Endoscopy Guidelines for Triage and Surveillance - Can We Improve Adherence ?

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Introduction

Encouraging standardised, guideline based triage and surveillance of GI referrals is a critical facet of endoscopy waiting list management, particularly in the current climate of COVID-19.

Although guidelines for endoscopy surveillance [1-3] are readily available, fewer exist for endoscopy triage[4-6] Where such guidelines exist there would appear to be considerable variability in their application. Deviation from guidelines can significantly increase endoscopy workload due to inappropriate use of endoscopy as a diagnostic tool and misclassification of procedures as urgent.

In our endoscopy unit triage of endoscopy referrals is carried out exclusively by Consultant Gastroenterologists. Nursing staff, with appropriate guidance and supervision, could be engaged to assist in this process.

Aim

- To determine if the use of locally developed flowsheets, created using existing guidelines, could aid in standardisation of endoscopy triage and surveillance in a single endoscopy unit.
- To determine the difference, if any, between medical and nursing staff with and without access to these flowsheets

Methods

Existing international (BSG, ESGE, NICE)[1-3,6] and national (HIQA)[4,5] guidelines were reviewed.

Simple flowsheets based on these guidelines were devised to address 3 categories:

- Triage:
  - Upper endoscopy
  - Lower GI endoscopy
- Surveillance:
  - Polyp surveillance
  - Barretts surveillance
- Family history of colorectal cancer (CRC)

A baseline quiz of clinical scenarios was created for each of the above and all endoscopy users were invited to participate. The quiz was then retaken after reviewing the relevant flowsheets.

Results

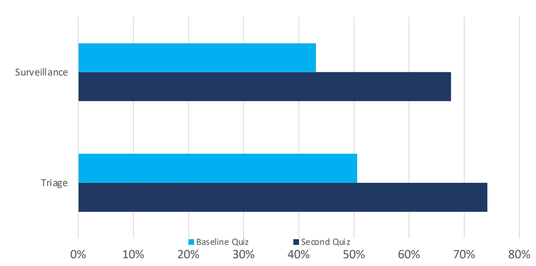
Flowsheet use resulted in significant improvements across all 5 sections of the quiz with the greatest improvement seen in the family history of colorectal cancer (CRC) section (30.2%, p=0.0006).

Table 1 - Results by Section

	Baseline Quiz	Second Quiz	Improvement	P-Value
Lower GI	45.5%	75.5%	30%	<0.0001
Upper GI	55.4%	75.1%	19.7%	<0.0001
Polyp Surveillance	34.2%	58.6%	24.4%	0.0001
Barretts Surveillance	54.2%	76.7%	22.5%	<0.0001
Family History CRC	35.9%	66.1%	30.2%	0.0006

Fig 2. Triage vs. Surveillance

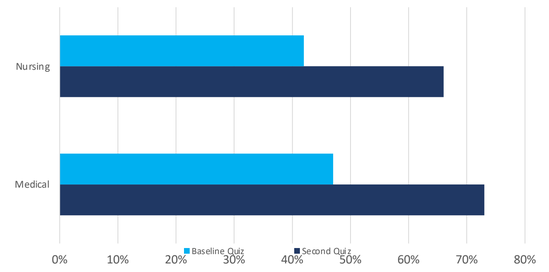
No significant difference was noted in the improvement in scores between the triage and surveillance categories



Results

No significant difference was seen between nursing and all medical staff (consultants and registrars, surgical and medical) (24±18% v 27±16%; p=0.7135)

Fig 3. Overall Medical vs. Nursing Staff
When all medical disciplines and grades were pooled, the proportion of correct answers did not differ significantly from nursing staff.



As a subset, consultant gastroenterologists had more correct answers than nurses at initial assessment (56±5% v 42±12%; p=0.054) but there was no significant difference after reviewing the flowsheets (71±10% v 66±14%; p=0.5566).

Table 2 - GI Consultants vs Nursing Staff

	Baseline Quiz	Second Quiz	Improvement
GI Consultants	56%	71%	15%
Nursing Staff	42%	66%	24%
P-value	0.05	0.5566	0.4018

Overall, GI consultants had higher mean scores at baseline compared to nurses (56±5% v 42±12%, p=0.0054) and GI registrars (56±5% v 46±10%, p=0.0698). However only nurses (42+12% v 66±13%, p=0.0131) and registrars (46±10% v 80±8%, p=0.0007) showed significant improvement in their scores with use of flowsheets (in part due to high baseline scoring of the consultants, with less room for improvement). All groups showed improvement in scores across the 5 sections.

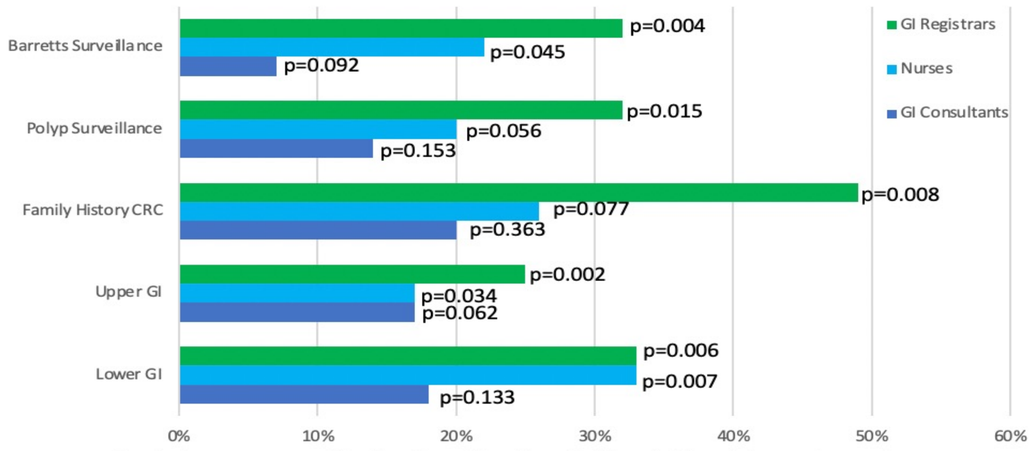


Fig 4. Improvement by Section. Nursing staff and GI registrars showed significant improvement across almost all categories when given the flowsheets for guidance

Discussion

We have shown a significant improvement in triage accuracy after reviewing appropriate guideline flowsheets among medical and nursing staff.

While the consultant medical staff performed better at initial assessment, there was no significant difference between all medical and nursing staff scores after reviewing the guideline-based flowsheets, indicating that with correct training and supervision, assessment of clinical scenarios for surveillance and triage can be safely performed by individuals of different specialities/training/grades, to a high standard.

We conclude that all staff should refer to guidelines when triaging clinical requests. In addition, it demonstrates that our nursing colleagues, with appropriate guidelines as reference and appropriate support, can be utilised to replace or compliment our current system of consultant-led triage.

References:

1. BSG Guidelines on the diagnosis and management of Barretts Oesophagus, 2015
2. BSG post-polypectomy and post-colorectal cancer resection surveillance guidelines, 2019
3. Post-polypectomy colonoscopy surveillance: European Society of Gastrointestinal Endoscopy (ESGE) Guideline, 2020
4. Referral thresholds for patients with lower gastrointestinal symptoms suspected of indicating malignancy, HIQA, 2014
5. Referral thresholds for patients with upper gastrointestinal symptoms suspected of indicating malignancy, HIQA, 2104
6. Suspected cancer: recognition and referral : guidance, NICE 2015