Use of Oesophago-Gastro-Duodenoscopy in Eastern Health

Choosing Wisely Recommendation

Avoid performing an endoscopy for dyspepsia without alarm symptoms for patients under the age of 65 years.

Practice Points

1. Wait time benchmarks for oesophago-gastro-duodenoscopy (OGD) are:

   Priority 1 (Urgent): 0–14 days

   - ◇ High likelihood of cancer, progressive/rapid dysphagia, odynophagia

   Priority 2 (Non-Urgent): 0–60 days

   - ◇ Iron deficiency, confirmation of celiac disease, reflux, dyspepsia, stable dysphagia

   Priority 3 (Screening): 0–182 days

2. Dyspepsia occurs in at least 20% of the population and, although it does not affect life expectancy, it can significantly impact quality of life and is responsible for substantial health care costs.

3. OGD is an accurate test for diagnosing dyspepsia. Most guidelines recommend as the first line approach for managing dyspepsia either empirical proton pump inhibitor therapy or a non-invasive test for Helicobacter pylori and then offering therapy if the patient is positive. If the patient has alarm features (such as unintentional weight loss, anemia, progressive dysphagia, persistent vomiting, palpable mass) endoscopy is appropriate.

4. Previous review of OGD referrals showed that rate of OGD referrals per 1,000 people (aged 20–64 years) in rural hospitals was 63% higher than in St. John's. It also showed access to OGD was better in the rural region than in St. John's.

Methods

1. Data were obtained from Community Wide Scheduler for five hospitals in Eastern Health (EH): Burin, Carbonear, GB Cross, Health Sciences Centre (HSC) and St. Clare's Mercy (SCM).

2. Referral rates and per cent who received OGD within optimal time were compared for those 20 to 64 years of age and those 65 years and older for 2018–19.

Results

Table 1. OGD Referrals to EH by Priority and by Region for 2018–19

			Priority 1	Priority 2	Priority 3	Total
Rural[1]	2018	20–64	416	963	15	1,394
		65+	546	601	16	1,163
	2019	20–64	425	1,081	5	1,511
		65+	517	767	7	1,291
St. John's[2]	2018	20–64	391	1,425	112	1,928
		65+	361	815	48	1,224
	2019	20–64	367	1,243	118	1,728
		65+	308	676	50	1,034
Eastern	2018	20–64	807	2,388	127	3,322
		65+	907	1,416	64	2,387
	2019	20–64	792	2,324	123	3,239
		65+	825	1,443	57	2,325

[1]Burin, Carbonear & GB Cross; [2]HSC & SCM

- In the three rural hospitals of EH, the number of OGDs performed for non-urgent reasons in people aged 20–64 years increased by 12.3% compared to 2018, whereas in St. John's there was a 12.8% decrease.

Table 2. Referral Rate/1,000 Adults by Priority and by Region for 2018–19

			Priority 1	Priority 2	Priority 3	Total
Rural[1]	2018	20–64	6.9	15.9	0.3	23.1
		65+	19.9	21.9	0.6	42.4
	2019	20–64	7.1	18.1	0.08	25.3
		65+	18.2	27.1	0.2	45.5
St. John's[2]	2018	20–64	2.9	10.4	0.8	14.1
		65+	11.1	25.0	1.5	37.6
	2019	20–64	2.7	9.2	0.9	12.8
		65+	9.0	19.9	1.5	30.4
Eastern	2018	20–64	4.1	12.1	0.6	16.8
		65+	15.1	23.6	1.1	39.8
	2019	20–64	4.1	11.9	0.6	0.9
		65+	13.2	23.1	0.9	37.2

[1]Burin, Carbonear & GB Cross; [2]HSC & SCM

- The rate/1,000 adults of OGD for urgent and non-urgent reasons was substantially higher in the three rural hospitals compared to St. John's.
- In particular, in 2019 the rate of OGD/1,000 adults aged 20–64 years for non-urgent indications was 18 in the rural hospitals and 9.2 in St. John's.

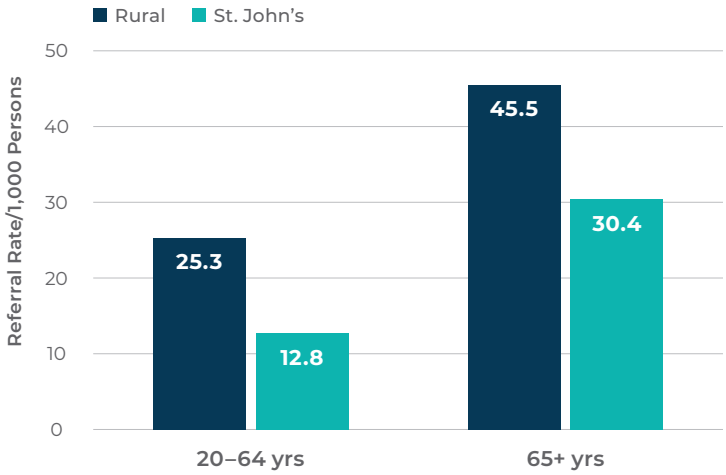

Figure 1. OGD Referral Rates per 1,000 Persons by Age and by Region in 2019

- In 2019, referral rate per 1,000 persons aged 20–64 in the rural hospitals was 98% higher than in St. John's. In people ≥65, the rate was 50% higher in the rural hospitals.

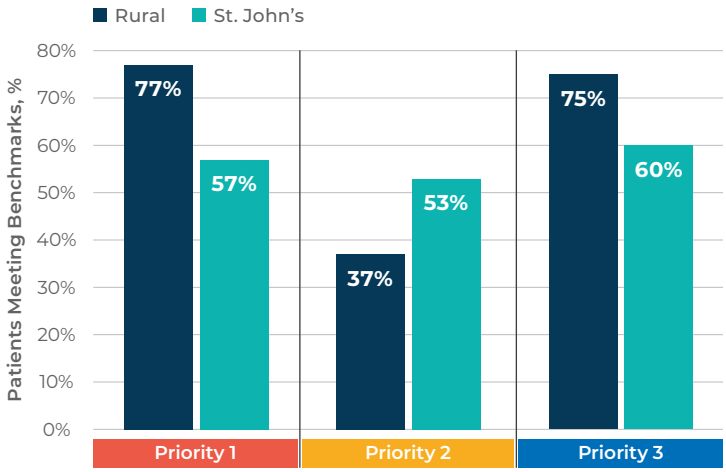

Figure 2. Percentage of Patients Meeting Benchmarks by Priority and by Region in 2019

- Percent meeting benchmark times to OGD in both urgent and non-urgent patients is not optimal. In the rural hospitals timelines of OGD for non-urgent patients has deteriorated.

Table 3. Comparison of Percentage of Patients Meeting Benchmarks by Priority and by Region for 2018–19 Data

			Region		
			Rural[1]	St. John's[2]	Eastern
Percentage of Patients Meeting Benchmarks	Priority 1	2018	79	59	70
		2019	77	57	69
	Priority 2	2018	76	63	68
		2019	37	53	45
	Priority 3	2018	85	89	88
		2019	75	60	61

[1]Burin, Carbonear & GB Cross; [2]HSC & SCM

- Comparing times to OGD in 2019 to 2018, the per cent meeting optimal times for non-urgent reasons deteriorated in both the rural and St. John's hospitals.

Conclusions

1. The population rate of OGD in the three rural hospitals of EH for both urgent and non-urgent patients is substantially higher than in St. John's. This is consistent with higher rates of other interventions that may be appropriate, such as antibiotics and CT scanning, in rural compared to urban areas of the province.

2. The high rate of OGD for non-urgent patients aged 20–64 years in the rural hospitals suggests that Choosing Wisely Canada guidelines should be followed.

3. The non-optimal achievement of optimal times to OGD in St. John's is similar to that for colonoscopy, and supports the need for better infrastructure to improve the timeliness of OGD.