Background and Resource Summary

The Early Quality Initiatives (EQIs) – Quality Improvement Resource Package for Endoscopy/ Colonoscopy



Quality Improvement Resource Package for Endoscopy/Colonoscopy

In March 2013, the Ministry announced a formal partnership between Cancer Care Ontario (CCO) and the College of Physicians and Surgeons of Ontario (CPSO) to develop provincial quality management programs (QMPs) for colonoscopy, mammography and pathology. This Quality Improvement Resource (QIR) package includes four QIRs for endoscopy/ colonoscopy providers that were developed by the Partnership as part of its early quality initiatives (EQI) work. These EQIs were based on recommendations from the colonoscopy Expert Advisory Panel, which were submitted to the Ministry in March 2014 in the Partnership's Phase 1 Report.

In fall 2014 and winter 2015, a Clinical Working Group (CWG) led by the Partnership's provincial lead for colonoscopy and supported by Partnership staff utilized a systematic evidence informed process to generate the QIRs included in this package.

This document provides an overview of the development process followed by a complete list of resources used to help develop each of the QIRs included in this package.

For more information about these resources or the Partnership visit the Partnership website at www.qmpontario.ca





What are the QIRs included in this package?

1. Bowel Preparation Selection Best Practice Guidelines

The Bowel Preparation Selection Best Practice Guidelines is an educational resource for colonoscopists and referring physicians. It includes two components:

- o A decision guide which visually depicts the logic of bowel preparation selection for different patient scenarios;
- o A table summarizing more comprehensive information on additional aspects of bowel preparation including dosing, diet and hydration recommendations for adequate bowel preparation prior to a colonoscopy.

The resource is intended to enable:

- o Colonoscopy providers to improve bowel preparation selection practice to enhance the quality of care, and
- o **Referring physicians** to better understand bowel preparation regimens that are selected for their patients; to communicate this information to their patient as needed; and, to deliberate with the colonoscopist on their patient's behalf in the event that the bowel preparation regimen prescribed is not suitable for their patient. This will enhance patient-centred care.

2. Standardized Endoscopy Reporting Guidelines

The endoscopist is responsible for reporting procedure details, key findings and the management plan to the physician who referred the patient for colonoscopy. These guidelines outline the minimum requirements for standardized endoscopy reporting by the endoscopist to the referring physician. The resource is intended to enable:

- o **Endoscopists** to enhance the quality of care by improving communication and strengthening the continuum of care. This includes reducing uncertainty about follow-up care and responsibilities, reducing repeat examinations due to the lack of appropriate information, reduce inappropriate decisions for the timing of surveillance colonoscopy and ensuring that referring physicians receive consistent and predictable information about the procedure findings, management plan, and follow-up, and
- o **Referring physicians** to form clear expectations about the information they can expect to receive from the endoscopist after their patient has undergone the procedure

3. Standardized Patient Discharge Guidelines for Endoscopy Facilities

The endoscopist is responsible for providing written post-discharge instructions to patients who have undergone colonoscopy. This guideline outlines the minimum requirements for the written post-discharge instructions that are provided to the patient, family member, and/or legal guardian at or before discharge following a colonoscopy procedure.

This resource is intended to enable **endoscopy facilities** to enhance patient-centred care by helping the patient better comply with the management plan, improve their recall of endoscopy findings and the management plan, decrease patient anxiety, increase patient knowledge about how to obtain final endoscopy results, improve patient understanding of what to do if complications arise after a colonoscopy and contribute to the provision of consistent discharge information to all patients. This will ensure that all patients receive key messages upon discharge.

4. Pre and Post Procedure Guidelines and Checklists for Endoscopy Facilities

This resource includes two components:

- o Guidelines outlining the minimum requirements for patient information that should be collected and activities that should be completed prior to and after a colonoscopy procedure
- o Three sample checklists including a Day-of Procedure Pre-Procedural Checklist, Procedure Room Pre-Procedural Checklists, and Post-Procedural Checklist

The guidelines are intended to enable **endoscopy facilities** to compare their current processes to those outlined in the guidelines to identify existing gaps and to ensure that the minimum requirements are integrated into the facility's provision of colonoscopy services. Where facilities are completing the activities recommended in the guidelines but may not be adequately documenting the completion of important pre-post procedure activities, the three checklists provided may be used to efficiently document the completion of these activities.







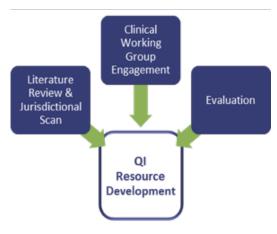
How were the QIRs designed and developed?

The QIRs included were drafted by a Clinical Working Group (CWG) led by the Partnership's Provincial Lead for colonoscopy, Dr. David Morgan. Membership included CPSO assessors Dr. Doug Hemphill, Dr. Hugh Kendall, Dr. Peter Rossos and CCO Clinical Leads Dr. Catherine Dubé and Dr. Jill Tinmouth, as well as Nurse Representative Kay Rhodes.

Figure 1 provides a visual overview of how the EQIs utilized a systematic evidence informed process to produce the resulting QIRs listed above. The process included comprehensive literature reviews and jurisdictional scans for each QIR, supplemented by CWG members' clinical expertise and consultation with additional subject matter experts (SMEs) as required (e.g. CPSO Out-of-Hospital Inspection Program.) Once drafted the QIRs were evaluated for their completeness, usefulness and usability. A more detailed overview of the QIR development process is provided in Figure 2, below.

The draft QIRs were evaluated for their completeness, usefulness and usability between September and December of 2015 utilizing a mixed methods approach. Ninety two healthcare providers from 25 Out-of-Hospital Premises (OHPs), 21 Hospitals and 10 Family Practices across twelve LHIN regions in Ontario provided feedback. During the evaluation, individual providers and facilities were asked to provide feedback after reviewing and/or using

Figure 1: Overview of QIR development



these resources in their clinical settings for a prescribed amount of uses. For example, providers who evaluated the bowel preparation selection best practice guidelines were asked to use the resource when selecting bowel preparation regimen for a minimum of ten patients prior to being asked to complete an evaluation survey. Evaluation findings were used by the CWG to refine and finalize the QIRs based on provider feedback, identify target audiences, and draft recommendations for dissemination and adoption of these resources.

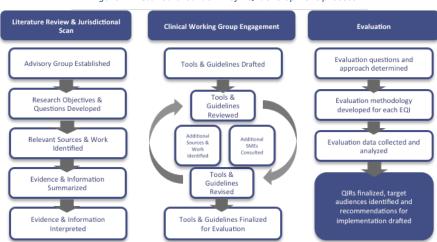


Figure 2: Detailed breakdown of EQI development process







Resource Summary – Bowel Preparation Selection Best Practice Guidelines

REFERENCES

Johnson DA, B. A., Boland, C., Giardello, F., Lieberman, D., Levin, T., Rex, D., et al. (2014). Optimizing adequacy of bowel cleansing for colonoscopy: recommendations from the US multi-society task force on colorectal cancer. *Gastroenterology*, 147(4), 903-924.

Merchant, R., Chartrand, D., Dain, S., Dobson, G., Kurrek, M., Lagace, A., et al. (2015). Guidelines to the Practice of Anesthesia - Revised Edition 2015. *Canadian Journal of Anaesthesia*, 62(1), 54-79.

REFERENCES

The following documents were reviewed during development of this tool:

American Society for Gastroentestinal Endoscopy (ASGE). (2009). Technology Status Evaluation Report: Colonoscopy preparation. *Gastrointestinal Endoscopy*, 69(7), 1201-1209.

Balaban, D. (2008). Guidelines for the safe and effective use of sodium phosphate solution for bowel cleansing prior to colonoscopy. *Gastroenterology Nursing*, 31(5), 327-34.

Barkun, A., & Champagne, M. (2011). Clinical Practice Standards for Colonoscopy. Ambulatory Surgical Center Quality Reporting Program Quality Measures Specifications Manual. Direction quebecoise du cancer.

Barkun, A., Chiba, N., Enns, R., Marcon, M., Natsheh, S., Pham, C., et al. (2006). Commonly used preparations for colonoscopy: Efficacy, tolerability and safety - A Canadian Association of Gastroenterology position paper. *Canadian Journal of Gastroenterology*, 20(11), 699-710.

Clark, L., & Dipalma, J. (2004). Safety issues regarding colonic cleansing for diagnostic and surgical procedures. *Drug Safety*, 27(15), 1235-1234.

Cohen, L., & Tennyson, C. (2007). Bowel Preparation for Colonoscopy: Maximizing Efficacy, Minimizing Risk. *Gastroenterology & Endoscopy News*.

Deepak, H. S. (unknown). Preparing for Colonoscopy. Evanston, Illinois: North Shore University Health System.

Hassan, C., Bretthauer, M., Kaminski, M., Polkowski, M., Rembacken, B., Saunders, B., et al. (2013). Bowel preparation for colonoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*, 45, 142-150.

Johnson DA, B. A., Boland, C., Giardello, F., Lieberman, D., Levin, T., Rex, D., et al. (2014). Optimizing adequacy of bowel cleansing for colonoscopy: recommendations from the US multi-society task force on colorectal cancer. *Gastroenterology*, 147(4), 903-924.

Lichtenstein, G. (2009). Bowel preparations for colonoscopy: a review. *American Journal of Health-System Pharmacy*, 66(1), 27-37.

Martel, M., Barkun, A., Menard, C., Restellini, S., Kherad, O., & Vanasse, A. (2014). Contemporary split-dose colonoscopy preparations: A systematic review and meta-analysis. *unpublished manuscript*, unk.

Merchant, R., Chartrand, D., Dain, S., Dobson, G., Kurrek, M., Lagace, A., et al. (2015). Guidelines to the Practice of Anesthesia - Revised Edition 2015. *Canadian Journal of Anaesthesia*, 62(1), 54-79.

Nett, A., Velayos, F., & McQuaid, K. (2014). . Quality bowel preparation for surveillance colonoscopy in patients with inflammatory bowel disease is a must. *Gastrointestinal Endoscopy*, 24(3), 379-92.

Parente, F., Marino, B., & Crosta, C. (2009). Bowel preparation before colonoscopy in the era of mass screening for colo-rectal cancer: a practical approach. *Digestive and Liver Disease*, 41(2), 87-95.







REFERENCES continued

Parikh, K., & Weitz, H. (2011). Can a bowel preparation exacerbate heart failure? *Cleveland Clinic Journal of Medicine*, 78(3), 157-60.

Parra-Blanco A, R. A., Alvarez-Lobos, M., Amorós, A., Gana, J., Ibáñez, P., Ono, A., et al. (2014). Achieving the best bowel preparation for colonoscopy. *World Journal of Gastroenterology*, 20(47), 17709-17726.

Wexner, S., Beck, D., Baron, T., Fanelli, R., Hyman, N., Shen, B., et al. (2006). A consensus document on bowel preparation before colonoscopy: Prepared by a Task Force From The American Society of Colon and Rectal Surgeons (ASCRS), the American Society for Gastrointestinal Endoscopy (ASGE), and the Society of American Gastrointestinal. *Gastrointestinal Endoscopy*, 63(7), 894-909.







Resource Summary – Standardized Endoscopy Reporting Guidelines

REFERENCES

American Society of Anesthesiologists. (n.d.). *American Society of Anesthesiologists*. Retrieved February 06, 2014, from ASA Physical Status Classification System: https://www.asahq.org/resources/clinical-information/asa-physical-status-classification-system

College of Physicians and Surgeons of Ontario. (2013). *Out-of-Hospital Premises Inspection Program (OHPIP) Program Standards*. Toronto: College of Physicians and Surgeons of Ontario.

College of Physicians and Surgeons of Ontario. (2014). Applying the Out-of-Hospital Premises Inspection Program (OHPIP) Standards in Endoscopy/Colonoscopy Premises and Independent Health Facilities (IHFs). Toronto: College of Physicians and Surgeons of Ontario.

Gage, B., Waterman, A., Shannon, W., Boechler, M., Rich, M., & Radford, M. (2001). Validation of clinical classification schemes for predicting stroke: Results from the National Registry of Atrial Fibrillation. *The Journal of the American Medical Association*, 285(22), 2864-2870.

Samsoon, G., & Young, J. (1987). Difficult tracheal intubation: a retrospective study. Anesthesia, 42(5), 487-490.

Quality Management Partnership. (2015, March). *Provincial Quality Management Programs for Colonoscopy, Mammography and Pathology in Ontario*. Toronto: Cancer Care Ontario and the College of Physicians and Surgeons of Ontario.

SUPPORTING DOCUMENTS

The following documents were reviewed during development of this guideline:

Aabakken, L., Barkun, A., Cotton, P., Federov, E., Fujino, M., Ivanova, E., et al. (2014). Standardized endoscopic reporting. *Journal of Gastroenterology and Hepatology*, 29(2), 234-240.

Armstrong, D., Barkun, A., Bridges, R., Carer, R., de Gara, C., Dube, C., et al. (2012). Canadian Association of Gastroenterology consensus guidelines on safety and quality indicators in endoscopy. *Canadian Journal of Gastroenterology*, 26(1), 17-31.

Beaulieu, D., Barkun, A., Dube, C., Tinmouth, J., Halle, P., & Martel, M. (2013). *Endoscopy reporting standards. Canadian Journal of Gastroenterology*, 27(5), 286-92.

College of Physicians and Surgeons of Ontario. (2013). *Out-of-Hospital Premises Inspection Program (OHPIP) Program Standards*. *Toronto: College of Physicians and Surgeons of Ontario*.

College of Physicians and Surgeons of Ontario. (2014). Applying the Out-of-Hospital Premises Inspection Program (OHPIP) Standards in Endoscopy/Colonoscopy Premises and Independent Health Facilities (IHFs). Toronto: College of Physicians and Surgeons of Ontario.

Lieberman, D., Nadel, M., Smith, R., Atkin, W., Duggirala, S., Fletcher, R., et al. (2007). Standardized colonoscopy reporting and data system: report of the Quality Assurance Task Group of the National Colorectal Cancer Roundtable. *Gastrointestinal Endoscopy*, 65(6), 757-766.

Maserat, E., Safdari, R., Maserat, E., & Zali, M. (2012). Endoscopic electronic record: A new approach for improving management of colorectal cancer prevention. *World Journal of Gastrointestinal Oncology*, 4(4), 76-81.

Rembacken, B., Hassan, C., Riemann, J., Chilton, A., Rutter, M., Dumonceau, M., et al. (2012). Quality in screening colonoscopy: position statement of the European Society of Gastrointestinal Endoscopy. *Endoscopy*, 44, 957-968.

Rey, J., Lambert, R., & Committee, E. Q. (2001). ESGE Recommendations for Quality Control in Gastrointestinal Endoscopy: Guidelines for Image Documentation in Upper and Lower Endoscopy. *Endoscopy*, 33(10), 901-903.

Tinmouth, J., Kennedy, E., Baron, D., Burke, M., Feinberg, S., Gould, M., et al. (2013). *Guideline for Colonoscopy Quality Assurance in Ontario*. Toronto: Cancer Care Ontario.







Resource Summary – Standardized Patient Discharge Guidelines for Endoscopy

REFERENCES

Armstrong, D., Barkun, A., Bridges, R., Carer, R., de Gara, C., Dube, C., et al. (2012). Canadian Association of Gastroenterology consensus guidelines on safety and quality indicators in endoscopy. *Canadian Journal of Gastroenterology*, 26(1), 17-31.

College of Physicians and Surgeons of Ontario. (2013). *Out-of-Hospital Premises Inspection Program (OHPIP) Program Standards*. Toronto: College of Physicians and Surgeons of Ontario.

College of Physicians and Surgeons of Ontario. (2014). Applying the Out-of-Hospital Premises Inspection Program (OHPIP) Standards in Endoscopy/Colonoscopy Premises and Independent Health Facilities (IHFs). Toronto: College of Physicians and Surgeons of Ontario.

Merchant, R., Chartrand, D., Dain, S., Dobson, G., Kurrek, M., Lagace, A., et al. (2015). Guidelines to the Practice of Anesthesia - Revised Edition 2015. *Canadian Journal of Anaesthesia*, 62(1), 54-79.

SUPPORTING DOCUMENTS

The following documents were reviewed during development of this guideline:

American Society for Gastrointestinal Endoscopy (ASGE). (2010). *Tools to Educate Patients*. Retrieved October 2013, from Polyp Patient Information Sheet POST PATHOLOGY: http://www.asge.org/members/members.aspx?id=9292

Armstrong, D., Barkun, A., Bridges, R., Carer, R., de Gara, C., Dube, C., et al. (2012). Canadian Association of Gastroenterology consensus guidelines on safety and quality indicators in endoscopy. *Canadian Journal of Gastroenterology*, 26(1), 17-31.

Barkun, A. (2014, November 10). Instructions following an endoscopy, Montreal General Hospital. (B. Bowes, Interviewer)

Barkun, A. (2014, November 10). Patient Colonoscopy Report, Montreal General Hospital. (B. Bowes, Interviewer)

Beaulieu, D., Barkun, A., Dube, C., Tinmouth, J., Halle, P., & Martel, M. (2013). Endoscopy reporting standards. *Canadian Journal of Gastroenterology*, 27(5), 286-92.

College of Physicians and Surgeons of Ontario. (2013). Out-of-Hospital Premises Inspection Program (OHPIP) Program Standards. Toronto: College of Physicians and Surgeons of Ontario.

College of Physicians and Surgeons of Ontario. (2014). Applying the Out-of-Hospital Premises Inspection Program (OHPIP) Standards in Endoscopy/Colonoscopy Premises and Independent Health Facilities (IHFs). Toronto: College of Physicians and Surgeons of Ontario.

Daniels, S., Canadian Association of Gastroenterology. (2014, October). Colonoscopy discharge instructions, *Alberta Health Services*. (B. Bowes, Interviewer)

Daniels, S., Canadian Association of Gastroenterology. (2014, October). Endoscopy Report for Patients. (B. Bowes, Interviewer)

Daniels, S., Canadian Association of Gastroenterology. (2014, October). ERCP discharge instructions, Alberta Health Services. (B. Bowes, Interviewer)

Daniels, S., Canadian Association of Gastroenterology. (2014, October). Gastroscopy discharge instructions 1-3, Alberta Health Services. (B. Bowes, Interviewer)

Daniels, S., Canadian Association of Gastroenterology. (2014, October). Sigmoidoscopy post procedure instructions. (B. Bowes, Interviewer)

Merchant, R., Chartrand, D., Dain, S., Dobson, G., Kurrek, M., Lagace, A., et al. (2015). Guidelines to the Practice of Anesthesia - Revised Edition 2015. Canadian Journal of Anaesthesia, 62(1), 54-79.

National Health Service (NHS). (2013, May). *Stockport NHS*. Retrieved December 2014, from Colonoscopy/Flexible Sigmoidoscopy Following Sedation Information Leaflet: https://www.stockport.nhs.uk/documents/PIL/41395_OUT30.pdf







Resource Summary – Standardized Patient Discharge Guidelines for Endoscopy

SUPPORTING DOCUMENTS continued

National Health Service (NHS). (2013, May). Stockport NHS. Retrieved December 2014, from Colonoscopy/Flexible Sigmoidoscopy without Sedation: https://www.stockport.nhs.uk/documents/PIL/41398 OUT33.pdf

National Health Service (NHS). (2013, May). Stockport NHS. Retrieved December 2014, from Gastroscopy Following Sedation Discharge Information Leaflet: https://www.stockport.nhs.uk/documents/PIL/41397 OUT32.pdf

National Health Service (NHS). (2013, May). Stockport NHS. Retrieved December 2014, from Gastroscopy discharge information without sedation information leaflet: https://www.stockport.nhs.uk/documents/PIL/41396 OUT31.pdf

National Health Service (NHS). (2013, May). Stockport NHS. Retrieved December 2014, from Polyp Removal Information Leaflet: https://www.stockport.nhs.uk/documents/PIL/41410 OUT34.pdf

National Health Service (NHS). (2009). *Lancashire Teaching Hospitals (NHS)*. Retrieved December 2014, from Discharge Information for Patients Following Colonoscopy: http://www.lancsteachinghospitals.nhs. uk/download.cfm%3Fdoc%3Ddocm93jijm4n1015 pdf%26ver%3D1739&rct=j&frm=1&q=&esrc=s&sa=U&ei=AFQjCNG31TN6CdgRyamgNLW7OxLoowXycw

National Health Service (NHS). (2014, September). *Oxford University Hospitals NHS*. Retrieved December 2014, from Discharge advice after your colonoscopy: http://www.ouh.nhs.uk/patient-guide/leaflets/files%5C10883Pcolonoscopy.pdf

Salem Endoscopy Center. (n.d.). *Salem Endoscopy*. Retrieved December 2014, from Salem Endoscopy Center Discharge Instructions: http://salemgastro.com/assets/downloads/SEC%20DISCHARGE%20INSTRUCTIONS.pdf

The Digestive Health Centre. (2014, October 21). *the digestive health centre*. Retrieved December 2014, from Important Discharge Information for Patients & Carers Following Endoscopy: http://www.digestivehealth.com.au/pdf/CP-005-B005-Important-Discharge-Information-for-Patients-and-Carers-Following-Endoscopy.pdf

unknown. (n.d.). Top Rate Doctors. Retrieved from Colonoscopy & Upper Endoscopy Discharge Instructions: http://topratedoctors.com/wp-content/uploads/COLONOSCOPY Endo-postop-instr.pdf







Resource Summary – Pre and Post Procedure Guidelines and Checklists for Endoscopy Facilities

REFERENCES

College of Physicians and Surgeons of Ontario. (2013). *Out-of-Hospital Premises Inspection Program (OHPIP) Program Standards*. Toronto: College of Physicians and Surgeons of Ontario.

College of Physicians and Surgeons of Ontario. (2014). Applying the Out-of-Hospital Premises Inspection Program (OHPIP) Standards in Endoscopy/Colonoscopy Premises and Independent Health Facilities (IHFs). Toronto: College of Physicians and Surgeons of Ontario.

SUPPORTING DOCUMENTS

The following documents were reviewed during the development of this tool:

Aldrete, J. The post-anesthesia recovery score revisited. Journal of Clinical Anesthesiology. 1995 Feb;7(1):89-91.

American Gastroenterological Association; American College of Gastroenterology; American Society for Gastrointestinal Endoscopy. (2012, June). American Gastroenterological Association. Retrieved January 24, 2015, from AGA Quality and Outcomes Measures: http://www.gastro.org/practice/quality-initiatives/performance-measures/aga-quality-and-outcomes-measures

American Society of Anesthesiologists. (n.d.). *American Society of Anesthesiologists*. Retrieved February 06, 2014, from ASA Physical Status Classification System: https://www.asahq.org/resources/clinical-information/asa-physical-status-classification-system

American Society of Anesthesiologists Task Force on Sedation and Analgesia by Non-Anesthesiologist. (2002). Practice guidelines for sedation and analgesia by non-anesthesiologist. Anesthesiology, 96(4), 1004-1007.

American Gastroenterological Association; American College of Gastroenterology; American Society for Gastrointestinal Endoscopy. (2012, June). American Gastroenterological Association. Retrieved January 24, 2015, from AGA Quality and Outcomes Measures: http://www.gastro.org/practice/quality-initiatives/performance-measures/aga-quality-and-outcomes-measures

American Society of Anesthesiologists Task Force on Sedation and Analgesia by Non-Anesthesiologist. (2002). Practice guidelines for sedation and analgesia by non-anesthesiologist. Anesthesiology, 96(4), 1004-1007.

Armstrong, D. (2014, November). Hamilton Health Sciences Clinical Manual MAC - Adult and Pediatric Patient - Verification Process for Invasive, High-risk, or Surgical Procedure. (Bowes, Interviewer)

Armstrong, D. (2014, November). Hamilton Health Sciences Clinical Manual MAC - Adult and Pediatric Patient - Verification Process for Invasive, High-risk, or Surgical Procedure. (Bowes, Interviewer)

Armstrong, D. (2014, November). Hamilton Health Sciences: Endoscopy Stay Record. (B. Bowes, Interviewer)

Armstrong, D. (2014, November). Hamilton Health Sciences: Authorizing Mechanisms - MAC - MD - Pre & Post Procedure Care for Adult Out-Patients in the Endoscopy Setting. (B. Bowes, Interviewer)

Armstrong, D. (2014, November). Hamilton Health Sciences: Department Manual - SAS - Discharge from Endoscopy Unit – Protocol. (B. Bowes, Interviewer)

Armstrong, D., Barkun, A., Bridges, R., Carer, R., de Gara, C., Dube, C., et al. (2012). Canadian Association of Gastroenterology consensus guidelines on safety and quality indicators in endoscopy. *Canadian Journal of Gastroenterology*, 26(1), 17-31.







SUPPORTING DOCUMENTS continued

Centre for Patient Safety and Service Quality (CPSSQ). (2013). Retrieved January 24, 2015, from Improving Quality and Safety in Gastrointestinal Endoscopy: http://www1.imperial.ac.uk/cpssq/research_themes_2/clinical_programmes/cancer/improvingsafetyefficiencyandqualityingastrointestinalendoscopy/

College of Physicians and Surgeons of Ontario. (2013). Out-of-Hospital Premises Inspection Program (OHPIP) Program Standards. Toronto: College of Physicians and Surgeons of Ontario.

College of Physicians and Surgeons of Ontario. (2014). Applying the Out-of-Hospital Premises Inspection Program (OHPIP) Standards in Endoscopy/Colonoscopy Premises and Independent Health Facilities (IHFs). Toronto: College of Physicians and Surgeons of Ontario.

Coriat, R., Lecler, A., Lamarque, D., Deyra, J., Roche, H., Nizou, C., et al. (2012). Quality indicators for colonoscopy procedures: a prospective multicentre method for endoscopy units. PLoS One, 7(4).

Daniels, S. (2014, October). Recovery Room Discharge Scoring System: Modified Aldrete Scoring System. Canadian Association of Gastroenterology. (B. Bowes, Interviewer)

Matharoo, M., Thomas-Gibson, S., Haycock, A., & Sevdalis, N. (2014). Implementation of an endoscopy safety checklist. *Frontline Gastroenterology*, 5(4), 260-265.

Merchant, R., Chartrand, D., Dain, S., Dobson, G., Kurrek, M., Lagace, A., et al. (2015). Guidelines to the Practice of Anesthesia - Revised Edition 2015. *Canadian Journal of Anaesthesia*, 62(1), 54-79.

Romagnuolo, J., Flemons, W., Perkins, L., Lutz, L., Jamieson, P., Hiscock, C., et al. (2005). Post-endoscopy checklist reduces length of stay for non-variceal upper gastrointestinal bleeding. *International Journal of Quality Health Care*, 17(3), 249-254.

Rosenberg, N., Urman, R., Gallagher, S., Stenglein, J., Liu, X., & Shapiro, F. (2012). Effect of an office-based surgical safety system on patient outcomes. *ePlasty*, 12(e59).

Tinmouth, J., Kennedy, E., Baron, D., Burke, M., Feinberg, S., Gould, M., . . . Panel, t. C. (2013). *Guideline for Colonoscopy Quality Assurance in Ontario*. Toronto: Cancer Care Ontario.

Willey, J., Vargo, J., Connor, J., Dumot, J., Conwell, D., & Zuccaro, G. (2002). *Quantitative assessment of psychomotor recovery after sedation and analysis for outpatient EGD.* Gastrointestinal Endoscopy, 56(6), 810-816.

Williams, D. (2014, October 31). Toronto General Hospital Endoscopy Safety Checklist. (B. Bowes, Interviewer)





