AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Clinical Care Standards

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Colonoscopy Clinical Care Standard

Consultation draft

Published by the Australian Commission on Safety and Quality in Health Care
Level 5, 255 Elizabeth Street, Sydney NSW 2000

Phone: (02) 9126 3600
Fax: (02) 9126 3613

Email: mail@safetyandquality.gov.au
Website: www.safetyandquality.gov.au

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Before starting bowel preparation, a patient receives comprehensive consumer-appropriate information about the bowel preparation, the procedure, and sedation or anaesthesia. They are provided an opportunity to discuss the reason for the colonoscopy, its benefits, risks and financial costs, and alternative options before deciding to proceed. Their understanding is assessed and their informed decision and consent, and the information provided to them, are documented.

4. Bowel preparation

A patient booked for colonoscopy is provided with consumer-appropriate instructions on how to obtain and use a bowel preparation product and dosing regimen suitable to their needs and co-morbidities. The importance of good bowel preparation for a quality colonoscopy is discussed with the patient, and their understanding is confirmed.

5. Sedation

Before colonoscopy, a patient is assessed by an appropriately trained clinician to identify any increased risk, including cardiovascular, respiratory or airway compromise. The sedation is planned accordingly. The risks and benefits of sedation are discussed with the patient. Sedation is administered and the patient is monitored throughout the procedure and recovery period in accordance with the Australian and New Zealand College of Anaesthetists' *Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures*.

6. Clinicians

A patient's colonoscopy is performed by a credentialed clinician working within their scope of clinical practice, who meets the requirements of an accepted certification and recertification process. Sedation or anaesthesia, and clinical support are provided by credentialed clinicians working within their scope of clinical practice.

7. Procedure

When a patient is undergoing colonoscopy their entire colon – including the caecum and/or terminal ileum – is examined carefully and systematically. The adequacy of bowel preparation, clinical findings, biopsies, polyps removed, therapeutic interventions and details of any adverse events are documented. All biopsies and polyps removed are submitted for histological examination.

8. Discharge

Following recovery, the preliminary outcomes of the procedure, the nature of any therapeutic interventions and adverse events, and arrangements for initial follow up, are discussed with the patient and provided in writing to them before discharge. The patient is discharged into the care of a responsible adult when it is safe to do so.

9. Reporting and follow up

Following colonoscopy and subsequent review of any histology results, the colonoscopist prepares a report that includes their findings, follow-up recommendations and arrangements. Recommendations for surveillance colonoscopy, if required, are consistent with evidence-based guidelines. If more immediate treatment or follow-up is needed, appropriate arrangements are made by the colonoscopist. The report is provided to the general practitioner, any other relevant clinician and the patient.

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 is a small number of quality statements that describe the clinical care that a patient should be offered for a specific clinical condition. The quality statements are linked to a number of indicators that can be used by health services to monitor how well they are implementing the care recommended in the clinical care standard. A clinical care standard differs from a clinical practice guideline; rather than describing all the components of care for managing a clinical condition, the quality statements address priority areas for improvement.

Each clinical care standard intends to support key groups of people in the healthcare system in the following ways:

- The public will have a better understanding of what care should be offered by the healthcare system, and will be better able to make informed treatment decisions in partnership with their clinician
- Clinicians will be better able to make decisions about appropriate care
- Health services will be better able to examine the performance of their organisation and make improvements in the care they provide.

This clinical care standard was developed by the Australian Commission on Safety and Quality in Health Care (the Commission) following consultation and development of a national safety and quality model for colonoscopy (the safety and quality model).This clinical care standard is an element of the safety and quality model, and was developed in collaboration with consumers, clinicians, researchers and health organisations. Many of these groups participated in the Colonoscopy Clinical Care Standard Topic Working Group, or in the consultations on the safety and quality model. The clinical care standard complements existing efforts that support care of patients undergoing colonoscopy for screening and diagnostic purposes, including state and territory-based initiatives.

For more information about the development of this clinical care standard and the indicators, visit: www.safetyandquality.gov.au/ccs.

Introduction

Context

Colonoscopy refers to the examination of the entire large bowel using a camera on a flexible tube, or colonoscope.[1] It is a complex task that requires the colonoscopist to manipulate the colonoscope effectively in order to visualise the bowel, while performing therapeutic interventions when necessary – such as removing polyps or tissue samples.

Colonoscopy may be performed for people with symptoms and signs of bowel disease, people at risk of bowel cancer (including follow-up diagnostic assessment after a positive screening test and regular screening for people who are in a high-risk category due to family history), or for surveillance in people with previous pathology. Evidence-based guidelines describe the indications for colonoscopy in each of these groups and how frequently it should occur.

Bowel cancer is the second most common cancer diagnosed in both men and women in Australia, which has one of the highest rates of bowel cancer in the world.

In Australia, screening for bowel cancer for most people occurs through faecal occult blood testing, either through the National Bowel Cancer Screening Program (NBCSP) or when the test is requested as a Medicare-subsidised test by a clinician. For people whose personal and/or family health history puts them at significantly higher than average risk of bowel cancer, screening is by colonoscopy.

People who have a positive result on the screening faecal occult blood test are referred for further diagnostic assessment, which for most people will include a colonoscopy. Planned expansion of the NBCSP means that by 2020, all eligible Australians aged between 50 and 74 will be invited to screen every two years, with an associated increase in the number of diagnostic colonoscopies.[2]

The quality of colonoscopy is critical to the early detection and treatment of bowel cancer. Using colonoscopy, it is possible to detect and remove growths in the bowel (such as polyps and adenomas) which may be pre-cancerous, therefore reducing the risk that they will develop into bowel cancer. Identifying these growths also helps indicate who will benefit from closer surveillance.

The quality of colonoscopy is also important for minimising the risk of complications from the procedure. Complications of the procedure include perforation and bleeding. Complications can also occur as a result of preparation for the procedure, or the administration of sedation or anaesthesia. The risk of serious complications following colonoscopy is estimated to be 2.8 per 1,000 examinations.[3] Complications resulting in hospitalisation occur in approximately 2 per 1,000 procedures.[4] The mortality rate is estimated to be 0.007 per cent.[5]

More than 900,000 colonoscopies are performed in Australia annually. Between 20% and 25% are performed in public hospitals, with the remainder performed in private hospitals and day procedure centres. A relatively small proportion (4.7% in 2015)* is performed on people who have received a positive faecal occult blood test through the NBCSP.

* Medicare data, Australian Government Department of Health

Despite the large number of procedures performed annually, there is considerable geographic variation in diagnostic colonoscopy, with up to a 30-fold variation in rates of MBS-funded colonoscopies across Australia.[6]

In 2016 and 2017, a safety and quality model for colonoscopy was developed by the Commission through national consultation and agreement with the public and private hospital sectors, clinical colleges and societies, and consumers. Its development was funded by the Australian Government Department of Health. The safety and quality model comprises three elements:

- A Colonoscopy Clinical Care Standard (this document)
- Initial certification, and periodic re-certification of colonoscopists' performance, in accordance with defined quality indicators and performance targets (as determined by the Conjoint Committee for the Recognition of Training in Gastrointestinal Endoscopy)
- Implementation of the Colonoscopy Clinical Care Standard in public and private hospitals and day procedure centres.

In November 2017, the Cancer Council Australia published the *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer*. The guidelines' recommendations were approved by the Chief Executive Officer of the National Health and Medical Research Council (NHMRC) on 27 October 2017 under section 14A of the *National Health and Medical Research Council Act 1992*, and can be accessed at: http://wiki.cancer.org.au/australia/Guidelines:Colorectal_cancer

Goal

The goal of the clinical care standard is to ensure the safe and appropriate use of colonoscopy, and to maximise patients' likelihood of benefit from the procedure while reducing their risk of avoidable harm.

Scope

The Colonoscopy Clinical Care Standard relates to the care of adult patients undergoing colonoscopy for screening, diagnosis, surveillance, and/or treatment. It covers the period from when a patient is referred for consideration of colonoscopy through to the planning of follow-up after the procedure. The Colonoscopy Clinical Care Standard is relevant to the care provided in primary and acute healthcare settings including general practice, day procedure services, private hospitals and public healthcare services.

Using the clinical care standard

Related standards and guidelines

Implementation of the Colonoscopy Clinical Care Standard should be undertaken within the context and requirements of the National Safety and Quality Health Service (NSQHS) Standards and other relevant standards and guidelines for health service organisations and clinicians providing colonoscopy services.

The National Safety and Quality Health Service (NSQHS) 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, patients and carers. The primary aims of the NSQHS Standards are to protect the

public from harm and to 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 first edition of the NSQHS Standards, which was released in 2011, has been used to assess health service organisations since January 2013. The second edition of the NSQHS Standards will be released in November 2017, and health service organisations will be assessed against the new standards from January 2019.

In the second edition of the NSQHS Standards, 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.

It is expected that colonoscopy will be provided by a health service organisation that has been assessed to the NSQHS Standards.

Under the NSQHS Standards (2nd ed.), health service organisations providing colonoscopy will be expected to support clinicians to use the best available evidence, including the Colonoscopy Clinical Care Standard (action 1.27b in the second edition of the NSQHS Standards).

Health service organisations are expected to implement the NSQHS Standards in a manner that suits the services provided and their associated risks. Individual standards within the second edition of the NSQHS Standards that are particularly relevant to the safety and quality of colonoscopy services, and their associated actions, are as follows:

- The Clinical Governance Standard, including actions related to:
  - governance, leadership and culture (for example, action 1.1)
  - safety and quality monitoring, including incident reporting systems
- policies and procedures (for example 1.7)
  - credentialling and scope of clinical practice (1.23 and 1.24)
  - evidence-based care (1.27)
  - variation in clinical practice and health outcomes (1.28)
  - safe environment (1.29) including for Aboriginal and Torres Strait Islander people (1.33)
- The Partnering with Consumers Standard, including actions related to:
  - informed consent (2.4)
  - information for consumers (2.9) and communication of clinical information (2.10)
- The Preventing and Controlling Healthcare-Associated Infection Standard, including actions related to:
  - infection prevention and control systems (3.5–3.13)
  - Reprocessing of reusable medical devices (3.14)
- The Communicating for Safety Standard, including actions related to:
  - communication of critical information
  - documentation of information
- The Recognising and Responding to Acute Deterioration Standard, including actions related to:
  - responding to deterioration.

Competencies and service capability

This clinical care standard recognises that safety and quality of care may be at risk if the workforce does not have the appropriate skills or experience.[8] The medical, procedural, and sedation/anaesthetic competencies required for high-quality and safe colonoscopy should be considered as part of health care organisations' clinical services planning.[9, 10] For colonoscopy, health services should take into account the work of the Conjoint Committee for the Recognition of Training in Gastrointestinal Endoscopy (CCRTGE) – a national body comprising representatives of the Royal Australasian College of Physicians (RACP), the Gastroenterological Society of Australia (GESA), and the Royal Australasian College of Surgeons (RACS) – and the requirements of individual professional organisations.

Credentialing, certification and re-certification of colonoscopists

The Conjoint Committee for the Recognition of Training in Gastrointestinal Endoscopy (CCRTGE) has offered a program for recognising training in endoscopy and colonoscopy for some years.

Recently, the Gastroenterological Society of Australia (GESA) introduced a voluntary triennial re-certification program in colonoscopy, designed to support practitioners to:

- Maintain their expertise in colonoscopy
- Continue to develop their skills through subsidised training opportunities
- Increase safety standards and the quality of care being delivered to patients.

In May 2016, the Colorectal Surgical Society of Australia and New Zealand (CSSANZ) endorsed the GESA voluntary recertification program for its members. The standards and quality indicators supported by the GESA and CSSANZ are expected to form the basis of the specifications for the re-certification of medical colonoscopists.

Indicators to support local monitoring

The Commission has identified a set of indicators to support healthcare providers and local health services 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. Some of the indicators identified may also be relevant to quality assurance and peer review activities, including performance indicators for certification and recertification.

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

- An environmental scan of existing local and international indicators
- Prioritisation, review and refinement of the indicators with the Colonoscopy Clinical Care Standard Topic Working Group.

The clinical care standard indicators are intended to align with the safety and quality model and the recertification indicators being developed through the CCRTGE.

Supporting documents

The following supporting information for this clinical care standard is available on the Commission's website at www.safetyandquality.gov.au/ccs:

- A consumer fact sheet
- A clinician fact sheet.

Quality statement 1 – Initial assessment and referral

When a patient is referred for consideration of colonoscopy, the referral document provides sufficient information for the colonoscopist to assess the appropriateness, risk and urgency of the procedure.

Purpose

To ensure referrals for colonoscopy are appropriate, well documented and enable a response consistent with evidence-based guidelines.

What the quality statement means

For patients. There are a number of reasons you could be referred so that a colonoscopy can be considered. Your general practitioner or another clinician will refer you if they think that you may benefit from this procedure. They should take into account evidence-based guidelines about who should have a colonoscopy, your physical and medical condition, the possible risks, and whether you are willing to have the procedure. When the clinician or service who may conduct the colonoscopy receives the referral, they in turn, need to assess whether a colonoscopy is likely to help you, whether the likely benefits outweigh the risks, and how quickly you should be booked in for the procedure. In order for them to do this, your referral document should describe:

- The reason for considering a colonoscopy
- Your personal or family history of bowel cancer or other cancers, previous bowel polyps, and any other bowel problems, or and genetic conditions that increase your risk of bowel cancer
- Any current bowel symptoms
- Information on your other medical conditions, current medications and allergies
- The results of any investigations, including X-rays, blood tests or tests of your bowel motions (faeces), previous colonoscopies and polyp results.

The clinician who writes the referral will explain what you need to do about the referral. It is important that you know how soon to have the assessment, and what to do if you are unable to get an appointment within that time.

For clinicians. When referring a patient for consideration of colonoscopy, document in your referral all relevant medical and family history, including of bowel and other cancers, known genetic predispositions, the results of investigations, including previous colonoscopy reports and histopathology results, why you think a colonoscopy may be indicated and the urgency of the referral. If a colonoscopy is indicated by evidence-based guidelines (such as the Cancer Council Australia's *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer* [7],*and Clinical Practice Guidelines for Surveillance Colonoscopy*)[11] consider co-morbidities and current medications, and discuss with the patient the risks and benefits and their willingness to undergo the procedure. Advise the patient that the specialist receiving the referral will assess the risks and benefits of the procedure for them individually before undertaking the colonoscopy. Provide clear instructions to the patient on what they need to do to act on the referral, the degree of urgency, and what to do if they cannot get an appointment in the recommended timeframe.

For health services. Referring services should use consistent processes for referring patients for colonoscopy; consider standard templates where relevant. Health services

providing colonoscopies should ensure that clear referral guidelines are available for referring clinicians. Identify the type and format of clinical information referring clinicians need to provide, which should include the indication for colonoscopy. Templates may assist. Ensure that procedures for the receipt, acknowledgement, prioritisation and management of referrals are in place. Ensure that policies support the triage of patients at risk of bowel cancer as described in the Cancer Council Australia's *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer* [7],and *Clinical Practice Guidelines for Surveillance Colonoscopy*.[11]

Quality statement 2 – Appropriate and timely colonoscopy

A patient is offered timely colonoscopy for bowel cancer screening, surveillance, or the investigation of signs or symptoms of bowel disease, consistent with evidence-based guidelines. Decisions should be made in the context of the patient's ability to tolerate the bowel preparation and the procedure, and their likelihood of benefit. If colonoscopy is not indicated, the patient and their referring clinician are advised of the alternative management approach for the patient's clinical situation.

Purpose

To ensure colonoscopy is offered to patients who are most likely to benefit from the procedure, in a timely manner according to their risk.

What the quality statement means

For patients Colonoscopy is the best procedure for looking at the inside of the bowel. However, this does not mean that it is right for everybody. You will be offered a colonoscopy if it is likely to benefit you. People who are likely to benefit include those at higher risk of bowel cancer. A check for bowel cancer could be recommended if you have a family history of bowel cancer, a genetic condition that increases your risk, symptoms that might indicate bowel cancer, previous bowel problems or if your clinician recommends it as a follow-up to other tests such as a faecal occult blood test. During the colonoscopy, your clinician can remove tissue and any visible growths (such as polyps) for testing. People with other bowel symptoms, or problems such as inflammatory bowel disease, may also benefit from a colonoscopy. When deciding whether a colonoscopy is right for you, you and your clinician also need to consider the risks for you of the bowel preparation, the procedure and sedation, taking into account your other medical conditions, medications and general health. You should also consider any risks of not having the procedure. It is important that you are offered colonoscopy according to your medical needs, and within the recommended timeframe.

For clinicians. Both referring clinicians and those receiving the referral should assess the patient to confirm the indication for colonoscopy and identify relevant risks and benefits, including whether there are risks associated with not having the procedure. Offer colonoscopy in accordance with evidence-based guidelines, and after assessing the patient's ability to tolerate the procedure and their likelihood of benefit. Take into account the recommendations of the Cancer Council Australia's *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer* [7],*and Clinical Practice Guidelines for Surveillance Colonoscopy*[11] regarding the timeliness of colonoscopy and frequency of screening in high-risk individuals. If colonoscopy is not appropriate, advise the patient and their referring clinician regarding alternative management.

For health services. Ensure that processes and policies support the performance of colonoscopy for a valid indication consistent with evidence-based guidelines and the National Bowel Cancer Screening Program Quality Framework.[12] Processes should support assessment of the patient's ability to tolerate the bowel preparation, the procedure and sedation, before colonoscopy is scheduled. Ensure clear diagnostic pathways for patients with suspected colorectal cancer and establish systems to support the use of triage criteria and timely colonoscopy as described in the Cancer Council Australia's *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer*[7] which recommend a maximum time to colonoscopy of 120 days from first presentation in general

practice with either symptoms suggestive of colorectal cancer or a positive screening immunochemical faecal occult blood test.[7] If a patient referred for colonoscopy is assessed to be unsuitable or inappropriate, policies should ensure that this is communicated to the referring clinician.

Quality statement 3 – Informed decision-making and consent

Before starting bowel preparation, a patient receives comprehensive consumer-appropriate information about the bowel preparation, the procedure, and sedation or anaesthesia. They are provided an opportunity to discuss the reason for the colonoscopy, its benefits, risks and financial costs, and alternative options before deciding to proceed. Their understanding is assessed and their informed decision and consent, and the information provided to them, are documented.

Purpose

To ensure each patient is provided with adequate information and opportunity to enable their fully informed decision about the risks and benefits of colonoscopy, before starting bowel preparation or any other part of the procedure, and before providing informed consent.

What the quality statement means

For patients. If your clinician recommends that you have a colonoscopy, you will need to decide whether to have the procedure and provide consent. Before providing consent, you need to understand what the procedure involves, including:

- Bowel preparation using diet, laxatives and fasting to clean your bowel before the procedure
- Sedation to reduce your discomfort during the procedure
- How the colonoscope is used to look at your bowel, and assist in removing any polyps.

You will be given information, as well as time and opportunity to discuss the procedure and ask questions so that you can make an informed decision. This will happen before you start the bowel preparation. Points you may wish to discuss include the reason for having the colonoscopy, the benefits to your health, the risks, any out-of-pocket costs, and any alternatives to having the procedure. You should also be informed of any risks associated with not having a colonoscopy. If you need an interpreter, this can be arranged. If you choose to have the procedure, your consent will be recorded in writing. At any time before the procedure, you may request more information or change your mind about whether you wish to proceed.

For clinicians. Provide the patient (or their responsible decision-maker where relevant) with comprehensive information about the bowel preparation, the procedure and sedation or anaesthesia, in a way that they can understand. Arrange an interpreter if required. Inform the patient of the reason for having the colonoscopy, its benefits, and the risks associated with each aspect of the procedure. Provide information about the financial costs, and the alternatives to having the colonoscopy, including any risks of not having the procedure. Provide adequate time for the patient to consider the information provided and ask questions. Respect and document the patient's decision and their informed consent in the medical record, with a description of the information discussed and provided to the patient.

For health services. Protocols should ensure that patients have the opportunity to participate in informed decision-making and allow for discussion and informed consent before commencing bowel preparation. Ensure that clear, written information is available for patients about bowel preparation, the procedure and associated sedation or anaesthesia. Ensure interpreter services are available. Ensure policies and procedures support the principles and practices of informed consent.

Quality statement 4 – Bowel preparation

A patient booked for colonoscopy is provided with consumer-appropriate instructions on how to obtain and use a bowel preparation product and dosing regimen suitable to their needs and co-morbidities. The importance of good bowel preparation for a quality colonoscopy is discussed with the patient, and their understanding is confirmed.

Purpose

To ensure that patients who present for colonoscopy have a clean and empty bowel that enables a thorough, complete examination.

What the quality statement means

For patients. Before you have a colonoscopy, you need to follow some steps to make sure your bowel is as clean as possible for the procedure. Good bowel preparation is essential to make sure that all areas of your bowel can be seen and thoroughly inspected during the procedure. If your bowel is not completely clean, there is a higher risk that polyps or even cancers may be missed. This is why it is crucial that you understand what to do and that you ask questions if unsure. Your clinician will review any regular medicines you use and advise you of any changes during the preparation period. You will also be advised what to eat and drink leading up to the colonoscopy, including when to drink additional clear fluids to prevent dehydration. You will be provided with, or advised to buy, certain laxative products to take at specified times before the procedure (usually starting the day before), which will clean your bowel by causing diarrhoea. Your clinician will explain the possible side effects. You and your clinician will discuss any specific personal or health support you may require while undergoing bowel preparation, which for some people may include overnight admission.

For clinicians. Provide written and verbal consumer-appropriate information to patients preparing for colonoscopy, using interpreter services where necessary. Clearly explain the purpose of bowel preparation, the importance of following the prescribed procedure, the regimen and the potential side effects of the bowel preparation products. A split-dose regimen results in a higher quality colonoscopy examination compared with ingestion of the entire preparation on the day or evening before the procedure, and has been associated with increased adenoma detection rates.[13] Typically this involves splitting the standard dose of the bowel preparation between the day before and the morning of the procedure (3-8 hours before the planned start of the procedure).[13] Allow the patient appropriate time to ask questions and confirm that they understand the importance of good bowel preparation. Ensure patients with diabetes and those on anticoagulants or other relevant medication are provided with information targeted towards managing their condition/medication as they undergo bowel preparation. Select an appropriate laxative agent taking into account cost, any patient co-morbidities and the patient's current medications, and ensure the patient knows how to obtain and use it. Consider whether a patient with relevant co-morbidities needs specific health or personal support whilst undergoing bowel preparation.

For health services. Establish processes for supporting patients to undertake effective bowel preparation for colonoscopy. Ensure interpreter services are available. Provide clear, written information for patients about the bowel preparation procedure, and a telephone number for any inquiries they may have as the bowel preparation proceeds. Ensure laxative agents are accessible for all patients. Policies should allow for extra support to patients who are unlikely to manage bowel preparation independently, including overnight admission if needed.

Quality statement 5 – Sedation

Before colonoscopy, a patient is assessed by an appropriately trained clinician to identify any increased risk, including cardiovascular, respiratory or airway compromise. The sedation is planned accordingly. The risks and benefits of sedation are discussed with the patient. Sedation is administered and the patient is monitored throughout the procedure and recovery period in accordance with the Australian and New Zealand College of Anaesthetists' *Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures.*[†]

Purpose

To ensure the safe and appropriate sedation of patients undergoing colonoscopy.

What the quality statement means

For patients. Before the procedure, an appropriately trained clinician will assess your suitability for sedation. He or she will ask about your health, other medical conditions, medications and previous experiences with sedation or anaesthesia, in order to assess the risks for you in having the sedation and to plan your sedation accordingly. The risks of sedation are higher for some people than others. For such individuals, a specialist anaesthetist, or other suitably trained medical practitioner will perform the sedation after a pre-procedure assessment. This is also the case if you have deeper sedation or a general anaesthetic. Your doctor will discuss the sedation that will be used, the risks and benefits of the sedation, the depth of sedation and what you can expect to be aware of during the procedure and as you recover. You will be cared for by appropriately trained and experienced clinicians who will administer sedation in accordance with current guidelines.

For clinicians. Ensure that the patient's suitability for sedation and any increased risks such as cardiovascular, respiratory or airway compromise are assessed in advance of the procedure by a clinician who is appropriately trained to make such an assessment. If an increased risk is identified, an anaesthetist, or other trained and credentialed medical practitioner within his/her scope of practice, should assess the patient and be present during the procedure to care for the patient. This is also the case for any patient likely to have deep sedation or general anaesthesia, for whom separate informed consent should be obtained by the anaesthetist. Ensure that the patient understands that their awareness of the procedure will depend upon the depth of sedation, and that this in turn depends on the scope of practice of the clinician providing the sedation. Sedation must be administered by a credentialed practitioner working within their scope of practice.
Provide sedation as described in the Australian and New Zealand College of Anaesthetists' *Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures (PS09),* with respect to:

- The number of staff present during the sedation and their level of training, competence and scope of clinical practice
- Facilities, equipment and medications
- Administration of sedation
- Monitoring of patients during the procedure and in the recovery room.

[†] Australian and New Zealand College of Anaesthetists (ANZCA). PS09 Guidelines on sedation and/or analgesia for diagnostic and interventional medical, dental or surgical procedures. Melbourne: ANZCA; 2014. Available from: http://www.anzca.edu.au/documents/ps09-2014-guidelines-on-sedation-and-or-analgesia.

For health services. Sedation should be provided in accordance with the ANZCA's *Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical, Dental or Surgical Procedures*.[14] Ensure that systems are in place, and services adequately resourced, to implement the ANZCA guidelines. Policies should ensure that pre-sedation assessment is carried out by appropriately trained clinicians, in order to identify patients who are not suitable for intravenous sedation in the absence of an anaesthetist, and to plan for sedation accordingly. Ensure that clinicians who administer sedation or anaesthesia for colonoscopy are credentialed and operating within their defined scope of clinical practice and that they maintain their skills by participating in ongoing professional development and performance review. Implement and ensure compliance with policies and procedures for the safe supervision of trainees.

Quality statement 6 – Clinicians

A patient's colonoscopy is performed by a credentialed clinician working within their scope of clinical practice, who meets the requirements of an accepted certification and recertification process. Sedation or anaesthesia, and clinical support are provided by credentialed clinicians working within their scope of clinical practice.

Purpose

To ensure all colonoscopies and associated sedation and general care are provided by skilled clinicians at a high level of safety and quality.

What the quality statement means

For patients Throughout your colonoscopy you will be cared for by qualified and experienced clinicians, who comply with expected professional standards of competence in their area of expertise. This includes the nurses who provide clinical support, the medical practitioner responsible for your sedation or anaesthesia, and the clinician who conducts the colonoscopy. As well as being appropriately qualified, most clinicians are required to maintain their skills and knowledge. For colonoscopists this will include ongoing assessment of their capability to perform the procedure safely and well.

For clinicians. Ensure your training and experience is sufficient to provide safe, high quality care to a patient undergoing colonoscopy, in accordance with expected professional standards. Comply with your health service's policies and procedures for credentialing, defining scope of clinical practice and performance monitoring. Work with your peers to ensure your performance, and theirs, meets accepted requirements for the safety and quality of colonoscopy and/or associated sedation or anaesthesia. If you are a colonoscopist, participate in a recertification process that is accepted by your professional association and/or employer. Supervise trainees at a level appropriate to their skill and experience.

For health services. Define the credentials that are required for clinicians to perform colonoscopy, provide sedation or anaesthesia, or provide nursing care for patients undergoing colonoscopy as set out in *Credentialing health practitioners and defining the scope of clinical practice: A guide for manager and practitioners*.[10] For colonoscopists, identify accepted certification and recertification processes according to their clinical speciality and professional body, when credentialing clinicians and defining their scope of clinical practice. Ensure non-anaesthetist practitioners providing sedation meet a defined standard of competency for sedation. Ensure all clinicians' performance is monitored and their skills are maintained. Periodically review individual and service performance against accepted performance indicators and ensure under-performance is addressed promptly and effectively. Implement and ensure compliance with policies and procedures for the safe supervision of trainees.

Note: Recognition of training for medical practitioners performing colonoscopy is currently provided through a program offered by the Conjoint Committee for the Recognition of Training in Gastrointestinal Endoscopy (CCRTGE), a national body comprising representatives of the Royal Australasian College of Physicians (RACP), the Gastroenterological Society of Australia (GESA), and the Royal Australasian College of Surgeons (RACS).

GESA has introduced a voluntary re-certification program in colonoscopy, which is open to all medical practitioners whose training has been recognised by CCRTGE. The Colorectal Surgical Society of Australia and New Zealand (CSSANZ) has endorsed the GESA voluntary recertification program for its members. The standards and quality indicators supported by

the GESA and CSSANZ are expected to form the basis of the specifications for re-certification of performance of colonoscopists.

Nurse endoscopists are currently credentialed through the facility that employs them.

Quality statement 7 – Procedure

When a patient is undergoing colonoscopy their entire colon – including the caecum and/or terminal ileum – is examined carefully and systematically. The adequacy of bowel preparation, clinical findings, biopsies, polyps removed, therapeutic interventions and details of any adverse events are documented. All biopsies and polyps removed are submitted for histological examination.

Purpose

To optimise detection and management of disease, to minimise adverse outcomes for all patients who undergo colonoscopy, and to ensure the procedure is documented adequately in the patient's health record.

What the quality statement means

For patients. Your colonoscopy will be performed to a high standard so that the chances of detecting and managing bowel problems, including polyps and cancer, are increased, and the risk of complications is reduced. During the colonoscopy, the colonoscope should be inserted into the bowel far enough for the whole length of the large bowel to be inspected carefully. During the colonoscopy, samples of tissue, and any growths seen such as polyps, will be removed. These will be referred for examination by a specialist pathologist under a microscope. Adverse events during colonoscopy are uncommon, but if they occur, they will be managed, you will be informed and the incident will be documented in the medical record. Accurate and complete records of the colonoscopy will be maintained.

For clinicians. To maximize adenoma detection, accurately intubate the caecum and/or terminal ileum and allow adequate time for mucosal inspection whenever performing colonoscopy.[15] In people with previous resection, examine the remaining bowel thoroughly. Document the quality of the bowel preparation, how caecal intubation was assessed, withdrawal time, clinical findings, the number of polyps removed, the method of removal and whether they were retrieved. Record adverse events including perforation, post-polypectomy bleeding, and sedation-related cardio-respiratory compromise, and inform the patient that these have occurred, and how they have been managed. Ensure all tissue removed is sent for histopathology examination.

For health services. Consider whether the number of patients booked on each list enables the colonoscopist to undertake a careful and systematic examination of each patient. Establish systems that require and support colonoscopists to maintain accurate records of the procedure including the adequacy of bowel preparation, biopsies taken, polyps removed, all diagnostic and therapeutic interventions, and details of any adverse events. Ensure complications of colonoscopy and details of any adverse events are monitored and reviewed as part of quality monitoring and clinical quality improvement activities (such as morbidity and mortality reviews).

Quality statement 8 – Discharge

Following recovery, the preliminary outcomes of the procedure, the nature of any therapeutic interventions and adverse events, and arrangements for initial follow-up, are discussed with the patient and provided in writing to them before discharge. The patient is discharged into the care of a responsible adult when it is safe to do so.

Purpose

To ensure patients recover and are discharged safely with available information about the outcomes of the procedure and arrangements for follow up.

What the quality statement means

For patients. After your colonoscopy, you will be monitored until you have recovered from the sedation. Your clinician will tell you what happened during the procedure and their initial findings. You will be informed of anything unexpected, such as any complications that may have occurred. When you have recovered sufficiently from the sedation, you will be discharged into the care of a responsible adult, with written instructions on how to care for yourself when you go home, when to resume regular medications and any arrangements for follow-up of the procedure. It is not recommended that you travel home by yourself or remain alone on the night after the procedure. You will be provided with information about what to do if you have any problems after discharge, including a phone number that you can use to contact the health service for advice after hours.

For clinicians. Before discharge, inform your patient whether the procedure was completed satisfactorily, your initial observations, whether biopsies or polypectomies were performed, and about any adverse events, if they occurred. Advise your patient of what to do if they experience symptoms that may indicate a complication of the procedure, and provide them with specific contact details for obtaining appropriate advice. Following authorisation by the practitioner who administered sedative drugs, or another appropriately qualified practitioner, ensure that processes are in place to discharge your patient into the care of a responsible adult. The responsible adult should be provided with written instructions about early post-procedure care and resumption of normal activities, including making legally binding decisions, operating machinery and resuming regular medication.

For health services. Document criteria and implement operational systems for monitoring, supervising and discharging patients in accordance with accepted management and supervision guidelines. Ensure that processes are in place for discharging patients into the care of a responsible adult, and that written instructions are provided about early post-procedure care and resumption of normal activities. Ensure that there is a response plan for patients in the event of problems arising post-discharge, and that the discharge information includes specific health service contact details after hours.

Quality statement 9 – Reporting and follow-up

Following colonoscopy and subsequent review of any histology results, the colonoscopist prepares a report that includes their findings, follow-up recommendations and arrangements. Recommendations for surveillance colonoscopy, if required, are consistent with evidence-based guidelines. If more immediate treatment or follow-up is needed, appropriate arrangements are made by the colonoscopist. The report is provided to the general practitioner, any other relevant clinician and the patient.

Purpose

To ensure the results of colonoscopy are followed up, patients and their health care providers are aware of outcomes and patients are offered treatment and/or ongoing surveillance in accordance with evidence-based guidelines.

What the quality statement means

For patients. The clinician who conducted the colonoscopy will prepare a report to be provided to you, your general practitioner, and your other doctors (if relevant). The report will describe why you had the procedure, what was found during the procedure, and the results of any pathology testing of any tissue or growths (such as polyps) removed from your bowel. The report will also describe whether you need a follow-up visit or repeat testing and when this should occur. These recommendations will be different for each person and will depend on your medical and family history and the findings of the colonoscopy. Repeat testing may involve the faecal occult blood test or another colonoscopy, depending what is recommended in your situation by current evidence-based guidelines. Follow-up testing should occur as often as recommended, but no more than is necessary. If the colonoscopy found that you need further treatment or investigations soon, your colonoscopist will arrange this for you.

For clinicians. Ensure you have a reliable system in place to follow up all pathology investigations and that these are included in your report to your patient's general practitioner and any other referring clinician, which should also be provided to the patient. The report should also include the indication for the procedure, the outcomes of the colonoscopy and recommendations for treatment or ongoing surveillance. Adhere to evidence-based guidelines on future screening or surveillance colonoscopy, such as the Cancer Council Australia's *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer* [7],*and Clinical Practice Guidelines for Surveillance Colonoscopy*.[11] If earlier treatment or investigation is required, make the necessary arrangements and ensure these are communicated to the patient and their referring clinician.

For health services. Policies should support adequate reporting of colonoscopy outcomes to the referring clinician, other relevant clinicians and the patient. These should include the reporting of histology results if any tissue was removed, and recommendations for future surveillance and follow-up based on evidence-based guidelines on surveillance colonoscopy, such as the Cancer Council Australia's *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer,* [7] *and Clinical Practice Guidelines for Surveillance Colonoscopy*.[11] Ensure systems are in place for the prompt management of histologically-confirmed colorectal cancer or high-risk lesions.

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Adenoma	A benign (non-cancerous) growth which has specific characteristics that can be seen using pathology testing techniques (proliferation of neoplastic epithelial cells). Adenomas may be protuberant, flat or depressed. Some adenomas may change over time and develop into malignant growths (cancers).
Benign growth (tumour)	A benign growth is one which is not able to spread to other parts of the body. It may also be described as pre-cancerous or pre-malignant.
Bowel	Part of the digestive tract extending from the stomach to the anus. It has two main sections – the small and large bowel (also known as the small and large intestine). The small bowel continues from the stomach – its various parts are the duodenum, jejunum and ileum. The small bowel joins up with the large bowel at the terminal ileum. The large bowel is made up of the colon and rectum. The rectum joins up with the anus.
Bowel cancer	Cancer of the large bowel; also known as colorectal cancer, colon cancer or rectal cancer. [7]
Bowel preparation	The use of medicines and changes in the diet to clean out the bowel in preparation for a test, scan or operation, allowing the lining of the bowel to be seen more clearly.
Caecum	The first part of the ascending colon of the large bowel. This is one of the important landmarks when performing a colonoscopy, to ensure the procedure has examined the whole bowel.
Colon	The main part of the large bowel, which absorbs water and electrolytes from undigested food (solid waste). Its four parts are the ascending colon, transverse colon, descending colon and sigmoid colon. [7]
Colonoscopy	An examination of the entire large bowel using a camera on a flexible tube, which is passed through the anus.[7] Colonoscopy can be performed to establish if there is something wrong in the bowel (diagnostic) or to treat a known bowel problem (therapeutic). (See also Flexible Sigmoidoscopy)
Colorectal	Referring to the large bowel, comprising the colon and rectum.[7]
Deeper sedation	Sedation that is characterised by depression of consciousness that can readily progress to the point where consciousness is lost and patients respond only to painful stimulation. It is associated with loss of the ability to maintain a patent airway, inadequate spontaneous ventilation and/or impaired cardiovascular function, and has similar risks to general anaesthesia, requiring an equivalent level of care.[14]

Dehydration	Dehydration occurs when the body loses more fluid than it takes in. It can result in problems like feeling dizzy, falls, chemical imbalances and kidney problems. It is important to follow instructions about fluid intake during bowel preparation to prevent dehydration.
Faecal occult blood test (FOBT)	A test that can detect microscopic amounts of blood in stools. Types of FOBT include immunochemical FOBTs (iFOBTs), which directly detect haemoglobin using antibodies specific for the globin moiety of human haemoglobin, and guaiac FOBTs (gFOBTs), which detect peroxidase activity, an indirect method for identification of haemoglobin.[7]
Family history	A family history of cancer is present when there are members of the family who have been diagnosed with cancers. Although bowel cancer is the most important, other cancers such as the uterus, breast and stomach are also relevant. The risk of getting bowel cancer is related to the number of affected relatives and the age at which they were diagnosed with cancer.
Familial syndromes	Genetic disorders in which inherited genetic mutations in one or more genes predispose a person to developing cancer, particularly at an early age. [7]
First presentation	The first presentation occurs when an individual first seeks advice leading to their first colonoscopy – this may be because of a positive faecal occult blood test in the NBCSP or symptoms.
Flexible sigmoidoscopy	A procedure used by doctors to examine the inner lining of the rectum and sigmoid colon (unlike a colonoscopy, in which the entire colon is examined). [7]
General anaesthesia	A drug-induced state characterised by absence of purposeful response to any stimulus, loss of protective airway reflexes, depression of respiration and disturbance of circulatory reflexes.[14]
iFOBT	Immunochemical Faecal Occult Blood Test (see entry for Faecal occult blood test)
Informed consent	Informed consent is a person's voluntary decision about health care that is made with knowledge and understanding of the benefits and risks involved.[16]
Inflammatory bowel disease	A group of inflammatory conditions of the colon and small intestine, including Crohn's disease and ulcerative colitis. [17]
Laxative	A medicine used to stimulate the bowel and clean it of faecal matter. Laxatives are important as part of preparation of the bowel prior to colonoscopy so the lining of the bowel can be seen clearly.

Malignant tumour	A growth that is able to spread into nearby normal tissue and travel to other parts of the body.[17] A malignant growth is a cancer.
National Bowel Cancer Screening Program (NBCSP)	A national program available to people ≥50 years of age which aims to decrease bowel cancer and illness and death related to it.
Polyp	A growth of colonic tissue which protrudes into the lumen (space) above the lining of the bowel. Polyps are usually asymptomatic, but sometimes cause visible rectal bleeding and, rarely, other symptoms. Polyps may be neoplastic (for example, adenomas) or non-neoplastic (for example, inflammatory polyps).
Rectum	The final section of the large bowel, ending at the anus.
Screening	Screening is the performance of a test in an individual at average risk of a disease who does not have symptoms. A positive test identifies an individual in whom further tests are usually needed to exclude or detect the disease being screened for. For bowel cancer screening in Australia, those ≥50 years are invited to undertake a faecal occult blood test (FOBT) through the national screening program. If the test is positive, a colonoscopy is usually recommended.
Screening colonoscopy	Individuals who are at markedly higher than average risk for bowel cancer are advised to undergo screening colonoscopy, as per NHMRC screening recommendations. This includes those with familial syndromes.
Sedation	The use of medications to induce a very relaxed or sleepy state, often used prior to a colonoscopy to facilitate the procedure. Sedation is different to a general anaesthetic.
Sigmoid colon	The last section of the colon before it connects to the rectum.[7]
Surveillance colonoscopy	A colonoscopy performed in: • Someone who has previously had disease to see if it has returned or if new disease is present (for example, after previous bowel cancer or adenoma removal) • Someone who currently has disease to see if it has progressed (for example, inflammatory bowel disease). Surveillance intervals are recommended in the Cancer Council Australia guidelines.
Terminal ileum	The end of the small bowel (intestine) where it joins the large bowel (intestine).

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