Overview of Public Bariatric Surgery

IFSO 2024

Melbourne

Ahmad Aly



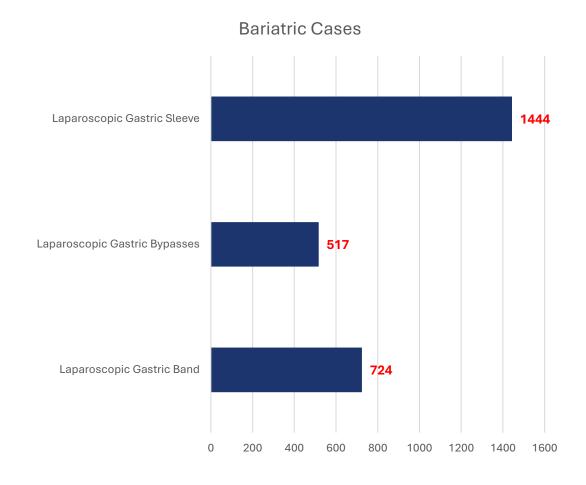
Disclosures

No Conflicts of Interest

Faculty for Ethicon Surgical

3000 Bariatric Cases

20% Revisional



Acknowledgement

Focus on Australia

NZ Similar Issues

Welcome discussion during Q&A





Sources of Data

- MBS
- AIHW & Medical Services Advisory Committee (MSAC) Reports
- Journal Publications

Registry





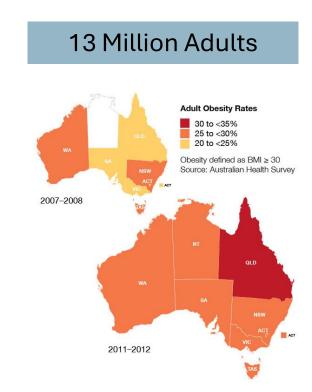
AIHW Report on Obesity 2022

Adults aged 18 and over:

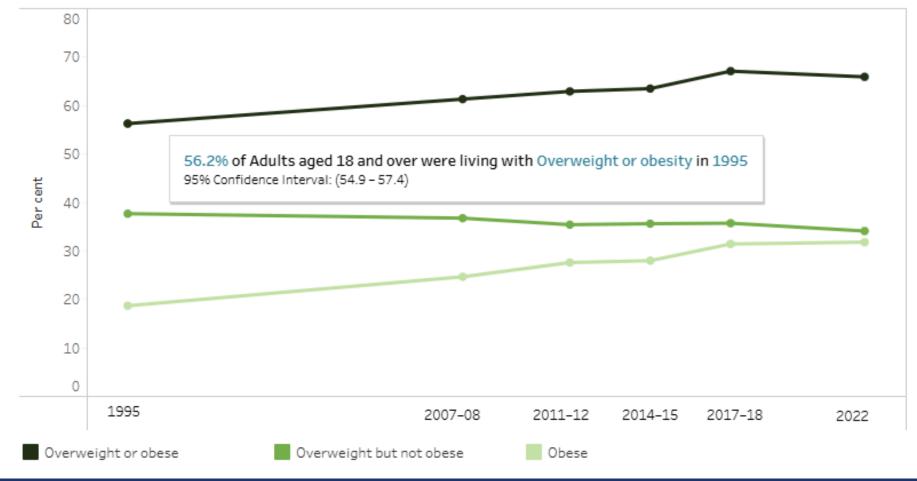
• 66% were living with overweight or obesity

• 32% were living with obesity

• 13% were living with severe obesity



Shift To More Severe Disease Over Time



Obesity Contributing Factor For...

Psychosocial

Eating disorders Poor self-esteem Body image disorder Social isolation and stigmatisation Depression

Pulmonary

Exercise intolerance Obstructive sleep apnoea Asthma

Gastrointestinal

Gallstones | Gastro-oesophageal reflux Non-alcoholic fatty liver disorder

Renal

Glomerulosclerosis

Musculoskeletal

Ankle sprains Flat feet Tibia vara Slipped capital femoral epiphysis Forearm fracture



Pseudotumour cerebri (idiopathic intracranial hypertension)

Cardiovascular

Hypertension Dyslipidaemia Coagulopathy Chronic inflammation Endothelial dysfunction

Endocrine

Insulin resistance
Impaired fasting glucose
or glucose intolerance
Type 2 diabetes
Precocious puberty
Menstrual irregularities
Polycystic ovary
syndrome (females)

We Cannot Seriously Provide

Healthcare Without Directly Addressing

Obesity Treatment



Treatment

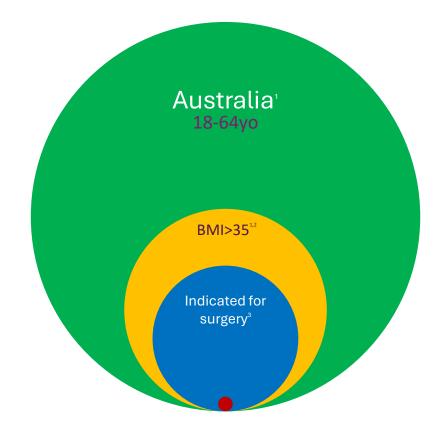
→ Surgery is still the most effective therapy we have

• Effective weight loss and health restoration in 80%+

Definitive saving of lives

Economic cost benefit (per individual)



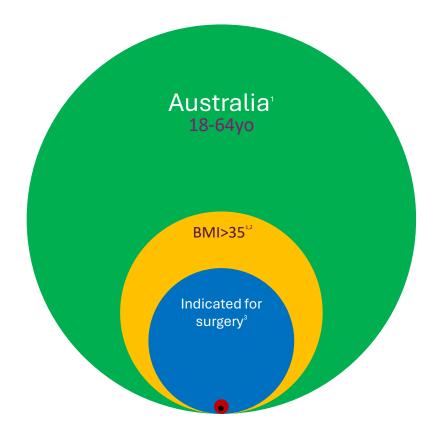


1.5% of eligible patients access surgery



We are using the most effective therapy we have in less than 2% of patients who would benefit





1.5% of eligible patients access surgery

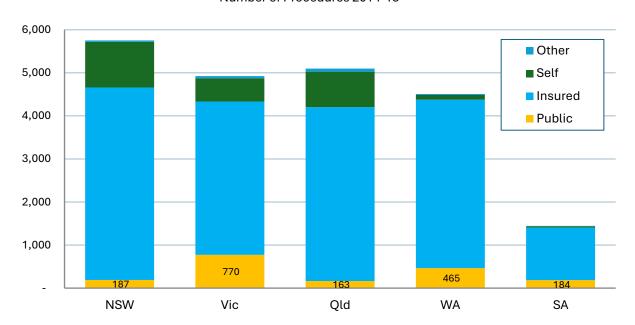
Only 10% in the public sector



Public Bariatric Surgery 2014/15

Bariatric Surgery by Funding Source in Australia

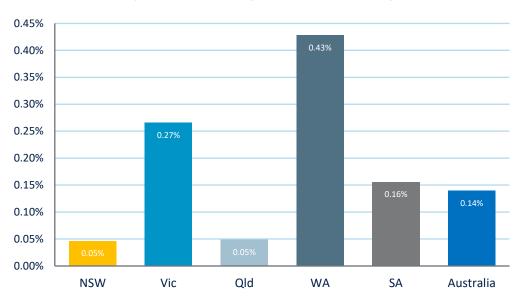
Number of Procedures 2014-15



8% of All Surgery 4% Fully Publicly Funded

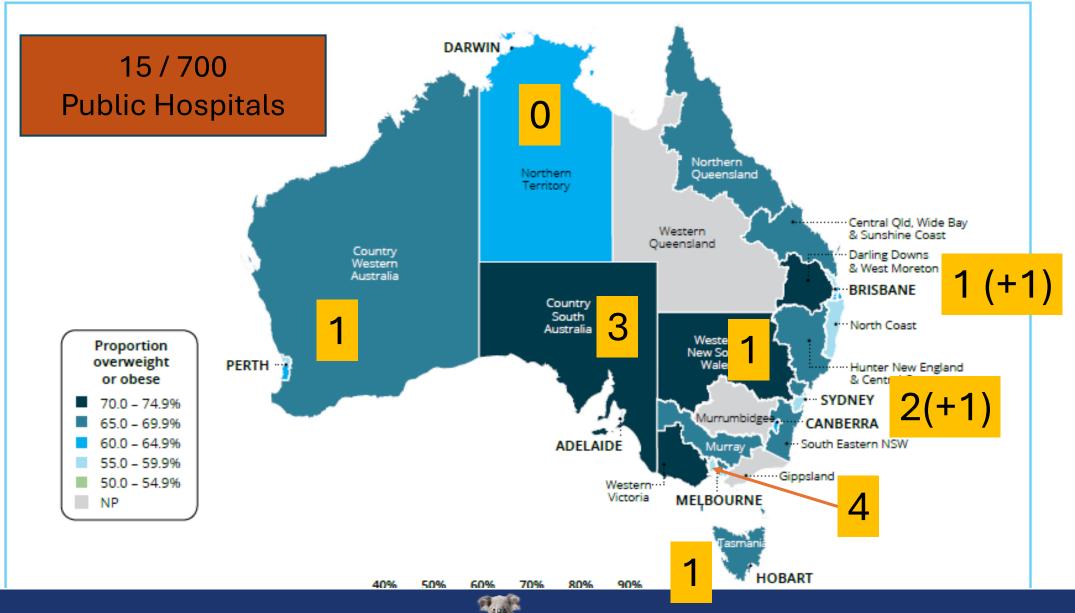
Publicly Funded Bariatric Surgery in Australia

Proportion of indicated patients (BMI>35, 18-64yo)



0.18% Total Eligible Population







Wide Discrepancy In Resources

- Services varied in
 - Access to MDT
 - Dietetic support
 - Psychology access
 - Medical weight loss expertise



2024.....no better off

Bariatric Registry Data

- 80% Total National Data Capture
- 95% Privately Funded
- 988 Public cases (5%)
- State to State Discrepancy

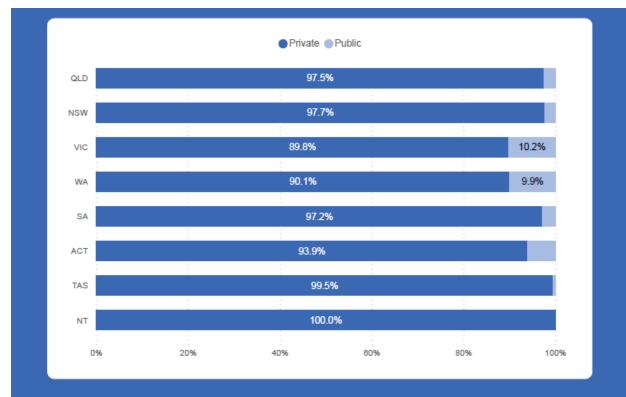


Figure 10 - Procedures (primary and revision) by jurisdiction and funding for 2023, Australia, n= 19,593

This excludes procedures that occurred at sites that do not participate in the BSR and for which jurisdiction is not recorded (n=16)

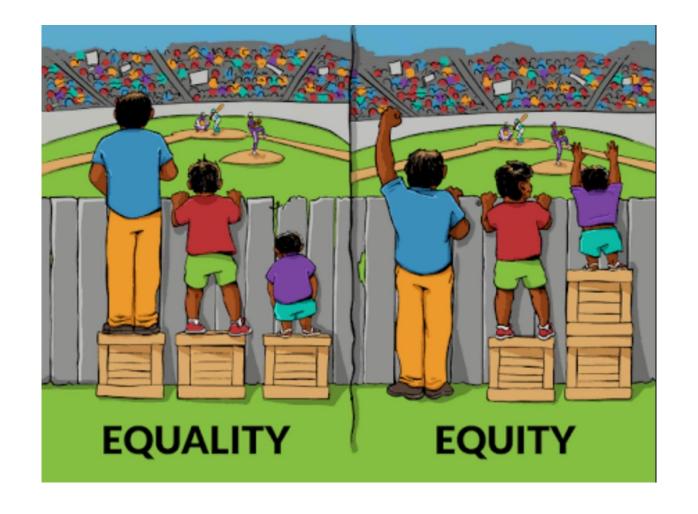


2023/2024 BSR sites

22 Sites recorded any form of public surgery

- Only 7 sites > 50 cases
 - 4 In Vic
 - 1 in NSW, QLD
 - None in SA, Tas, ACT

7 NSW 6 Vic 3 SA 2 QLD / 2 ACT 1 WA / 1 Tas





Reasons Beyond Equity....

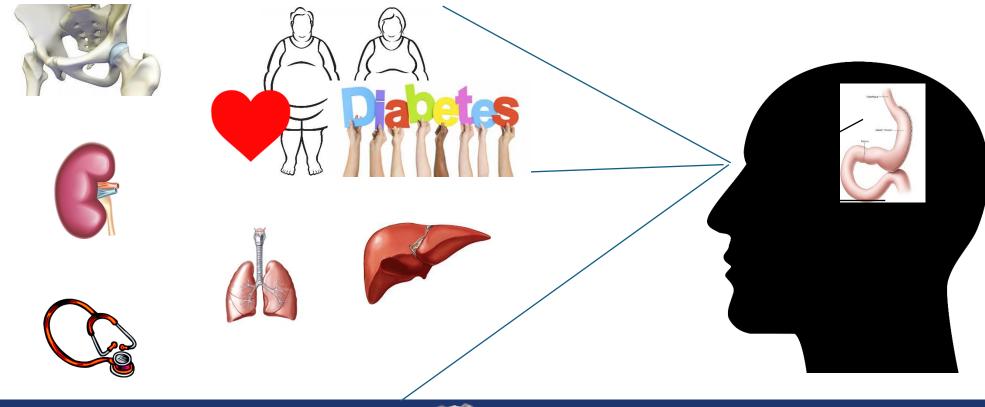
- Normalisation / Destigmatisation
 - → more effective obesity care generally

Training

Delivering appropriate treatment beyond simply weight**



Weight Not The (Only) Trigger For Surgery





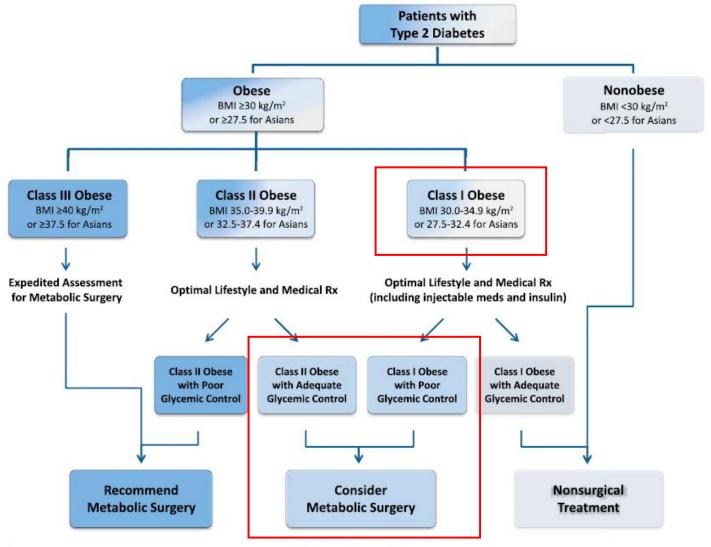


Figure 4—Algorithm for the treatment of T2D, as recommended by DSS-II voting delegates. The indications above are intended for patients who are appropriate candidates for elective surgery. meds, medications.

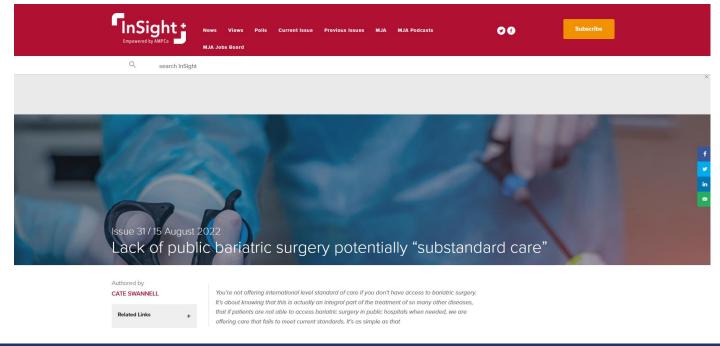
Metabolic Surgery in the Treatment Algorithm for Type 2 Diabetes: A Joint Statement by International Diabetes Organizations

Diabetes Care 2016;39:861-877 | DOI: 10.2337/dc16-0236



IF NOT Offering Surgery....

- Australian Hospitals increasingly not meeting standard of care in in treating
 - Diabetes
 - Osteoarthritis
 - Liver Disease
 - Sleep Apnoea
 - Cardiovascular Disease





Consequences Of Private Only Care

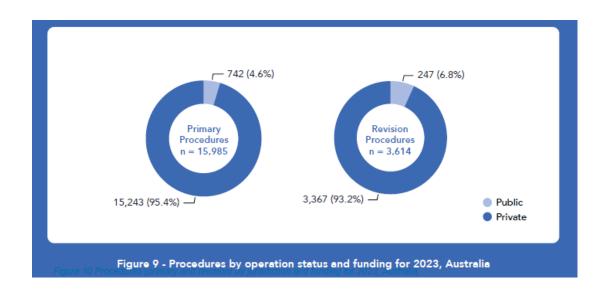
- Insurance "the temporary dilemma"
 - Drives insurers to increase cost
 - Limits access further
- Self Paying financial risk
- Superannuation Access
- Legacy surgery consequence
 - 77% of revisions were legacy patients*
 - Increased pressure on public to manage complications and revisions
 - Further reducing access

*Aly A, et al. ANZ J Surg 92 (2022) 2129–2136



Public Vs Private

- 4.6% of Primary public
- 6.8% of Revisions public
- Revision Proportions
 - Private 18%
 - Public 33%



*Aly A, et al. ANZ J Surg 92 (2022) 2129–2136

In our study 77% of revisions came from legacy patients*



Failure to Advance

....Not a problem of efficacy



Australian Literature

- More than 10 years
- 9 Clinical outcome papers
- 4 Cost / resource utility
- 2 Demographic demand
- Several commentaries

4	Author	Year∳	Title
	Chadwick, Chiara	2023	Bariatric Surgery Efficiency, Safety and Health Outcomes in Government Versus Privately Funded Hospitals Obesity Surgery Added to Library: 27 Aug 2024 Last Updated: 27 Aug 2024
	Aly, Ahmad	2022	Bariatric surgery in a public hospital: a 10-year experience ANZ Journal of Surgery Added to Library: 27 Aug 2024 Last Updated: 27 Aug 2024
	Dona, Sithara Wanni Arachchige	2022	Obesity and Bariatric Surgery in Australia: Future Projection of Supply and Demand, and Costs Obesity Surgery Added to Library: 27 Aug 2024 Last Updated: 27 Aug 2024
	Carroll, J.	2018	Revision gastric bypass after laparoscopic adjustable gastric band: a 10-year experience at a public teaching hospital ANZ J Surg Added to Library: 29 Aug 2021 Conline Link+ Go to URL
	Clough, A.	2017	Outcome of three common bariatric procedures in the public sector ANZ J Surg Added to Library: 29 Aug 2021 Last Updated: 29 Aug 2021 Online Link+ Go to URL
	Burton, P.	2016	Outcomes of high-volume bariatric surgery in the public system ANZ J Surg Added to Library: 27 Aug 2024 Last Updated: 27 Aug 2024 Online Link+ Go to URL
	Meyer, Samantha B.	2015	Quantitative analysis of bariatric procedure trends 2001–13 in South Australia: implications for equity in access and public healthcare expenditure Australian Health Review Added to Library: 27 Aug 2024 Last Updated: 27 Aug 2024
	Lukas, N.	2014	The efficacy of bariatric surgery performed in the public sector for obese patients with comorbid conditions Med J Aust Added to Library: 29 Aug 2021 Last Updated: 29 Aug 2021 Online Link+ Go to URL
	Stringer, K. M.	2007	Gastric banding at the Royal Brisbane and Women's Hospital: trials and tribulations of a public service ANZ J Surg Added to Library: 29 Aug 2021 Last Updated: 29 Aug 2021 Online Link+ Go to URL

Public Vs Private

- Public Patients
 - Older, sicker, bigger
 - Lesser health resources

Outcomes / Health Benefit of Surgery Same

- Safety Similar
- LOS marginally longer

Obesity Surgery (2023) 33:1160-1169 https://doi.org/10.1007/s11695-023-06489-3



ORIGINAL CONTRIBUTIONS



Bariatric Surgery Efficiency, Safety and Health Outcomes in Government Versus Privately Funded Hospitals

Chiara Chadwick^{1,2} • Paul R. Burton^{1,2} • Dianne Brown³ • Jennifer F. Holland³ • Angus Campbell³ • Jenifer Cottrell³ • Andrew D. MacCormick^{3,4} • Ian Caterson^{5,6} • Wendy A. Brown^{1,2,3}

UPPER GUT



Bariatric surgery in a public hospital: a 10-year experience

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Bariatric Surgery Registry 2023 Annual Report



Failure to Advance

....Not a problem of recognition



Multiple Recommendations

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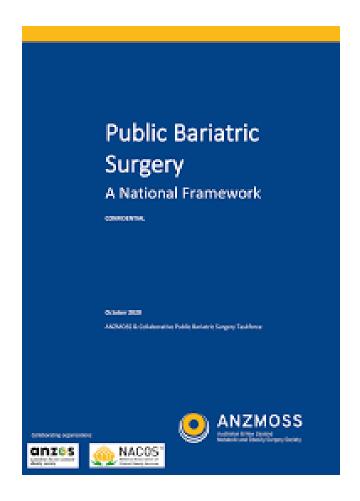
• "MSAC recognizes the significant disparity in access to surgery in the public and private health care systems

- "MSAC also advised the development and implementation of a nationally recognised pathway to:
 - improve patient access to bariatric surgery services; ensure that patients would receive comprehensive care (including adequate follow-up support) and
 - ensure bariatric surgery is clinically appropriate for the patient."

Public Bariatric Taskforce

Consensus Document 2019

Toward A National Framework
For Public Bariatric Surgery





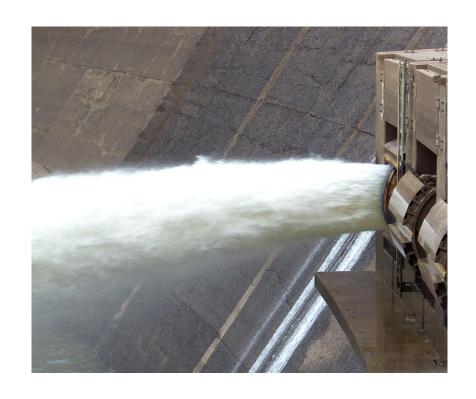
Barriers?



Barriers

Obesity Stigma

- Political Fear?
 - Cost? → Flood Gates
 - Value? (bang for buck)
- Political Visibility
 - Obesity doesn't affect votes





Challenges

Cost / Value



"Weighing The Cost Of Obesity"

Annual Cost

Source	Direct Cost	Indirect Cost	Total	Lost Well Being
PWC 2015	3.8 Billion	4.8 Billion	8.6 Billion	N/A
Access Economics (APH Report) 2009	3.9 Billion	4. 3 Billion	8.2 Billion	52 Billion



NSW Cost Of Care 2017

Procedure	Cost
Bariatric Surgery	\$11,567
Gall Bladder Surgery	\$22,700
Knee Replacement	\$19,700
Hip Replacement	\$21,200
Colorectal Surgery	\$30,400
CABG	\$38,100

Cost Benefit?

Event	Cost
Stroke	\$10,500
Angiogram	\$9,100
Pacemaker	\$12,300
Diabetes Per Annum	\$14,500
Dialysis Per Annum	\$62,000
Hip Replacement	\$21,200
Renal Transplant	\$43,000
Cardiac Transplant	\$139,900
Liver Transplant	\$153,000

	Bariatric Surgery \$11,567			
	Disease	HR ¹		
_	Stroke	0.66		
	AMI	0.71		
	Diabetes	0.17		
	Cancer	0.58		

30% TKA avoided after bariatric surgery ²

3/7 Cardiac Transplants avoided after bariatric surgery³



It's a big problem...

Adults

- 60% Overweight / Obese 11,238,600
- 30% Obese 4,943,900
- Potentially Eligible For Surgery*

1,881,300



What Policy Makers See...

At Current Rates Of Surgery...



Group Age 18-64	Number	Percentage Population	Years To Treat	Cost
Class I	2,530,200	17.5%		
Class II & III	1,831,300	9.6%	62.8	19.8 billion
All Obesity	3,911,500	27.1%	177.8	42.9 billion
Population	14,451,600			

Viewed in this way, clearly surgery is not a population level interventional strategy

It helps individuals

... at this stage, relatively few



Minimal Impact Argument

Penetrance of 2%

- No meaningful impact on economics the cost benefit argument falls
- No meaningful impact on global health the society health argument falls

But Could It?

Could We Target For A Greater Benefit?



Obesity and Bariatric Surgery in Australia: Future Projection of Supply and Demand, and Costs

Sithara Wanni Arachchige Dona · Mary Rose Angeles · Dieu Nguyen · Lan Gao · Martin Hensher 20

Received: 29 April 2022 / Revised: 26 June 2022 / Accepted: 27 June 2022 / Published online: 8 July 2022 © The Author(s) 2022

- Examined a variety of scenarios incorporating
 - ANZMOSS / EOSS criteria
 - Treating existing, forecast new and revision patients
 - 340,000 cases per year (about x8 current capacity)
 - Calculated (direct) surgical cost
- 5 year program at 20% uptake (68,000 cases per year)
 - Public 2.9 billion
 - Private 2.5 billion
 - Total 5.5 billion



Reality vs Perception

- 68,000 cases per year is a lot but...
 - 20% penetrance is unlikely
 - Cholecystectomy: 50,000 / Hernia 55,000 / Bariatric 35,000
- → If sufficient hospitals engaged then flood gates not an issue
- The cost is direct felt by budget
- The indirect costs of obesity are not visible
- Governments work on short term / immediate





Further Scope?

What If We Operated Just On Diabetics?

Group Age 18-65	Just Diabetics	Years To Treat	Cost
Class I (uncontrolled diabetics)	14,640	0.6	
Class II	70,641	3.2	
Class III	63,496	2.8	
All Obesity	148,777	6.7	1.6 billion



Further Scope? – The GLP-1 Era

- Increasingly more effective medical therapies
- Rationalised approaches
 - Indication refinement?
 - "Weight loss need based" approach?
 - 5-10%: Lifestyle / Dietary therapies
 - 10-20% Medical Therapy
 - 20-30% Surgery
- But does demand public specialised treatment services



What Is Clear...

- The indications for surgery for most *Value*
 - Clinical
 - Economic

Is an evolving space in this era

Can "Precision Treatment" be achieved?

Demands more strategic research



Way forward?

- Advocacy
 - Physicians for standard of care
 - Diabetes
 - NASH
 - Sleep apnoea
 - etc
 - Surgeons for patients
 - Patient voice for stigma





