Digestive Health Network

Colonoscopy Services Model of Care

July 2009

Government of Western Australia
Department of Health
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Executive Summary

Introduction

Colonoscopy is a key investigation in the assessment of colonic diseases and currently represents the gold standard diagnostic procedure. It is the principal diagnostic modality for colorectal cancer with a sensitivity of 95%.

Inappropriate referral and provision of inadequate clinical information constitute major hurdles in delivery of efficient and appropriate colonoscopy services.

In 2006/07 more than 50,000 colonoscopies were performed in WA, with 9% performed in public tertiary hospitals and a further 27% performed in secondary and regional hospitals. The remainder are performed in the private sector.

It is estimated that 15-20% of colonoscopy referrals contain inadequate clinical information for determination of appropriateness and timing of the procedure (Internal audit information, Gastroenterology Department, Fremantle Hospital). Furthermore, with the introduction of the National Bowel Cancer Screening Program there is likely to be significant pressure for provision of further services.

Objectives of the Colonoscopy Services Model of Care

The Colonoscopy Services Model of Care is an articulation of best practice service provision across the continuum of care. It will provide a framework for the delivery of a standardised patient-centred approach that will ensure timely, effective, and appropriate service delivery for all Western Australians requiring access to colonoscopy services. In addition, it will also be able to streamline referral for upper gastrointestinal endoscopy services using a similar referral tool which is a byproduct of the Colonoscopy Services Model of Care. The Colonoscopy Services Model of Care is intended to facilitate the following:

Summary of recommendations and outcomes

- Ensure that a patient/consumer centred approach is paramount in the delivery of colonoscopy services and is in accordance with accepted health service delivery guidelines and protocols.
- Provide standardised guidelines for referral for colonoscopy.
- Develop and provide a standardised guidelines driven electronic referral tool (form) that mandates correct provision of information and indication for procedure.
- Ensure the timely access to colonoscopy services in accordance with guidelines through utilisation of an electronic referral tool.
- Implement quality and audit processes at the local institutional level to ensure adherence to the colonoscopy model of care best practice and safety and quality recommendations.
1. Model of Care Overview

1.1 Model of Care Stages and Key Objectives

The Colonoscopy Services Model of Care is an articulation of best practice for adults diagnosed with a condition requiring access to colonoscopy services across the continuum of patient care.

Colonoscopy services have been selected as a priority digestive health issue because the referral process is often incomplete in terms of patient information provided by the referring practitioner and indication for procedure. In addition, many procedures are requested either inappropriately or not in accordance with best practice guidelines. This has significant impact on resource utilisation and wait time for the procedure and adds to the already substantial public sector waiting list.

<table>
<thead>
<tr>
<th>Stages across the colonoscopy service continuum</th>
<th>Key Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient/consumer centred approach</td>
<td>▪ Provide appropriate community education about common gastro-intestinal diseases and disorders, and the availability of diagnostic and treatment services</td>
</tr>
<tr>
<td></td>
<td>▪ Patients, and their families/carers as appropriate, are sensitively provided with a full explanation about the procedure, including its possible risks</td>
</tr>
<tr>
<td></td>
<td>▪ Patients, and their families/carers as appropriate, are provided with best practice post-procedure support and education</td>
</tr>
<tr>
<td>General practitioner awareness of correct use of colonoscopy</td>
<td>Ensure colonoscopy referral guidelines and awareness strategies are in place</td>
</tr>
<tr>
<td>Refer patients appropriately for colonoscopy</td>
<td>Develop and provide a standardised guidelines driven, soft-copy referral tool that recommends correct provision of information and indication for procedure</td>
</tr>
<tr>
<td>Best management and processing of colonoscopy booking following referral</td>
<td>The standardised guidelines driven, soft-copy referral tool is electronically submitted to the appropriate health care facility or area as chosen by the referring practitioner</td>
</tr>
<tr>
<td>Patient follow-up</td>
<td>Patients are followed up by the referring practitioner in a timely manner according to best practice guidelines and recommendations</td>
</tr>
</tbody>
</table>
1.2 Methodology

The Digestive Health Network Executive Advisory Group identified important clinical areas where improvements could be made to service access and provision of information aimed at aligning current practice with best practice guidelines. A key issue to emerge from these processes was the requirement for improved referral quality (clinical information, indication) for access to colonoscopy (and other ‘direct access’ gastroenterological endoscopic procedures). This was supported by the outcomes of a survey of general practitioners conducted by the Digestive Health Network during 2007.

This formative work was utilised to commence the initial development of the Colonoscopy Model of Care document by the Digestive Clinical Lead with support from the Health Networks Branch Senior Policy Officer.

Further expert consultation through members of the Digestive Health Network Executive Advisory Group occurred throughout the development of the model of care. Additional stakeholder feedback and submissions to iterations of the model were invited, considered and incorporated as appropriate. The final draft was then circulated to the wider digestive health network for comment.

The Digestive Health Network Executive Advisory Group endorsed the finalised model of care.
2. Current Colonoscopy Services

2.1 Background

Colonoscopy is the most accurate investigation for assessing the colon and rectum\(^1\). Currently it is the gold standard for diagnosing pathological conditions affecting the colon and has a sensitivity of 95% for colon cancer\(^2\). Unlike barium enema, or computerised tomography colonography, colonoscopy enables both direct visualisation and histological sampling to occur during the same procedure with the removal of adenomatous polyps, the precursors to colorectal cancer. Colonoscopy requires bowel cleansing prior to the procedure and is otherwise generally well tolerated with an acceptable complication rate of 0.14% for diagnostic colonoscopy compared with 2% for therapeutic colonoscopy\(^3\).

Several conditions can be diagnosed at colonoscopy including colorectal cancer, inflammatory bowel disease, diverticular disease and microscopic and infective colitis. However, the greatest role of colonoscopy is in the detection of colonic polyps, the precursors to colorectal cancer which is a major health issue in Australia. Colorectal cancer is the most common cancer reported to Australian cancer registries and was responsible for 13% of all cancer deaths in 2001\(^4\). Each year there are approximately 12,600 new cases of colorectal cancer and 4,700 deaths, with about one in twenty Australians likely to develop colorectal cancer during their lifetime\(^4\). Most colorectal cancers develop from pre-existing adenomatous polyps that on average take 10 years to transform into invasive cancer for polyps <10mm\(^5\). Colonoscopy with polypectomy has been shown to significantly reduce the expected incidence of colorectal cancer by 76-90% in multiple cohort studies\(^7\)\(^-\)\(^9\) and indirect evidence from faecal occult blood testing trials has shown that colonoscopy reduces mortality\(^10\).

The miss rate of colonoscopy for polyps, on the basis of back to back colonoscopies is 27% for adenomas <5mm and 6% for polyps >10mm\(^11\). Improved polyp detection at colonoscopy has been shown to be achieved with enhanced operator skill and practice\(^12\), better bowel cleansing\(^13\), and greater time spent on withdrawal of the colonoscope\(^14\).

The indications for colonoscopy are changing. Previously it has been predominantly used as a diagnostic tool in symptomatic patients with lower gastrointestinal bleeding, abdominal pain or a change in bowel habit. However, more recently a large proportion of colonoscopies are now being undertaken as repeat procedures for polyp surveillance in those who have previously had polyps removed at colonoscopy. Furthermore, the commencement and extension of the recent National Bowel Cancer Screening Program in Australia using faecal occult blood testing (FOBT) will have a large impact on the demand for colonoscopy services over the next decade. Approximately 7-8% of all people undergoing FOBT will have a positive result which will require a colonoscopy, 40% will have polyps detected and 5-10% will have colorectal cancer which requires future surveillance colonoscopies\(^15\).
2.2 Roles of Colonoscopy (Symptoms, Screening and Surveillance)

Colonoscopy For Symptomatic Patients: The yield of colonoscopy in patients with symptoms is predominantly dependent on the patients age, family history of colorectal cancer and the presence of specific ‘red flag’ or ‘alarm’ symptoms including iron deficiency anaemia, rectal bleeding, a recent change in bowel habit or abdominal pain (National Health and Medical Research Council guidelines 2005). Many of these symptoms can occur due to benign disease, including irritable bowel syndrome or haemorrhoids, and colorectal cancer is uncommon in patients below the age of 40 but persistent symptoms demand full investigation in younger patients.

Colonoscopy follow-up of positive FOBT: Participants in the National Bowel Cancer Screening Program with a positive faecal occult blood test, or those outside the screening program who also have a positive faecal occult blood test, are recommended to proceed to colonoscopy. In this instance, the majority will have a normal colonoscopy, but up to 40% are likely to have an adenoma detected and polypectomy, requiring future surveillance colonoscopies.

Family History: In those people with a positive family history of colorectal cancer, the risk of developing bowel cancer is dependent upon the number of affected family members, the age of each affected individual, the closeness of the relationship, together with any specific familial genetic colorectal cancer syndromes such as hereditary nonpolyposis colorectal cancer (HNPCC) or familial adenomatous polyposis coli (FAP). Table 1 describes the relative risk in those people with a positive family history of colorectal cancer.

Table 1. Familial Clustering of the most common forms of bowel cancer

<table>
<thead>
<tr>
<th>Family history</th>
<th>Relative risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>One first-degree relative with bowel cancer diagnosed at 55 years or over</td>
<td>up to 2-fold</td>
</tr>
<tr>
<td>One first-degree relative with bowel cancer diagnosed under 55 years</td>
<td>3 to 6 fold</td>
</tr>
<tr>
<td>Two first-degree relatives with bowel cancer diagnosed at any age</td>
<td>3 to 6 fold</td>
</tr>
</tbody>
</table>

Note: Relative risk is the ratio of the risk of developing Colorectal Cancer in a particular exposed group to the average risk in the whole population (NH&MRC, 2005)

Surveillance recommendations for people with a family history of Colorectal Cancer are shown in Appendix 1.

Colonoscopy Surveillance in Asymptomatic Patients: Surveillance colonoscopies are required in certain patient groups who have had previous polyps detected and removed, a bowel resection for colorectal cancer, or have chronic inflammatory bowel disease. The former group now make up the predominant patient population undergoing repeat colonoscopy. However this may be at the expense of those patients who have symptoms and who have never been previously investigated due to delays in diagnosis because of limited access to over-stretched colonoscopy services. Consideration should be given to the overall health status (morbidity and mortality) of the patient prior to embarking on surveillance as this will substantially impact on safety and utility of the surveillance programme.
It is therefore imperative that patients are triaged safely and accurately, according to current evidence based guidelines. This will ensure that patients are not undergoing inappropriate or delayed colonoscopy. Understanding the differing roles and yields of colonoscopy in terms of the investigation of symptoms, the screening of asymptomatic patients and the surveillance of patients following polypectomy is therefore important, as they impact on the rationalisation and prioritisation of endoscopy services. The ability to triage patients safely and accurately for colonoscopy into each of these groups is also vitally dependent upon the quality of information received from GP referrals as well as from medical and surgical referrals from within the hospital.

### 2.3 Colonoscopy guidelines

Currently the triaging of colonoscopy requests both from open access referrals and from within the hospital is done by gastroenterologists. This often involves sending back referrals for further information due to lack of clinical or family history details or an inappropriate surveillance interval colonoscopy request, with subsequent patient delays and extra work for the gastroenterologist.

Several published evidence based guidelines exist which should be utilised to stratify the urgency of the procedure and the timing of the colonoscopy. These include both national guidelines (National Health and Medical Research Council of Australia guidelines on “The prevention, early detection and management of colorectal cancer”) and international guidelines, such as those published by the American Society of Gastrointestinal Endoscopy.

The existing colonoscopy guidelines lack uniformity and are not adhered to in clinical practice. Excessive colonoscopy requests and repeat procedures for patients following polypectomy, with family history of bowel cancer, and after curative resection for bowel cancer are not uncommon. Studies have shown that requests for more frequent repeat colonoscopy than guidelines suggest rarely yields significant neoplasia, even in symptomatic patients, and that the current triaging of patients for colonoscopy using NHMRC guidelines stratifies patients appropriately.

To ensure that all colonoscopy referral requests are appropriate, and that the urgency of referrals is correctly triaged according to guidelines, requires significant time and effort from gastroenterologists. This is an inefficient use of skilled resources. At Flinders Medical Centre in Adelaide, specialist nurses trained in the triaging of colonoscopy requests significantly improved the appropriateness of referrals and ensured appropriate adherence to guidelines. This resulted in a 23% reduction in the number of post-polypectomy surveillance colonoscopies performed per year and a 17% reduction for colonoscopies performed for a family history of colorectal cancer. The use of a specialist nurse within gastroenterology departments could therefore ensure substantial improvements in the appropriateness of endoscopy referrals, acquisition of important clinical information, communication between patients, GPs and the hospitals and ultimately, more efficient use of limited endoscopy resources.
2.4 Colonoscopy – the future

The recent introduction of the National Bowel Cancer Screening Program in Australia will significantly increase the number of referrals for colonoscopy over the next decade. Colonoscopy services within the public health care system need to be organised to ensure an efficient and appropriate use of resources, which requires a greater awareness of guidelines from referring practitioners and accurate triage (ideally by a specialist nurse) to ensure timely investigation and surveillance of patients who require colonoscopy.

Table 2. Colonoscopy numbers per annum by hospital type 1999/00 – 2006/07

<table>
<thead>
<tr>
<th>Year</th>
<th>Public North Metro</th>
<th>Public South Metro</th>
<th>Public WACHS</th>
<th>Private</th>
<th>Unclassified</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teaching</td>
<td>Non-teaching</td>
<td>Teaching</td>
<td>Non-teaching</td>
<td>Teaching</td>
<td>Non-teaching</td>
</tr>
<tr>
<td>1999/00</td>
<td>3,022</td>
<td>2,308</td>
<td>3,022</td>
<td>1,796</td>
<td>319</td>
<td>4,700</td>
</tr>
<tr>
<td>2000/01</td>
<td>2,832</td>
<td>2,136</td>
<td>2,856</td>
<td>2,111</td>
<td>322</td>
<td>5,122</td>
</tr>
<tr>
<td>2001/02</td>
<td>2,697</td>
<td>2,253</td>
<td>2,703</td>
<td>1,983</td>
<td>293</td>
<td>4,938</td>
</tr>
<tr>
<td>2002/03</td>
<td>2,681</td>
<td>2,316</td>
<td>2,709</td>
<td>2,137</td>
<td>299</td>
<td>5,097</td>
</tr>
<tr>
<td>2003/04</td>
<td>2,454</td>
<td>2,274</td>
<td>2,718</td>
<td>1,853</td>
<td>331</td>
<td>5,122</td>
</tr>
<tr>
<td>2004/05</td>
<td>2,755</td>
<td>2,432</td>
<td>2,998</td>
<td>2,242</td>
<td>304</td>
<td>5,349</td>
</tr>
<tr>
<td>2005/06</td>
<td>2,317</td>
<td>3,060</td>
<td>2,913</td>
<td>2,634</td>
<td>306</td>
<td>5,151</td>
</tr>
<tr>
<td>2006/07</td>
<td>2,087</td>
<td>4,655</td>
<td>2,325</td>
<td>4,070</td>
<td>321</td>
<td>5,602</td>
</tr>
</tbody>
</table>

Source: WA Health Epidemiology Branch 2008

Table 3. Predicted growth

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PUBLIC</th>
<th>PRIVATE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/2008</td>
<td>19,144</td>
<td>34,112</td>
<td>53,256</td>
</tr>
<tr>
<td>2008/2009</td>
<td>20,625</td>
<td>35,894</td>
<td>56,519</td>
</tr>
<tr>
<td>2009/2010</td>
<td>21,801</td>
<td>37,467</td>
<td>59,268</td>
</tr>
<tr>
<td>2011/2012</td>
<td>23,941</td>
<td>40,598</td>
<td>64,539</td>
</tr>
<tr>
<td>2012/2013</td>
<td>25,341</td>
<td>42,382</td>
<td>67,723</td>
</tr>
<tr>
<td>2013/2014</td>
<td>26,432</td>
<td>43,958</td>
<td>70,390</td>
</tr>
<tr>
<td>2014/2015</td>
<td>27,574</td>
<td>45,561</td>
<td>73,135</td>
</tr>
</tbody>
</table>

Source: WA Health Epidemiology Branch 2008

2.5 Access to Services

Current health service provider awareness, diagnostic practices and protocols for referral for colonoscopy are variable in Western Australia. This is linked to gaps in provider education across primary care, access to colonoscopy, specialist services and the need for standardised referral requirements and indications. These issues are of particular significance in the provision of colonoscopy services in rural and remote areas of Western Australia where access is limited.
Metropolitan

Primary Care Services

Primary care services currently play the principal role in identification of patients who require referral for colonoscopy. The main issues to be considered are:

- Identification by general practitioners of appropriate indications and knowledge of information required by proceduralists to facilitate efficient and safe provision of colonoscopy services.
- Referral to specialist services, public and private.
- Patient communication and follow-up.

Hospital Endoscopy Services - Public

The following colonoscopy services are provided through the public hospital system.

- Triaging of referrals
- Provision of colonoscopy and pathology services
- Gastroenterological consultation (medical and surgical).

Tertiary Public Hospitals

Fremantle, Sir Charles Gairdner, Royal Perth and Princess Margaret Hospitals provide colonoscopy services through departments of gastroenterology.

General Public Hospitals

Armadale, Bentley, Rockingham, Peel, Swan Districts, Osborne Park, Kaleeeya and Joondalup hospitals provide access to colonoscopy services via the Ambulatory Surgery Initiative or direct referral from specialist rooms.

Hospital Endoscopy Services - Private

Private services provide two thirds of all services in WA and are therefore the major service providers.

Through the engagement of funders and providers, the Model of Care will encourage the standard application of recommended guidelines and best practice protocols across both public and private sectors.

Inpatient Services

The identification and appropriate referral of inpatients within hospitals is dependent on clinical assessment by a broad range of clinicians (specialist, generalist, junior medical staff) in the public hospital system.

Outpatient Services

- Public hospitals provide varying degrees of outpatient clinical services which can provide a point of referral for colonoscopy.
- Some private hospitals provide consultative clinical services which can provide a point of referral for colonoscopy.
- Private and public generalist and specialist consulting rooms can provide patients for referral.
- The National Bowel Cancer Screening Program identifies patients who require colonoscopy for investigation of positive screening tests.
Regional (rural and remote) services

While the major regional centres outside of Perth provide colonoscopy services by accredited endoscopists there is still limited access to colonoscopy services in rural and remote areas.

Areas of deficiency include:
- Access to general practitioners for initial assessment and/or referral
- Correct identification of need for colonoscopy/indication
- Provision of colonoscopy services.

2.6 Quality issues and adherence

- Comply with evidence-based recommendations
- Ensure timely referral
- Promote the uptake of the Colonoscopy Services Model of Care in the community.
- Standardisation of recommendations by proceduralists for follow up.
- Promote appropriate information regarding consent and risks.
- Promote a culture of safety and risk management including future development of standardised credentialing/re-credentialing processes for proceduralists and nursing staff.
3. Future Model of Care for Colonoscopy Services

3.1 Patient/consumer centred approach

A patient/consumer centred approach will be paramount in the delivery of colonoscopy services and will be in accordance with accepted health service delivery guidelines and protocols. Specific patient/consumer considerations will include:

- The patient will be treated with dignity and respect.
- The patient has the right to expect safe and competent care covering the medical, nursing, equipment, procedure, treatment and care environments.
- The patient has a right to expect timely care based on need and clinical necessity.
- The patient and their family will be encouraged to be involved in their care as appropriate including procedure preparation, follow up and appointments.
- The patient and their family as appropriate will be fully informed of procedures and treatment including associated risks and possible complications.
- There will timely communication between the patient’s providers including specialist, GP and allied health providers.

3.2 Indications for Colonoscopy

The future model of care will adhere to the guidelines provided in Appendix 1. Referrals outside these guidelines will not be possible from general practice. If it is thought that a colonoscopy is required outside of these guidelines then the patient must be referred for a clinical review to a clinician who practices colonoscopy.

Standardised referral guidelines will be provided on an appropriate website maintained by HDWA.

3.3 GP Education and referral

A major objective is the development and implementation of an electronic referral form for GPs which requires compulsory information to be provided before the referral can be submitted, thereby minimising inappropriate referral.

Considerable work has already occurred in the development of electronic referrals by the Faculty of Health Sciences at Curtin University and through a dedicated out-patient reform project that is being run out of Fremantle Hospital in partnership with the UWA Centre for Software Practice.

The Digestive Health Network is working with both groups to develop a standardised guidelines driven electronic tool (form) with an ‘intelligent filler’ decision support capability that can guide the GP through the referral process. The form is received at a centralised unit which sorts patients into cohorts, including for diagnostic procedures, follow-up checks and screening, as determined by guidelines.

It is proposed that this new referral tool be developed and trialled in partnership with selected Divisions of General Practice, initially using colonoscopy/endoscopy as a model.
3.4 Patient journey
The patient will be referred using the standardised guidelines driven electronic referral form to the colonoscopy service provider chosen by the referring practitioner and within the appropriate health area. For patients eligible for Ambulatory Surgery Initiative procedures, options will be provided to enable the referring clinician to select the preferred service provider on the referral form, minimising the paperwork required to achieve these referrals.

3.5 Role delineation

Tertiary
- Supervisory role and training
- Credentialing
- Maintenance of standards
- High-risk patients
- Links to secondary centres – support and resources for these centres

Secondary
- Supervisory role and training
- Credentialing
- Maintenance of standards

3.6 Quality monitoring and improvement
Colonoscopy service providers will provide a computer generated report to the patient and referring clinician immediately on completion of the procedure. Auditing of colonoscopy procedures will be the responsibility of the credentialing body and will comprise a minimum dataset for each colonoscopist including number of procedures, caecal visualisation, procedure time, withdrawal time, and complication requiring admission after the procedure within a period of 1 week.

3.7 Training (all staff) and credentialing (proceduralists, nursing staff)
The ongoing training and credentialing of all staff involved in the provision of colonoscopy services is required to maintain optimal best practice and safety standards. Key areas to be covered include:
- The current credentialing process
- Maintenance of credentialing and standards
- Audit of performance
3.8 Future workforce planning and development

To accommodate the projected increase in the number of colonoscopies that will be required, future workforce planning and development will be an integral component of colonoscopy services. Key considerations will include:

- Staged workforce development in line with clinical services planning, particularly endoscopists/proceduralists and nursing staff.
- Provision for the increased application of computerised tomography (CT) colography & magnetic resonance imaging (MRI) colography. It should be noted that current Australian guidelines do not endorse their use in screening for bowel cancer.

3.9 Facilities and equipment

The provision of up-to-date facilities including anaesthetic support and equipment is essential to deliver best practice and to meet credentialing requirements.
4. Other Considerations

4.1 National Bowel Cancer Screening Program (NBCSP)

The NBCSP uses an immunochemical faecal occult blood test (FOBT) to detect bleeding from colorectal neoplasia. Participants with a positive FOBT are recommended to present to their GPs, where the vast majority will be referred for colonoscopy. The Program began in WA in January 2007, with eligible people turning 55 or 65 years of age between 1 May 2006 and 30 June 2008. The current participation rate is approximately 40%, with a FOBT positivity rate of approximately 8%.

From July 2008, the eligibility criteria will include people turning 50, 55 or 65 years of age between 2008 and 2010. It is estimated that an additional 50 colonoscopies per week in WA will be generated as a direct consequence of the Program.

A major problem with the Program is that colonoscopies for FOBT positive participants have to be organised in the “business as usual” pathway, i.e. there is no dedicated pathway specifically created for NBCSP participants nor additional resourcing. Another major problem is that the majority of Assessment Forms are not being filled out by GPs, colonoscopists and histopathologists. The resultant large data losses mean that analyses of numerous aspects of the Program, including its effectiveness, cannot be accurately made.

The Program is under constant review, and there will be ongoing discussions between the Federal and State governments, as well as advisory groups, on operational issues including data management, public education, Program promotion and equitable and timely access to colonoscopies. Furthermore, further discussions on quality, workforce and training requirements are being undertaken.
5. Summary of Recommendations

- Ensure that a patient/consumer centred approach is paramount in the delivery of colonoscopy services and is in accordance with accepted health service delivery guidelines and protocols.
- Provide standardised guidelines for referral for colonoscopy
- Develop and provide a standardised guidelines driven electronic referral tool (form) that mandates correct provision of information and indication for procedure.
- Ensure the timely access to colonoscopy services in accordance with guidelines through utilisation of an electronic referral tool.
- Implement quality and audit processes at the local institutional level to ensure adherence to the colonoscopy model of care best practice and safety and quality recommendations.
6. Evaluation

WA Area Health Services and Health Networks will work together to develop Key Performance Indicators to evaluate the implementation of the Colonoscopy Model of Care and based on the quality monitoring indicators described in section 3.6.
References


18. ASGE guideline: colorectal cancer screening and surveillance. Gastrointest Endosc 2006;63:546-57


23. Seow CH et al. Repeat colonoscopy has a low yield even in symptomatic patients. Gastrointest Endosc 2006;64(6):941-7
Appendices

Appendix 1: Colonoscopy Referral Guidelines

Colonoscopy for Symptoms:

<table>
<thead>
<tr>
<th>Indication</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Chronic Rectal Bleeding</td>
<td>&lt; 4/52</td>
</tr>
<tr>
<td>2. Iron Deficiency Anaemia</td>
<td>&lt; 4/52</td>
</tr>
<tr>
<td>3. Change in Bowel Habit</td>
<td></td>
</tr>
<tr>
<td>+ alarm symptoms*</td>
<td>&lt; 4/52</td>
</tr>
<tr>
<td>no alarm symptoms</td>
<td>&gt;12/52</td>
</tr>
<tr>
<td>longstanding symptoms/suspected IBS or chronic constipation</td>
<td>&gt;12/52</td>
</tr>
<tr>
<td>4. Chronic Diarrhoea</td>
<td>&gt;12/52</td>
</tr>
<tr>
<td>5. Suspected IBD</td>
<td>&lt;4-12/52</td>
</tr>
<tr>
<td>6. Abnormal CT/Barium Imaging</td>
<td></td>
</tr>
<tr>
<td>Suspected cancer / large polyp</td>
<td>&gt;2cm&lt;2/52</td>
</tr>
<tr>
<td>Suspected polyp</td>
<td>&lt;2cm&gt;12/52</td>
</tr>
</tbody>
</table>

*Alarm Symptoms: weight loss, severe pain, anaemia, palpable mass

Colonoscopy for Surveillance:

<table>
<thead>
<tr>
<th>Indication</th>
<th>Colonoscopy Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. FOBT positive (NBCSP)</td>
<td>&lt;4/52</td>
</tr>
<tr>
<td>2. Family History of CRC</td>
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<tr>
<td><strong>Category 1 – Slightly above average risk</strong></td>
<td></td>
</tr>
<tr>
<td>One first degree relative diagnosed age &gt;55</td>
<td></td>
</tr>
<tr>
<td>Screening recommendations for people in this category should be as for the average-risk population.</td>
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<tr>
<td><strong>Category 2 - Moderately increased risk</strong></td>
<td></td>
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<tr>
<td>First degree relative diagnosed age &lt;55</td>
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<tr>
<td>Two first degree or one first degree and one second degree relative(s) on the same side of the family with bowel cancer diagnosed at any age:</td>
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</tr>
<tr>
<td>Refer for colonoscopy at five yearly intervals starting at age 50, or 10yrs younger than the age of the earliest diagnosis of Colorectal Cancer in the family, whichever comes first.</td>
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</tr>
<tr>
<td><strong>Category 3 – High risk (50% or higher risk of cancer)</strong></td>
<td></td>
</tr>
<tr>
<td>HNPCC Kindred, FAP</td>
<td></td>
</tr>
<tr>
<td>Suspicion of a high-risk syndrome should be raised when two or more close relatives are affected, Colorectal Cancer has been diagnosed at an early age, (the earlier the age, the higher the degree of suspicion), or certain syndrome –specific characteristics are present.</td>
<td></td>
</tr>
<tr>
<td>(NH&amp;MRC, 2005)</td>
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<tr>
<td>Requires specialist referral. Will probably require colonoscopy annually beginning at age 25 or 10 years younger than earliest age of diagnosis of Colorectal Cancer. Will require genetic assessment.</td>
<td></td>
</tr>
</tbody>
</table>
3. Prior Colon Cancer Colonoscopy
1 year after curative resection followed by another 3 years later. If normal then for 5 yearly colonoscopy

4. Ulcerative Colitis & Colonic Crohns
Colonoscopy every 1-2 yrs
(no indication for surveillance in proctitis) with systematic biopsies if duration of disease >10 yrs

5. Colonoscopy for Polyp Surveillance
Guidelines – Management of epithelial polyps (NHMRC, 2005)
All patients with colorectal neoplasia completely removed at colonoscopy should then be considered for colonoscopic surveillance according to the following protocols:
- within a year following incomplete or possible inadequate examination, for example in a subject with multiple adenomas
- at * three years for category 1 subjects with large adenomas (> 1cm), adenomas with high grade dysplasia, villous change in adenomas, three or more adenomas, or aged 60 or more with a first degree relative with colorectal neoplasia
- at four to six years in subjects without the risk factors outlined above
Delivering a **Healthy WA**