2017/2018 National Data Report

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National Data Reporting

• 3rd National Data Report released today

• Covers procedures performed from the 7th of July 2017 to the 8th of July 2018

• 39 Hospitals submitted data to the report
  o 31 Public Hospitals
  o 8 Private Hospitals

• 99.2% Data coverage
  o To be used as a tool with local confirmation of significant findings
  o Data should not be used to directly compare units
New in this Report

• Move from bar charts to Funnel Plots
  o Additional context provided to KQIs by including the number of procedures performed.

• Increased focus on the number and percentage of Endoscopists meeting targets rather than national averages

• Emphasis on patients over 70 years of age when looking at Sedation
Funnel Plots

- Funnel Plots would usually contain 99.7% of instances within the outer limits, anything that falls outside of this is deemed to be very unusual.

- This is not the case for the funnel plots used in these reports.

- They act more as scatter plots with extra information on the average.

- Beneficial by providing extra context to the KQI.
Caecal Intubation Rate

Colonoscopy - Caecal Intubation Rate by Hospital
(July 2017 - July 2018)

Minimum Target: ≥90% of cases with Caecal Intubation
Achievable Target: ≥95% of cases with Caecal Intubation
Caecal Intubation Rate

Caecal Intubation Rate By Hospital
(July 2017 - July 2018)
Caecal Intubation Rate

CI Rate is calculated by number of cases where caecum was intubated as Endo1 or Endo2, as a percentage of the total number of colonoscopies performed as Endo1 or Endo2.
Caecal Intubation Rate

Colonoscopy - Endoscopists by CI Rate and Case Amount

Number of Cases
Caecal Intubation Rate – Summary

• Number of Endoscopists meeting the CI Rate minimum target has increased from 64% to 71%

• There could be a relationship between the fluctuation in unit CI Rate depending on whether or not the unit provides training

• It is difficult to ascertain who the cohort performing low numbers of procedures are as the ERS does not currently collect that information.
  o When we look at cases performed by Endoscopist 1 only as a proxy for non-trainees we see similar CI Rate. (72% meeting target)
Caecal Intubation Rate - Recommendation

• Maintaining a high volume of procedures is related to a high CI Rate
  o Inverse is also, but not always, true; low volumes correlate with low CI Rate

• In order to maintain and increase CI Rates it is recommended that Endoscopists keep their number of procedures high

• Future IT upgrades should include the ability to record further information on Endoscopist (e.g. whether they are a Trainee or not)
Comfort Score

Target:
≥80% of colonoscopies with a comfort score of 1 or 2

1 - No: No discomfort – resting comfortably throughout.

2 - Minimal: One or two episodes of mild discomfort, well tolerated.

3 - Mild: More than two episodes of discomfort, adequately tolerated.

4 - Moderate: Significant discomfort, experienced several times during the procedure.

5 - Severe: Extreme discomfort, experienced frequently during the procedure.
Comfort Score

Colonoscopy - Comfort Score by Hospital
(July 2017 - July 2018)
Comfort Score

Colonoscopy - Percentage and Number of Cases by Comfort Score nationally

- 1 - No Discomfort: 52457 Cases (58%)
- 2 - Minimum Discomfort: 26824 Cases (29%)
- 3 - Mild Discomfort: 8354 Cases (9%)
- 4 - Moderate Discomfort: 663 Cases (1%)
- 5 - Severe Discomfort: 2696 Cases (3%)

Total Cases: 103304

[Diagram showing the distribution of comfort scores in colonoscopy cases]
Comfort Score

Summary:
• Percentage of Endoscopists meeting Comfort Score target is now at 65%, up 1% on last year

Recommendations:
• Units should ensure their Comfort Score scales is standardised to the definitions set out in the Gloucester Scale

• Comfort Score should be suggested by a 3rd party (e.g. an endoscopy nurse) and agreed with the Endoscopists before recording
Polyp Detection

Colonoscopy - Number and Percentage of Endoscopists Above and Below Polyp Detection Target

- Above Target: 459 Endoscopists (73%)
- Below Target: 174 Endoscopists (27%)

Target: 
≥20% of colonoscopies with a polyp detected
Polyp Detection

Polyp Detection Rate by Hospital
(July 2017 - July 2018)

Number of Colonoscopies

Polyp Detection Rate

Hospital Polyp Detection Rate

Target
Polyp Detection

Summary

• Vast majority of units are above target for this KQI

• The Polyp Detection national average is over 10% more than the target

• There is a huge variation between unit’s Polyp Detection Rates
  ○ Possibly due to the difference between screening & non screening sites
Bowel Preparation Rates by Hospital
(July 2017 - July 2018)
Bowel Preparation - Summary

- Majority of units not meeting the minimum target of ≥90% of cases with a Bowel Prep score as Excellent or Adequate

- There a large variation between units Bowel Preparation Scores
  - This could reflect a variation in bowel prep recording
Bowel Preparation - Recommendation

• There is a need to further standardise bowel preparation definitions

• Definitions as per the QI Guidelines:

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Adequate</th>
<th>Complete despite poor prep</th>
<th>Failed due to poor prep</th>
</tr>
</thead>
<tbody>
<tr>
<td>No or minimal solid stool and only clear fluid requiring suction</td>
<td>Collections of semi-solid debris that are cleared with washing/suction</td>
<td>Solid or semi-solid debris that cannot be cleared effectively but which still permits intubation to caecum</td>
<td>Solid debris that cannot be cleared effectively and prevents intubation to caecum.</td>
</tr>
</tbody>
</table>
Duodenal 2\textsuperscript{nd} Part Intubation

OGD - National Duodenal 2nd Part Intubation Rate per Quarter - Year on Year

- National Duo2 Rate
- Target

Data Maturation
Duodenal 2\textsuperscript{nd} Part Intubation

\textbf{OGD - Duodenal 2nd Part Intubation by Hospital}

\textit{(July 2017 - July 2018)}
Retroflexion

OGD - Retroflexion Rates by Hospital
(July 2017 - July 2018)
2nd Part Intubation and Retroflexion

Summary
• Vast majority of units, and Endoscopists, are achieving target for OGD KQIs.
• Extreme outliers could possibly reflect data entry errors

Recommendation
• Outlier units should check their local data to confirm findings
• If data entry is due to boxes not being mandatory in the ERS, units should liaise with their vendor to make them mandatory fields
Sedation

Colonoscopy - Midazolam - Endoscopists Above and Below Target (Over 70s)

- 267 Endoscopists (46%)
- 308 Endoscopists (54%)

- Endoscopists with a median of ≤3mg
- Endoscopists with a median of >3mg
Sedation

Colonoscopy - Midazolam Dosages in Patients 70 and Older - Number and Percentage of Cases

- 6081 Cases (31%): <=3mg
- 12007 Cases (62%): >3mg and <=5mg
- 12 Cases (0%): >5mg and <=7mg
- 267 Cases (2%): >7mg and <=10mg
- 1043 Cases (5%): >10mg
Sedation

Colonoscopy - Midazolam Dosages in Patients 70 and Older - Percentage of Cases per Hospital
Endoscopist Target Median: ≤3mg
Sedation

Colonoscopies - Percentage of Colonoscopies per Hospital for patients Over 70 where 3mg Sedation Target is met

Number of Colonoscopies vs % of COLs Meeting Sedation Targets

- National Average
- Sedation on target
Sedation

OGD - Midazolam - Endoscopists Above and Below Target (Over 70s)

159 Endoscopists, 27%
427 Endoscopists, 73%

- Endoscopists with a median of <=3mg
- Endoscopists with a median of >3mg
Sedation

Summary:
• The number of Endoscopists achieving the target median for this KPI has remained static at around 54% over the past 3 years.

• It seems that some units are regularly administering the same dosage of midazolam to patients under 70 and patients over 70

Recommendation:
• Endoscopy units could procure lower concentrations of midazolam, e.g. 1mg/ml, to facilitate the administering of lower dosages
Combined KPI

• Performance Indicator for Colonic Intubation (PICI)

• Formula for calculation in this report:

  Number of cases where Caecum was intubated, Midazolam ≤3mg, Comfort Score of 1 or 2
  Total number of colonoscopies

• Intended to be used as a stimulant for thought rather than a full KPI
  o The formula used is not ideal (combines age categories)
  o Can be improved on if it is found to be beneficial
Combined KPI

PICI Score by Hospital
(July 2017 - July 2018)

Number of Colonoscopies

% of procedures meeting PICI target

National Average
PICI %
Sedation at least partially responsible for 90% of cases that did not meet PICI standard.
KQIs - Year on Year

- Endoscopists meeting target Year on Year

![Percentage of Endoscopists Meeting KQI Targets Year on Year](chart.png)
Overall Summary Points

- The number of Endoscopists meeting targets for KQIs continues to increase for most KQIs

- Data seems to have matured over the past 3 years
  - A couple of units still have some data entry issues in relation to OGD KQIs

- Standardisation of definitions is still needed in the subjectively recorded KQIs

- Issues persist in regards to levels of sedation being administered to patients over 70
Using the Data from reports

• Information contained in the National Data Report should be confirmed in units against local data

• People should be encouraged to use the data collected by NQAIS-Endoscopy for Quality Improvement projects

• Where persistent problems are identified they should be addressed through local hospital procedures

• The national training lead has now been appointed.
  ○ NQAIS data can help to identify training needs in your unit.
Thank you