Obesity and the healthcare system

RACP ASM, Melbourne, May 2017

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Obesity

- A serious chronic relapsing disease

Obesity

- A serious chronic relapsing disease
- It’s common:

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Obesity</td>
<td>O/weight</td>
</tr>
<tr>
<td>Australia</td>
<td>6-8%</td>
<td>15-17%</td>
</tr>
<tr>
<td>NZ</td>
<td>11%</td>
<td>21%</td>
</tr>
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Obesity

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<tr>
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<td>28%</td>
</tr>
<tr>
<td>NZ</td>
<td>11%</td>
<td>32%</td>
</tr>
<tr>
<td>O/weight</td>
<td>15-17%</td>
<td>35%</td>
</tr>
</tbody>
</table>

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

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.

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%
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 (2º 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.”
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

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

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

<table>
<thead>
<tr>
<th>Procedure Type</th>
<th>Primary in Public</th>
<th>Revision in Public</th>
<th>Total BSR (Feb 2012 to 30 June 2016)</th>
<th>BSR Last 6 Months (1 Jan to 30 June 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Sleeve gastrectomy (LSG)</td>
<td>928</td>
<td>13%</td>
<td>99</td>
<td>12%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>244</td>
<td>10%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>21</td>
<td>9%</td>
</tr>
<tr>
<td>Gastric Banding (LAGB)</td>
<td>572</td>
<td>16%</td>
<td>215</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>64</td>
<td>12%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>17</td>
<td>13%</td>
</tr>
<tr>
<td>R-Y gastric bypass (RYGB)</td>
<td>78</td>
<td>11%</td>
<td>78</td>
<td>10%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td>6%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td>4%</td>
</tr>
<tr>
<td>Single anastomosis gastric bypass (SAGB)</td>
<td>28</td>
<td>9%</td>
<td>8</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>11%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Bilio pancreatic bypass/duodenal switch (BPD)</td>
<td>3</td>
<td>27%</td>
<td>14</td>
<td>56%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0%</td>
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<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Port Revision</td>
<td>NA</td>
<td>NA</td>
<td>47</td>
<td>21%</td>
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<td></td>
<td></td>
<td></td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>14%</td>
</tr>
<tr>
<td>Surgical Reversal</td>
<td>NA</td>
<td>NA</td>
<td>235</td>
<td>16%</td>
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<td></td>
<td></td>
<td></td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>19</td>
<td>11%</td>
</tr>
<tr>
<td>Other Procedures</td>
<td>1</td>
<td>3%</td>
<td>11</td>
<td>13%</td>
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<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Total Procedures</strong></td>
<td><strong>1,605</strong></td>
<td><strong>13%</strong></td>
<td><strong>707</strong></td>
<td><strong>15%</strong></td>
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<td></td>
<td></td>
<td></td>
<td><strong>334</strong></td>
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<td></td>
<td></td>
<td><strong>105</strong></td>
<td><strong>9%</strong></td>
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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

<table>
<thead>
<tr>
<th>WEIGHT MEASURE</th>
<th>FEMALE</th>
<th>MALE</th>
<th>ALL</th>
</tr>
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<tbody>
<tr>
<td>Mean Start BMI (Standard Deviation)</td>
<td>43.8 (8.1)</td>
<td>45.1 (8.3)</td>
<td>44.1 (8.1)</td>
</tr>
<tr>
<td>Mean DOS BMI (Standard Deviation)</td>
<td>42.0 (7.6)</td>
<td>43.9 (7.4)</td>
<td>43.0 (7.7)</td>
</tr>
<tr>
<td>Mean Start BMI – Private (Standard Deviation)</td>
<td>43.0 (7.6)</td>
<td>44.3 (7.8)</td>
<td>43.3 (7.7)</td>
</tr>
<tr>
<td>Mean DOS BMI – Private (Standard Deviation)</td>
<td>42.0 (7.1)</td>
<td>43.2 (7.3)</td>
<td>42.3 (7.2)</td>
</tr>
<tr>
<td>Mean Start BMI – Public (Standard Deviation)</td>
<td>48.9 (9.2)</td>
<td>50.0 (9.5)</td>
<td>49.1 (9.3)</td>
</tr>
<tr>
<td>Mean DOS BMI – Public (Standard Deviation)</td>
<td>47.2 (8.5)</td>
<td>47.7 (9.3)</td>
<td>47.3 (8.7)</td>
</tr>
</tbody>
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* DOS – day of surgery
Patients in *public* hospitals have much higher BMIs and higher prevalence of diabetes

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

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* DOS – day of surgery

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

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<thead>
<tr>
<th></th>
<th>FEMALE</th>
<th>MALE</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public*</td>
<td>25.6%</td>
<td>36.3%</td>
<td>29.1%</td>
</tr>
<tr>
<td>Private</td>
<td>10.7%</td>
<td>19.3%</td>
<td>12.6%</td>
</tr>
<tr>
<td>All</td>
<td>12.7%</td>
<td>21.7%</td>
<td>14.7%</td>
</tr>
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* 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

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.
Level 1
70-80% of patients with o/wt obesity
Self-based care supported by community-based services

Level 2
High risk patients
Care management

Level 3
Complex patients
Case management

Bariatric surgery & linked services

Tertiary care facilities & special obesity clinics; specialist teams; key worker case manages & joins up care

Secondary level care facilities; multidisciplinary teams; group programs; specialist allied health

Self-care supported by general practitioners, other 1\textdegree care, group programs

Primary prevention & health promotion

Obesity and the chronic disease care pyramid

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70-80% of patients with o/wt/ obesity
Self-based care supported by community-based services

Level 2
High risk patients
Care management

Level 3
Complex patients
Case management

Self-care supported by general practitioners, other 1° care, group programs
Secondary level care facilities; multidisciplinary teams; group programs; specialist allied health

Tertiary care facilities & special obesity clinics; specialist teams; key worker case managers & joins up care; specialist teams; keyworker case manages & joins up care

All parts of the pyramid are needed.
What services are available in your region?
With whom do your services link?

Bariatric surgery & linked services

Primary prevention & health promotion

So, here are some selected personal recommendations for improving health service provision for people affected by obesity.
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
Suggested solutions – Point #1
(Medium cost)

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- Registrar/ Fellow/ Advanced Trainee training positions
- Training positions for other health professionals
**Suggested solutions – Point #1**

(****Medium cost**)

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- Registrar/ Fellow/ Advanced Trainee training positions
- Training positions for other health professionals
- 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

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?
• 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

Thank you!