

The SNARE Project: Closing the loop on synoptic endoscopic reporting and skills assessment

Peter G. Rossos^{3,4}, Ted Xenodemetropoulos², Kelly Lane⁴, Erika Rodrigues⁴, David Armstrong¹

1. McMaster University, Hamilton, ON 2. Medicine, McMaster University, Hamilton, ON 3. Medicine, University of Toronto, Toronto, ON 4. Techna Institute, Toronto, ON

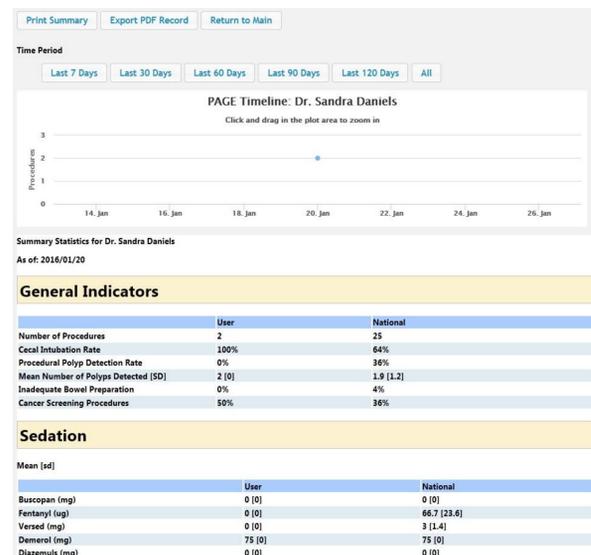


Premise

Structured reporting improves the completeness and timeliness of procedure reports to ensure effective communication and data capture. Adoption barriers to endoscopy EMRs include costs, workflow, lack of optimized content and inability to incorporate clinical best practice. Traditional mechanisms of endoscopic skill assessment are inherently biased and do not support objective comparative analysis. Peer-comparator practice audits have demonstrated a basis for evaluating variation while providing opportunities to improve clinical practice.

Objectives:

In order to comprehensively improve the quality of endoscopic procedures, SNARE (Structured Notes Auditing and Reporting in Endoscopy) will combine synoptic point of care clinical reporting through a recently developed pan-Canadian data model with RPAGE (Resident Practice Audit in Gastroenterology).



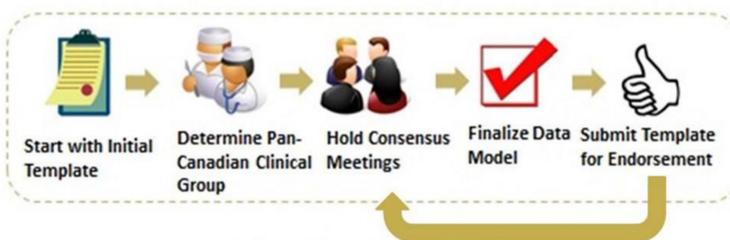
RPAGE

RPAGE is a point-of-care, peer-comparator practice audit tool facilitating the collection of anonymized trainee, patient and practice data using a web-based data capture mechanism for subsequent analysis and review by participants. The instruments allow trainees to objectively record key endoscopic quality indicators (eg. gastroscope and colonoscope insertion and withdrawal times, bowel preparation quality, sedation, immediate complications and polypectomy, biopsy rates).

Furthermore, development of comprehensive user feedback functionality, with exportable, customizable reports and Program Director accessible trainee data has promoted utility in trainee review of personal performance and peer comparison, promoting the identification of learning needs and objectives, as well as the basis for the development of targeted education programs.

As a Canadian Association of Gastroenterology (CAG) supported initiative, the integration of RPAGE into endoscopic training in Canada has proven timely, as a structured mechanism for Canadian training programs to proactively embrace the introduction of the Competence by Design (CBD) initiative by the Royal College of Physicians and Surgeons of Canada with the formal integration of competency-based education to learning and assessment in postgraduate medical training.

Pan-Canadian Data Model Development



1. Curation of existing endoscopy templates

Templates are helpful for guiding discussions and provide a tangible starting point for the development of a pan-Canadian data model.

2. Determine Pan-Canadian Clinical Group

The investigators established a National Endoscopist Working Group representing academic, community, adult and pediatric practice. Participation from clinicians across the country was solicited to provide key clinical and quality indicators, leveraging the most up-to-date national and international standards.

3. Consensus Meetings & Finalizing Data Model

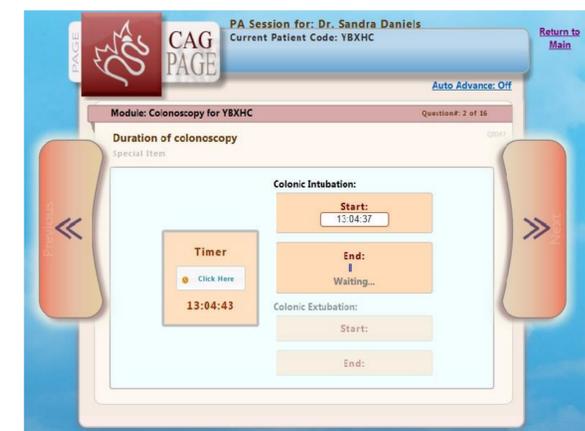
The group reviewed and incorporated elements and indicators from the Canadian Association of Gastroenterology (CAG) consensus guidelines on safety and quality indicators in endoscopy (January 2012), Clinical Outcomes Research Initiative (CORI), UK Global Rating Scale (GRS), Colonoscopy Reporting and Data System (CO-RADS) and Minimal Standard Terminology (MST).

Participants determined content for inclusion in the endoscopy data model. Data elements were defined and identified as being essential or optional.

Essential: Required for a complete endoscopy report

Optional: Recommended for a complete endoscopy report

Participants were advised to produce data models that could be used generically across technology platforms. Providers and organizations have the ability to adapt the data model by selecting optional data elements for inclusion.



Endoscopy Template Structure

A. Administrative & Identification Details

Template Administration	Patient Information	Provider Details	Facility Details
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B. Procedure Planned & Performed

Procedure Administration

C. Pre-Procedure Assessment

Clinical & Surgical History	Patient Consent	Pre-Procedure Preparation	Physical Exam
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D. Procedure

Procedure Details	Includes sections on: anesthesia/sedation, position, instruments, procedure times, Findings and interventions
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E. Completion

Notable Events	Follow-up
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4. Submission of Template for Endorsement

The final template was submitted to the Canadian Society of Gastroenterology (CAG) for review and endorsement. Partnering with a clinical society or national organization provides a mechanism to disseminate the data model and oversight process to regularly review and maintain the content.

SNARE – Opportunities and Challenges

Opportunities:

Many of the data elements required in RPAGE are included in the pan-Canadian reporting data model. Integration will improve accuracy and save time through point of care data entry.

Challenges:

1. Only anonymized patient data is collected in RPAGE. The systems must be linked without exposing patient identifiers while enabling faculty to provide specific feedback to trainees.
2. In addition to procedural details, RPAGE requires unique reflective data elements to provide comprehensive user feedback.

Next Steps

An integrated platform is under evaluation to securely populate the RPAGE portal with anonymized clinical data captured synoptically at the point of care. This will enable timely feedback and review as part of ongoing quality improvement to individual endoscopists and programs.

We hope this will serve as a potential model for practicing endoscopists across the country.

For more details, please contact Dr. Peter Rossos at peter.rossos@utoronto.ca