

**WA Health
Bariatric Surgery Plan
– a standardised approach to
surgery for obesity**

**Health System Improvement Unit (HSIU)
Department of Health**

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Abbreviations

Activity Based Funding and Management	ABF/M
Adjustable gastric band	AGB
Australian Institute of Health and Welfare	AIHW
Body mass index	BMI
Department of Health	DoH
Department of Veteran's Affairs	DVA
Diagnostic Related Group	DRG
Elective Surgery Wait List	ESWL
Elective and Emergency Steering Committee	EESC
Fremantle Hospital and Health Service	FHHS
General practice	GP
Laparoscopic adjustable gastric banding	LAGB
Health System Improvement Unit	HSIU
Intensive Care Unit	ICU
Laparoscopic Roux-en-Y gastric bypass	LRYGB
Model of Care	MoC
National Health and Medical Research Council	NHMRC
National Partnership Agreement	NPA
North Metropolitan Health Service	NMHS
Operational Directive	OD
Performance Activity and Quality	PAQ
Ready for Care	RFC
Roux-en-Y gastric bypass	RGB
Royal Perth Hospital	RPH
Sir Chares Gairdner Hospital	SCGH
State Health Executive Forum	SHEF
South Area Health Service	SMHS
Very low calorie diet	VLCD
Western Australia	WA

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Scope

The purpose of this Bariatric Surgery Plan is to provide an overview of obesity in the context of elective surgery, the identified issues and proposed strategies to improve the care co-ordination and management of these patients.

The State Health Executive Forum (SHEF) considered the efficacy of surgical procedures for obesity, and the situation of the bariatric cohort on the elective surgery waitlist (ESWL) in January 2011.

There is compelling support for focused attention on obesity. Results from the National Health Survey (2007-08) showed that “25% of persons aged 18 years and over to be obese, 37% overweight, 37% normal weight and 2% underweight. The highest rate of overweight/obesity was in the 65-74 year age group, at 75%. More adult males (68%) were overweight or obese than adult females (55%)” (1).

The Australian Chronic Disease Prevention Alliance Chairperson, Professor Olver said “Obesity is now overtaking tobacco as the largest preventable cause of disease in Australia. Obesity already affects nearly four million Australians and costs \$58 billion. Unless we get serious about prevention, nearly seven million Australians will be obese by 2025” (2).

From a Western Australian perspective, ‘The burden of disease and injury attributed to preventable risks to health in Western Australia -2006, published in 2010 found that excess body weight (overweight and obesity) was the leading cause of disease burden (premature death and disability combined). “High body mass ranked as the highest contributor to disease burden, accounting for 8.7% of the total burden of disease and injury in WA in 2006. High body mass contributed 2.2% more to the total burden than the next leading risk factor, tobacco (6.5%)” (p.4) (3).

The WA Chief Health Officer’s Report (2010) outlined that: “Trends in life expectancy show a continuing improvement over time ... but further improvements will be harder to achieve (‘the law of diminishing returns’) and there are new threats, such as rising levels of obesity, that might lead to reversal of some gains in future generations” (4).

Table 1 below outlines the increase in bariatric surgery in WA over the past six years. The Private sector provides the majority of separations, with the share provided in the public sector increasing to 21.7% in 2010/11.

Table 1. Separations for bariatric procedures in public and private hospitals

Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Public sep'ns	222	329	349	483	496	713
Private sep'ns	1,514	2,064	2,739	3,603	3,488	3,282
Public %	14.7%	15.9%	12.7%	13.4%	14.2%	21.7%

Strategies

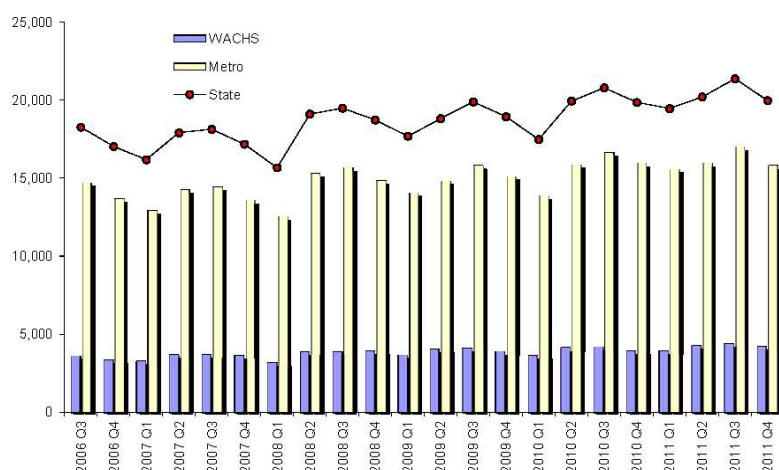
An Operational Directive for elective bariatric surgery will be developed consistent with the approaches taken in England and New South Wales.

1. Develop and promote an evidence based assessment and care pathway for the appropriate management of obesity to support general practice as the 'case manager' for the patient / family, utilising the Enhanced Primary Care Medicare funded items of allied health (five visits per annum) and psychological support (ten visits per annum), with appropriate referral points to specialist care.
2. Develop standardised access criteria for bariatric surgery and establish this as a state-wide policy for all public hospitals providing bariatric surgical intervention.
3. Develop state-wide policy that all uncomplicated elective bariatric procedures are classified as Category 3.
4. WA Health has determined that Joondalup Health Campus will become the statewide provider for bariatric surgery. Cases requiring tertiary level care will be referred to Sir Charles Gairdner Hospital.

Introduction

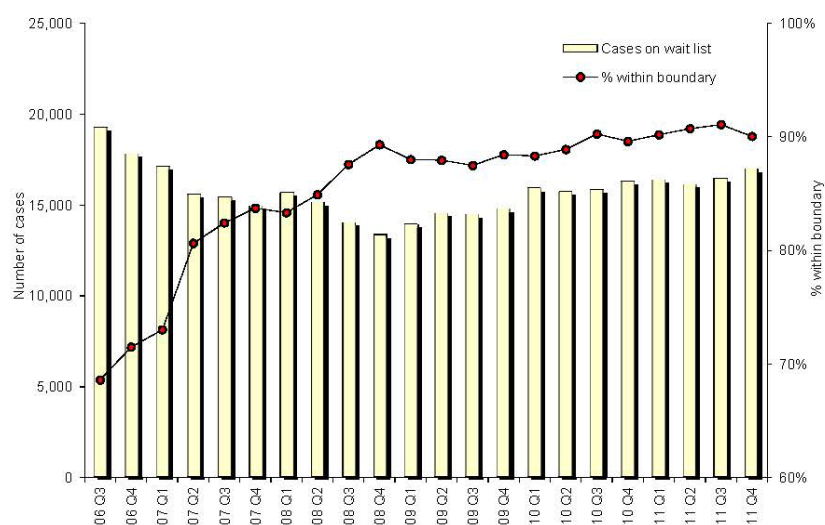
Over the past five years WA Health has made significant improvements in the management of elective surgery, with a higher proportion of patients within boundary across the state.

Figure 1. WA State summary, quarterly admissions, September 2006 quarter - December 2011 quarter.



Note: extracted from Western Australian Elective Surgery Wait List (ESWL) Report December 2011 Quarter (4)

Figure 2. WA State summary, cases waiting & proportion (%) within boundary, September 2006 quarter - December 2011 quarter



Note: extracted from Western Australian Elective Surgery Wait List (ESWL) Report December 2011 Quarter (4)

During the same period, WA Health has continued to experience increased demand for elective surgery. Specialities such as orthopaedic surgery and general surgery remain the largest patient cohorts on the Elective Surgery Wait List (ESWL). Bariatric procedures to address obesity are included in the surgical specialities of general surgery and plastic surgery.

While the National performance measures from the Australian Institute of Health and Welfare (AIHW) focus on median waiting time for each category, and performance has continually improved, the particular issues with longer than clinically desirable waiting times for people awaiting bariatric surgery was considerably understated.

Following the Expert Panel Review of elective surgery nationally in 2011, the targets set by the National Partnership Agreement (NPA) from 2012 -2014 changed (5). With the shift to average or ‘mean’ measures and targets with an incremental reduction in the mean days’ overboundary for each category (2012-2014), the long wait cases become immediately apparent. This measure coupled with the mandatory requirement to address the ten per cent longest wait cases or the ‘tail’ for each category, has emphasised the issue of extended wait times for bariatric surgery.

Current Status

In January 2011, WA Health considered the demand for bariatric surgery at SHEF. At that time data was provided to outline the types of procedures, category and wait times. It is noted that in January 2012 there were 473 bariatric cases on the ESWL, this has reduced to 390 (by 17.5%) predominantly because the cases have been determined not ready for care, as opposed to being completed. Table 2 shows the overboundary bariatric cases by procedure.

Table 2: Counts overboundary bariatric cases at 31 January 2011 and 2012

Procedure description	2011 Long Wait	2012 Long Wait
Lipectomy of abdominal apron*	18	18
Gastric reduction	9	
Revision Gastric band		6
Laparoscopic gastric reduction	47	65
Reduction mammoplasty, bilateral*	58	67
Others	15	21
Total	147	193

Notes: * Includes a principle diagnosis of adiposity or obesity/morbid obesity (E65 or E66.0 - E66.9). The grouping 'others' includes procedures for which there were less than 5 patients and have therefore been combined for confidentiality reasons.

Morbid Obesity Model of Care

The WA Health Networks published the Morbid Obesity Model of Care (MoC) in 2008 (6). This is WA's broad policy statement similar to the New South Wales *Obesity Management Plan* (7). In relation to surgical intervention, the WA MoC makes the following key points:

- That, “*availability and delivery of bariatric surgery in the public health system in Australia is inconsistent*” (p.23);
- One to two years after surgery, morbidly obese patients can lose 16-43% (22-63 kg) of body weight, which can be maintained with a supervised weight management plan (p.23). Research identified that there are a range of surgical guidelines that are currently available for the treatment of the morbidly obese; and
- The Obesity Surgery Society of Australia and New Zealand provide selection criteria for bariatric surgery. Area Health Services have policy guidelines on all surgical procedures for the morbidly obese. However, these guidelines vary across WA, along with facilities. There needs to be an integrated approach towards adopting available guidelines (p.23).

The recommendations outlined in the MoC in relation to surgical intervention included:

- All gastric surgery should be performed by an appropriately credentialed surgeon with access to specialised accredited peri-operative support (p.25);
- Promote state wide implementation of surgical guidelines, endorsed by credentialed professional bodies, for the treatment of the morbidly obese (p.25); and
- Hospital/Health service policy should include specialised services and facilities to manage morbid obesity in a dignified manner (p.26).

The MoC noted that, “*Some insurance and government agents have questioned the cost effectiveness of bariatric surgery. However, a number of studies have found in relation to hospital, pharmaceutical and physician costs, bariatric surgery is a cost-saving procedure to health care and governmental agencies after the first few years of surgery*” (p28).

Assessing interventions for obesity

Surgical and non-surgical interventions

There is a substantial body of evidence suggesting that bariatric surgery is currently the only intervention that consistently results in substantial, sustained weight loss in morbidly obese patients (over 40 BMI or between 35 and 40 with significant comorbidities). Surgery has also been shown to have a positive impact on diabetes and cardiovascular risk and reduce mortality more effectively compared to conventional obesity treatments (8).

While surgery has promising outcomes against several measures, it is also consistently argued that a multidisciplinary approach is required. The efficacy of various procedures and the wider use of surgical interventions for treating obesity (as opposed to morbid obesity) continues to be debated in the literature.

The Swedish Obese Subjects (2007) is a landmark and highly cited study conducted over more than 10 years examining “conventional” versus surgical interventions. Key points regarding this study are as follows:

- Conventional therapies included dietary education, pharmaceutical therapies;
- The surgical group included banding, vertical banded gastroplasty and bypass;
- Mean weight for the non-surgical group changed little, with a slight loss followed by slight gain then plateauing up to the 10 year mark;
- Mean weight for surgical cohorts dropped dramatically and then increased steadily, with banding group continuing to increase through the study; and
- Initial mortality was slightly higher for surgical group, with final results showing mortality was substantially higher in the conventional therapy group (8).

Over the shorter term, non-surgical interventions have been found to be effective weight reduction strategies for severe or morbid obesity. A National Health and Medical Research Council (NHMRC) report indicates mean % weight loss over 4-20 weeks for different weight loss methods.

Over this shorter time frame a very low calorie diet (VLCD) supplemented with Optifast achieved 14.7% weight loss, second only to surgical intervention (24-38%). One study has showed that patients using a VLCD prior to surgery had better compliance outcomes post-operatively.

Pharmaceutical treatments that are currently available are limited both in number and efficacy (9). Orlistat, which prevents the absorption of fat, was very popular when initially marketed in 2007 but has since waned with one report indicating rates of less than 10% at one year and 2% at two years. Sibutramine (Reductil) belongs to a class of selective serotonin and noradrenalin reuptake inhibitors, and in 2010 was withdrawn in Australia and other countries due to reported increase in cardiovascular risks.

Surgery has previously been recommended only for severely or morbidly obese patients. There is research emerging to suggest that surgery may be appropriate for those with a BMI of over 35 with no comorbidities, or between 30 and 35 with significant comorbidities.

Comparison of surgical procedures

Laparoscopic adjustable gastric banding (LAGB) and Laparoscopic Roux-en-Y gastric bypass (LRYGB) are two of the most commonly performed procedures in the treatment of morbid obesity in Australia.

The perioperative costs associated with bariatric surgery exceeds nonsurgical treatments (9). However, effective surgery may reduce the costs associated with medication use, outpatient visits and hospitalisation over time.

The efficacy of treatments for morbid obesity may be measured by a number of indices, including:

- Weight loss – absolute; BMI; % excess weight loss;
- Comorbidities – type 2 diabetes; hyperlipidaemia, hypertension, sleep apnoea; and
- Mortality – as a result of surgical complications versus long term chronic health conditions associated with obesity (9 & 10).

The positive impacts of bariatric surgery on other factors such as metabolism (i.e. post-operative improvement in insulin resistance) and psychosocial status (improvement in mood, depression) have also been assessed by researchers.

In general it is reported that LRYGB (i.e. bypass) more consistently achieves better weight loss results, over the longer term, and a reduced number of surgical failures compared with LAGB (i.e. banding) (11). Some studies have shown that a higher proportion of patients have more frequent positive impact on associated comorbidities (i.e. type 2 diabetes) than with banding. There are a number of post-operative complications associated with banding procedures including slippage and irritation caused by the band, and pouch dilations (11). This has led to the need to convert banding to a bypass or other permanent surgical procedure. LRYGB however also has a significantly longer operating and recovery time and increased incidents of life-threatening complications.

A broad literature review conducted in 2009 compares the efficacy and morbidity associated with various surgical procedures. The tables below are extracted from the literature review and give a comparison between bypass and banding (11).

Table 3 below shows a comparison of mean excess weight loss between surgical procedures. RGB surgery has noticeably higher percentage of weight loss in the first year, but the difference between procedures becomes smaller over time.

Table 3. Percentage excess body weight loss after bariatric surgery

Operation		Mean follow-up period (years)							
		1	2	3	4	5	7	8	10
RGB (proximal)	%EBWL	67.3	67.5	62.5	58.0	58.2	55.0		52.5
AGB	%EBWL	42	57.2	54.8	54.5	55.2	51.0	59.3 ^a	

RGB Roux-en-Y gastric bypass; *AGB* Adjustable gastric band

Note: table extracted from Boza et al (11)

Table 4 shows the impact of surgery on comorbidities, with RGB surgery showing a great impact on comorbidities over banding, except for sleep apnoea.

Table 4. Improvement of co-morbidities after surgical bariatric procedures

Operation	Diabetes resolved (%)	Hypercholesterolemia improved (%)	Hypertension resolved (%)	Sleep apnea resolved (%)
Banding	47.8	71.1	38.4	94.6
RGB	83.8	93.6	75.4	86.6

Note: table extracted from Boza et al (11)

Table 5 shows the percentage of mortality at 30 days, overall complications and major complications, with the lowest percentage for each being associated with banding.

Table 5. Mortality and morbidity after laparoscopic bariatric procedures

Operation	30-day mortality [21, 95, 134, 147, 148, 180, 208] (%)	Overall complications [151] (%)	Major complications [151] (%)
Lap AGB	0.05–0.4	9	0.2
Lap RGB	0.5–1.1	23	2
Lap BPD	2.5–7.6	25	5

Lap laparoscopic, *AGB* adjustable gastric banding, *RGB* Roux-en-Y gastric bypass, *BPD* biliopancreatic diversion

Note: table extracted from Boza et al (11)

In summary, the review indicates that there is a relationship between the complexity, effectiveness and risk related to the type of surgery (12 &13). That is, surgery that is more effective in terms of weight loss also tends to be more complex and have the highest risk of complication (e.g. bypass), while those offering greater safety and flexibility may be less effective (e.g. banding). This appears to extend to non-surgical interventions, which have a lowest potential for related complications, but also with the least potential for long term substantial weight loss in patients with severe or morbid obesity.

It appears that there is no clear indication regarding the ‘best’ form of bariatric surgery and that there are a range of factors to be taken into consideration in determining the most appropriate intervention in any given situation.

Weight loss surgery in Australia

In 2010 the AIHW published *Weight loss surgery in Australia* (14) a detailed report providing, ‘a comprehensive range of statistical information on weight loss surgery, obesity prevalence and general practitioner services for people with excess body weight’ (p. ii). The report acknowledges the Government

inquiry into Obesity in Australia (2009), with recommendations for the prevention and management of the increasing obesity problem. Recommendations included:

- To ensure equity in access by publicly funding bariatric surgery, including multidisciplinary support teams, for those patients that meet appropriate clinical guidelines (Recommendation 5).
- To develop a national register of bariatric surgery with appropriate stakeholders. The purpose of the register would be to capture data on the number of patients, the success of surgeons, and any possible complications. The data would be used to track the long term success and cost effectiveness of bariatric surgery (Recommendation 6) (p.1).

The WA State Health Executive Forum (SHEF) has considered the efficacy of surgical procedures for obesity over the past two years. It is evident that work is progressing in other jurisdictions to address the obesity problem, including surgical options where this is deemed to be clinically appropriate.

Discussion

The WA Health Networks Morbid Obesity MoC (6), recommendations included:

- Comprehensive primary care strategies for the management of morbid obesity
- The role of General Practice (GP) in the care of the morbidly obese
- Surgical interventions for treatment
- Health care services equipment and facility issues/initiatives (p.14).

To improve access to a range of services specifically for morbid obesity, multidisciplinary clinics should be in a location more accessible to more of the community (p.18). The model acknowledges the key role of GP in managing patients in the primary care setting and that the reference guide for primary care was the NHMRC's *Clinical practice guidelines for the management of overweight and obesity in children and adolescents, and adults* (p.22).

Multi-disciplinary care in the management of obesity in primary care has potentially been enhanced through Medicare billable services through the Enhanced Primary Care initiative (five consults per annum) and access to psychological services (ten consults per annum). This approach aligns with WA Health's desire to increase the share of outpatient type services legitimately costed to Medicare.

There is evidence that other states in Australia have developed and implemented comprehensive obesity strategies in an effort to reduce the burden of disease resulting from obesity. The Australian New Zealand Obesity Society (October 2011) acknowledged the concerted effort being applied through policy and action in Queensland and New South Wales. The Society awarded Queensland the gold medal for action towards addressing obesity for the third time in four years. "*The key to Queensland's success lies in its coordinated approach through the Q2 strategy, which includes obesity targets*

for Queenslanders, and it also benefits from the strong partnerships that exist between various levels and sectors of government and non-government organisations” (15).

New South Wales

Within a broad obesity management strategy, New South Wales (NSW) have developed an *Obesity Management Plan* in 2009 (7) to ensure that people with problems of obesity are managed across a co-ordinated care pathway, including the option of bariatric surgery. This document is similar to the WA MoC, identifying the high risk groups and the burden of co-morbidities as a result of obesity, the impact this has on the quality of life of individuals and the cost to the health system.

The appendices of this plan include a range of resources and templates to enable health services to commence obesity management services. These documents are an excellent resource for developing similar processes for WA.

England

The National Health Service’ National Institute for Health and Clinical Excellence (NICE) has published the guideline: *Obesity: guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children* (2006) (17). The guideline takes a whole of life approach and considers social determinants and lifestyle influences / healthy behaviours to address weight management. The NSW Obesity Management Plan is consistent with the NICE guideline.

WA Policy Inconsistencies

Access criteria

The MoC for Morbid Obesity noted the inconsistency of surgical procedures undertaken at the various hospitals across WA, and range of access criteria applied for surgical intervention. Through this review it is recommended that the access criteria documented in the *NSW Obesity Management Plan* (7) is adopted by WA to standardise access to publicly funded surgical interventions. The access criteria are outlined in Figure 3.

Figure 3. NSW Health Recommended Criteria for Eligibility for Bariatric Surgery (p.51)

Parameter	Criteria
Age	<ul style="list-style-type: none"> • Age between 16-55 years • Pregnancy not anticipated in first two years post-op
Body weight	<ul style="list-style-type: none"> • BMI \geq 40, or • BMI \geq 35 with associated obesity illnesses such as Type II Diabetes and Sleep Apnoea • Pubertal development \geq stage 4.
Resistant obesity	<ul style="list-style-type: none"> • Failed weight loss techniques including dietary, exercise and behaviour modification programmes supervised within the Bariatric Programme
Morbidity	<ul style="list-style-type: none"> • Obesity related morbidity as follows: diabetes, sleep apnoea, degenerative major weight bearing joint disease (and be candidate for joint replacement) etc • Free of end organ damage • Absence of other medical conditions such as Multiple Sclerosis that would increase the morbidity or mortality risk of bariatric surgery • Comprehensively assessed as fit for surgery by specialist physician, endocrinologist, anaesthetist and bariatric surgeon
Psychological profile	<ul style="list-style-type: none"> • Undergone comprehensive psychosocial evaluation, and free of psychiatric issues, treatment or drug dependency problems • Proven to be able to comply with and adhere to the behavioural changes required after surgery • Capacity to understand the associated risks and commitment • Well-informed, motivated and with acceptable operative risks

Nominated Hospital Setting

In allocating the category for surgery, surgeons need to ensure that the patient record includes the patient's co-morbidities and clearly identifies the appropriateness of the case being completed at a general hospital or by a private provider. Consideration should be given to the less complex cases proactively being listed and completed outside the hospitals were emergent work impacts on elective activity. If the patient's clinical condition necessitates access to ICU, this needs to be clearly documented. It is noted that only 2.4% of separations (n=95) in 2010/11 required ICU admission, with a total of 177 ICU days utilised.

A review the NSW approach to surgical planning, *Surgical Futures – a plan for Greater Sydney* (2011) (19), consideration has been given to developing designated bariatric surgery facilities to foster centres of excellence which better meet the needs of the client cohort.

Financial Implications

The hospital where surgical procedures are performed impacts on the cost of the procedure under activity based funding and management. Tertiary, non-teaching and rural facilities have different prices by DRG. The same procedure could be completed in a more cost effective and clinically appropriate environment at a general, regional or private hospital.

The Australian Institute of Health and Welfare (AIHW) report (14) identifies that, '*in 2007-08 year 90% of weight loss surgery occurred in private hospitals with private health insurance funding 82% of separations*' (p. viii). Therefore, the public component of weight loss surgery nationally was 10 per cent.

Obesity Classification

There is inconsistent community based support for patients seeking surgical intervention. This has lead to inappropriate referral for bariatric specialist review at outpatients' clinics. This raises expectations that surgery is an appropriate option, before the patient has satisfied appropriate work up and been provided with essential nutritional and psychological support.

According to the National Institute for Health and Clinical excellence (NICE) (17), the degree of overweight or obesity in adults should be defined utilising the measures of body mass index (BMI) and girth circumference. The two recognised assessment tools are shown in Table 6 and Table 7.

Table 6: Classification of obesity by BMI

Classification	BMI (kg/m ²)
Healthy weight	18.5–24.9
Overweight	25–29.9
Obesity I	30–34.9
Obesity II	35–39.9
Obesity III	40 or more

<http://www.nice.org.uk/nicemedia/pdf/CG43NICEGuideline.pdf> (p36)

Table 7: Classification of obesity by waist circumference

BMI classification	Waist circumference		
	Low	High	Very high
Overweight	No increased risk	Increased risk	High risk
Obesity I	Increased risk	High risk	Very high risk
For men, waist circumference of less than 94 cm is low, 94–102 cm is high and more than 102 cm is very high. For women, waist circumference of less than 80 cm is low, 80–88 cm is high and more than 88 cm is very high.			

<http://www.nice.org.uk/nicemedia/pdf/CG43NICEGuideline.pdf> (p37)

NICE has developed the following matrix to outline the appropriate interventions for each classification of obesity (Table 8). The *NSW Obesity Management Plan* also utilised this tool in determining the level of interventions for clients, noting that not all clients would be accepted for surgical intervention due to the risks associated with surgical intervention.

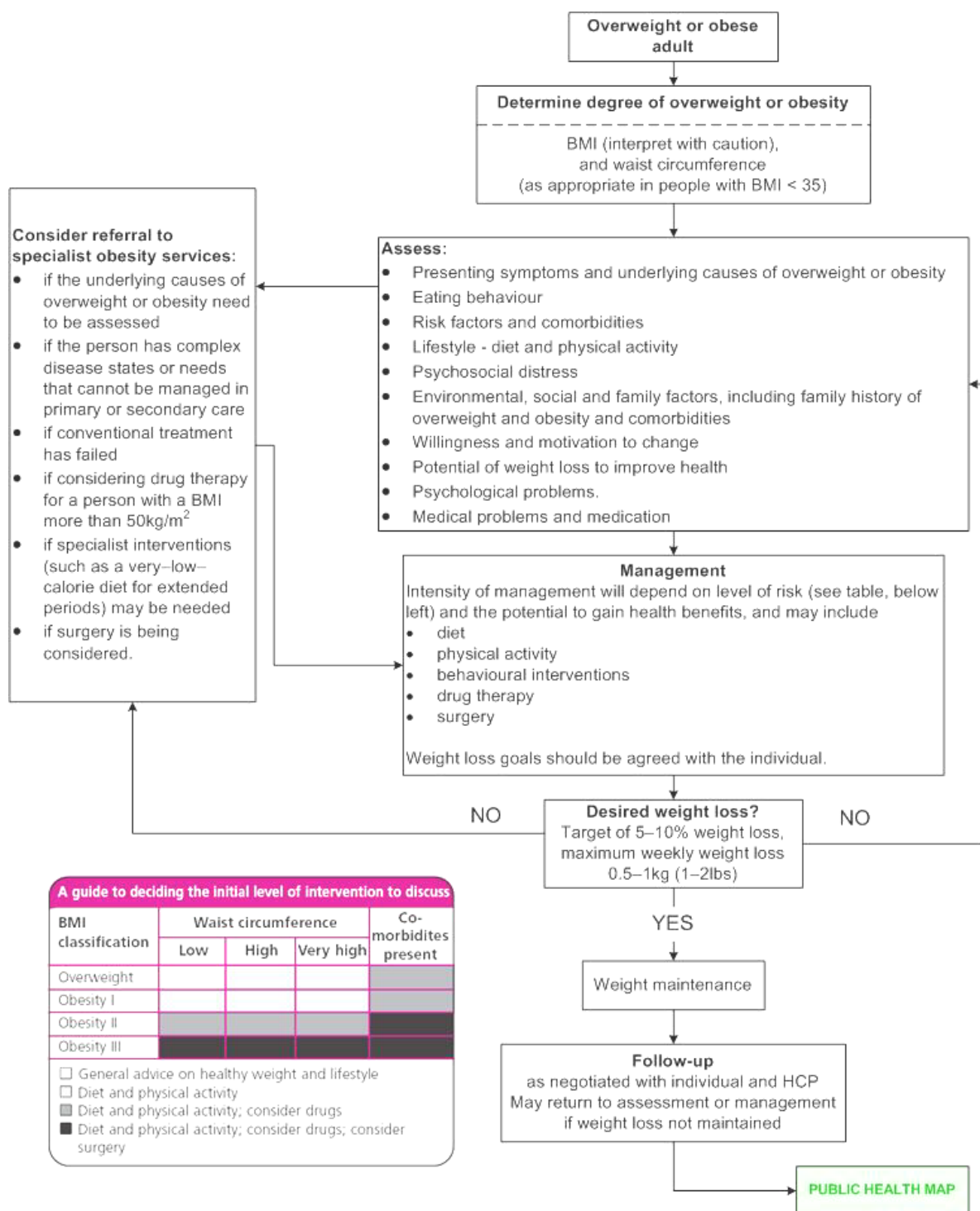
Table 8. Interventions for obesity by BMI and waist circumference

BMI classification	Waist circumference			Comorbidities present
	Low	High	Very high	
Overweight				
Obesity I				
Obesity II				
Obesity III				
General advice on healthy weight and lifestyle				
Diet and physical activity				
Diet and physical activity; consider drugs				
Diet and physical activity; consider drugs; consider surgery				

<http://www.nice.org.uk/nicemedia/pdf/CG43NICEGuideline.pdf> (p37)

NICE has also developed a clearly articulated pathway for the assessment and management of patients with overweight or obesity (17) see Figure 4.

Figure 4. NICE Overweight /Obesity Management Pathway



The NICE guidelines provide detailed information and advice to general practitioners for the assessment and management of obese patients prior to referral for possible surgical intervention.

Following consultation with bariatric surgeons in WA a set of access criteria for bariatric surgery has been adapted from the NSW assessment criteria (Figure 5).

Figure 5 WA Bariatric Surgery Assessment Criteria

Parameter	Criteria
Age	<ul style="list-style-type: none"> ▪ Age between 16-55 years ▪ Pregnancy not anticipated in the first two years post op
Body Weight	<ul style="list-style-type: none"> ▪ BMI \geq 40 or ▪ BMI \geq35 with associated obesity illnesses such as Type 2 Diabetes and Sleep Apnoea ▪ Pubertal development \geq Stage 4
Resistant obesity	<ul style="list-style-type: none"> ▪ Failed weight loss techniques including dietary exercise and behaviour modification program supervised with the bariatric programme
Morbidity	<ul style="list-style-type: none"> ▪ Obesity related morbidity as follows: Type 2 diabetes, hypertension, sleep apnoea, degenerative major weight bearing joint disease (and be a candidate for joint replacement) etc ▪ Free of organ damage ▪ Absence of other medical conditions such as Multiple Sclerosis that would increase the morbidity or mortality risk of bariatric surgery ▪ Comprehensively assessed as fit for surgery by a medical practitioner with a special interest in obesity, (with access to a specialist general physician or endocrinologist when indicated), anaesthetist and bariatric surgeon
Psychological profile	<ul style="list-style-type: none"> ▪ Undergone comprehensive psychosocial evaluation, and free of psychiatric issues, treatment or drug dependency problems ▪ Proven to be able to comply with and adhere to the behavioural changes required after surgery ▪ Capacity to understand the associated risks and commitment ▪ Well-informed, motivated and with acceptable operative risks
<p>If patients cannot achieve some significant short term weight loss by conservative measures (12 months), then they will probably not be able to comply with post operative advice to achieve real long term benefit from the surgery.</p>	

Adapted from the NSW Obesity Management Plan Assessment Criteria (2009, p. 51)

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Related material

Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults, Children and Adolescents

<http://www.nhmrc.gov.au/nics/nics-programs/clinical-practice-guidelines-management-overweight-and-obesity-adults-children-and-adolescents>

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