drops are indicated, prescribe chloramphenicol 0.5% eye drops, stipulating the duration (usually 7 days) to avoid overuse.

For patients at risk of developing cystoid macular oedema after cataract surgery, for example because of coexisting diabetes or uveitis, consider post-operative nonsteroidal anti-inflammatory eye drops in combination with topical steroids and discuss their benefits and possible adverse effects with the patient. Nonsteroidal anti-inflammatory eye drops, with or without topical steroids, may be considered in lower risk patients to prevent inflammation and/or cystoid macular oedema.

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

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.
Indicators for local monitoring

Indicator 6
Proportion of patients who received intracameral administration of antibiotics at the end of surgery

The proportion of patients with cataract, who received intracameral administration of antibiotics at the end of surgery.

- **Numerator**: Number of patients who have cataract surgery who receive an intracameral antibiotic injection at the end of their surgery.
- **Denominator**: Number of patients admitted to hospital or day procedure service for cataract surgery

Indicator 7
Proportion of patients who are prescribed post-operative antibiotic eye drops after cataract surgery in accordance with evidence-based prescribing guidelines

The proportion of patients who are prescribed post-operative antibiotic eye drops after cataract surgery in accordance with the *Therapeutic Guidelines: Antibiotic* or another locally approved evidence-based guideline.

- **Numerator**: Number of patients who had cataract surgery who are prescribed post-operative antibiotic eye drops in accordance with the *Therapeutic Guidelines: Antibiotic* or another locally approved evidence-based guideline.
- **Denominator**: Number of patients admitted to hospital or day procedure service for cataract surgery.
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 complete 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 two to four 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 if 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. This usually means review in the first 48 hours and again within two to four weeks of surgery. Determine the exact frequency of postoperative review taking into account the surgical technique, and any operative and/or postoperative complications. Inform patients about the need for follow-up appointments and 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 with some rural and remote patients, care should be delegated to an appropriately qualified clinician with adequate clinical handover. 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 post-operatively, use of medications, information about 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 post-operative 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.
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adverse effect</strong></td>
<td>An adverse effect is a side effect, or an unwanted symptom caused by medical treatment.</td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td>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, on information reported by family members and other healthcare team members, and on the clinician’s objective findings (including data obtained through tests, physical examination, medical history, and information reported by family members and other healthcare team members).</td>
</tr>
<tr>
<td><strong>Best Corrected Visual Acuity</strong></td>
<td>The best possible vision a person can achieve with corrective lenses, measured using a visual acuity chart.</td>
</tr>
<tr>
<td><strong>Cataract</strong></td>
<td>A cataract is a dense, cloudy area that forms in the lens of the eye. It develops slowly and eventually interferes with your vision.</td>
</tr>
<tr>
<td><strong>Clinician</strong></td>
<td>A qualified and trained health professional who provides direct patient care (that is, the diagnosis and/or treatment of patients including recommending preventative 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.</td>
</tr>
<tr>
<td><strong>Clinically significant cataract</strong></td>
<td>A clinically significant cataract occurs where opacity of the lens causes visual impairment and significant vision related activity limitations.</td>
</tr>
<tr>
<td><strong>Credentialing</strong></td>
<td>The formal process used to verify the qualifications, experience, professional standing and other relevant professional attributes of health practitioners for the purpose of forming a view about their competence, performance and professional suitability to provide safe, high-quality health services within specific organisational environments.</td>
</tr>
<tr>
<td><strong>Health service organisation</strong></td>
<td>A service responsible for the clinical governance, administration and financial management of unit(s) providing health care. A service unit involves a group of clinicians and others working in a systematic way to deliver health care to patients and can be in any location or setting, including pharmacies, clinics, outpatient facilities, hospitals, patients’ homes, community settings, practices and clinicians’ rooms.</td>
</tr>
<tr>
<td><strong>Hospital</strong></td>
<td>A health-care facility established under Commonwealth, state or territory legislation as a hospital or a free-standing day procedure unit and authorised to provide treatment and/or care to patients.</td>
</tr>
</tbody>
</table>
Immediately sequential bilateral cataract surgery (ISBCS) is 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.

**Intracameral injection**

Administration of a medicine into the anterior chamber of the eye (the front part of the eyeball near the lens).

**Lens opacity**

A 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 welfare of people. Prescription, non-prescription and complementary medicines, regardless of administration route (e.g. oral, intravenous, intra-articular, transdermal or intra-uterine), are included.

**Ophthalmologist**

Medical doctors who have taken additional specialist training in the diagnosis and management of eye disorders and disorders of the visual system. Cataract surgery is performed by ophthalmologists.

**Optometrist**

Eye care professionals who examine eyes, give advice on visual problems, and prescribe and fit glasses or contact lenses. If eye disease is detected, optometrists will refer patients to an ophthalmologist for further management.

**Orthoptist**

Eye health care professionals who are trained to diagnose and manage disorders of eye movements and associated vision problems and to perform investigative testing of eye diseases.

**Primary care**

The first level of care or entry point to the healthcare system for consumers. It is multidisciplinary and incorporates office-based practices (e.g. general practice clinics, family planning clinics and sexual health services), community health practice (e.g. clinics, outreach or home-visiting services), emergency services (e.g. ambulance services), community-based allied health services (e.g. pharmacists), services for specific populations (e.g. Aboriginal and Torres Strait Islander or refugee health services, or school health clinics).

**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.

**Refractive error**

A refractive error is a very common eye disorder. It occurs when the eye cannot clearly focus the images from the outside world. The result of refractive errors is blurred vision, which is sometimes so severe that it causes visual impairment.

Common refractive errors include being short sighted or being longsighted. Refractive errors can be diagnosed by an eye examination and treated with corrective glasses, contact lenses or refractive surgery.
| **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 or injury.  
58 |
| **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.  
64 |
| **Bilateral simultaneous cataract surgery** | See Immediately sequential bilateral cataract surgery |
| **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 behavior 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). In cataract, the most common impairment is in the sharpness or clarity of vision (visual acuity). You 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.  
66 |
| **Vision related activity limitations** | The difficulty people have performing daily activities because of their vision. Sometimes called visual functioning or visual disability.  
34 |
1 References


