

Tamara Fisher Binuri Attanayake Amanda Samsuddin Phillip Karpati Elisa Tran



Aim

To determine whether waiting periods between colonoscopy referral and procedure completion align with the Queensland Health recommendations based on urgency categorisation.

Urgency Categorisation

Category	Time frame	Criteria	Examples
1	30 days	Requires prompt assessment and review → major risk if treatment is delayed	 Positive FOBT Palpable abdominal/rectal mass Abnormal radiology PR bleeding, unexplained anaemia, weight loss, severe abdominal pain, altered bowel habits + concerning features
2	90 days	Moderate functional impairment	 Anaemia, altered bowel habits, PR bleeding or weight loss without concerning features
3	365 days	Minimal functional impairment	 Screening for those with family history of CRC Minor change in bowel habit (age <40 years & no family history CRC)

Concerning features

- Dark blood coating or mixed with stool
- Bloody or nocturnal diarrhoea
- Weight loss, ≥ 5% of body weight in previous 6mo
- Abdominal / rectal mass on clinical examination or abnormal imaging
- Persistent abdominal pain
- Iron deficiency in males and postmenopausal women or unexplained iron deficiency in premenopausal women
- Patient or family history of CRC (1st degree relative before 55 years old)
- iFOBT or calprotectin +ve

Methods

DATA COLLECTION

Sample: colonoscopy procedures performed in 2019

Data collected onto spreadsheet:

- Age
- Gender
- Indication for colonoscopy
- Priority categorisation
- Date of colonoscopy referral
- Date of triage
- Date of colonoscopy procedure

DATA ANALYSIS

Performed using Microsoft Excel

Days in waiting period = date of colonoscopy procedure - date of referral

Stratified by priority category

- Mean and median waiting period
- % within recommended time frame

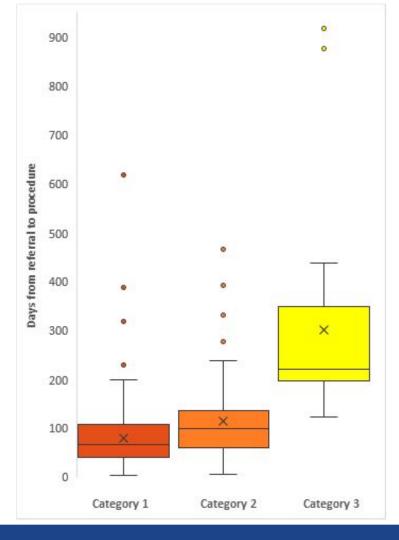
Outliers: waiting period data points that were ≥1.5 IQR beyond Q1 & Q3 (Tukey's Fences method)

Calculations repeated after excluding outliers

Calculations performed for each hospital site & across entire pooled sample

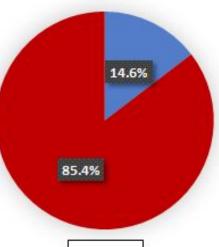
Gympie

Category	Recommended wait time (days)	Mean wait time (days)	Median wait time (days)	Max wait time (days)
1	30	71	67	619
2	90	99	100	466
3	365	260	221	917



Gympie

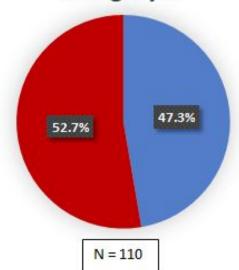




N = 233

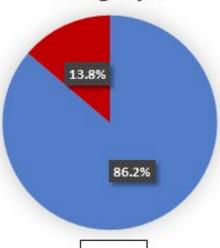
- % Within Recommended Time
- % Not Within Recommended Time

Category 2



- % Within Recommended Time
- % Not Within Recommended Time

Category 3

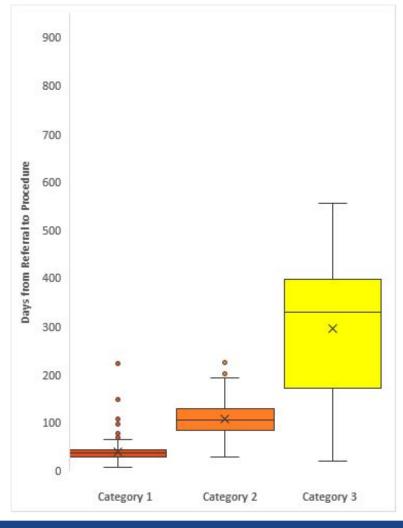


N = 29

- % Within Recommended Time
- % Not Within Recommended Time

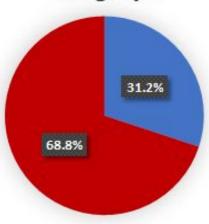
Kingaroy

Category	Recommended wait time (days)	Mean wait time (days)	Median wait time (days)	Max wait time (days)
1	30	37	37	224
2	90	107	106	226
3	365	295	330	556



Kingaroy



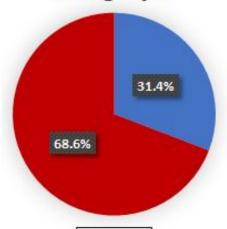


N = 282

■ % Within recommended time

% Not within recommended time

Category 2

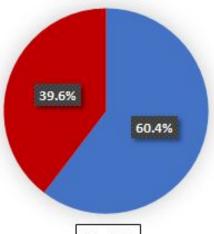


N = 105

■ % Within recommended time

■ % Not within recommended time

Category 3



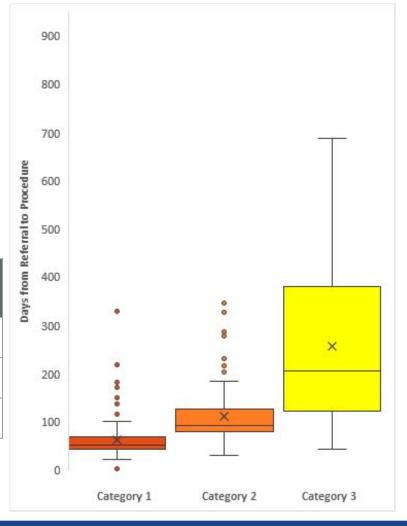
N = 53

% Within recommended time

% Not within recommended time

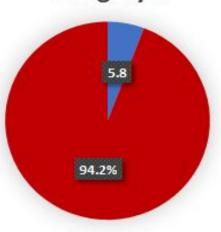
Warwick

Category	Recommended wait time (days)	Mean wait time (days)	Median wait time (days)	Max wait time (days)
1	30	53	52	330
2	90	98	94	346
3	365	257	207	688



Warwick

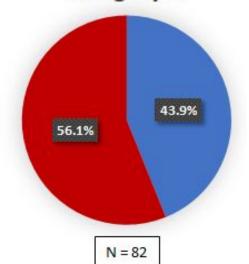
Category 1



N = 138

- % Within recommended time
- % Not within recommended time

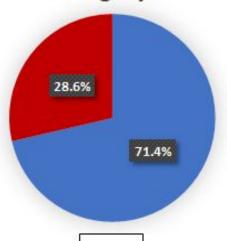
Category 2



■ % Within recommended time

■ % Not within recommended time

Category 3

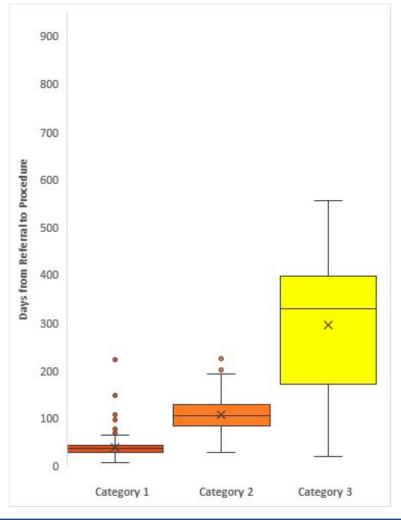


N = 21

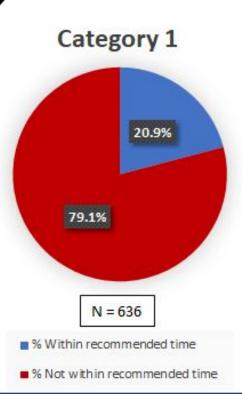
- % Within recommended time
- % Not within recommended time

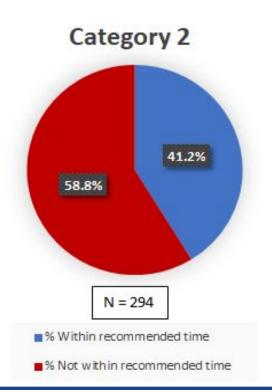


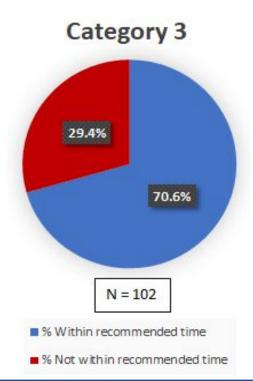
Category	Recommended wait time (days)	Mean wait time (days)	Median wait time (days)
1	30	48	45
2	90	100	99
3	365	273	269



Combined data



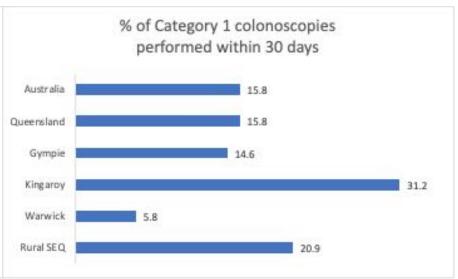






- Australian Institute of Health & Welfare monitoring report on the NBCSP (July 2020)
- Audit of the time between positive screen and diagnostic assessment (colonoscopy) from 1 January 2018 to 31 October 2018
- 78,573 colonoscopies were performed in Australia under the NBCSP, of which 15,032 were performed in Queensland







- CRC is the second largest cause of cancer death in Australia - over 5000 deaths/year
- Colonoscopy is the gold standard for CRC screening and reduces the incidence of CRC
- Colonoscopy wait times are highest for people living in remote areas
- To assess current practices and determine if amendments need to be made to provide better services to patients



Factors contributing to prolonged waiting times

Patient factors	Hospital Factors	Other factors
 Adamant to have a specific doctor Admitted to hospital for another reason Rebooked due to illness Overseas or interstate Recent surgery Patient not contactable to be booked in for a date Unable to organise transportation or patient unable to travel/drive 	 Missing paperwork Waiting for specialist review (cardiologist, anesthesiologist) Endoscopist availability 	 Could not attend due to bushfires Patient was worried about COVID-19 (patient didn't want an unnecessary procedure)



Limitations of Audit

- Time restraints unable to determine if categorization was correct
- Limitations of data collection systems (HBCIS) inaccurate/missing data
- Lack of hospital representation in rural SEQ hospitals
- Referrals go from GP/ surgical clinic → Rural hospital outpatients admin → SCUH/ Toowoomba Hospital (triage) → Rural hospital (book)

Gympie	Warwick	Kingaroy
Usually 1-2 weeks between GP referral and SCUH triage which does not get added on to the 'waiting time'	 Excluded patients who had colonoscopy performed under the private system Category 9 excluded 	 Missing/incomplete data due to unavailability of the hospital chart Category 9 excluded



- Areas of improvement for future audits
 - Supplement this audit with data from other rural SEQ hospitals
 - Compare with metro hospitals
- Areas of improvement for colonoscopy wait times
 - Hospital provided transport
 - Improved admin/ booking system e.g. move to online
 - Increase the number of visiting endoscopists
 - Improve accessibility to other specialists e.g. cardiologists, anaesthetists
 - Improved communication between endoscopist and admin staff to maximise theatre booking efficiency



