QI Guidelines

• **Priority Indicators**
  - PDR
  - Caecal Intubation Rate
  - Withdrawal Time
QI Guidelines

• How is PDR calculated
  ➢ Colonoscopies with polyps detected expressed as a % of total colonoscopies per Endoscopist

• Key Quality Target:
  ➢ 20% of all colonoscopies have a polyp(s) detected
Polyp Detection Vs Adenoma Detection

• Polyp Detection is used as a proxy marker for Adenoma Detection Rate.

• Ideally we would be recording adenoma detection as a direct marker.
  – Lack of link to histology means that the Programme is some years away from being able to calculate Adenoma Detection Rate accurately.

• Currently, ADR is often recorded using retrospective data entry.
  – Due to the lack of resources in busy departments, this is not always possible.
Adenoma Detection Rate (ADR)

- Higher ADR = higher quality exam = fewer missed cancers
- Goal:
  - >25% for men >50 yrs
  - >15% for women > 50 yrs

Rex DE et al. Am J Gastroenterol 2002;97:1296-1308
Current Polyp Detection Rates

Colonoscopy - Percentage of Cases with Polyp Detection by month (July 2016 - 7 July 2017)

National Polyp Detection Rate for the 2016/2017 year: 30%
Current Polyp Detection Rates

70% of Endoscopists meeting the Polyp Detection target
Ways to Improve Polyp/Adenoma Detection

- Good scoping technique
- Good Bowel prep
- Withdrawal Time
- Underwater colonoscopy
- Colonoscopy aids – Chromoendoscopy in IBD, NBI, Add-ons

Train The Trainers (TTT) Course has shown to improve PDR / ADR in UK
Good Technique

- Aim to have a straight scope to get a 1:1 movement
- Avoid Loops
Good Technique

• Change Position of Patient: Bottom Line
  – Left lateral: sigmoid / left colon
  – Supine: splenic flexure and transverse colon
  – Left Lateral: Right colon
  – Finally Right Lateral: to properly view Caecum
During Withdrawal

Technique

• Look behind folds
• Clear the debris
• Distend the colon

2\textsuperscript{nd} time look at Right colon improves ADR
No difference between forward and retro view

Kushnir \textit{Am J Gastroenterol March 2015}
Split Prep Is Superior to Other Preps

- Meta-analysis
- 9 Trials
- Spilt dose is superior for excellent prep OR 3.46
Split Prep = Higher ADR

- Split prep
- Non Split
Withdrawal Time

- 12 Gastroenterologists
- 7882 colonoscopies
- Mean withdrawal time >6min had higher adenoma detection rates

28.3% vs. 11.8% P <0.001

NEJM 2006; 355:2533-41
Quality Indicators
Risk for Interval CRC

- 186 Endoscopists
- 45,026 patients
- End point: development CRC between screening and next surveillance exam
- Adenoma Detection Rate (ADR) of less 20% has 11-12 fold increase for an interval CRC

N Engl J Med 2010;362 1795-803
Increases ADR
Increases right-sided polyp detection

<table>
<thead>
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<th>Study or subgroup</th>
<th>Endocuff</th>
<th>Without Endocuff</th>
<th>Odds ratio M-H, fixed, 95%CI</th>
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<td>Chin et al 2015</td>
<td>93</td>
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<tr>
<td>Total events</td>
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<td>164</td>
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Heterogeneity: $\chi^2 = 1.77$, df = 2 ($P = 0.41$); $I^2 = 0$

Test for overall effect: $Z = 3.96$ ($P < 0.0001$)
Take Home Points

• Measurement of PDR / ADR is essential

• High levels of PDR can be achieved with meticulous technique, split bowel preparation, High definition instruments

• TTT or leadership courses improve PDR and should be done by colonoscopists

• Add on devices like Endocuffs improve PDR
Round Table Discussions

• How does your hospital record Adenoma Detection Rates?

• Is there any other information that could be recorded to increase the significance of Polyp Detection? (location of polyp or hyperplastic, serrated, inflammatory polyps)

• Should we split targets for Polyp Detection by Male and Female?

• Should resources be sought to allow retrospective data entry for ADR?