# Use of the Endoscopy Global Rating Scale by endoscopy services in Canada

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The Canadian Association of Gastroenterology (CAG), through its Quality Program – Endoscopy (QP-E), has been promoting and supporting the use of the Global Rating Scale (GRS) since 2007 (1,2). The CAG recently performed a review of the uptake of the GRS across Canada as well as the anonymous, aggregate results obtained by the participating units since 2007.

## 1. BACKGROUND

The endoscopy Global Rating Scale, or GRS, is a quality improvement tool designed for endoscopy services. It promotes patient-centred standards of quality through the use of an iterative process of measurement, interpretation of observed outcomes, formulation of action plans and ensuring desired outcomes have been achieved. The GRS measures unit performance with regards to 12 domains of quality endoscopy: 1) consent and patient information; 2) safety; 3) patient comfort; 4) quality of the procedure; 5) appropriateness of the procedure; 6) ability to communicate results to referring physicians; 7) equality of access; 8) timeliness of the service; 9) booking procedure; 10) privacy and dignity; 11) aftercare; and 12) ability for patients to provide feedback to the service.

The GRS was introduced in Canada by the CAG in 2007 through a pilot project that complemented its use with that of a colonoscopy practice audit. It quickly became apparent to users that the GRS was an excellent tool that provided services with both a measure of the intensity of quality-related processes and monitoring, as well as guidance through interventions that would heighten the quality of that service. It also became apparent that the GRS, which was developed in the UK, had some shortcomings as it related to the Canadian model of endoscopy care delivery. This led to the development of an adapted version of the tool, the so-called Canadian GRS (C-GRS) (3), which has now been used across Canada since the fall 2011. Moreover, in the fall 2011, the CAG launched its new GRS website for data entry, which is both user-friendly and accessible.

## 2. UNIT PARTICIPATION

To date, a total of 39 endoscopy units from across Canada have participated in the QP-E program including the GRS. A total of 27 units participated at least once in the eight cycles of the UK-GRS while a total of 30 sites participated at least once in the four cycles of the C-GRS. Eighteen sites participated in both phases. Figure 1 shows the participation uptake for both phases. As shown, uptake with the UK-GRS was dropping by 2010, with lowest participation in fall 2010. The drop is largely related to concentration of efforts during that time to produce a national consensus on quality and safety indicators in endoscopy (4-6) as well as the fact that the C-GRS was being developed and a shift was being made away from the UK GRS system. Since the release of the C-GRS, uptake has been steadily increasing and overall participation is currently greater than seen before. Of the 22 sites that completed the Spring 2013 GRS cycle, 4 are new units which had not participated before and since the new C-GRS was introduced in 2011, 11 new sites have joined the program.

## 3. GRS RESULTS

Unit performance with C-GRS is presented in Figure 2, where, for each item, the percentage of units performing at an "above-D" (either C, B or A) level is shown, along with the percentage of units which, over the past four cycles, have shown some improvement in their GRS score.

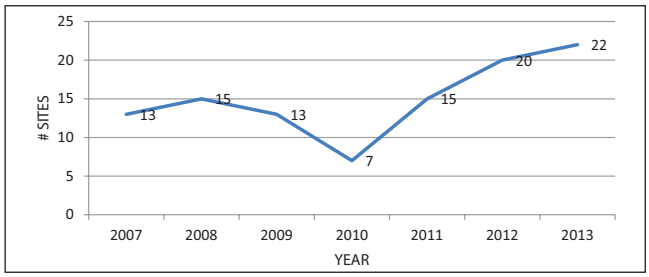


**Figure 1)** *Sites completing the GRS*

Results and progress achieved to date show that, for all domains measured by the GRS, the majority of units currently perform at baseline (D level) or below baseline (incomplete D level, so-called D-minus level). This means that, while the quality of care may be excellent, the majority of units have no processes, policies and/or monitoring in place to ensure that quality is uniform and to ensure that deficiencies can be systematically identified and remedied.

Results also show that units' performance is best for the domains of "patient comfort", "ability to provide feedback to the service" and "consent and patient information", where 55%, 55% and 43% of units perform above baseline (D) level, respectively. Over these past two years, at least 35% of the units that completed the C-GRS at least twice achieved improvements in scoring in 8 out of 12 domains (Figure 2). Score improvements were seen most commonly for "ability to provide feedback to the service", "comfort"and "privacy" where 50%, 45% and 43%, of units improved, respectively. Conversely, with respect to timeliness of access to the service, where the C-GRS is anchored with the CAG's wait times targets (7), 72% of units are at or below baseline and improvement in scoring was achieved by only 15% of them.

The high-achieving units were identified as those that achieved levels A and/or B for a given item on at least two consecutive cycles. There were more A/B units when looking at the C-GRS cycle data as compared to the UK-GRS data, especially for the items "providing feedback to the service" (8 A/B units), "aftercare" (4 A/B units), "booking procedure" and "communicating results to the referrer" (3 A/B units in each case). Only 3 units achieved A/B levels on any item of the UK-GRS while a total of nine units achieved A/B levels on any items of the C-GRS.

One site has achieved A/B levels in 11 of 12 items of the C-GRS. It is a dedicated screening-related colonoscopy centre that used the UK-GRS as the foundation for many of its operational policies. This unit also uses an electronic reporting system that allows the collection and reporting on colonoscopy quality indicators and performance reports for endoscopists.

In summary, these results demonstrate that there is an increasing uptake of the C-GRS amongst Canadian endoscopy units. It also reveals that high-performance, defined as achieving A and or B levels on two consecutive cycles, is possible, and more likely to occur with the C-GRS. In particular, items related to patient feedback, aftercare, communicating results to the referrer, and booking procedure seem to be most achievable initially.

In summary, the CAG's QP-E is encouraged by these results and is keen to further promote the use of the GRS, and expanding the GRS

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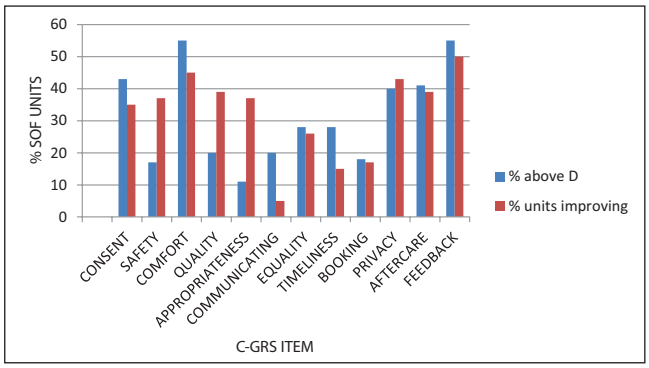


**Figure 2)** *Unit performance with the C-GRS*

website to include electronic resources and to facilitate each unit's review of their achievements. Achieving high scores on the GRS will continue to depend on adequate electronic support in the unit, which is intrinsic to our current understanding of quality in endoscopy.

## REFERENCES

1. Armstrong D, Hollingworth R. Endoscopy and quality assurance – It is here! Can J Gastroenterol 2007;21:255-258.
2. Hollingworth R, Dube C. The Canadian Association of Gastroenterology Endoscopy Quality Initiative: Leading the wave. Can J Gastroenterol 2009;23:506-7.
3. MacIntosh D, Dubé C, Hollingworth R, et al. The endoscopy Global Rating Scale – Canada: Development and implementation of a quality improvement tool. Can J Gastroenterol 2013;27:74-82.
4. 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.
5. Borgaonkar MR, Hookey L, Hollingworth R, et al. Indicators of safety compromise in gastrointestinal endoscopy. Can J Gastroenterol 2012;26:71-8.
6. Sewitch MJ, Dube C, Brien S, et al. Patient-identified quality indicators for colonoscopy services. Can J Gastroenterol 2013;27:25-32.
7. WG Paterson, WT Depew, P Paré, et al; for the Canadian Association of Gastroenterology Wait Time Consensus Group. Canadian consensus on medically acceptable wait times for digestive health care. Can J Gastroenterol 2006;20:411-23.