

Report on the Adoption of the Canada- Global Rating Scale (C-GRS®)

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The Canadian Partnership Against Cancer's National Colorectal Cancer Screening Network supports the production of this report.

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Table of Contents

I. Introduction	2
Encouraging the Use of C-GRS [®]	3
Endorsement Statement.....	3
II. Current Use of C-GRS[®] and GRS	4
Canadian Use of C-GRS [®]	4
Global Use of GRS	4
III. Description of C-GRS[®]	5
IV. Benefits of Implementing GRS	7
V. Opportunities for Future Improvements to Endoscopy Quality	9
VI. Access to C-GRS[®]	10
References	11
Appendix	

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I. Introduction

Within each of the 10 organized colorectal cancer screening programs in Canada, colonoscopy is utilized for follow-up of an abnormal fecal test¹; and in some cases, may be recommended as an entry-level screening test for individuals at increased risk.² In Ontario, registered nurse-performed flexible sigmoidoscopy programs are also used to screen individuals at average risk of colorectal cancer.³ An integral component to measuring the quality of colorectal cancer screening programs is to monitor and evaluate the effectiveness of tests, such as endoscopy (including both colonoscopy and sigmoidoscopy), that are utilized to detect cancers early.

The importance of ensuring quality care in endoscopy is widely supported and implies a need for endoscopy facilities to monitor and review risks related to colonoscopy.^{4,5} It is recommended that screening programs should have processes in place for monitoring, auditing, reviewing and acting upon key auditable outcomes and quality indicators for colonoscopy quality, safety and patient feedback.⁶ There are two key components to ensure quality of a colonoscopy procedure: to safely, comfortably and completely examine the colon; and to successfully detect and remove (if appropriate) colorectal cancers and adenomas.⁷ Quality is important to measure since poor colonoscopy quality can lead to higher rates of post-colonoscopy colorectal and interval cancers.⁸

Within Canada, there is no accreditation system in place for endoscopy and currently, Canadian colorectal cancer screening programs do not require the use of a quality improvement tool to monitor endoscopy quality. However, the National Colorectal Cancer Screening Network (NCCSN), a group of Canadian colorectal cancer screening community members brought together by the Canadian Partnership Against Cancer (CPAC), has established a series of national quality determinants along the colorectal cancer screening pathway for average risk populations.⁷ Programmatic data on these quality indicators are regularly collected by CPAC.⁷ Three domains (follow-up colonoscopy, diagnosis and initiation of treatment and programs outcomes) are measures related to colonoscopy quality.^{7,9} While such measures are important to monitor at a population-level, they do not directly assess colonoscopy quality or the quality of the patient experience.

The Global Reporting Scale (GRS) is a web-based survey tool that offers a comprehensive, systematic approach to the measurement of endoscopy quality. This tool assesses the quality of the colonoscopy service, including the procedure and the quality of the patient experience.⁴ Functioning as a “self-report” tool, endoscopy units assess and obtain scores on 12 key aspects of quality through a series of statements requiring a yes or no response. Improvements in the quality of endoscopy services have been attributed to the use of GRS in the United Kingdom (UK).⁴ The Canada - Global Rating Scale (C-GRS[®]) had been developed to fit the Canadian healthcare infrastructure, language and current practice; therefore, to attain quality improvements in Canada more widespread use of the C-GRS[®] is encouraged.^{4,10} The C-GRS[®] provides a score for each of the 12 content areas that may allow screening programs to adequately evaluate and compare the rate of improvement and quality of services being offered.

Encouraging the Use of C-GRS[®]

The NCCSN endorses and encourages the use of C-GRS[®] to improve the quality of endoscopic services in Canada. The official statement prepared by the NCCSN and endorsed based on consensus is as follows:

Endorsement Statement

The National Colorectal Cancer Screening Network joins the Canadian Association of Gastroenterology in recommending the use of the Canada-Global Rating Scale[®] (C-GRS[®]) as a tool to support quality improvement in the delivery of patient-centered endoscopy services, including colonoscopy. Timely and appropriate access to high-quality colonoscopy is a key component of fecal testing screening programs for the prevention and diagnosis of colorectal cancer. The C-GRS[®] is a web-based tool, which allows endoscopy units to evaluate and enhance the quality of services being offered through biannual standardized assessments of the clinical quality of colonoscopy; and of the quality of the patient experience.

II. Current Use of C-GRS and GRS

Canadian Use of C-GRS[®]

Currently, C-GRS[®] is being utilized by 130 endoscopy units across Canada out of an estimated 450. Some provinces, such as Newfoundland and Labrador and British Columbia, have successfully embedded the use of C-GRS[®] into their cancer screening program or provincial healthcare system. In Ontario, the use of C-GRS[®] is recommended as part of a Colonoscopy Quality Management Program.¹¹ In Alberta, the provincial colorectal cancer screening program (ACRCSP) is promoting the use of C-GRS[®] for all sites that perform screening colonoscopies, with the goal that all sites will eventually become compliant. Since some provinces/territories have or will be embedding C-GRS[®] into current practice, this may serve as a basis to help other jurisdictions successfully implement the C-GRS[®] into endoscopy units participating in colorectal cancer screening.

Global Use of GRS

Since 2005, the use of GRS has been widespread in the UK with it first being introduced in England. The GRS has also been successfully implemented in Scotland, Wales and the Republic of Ireland.⁴ It has become mandatory for UK endoscopy units to utilize GRS. Among other requirements, the UK endoscopy units that wish to be part of the UK Bowel Cancer Screening Program (BCSP)⁴ have to obtain a GRS score equal or better than a “level B”.⁴ This score signifies that outcomes are identified, monitored, reviewed and acted upon in order to achieve benchmarks.⁴

III. Description of C-GRS®

GRS was first introduced in the UK where a number of challenges in delivering endoscopy services, including high number of complications and inadequate training of endoscopists, was observed. To address these concerns, an accreditation process was developed by using a 12-item web-based patient-centered quality improvement tool – the GRS.⁴ The GRS was piloted in Canada in 2007; and eventually, it was adapted to the Canadian context thus creating the C-GRS®.⁴

The C-GRS® has two primary domains included in the survey: 1) the clinical quality of endoscopy; and 2) the quality of the patient experience. There are 6 dimensions included in each domain (total of 12 dimensions) covering themes that are largely similar to Accreditation Canada’s 8 dimensions of quality.⁴ Each dimension is completed by answering “yes” or “no” to a series of 8 to 11 statements regarding what has been achieved.⁴ The extent to which each dimension is successfully covered by the service is scored on a scale that ranges from level D (basic) to A (advanced).⁴

The six dimensions included in each of the domains are⁴:

For clinical quality of endoscopy:

- 1) Patient information/consent
- 2) Safety
- 3) Patient comfort
- 4) Quality of the procedure
- 5) Appropriateness
- 6) Communicating results to the referrer

For quality of the patient experience:

- 1) Equality of access
- 2) Timeliness of the service
- 3) Booking choice
- 4) Privacy and dignity
- 5) Aftercare
- 6) Ability to provide feedback to the service

The survey is completed electronically twice a year, using an online C-GRS[®] data entry site, by a multidisciplinary team (typically made up of a nurse, a physician and a unit manager) who are also responsible to create action plans targeting specific quality improvement activities.⁴ Access to the site-specific data is restricted, as determined by each participating institution. The Canadian Association of Gastroenterologists' (CAG) national office may also access the data for administrative purposes. Patient surveys, as well as other standardized tools (including some that are translated), are available to download from the Endopedia section (resource library on the C-GRS website); and can be adapted to meet the needs of each unit.⁴ At this time, there is no fee to use the C-GRS[®]; however, it is anticipated that a small user fee per site may be implemented to cover the cost of providing and maintaining the platform. The C-GRS[®] tool is currently only available in English.

IV. Benefits of Implementing GRS

In the UK, several concerted efforts took place which effectively led to the improvement of endoscopy quality: the UK government provided funding to support and improve endoscopy training; the implementation of a quality improvement program for endoscopy units – i.e. the GRS; and the implementation of a national Bowel Cancer Screening Program (BCSP) which required participating units to be accredited through the GRS, as well as endoscopists to be certified to participate in the BCSP.¹² This accreditation process involved at least two visits to the unit including a pre-accreditation and an accreditation visit. This allowed units to receive direct training from the central GRS staff, as well as allowed accreditors to ensure proper use of the GRS to further promote best practice.¹³

Implementation of GRS in England resulted in substantial improvements in the quality of endoscopy services, along with a pronounced reduction in wait times for endoscopy.⁴ Other benefits that have been attributed to GRS in the UK included: raising the profile of endoscopy, improving teamwork, raising standards, identifying service gaps, providing evidence for investment and supporting accreditation.⁴ Additionally, the patient experience for endoscopy services has significantly improved.⁴ Substantial enhancements in the clinical quality of endoscopy have been achieved in the UK with improved cecal intubation and adenoma detection rates, a reduction of post colonoscopy colorectal cancers, as well as a reduction in complications.¹⁴⁻¹⁶

It is anticipated, and quite common, that when facilities begin using the GRS they obtain scores at a level D (baseline quality level) or below. This was observed in the UK in 2005 and is expected to be the case with new users of the C-GRS®.⁴ Such results are commonly reflective of not having a previous system in place to measure the level of quality, record and review unit performance. C-GRS® is a performance measurement tool; therefore, regular review and use of C-GRS® addresses this gap. Improved quality, as indicated with increased scores, are likely to follow as units improve efforts in gathering information on their practice and the overall patient experience.⁴

Furthermore as seen in the UK, increased use of the C-GRS® could help advance the quality and timeliness of the data being captured by endoscopy units in order to provide more enhanced endoscopic services.⁴ More specifically, it is anticipated that ongoing use of the tool may encourage

improved record keeping and participation by all levels of staff, timely identification of potential problems within units and patient feedback with a focus on patient-centred care.⁴ Since the C-GRS[®] encourages processes to be regularly reviewed, this will allow teams to better share information on a consistent basis such as, improvements that have been implemented to address problems identified by the patients or in the records. This will further enhance the overall delivery of high-quality endoscopy services by adapting processes to fit the needs of the unit and patient.⁴

V. Opportunities for Future Improvements to Endoscopy Quality

Some opportunities to further improve endoscopy quality which can be explored in the future is the development of an accreditation program. This may ensure colonoscopy quality is better integrated into colorectal screening programs and endoscopy services. An example of a successful approach to establishing a formalized accreditation program for breast cancer screening was observed through the Canadian Association of Radiologists' (CAR) Mammography Accreditation Program (MAP). This collaborative effort involved the Canadian Breast Cancer Screening Network (CBCSN) and CAR to develop accreditation measures with national consensus to be included in the CAR-MAP. Although accreditation is not available for colorectal cancer screening at this time, the CAG offers recognition annual awards to facilities who have effectively implemented C-GRS[®]. This process could be recognized as a partial form of accreditation.

The development of C-GRS[®] and other endoscopy quality improvement programs has been primarily led by CAG, with support from CPAC and the larger gastroenterology community. Given that there are other clinicians who perform colonoscopies outside of the gastroenterology community (e.g. surgeons, family doctors, radiologists, etc.), it would be beneficial to liaise between primary healthcare providers and other national organizations. This would serve to better coordinate efforts in improving endoscopy quality and expand the use of C-GRS[®]. Moreover, it would be important to inform colorectal cancer screening programs and endoscopy units by equipping them with information and access to C-GRS[®]; and if C-GRS[®] becomes widely available, it would be valuable to discuss the results arising from use of this tool at a pan-Canadian level. This will help improve the overall quality of endoscopy services being offered and enhance the patient experience in Canada.

VI. Access to C-GRS[®]

Accessing the C-GRS[®] is as simple as visiting the following website: <http://mdpub.org/grs/index.php>. Although the tool is available online, the C-GRS[®] is a private website which requires permission to be granted in order to gain access. Contact Sandra Daniels (Senior Manager, CAG) at Sandra@cag-acg.org for questions or to request access. This site contains the C-GRS[®] survey, a platform for data entry, the Endopedia (an extensive electronic library of policies, standardized forms, patient satisfaction surveys as a few examples), an action planning tool, summary data on unit performance over-time, contacts, FAQs and newsletters. As previously stated there is no fee to access this tool.

Other Supporting Resources:

1. Visit the CAG Quality Program-Endoscopy site for more information about the C-GRS[®] including a link to the CAG-CPAC hosted webinars which were held on April, 2016 to provide an overview of the C-GRS[®] tool, as well as the functionality of the tool: <https://www.cag-acg.org/quality/quality-in-gastroenterology/qp-e>
2. Access the CPAC collaborative group space on the Cancerview HUB dedicated to C-GRS[®] to find resources such as: presentations by provincial representatives related to the adoption of C-GRS[®], 1-page briefing document, etc. To receive access and a link to this HUB space contact Screening@partnershipagainstcancer.ca

References:

1. Leddin DJ, Enns R, Hilsden R, Plourde V, Rabeneck L, Sadowski DC, et al. Canadian Association of Gastroenterology position statement on screening individuals at average risk for developing colorectal cancer:2010. *Can J Gastroenterol*. 2010 December; 24(12): 705-14.
2. Canadian Task Force on Preventive Health Care. Recommendations on screening for colorectal cancer in primary care. *CMAJ*. 2016 March; 188(5); 340-348.
3. Tinmouth J, Vella E, Baxter NN et al. Colorectal cancer screening in average risk populations: Evidence summary. Toronto (ON): CCO; 2015 November 11. Program in Evidence-based Care Evidence Summary No: 15-14.
4. MacIntosh D, et al. The endoscopy Global Rating Scale – Canada: Development and implementation of a quality improvement tool. *Can J Gastroenterol*. 2013 Feb; 27(2): 74–82.
5. NHS Cancer Screening Programmes. Quality Assurance Guidelines for Colonoscopy. NHS BCSP Publication No 6; 2011 February [cited 2016 March 7]. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/427591/nhsb_csp06.pdf.
6. World Health Organization. European guidelines for quality assurance in colorectal cancer screening and diagnosis. Lyon, France: World Health Organization; 2010 [cited 2016 March 21]. Available from: http://www.uegf.org/eu_affairs/eu_news/CRC_guidelines_publication%20EU_2011.pdf.
7. Canadian Partnership Against Cancer. Quality Determinants and Indicators for Measuring Colorectal Cancer Screening Program Performance in Canada. Toronto: Canadian Partnership Against Cancer; 2013 May [cited 2016 Mar 16]. Available from: http://www.cancerview.ca/idc/groups/public/documents/webcontent/colorectal_qual_det.pdf.
8. Kaminski MF, Regula J, Kraszewska E, et al. Quality indicators for colonoscopy and the risk of interval cancer. *N Engl J Med*. 2010; 362(19): 1795-803.
9. Canadian Partnership Against Cancer. Colorectal Cancer Screening in Canada : Monitoring & Evaluation of Quality Indicators – Results Report, January 2011- December 2012. Toronto: Canadian Partnership Against Cancer; 2014.
10. Valori R. Quality Improvements in Endoscopy in England. *Tech Gastrointest Endoscopy*. 2012 January; 14(1): 63-72.
11. Quality Management Partnership. Provincial Quality Management Programs for Colonoscopy, Mammography and Pathology in Ontario. Quality Management Partnership; 2015 March [cited

2016 March 23]. Available from:

<https://www.qmpontario.ca/common/pages/UserFile.aspx?fileId=350481>.

12. Gavin DR, Valori RM, Anderson JT, Donnelly MT, Williams JG, Swarbrick ET. The national colonoscopy audit: a nationwide assessment of the quality and safety of colonoscopy in the UK. *Gut*. 2013 Feb; 62(2): 242-9. doi: 10.1136/gutjnl-2011-301848.
13. Anderson JT. Assessments and skills improvement for endoscopists. *Best Pract Res Clin Gastroenterol*. 2016 June; 30(3): 453-471.
14. Borgaonkar MR. A Blue Print for Quality. *Can J Gastroenterol*. 2013 Feb; 27(2): 73.
15. Atkin WS, et al. Improving colorectal cancer screening outcomes: Proceedings of the second meeting of the International Colorectal Cancer Screening Network, a global quality initiative. *J Med Screen*. 2010 September; 17(3): 152-157.
16. Morris EJ, Rutter MD, Finan PJ, *et al*. Postcolonoscopy colorectal cancer (PCCRC) rates vary considerably depending on the method used to calculate them: a retrospective observational population-based study of PCCRC in the English National Health Service. *Gut*. 2015; 64: 1248–1256.
17. Armstrong D, Barkun A, Bridges R, et al. Canadian Association of Gastroenterology consensus guidelines on safety and quality indicators in endoscopy. *Can J Gastroenterol*. 2012; 26: 17–31.

Appendix: Additional Background Information on the Establishment of C-GRS®

The National Colorectal Cancer Screening Network (NCCSN), hosted by the Canadian Partnership Against Cancer (CPAC), brings together provincial/territorial program leaders, national organization and government representatives to exchange knowledge about delivering appropriate colorectal cancer screening across Canada. Improving the quality of endoscopy (including both colonoscopy and sigmoidoscopy) services has been an important topic of discussion for the NCCSN. Emerging evidence for quality assurance on colonoscopies, which included the United Kingdom (UK) experience, was shared with NCCSN members. GRS was first introduced in the UK to improve the state of endoscopy quality being offered to patients. The evidence that was shared supported the use of the 12-item web-based patient-centered quality improvement tool – the Global Rating Scale (GRS).⁴

In 2010, a consensus meeting was held in Toronto, ON where national and international experts discussed methods to improve the quality of Canadian endoscopy services. At this meeting, it was determined that a working group be established to help expand the use of GRS in Canada.¹⁷ The working group investigated the current state of GRS use in Canada by soliciting feedback from 22 endoscopy sites that had completed the UK based GRS; as well as compiled results of the Canadian consensus on safety and quality indicators in endoscopy and other consensus reports. This information was used to develop components of the C-GRS®.⁴