



Pilot-Testing a Bariatric-Specific Patient-Reported Outcome Measure for the Australia and New Zealand Bariatric Surgery Registry

Alyssa Budin

PhD Candidate & Research Fellow

4 September 2024





CONFLICT OF INTEREST DISCLOSURE

I have no potential conflict of interest to report



ANZ Bariatric Surgery Registry

Clinical Quality & Safety

- Type of procedure
- Weight / BMI
- Diabetes status
- Adverse events
- Complications
- Reoperation / Revision procedures

ADD PATIENT-REPORTED OUTCOMES

Quality of life Experience of surgery Mental health / mood Psychosocial well-being

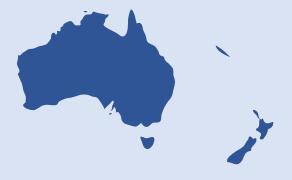






Questionnaire Development

PROMs in ANZ Bariatric Practices



Are surgeons engaged with and using PROMs in their clinical practice?

Questionnaire Development

Obesity Surgery https://doi.org/10.1007/s11695-022-06237-z



ORIGINAL CONTRIBUTIONS



Surgeon Engagement with Patient-Reported Measures in Australian and Aotearoa New Zealand Bariatric Practices

Alyssa J. Budin¹ • Priya Sumithran² · Andrew D. MacCormick^{3,4} · Ian Caterson⁵ · Wendy A. Brown^{1,6}

Received: 17 March 2022 / Revised: 27 July 2022 / Accepted: 4 August 2022

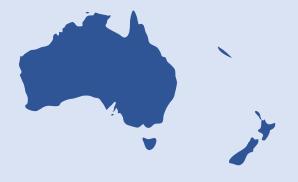
© The Author(s) 2022





Questionnaire Development

PROMs in ANZ Bariatric Practices



Are surgeons engaged with and using PROMs in their clinical practice?

Outcome Importance Survey





How important do you think it is that each outcome of bariatric surgery is measured?

Questionnaire Development

Article Open access | Published: 26 July 2024

Bariatric Surgery

Patient and healthcare practitioner evaluation of patient-reported outcomes in bariatric surgery – a modified Delphi study

Alyssa J. Budin [™], Priya Sumithran, Andrew D. MacCormick, Ian D. Caterson & Wendy A.

Brown

International Journal of Obesity (2024) Cite this article





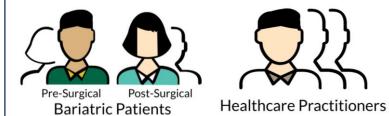
Questionnaire Development

PROMs in ANZ Bariatric Practices



Are surgeons engaged with and using PROMs in their clinical practice?

Outcome Importance Survey



How important do you think it is that each outcome of bariatric surgery is measured?

Focus Groups



How do patients interpret the outcome importance results?



Objectives

Pilot-Testing a Bariatric-Specific PROM

(1) to establish patient understanding, acceptability and importance of the questionnaire items

(2) to pilot test the questionnaire amongst a sample of post-surgical patients.



Cognitive Debriefing Interviews

Methods

- Conducted with post-surgical patients via Zoom.
- Participant discussion:
 - Does the question make sense to you?
 - Is there anything in the wording that you don't like or is unclear?
 - Are the answer options appropriate or would it be easier if there were different options?
 - Do you think there is a better way to ask this question?



Cognitive Debriefing Interviews

Results

Key Feedback:

- Examples were meaningful and relevant
- Addition of a time frame
- Relevant answer options
- Standardisation of answer options

Cognitive Debriefing Interviews

Results

Key Feedback:

- Examples were meaningful and relevant
- Addition of a time frame
- Relevant answer options
- Standardisation of answer options
- Follow-up questions based on participant answers
- Avenues for support
- Relevance of outcomes over time



Methods

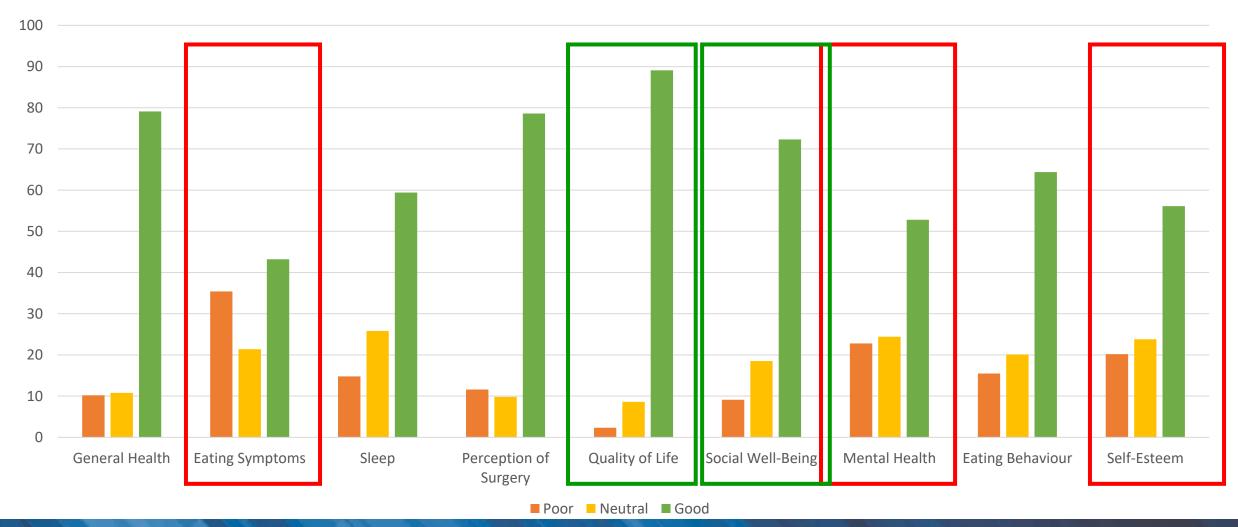
- Stratified sample of post-surgical patients from ANZ BSR
- Pilot PROM administered online
 - 58 questions covering 9 domains
 - General Health
 - Eating Symptoms
 - Sleep

- Perception of Surgery
- Quality of Life
- Social Well-Being
- Mental Health & Emotional Well-Being
- Eating Behaviour & Relationship to Food
- Self Esteem & Body Image

| lts . | | |
|---------------------------------------|-------------------------------------|------------------------------|
| | Study participants | Australia |
| (n) | (n = 66) | (based on primary procedure) |
| Mean Age^ (SD) | 46.0 (10.6) | 42.4 (11.5) |
| Number Female (%) | 54 (81.8) | 113,314 (79.1) |
| State / Territory (%) | | |
| ACT/NSW | 19 (28.8) | 33,227 (27.6) |
| QLD | 17 (25.8) | 35,387 (29.4) |
| NT/SA | 4 (6.1) | 6,863 (5.7) |
| TAS/VIC | 17 (25.7) | 29,128 (24.2) |
| WA | 9 (13.6) | 15,807 (13.1) |
| Bariatric Procedure (%) | | |
| Adjustable Gastric Band (AGB) | 1 (1.5) | 6,474 (5.4) |
| Sleeve Gastrectomy (SG) | 48 (72.7) | 96,335 (80.0) |
| Roux-en-Y Gastric Bypass (RYGB) | 7 (10.6) | 8,652 (7.2) |
| One Anastomosis Gastric Bypass (OAGB) | 9 (13.6) | 8,435 (7.0) |
| Unknown | 1 (1.5) | - |
| Other procedures | | 523 (0.4) |
| Mean time since surgery (SD) | 3.5 (1.9) years Range: 0.6 – 8.1 | - |



Results



Results

Psychometric Testing

Descriptives, histograms and box plots

Item-total correlation coefficients

Cronbach's Alpha

Demographic analyses

Score Distributions

Discrimination

Internal Consistency

Fairness

Identify and revise/remove items affecting the reliability and validity of the PROM

23 items revised, 11 items removed

Revised PROM
34 items across 8 domains



Conclusions & Next Steps

- Initial testing identified key domains with high rates of poor outcomes
 - 'Eating Symptoms', 'Mental Health & Emotional Well-Being', and 'Self-Esteem & Body Image'
- Psychometric analyses identified items for revision/removal



Conclusions & Next Steps

- Initial testing identified key domains with high rates of poor outcomes
 - 'Eating Symptoms', 'Mental Health & Emotional Well-Being', and 'Self-Esteem & Body Image'
- Psychometric analyses identified items for revision/removal

Preliminary Results

- Implementation of the draft PROM in the Registry
 - Large scale data collection, advanced psychometric testing & further refinement
 - Harmonise the collection of PROMs across ANZ to better identify at-risk patients



Acknowledgements

PhD Supervisors

- Prof. Wendy Brown
- A/Prof. Priya Sumithran
- Prof. Ian Caterson
- Dr Andrew MacCormick

Bariatric Surgery Registry Team

- Jennifer Holland
- Dianne Brown
- Rachana Pattali
- James Wetter
- Robin Thompson
- Anagi Wickremesinghe
- Kate Page

- Edan McCartney
- Shivangi Shah
- Seline Ruiz
- Mariya Patel
- Roxana Ruiz
- Jenifer Cottrell
- Angus Campbell







