

# Obesity and the healthcare system

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# Obesity

- **A serious chronic relapsing disease**

Garnett, Baur, Cowell. *Obesity Reviews* 2011; 12:887-896

<http://www.health.govt.nz/nz-health-statistics/health-statistics-and-data-sets/obesity-statistics>

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4338.0~2011-13~Main%20Features~Overweight%20and%20obesity~10007>

# Obesity

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- It's common:

	<i>Children</i>		<i>Adults</i>	
	<i>Obesity</i>	<i>O/weight</i>	<i>Obesity</i>	<i>O/weight</i>
<i>Australia</i>	6-8%	15-17%	28%	35%
<i>NZ</i>	11%	21%	32%	35%

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- Prevention is vital
- → So, too, is effective management of those already affected

Garnett, Baur, Cowell. *Obesity Reviews* 2011; 12:887-896

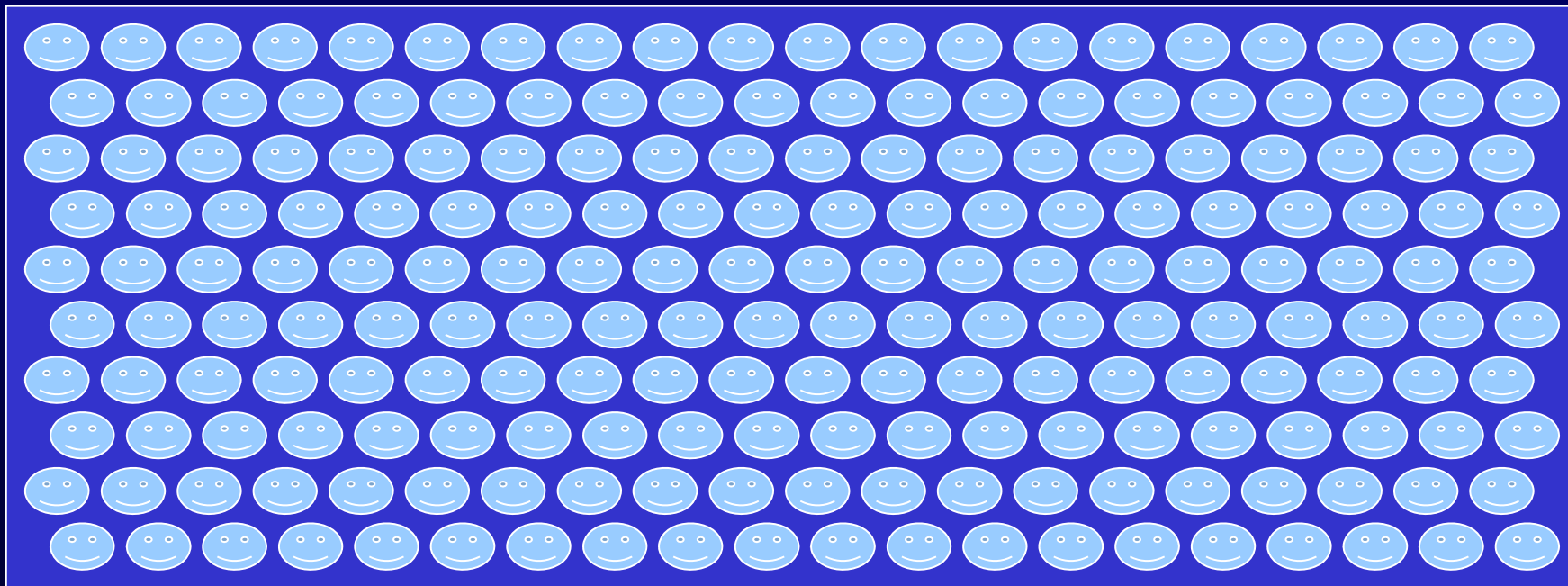
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**Bur our healthcare systems  
generally fail people affected  
by obesity**

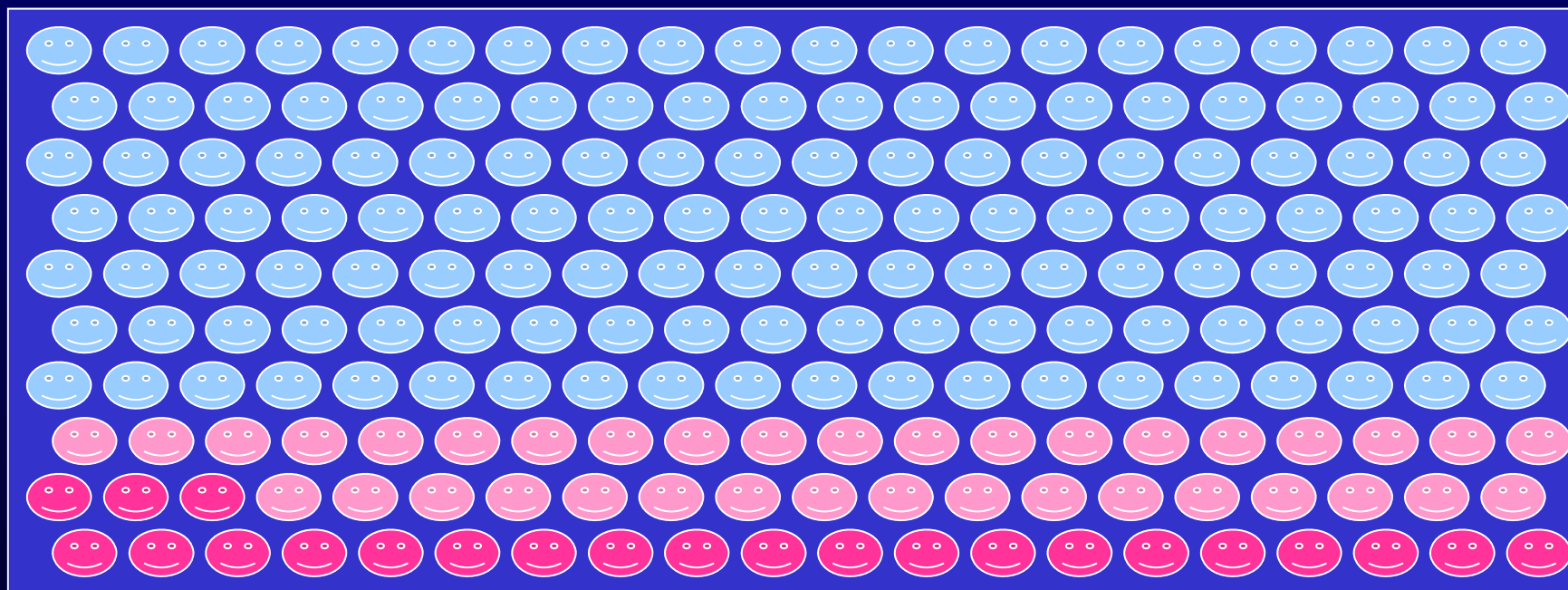
**People with obesity present frequently to the health system – but aren't necessarily offered treatment**

# In Australia, of every 200 children presenting to their family doctor



BEACH data set, Annual national random survey of 1,000 family doctor surgeries (data on 100 consecutive patients, of all ages); 2002-2006, >40,000 children aged 2-17 years, Self-reported heights & weights; *Cretikos M et al, Medical Care 2008; 46:1163-1169* ; background prevalence of O&O 23-25%

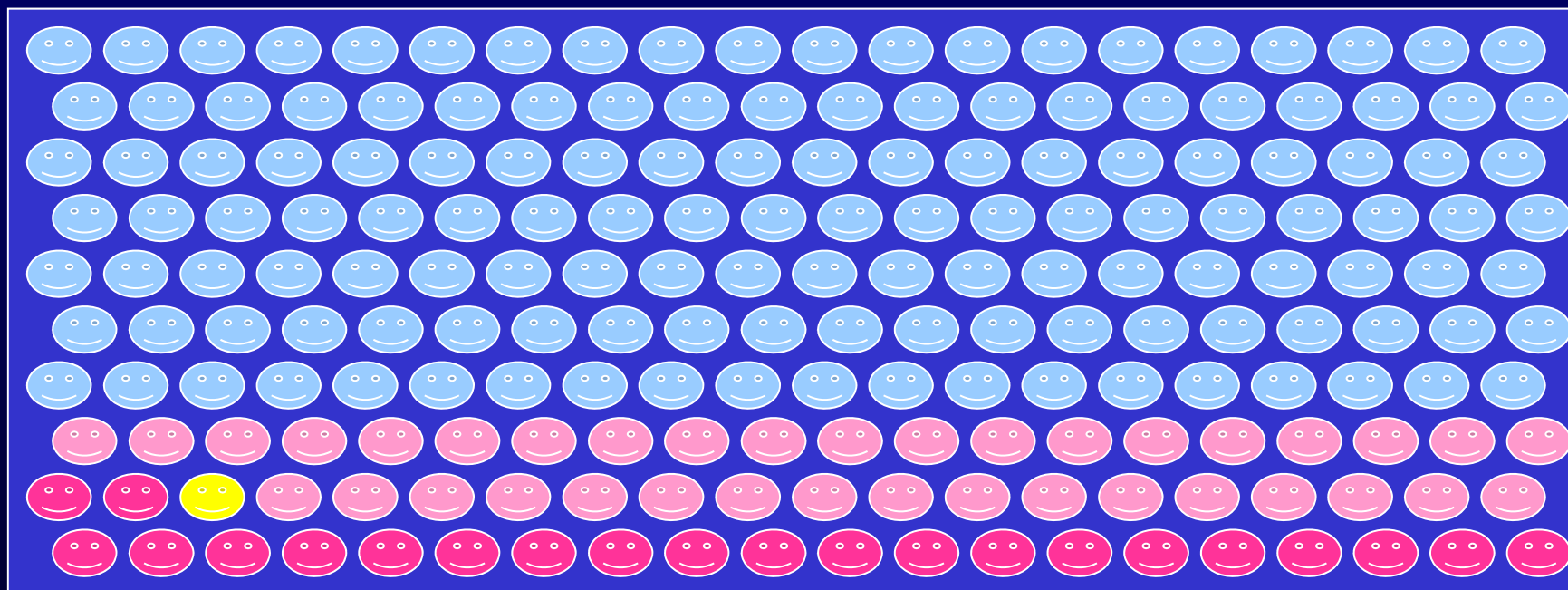
**In Australia, of every 200 children presenting to their family doctor, 60 have overweight or obesity (23 obesity)**



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**In Australia, of every 200 children presenting to their family doctor, 60 have overweight or obesity (23 obesity) – and 1 is offered weight management intervention**



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**The situation is very similar in secondary & tertiary care, with adults, and in other countries**

**People with obesity are already presenting frequently to clinical services – but they are usually NOT being treated primarily for this issue**

**Weight bias is also a problem**

**Obesity 1.1 - Think of a health facility or institution where you work (or with which you are familiar). How much does weight bias influence the access to, and quality of, clinical care received by people with obesity?**

- I don't know**
- Very little**
- A moderate amount**
- Quite a bit**
- A lot**

**Some examples of weight bias,  
possibly at a hospital near to you**

### **Brian, aged 12 years**

- Severe obesity & long-standing hip pathology (2<sup>o</sup> to previous septic arthritis)
- In a crowded outpatients clinic at an adult hospital
- The doctor sees him and calls out across the waiting room, *“You’re as big as an elephant!”*
- Brian’s mother recounts this story: *“Everyone turned and looked at him. His eyes welled up with tears....”*

### **Hospital exec. to physician**

- A physician was receiving more referrals to manage patients affected by severe obesity in the hospital outpatients clinic
- A Senior Hospital Executive noted the increased referrals and met with the physician, saying: *“These patients don’t need to be seen here. There are more important problems to be managed in our Outpatients Clinics.”*

**And what does this extract from a hospital 's Manual Handling Policy say about the experience of being weighed if you are a large person?**

## **SECTION 14 – WEIGHING**

- a) Patients up to 150kg can be weighed in ward. Patients >150kg will need to be weighed using the hospital loading dock.**
- b) The linen room loading dock weigh machine is the best option. Preferred time is after 1pm**
- c) Will need to test if bed can be weighed on (hospital) docks. If not possible will need to use loading docks at (neighbouring hospital)**

# Weight bias, health professionals & health outcomes

## STRONG evidence

- Health-care professionals endorse stereotypes about patients with obesity
- Weight bias contributes to maladaptive eating behaviors among people with obesity

## MODERATE evidence

- Patients with obesity perceive biased treatment in health care
- Weight bias increases vulnerability to depression, low self-esteem, and poor body image
- People with obesity avoid health care facilities due to bias
- Weight bias contributes to avoidance of physical activity and less engagement in weight control attempts

Puhl, Rebecca M., Joerg Luedicke, and Cheslea Heuer. *Journal of School Health* 81.11 (2011): 696-703

Puhl, Rebecca M., and Chelsea A. Heuer. *American Journal of Public Health* 100.6 (2010): 1019-1028





**Appropriate chairs, beds, gowns, bathrooms, signage ...  
can help minimise weight bias**



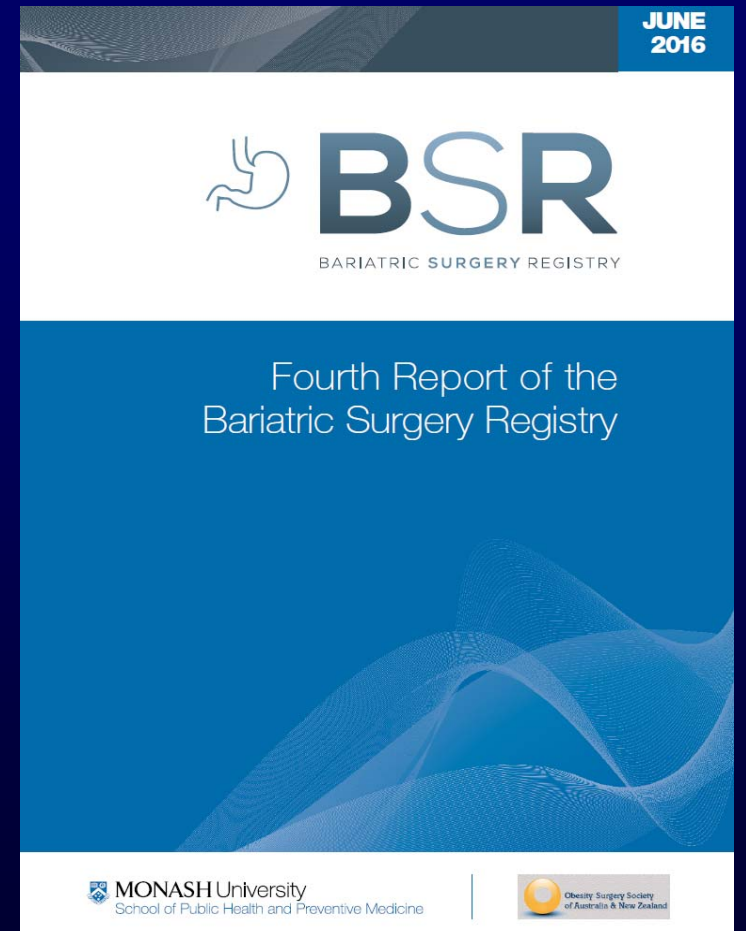
**Limited availability of bariatric surgery procedures in Australian public hospitals may be an example of institutionalised weight bias**

# Australian Bariatric Surgery Registry

- Voluntary registry by surgeons of patients having bariatric surgery in Australia

[http://www.ossanz.com.au/bariatric\\_registry.htm](http://www.ossanz.com.au/bariatric_registry.htm)

<http://www.med.monash.edu.au/sphpm/depts-centres-units/bariatric/docs/bsr-4th-report-june-2016.pdf>



## Low percentage overall of bariatric surgery procedures in *public* hospitals: 13-15%

	TOTAL BSR (Feb 2012 to 30 June 2016)				BSR LAST 6 MONTHS (1 Jan to 30 June 2016)			
	Primary in Public		Revision in Public		Primary in Public		Revision in Public	
	#	% of That Procedure Type	#	% of That Procedure Type	#	% of That Procedure Type	#	% of That Procedure Type
Sleeve gastrectomy (LSG)	923	13%	99	12%	244	10%	21	9%
Gastric Banding (LAGB)	572	16%	215	21%	64	12%	17	13%
R-Y gastric bypass (RYGB)	78	11%	78	10%	11	6%	9	4%
Single anastomosis gastric bypass (SAGB)	28	9%	8	3%	15	11%	1	1%
Bilio pancreatic bypass/ duodenal switch (BPD)	3	27%	14	56%	0	0%	0	0%
Port Revision	NA	NA	47	21%	NA	NA	6	14%
Surgical Reversal	NA	NA	235	16%	NA	NA	49	11%
Other Procedures	1	3%	11	13%	0	0%	2	12%
<b>Total Procedures</b>	<b>1,605</b>	<b>13%</b>	<b>707</b>	<b>15%</b>	<b>334</b>	<b>10%</b>	<b>105</b>	<b>9%</b>

Of the 16,577 procedures captured by the Registry there has only been one Revision procedure where a concurrent Renal Transplant took place. There have been no concurrent Liver Transplants reported as yet.

# Patients in *public* hospitals have much higher BMIs

**Table 17** » Mean BMI for All Primary Procedures Feb 2012 to 30 June 2016

WEIGHT MEASURE	FEMALE	MALE	ALL
Mean Start BMI (Standard Deviation)	43.8 (8.1)	45.1 (8.3)	44.1 (8.1)
Mean DOS BMI (Standard Deviation)	42.8 (7.6)	43.9 (7.8)	43.0 (7.7)
Mean Start BMI – Private (Standard Deviation)	43.0 (7.6)	44.3 (7.8)	43.3 (7.7)
Mean DOS BMI – Private (Standard Deviation)	42.0 (7.1)	43.2 (7.3)	42.3 (7.2)
Mean Start BMI – Public (Standard Deviation)	48.9 (9.2)	50.0 (9.5)	49.1 (9.3)
Mean DOS BMI – Public (Standard Deviation)	47.2 (8.5)	47.7 (9.3)	47.3 (8.7)

\* DOS – day of surgery

# Patients in *public* hospitals have much higher BMIs and higher prevalence of diabetes

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**Table 20** » % Primary Patients identifying as having Diabetes at Presentation Feb 2012 to 30 June 2016

	FEMALE	MALE	ALL
Public*	25.6%	36.3%	28.1%
Private	10.7%	19.3%	12.6%
All	12.7%	21.7%	14.7%

\* NB: unknown diabetes status is much lower in public (2%) as compared to private (9%)

**There are multiple other barriers to effective service provision for people affected by obesity**

## **What Australian family doctors say are the barriers to primary care management of obesity**

- Lack of time
- Lack of reimbursement
- Lack of parent/patient motivation
- Lack of effective interventions
- Lack of support services
- Lack of healthcare pathways
- Complex/difficult problem
- Sensitivity
- Inadequate training

King L et al. *British Journal of General Practice* 2007; 57:124-129.  
Results of focus groups with Australian family doctors (general practitioners)

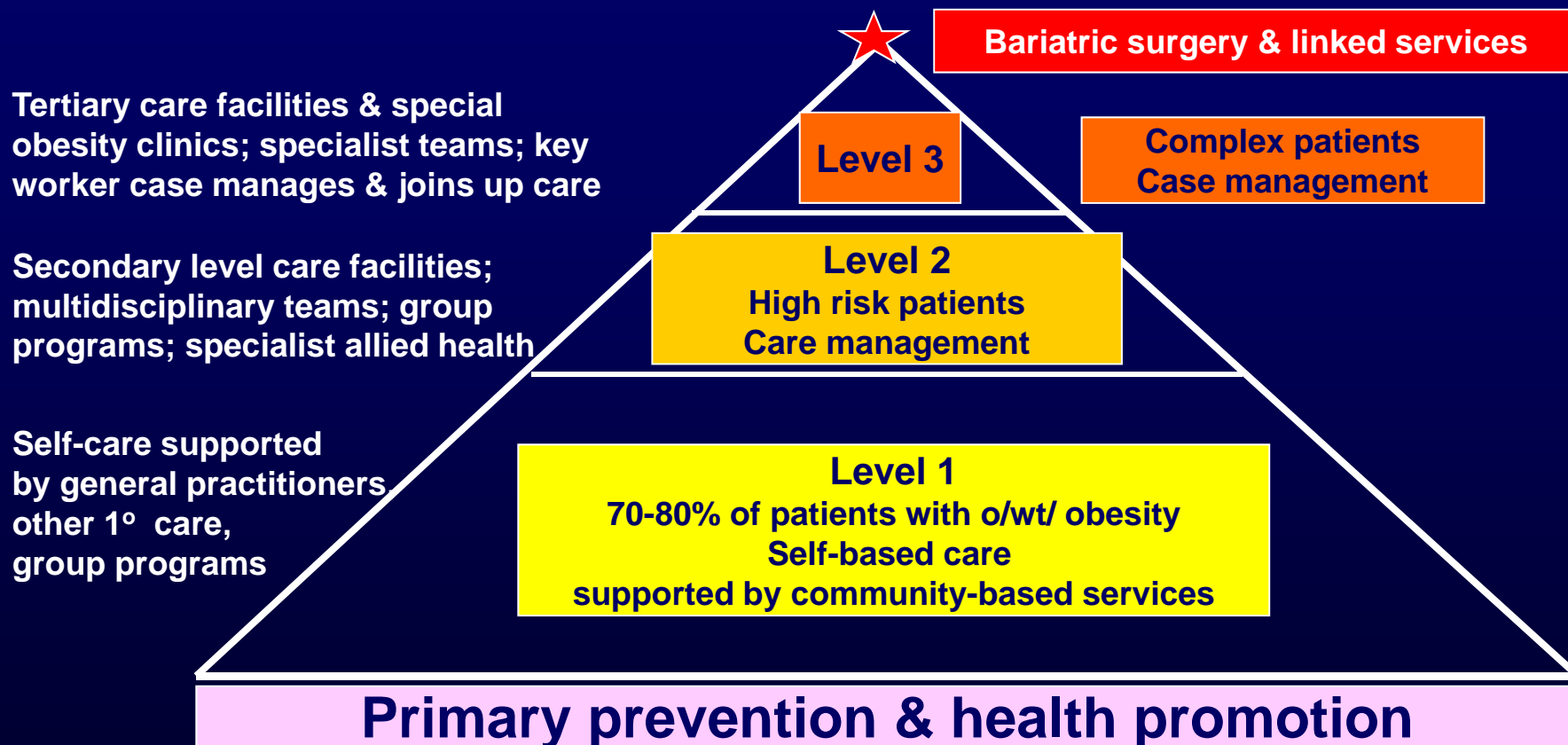


**Obesity 1.2: How competent do you feel in raising the issue of obesity with a patient (or a paediatric patient's carer) and in providing initial management advice?**

- Not at all competent**
- Somewhat competent**
- Quite competent**
- Very competent**

**These are just some examples of how  
the health system seems to be failing  
patients affected by obesity**

# Obesity and the chronic disease care pyramid



*Baur LA et al, Nature Rev Gastroenterol Hepatol 2011; 8:635-45. Adapted from Kaiser-Permanente and UK NHS chronic disease management pyramids of care*

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**So, here are some selected  
personal recommendations for  
improving health service provision  
for people affected by obesity**

# **Suggested solutions – Point #1**

**(Medium cost)**

## **Develop, evaluate & provide health professional training**

- **Undergraduate and postgraduate level**
- **A range of types of clinicians**
- **For most, it will be short, modular, on-line/ accessible training**
- **This could be done in a range of ways – roles for the RACP**

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- *Weight4KIDS: E-learning package for health professionals, NSW*
- Masters level eg M Med (Paed), M Metab Med (*both at USYD*)





## **Suggested solutions – Point #2**

**(Low-ish cost)**

**Invest in better quality data on how obesity influences health service use and costs**

- **Better quality data are needed:**
  - **To advocate for shifts in resources, re-organisation of existing services managing people with obesity (eg cardiac disease, fatty liver disease, OSA, diabetes, arthritis ...)**
- **May include: Methods for routine collection of height and weight data, specific case studies**

## **Suggested solutions – Point #3**

**(Bigger costs!)**

**Refine and implement a coordinated approach to obesity treatment service delivery**

- **Development of healthcare pathways – within a facility and across levels of care/ institutions**
- **Services at 1°, 2°, 3° and 4° level care need to be resourced**
- **Bariatric surgery provision in public hospitals - for adolescents as well as adults**

*Dietz WH, Baur LA, et al. Lancet 2015; 385:2521-2533 ; Baur LA et al, Nature Rev Gastroenterol Hepatol 2011; 8:635-45;*

## Can we contemplate a (near) future when .....

- health professional students and practitioners are trained in the management of obesity?
- people affected by obesity do not experience weight bias – by health facilities or by health professionals?
- there are clear healthcare pathways for the recognition, assessment and management of people with obesity?
- our health services, at all levels, are re-organised to provide equitable access to high quality, dignified treatment for people with obesity?

# Thank you!

- **Members of The Children's Hospital at Westmead (CHW) Weight Management Services; CHW Obesity Research Group**
- **CHW Endocrinology and CHW Sleep Unit**
- **Prevention Research Collaboration and the Boden Institute at USYD**
- **World Obesity Federation Health Services Committee**
- **The following research teams: HIKCUPS, LEAP, metformin trial, PEACH, RESIST, Loozit, Fast Diet, SHAKE-IT, Fast Track Trial...**
- **The (former) Australasian Child & Adolescent Obesity Research Network**
- **NSW MoH Childhood Obesity Group; The Australian Prevention Partnership Centre**