

Alberta North Zone Endoscopy Quality Study

Dereck Mok MD FRCSC, Nicole Olivier ACRP-CP, Michael Kolber MD CCFP MSc

INTRODUCTION

- Variability exists between individual endoscopists' colonoscopy performance.
- Providing endoscopists with a synthesized report of key performance indicators (KPIs) in colonoscopy improves future colonoscopy quality.

OBJECTIVES:

- To implement a program that captures quality metrics in colonoscopy in a large geographically diverse health region and across medical specialties.
- To explore the quality of colonoscopies performed by regional endoscopists.
- To compare outcome measures with colonoscopy benchmarks.

METHODS

Prospective, multi-centre observational study with electronic data collection of key performance indicators in colonoscopies performed in Northwestern Alberta.

OUTCOMES: Indications, Bowel prep results, patient comfort and sedation, cecal intubation rate, polyp detection rates, number of polyps per 100 colonoscopies.

PARTICIPANTS, SITES PATIENTS and PROCEDURES

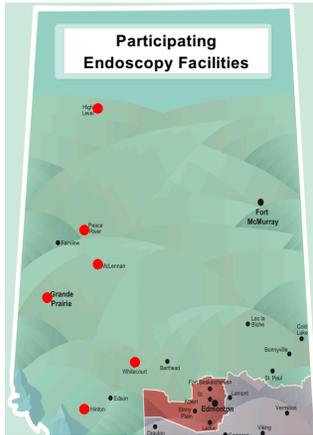
ENDOSCOPISTS: (n=15)

- 8 Surgeons, 4 Family Physicians, 3 General Internists

SITES: (n=6; see map: ●)

PROCEDURES: n = 5576

DEMOGRAPHICS	
Mean Patient Age	56.8 years
Female	49.7%
First-Time Colonoscopy	41.7%
INDICATIONS	
- Screening	28.3%
- Symptoms	37.9%
- Follow Up Scope	25.3%
- Other	6.4%



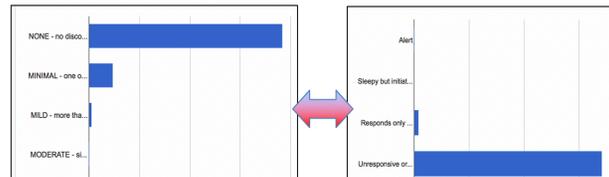
RESULTS

OUTCOME:	Study Results	Benchmark
Inadequate Bowel Preparations	4.5%	< 10%
Patient comfort	5.9%	Moderate + significant discomfort <10%
Proportion of Successful Cecal Intubations	97.0%	≥ 90%
Withdrawal Time (when no lesions detected)	7.4 mins	≥ 6minutes
Proportion of Males with polyp (≥50 years, 1 st time colonoscopy)	65.7%	≥ 45%
Proportion of Females with polyp (≥50 years, 1 st time colonoscopy)	48.8%	≥ 35%
Number of polyps per 100 colonoscopies: (all colonoscopies)	113	NA

SEDATION:

- Performed by:** endoscopist (3093, 68.6%), anesthetist (1414, 31.4%)
- Agents used:** Versed (97.6%), Fentanyl (76.1%), Propofol (31.2%)
- Colonoscopies without sedation:** n=41

Variability Between Sites: Patient Level of Sedation

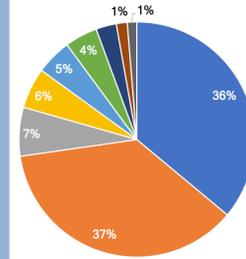


More sedated, lower patient discomfort

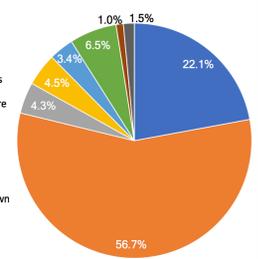


Less sedated, more patient discomfort

Predominant Finding: All Scopes



Predominant Finding: All FIT+ Scopes



CONCLUSIONS

- Alberta North Zone endoscopists and their teams are willing to participate in studies evaluating quality metrics in colonoscopy.
- Alberta North Zone Surgeons, Internists and Family Physician endoscopists are achieving quality benchmarks in colonoscopies.
- Variability may exist in sedation practices.



LIMITATIONS

- Non-universal participation of Alberta NZ Endoscopists
- Inability to track delayed complications relating to endoscopy

FUTURE PLANS

- Ongoing Data Reporting with comparisons of results over time.
- Recruit additional Endoscopy Units within Alberta.
- Facilitated feedback sessions with participants.
- Pathological verification of lesions for Adenoma Detection Rate
- Compare study participant and non-participating endoscopist outcomes

Acknowledgements: we would like to thank the participating physicians and their endoscopy teams for participation in the study and the Alberta North Zone Quality Assurance team for funding the project