

Care Delivery to Culturally and Linguistically Diverse Patients within a Barrett's Oesophagus Surveillance Program

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◇ Introduction

- **Barrett's oesophagus (BE)** is a precancerous condition requiring structured surveillance to prevent oesophageal adenocarcinoma.
- The **Seattle protocol** is the global standard for systematic biopsy during BE surveillance.
- **Culturally and linguistically diverse (CALD)** populations may face communication, literacy, and cultural barriers affecting adherence to such protocols.
- **Aim:** To evaluate the impact of CALD background on the quality and adherence of BE surveillance within a major metropolitan hospital.

◇ Methods

Design: 10-year retrospective audit (2010–2019) at Northern Health, Melbourne, Australia.

Cohort: All patients with histologically confirmed BE (≥ 10 mm).

Data collected:

- Demographics, language background, interpreter use, socioeconomic status (IRSAD), surveillance timing, biopsy adherence.

Outcome measures:

- Adherence to **Seattle biopsy protocol**.
- Endoscopic follow-up timing and dysplasia/cancer detection.

Analysis: χ^2 , Fisher's exact, and Mann–Whitney U tests (IBM SPSS v28).

Table 2 – Comparison of patients with ongoing endoscopic follow-up and discontinued follow-up

Number	Ongoing follow-up group	Discontinued group	p-value
	296	80	
Age	62.8 +/- 13.2	60.3 +/- 13.9	0.13
Gender			0.016
Male	186	62	
Female	110	18	
Country of birth			0.41
Australia	146 (74.9%)	49 (25.1%)	
Overseas	94 (79.7%)	24 (20.3%)	
Language			0.53
English	264 (78.1%)	74 (21.9%)	
Non-English as first language	32 (84.2%)	6 (15.8%)	
Interpreter			0.51
Not required	268 (78.1%)	74 (21.9%)	
Required	28 (84.8%)	6 (15.8%)	
IRSAD socio-economic region score			0.36
1 (Most disadvantaged)	80 (83.3%)	16 (16.7%)	
2	109 (80.1%)	27 (19.9%)	
3	60 (77.9%)	17 (22.1%)	
4	42 (70.0%)	18 (30.0%)	
5 (Most advantaged)	5 (71.4%)	2 (28.6%)	
IRSAD group			0.07
1-3	249 (80.6%)	60 (19.4%)	
4-5	47 (70.1%)	20 (29.9%)	
Reason for discontinuation			
Failure to attend		75	
Self-discharge		5	

Table 3 – Comparison of endoscopies with adherence to Seattle biopsy protocol

Number	Adherence	Non-adherence	p value
	301	490	
Age	61.4 ± 11.7	62.7 ± 12.8	0.15
Gender			0.12
Male	213	320	
Female	88	170	
Country of birth			0.064
Australia	187 (41.5%)	264 (58.5%)	
Overseas	86 (34.2%)	165 (65.8%)	
Language			0.001
English	287 (39.9%)	432 (60.1%)	
Non-English as first	14 (19.4%)	58 (80.6%)	
Interpreter			0.001
No required	289 (39.8%)	438 (60.2%)	
Required	12 (18.8%)	52 (81.2%)	
IRSAD score			0.82
1 (Most disadvantaged)	85 (39.7%)	129 (60.3%)	
2	105 (37.5%)	175 (62.5%)	
3	69 (39.9%)	104 (60.1%)	
4	38 (34.2%)	73 (65.8%)	
5 (Most advantaged)	4 (30.8%)	9 (69.2%)	
Length of Barrett's segment (IQR)	4 (2, 6) (n=270)	3 (2, 6) (n=340)	0.187
Dysplasia			0.006
Low-grade	11 (3.7%)	12 (2.5%)	
High-grade	8 (2.7%)	9 (1.8%)	
Cancer detection	3 (1.0%)	7 (1.4%)	0.006
Eventual progression to cancer			0.76
No	285 (38.2%)	461 (61.8%)	
Yes	16 (35.6%)	29 (64.4%)	
Number of Endoscopies in the study period	3 (2, 5)	2 (2, 4)	<0.001

◇ Results

Total patients: 376 BE patients → **791 endoscopies**.

Adherence to Seattle protocol: 38.1%.

Non-adherence associated with:

- Overseas-born patients (65.8% vs 58.5%, $p=0.064$)
- English as a second language (80.6% vs 60.1%, $p=0.001$)
- Interpreter use (81.2% vs 60.2%, $p=0.001$)

No association with socioeconomic disadvantage (IRSAD, $p>0.05$).

Dysplastic detection:

- Higher in biopsy-adherent group (6.4% vs 4.3%, $p=0.006$)
- Slightly higher cancer detection at index endoscopy in non-adherence group (1.4% vs 1.0%).

Follow-up adherence: 84% of CALD patients maintained recommended surveillance timing.

◇ Conclusion

- While **interpreter-supported follow-up** ensures CALD patient engagement, **quality of surveillance** (Seattle biopsy protocol adherence) remains suboptimal.
- **Interpreter services alone are insufficient** — additional strategies are needed:
- Enhanced clinician cultural and linguistic training.
- Dedicated BE surveillance nurse support.
- Multilingual patient education and repeated face-to-face consultations.
- Ensuring equitable, high-quality BE surveillance demands **targeted organisational and communication interventions** beyond translation alone.