

Direct access colonoscopy model of care

Mandatory and recommended inclusions for the local implementation of direct access services in NSW

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Introduction

Background

The National Bowel Cancer Screening Program (NBCSP) provides free screening using an immunochemical faecal occult blood test (iFOBT) to men and women aged 50–74 years every two years. Those who receive a positive bowel screening test result are recommended to undergo further assessment, which usually involves having a colonoscopy.

There is a substantial shift towards earlier stage diagnosis and prevention of bowel cancer related deaths through participation in the NBCSP. A reduction in the number of bowel cancer cases and the number of deaths attributed to bowel cancer leads to reduced costs of treatment.¹

To continue to reduce the incidence of bowel cancer and reduce health care costs, increased participation in the NBCSP needs to be paired with timely access to high quality colonoscopy.

A series of competitive grants, followed by the Leading Better Value Care (LBVC) Direct Access Colonoscopy (DAC) initiative have sought to address the challenges created by long waits for colonoscopy which are due partly to increases in the overall demand for colonoscopy, through:

- the statewide implementation of DAC services for patients with a positive iFOBT
- improved triaging and prioritisation of colonoscopy wait lists.

At time of publication, there are 21 DAC services operating across NSW, however each model varies slightly in order to address the local context in which it has been established. While variation can be observed amongst existing DAC services, all services share common features which have contributed to the successful implementation and ongoing management of patients and colonoscopy wait lists.

Development and governance

In June 2019, the Institute invited key clinicians and stakeholders to participate in the DAC Model of Care Clinical Reference Group (CRG). The objective of this group was to provide clinical oversight of the development of the DAC model of care document and define the mandatory and recommended inclusions for the localisation of DAC services in NSW.

The CRG acknowledged the need for flexibility around particular components of the model of care to address the variations that exist, such as organisational structure, geography and cultural diversity.

Model of Care revision

The DAC CRG reconvened in 2023 for the purpose of:

- Providing clinical advice and expertise for the revision of the DAC Model of Care
- Reviewing and endorsing any potential 'alternative' DAC variations which may not have all the key features of a DAC service yet address the key DAC outcomes.

Updates/changes to Model of care

The general consensus of the group is that DAC is a well-functioning, comprehensive and safe model of care with minimal changes required to the existing model of care.

No significantly different models were endorsed as being equivalent to DAC in terms of addressing the key outcomes.

Nurse- grading

In response to questions raised by Local District teams about minimum requirements, the particulars of the DAC nurse role were given further consideration by the CRG. Based on the work requirements expected of the role, the CRG recommends that a DAC nurse should be at least a Clinical Nurse Specialist, and preferably a Clinical Nurse Consultant. It is the opinion of the CRG that a Registered Nurse (RN) may not have the required level of independence or experience for this role. However, the decision should be made by the hospital and/or clinical lead based on the individual context with the expectation that an RN may be employed with added supervision.

Clinical care standards

There is an update to clinical care standards expected in 2024. If changes need to be made to the Model of Care to realign it with the new standards, it is anticipated that consultation may be done out of session.

Consultation

An Aboriginal Health Unit of a regional Local Health District (LHD) was consulted during the revision of the DAC Model of Care and invited to be part of the CRG to provide opportunity for amendments to be made which would improve the cultural appropriateness of the DAC model for Aboriginal clients. No changes or feedback were submitted to be included in the DAC Model of Care 2.0.

Direct access colonoscopy model of care

The DAC model of care provides guidance for the implementation of localised models of care for direct access services across NSW. The document outlines the requirements for the implementation of a direct access service at a systems and operational level as well as listing the mandatory and recommended inclusions.

The model of care draws heavily on the Australian Commission on Safety and Quality in Health Care (ACSQHC) National Safety and Quality Health Service (NSQHS) Standards as well as the Colonoscopy Clinical Care Standard 2018 to ensure high quality outcomes for patients, clinicians and health services. Implementation of the Colonoscopy Clinical Care Standard is mandated as part of the NSQHS Standards for accreditation of hospitals and day facilities providing colonoscopy services.

An attempt has been made to demonstrate linkage to the relevant ACSQHC Colonoscopy Clinical Care Standard and associated quality statements.

LHDs and relevant Specialty Health Networks (SHNs) are strongly encouraged to undertake the process of co-design with key stakeholders to ensure the direct access model of care addresses the barriers and challenges specific to the local context.

The CRG acknowledges that the implementation of a DAC service takes a considerable amount of time and resources, reflecting the need for robust planning and stakeholder engagement.

Guiding frameworks

It is the recommendation of the DAC CRG that the model of care document is supplementary, and is read in conjunction with the following:

- the Australian Commission on Safety and Quality in Health Care [Colonoscopy Clinical Care Standard 2020](#)
- the [National Safety and Quality Health Service Standards](#)
- the National Health and Medical Research Council (NHMRC) [Clinical Practice Guidelines for Surveillance Colonoscopy](#)
- local LHD and SHN policies and procedures.

Feedback and revision

The Institute and Clinical Reference Group members welcome feedback on this model of care. Please send comments to the DAC project team email address: CINSW-DAC@health.nsw.gov.au.

1. Key characteristics of a direct access colonoscopy service

In order to define a DAC service, it is important to distinguish the key features which differentiate it from other models of care.

A key advantage of DAC is a reduction of unnecessary delays for someone where the diagnosis-of-exclusion is now cancer, through the removal of the initial specialist consultation and introduction of nurse-led telephone triage.

A DAC service allows patients who fulfil a set criteria to attend the hospital once, on the day of their procedure.

Removing the initial specialist consultation may eliminate barriers including the out-of-pocket cost of the consultation, transport, parking and lost income. Nurse-led telephone triage assessment allows specialist clinic time to be directed to more complex patients.

DAC services require a well-structured and protocolised triage and assessment pathway that allows safe, independent assessment by nursing staff. A model of care that does not meet the criteria below cannot be referred to as a DAC service. This may include a model where patients are seen by a nurse in an outpatient clinic, either solely or in conjunction with a specialist, or where a specialist sees patients in a rapid triage and review clinic.

Mandatory features

1.1 A protocolised, streamlined referral pathway

A streamlined referral pathway provides clarity for referrers, reduces time to assessment and reduces ambiguity in assessment so patients are safely reviewed prior to colonoscopy. The pathway, including referral, triage, assessment and follow up, should be comprehensively documented.

1.2 Nurse-led assessment

A direct access service must include nurse-led assessment. Nurse-led telephone assessment of patients has demonstrated efficiencies over clinic-based specialist assessment. Triage of referrals may be performed by a nurse or specialist. However, most existing services have a protocolised triage system which allows specially trained nurses to safely and effectively triage patients.

The requirements of this role were considered by the Clinical Reference Group in the review of the latest version. Based on the work requirements for this role, the committee recommends that a DAC nurse should be at least a Clinical Nurse Specialist or Clinical Nurse

Consultant. However, the decision should be made by the hospital and/or clinical lead based on the individual context with the expectation that a Registered Nurse may be employed with added supervision.

1.3 Direct colonoscopy booking for patients meeting inclusion criteria

Patients meeting DAC inclusion criteria should be booked for colonoscopy without specialist clinic-based assessment. Specialist assessment prior to colonoscopy is appropriate for those who do not meet DAC inclusion criteria. These patients may have other risk factors determined during the triage or assessment process which require specialist review. These factors should be identified in the referral form ([section 3](#)), the triage process ([section 4](#)), and the nurse assessment ([section 4](#)).

1.4 Specialist oversight

A local governance structure should be implemented and a specialist lead should be appointed with responsibility for the service. The specialist lead should be readily available for DAC nurses to consult with for any issues at any stage surrounding the triage and assessment of patients.

2. Establishing a local governance structure for direct access colonoscopy

Establishing and maintaining a strong local governance structure is critical to the successful implementation of DAC services.

This structure will be responsible for providing the strategic and operational direction for the development and implementation of the DAC service. The governance structure and members within it will be responsible for providing oversight and management of the service while escalating issues and risks.

Mandatory inclusion

2.1 A local governance structure should be established for all DAC services.

An operational and strategic governance arrangement should include the following members:

- specialist lead for direct access clinic
- head of department (gastroenterology/ endoscopy/surgery)
- head of anaesthetics or approved delegate
- endoscopy/theatre suite nurse unit manager (NUM)
- executive sponsor.

Recommendations and considerations

2.1a A DAC service impacts a wide variety of stakeholders. It is recommended that the following stakeholders are included in the governance structure either as an ongoing member or are consulted when required:

- LBVC executive sponsor
- DAC service triage/assessment nurse(s)
- administration (bookings and referral management)
- specialist services delivering colonoscopy (surgeons, gastroenterologists)
- representative/s from the anaesthetic department (or, where relevant, GP anaesthetist)
- visiting medical officer (VMO) and staff specialists
- peri-operative manager
- operational manager or facility manager
- surgical wait list manager

- primary health network (PHN) representatives
- HealthPathways coordinator
- local Aboriginal medical service (AMS)
- Aboriginal health worker (AHW)
- Health care interpreter service (HCIS)
- all specialist nurses working in the department (including DAC nurse)
- relevant personnel involved/experience in the patient management system/application development
- safety and quality manager.

2.1b The DAC executive sponsor may be a member of the LHD executive team or the LBVC executive sponsor.

An example governance structure is included in [Appendix A](#).

2.1c It is recommended that within the DAC service the LHD ensures there are effective methods for engagement and support of Aboriginal clients.

LHDs should engage with Aboriginal communities through their LHD Aboriginal health units and local Aboriginal community controlled health services (ACCHS) and AMS. The purpose of engaging with these services is to develop strong relationships to enhance the LHDs' ability to deliver culturally safe, effective and patient-centred care.

LHDs should liaise with local Aboriginal Health Services to:

- develop local service agreements or memorandums of understanding (MOUs) to formalise deliverables for Aboriginal communities within the LBVC program
- develop health pathways for AMS clients and increase awareness among AMS GPs about DAC and bowel cancer screening
- develop health pathways for Aboriginal clients who do not access an AMS and increase awareness of LHD Aboriginal health workers about DAC and bowel cancer screening
- connect with Aboriginal hospital liaison officers (AHLOs) and Aboriginal health workers (AHWs) to increase awareness of bowel cancer screening and support uptake of DAC in Aboriginal communities.

LHDs should identify strategies to ensure equitable and culturally safe access to DAC by the Aboriginal community through application of:

- the [National Safety and Quality Health Service Standards – User Guide for Aboriginal and Torres Strait Islander Health](#) (Actions 1.2, 1.4, 1.21, 1.33, 2.13 and 5.8)
- [NSW Aboriginal Health Impact Statement \(PD2017_034\)](#)
- ensuring all staff undertake training outlined in the [Respecting the Difference: An Aboriginal Cultural Training Framework \(PD2011_069\)](#)
- [Aboriginal and Torres Strait Islander Origin: Recording of information of patients and clients \(PD2012_042\)](#)
- [Good Health – Great Jobs: Aboriginal Health Strategic Framework 2016–2020 \(PD2016_053\)](#).

Key reference standards

NSQHS Clinical Governance Standard

- Governance, leadership and culture (for example, action 1.1)
- Safety and quality monitoring, including incident reporting systems (1.8 and 1.11)
- Policies and procedures (for example 1.7)
- Credentialing 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)

ACSQHC Colonoscopy Clinical Care Standard 2018

Mandatory inclusion

2.2 The specialist lead for the DAC service should have direct responsibility for all patients who are triaged and assessed via telephone. The specialist lead should also have direct responsibility for the triage and assessment nurse.

The specialist lead should be readily available to consult with the triage and assessment nurse regarding issues at any stage of the process.

2.3 The members within the local governance arrangement should meet regularly to assess quality outcomes and provide feedback to the clinicians and stakeholders working within the DAC service.



Key point

In order to achieve the LBVC key performance indicators and meet colonoscopy wait time targets outlined in the NSW Colonoscopy Categorisation Clinical Practice Guide, LHDs and their executive should prioritise an overarching commitment to colonoscopy access across the LHD. This may include initiatives such as:

- increasing endoscopy lists to meet demand
- maintaining or introducing dedicated bowel cancer screening lists
- prioritising iFOBT patients
- ensuring there are adequate staffing and administration resources.

3. The process of referral

When a patient is referred to a DAC service, the GP referral form will provide sufficient information for the triage assessment nurse or specialist lead to determine the appropriateness of the patient to be seen through the DAC pathway.

LHDs should design a referral form to meet local requirements and include the mandatory information below as well as considering recommendations made by the clinical reference group to implement a high quality service.

Specific data items will need to be collected to measure the success of implementation and ongoing evaluation of the DAC service. LHDs will be able to use these data items to measure the time it takes patients to receive a colonoscopy and for quality improvement purposes.

Mandatory inclusion

3.1 A clearly documented referral pathway

This pathway should be documented in a LHD model of care or policy document.

Recommendations and considerations

3.1a It is recommended that the referral pathway is developed in conjunction with key stakeholders.

- It is recommended that LHDs work closely with their local PHN, AHW and AMS to develop external referral pathways for DAC. Referrers should be consulted to examine ways of removing barriers to appropriate referral.
- It is recommended that the DAC referral form be available/downloadable in GP practice management software or accessible on
 - the internet.
- Referral pathways should be secure as patient information is being communicated.
- Electronic communications are recommended as a way to expedite the transfer of information, i.e. secure messaging, eFax, fax or email.
- There is a DAC directory for GPs (a webpage that shows which LHD/hospital is operating a DAC service).
- DAC services may consider holding a GP information evening to increase awareness of DAC and referral pathways.

Mandatory inclusion

3.2 A DAC referral form should contain the following minimum information set:

- patient name, date of birth, phone number, Medicare details
- language and/or interpreter required
- Aboriginal status
- name of doctor being referred to and/or clinic
- date of the referral
- relevant clinical information about the patient's condition for investigation, opinion, treatment and/or management
- the signature of the referring practitioner.

It is recommended the patient's email address is captured to enable information to be sent electronically.

Ideally the iFOBT pathology report should be attached to the referral.

If the iFOBT pathology report in its entirety is not available, include and/or attach the following to the referral:

- date of test
- details about the screening test undertaken NBCSP/GP initiated, including the Register Record Number (RNN).

Recommendations and considerations

3.2a It is recommended that the DAC referral form includes clinical details to allow appropriate triage.

The DAC service is responsible for determining the key clinical criteria to be included on a referral form.

The DAC referral form may stipulate some required fields to make the triage process more complete and straightforward for the triage assessor.

Typical inclusion criteria would be asymptomatic patients aged 50–75 years.

Critical specialist assessment criteria should be documented:

- It is recommended that 'red flag' features that require clinical assessment outside of the scope of a DAC service are documented. These clinical features may include iron deficiency anaemia, unexplained abdominal pain, unexplained weight loss, a new change in bowel habit, or a palpable or visible rectal or abdominal mass.
- The referral form may include a request for blood tests including a full blood count and ferritin/iron studies.
- Antiplatelet or antithrombotic treatment (including aspirin) must be listed. It is recommended that patients who are on these agents should be assessed by a specialist prior to receiving a colonoscopy and are therefore unable to be assessed via telephone.

- The DAC service is responsible for the development of clear policies about whether patients on these agents require specialist assessment or are suitable for telephone triage advice (see section 4).

Critical anaesthetic assessment criteria should be documented:

- The referral should include a full list of medical comorbidities and medications.
- The referral form may list key anaesthetic exclusion criteria which would mandate specialist assessment (see section 4).

3.2b It is recommended that the DAC referral form includes an assessment of the patient's capacity to provide consent via telephone.

Patients who do not have capacity for consent should be assessed in a specialist clinic and are not suitable for telephone triage. This may include patients with dementia, intellectual disability or major psychiatric comorbidity.

3.2c It is recommended that the DAC referral form includes data items to allow audit, quality improvement and reporting to the LBVC program as per requirements listed in the local service agreements for LHDs.

These data points include:

- triage date
- triage DAC service pathway (i.e. accepted for telephone triage, specialist assessment, standard clinic or declined).

Mandatory inclusion

3.3 It is recommended that the DAC service documents a mechanism for dealing with incomplete referrals.

The LHD may have existing policies and processes for the management of incomplete referrals. In this case, it should be documented in the local DAC model of care.

- It is recommended that the DAC service liaise with PHNs and GPs to determine a mechanism for when a referral does not meet the criteria.
- Incomplete referrals may be returned to the referrer or the triage nurse may contact the referrer to obtain complete information.



An example of the [Direct access colonoscopy referral form](#) is included at the end of this document

Key reference standards

ACSQHC Colonoscopy Clinical Care Standard

Quality statement 1: Initial assessment and referral

When referring patients for consideration of colonoscopy, provide a comprehensive referral to prevent delays and enable accurate assessment of the patient's suitability for colonoscopy.

The ACSQHC has developed a referral template to support implementation of the Colonoscopy Clinical Care Standard Quality statement 1. See:

<https://www.safetyandquality.gov.au/publications-and-resources/resource-library/colonoscopy-referral-information-template>

This referral template has been incorporated into the latest versions of the following GP software systems:

- Best Practice
- Communicare
- Genie
- Medical Director
- Zedmed.

NSQHS Partnering with Consumers Standard

- Informed consent (2.4)
- Information for consumers (2.9)
- Communication of clinical information (2.10)

NSQHS Communicating for Safety Standard

- Communication of critical information (6.9 and 6.10)
- Documentation of information (6.11)

4. Assessment and triage of the patient

The purpose of the triage assessment is to distinguish the patients' suitability for colonoscopy and perform an initial pre anaesthetic assessment.

It is the responsibility of the DAC service to assess patients' suitability to continue through the DAC pathway. The majority of patients are suitable for DAC, however evidence suggests about 30–50% may require specialist assessment prior to the procedure.²

LHDs will be required to develop a robust process for the telephone triage assessment of patients, clearly setting out the criteria for inclusion and exclusion.

Mandatory inclusion

4.1 Key stakeholders within the local governance structure are responsible for determining:

- inclusion and exclusion criteria
- the process for categorisation
- review of patients who are not suitable for direct access telephone triage and assessment.

DAC services are required to collaborate with key stakeholders to develop robust inclusion and exclusion criteria to assess a patient's suitability to continue to colonoscopy without specialist assessment.

Recommendations and considerations

4.1a It is recommended that a clearly defined flowchart is established for all triaged patients which explains how they will proceed to clinical assessment.

- Patients who are not suitable for telephone assessment will require assessment in a face-to-face nurse-led clinic or a specialist outpatient clinic.

4.1b It is recommended that key stakeholders and departments develop consensus regarding the thresholds and management of high risk comorbidities such as:

- glomerular filtration rate (GFR) (thresholds)
- body mass index (BMI) (thresholds)
- cirrhosis or advanced liver disease

- ischaemic heart disease
- cerebrovascular disease
- respiratory disease
- history of anaesthetic adverse events.

The management of high risk comorbidities will depend on each LHD's ability to reach consensus as well as the availability of resources and health care facilities.

4.1c It is recommended that as part of the DAC service the LHD determines strategies for the perioperative management of diabetes.

- Clear advice should be documented regarding the management of oral hypoglycaemics.
- Patients with more complex diabetic medicine regimes or those on insulin may need to be seen in a medical or pre-anaesthetic clinic.

4.1d It is recommended that as part of the DAC service the LHD determines strategies for the perioperative management of antithrombotics and antiplatelet agents.

- Patients on aspirin alone may continue this for the colonoscopy.
- DAC services should clearly define how patients on other antiplatelet agents, dual antiplatelet or antithrombotic agents will be managed.
- Patients may require review in a medical clinic or pre-anaesthetic clinic to estimate the risks of discontinuing these agents.

4.1e It is recommended that key stakeholders and departments develop consensus regarding the management of symptomatic patients or patients with iron deficiency anaemia.

Patients with 'red flag' features identified on referral may require clinical assessment by a specialist. These clinical features may include:

- overt rectal bleeding
- iron deficiency anaemia
- unexplained abdominal pain
- unexplained weight loss
- new change in bowel habit
- a palpable or visible rectal or abdominal mass.

These features should be included on the referral form.

4.1f It is recommended that any patient who has been identified as not having capacity for consent should not proceed to telephone assessment.

Patients who do not have capacity to consent should be assessed in a specialist clinic and are not suitable for telephone triage. This may include patients with cognitive impairment, intellectual disability or major psychiatric comorbidity.

4.1g LHDs should engage a health care interpreter (when required) to ensure the patient has been informed about the procedure (including risks) in a way that they can understand.

It is recommended in those LHDs where there is a high culturally and linguistically diverse (CALD) population that the DAC model incorporates the regular use of health care interpreter services (HCIS) to deliver information about the procedure.

LHDs should also consider the potential challenges surrounding the use of HCIS, such as timely access and capacity.

Refer to [Interpreters – Standard Procedures for Working with Health Care Interpreters \(PD2017_044\)](#).

An example flowchart for patient assessment and review is included as [Appendix B](#).

Mandatory inclusion

4.2 The DAC service should include a pro forma which is to be completed by the triage assessment nurse.

This document should be included in the LHD model of care or policy document.

Recommendations and considerations

4.2a It is recommended that the pro forma contains the following components:

- an introduction that includes identification of the assessor, an explanation of the DAC process and an opportunity for the person to opt out
- consent to proceed with the telephone triage process
- confirmation of patient demographics and identifying information
- symptoms (including critical symptoms requiring clinical review)
- medical history (including critical comorbidities requiring anaesthetic review)
- medications (including antiplatelet agents and antithrombotics)
- specific medications increasing the risk of inadequate bowel preparation (may require extended bowel preparation), such as tricyclic antidepressants and opioids
- allergies
- family history of colorectal cancer and cancers in general (this will increase detection of Lynch syndrome)
- smoking and alcohol use
- prior endoscopy history and adequacy of bowel preparation
- exercise tolerance
- red flags for obstructive sleep apnoea (STOP-BANG)
- an opportunity for the patient to discuss the personal risks and benefits and the alternatives
- an opportunity for the patient to ask questions
- confirmation of the patient's willingness to proceed to colonoscopy, i.e. consent to the procedure.

LHDs may decide to send an information pack to the patient prior to the telephone triage conversation (minus information about diet and bowel prep).

LHDs may decide to flag with the patient that they will receive a call through mechanisms such as Telstra Integrated Messaging.

The triage nurse should clearly mark on the Recommendation for Admission (RFA) form that the patient has come through the DAC pathway.

4.2b It is recommended the pro forma includes a description of the benefits and risks of colonoscopy, bowel preparation and sedation.

- Information provided to the patient should be agreed upon by key stakeholders.
- Risks should include all common adverse events and all uncommon serious adverse events and any risks that the patient considers relevant.
- A description of the benefits and risks should be communicated according to a predefined checklist and followed by an opportunity for the patient to ask questions and obtain answers.
- Explain and confirm with the patient that they are aware the discussion is to clarify that they are consenting to the procedure. Also explain that the patient will have the opportunity to confirm the information they have received and ask further questions or clarify information on the day of the procedure and will sign a consent form on the day of the procedure.
- Ensure the patient is aware that they can decline the procedure at any time prior.

An example telephone checklist and assessment pro forma is included as [Appendix C](#).

4.2c It is recommended the pro forma includes an assessment of logistic issues that may exclude patients from being able to participate in DAC.

Local anaesthetic and endoscopy guidelines should inform this component of the pro forma, but may include the following:

- ensuring that the patient has a suitable person to pick them up following the procedure and a responsible person to support them overnight after the procedure
- ensuring that the patient has sufficient support and understanding to effectively take bowel preparation. If the person performing the assessment feels that the patient may need additional support (i.e. the patient has a disability), then review in clinic may be arranged.

4.2d It is recommended the pro forma includes important logistical information relevant to the hospital or LHD that the patient will attend.

Information may include the items listed below but may vary according to what is determined to be the responsibility of the DAC service or the bookings/administration team:

- patient availability
- hospital location
- colonoscopy and bowel preparation instructions
- contacts for pick up
- explanation that the procedure may need to be rescheduled due to unforeseen circumstances
- explanation that any change in the patient's condition or comorbidities should be communicated to the DAC service
- contact details for the DAC service.

Mandatory inclusion

4.3 All patient assessments should be recorded in the hospital medical record.

Any communication with the patient, completed pro forma or communication of information should be recorded in a clear and easily accessible location in the hospital record. All information should be readily available to the treating specialist and anaesthetist on the day of the procedure.

Key reference standards

ACSQHC Colonoscopy Clinical Care Standard

Quality Statement 1: Initial assessment and referral

When a patient is referred for consideration of colonoscopy, the referral document provides sufficient information for the receiving clinician to assess the appropriateness, risk and urgency of consultation. The patient is allocated an appointment according to their clinical needs.

Quality Statement 2: Appropriate and timely colonoscopy

A patient is offered timely colonoscopy when appropriate for screening, surveillance, or the investigation of signs or symptoms of bowel disease, as consistent with national evidence-based guidelines. Decisions are made in the context of the patient's ability to tolerate the bowel preparation and colonoscopy, and their likelihood of benefit. If colonoscopy is not appropriate, the receiving clinician advises the patient and their referring clinician of alternate recommended management.

Quality Statement 3: Informed decision making and consent

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

Quality Statement 4: Bowel preparation

A patient booked for colonoscopy receives a bowel preparation product and dosing regimen individualised to their needs, co-morbidities, regular medicines and previous response to bowel preparation. The importance of good bowel preparation for a quality colonoscopy is discussed with the patient. They are provided with consumer-appropriate instructions on how to use the bowel preparation product and their understanding is confirmed.

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 colonoscopy and recovery period in accordance with Australian and New Zealand College of Anaesthetists guidelines.

Quality Statement 8: Discharge

Following recovery and before discharge, the patient is advised verbally and in writing about the preliminary outcomes of the colonoscopy, the nature of any therapeutic interventions or adverse events, when to resume regular activities and medication, and arrangements for medical follow-up. The patient is discharged into the care of a responsible adult when it is safe to do so.

NSQHS Partnering with Consumers Standard

- Informed consent (2.4)
- Information for consumers (2.9)
- Communication of clinical information (2.10)

NSQHS Communicating for Safety Standard

- Communication of critical information (6.9 and 6.10)
- Documentation of information (6.11)

5. High quality colonoscopy

To provide the best outcome for patients a high quality service is essential. This requires that all involved in the process have the appropriate training and credentialing to deliver high quality, safe colonoscopy procedures.

Mandatory inclusion

5.1 All DAC services should have the medical, nursing, procedural, and sedation/anaesthetic competencies required for high quality and safe colonoscopy.

5.2 Specialists performing colonoscopy are required to have Conjoint Committee for Recognition of Training in Gastrointestinal Endoscopy (CCTRGE) accreditation in colonoscopy and participate in the Gastroenterological Society of Australia (GESA) Colonoscopy Recertification Program.

5.3 Quality data should be collected on all DAC endoscopy procedures.

At a minimum this should include:

- procedure indication
- caecal intubation rate
- adenoma detection rate
- bowel preparation adequacy rate (using a validated score).

Other quality data may include:

- cancer diagnosis rates
- sessile serrated polyp detection rate
- procedural and sedation adverse event rate
- inappropriate referral to DAC service (i.e. non-iFOBT positive)
- readmission within 30 days
- procedure cancellation on the day of admission (including reason: did not attend, bowel preparation not taken, inadequate pre-procedure anaesthetic assessment, list cancellation, rescheduled due to emergency, patient refused procedure) surveillance recommendations.

Recommendations and considerations

5.4 It is recommended that bowel preparation advice is recorded in the LHD model of care or policy document.

5.5 It is recommended that a standardised, evidence-based bowel preparation regime is used for all patients proceeding via the DAC pathway.

- LHDs may look to standardise bowel preparation across the district.
- A standardised approach reduces complexity, simplifies the assessment pro forma and telephone script for the assessment nurse, allows the production of standardised information sheets and reduces confusion for patients and booking staff.
- The LHD may have a bowel preparation policy in place which should be referred to in the localised DAC service model of care.
- If nurses distribute bowel preparation a nurse initiated medication prescription will need to be submitted and accredited by the pharmacy.

An evidence-based recommendation for bowel preparation is included as [Appendix D](#).

Key reference standards

Performance indicators

The ACSQHC has identified a set of indicators to support healthcare providers and local health service organisations to monitor how well they

implement the care described in the Colonoscopy Clinical Care Standard. The indicators are a tool to support local clinical quality improvement and may be relevant to other quality assurance and peer review activities.

These indicators align with quality statements 4 and 7 of the Colonoscopy Clinical Care Standard and with the performance indicators for certification and recertification developed by the CCRTGE and GESA.

ACSQHC Colonoscopy Clinical Care Standard

Quality Statement 4: Bowel preparation

A patient booked for colonoscopy receives a bowel preparation product and dosing regimen individualised to their needs, co-morbidities, regular medicines and previous response to bowel preparation. The importance of good bowel preparation for a quality colonoscopy is discussed with the patient. They are provided with consumer-appropriate instructions on how to use the bowel preparation product and their understanding is confirmed.

Refer to the Indicator for Quality Statement 4:

Proportion of patients scheduled for a colonoscopy whose bowel preparation was adequate.

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.

The ACSQHC has developed a fact sheet about the certification and recertification requirements for practising colonoscopists and is available on their website at: <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/nsqhs-standards-certification-and-re-certification-practising-colonoscopists>

Quality Statement 7: Procedure

When a patient is undergoing colonoscopy their entire colon – including the caecum – 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 polyps removed are submitted for histological examination.

Refer to the Indicators for Quality Statement 7:

- Proportion of patients undergoing a colonoscopy who have their entire colon examined .
- Proportion of patients who had a colonoscopy that detected one or more adenoma(s).
- Proportion of patients who had a colonoscopy that detected one or more sessile serrated adenoma(s) or sessile serrated polyp(s).

Full specifications of the Colonoscopy Clinical Care Standard indicators can be found in the Metadata Online Registry (METeOR) at <https://meteor.aihw.gov.au/content/721274>

NSQHS: Clinical Governance Standard

- Safety and quality monitoring, including incident reporting systems (1.8 and 1.11)
- Policies and procedures (for example 1.7)
- Credentialing and scope of clinical practice (1.23 and 1.24)
- Evidence-based care (1.27)

6. Patient information and consent

LHDs are responsible for providing the patient with clear and comprehensive information about all aspects of the colonoscopy for which the health service is responsible. Where possible this information should be provided to patients in their preferred language.

Mandatory inclusions

6.1 LHDs are responsible for providing the patient with clear and comprehensive information (written and verbal) about all aspects of the colonoscopy for which the health service is responsible, which may include bowel preparation, the colonoscopy, sedation or anaesthesia and alternatives to colonoscopy.

- The person seeking the consent must be suitably qualified and trained (see 6.1a) to provide sufficient information about the proposed treatment.
- The person seeking consent and performing the telephone assessment must have access to a designated consultant who has clinical oversight of the service.
- The LHD will be responsible to deliver training to the nominated triage assessment nurse.
- Information provided verbally is to be performed via a detailed, check-listed conversation, including the risks and possible complications (as agreed on by key stakeholders).
- The check-listed conversation will include support and opportunities for the patient to ask questions (see [section 4](#)).

Recommendations and considerations

6.1a It is recommended that the person performing the telephone assessment has the following:

- clinical exposure to bowel preparation, colonoscopy and anaesthesia or sedation to ensure they have a good understanding of the process and can reliably answer questions
- a good clinical understanding of patient comorbidities that may impact on sedation or anaesthesia. Previous work in pre anaesthetic clinics, perioperative units and endoscopy units is ideal.

Consent

Four criteria must be met for consent to a medical treatment to be valid:

- The patient giving consent must have capacity to consent.
- The consent must be freely given.
- The consent must be sufficiently specific to the procedure or treatment proposed.
- The consent must be informed.

The person seeking the consent must be suitably qualified and trained to provide sufficient information about the proposed treatment, including material risks, to enable the patient to gain a genuine understanding of the nature of the procedure. A patient must have the opportunity to ask questions and have those questions answered.

On the day of the procedure, the patient will be provided a second opportunity to clarify that they have understood the information provided to them about the procedure. The patient should have the opportunity to ask any further questions and can then sign the consent with the proceduralist.

Advice regarding consent on the day of the procedure has been obtained from the Ministry of Health legal branch.

6.2 LHDs should engage a health care interpreter (when required) to ensure the patient has been informed about the procedure (including risks) in a way that they can understand.

It is recommended in those LHDs where there is a high culturally and linguistically diverse (CALD) population that the DAC model incorporates the regular use of health care interpreter services (HCIS) to deliver information about the procedure. LHDs should also consider the challenges surrounding the use of HCIS such as timely access and capacity.

Refer to: [Interpreters – Standard Procedures for Working with Health Care Interpreters \(PD2017_044\)](#).

Recommendations and considerations

6.2a It is recommended that where possible written information is available in the patient's preferred language.

Consider developing information packs which detail the procedure, bowel preparation, side effects, risks and procedural information in other languages.

6.3 All specialists who are performing procedures on patients assessed via the DAC pathway should have the opportunity to review the local LHD model of care. Local specialists should reach consensus that the assessment process, consent information and information provided to the patient are sufficient for them to perform appropriate and safe colonoscopy. Specialists should also agree that the staff involved in this process are suitably qualified and trained.

The DAC service may consider formally documenting that individual specialists have agreed to participate in the process and perform endoscopy on patients assessed through the DAC pathway.

Key reference standards

ACSQHC consumer video

The ACSQHC has developed a consumer video for patients preparing for a colonoscopy. This may be particularly suitable for those who prefer visual learning.

See <https://www.safetyandquality.gov.au/standards/clinical-care-standards/colonoscopy-clinical-care-standard/colonoscopy-what-you-need-know>

ACSQHC Colonoscopy Clinical Care Standard

Quality statement 3: Informed decision making and consent

Prior to commencing bowel preparation, a patient received comprehensive consumer appropriate information about bowel preparation, the colonoscopy and sedation or anaesthesia. They have an opportunity to discuss the reason for the colonoscopy its benefits, risks, financial costs and alternative options before deciding to proceed. Their understanding is assessed, and the information provided and their consent to sedation, colonoscopy and therapeutic intervention is documented.

ACSQHC Partnering with Consumers Standard

- Informed consent (2.4)
- Information for consumers (2.9)
- Communication of clinical information (2.10)

7. Feedback and follow up

Patients should receive timely feedback regarding the outcome of their colonoscopy and any follow up that is required.

Mandatory inclusions

7.1 Feedback should be provided to the patient and referrer on the outcome of the colonoscopy and any recommended follow up.

7.2 On the day of the procedure, the treating specialist should provide verbal and written information about the outcome of the colonoscopy and any follow up that is required.

Recommendations and considerations

7.2a The DAC service policy will determine who is responsible for deciding on follow up recommendations.

Standard clinical practice is for the treating specialist on the day of the procedure to provide verbal and written information to the patient about the outcome of the procedure and any follow up that is required. This should also be communicated directly to the GP or referrer. The treating specialist should also follow up any tissue specimens that are taken as part of the procedure and action any results.

If practice at an LHD varies from this, the role of the DAC service in communicating follow up information should be clearly documented in a model of care or policy document.

Key questions to be addressed for follow up include:

- Who provides results to the patient?
- Who provides recommendations for follow up or surveillance?
- Who organises any tests or procedures required based on the results of the colonoscopy?
- Who communicates results and recommendations for follow up to the GP or referrer?

Mandatory inclusion

7.3 All communications with the patient should adhere to Ministry of Health guidance about secure communication of patient results.

Recommendations and considerations

7.3a It is recommended that the DAC service investigates ways of efficiently and securely communicating with GPs.

If feasible, DAC service communications may integrate with software used in GP practices or private rooms.

Mandatory inclusion

7.4 The DAC service recommendations for follow up should adhere to NHMRC guidelines.³

Key reference standards

ACSQHC Colonoscopy Clinical Care Standard

Quality statement 8: Discharge

Following recovery and before discharge, the patient is advised verbally and in writing about the preliminary outcomes of the colonoscopy, the nature of any therapeutic interventions or adverse events, when to resume regular activities and medicines, and arrangements for medical follow-up. The patient is discharged into the care of a responsible adult when it is safe to do so.

Quality statement 9: Reporting and follow up

The colonoscopist communicates the reason for the colonoscopy, its findings, any histology results and recommendations for follow-up in writing to the general practitioner, any other relevant clinician and the patient, and documents this in the facility records.

Recommendations for surveillance colonoscopy, if required, are consistent with national evidence-based guidelines. If more immediate treatment or follow-up is needed, appropriate arrangements are made by the colonoscopist.

Ensure that policies and procedures for information management and communication support the complete reporting of colonoscopy and histology outcomes to referring clinicians, other relevant clinicians and the patient, and that responsibilities are clearly delineated. These should include arrangements for the reporting of all histology results if any tissue was removed, regardless of the histological findings.

Note: For NBCSP participants, provide colonoscopy outcomes, results and adverse events to the NBCSP Register.

The ACSQHC has developed a report template to support implementation of the Colonoscopy Clinical Care standard quality statement 9, reporting and follow up. This report template captures all the information to support DAC and is available at: <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/colonoscopy-report-template>.

This report template is supported by two endoscopy information systems, Endobase and Provation, which are used in NSW.

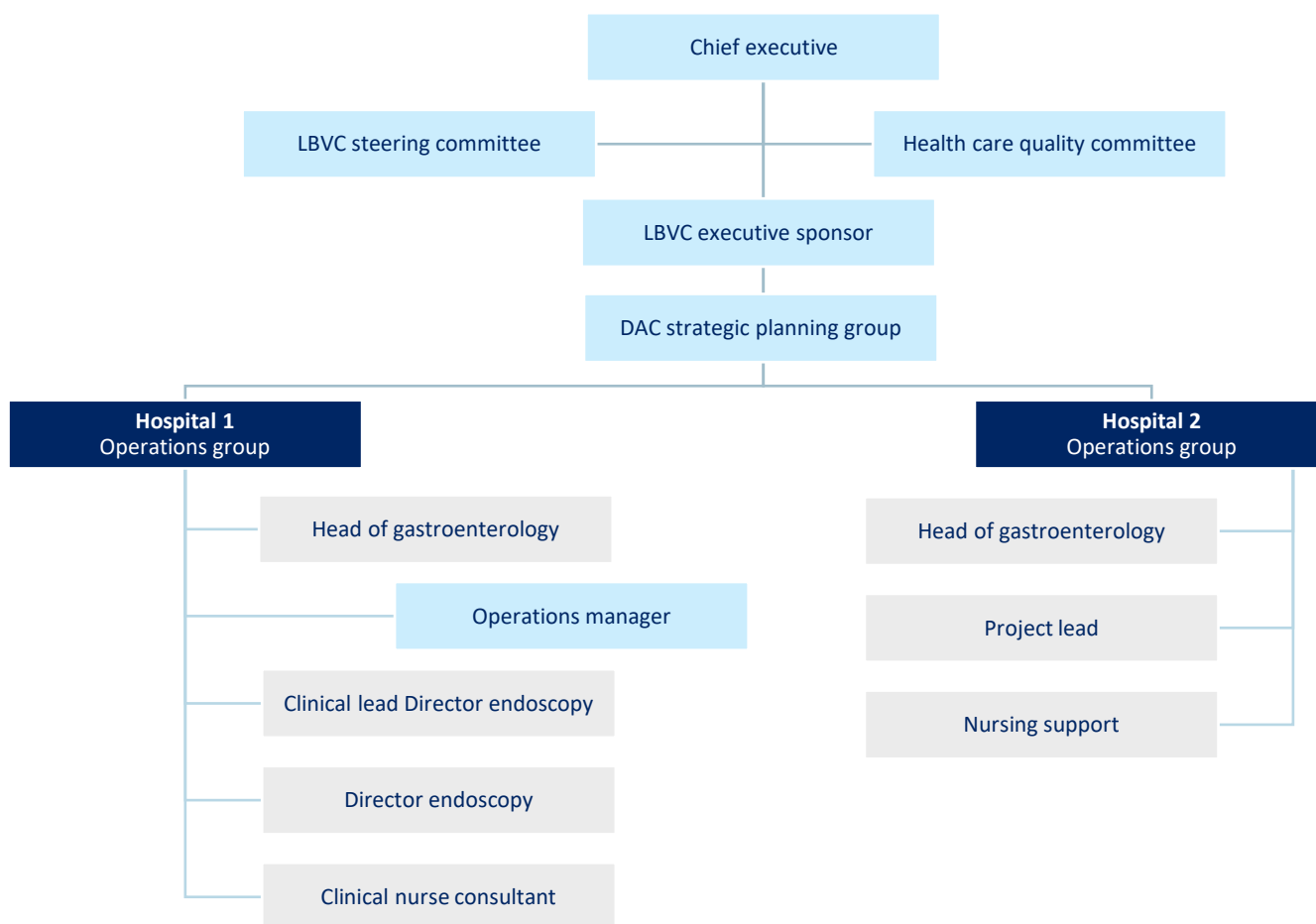
NSQHS: Partnering with Consumers Standard

- Informed consent (2.4)
- Information for consumers (2.9)
- Communication of clinical information (2.10)
- Colonoscopy Clinical Care Standard 2018
- Quality Statement 8: Discharge
- Quality Statement 9: Reporting and Follow up

8. Appendices

Appendix A. Local governance structure examples

Example 1



DAC strategic planning group

- LBVC executive sponsor
- LBVC manager
- Head of department
- EDO

DAC strategic planning group

- Director medical services
- Head of department
- Clinical lead
- Project lead
- Divisional directors
- Anaesthetics

Example 2

Direct access colonoscopy working group

- Clinical nurse consultant – clinical lead
- Manager clinical redesign – LBVC lead
- Endoscopy nurse unit manager – **hospital 1**
- Theatre manager – **hospital 1**
- Endoscopy nurse unit manager – **hospital 2**
- Theatre manager – **hospital 2**

Endoscopy management committee

- Head of department gastroenterology
- Head of department general surgery
- Clinical director division of medicine
- Operational nurse manager – **hospital 1**
- Operational nurse manager – **hospital 2**
- Nurse manager, perioperative – **hospital 1**
- Nurse unit manager, theatres – **hospital 2**
- Clinical nurse consultant endoscopy services – (chair)
- Endoscopy nursing unit manager – **hospital 1**
- Endoscopy nursing unit manager – **hospital 2**
- Director clinical operations as required
- Invitees as required

Value based care committee

- Director, quality, strategy and improvement
- Director healthcare improvement
- General manager – **hospital 1**
- General manager – **hospital 2**
- Director of nursing and midwifery
- Director health information and business support
- Director mental health
- Director allied health services
- Director women, children & families
- Director community, chronic and complex care

Manager efficiency & improvement

- Manager activity based management
- Change manager clinical operations
- Senior management accountant
- District clinical director
- ICT performance and business services manager

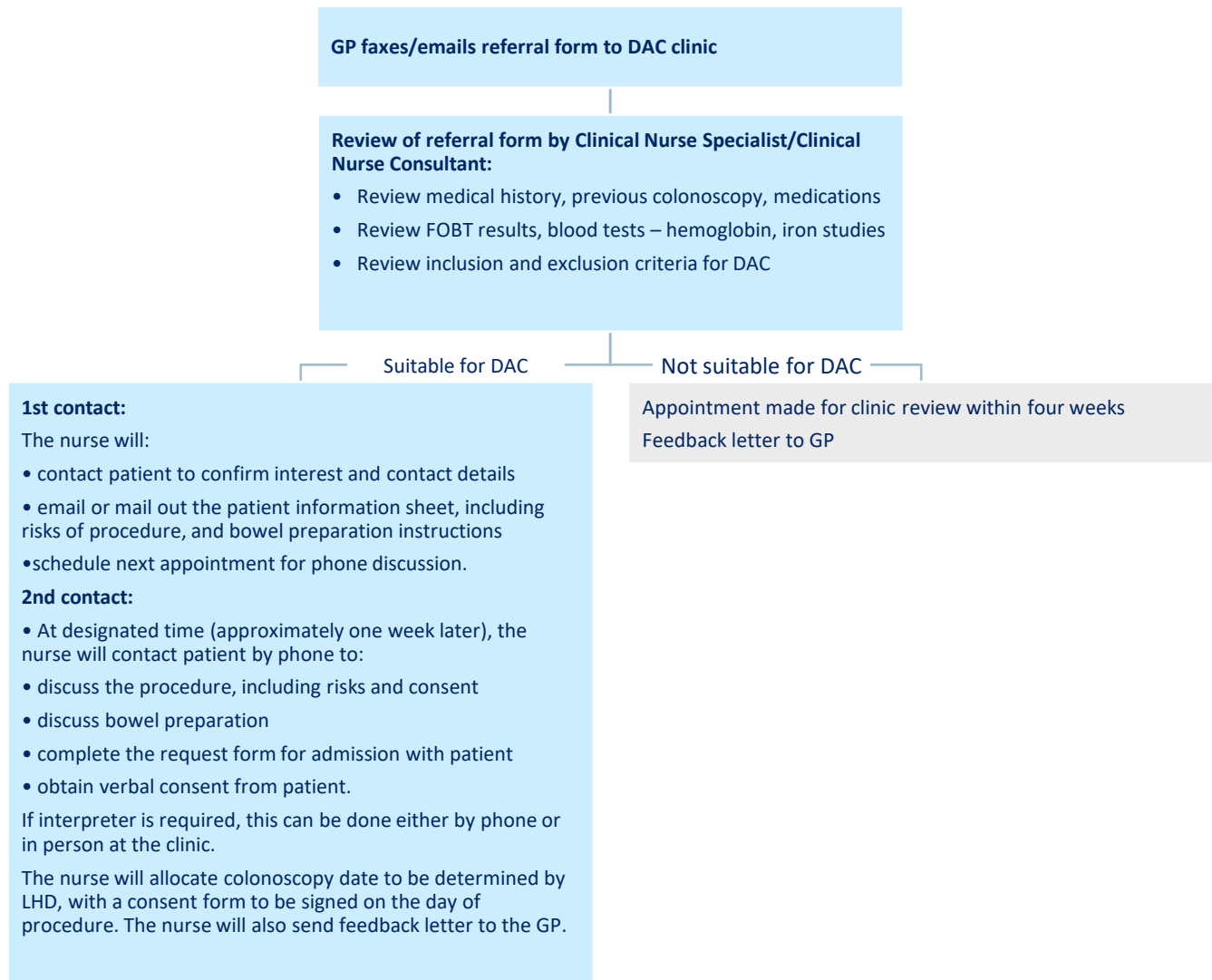
- Clinical lead quality improvement/ National Surgical Quality Improvement Program (NSQIP) manager
- Deputy director talent and capability
- Manager clinical redesign

Sustainability program steering committee

- Chief executive
- Director clinical operations
- Director, quality, strategy and improvement
- Director healthcare improvement

Appendix B. DAC service clinical review flowchart

Within scope of influence for NSW Health



Appendix C. DAC check-listed conversation and assessment pro forma

Topics to consider	Inclusions
Introduction	Mandatory <ul style="list-style-type: none">• Identify who you are and why you are calling• Confirm patient details
Information about direct access colonoscopy (DAC) and referral	Mandatory <ul style="list-style-type: none">• Explanation of DAC• Confirm patient is aware that they have been referred by their GP for investigation following a positive iFOBT• Provide patient the opportunity to opt out of the direct access pathway
Information about positive iFOBT	Mandatory information to include: <ul style="list-style-type: none">• Explain what a positive FOBT means:• Blood has been detected in your stool sample. About 1 in 14 people will have a positive FOBT result.• Bleeding may be caused by a number of conditions, including polyps, haemorrhoids or inflammation, and may not necessarily be cancer related. However, the bleeding needs to be investigated.<ul style="list-style-type: none">— 50% normal colonoscopy— 45% pre-cancerous lesion— 5% early stage cancer• Explain that the investigation required is a colonoscopy
Provide information about colonoscopy	<ul style="list-style-type: none">• Explain what a colonoscopy involves• Explain the purpose of this conversation Useful information: <p>ACSQHC consumer video: https://www.safetyandquality.gov.au/standards/clinical-care-standards/colonoscopy-clinical-care-standard/colonoscopy-what-you-need-know</p>

Medical exclusions and pathways for high risk comorbidities

Mandatory

- LHD to determine exclusion criteria such as:
- age >75 years
- pacemaker
- artificial heart valve or significant valvular disease
- implantable defibrillators
- unstable ischemic heart disease
- myocardial infarction or stroke within three months
- diabetes – insulin dependent
- anaesthetic or sedation issues (major)
- known contraindications to bowel preparation
- glomerular filtration rate (thresholds)
- body mass index (BMI) (thresholds)
- cirrhosis or advanced liver disease
- ischaemic heart disease
- cerebrovascular disease
- respiratory disease
- history of anaesthetic adverse event
- anticoagulants (antithrombotic/antiplatelet agents) – Note: patients on aspirin can continue to colonoscopy

Medical exclusions and pathways for high risk comorbidities (cont.)

LHD determined pathway for those patients with ‘red flag’ features such as:

- iron deficiency anaemia
- undiagnosed abdominal pain
- weight loss
- palpable or visible rectal or abdominal mass.

Other exclusions

- Interviewer’s discretion
- Reluctance of patient to proceed directly to procedure
- Patient unable to participate in telephone interview or adequately comprehend instructions over telephone

Other symptoms/ family history

Mandatory

Check for any other colorectal cancer symptoms:

- rectal bleeding – confirm presence of bright bleeding
- altered bowel habit
- unexplained abdominal or rectal pain
- unintentional weight loss >5%.

Check for family history of colorectal cancer.

Check for previous colonoscopies, date and outcome.

Risks and complications

Mandatory

More common risks and complications of the procedure include:

- abdominal bloating, discomfort and passing 'wind' after the procedure (may last for 1–5 days)
- nausea and vomiting
- faintness or dizziness after the procedure
- pain, redness or bruising at the intravenous injection site

Uncommon risks and complications include:

- 1 in 1,000 accidental perforation (hole) causing a leak
- 70% will need surgery
- 40–60% temporary colostomy, reversed in 3–6 months
- **1 in 100** will experience a significant bleed from the bowel where a polyp was removed. Further endoscopy, a blood transfusion or an operation may be necessary
- endoscopist may not see the entire bowel. This can happen if your bowel is not completely clean or if the colonoscope could not be passed to the end of your large bowel
- missed polyps, growths or bowel disease
- anaesthesia may cause heart and lung problems such as heart attack or vomit in the lungs causing pneumonia. Emergency treatment may be required
- change of the anaesthetic from sedation to general
- 'dead arm' type feeling in any nerve due to positioning with the procedure – usually temporary
- an existing medical condition that you have may worsen

Rare risks and complications include:

- bacteraemia (infection in the blood) – this will need antibiotics
- stroke resulting in brain damage
- anaphylaxis to medication given at the time of procedure.

Death as a result of complications to this procedure is rare.

Medications

Mandatory

Obtain current medication list.

Medications to check for:

- iron replacement
- prophylactic aspirin
- fish oil
- St John's Wort
- turmeric
- anti hyperglycaemic
- oral contraceptive

- antiepileptic

Bowel preparation

Mandatory

Explanation of bowel preparation including instructions

Other considerations

Mandatory

Confirm that the person will have someone to pick them up following the procedure and someone to support them overnight.

Booking process

Dependent on local processes.

Instructions and documents to provide patients

To be agreed upon by clinicians and stakeholders.

Other considerations

- Provide contact details for the DAC service.
- Check availability of any recent blood tests.
- Interviewer's discretion not suitable for DAC.
- Inform gastroenterologist/general surgeon of patient.

Appendix D. Evidence- based bowel preparation

Bowel preparation

Inadequate bowel preparation is associated with lower adenoma and polyp detection rates, higher caecal intubation failure rates, unsatisfactory patient experience, shorter colonoscopy surveillance intervals and increased costs.^{4,5,6,7}

There are now evidence-based guidelines on the safety and efficacy of bowel preparation, covering patient information, diet, timing and type of laxatives and different patient scenarios.^{8,9,10} The reader is encouraged to review these guidelines as an understanding of these factors allows greater chance for safe, effective bowel preparation as well as improved patient outcomes and experiences.

Diet and patient information

Not only are low fibre diets (<10g /day) on the day preceding colonoscopy as effective as clear fluid restriction in terms of bowel preparation adequacy and polyp detection rate, they are associated with enhanced patient satisfaction, tolerability and willingness to repeat colonoscopy.^{11,12,13}

Permissible foods and fluids allowed in the 'White Diet' is shown in Table 1.

Recent studies confirm that compared to receiving standard instructions, patients who received enhanced instructions (e.g. visual aids, SMS, social media or smartphone apps) prior to colonoscopy had better bowel cleanliness, improved adenoma detection rates and higher patient satisfaction.

Table 1. The 'White Diet' – low fibre diet that can be used in the day(s) prior to colonoscopy³

Foods and fluids permitted	Foods not allowed
<ul style="list-style-type: none">• Milk (regular, low fat, skim), water, lemonade, soda or mineral water, clear (not coloured) sports drinks• White-coloured yoghurt (no added fruit or insulin), mayonnaise, cream, sour cream, butter and margarine, oil for cooking• Regular white bread/toast, popped rice cereal (e.g. Rice Bubbles), eggs• White rice, regular pasta, potatoes (peeled), rice noodles• Plain rice crackers, white flour, sugar• Chicken breast (no skin), white fish fillet (no skin)• Plain cream cheese, cheddar cheese, ricotta, fetta, cottage, parmesan or mozzarella cheese, white sauce, white chocolate, vanilla ice cream, lemonade ice-block (e.g. 'Icy-pole'), clear jelly, custard, 'milk bottles' (white confectionery)	<ul style="list-style-type: none">• Anything not listed in the left column• Other white-coloured foods such as pears, parsnip, cauliflower, onion, high fibre white bread, tofu, coconut, porridge, banana, mushrooms, semolina, couscous, popcorn

Timing

The timing of the laxative ingestion is one of the most important factors in successful bowel preparation. It is now clear that 'split-dosing' is superior to 'day-before' bowel preparation in terms of bowel cleanliness, adenoma detection rates and patient tolerability.^{14,15}

Studies have shown inverse correlation between bowel cleanliness and the interval of time between last dose of laxative and start of colonoscopy.^{16,17} Meta-regression analysis showed that the clinical gain of 'split-dosing' (as compared to 'day-before') was highest within three hours from last dose ingestion, with no further benefit if delayed >5 hours.¹⁸

As supported by systematic review, it is reasonable and safe to recommend two hours as the minimum interval between ingestion of last dose of laxative and start of the colonoscopy (in line with ANZCA standards).^{19,20}

For patients undergoing afternoon colonoscopy, 'same-day' dosing (entire laxative dosing taken on same day as the colonoscopy) is an acceptable alternative to 'split-dosing' as it appears to provide similar results for bowel cleanliness and patient tolerability.²¹

Laxatives

Polyethylene glycol (PEG) solutions are osmotically balanced and are intended to impair intestinal absorption of water and sodium by maintaining isosmosis of bowel lumen content. As such PEG formulations have a good safety profile and should be considered first choice laxative in the elderly, renal dysfunction, cardiac failure and cirrhosis.^{15,22}

In order to improve tolerability, low volume PEG + osmotically active adjuvant (e.g. ascorbic acid) solutions have been formulated and shown to be non-inferior to high volume PEG and non-PEG regimens in terms of bowel cleanliness.^{23,24,25}

Non-PEG regimens are combination preparations containing, sodium picosulfate, magnesium oxide and citric acid and work by stimulating peristalsis and promoting water/ electrolyte accumulation within the colon. Whilst these formulations maybe better tolerated because of lower ingested volumes and provide high overall success rates, there is risk of dehydration and magnesium accumulation that mandates appropriate patient selection.^{26,27}

Table 2. Summary on efficacy and safety of laxatives for bowel preparation (Adapted from ESGE guidelines 2019⁵ and Clinical Guidelines Wiki)⁷

Agent	Action	Efficacy (split/ same-day)	Safety
Polyethylene Glycol (PEG)			
High volume 3–4 L PEG	Osmotic	Non-inferior or superior to low volume PEG or non-PEG regimens	First choice for older age, renal failure, cirrhosis Not recommended in heart failure (NYHA class III or IV).
Low volume 2 L PEG + ascorbate	Osmotic	Non-inferior to high volume PEG and non-PEG formulations	Not recommended in severe renal insufficiency (creatinine clearance < 30 mL/min); heart failure (NYHA III or IV) Contraindicated in Phenylketonuria & G-6PD deficiency
Non-PEG formulations			
Sodium picosulfate, magnesium oxide, citric acid	Osmotic, stimulant	Non-inferior to high volume PEG or 2 L PEG + ascorbate	Not recommended in congestive heart failure, severe renal insufficiency, patients at risk of hypermagnesaemia and rhabdomyolysis
Sodium phosphate	Hyperosmotic	Non-inferior to high and low volume PEG	Risk of acute kidney injury and acute phosphate nephropathy with renal failure Avoid in older age >65yo, renal insufficiency, cardiac failure, ascites, active IBD, inability to hydrate adequately

Documentation of quality of bowel preparation on colonoscopy report

It is recommended that clinical practices aim for minimum adequate bowel preparation rates of 85–90% and that bowel preparation quality be documented at the time of the colonoscopy using validated scales.^{8,9}

Whilst there are multiple bowel preparation quality scales the Boston Bowel Preparation Scale (BBPS) is supported by extensive reliability data and is recommended as the current standard for use in clinical practice.²⁶ A BBPS total score ≥ 6 and all segment scores ≥ 2 (assessed on withdrawal after washing and suctioning) are indicative of an adequate bowel preparation for the detection of adenomas > 5 mm and for repeat colonoscopy at standard, guideline-recommended intervals.^{28,29}

Table 3. Boston Bowel Preparation Scale rating for each colon segment (right, transverse, left)³⁰

	Points	Description
Total BBPS score ranges from 0 (very poor) to 9 (excellent) Adequate preparation = BBPS total score ≥ 6 and all segment scores ≥ 2	0	Unprepared colon segment with stool that cannot be cleared
	1	Portion of mucosa in segment seen after cleaning but other areas not seen because of retained material
	2	Minor residual material after cleaning but mucosa of segment generally well seen
	3	Entire mucosa of segment well seen after cleaning

Inadequate bowel preparation

In the case of inadequate bowel preparation, repeat colonoscopy should be offered within 12 months. The next regimen of bowel preparation needs to be individualised to take into account possible reasons for failure.

Factors that have been associated with inadequate or poor bowel preparation include older age, constipation, chronic medical conditions (diabetes, stroke, dementia, cirrhosis) and medications (narcotics, tricyclic antidepressants).^{31,32}

For those with history of or predicted significant risk for inadequate bowel preparation, there is evidence that an intensive split-dose high volume PEG regimen (including 3 days low residue diet and bisacodyl 10mg the day before) provides satisfactory success rate for adequate bowel cleansing (intention-to-treat analysis 81.1%).³³

Summary of bowel preparation recommendations

- High quality bowel preparation is necessary for successful colonoscopy.
- Clinical practices should aim for minimum adequate bowel preparation rates of 85–90%.
- Bowel preparations should be individualised taking into account patient's health, comorbidities, tolerability and safety.
- A low fibre diet is recommended on the day prior to colonoscopy.
- Consider using enhanced instructions to patients for bowel preparation.
- Split-dose bowel preparation is recommended.
- For patients undergoing afternoon colonoscopy, same-day bowel preparation is an acceptable alternative.
- The last dose of bowel preparation should be started within five hours of colonoscopy and completed at least two hours before start of the procedure.
- PEG formulations are safer in the elderly and for patients with comorbidities.
- Oral sodium phosphate bowel preparation should be avoided
- Bowel preparation quality should be documented on the colonoscopy report using a validated quality scale (BBPS).
- An adequate bowel preparation for detection of adenomas >5 mm (and for repeat colonoscopy at standard, guideline-recommended intervals) is equivalent to BBPS total score ≥ 6 and all segment scores ≥ 2 .
- Repeat colonoscopy should be offered within 12 months in cases of inadequate bowel preparation.
- For patients with history of inadequate bowel preparation, an intensive split dose high volume PEG regimen can be effective.

Logo
here

Logo
here

Direct access colonoscopy referral form

District	<input type="text"/>
Facility	<input type="text"/>
Name of referral form (available via HealthPathways)	<input type="text"/>

Patient Information

Family name

Given name

MRN

Male Female

Date of birth

Address line one

Address line two

Suburb

Postcode

Contact number home

Mobile

Is this person of Aboriginal or Torres Strait Islander origin?

- Aboriginal Aboriginal and Torres Strait Islander
 Torres Strait Islander Not Aboriginal or Torres Strait Islander

Interpreter required Yes No

Language spoken

Mandatory information

Past medical history attached Yes

Please tick all that apply (LHD can add to the list below)

Diabetes (Type 1/Type 2)

Heart disease – please specify

Respiratory – disease please specify

Renal disease – eGFR

Other – please specify

List of current medications attached Yes

Anti platelet or antithrombotic treatment (including aspirin)

Relevant information

Does this patient have a positive iFOBT result? Yes

iFOBT results attached Yes

Source:

- National Bowel Cancer Screening Program Self-test kit, e.g. Rotary bowel scan
 Other – specify below

High risk ‘red flag’ features (LHD to agree upon high risk features)

- Iron deficiency anaemia Unexplained weight loss
 Unexplained abdominal pain Palpable or visible rectal/abdominal mass

Smoker Yes No

Allergies Yes – specify below No

Family history

First degree relative with colorectal cancer Yes No

Relevant blood tests. Please attach recent blood test results, including: full blood count, iron studies

Other investigations. Please specify:

Previous colonoscopy? No

Yes – specify date (Please attach results of previous colonoscopies)

Eligible patients may be assessed by telephone and booked directly for colonoscopy. Patients must have the capacity to understand advice on the risks and benefits of the procedure and comprehend instructions on diet and bowel preparation. Patients who lack capacity for consent must be reviewed in a specialist clinic.

Yes – The patient has a cognitive impairment or reduced capacity to provide consent

Referring doctor - practice stamp or details

Doctor’s signature

Date

9. Glossary & acknowledgements

Glossary of acronyms

Acronym	Meaning
ACCHS	Aboriginal community controlled health services
ACSQHC	Australian Commission on Safety and Quality in Health Care
ADR	Adenoma detection rate
AHLO	Aboriginal hospital liaison officer
AHW	Aboriginal health worker
AMS	Aboriginal medical service
BBPS	Boston Bowel Preparation Scale
CALD	Culturally and linguistically diverse
CCRTGE	Conjoint Committee for the Recognition of Training in Gastrointestinal Endoscopy
CNC	Clinical Nurse Consultant
CNS	Clinical Nurse Specialist (I or II)
DAC	Direct access colonoscopy
GESA	Gastroenterological Society of Australia
GP	General practitioner
HCIS	Health care interpreter service
iFOBT	Immunochemical faecal occult blood test
LBVC	Leading Better Value Care
LHD	Local health district
MOU	Memorandum of understanding
NBCSP	National Bowel Cancer Screening Program

NSQHS The National Safety and Quality Health Service

NUM Nurse unit manager

OAC Open access colonoscopy - **an alternate referral pathway allowing a GP to refer directly to an endoscopist without a specialist appointment prior to colonoscopy. This model differs from a DAC model due to the absence of nurse-led assessment and triage as well as a lack of overarching specialist oversight.**

PHN Primary health network

RFA Recommendation for admission

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