



# Quality Indicators for GI Endoscopic Procedures: the Triple Society Paper

Julie C. Servoss, MD, MPH – Medical Director of Gastroenterology

Elliot Ellis, MD – Team Lead for Gastroenterology

Erin Dettrey, PA-C, MBA – Product Manager for Analytics

# Modernizing Medicine



Julie C. Servoss, MD, MPH

- Medical Director, EMA Gastroenterology
- Practicing gastroenterologist in Boynton Beach, FL
- MD/MPH | Harvard
- Gastroenterology & Hepatology | Harvard | MGH



Elliot Ellis, MD

- Team Lead, EMA Gastroenterology
- Practicing gastroenterologist in Palm Beach, FL
- Internal Medicine Resident | Yale
- Gastroenterology Fellowship Mount Sinai New York



Erin Dettrey, PA-C, MBA

- Gastroenterology Physician Assistant since 2000
- Masters in Business Administration
- Product Manager Analytics for gMed/Modernizing Medicine

# Background

## Origins of the Triple Society Paper

- In 2006, the American Society for Gastrointestinal Endoscopy (ASGE)/American College of Gastroenterology (ACG) Task Force on Quality in Endoscopy published their first version of quality indicators for colonoscopy.
- In 2015, these quality indicators were updated and represent the current indicators that GI endoscopists should use in the quality improvement process. (Gastrointestinal Endoscopy, 2015; 81(1); 31-53.)

# Purpose of identifying and measuring quality indicators

- Improve patient care by identifying poor performers and retraining them or remove privileges if performance cannot be improved
- Example: adenoma detection rate (ADR)
  - The most effective interventions to improve ADR include two areas of education
    - Paris classification – flat and depressed lesions
    - Withdrawal technique, e.g., probing the proximal sides of folds, cleaning up pools of retained mucus and ensuring adequate distension of the entire colon
  - Other interventions include technical adjuncts (chromoendoscopy)

# Development of the quality indicators

- Task Force summarized current evidence
  - Focused on parameters related to endoscopic procedures
- Quality indicators graded by strength of evidence

**TABLE 1. Grades of recommendation\***

<b>Grade of recommendation</b>	<b>Clarity of benefit</b>	<b>Methodologic strength supporting evidence</b>	<b>Implications</b>
1A	Clear	Randomized trials without important limitations	Strong recommendation, can be applied to most clinical settings
1B	Clear	Randomized trials with important limitations (inconsistent results, nonfatal methodologic flaws)	Strong recommendation, likely to apply to most practice settings
1C+	Clear	Overwhelming evidence from observational studies	Strong recommendation, can apply to most practice settings in most situations
1C	Clear	Observational studies	Intermediate-strength recommendation, may change when stronger evidence is available
2A	Unclear	Randomized trials without important limitations	Intermediate-strength recommendation, best action may differ depending on circumstances or patients' or societal values
2B	Unclear	Randomized trials with important limitations (inconsistent results, nonfatal methodologic flaws)	Weak recommendation, alternative approaches may be better under some circumstances
2C	Unclear	Observational studies	Very weak recommendation, alternative approaches likely to be better under some circumstances
3	Unclear	Expert opinion only	Weak recommendation, likely to change as data become available

\*Adapted from Guyatt G, Sinclair J, Cook D, et al. Moving from evidence to action. Grading recommendations—a qualitative approach. In: Guyatt G, Rennie D, editors. Users' guides to the medical literature. Chicago: AMA Press; 2002. p. 599-608.

# Development of the quality indicators

- Each quality measure classified as *outcome* or *process* measure
- These are quality indicators and NOT measures
- Each quality indicator has a *performance target*
  - Targets set from benchmarking data in the literature when available
  - N/A listed when no data available
  - If expert consensus considered failure to perform a “never event”, then target level set > 98%

# Development of quality indicators

- Quality indicators divided into 3 categories:
  - Pre-procedure
  - Intraprocedure
  - Postprocedure



# Pre-procedure quality indicators common to all endoscopic procedures

Quality indicator	Grade of recommendation	Measure type	Performance target (%)
<b>Preprocedure</b>			
1. Frequency with which endoscopy is performed for an indication that is included in a published standard list of appropriate indications, and the indication is documented (priority indicator)	1C+	Process	> 80
2. Frequency with which informed consent is obtained and fully documented	3	Process	> 98
3. Frequency with which preprocedure history and directed physical examination are performed and documented	3	Process	> 98
4. Frequency with which risk for adverse events is assessed and documented before sedation is started	3	Process	> 98
5. Frequency with which prophylactic antibiotics are administered for appropriate indication (priority indicator)	Varies	Process	> 98
6. Frequency with which a sedation plan is documented	Varies	Process	> 98
7. Frequency with which management of antithrombotic therapy is formulated and documented before the procedure (priority indicator)	3	Process	N/A
8. Frequency with which a team pause is conducted and documented	3	Process	> 98
9. Frequency with which endoscopy is performed by an individual who is fully trained and credentialed to perform that particular procedure	3	Process	> 98

# Pre-procedure quality indicators specific to colonoscopy

1) Frequency of Correct Indication	Performance Target > 80%
2) Specific Informed Consent	>98%
3) Correct Screening Intervals	>90%
4) UC and Colitis Intervals	>90%

# Intraprocedure quality indicators common to all endoscopic procedures

Intraprocedure			
10. Frequency with which photodocumentation is performed	3	Process	N/A
11. Frequency with which patient monitoring during sedation is performed and documented	3	Process	> 98
12. Frequency with which the doses and routes of administration of all medications used during the procedure are documented	3	Process	> 98
13. Frequency with which use of reversal agents is documented	3	Process	> 98
14. Frequency with which procedure interruption and premature termination due to sedation-related issues is documented	3	Process	> 98

# Intraprocedure quality indicators specific to colonoscopy

- |  |                                    |
|--|------------------------------------|
| 1) Frequency of Prep Quality Documentation | >98%                               |
| 2) Adequate Bowel Prep                     | >85%                               |
| 3) Cecal Intubation WITH Photography       | >95% Screening, 90% all            |
| 4) Adenoma Detection Rate                  | 25% for All (30% Male, 20% Female) |
| 5) Withdrawal Time Documented              | >98%                               |
| 6) Average Withdrawal Time                 | >6 Minutes                         |
| 7) Biopsies For Chronic Diarrhea           | >98%                               |
| 8) Tissue Sampling for Colitis             | >98%                               |
| 9) Attempt at polyp removal <2cm           | >98%                               |

# Postprocedure quality indicators common to all endoscopic procedures

## Postprocedure

15. Frequency with which discharge from the endoscopy unit according to predetermined discharge criteria is documented	3	Process	> 98
16. Frequency with which patient instructions are provided	3	Process	> 98
17. Frequency with which the plan for pathology follow-up is specified and documented	3	Process	> 98
18. Frequency with which a complete procedure report is created	3	Process	> 98
19. Frequency with which adverse events are documented	3	Process	> 98
20. Frequency with which adverse events occur	3	Outcome	N/A
21. Frequency with which postprocedure and late adverse events occur and are documented	3	Outcome	N/A
22. Frequency with which patient satisfaction data are obtained	3	Process	N/A
23. Frequency with which communication with referring provider is documented	3	Process	N/A

# Postprocedure quality indicators specific to colonoscopy

- 1) Incidence of Perforation                      Performance Target < 1:500, <1:1000 (all)
- 2) Incidence of Post Polypectomy Bleeding                      <1%
- 3) Bleeding Managed without Surgery                      >90%
- 4) Appropriate Repeat Colonoscopy Recommendation >90%

# Implementing quality improvement process for endoscopists

- Quality indicators have been identified
- Now, practices must have ability to assess how each endoscopist and the practice are performing...practices need a “score card”
  - Quality indicators must be measured and tracked
- Once indicators or outcomes are measured, a practice can respond with a plan, implement the plan and re-measure outcomes
- ...this becomes the practice improvement cycle

# The practice improvement cycle



Image reference: <http://www.cpsa.ca/trevors-take-building-better-practice-improvement-program/>



# gInsights: evaluating quality indicators

- With gInsights, practices can track
  - Quality indicators
  - By enterprise, server, location, provider and other parameters
  - By month, quarter, year and other time points

## Quality Indicators: Colonoscopy

Overall

IND

Doc

Intervals

ADR

WDT

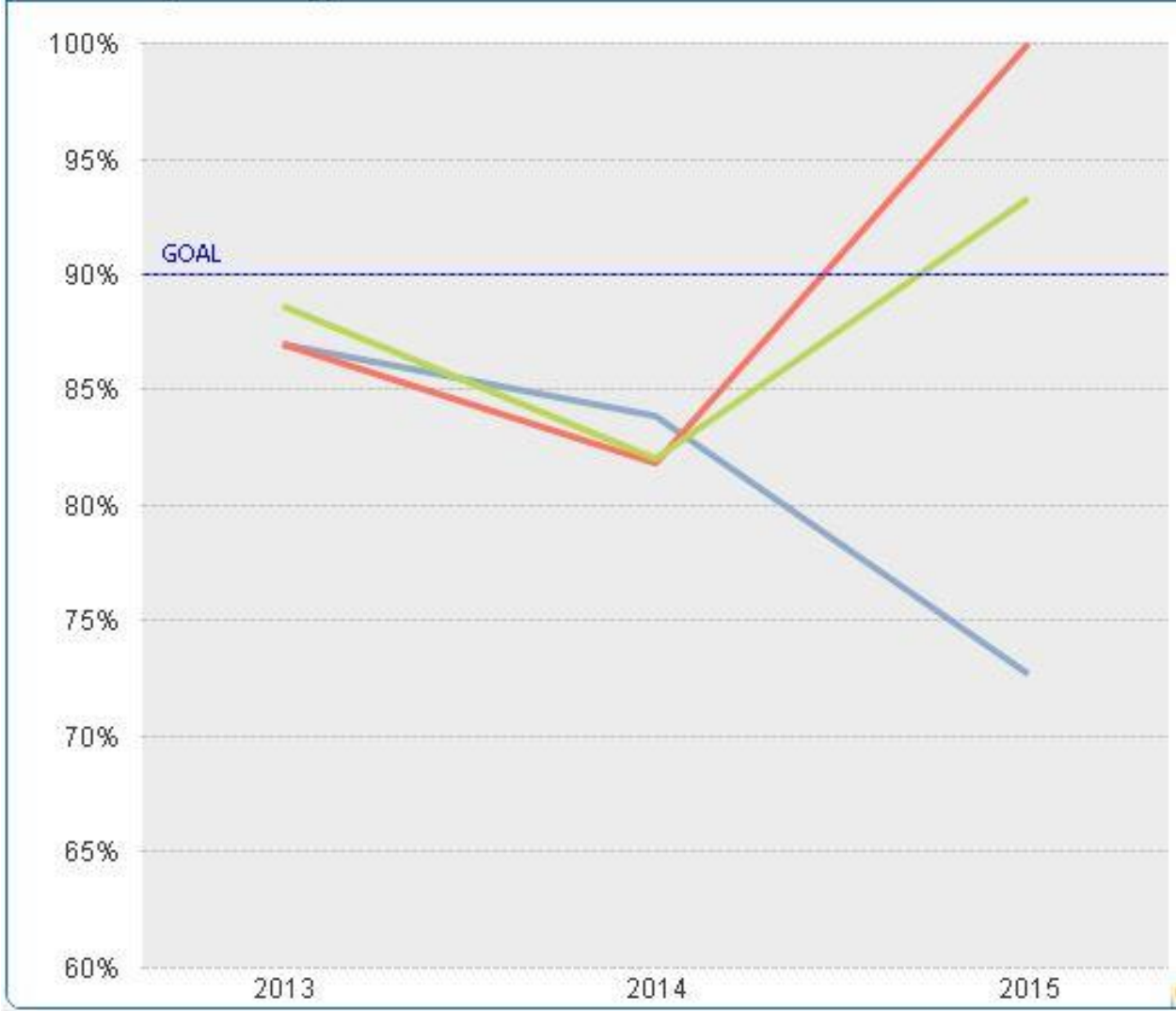
Patients List

Complete Documentation	Measure	Current Month	Current Quarter	Current Year	Last Year
Indications	I	●	●	●	●
Informed Consent	II	●	●	●	●
Quality of Preparation	V	●	●	●	●
Withdrawal time	IXa	●	●	●	●
Cecum Intub/Pic (All Colons)	VIIa	●	●	●	●
Cecum Intub/Pic (Screening)	VIIIb	●	●	●	●
Complication: Perforation (ALL)	XIIIb	●	●	●	●
Complication: Perforation - Screening	XIIIc	-	-	-	-
Complication: Post Polypectomy Bleed	XIII d	○	○	○	○
Limitations / Complications	XIIIa	●	●	●	●
Procedure Quality Indicators	Measure	Current Month	Current Quarter	Current Year	Last Year
Appropriate Intervals: Screening	IIIa	○	○	○	○
Frequency of Inadequate Prep	VI	●	●	●	●
Adenoma Detection Rate - Mixed Gender	VIIIa	○	○	○	●
Adenoma Detection Rate - Males	VIIIb	○	○	○	●
Adenoma Detection Rate - Females	VIIIc	○	○	○	●
Indications Diarrhea = Biopsies	X	-	●	●	○
Withdrawal Time	IXb	●	●	●	●

# gInsights: evaluating quality indicators

- One can then analyze
  - Individual quality indicators
  - Individual providers
  - Groups of providers

# Intervals (Screening) Measure IIIa



# Quality Indicators: Colonoscopy

Overall

IND

Doc

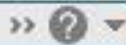
Intervals

ADR

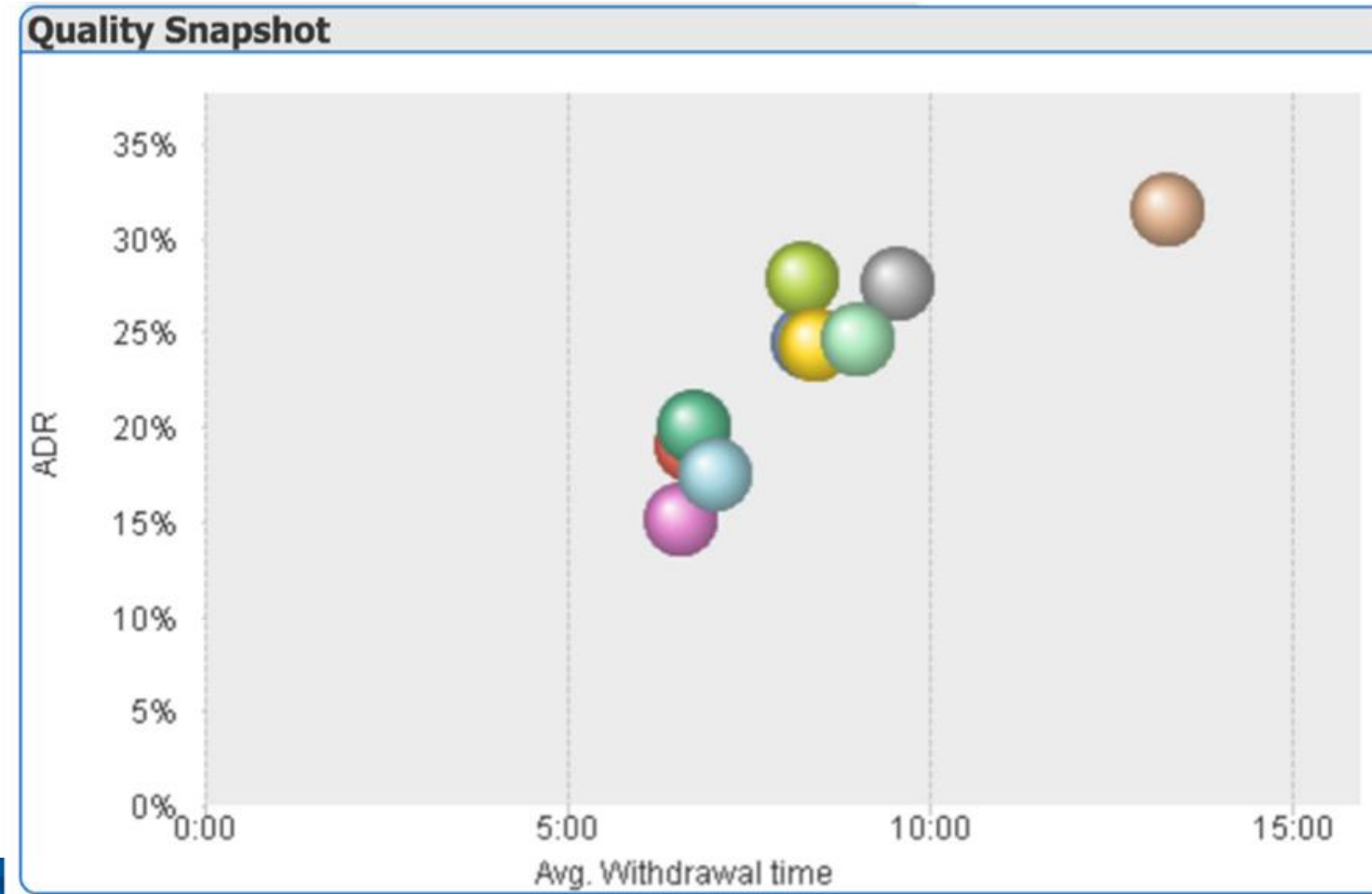
WDT

Patients List

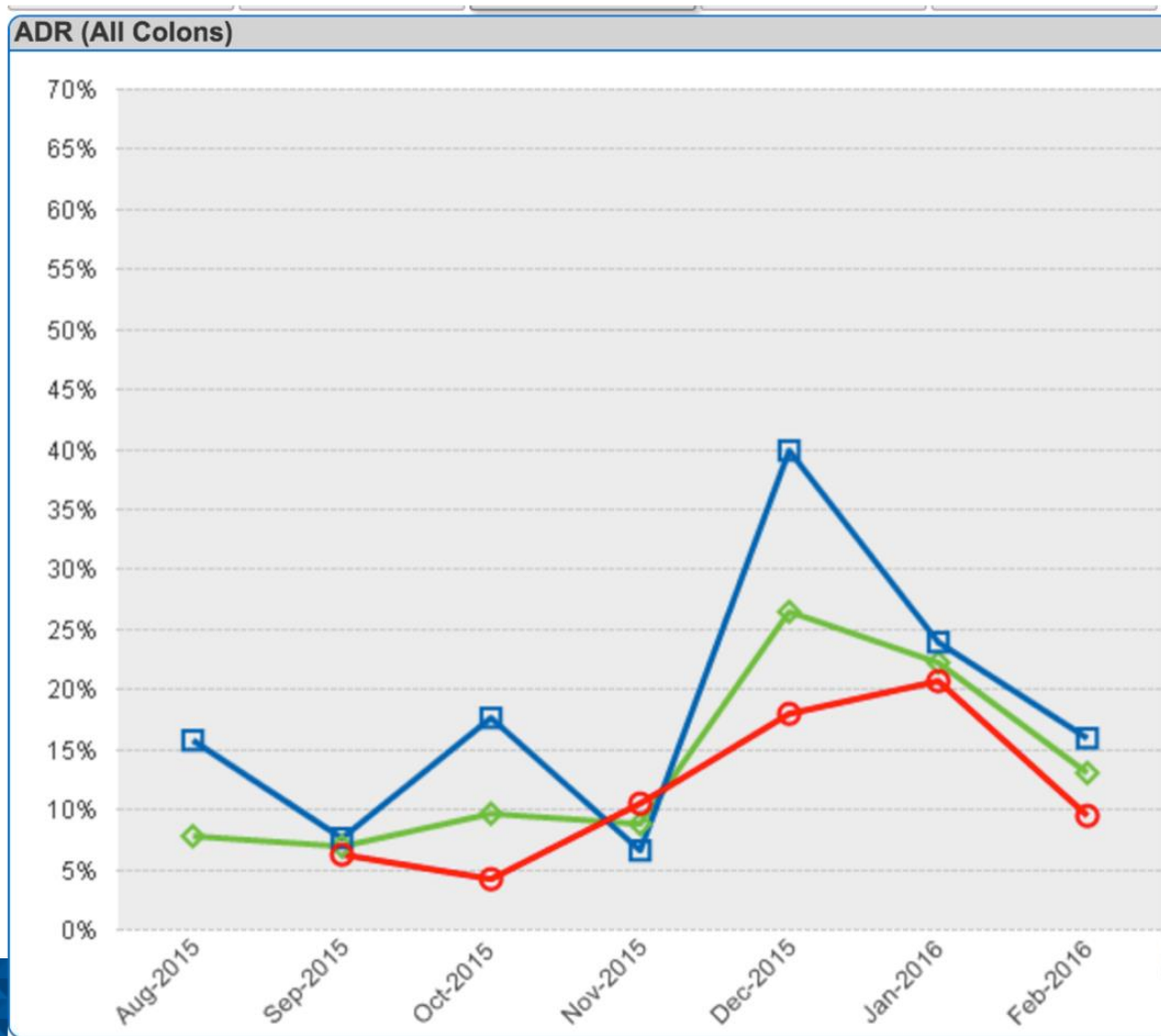
## Average Withdrawal Time



# Evaluating whether withdrawal time is associated with adenoma detection rate (ADR) for the practice



# Implementing practice improvement plan and reassessing outcomes (ADR)



# gInsights facilitates the practice improvement cycle

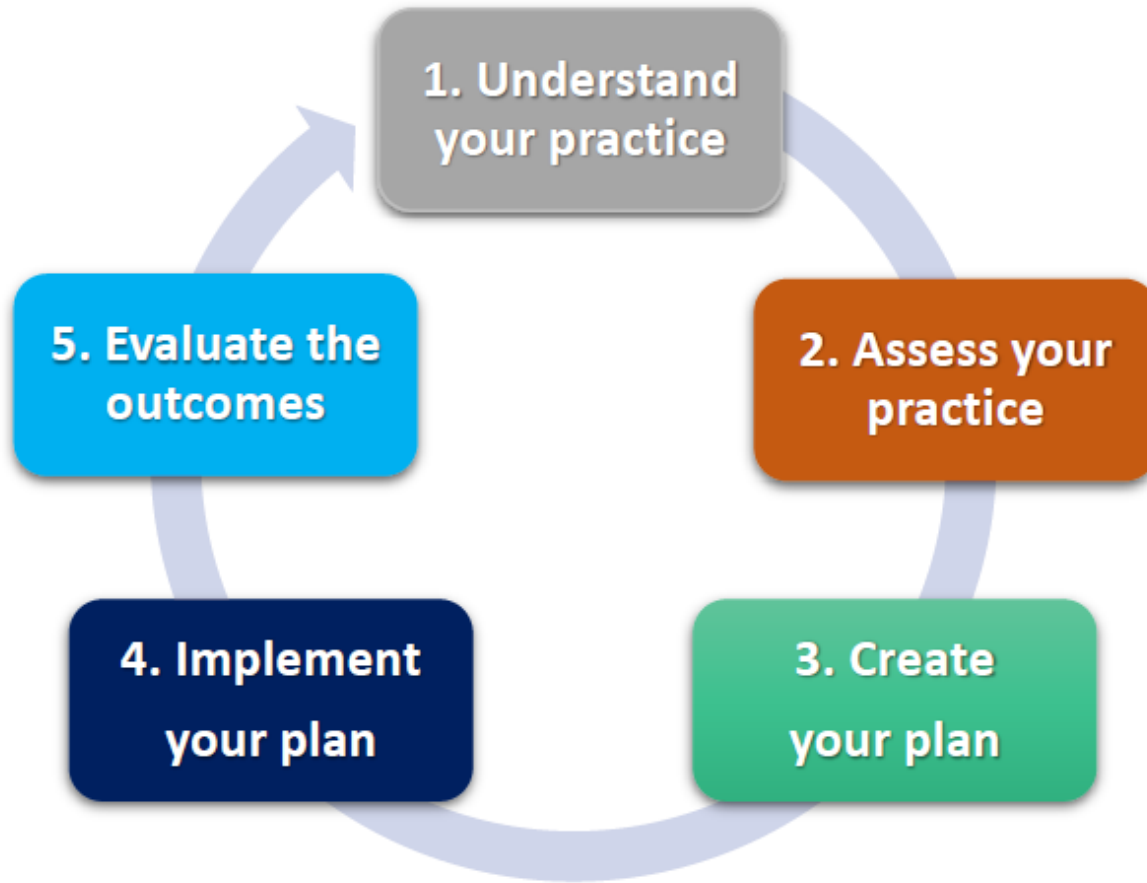


Image reference: <http://www.cpsa.ca/trevors-take-building-better-practice-improvement-program/>



# Summary

- The Triple Society Paper provides the current indicators that GI endoscopists should use in the quality improvement process
- Quality of patient care will drive government and industry reimbursement over time
- Practices will need to KNOW and REACT to their quality outcome data before it negatively impacts the practice's bottom line
- You can PROMOTE and leverage your data to differentiate your practice with referring physicians, payers, ACO's, hospital systems and CMS

# Questions?

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**Society of Gastroenterology Nurses & Associates | Booth 331**

**Digestive Disease Week | Booth 910**