

Sydney South West Area Health Service Overweight and Obesity Prevention and Management Plan 2008 - 2012



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CHIEF EXECUTIVE'S MESSAGE

Obesity is a significant and growing problem in our community, affected by our changing lifestyles and behaviours. The long term implications for the health of children, adolescents and adults are considerable, with overweight and obesity contributing to the development of health problems such as Type 2 diabetes, heart disease and some cancers.

Overweight and obesity is a difficult problem for individuals and families to solve on their own. Help and support is required from health services and professionals. They also need an environment which encourages a healthy and active lifestyle. This can only be achieved if services work together to address this significant and complex problem.

The *Sydney South West Area Health Service Overweight and Obesity Prevention and Management Plan 2008 - 2012* has been developed in response to the increasing prevalence of overweight and obesity in our community. As the first such plan for Sydney South West Area Health Service (SSWAHS), it lays a solid foundation for future plans and provides a framework on which to build further strategies to address overweight and obesity issues.

There has been considerable effort from many people to develop the *Sydney South West Area Health Service Overweight and Obesity Prevention and Management Plan 2008 - 2012*. Extensive consultation has occurred with SSWAHS clinicians and other staff, external agencies and services. The recommendations from these services together with the views of over 300 community members have been utilised to shape the strategies that will be implemented over the next 5 years. Thank you to all who were involved and made time to provide feedback during the development of the Plan.

It is intended that this Plan is a flexible and responsive document so that any new national and or state government policies and directions on overweight and obesity can be incorporated. Ongoing consultation will be required throughout the life of the Plan, particularly to inform the development of new services and programs.

The co-operation and support of all staff and development of partnerships and networks amongst services within SSWAHS will be essential for the successful implementation of this Plan. In addition, new and stronger partnerships will need to be developed with external agencies and the private sector.

I look forward to the implementation of this Plan and the opportunity to work with other agencies and the broader community to improve the health of the people of Sydney South West.



Mike Wallace
Chief Executive
Sydney South West Area Health Service

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1. EXECUTIVE SUMMARY

The *Sydney South West Area Health Service Overweight and Obesity Prevention and Management Plan 2008 – 2012* was developed to address increasing rates of overweight and obesity in the community, and provides a framework for the development of coordinated overweight and obesity services in Sydney South West Area Health Service (SSWAHS).

Given the complexity of the overweight and obesity problem and the existing evidence on best practice, a decision was made that the major focus of the Plan would be children. In recognition that overweight and obesity is also a concern in the adult population, strategies have also been developed to address treatment of adults. This includes a limited number of adult/adolescent prevention strategies. This five year Plan thus focuses on four areas:

- Child overweight and obesity prevention (0 – 12 years);
- Child and adolescent overweight and obesity treatment and management (less than 18 years);
- Adult overweight and obesity treatment and management; and
- Adult/adolescent overweight and obesity prevention (limited strategies).

Strategies developed to address the problem will support SSWAHS in achieving its goals. The long term goal is to reduce the level of overweight and obesity in the community, and the short term goal is to increase the capacity of SSWAHS and the broader community to reduce overweight and obesity.

During the development of the Plan a number of priority populations were identified as experiencing a higher prevalence of overweight and obesity or at greater risk of becoming overweight and obese. These populations included Aboriginal people, some culturally and linguistically diverse (CALD) communities, and people with greater socioeconomic disadvantage. Specific strategies have been developed to address overweight and obesity in these populations.

While SSWAHS provides a range of related health promotion services, limited obesity specialist services, and many lifestyle programs and services which provide dietary and physical activity advice, some existing services will be enhanced and new services will be developed. The establishment of a structure and networks to coordinate these services will be important to ensure efficiency and equity of access to services in SSWAHS.

The major strategies in the Plan are:

- Continuation of development of strategies and programs focused on children 12 years and under which promote healthy eating, physical activity and reduced sedentary behaviour;
- Working with other agencies and services to ensure effective overweight and obesity prevention and treatment;
- Strengthening the capacity of all health professionals to identify and refer overweight and obese people of any age to appropriate services;
- Increasing the skills of health practitioners, including general practitioners and specialist services, to effectively assess and manage overweight and obesity in all age groups;
- Ensuring access to specialist overweight and obesity services is available across the Area;
- Creating an environment in SSWAHS facilities and services that promotes good health, and safe care and practice for staff and the community; and
- Developing the infrastructure needed to support improvements in overweight and obesity prevention and treatment.

Implementation of the *Sydney South West Area Health Service Overweight and Obesity Prevention and Management Plan 2008 – 2012* will be facilitated, monitored, adjusted and evaluated by the *SSWAHS Overweight and Obesity Prevention and Management/Advisory Committee*. This Committee will also advise any future planning steering committee during the development of any subsequent related plans.

2. BACKGROUND

The increasing prevalence of childhood overweight and obesity is a global public health problem¹, not only because of the health consequences in childhood² but also because of the greater risk of remaining overweight in adulthood³. In the ten year period from 1985 to 1995, the level of combined overweight and obesity in Australian children increased by more than 50%⁴. It has been estimated that if current trends continue, by 2025, 50% of children and adolescents in NSW will be overweight or obese⁵.

Consistent with trends in child and adolescent overweight and obesity, the prevalence of overweight and obesity in people aged 16 years and over in NSW is also increasing. In 2005, 50% of the adult NSW population was considered to be overweight or obese, an increase of 3.8% since 2002⁶. In the same year, 17.5% of males and 16.1% and females aged 16 years and over in NSW reported being obese, compared with 14.8% (males) and 14.4% (females) in 2002. However these overweight and obesity estimates are considered under-estimates as they relied on self-report of height and weight⁷. It has been estimated that in 1999 22% of Australians were obese, almost triple the level in 1980⁸.

According to a 2007 Organisation for Economic Co-operation and Development (OECD) report, Australia ranks the fifth highest for rates of overweight and obesity amongst OECD countries⁹. It has been estimated that the total cost of obesity in Australia in 2005 was \$21 billion and health system costs contributed \$873 million to this amount¹⁰.

The main cause of obesity and overweight is an energy imbalance between calories consumed on the one hand and calories expended on the other hand¹¹, with energy intake exceeding energy expenditure persistently over time¹². Obesity has become a public health problem in the 20th and 21st centuries. Factors that have contributed to the growing prevalence of obesity in our community include an increased consumption of energy-dense foods high in saturated fats and sugars¹³, reduced physical activity¹⁴, and lifestyle changes resulting in increased sedentary behaviour such as increased television viewing time¹⁵. Other forces promoting obesity in our community include concerns about the safety of children which have led to less outdoor activity for children, and the ready availability of foods that have a high fat content and are energy dense¹⁶.

Socioeconomic status has also been associated with overweight and obesity in both adults and children. Among adults in NSW, between 1997 and 2005, there was a gradient of increasing rates of overweight and obesity with decreasing socioeconomic status¹⁷. Children from lower socioeconomic groups in NSW are also more likely to be overweight and obese¹⁸. National adult data, for the period 2004 -2005, indicates that while fairly similar proportions of adults in low income and high income households were overweight or obese (56% and 52% respectively), those in low income households were more likely to be obese¹⁹. However, evidence is emerging that lifestyle and behavioural factors are not sufficient explanations of higher body mass indexes amongst socioeconomically disadvantaged groups²⁰. Factors contributing to the over-representation of obesity in low-income groups include the relatively low cost of high energy and nutrient poor foods²¹ and difficulty in accessing fresh food outlets²².

The National Health and Medical Research Council (NHMRC) *Clinical Practice Guidelines for the Management of Overweight and Obesity in Children and Adolescents (2003)*²³ advise that there are many definitions of overweight and obesity for children and adolescents but recommend that age-related body mass index (BMI) be used as it is closely linked to body fatness in children and adolescents. In line with these NHMRC guidelines, children and adolescents with a BMI above the 85th percentile may be considered overweight while those with a BMI above the 95th percentile may be considered obese.

For adults, a combination of BMI and waist circumference is recommended for the clinical measurement of overweight and obesity²⁴. A BMI of 25 and above or a waist circumference above 94 centimetres in men and 80 centimetres in women is considered as overweight. A BMI of 30 or more

or a waist circumference above 102 centimetres in men and 88 centimetres in women is considered as obese²⁵. The NHRMC *Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults (2003)* advises however that these cut-offs have been derived in predominantly Caucasian populations and are likely to vary in other population groups. There are also no data on the best measures to use for Aboriginal and Torres Strait Islander peoples²⁶.

For the child, adolescent and adult, overweight and obesity increases the risk of developing a range of health, social and psychological problems. Overweight or obese children and adolescents are at greater risk of developing endocrine, gastrointestinal and certain orthopaedic problems and cardiovascular disease, experiencing social discrimination, and suffering from poor self-esteem and depression²⁷. Childhood obesity is also associated with a higher chance of premature death and disability in adulthood²⁸. In adults, overweight and obesity increases the risk of developing a range of health problems including cardiovascular disease, high blood pressure, Type 2 diabetes, osteoarthritis, psychological problems and reproductive problems for women²⁹. It also increases the risk of developing some cancers including oesophageal, breast (postmenopausal), endometrial, colorectal, pancreatic, and kidney cancer³⁰. Obesity can also impair the function of the respiratory system³¹. Obstructive sleep apnea syndrome and obesity hypoventilation syndrome are recognised complications of obesity³².

In response to concerns about the increasing level of overweight and obesity in its community, and recognising the time lag between the onset of overweight and obesity and subsequent health problems, SSWAHS determined that a strategic plan was required to focus on this problem. In particular, attention focused on children where the greatest concern was identified. While specific information about the prevalence of overweight and obesity in SSWAHS children and adolescents is lacking, the prevalence of childhood overweight and obesity in NSW was estimated to be 25% for children aged 5 to 16 years in 2004, compared with 11% for children aged 7 to 16 years in 1985³³. An important additional consideration was the inequitable distribution of the problem across SSWAHS. As such, the Plan reflects a commitment to working with populations with the highest prevalence of overweight and obesity.

Although children and adolescents are the focus of this Plan, it was recognised that overweight and obesity in the adult population is also a significant area of concern. Mirroring NSW State trends, the prevalence of reported overweight and obesity in adults in SSWAHS has consistently risen over the past ten years from 41.3% in 1997 to 50.4% in 2006³⁴. Concurrently the prevalence of reported obesity has risen from 10.3% (1997) to 19% (2006)³⁵. Therefore it was acknowledged that there is a need to ensure that clinical services are available for adults whose health is significantly compromised by obesity. These include obesity and metabolic services and, consistent with NSW Department of Health strategies, access to bariatric surgery.

In addition to population wide strategies, priority groups have been identified as requiring specific strategies. These groups have been identified as having higher rates of overweight or obesity or are at greater risk of becoming overweight or obese compared to the general population and experience disadvantage due to their socioeconomic status, level of education, employment status and language skills. They include people with mental health problems, Middle Eastern people, people from Pacific Communities, Aboriginal people, people with disabilities, and people with greater socioeconomic disadvantage.

3. DEVELOPMENT OF SSWAHS OVERWEIGHT AND OBESITY PREVENTION AND MANAGEMENT PLAN

This Plan is an initial five year plan for the SSWAHS to address overweight and obesity in the community and forms the basis for a longer term strategy to tackle overweight and obesity in SSWAHS. The Steering Committee established to guide the development of this Plan agreed that the Plan would encompass the following four areas:

- Childhood overweight and obesity prevention (12 years and under);
- Child and adolescent overweight and obesity management and treatment (less than 18 years);
- Adult overweight and obesity management and treatment; and
- Adult/adolescent overweight and obesity prevention.

Although adult prevention was not considered a priority by the Committee it was recognised that the family focus of childhood prevention strategies would impact on adults. In addition, the inclusion of prevention strategies aimed at SSWAHS employees and visitors to SSWAHS facilities would also provide a basis for future adult focussed prevention work. It would also assist to create a safe environment and culture.

In developing this Plan, those involved were cognisant that strategies proposed needed to:

- Be supported by evidence;
- Be effective at the health service level;
- Complement state and local plans;
- Build on existing capacity;
- Be feasible given existing infrastructure; and
- Address inequities.

The terms of reference of the Steering Committee and lists of members of the Steering Committee and working parties established to develop strategies focusing on the four priority areas are attached (Appendix A).

4. THE POLICY AND PLANNING CONTEXT

Goals and Objectives – New South Wales and Sydney South West Area Health Service

The overall objectives and service planning principles that guided development of this Plan are aligned with NSW Health's vision, four goals and seven strategic directions. The NSW Health Vision is 'Healthy people – Now and in the Future', and the overarching goals are:

- To keep people healthy;
- To provide the health care that people need;
- To deliver high quality services; and
- To manage services well.

NSW Health has seven strategic directions. These are:

- Make prevention everybody's business;
- Create better experiences for people using health services;
- Strengthen primary health and continuing care in the community;
- Build regional and other partnerships for health;
- Make smart choices about the costs and benefits of health services;
- Build a sustainable health workforce; and
- Be ready for new risks and opportunities.

In 2006, the State Government concerned about the increasing prevalence of overweight and obesity in children in NSW, set the following target *in the NSW State Plan. A New Direction for NSW*:

1. "Stop the growth in childhood obesity by holding childhood obesity at the 2004 level of 25 per cent by 2010. Then reduce levels to 22 per cent by 2016"³⁶.

Complementing this target is the NSW Department of Health target for adults, articulated in its plan *NSW Health. A New Direction for NSW: State Health Plan. Towards 2010*:

2. "Prevent further increases in levels of adult obesity which are currently at 50%"³⁷.

There are also NSW Department of Health policies that are of relevance to this Plan. These have been incorporated into the Action Plan³⁸. The development of this Plan was also a key initiative identified in the SSWAHS Strategic Plan³⁹.

Goals and Objectives of the Sydney South West Area Health Service Overweight and Obesity Prevention and Management Plan 2008 - 2012

The following goals and objectives of the *Sydney South West Area Health Service Overweight and Obesity Prevention and Management Plan 2008 - 2012* reflect the strategic directions established in both the State and NSW Department of Health plans. They will also assist the SSWAHS in meeting the NSW overweight and obesity targets.

SSWAHS long-term goal
To reduce the level of overweight and obesity in the community

Short term goal

To increase the capacity of SSWAHS and the broader community to reduce overweight and obesity.

1. Behavioural Objectives

- 1.1 Reduce the consumption of sweetened drinks and increase the consumption of non-sweetened drinks, especially water
- 1.2 Reduce the consumption of energy dense/nutrient poor food and increase consumption of vegetables and fruit

- 1.3 Increase the level of appropriate infant feeding
- 1.4 Increase the amount of time spent in planned moderate-vigorous and incidental physical activity
- 1.5 Reduce the time spent in sedentary behaviour, especially small screen recreation

2. Capacity Building Objectives ¹

- 2.1 Increase knowledge and skills of health practitioners and agencies in the prevention and management of overweight and obesity
- 2.2 Increase awareness, knowledge and skills of the community to promote healthy weight and prevent overweight and obesity
- 2.3 Improve identification, assessment and management of children, adolescents and adults who are overweight and obese
- 2.4 Provide a pathway for access to bariatric surgery for those who require it, including pre and post surgical care by a multidisciplinary team
- 2.5 Increase the focus of SSWAHS and other agencies on overweight and obesity in priority populations
- 2.6 Work with vulnerable communities including culturally and linguistically diverse (CALD) and Aboriginal people to identify appropriate strategies to address overweight and obesity, and people with disabilities who are often vulnerable due to physical activity limitations

3. Environmental Objectives

- 3.1 Foster a physical environment in health facilities which supports physical activity and healthy eating
- 3.2 Improve and enhance environments in the community which support physical activity and healthy eating
- 3.3 Improve the safety and welfare of our staff, patients and visitors by considering the physical and psychological aspects of safety in relation to overweight and obesity²

4. Quality Improvement and Evaluation Objectives

- 4.1 Build on existing evidence in overweight and obesity prevention, assessment and management and incorporate into future strategies

5. Advocacy Objectives

- 5.1 Advocate for policies and strategies that support increased physical activity, healthy eating and better clinical practice within health services
- 5.2 Advocate for policies and strategies that support increased physical activity and healthy eating in educational and local facilities

6. Management Objectives

- 6.1 Expand leadership in obesity and overweight prevention and management in SSWAHS ³

The *Sydney South West Area Health Service Overweight and Obesity Prevention and Management Plan 2008 - 2012* has also been developed to be consistent with the plans and policies of NSW Health, the endorsed plans of the SSWAHS, national documents, and other documents. A summary of these key reference documents is provided (Appendix B).

¹ Capacity building in this Plan refers to an approach to development that builds independence. It aims to "increase the range of people, organisations and communities who are able to address problems, and in particular, problems that arise out of social inequity and social exclusion." Resources, skills, knowledge, physical environment and infrastructure are integral components of capacity building in this Plan. (Population Health, *Capacity Building*, NSW Department of Health. Available at: <http://internal.health.nsw.gov.au/public-health/promotion/capacity-building/index.html>).

² Safety in this objective refers to SSWAHS' duty of care to staff, patients and visitors. It encompasses the physical aspects of safety (for example ensuring that appropriate equipment and furniture is available) as well as the psychological aspects (for example fostering a culture of support and developing strategies to address discrimination).

³ Leadership as referred to in the management objective, will involve the following factors: ownership, coordination, planning, governance, resource allocation, monitoring, implementation, change management, direction, accountability and systems.

5. SYDNEY SOUTH WEST AREA HEALTH SERVICE (SSWAHS)

Introduction

SSWAHS comprises the fifteen local government areas (LGAs) of Ashfield, Bankstown, Burwood, Camden, Campbelltown, Canada Bay, Canterbury, Fairfield, Marrickville, Leichhardt, Liverpool, Strathfield, City of Sydney (part of), Wollondilly and Wingecarribee. It covers a land area of 6,380 square kilometres and settlements vary from scattered rural townships in the south, through to the densely populated inner city (refer Figure 1). With an estimated 1.34 million (M) people in 2006⁴⁰, SSWAHS is the most populous area health service within NSW and represents approximately 20% of the total population of NSW. This population is projected to increase to 1.5M in 2016, and 1.57M by 2021, mainly as a result of the planned release of land in the South West Growth Centre (refer Figure 1) and urban consolidation in the Inner West.

Over the next 20 years an additional 300,000 people will be settling in the South West Growth Centre. This new development, together with medium density urban consolidation in the inner and middle rings of Sydney, will place further demands on services in the Area, and present additional complexities and challenges.

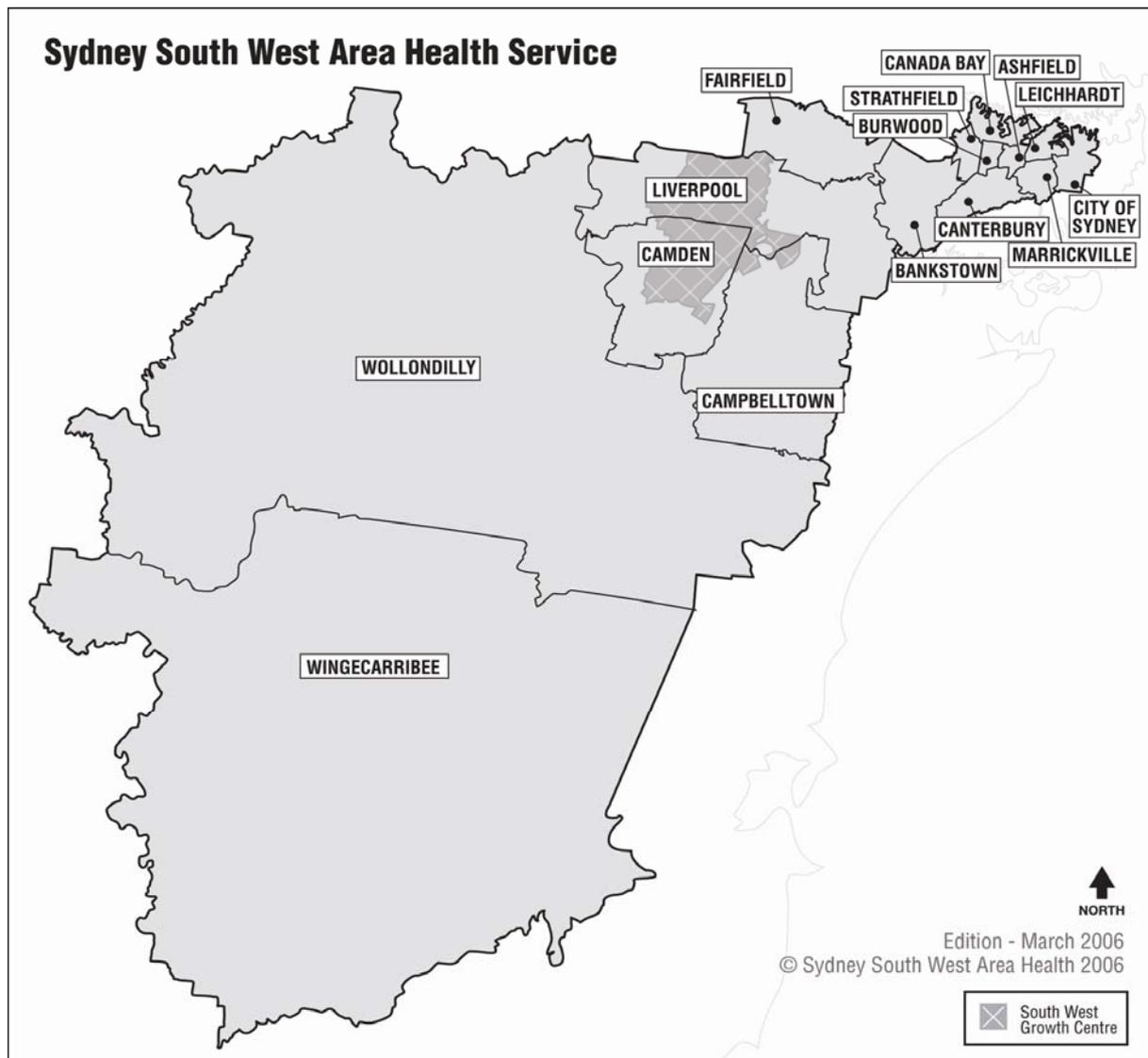


Figure 1: Map of SSWAHS including hatched areas of South West Growth Centre.

SSWAHS Children and Young people

In 2006, there was an estimated 260,000 children aged 0 - 14 years in SSWAHS, equating to approximately 19% of the Area's population⁴¹. The majority of these children live in the south west of the Area Health Service with the highest proportion of younger people (0 - 14 years) living in the Fairfield, Liverpool, Campbelltown, and Canterbury LGAs. Current projections estimate a slight increase in the number of children aged 0 - 14 years in SSWAHS, from approximately 260,000 to 266,000 by 2016⁴².

Socioeconomic Disadvantage

SSWAHS has some of the poorest communities in the state, characterised by a large number of recent migrants, significantly higher levels of unemployment and a high proportion of families dependent on welfare. According to the Socio-Economic Indexes for Areas (SEIFA 2001), a relative measure of socioeconomic disadvantage, SSWAHS includes 9 of the 10 most disadvantaged metropolitan Sydney postcodes including Claymore, Waterloo, Cabramatta, Villawood, Bonnyrigg, Fairfield, Macquarie Fields, Lakemba/Wiley Park and Miller. There are also several LGAs within SSWAHS that on the basis of the SEIFA index have a socioeconomic disadvantage greater than the state median. In order of ranking these are Fairfield, Canterbury, Campbelltown, Liverpool, Bankstown and Marrickville. The Fairfield LGA has the second highest level of disadvantage of all NSW LGAs⁴³.

In a literature review, Burns⁴⁴ examined the links between poverty, food insecurity and obesity and concluded that "national and international data indicates that those with the poorest social, economic and educational resources are at the greatest risk of obesity". Food insecurity, defined as "the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways⁴⁵" was observed in a study of three socially disadvantaged locations in south west Sydney⁴⁶. Described as the three lowest ranked (SEIFA 2001) postcodes from the three most disadvantaged south western Sydney LGAs, the survey revealed food insecurity in 21.9% of households and more than double the rate in households with children less than 18 years of age.

Culturally and Linguistically Diverse (CALD) Communities

SSWAHS covers one of the most ethnically diverse communities in Australia, with a significant number of people speaking a language other than English at home. This is most notable in the Fairfield and Canterbury LGAs, where 67% and 63% of the population respectively speak a language other than English at home⁴⁷. A high proportion of new migrants to Australia, including refugees, choose to settle in the south west of Sydney.

Although SSWAHS has historically been an area of settlement for many people from southern Europe and Asia, recent arrivals have increasingly been from Africa, in particular Sudan, Sierra Leone, Ethiopia, Ghana, Somalia, Nigeria and Eritrea. Other emerging communities include Afghani and Bangladeshi groups.

Aboriginal and Torres Strait Islander Peoples

In SSWAHS, approximately 14,000 people identify as Aboriginal or Torres Strait Islander. This represents 1.09% of the population in SSWAHS and 10% of the Indigenous population in NSW⁴⁸. Of the LGAs within SSWAHS, approximately 43% of the Indigenous population reside in the Campbelltown and Liverpool LGAs.

6. OVERWEIGHT AND OBESITY IN SSWAHS

Children and Adolescents

As previously stated, local information about the prevalence of overweight and obesity in SSWAHS children and adolescents is very limited. The only local data are contained in a convenience sample survey of preschool children aged 2 - 4 years from low socioeconomic areas in the inner west of SSWAHS which occurred in 1998. The study found that 15.3% of boys and 26.3% of girls in this age group were considered overweight. A further 8.7% of boys and 8% of girls were considered obese⁴⁹.

Across NSW the prevalence of childhood overweight and obesity is estimated to be 25% of children aged 5 -16 years⁵⁰. Of concern is that children and young people are becoming overweight or obese at an increasing rate⁵¹.

In 2004, the *NSW Schools Physical Activity and Nutrition Survey (SPANS)*⁵², which surveyed almost 5,500 children in NSW schools, showed that 26% of boys and 24% of girls aged approximately 5 - 16 years were overweight or obese compared with 11% of all young people aged 7 - 16 years in 1985. The 2004 survey also revealed that approximately 8% of boys and 6% of girls in the same age group were obese. Children from lower socioeconomic areas and Middle Eastern backgrounds were also more likely to be overweight or obese.

Factors that contribute to overweight and obesity identified in the 2004 SPANS included:

- While 65 - 70% of students ate the recommended amount of fruit per day, only 15 - 25% ate the recommended amount of vegetables;
- About half of all students drank more than 250ml of soft drink per day;
- The students surveyed were more active than their counterparts in 1985 and 1997, with the prevalence of physical activity participation increasing by between 15% and 25% from 1985 to 2004 among secondary school students. Nevertheless, three quarters of secondary school boys and two-thirds of secondary school girls spent more than 2 hours per day engaged in small screen recreation. The recommended period for engaging in small screen recreation is a maximum of 2 hours per day; and
- The prevalence of students walking and cycling to school had decreased markedly since 1985.

Adults

In SSWAHS the prevalence of overweight and obesity in people 16 years and over in 2006 was 50.4% and the prevalence of obesity was 19%⁵³.

The *NSW Health Population Health Survey, 2006*⁵⁴ provides additional lifestyle related information:

- Just over 50% of SSWAHS people aged 16 years and over participated in adequate physical activity. The prevalence of participation in adequate physical activity, 2001 - 2006, by SSWAHS persons aged 16 years and over was 52.4%, which was below the NSW prevalence of 54.9%. However local participation rates have increased from 1998 (47.9%);
- The prevalence of persons aged 16 years and over in SSWAHS, 2001 - 2006, who consumed an adequate amount of vegetables was 7.4%. The NSW prevalence was 9.4%; and
- The prevalence of SSWAHS persons aged 16 years and over (2001 - 2006) who consumed the recommended amount of fruit was below the NSW prevalence, 52.1% and 53.4% respectively.

Detailed information regarding levels of overweight and obesity according to divisions of general practices within SSWAHS is provided in Appendix C.

Aboriginal and Torres Strait Islander Peoples

According to the *New South Wales Population Health Survey 2002-2005. Report on Adult Aboriginal Health*⁵⁵, the prevalence of overweight and obesity in SSWAHS Aboriginal adults (aged 16 years and over) was 53% in 2002 - 2005. While this was below the NSW average of 55.3% (Aboriginal adults), the prevalence of overweight and obesity in SSWAHS Aboriginal women in the same period was 59.2%, which was above the NSW average of 53.3% (Aboriginal female adults). The prevalence of overweight and obesity in SSWAHS Aboriginal males was 48.0% (2002-2005), which was below the NSW average of 57.2% for Aboriginal males aged 16 years and over.

Of concern however is that the same survey found that just over 10% of SSWAHS Aboriginal adults, in the period 2002-2005, met the recommended consumption of vegetables, 5 serves per day, and 42% met the recommended fruit consumption of 2 serves per day. The NSW average for Aboriginal adults for the same period was 10.2% and 37.2% respectively.

In terms of adequate physical activity, 57.6% of SSWAHS Aboriginal adults met the indicator for adequate physical activity. This was above the NSW average of 51.6%. However only 37.1% of SSWAHS Aboriginal females met this indicator. The NSW average for Aboriginal women was 45.6%. For SSWAHS Aboriginal males, 76.8% reported adequate physical activity during the same survey which was above the NSW average for Aboriginal males of 58%.

There is no specific information on the prevalence of obesity and overweight in Aboriginal children and adolescents in SSWAHS. However in the area of infant and child health, a NSW study found that Indigenous preschoolers were at higher risk of being overweight.⁵⁶

Culturally and Linguistically Diverse Communities

There is no SSWAHS specific information about people from CALD communities and rates of overweight and obesity. However a national study on preschoolers found that preschoolers speaking a language other than English at home (particularly boys) were at higher risk of being overweight⁵⁷, while the 2004 SPAN survey found that children from a Middle Eastern background had higher levels of overweight.

People with Disabilities

There is a lack of local data about people with disabilities and levels of overweight and obesity. However some people with a disability are prone to overweight or obesity and find it difficult to maintain a healthy weight compared to other people in the population. Factors that may contribute to overweight and obesity in people with disabilities include: a medical condition that affects metabolism; medications that may increase appetite; reduced mobility and a lack of regular exercise; and poor knowledge of nutrition⁵⁸. An example is Prader-Willi syndrome, a genetic disorder which affects growth and sexual development, and is characterised by the onset of obesity early in childhood⁵⁹. Overseas studies of adults with intellectual disabilities have shown high levels of obesity amongst this group⁶⁰.

People with Mental Illness

People with a serious mental illness are also more likely to suffer from obesity compared to the general population⁶¹. Weight gain in the mental health population occurs for a variety of reasons. The illness itself may lead to disturbances in metabolism. Psychiatric illness is often associated with changes in daily appetite and habit⁶². Patients with severe mental illness are also less physically active compared to the general population⁶³. Weight gain is also associated with the use of psychotropic medications which are prescribed in the treatment of some psychiatric illnesses⁶⁴. The precise contribution of medications and lifestyle factors, such as poor diet and lack of exercise, to the development of obesity in patients with a mental illness is unknown⁶⁵.

Obesity combined with a mental health illness can have serious consequences for a patient. Metabolic Syndrome (comprised variably of obesity, high blood pressure, high blood sugars, and high blood fats like cholesterol) increases the risk of developing cardiovascular disease⁶⁶. Rates of Metabolic Syndrome are elevated in many patients with mental illness. While mortality among people with a mental illness is high, and rates are significantly elevated for most major causes, rates of

cardiovascular disease are particularly high⁶⁷, and patients may lose between 10 and 25 years of their expected lifespan.

Compounding the situation is that fact that there are many barriers to the recognition and management of morbidity, such as obesity, in people with mental illness⁶⁸. These barriers include the attitudes of medical practitioners, the structure of healthcare delivery services⁶⁹ and factors related to the mental illness for example patients not being good advocates for their own medical health⁷⁰, poor general treatment adherence and unawareness of physical problems due to cognitive deficits associated with the mental illness⁷¹.

While rates of overweight and obesity in the local mental health client population are not available, a study of the prevalence of Metabolic Syndrome among people with psychosis living in the community in Victoria found that more than 50% of people in the study were obese and 35% were overweight. Women were more likely than men to be obese (78.3% vs. 40.9%), while men were more likely to be overweight (45.5% vs. 4.3%). The mean BMI of the sample group was just over 30. In addition, the majority (80.9%) of patients ate foods high in fat on a regular basis and only one fifth (19.8%) engaged in vigorous exercise⁷².

The SSWAHS Maternal Population

SSWAHS has the highest female population in the child bearing age group (15 – 44 years) of any area health service in NSW, estimated to be 308,000 in 2006⁷³. In 2005, SSWAHS residents gave birth to 20,016 babies, representing over 22% of all confinements in NSW. The predominant age group that gave birth was 30 - 34 years old⁷⁴. It has been noted that the average age of mothers is increasing each year⁷⁵.

In SSWAHS, in the 2001 – 2006 period, it has been estimated that the prevalence of overweight and obesity in the 16 to 44 year old female age group ranged from 20.4% (16 – 24 years old) to 34.1% (35 - 44 years old), and the prevalence of obesity ranged from 0.7% to 15.7% respectively for the same age cohorts ⁷⁶. Both overweight and obesity prevalence rates increased with increasing age .

Obesity has been associated with difficulties conceiving and complications for mother and baby during pregnancy⁷⁷. For the mother, complications associated with obesity in pregnancy include gestational diabetes and thromboembolic problems⁷⁸ as well as delivery complications such as increased rates of caesarean section⁷⁹. Babies of overweight and obese women are at increased risk of requiring admission to a neonatal intensive care unit and having congenital abnormalities such as cardiac and neural tube defects⁸⁰. Maternal obesity also increases the risk of a large for gestational age baby who is in turn at risk of childhood obesity⁸¹.

7. CURRENT SERVICES AND HEALTH PROMOTION PROGRAMS IN SSWAHS

SSWAHS operates a range of services that focus on overweight and obesity. These include prevention programs, services for people who are overweight and obese including specialised overweight and obesity services, lifestyle programs and services with nutrition and exercise components for adults, and programs that incorporate overweight and obesity prevention activities for children and adolescents. These services are summarised below.

Health Promotion Service

SSWAHS Health Promotion Service conducts a number of health promotion activities around prevention of overweight and obesity, particularly in children. These include a home visiting intervention research program with first time mothers, a food security project in three low-income areas that aims to increase the capacity of local communities to access healthy eating and affordable food through community development, and work with health and childcare services, primary schools and local government to promote breastfeeding, healthy eating, reduced small screen recreation and increased physical activity. A detailed list of health promotion projects is provided in Appendix D.

Specialist Assessment and Treatment Services

Specialised services for patients with higher grades of obesity are limited within SSWAHS. The Royal Prince Alfred Hospital (RPAH) Metabolism and Obesity Service (MOS) provides a comprehensive, broad based multidisciplinary weight management, nutrition and metabolic service and acts as a reference centre for these disorders in NSW. The service covers children, adolescents and adults. Adult clients referred to the service require a BMI greater than or equal to 35kg/m² or need to be suffering from co-morbidities secondary to their obesity. Clinical input into the service includes medical, dietetics, nursing, physiotherapy, and social work.

MOS also runs the only adult and adolescent Prader-Willi Service in NSW. Prader-Willi is a rare genetic disorder, which affects development and growth. A feature of this disorder is a voracious and insatiable appetite, which often results in obesity⁸².

In 2005/2006, there were 431 new referrals to MOS, approximately 3,500 individual occasions of service were provided and 549 group activities were conducted. There are 4,000 clients on the database, including 2,000 residents of other area health services. At present the service is at capacity.

The Metabolic Rehabilitation Clinic at Concord Repatriation General Hospital provides a service to patients with a BMI of 30-45 who also have impaired glucose tolerance or Type 2 diabetes. Clinical input to this clinic includes medical, dietetics, psychology, nursing and physiotherapy. Similar to MOS, this service is also at capacity at present.

At Campbelltown Hospital, a paediatric weight management clinic is held every second week. This clinic is not a multidisciplinary service, and is run by a staff specialist. The waiting list for this clinic is 2 - 3 months. Very obese patients are referred to the RPAH MOS. However many patients are reluctant to travel to Camperdown. Very obese children are also able to access the Paediatric Obesity Clinic at The Children's Hospital at Westmead.

At Liverpool Hospital, dietitians conduct one session per week for overweight and obese children. There are also a limited number of services provided by dietitians in other facilities including Community Health Early Nutrition Clinics.

Although SSWAHS provides limited non-surgical treatment for severely obese patients, a comprehensive bariatric surgical service is not available. In 2005/2006, 260 residents of SSWAHS had a major procedure for obesity (Diagnostic Related Group K04Z) performed outside SSWAHS. 257 of these were performed in the private sector and 3 in two NSW public hospitals⁸³.

Other SSWAHS Clinical Services

In addition to the specialist services described above, many SSWAHS child and adolescent services incorporate overweight and obesity prevention activities including advice on bottle feeding and eating, physical activity, health promotion, and healthy lifestyle groups (e.g. adolescent mental health) into their programs.

While specialist overweight and obese services for adults are limited in SSWAHS, a questionnaire completed by SSWAHS clinical services indicated that many overweight and obese adults attend lifestyle programs and services such as hydrotherapy, cardiac rehabilitation, cardiovascular disease services, diabetes management services, pulmonary rehabilitation, and exercise groups conducted by SSWAHS. The reported activity of these services in 2005/06 varied from between 50 to 12,000 individual occasions of service (OOS), and for group sessions from 20 to 1,887 OOS. The majority of these services had access to scales, and varying levels of access to stadiometers and BMI charts. Most of these services required a doctor's referral and generally included specific admission criteria. An issue for services which may be used by obese patients is the lack of larger scales to weigh heavier patients.

Identification is an important component of access to services. SSWAHS clinical services who responded to a questionnaire provided advice about their current practices regarding identification of overweight and obesity. Of the 48 responses from SSWAHS child and adolescent services, 64% indicated that staff measure weight; 47% measure height; 17% calculate BMI; 2% measure waist circumference; 45% of staff use weight charts; 38% use height charts; 19% use BMI charts; and 2% use waist circumference charts. Respondents also indicated that in SSWAHS a variety of charts for each measure are used.

There was also variability in access to equipment to measure height, weight and BMI: 85% indicated that they had access to scales; 26% had access to stadiometers; 74% had access to height and weight percentile charts; and 28% had access to BMI percentile charts. The survey indicated that clinicians within the SSWAHS refer overweight and obese children and adolescents to both MOS and The Children's Hospital at Westmead.

Primary Care and Private Sector Overweight and Obesity Services

General practitioners are responsible for assessment and management of children, adolescents and adults with overweight and obesity problems. The type of services available and adherence to NHMRC guidelines is dependent on the interest of individual general practitioners. For example, an unpublished survey of general practitioners in SSWAHS indicated that less than a third of general practitioners used the clinical guidelines for the diagnosis and management of overweight and obese children. While management was usually appropriate, there was much variability in screening for complications. For example, while most general practitioners screened for Type 2 diabetes and psychosocial problems, screening for other problems such as fatty liver was less common.

Service availability is also dependent on the business focus of local divisions of general practice. For example, the Macarthur Division of General Practice conducts its own weight management programs for adolescents and families in addition to a program based in local Macarthur high schools. It has also developed an assessment and management protocol. Other divisions of general practice have focused on prevention strategies.

Both the Tharawal Aboriginal Medical Service (located in Airds) and the Aboriginal Medical Service Co-operative Ltd Redfern have, and are developing, a range of strategies focused on exercise and diet. These build on Aboriginal health chronic disease initiatives, and the interest and expertise of clinicians.

Private allied health professionals, such as dietitians, exercise physiologists, and psychologists, can provide specific help and advice to support people with overweight and obesity problems. Access to these services is variable, with a higher number of health professionals located in the eastern part of SSWAHS. Pharmacists are also promoting a range of non-prescription weight loss products.

There are several private sector facilities within SSWAHS LGAs that offer bariatric surgery and/or non-surgical services for overweight and obese people. These are located in Campbelltown, Strathfield, Ashfield, the Southern Highlands, and Liverpool. Weight management and exercise programs and facilities, such as *Weight Watchers* and gymnasiums, are also available throughout the Area.

8. CONSULTATION

In addition to consideration of available evidence, and the questionnaires completed by clinical services, the development of this Plan drew on the experience of a range of clinicians, consumers, service providers and organisations. Consultation has been extensive and has included Aboriginal Medical Services, local divisions of general practice, SSWAHS staff, CALD workers including those from local non-government agencies, government departments such as the Department of Education and Training and the community. The results of these consultations, which occurred in 2007 and 2008, are presented below.

Aboriginal Medical Services and SSWAHS Aboriginal Health Staff

Consultation with the Aboriginal community focused on determining the degree to which the model of care would address the needs of the local Aboriginal and Torres Strait Islander communities. Meetings were held with staff from the Tharawal Aboriginal Medical Service, the Aboriginal Medical Service Co-operative Limited, Redfern, and the SSWAHS Aboriginal Health Services.

The consultation indicated that both Aboriginal Medical Services have developed and are developing a range of strategies which focus on physical activity and healthy eating. They were interested in prevention of overweight and obesity and suggested strategies including working with fast food outlets and schools. They were also concerned with the high sugar intake of children within their communities. As noted previously, both organisations are focused on a clinical response to overweight and obesity.

SSWAHS staff identified cost of accessing general community services, for example gymnasiums and local swimming pools, as an issue. They also suggested that greater emphasis needs to be placed on longer term projects to achieve ongoing improved outcomes.

A variety of strategies involving potential partnerships between the Aboriginal Medical Services and SSWAHS were discussed at the consultations and these have been incorporated into the Action Plan. These strategies build on activities and services already in place within each organisation.

Local Divisions of General Practice

General practitioners, identified as key clinicians in the management of children, adolescents and adults who are overweight and obese, are critical to the development of overweight and obesity prevention and management strategies. Questionnaires and focus groups conducted with local divisions of general practice and general practitioners provided advice regarding education and resources available to general practitioners, as well as the practicality of the proposed model of prevention and care and potential partnerships around overweight and obesity prevention and management.

The consultation indicated general practitioner support for population based prevention approaches and locally available services, concern about the lack of availability of public and private allied health services such as dietitians and psychologists, the need for lower priced access to facilities such as gymnasiums and weight loss programs, and reluctance of patients (and parents of children) with overweight and obesity problems to acknowledge the problem. There was also a varying level of skill and resources available to general practitioners to treat and manage overweight and obesity in children, adolescents and adults.

Strategies proposed included: provision of general practitioners with continuous professional development (CPD) educational opportunities; working with practice nurses; the importance of access to translated resources for CALD communities; the potential to involve pharmacists; with some communities the need to work with key organisations such as churches; the development of an internet site for SSWAHS residents with 'blogging' capabilities; the development of partnerships with private services; and support in developing resources.

Culturally and Linguistically Diverse Communities

During the initial phases of planning, several communities were identified as being at greater risk of overweight and obesity. In July 2007, a forum was held to consult with SSWAHS staff and staff from non-government organisations (NGOs) who work predominantly with Pacific, Middle Eastern, Chinese and Vietnamese communities.

The consultation indicated common themes across these communities. These themes related to parenting and cultural practices and included: the importance of food within each culture and its use for social purposes; the contradictory behaviour of parents, for example, the tendency for parents to continue to feed their children despite recognising their children do not require more food; the difficulty for some parents to say “no”; parental justification for the purchase of fast food with qualifiers such as it allows their children to “fit in” with their peers and “it is quick, easily accessible, and cheap”; and exercise per se is not necessarily a part of each culture, it is perceived as expensive, and often there is a parental priority on children studying rather than exercising.

Although there was support for intervention within each community, the type of approaches proposed varied. Suggested strategies included: the development of relevant group activities for parents and children including the provision of healthy cooking and dance classes; the provision of simple resources and education classes promoted via a number of media settings such as newspapers and ethnic newspapers; programs which included community and/or family development for example community market gardens and sporting events; working with general practitioners, ethnic media, community leaders and families; and distribution of resources via health facilities and community organisations.

The importance of using culturally appropriate staff to link with these community groups was emphasised.

Community Consultation

Over 300 people attending local shopping centres were surveyed by SSWAHS staff about their opinions about obesity and the role that the Health Department should take in managing this problem. Approximately 90% of people surveyed reported that it was important or very important for the Health Department to act to prevent childhood obesity and education of parents was the most commonly identified strategy (43%) to deal with the overweight and obesity problem. Other strategies suggested included working with schools and childcare centres (35%), encouraging healthy school canteens (31%), restricting food advertising targeting children (30%) and restricting or regulating fast food outlets (23%). When asked to identify additional strategies that would support healthy eating and physical activity choices, people surveyed suggested improving access to affordable fresh food (41%) and affordable organised sport (24%); and education and skills development (19%).

SSWAHS Clinical Services

Questionnaires were distributed in 2007 to SSWAHS early childhood, child, adolescent and adult services and posted on the intranet inviting comment about the overweight and obesity problem in SSWAHS. The questionnaires focused on current practice, staff capacity to identify and manage overweight and obesity, awareness of resources available, training and other related needs. The responses revealed a general concern among staff about overweight and obese patients and residents in SSWAHS. They also indicated that while services and staff were willing to participate in the prevention, identification, and to a lesser degree management and or treatment of overweight and obesity of residents and patients of SSWAHS, there was no capacity at present to increase their current workloads without training and additional resources.

SSWAHS Staff and External Agencies

Late 2007 and early 2008, draft versions of the Plan were circulated widely within SSWAHS and to external organisations such as the NSW Ministry of Transport and local councils for comments. Comments received were generally supportive. Suggestions made were considered and where appropriate the draft of the Plan was amended.

9. MODEL OF PREVENTION AND CARE

To address overweight and obesity in SSWAHS, a model of prevention and care for overweight and obesity has been developed. It has four components:

1. Child overweight and obesity prevention (0 -12 years);
2. Child and adolescent overweight and obesity treatment and management;
3. Adult overweight and obesity treatment and management; and
4. Adult/adolescent overweight and obesity prevention.

The strategies in this Plan cover all residents of SSWAHS. However Aboriginal and Torres Strait Islander peoples, people from Pacific Communities and Middle Eastern countries, require specific strategies as they have been identified as being at greater risk of overweight and obesity. While people from the Middle Eastern region are referred to in this Plan as a priority population, other Arabic speaking groups, for example Egyptians, are included in this group. People with disabilities, people with mental illness, and those with higher levels of socioeconomic disadvantage have also been identified as requiring specific attention.

While the model of prevention and care involves the development of tertiary services at specific sites, the Plan also includes the development of local resources. Examples include training interested health professionals in the identification and management of overweight and obesity, and the availability of appropriate furniture in SSWAHS facilities to care for severely obese patients. Key health professionals will include dietitians, general practitioners, community nutritionists, health promotion staff and endocrinologists however the model will also engage health professionals not traditionally involved in assessment of overweight and obesity.

A key feature of the model will be the development of networks between existing and proposed overweight and obesity services to ensure a single service is provided across SSWAHS. Close management links will be fostered and maintained between inner west and south west child, adolescent and adult services. This will facilitate equity of access to services, efficiency, and sharing of expertise across the Area. Given the complexity of the overweight and obesity problem, cooperation and involvement of all clinical streams will also be essential.

Recognising the scale of overweight and obesity, and the skills and expertise available in the commercial sector and private service sector, the model also involves the development of partnerships with providers from these sectors. For the duration of this Plan, it will also involve monitoring the environment for opportunities including new funding initiatives that may allow SSWAHS to create partnerships with these providers and other providers, and/or develop services to support overweight and obesity prevention, treatment and management programs and services.

Figure 2 illustrates the model of prevention and care and incorporates the priority areas and priority groups. The model acknowledges the influence of culture and environment, diverse communities, and health professional and media influence on the overweight and obesity problem.

The following sections describe each component of the model in detail.

9.1 *Prevention - Childhood Overweight and Obesity in SSWAHS (0 - 12 years)*

Health Promotion Context

The overweight and obesity prevention strategies detailed in this Plan are informed by the principles of effective health promotion practice. This approach recognises that a number of individual, social and environmental factors interact to influence whether a child is overweight or obese. Prevention strategies are population-based, and involve working in partnership within an Ottawa Charter framework, the core elements of health promotion:

- Build healthy public policy;

- Create supportive environments;
- Strengthen community action;
- Develop personal skills; and
- Reorient health services.

**SYDNEY SOUTH WEST AREA HEALTH SERVICE
OVERWEIGHT AND OBESITY PREVENTION AND CARE MODEL**

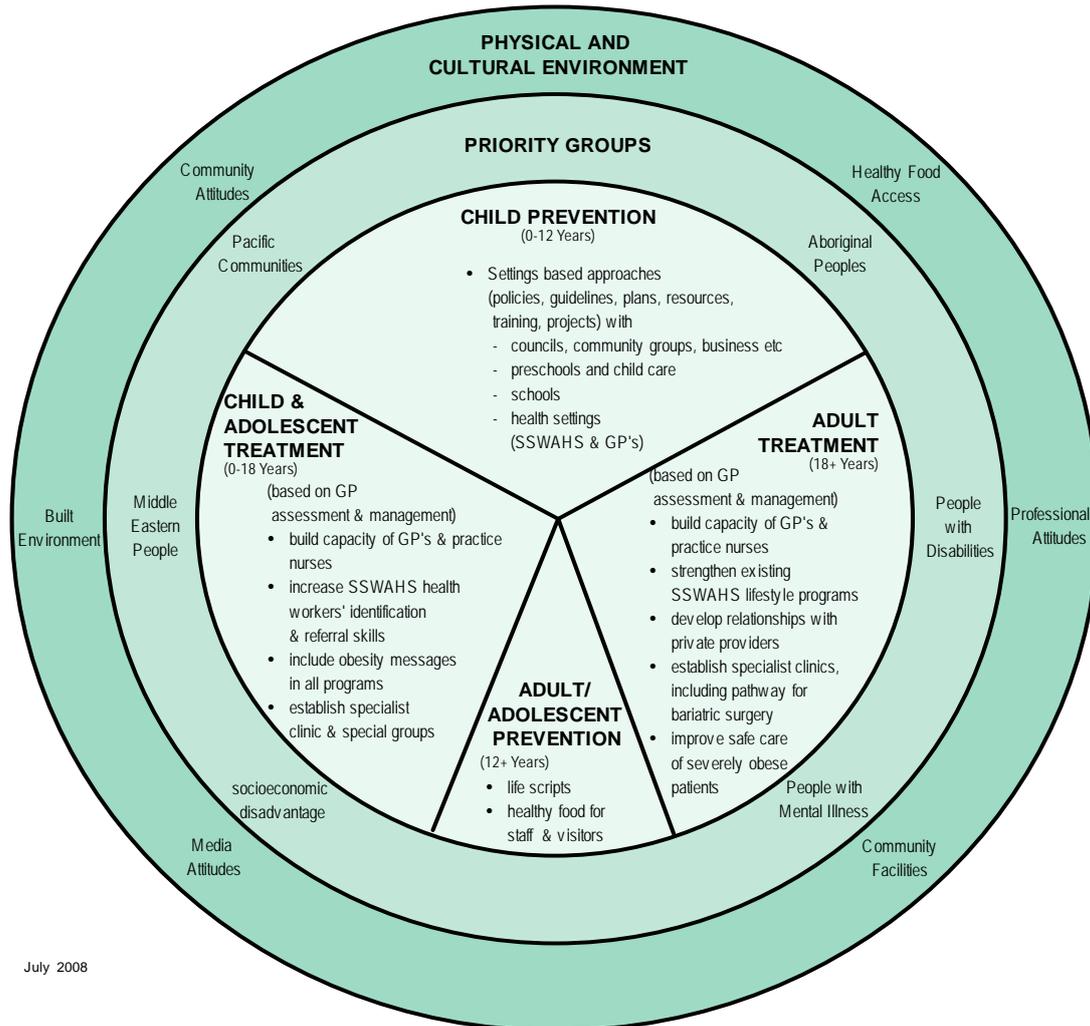


Figure 2: SSWAHS overweight and obesity prevention and care model

Table 1 below outlines the factors that might promote or prevent overweight and obesity and the level of evidence that supports their role. These physical activity and nutrition behaviours are potential points of intervention for a prevention approach. Effective interventions need to be long lasting, multi-faceted and sustainable, ideally targeting the whole environment⁸⁴.

Table 1: Summary of the strengths of evidence on factors that might promote or protect against weight gain and obesity

Evidence	Decreases risk	Increases risk
Convincing	Regular physical activity High dietary fibre intake	High intake of energy dense foods* Sedentary lifestyles
Probable	Home and school environment that supports healthy food choices for children	Heavy marketing of energy-dense foods and fast food outlets Sugar sweetened soft drinks and juices Adverse social and economic conditions in developed countries
Possible	Low glycaemic index foods Breastfeeding	Large portion sizes High proportion of food prepared outside the home Rigid restraint/periodic disinhibition of eating patterns
Insufficient	Increased eating frequency	Alcohol

*Energy dense foods are high in fat/sugar and energy

Source: Adapted from World Health Organisation (WHO) 2003⁸⁵

The prevention strategies selected aim to foster an environment that supports appropriate and sustained changes to eating and physical activity patterns in children. There is potential overlap with the children's treatment strategies outlined, as they aim to promote the same behaviours underpinned by a prevention approach, that is:

- Reduce the consumption of sugary drinks and increase the consumption of water;
- Reduce the consumption of energy dense/nutrient poor food and increase consumption of vegetables and fruit;
- Increase the amount of time spent in planned moderate-vigorous and incidental physical activity; and
- Reduce the time spent in sedentary behaviour, especially small screen recreation.

The target population for prevention is children aged 0 - 12 years, their parents and carers. Survey data suggest that children from some population groups may be at higher risk of overweight and obesity and its consequences than others. Therefore, priority populations identified are: communities with higher levels of socioeconomic disadvantage; Aboriginal and Torres Strait Islander communities; Pacific Communities; Middle Eastern communities; and children from Southern European backgrounds.

As noted earlier, this initial 5 year plan is part of a long-term approach to overweight and obesity prevention. There will be opportunities to build on this initial body of work in subsequent plans.

Framework for Action

A recent review of place-based interventions in disadvantaged locations highlights factors associated with positive improvements in health and the social determinants of health⁸⁶. These include:

- Integrated and holistic approaches;
- Interventions that are fully implemented with no premature discontinuation;
- Community engagement, participation, and ownership;
- A focus on long term and sustainable benefits; and
- A good understanding of the community (the type and causes of disadvantage, the needs, the resources available).

A settings-based approach provides an integrated way of reaching the target population and influencing both behavioural and social/environmental factors that relate to overweight and obesity⁸⁷, as outlined in the objectives of the Plan. The key settings identified to reach the target population are:

- **Community, Organisations and Environments**

Communities include a focus on families, where many decisions are made about food and physical activity behaviours that underpin the development of obesity. Evidence suggests that food and activity attitudes, beliefs and behaviours of parents are among the strongest influences on those same behaviours in children⁸⁸, so engagement with parents is an essential element.

Local communities also comprise commercial operators, government agencies, local councils and NGOs, as well as the physical infrastructure and services available within that locality. There are also relevant volunteer based groups such as a community sport system in NSW with over 460,000 volunteers involved in the delivery of physical activity opportunities for young people. The built environment provides both opportunities and barriers to physical activity, while access to a wide variety of cheap, energy dense/nutrient poor foods that are marketed powerfully has influenced the energy intake of the population.

Environmental improvements require collaboration with other sectors, such as transport, urban planning, and food suppliers. The range of strategies selected in the Plan reflects the role of Health in capacity building, communication and advocacy for healthy environments.

- **Health Services**

Health services include primary health care plus services that are part of SSWAHS, such as clinical, population and community health services. There is little evidence of the effectiveness of population-based obesity prevention in health services, especially with children. However there is significant potential to involve primary health care services in family-focused prevention programs. The reach of GPs and early childhood health services provides an opportunity to trial and evaluate a home visiting program, as well as brief intervention approaches, over the next five years. There is also a focus on increasing the capacity of health professionals to undertake primary prevention work.

- **Childcare and Out of School Hours Care Services**

Childcare facilities for young children include long day-care, occasional care, pre-school and family day care. Primary school aged children may attend before and after school care, known as 'Out of School Hours Care' (OOSHC).

Early childhood care provides one of the most effective ways to reach children aged three to five years. There has been substantial activity to improve nutrition in childcare services, though there is limited published research on the effectiveness of physical activity interventions or measurement of weight-related outcomes. However, recently evaluated work in pre-schools in NSW has shown promise, and the Statewide focus to work with the sector over the next four years is reflected in this Plan. Little work has previously been done with the Family Day Care sector, but it presents an opportunity to trial a project that reaches priority populations.

Less evidence is available for the OOSHC sector, but it is viewed as a setting with considerable promise, especially the promotion of physical activity in the 'critical window' between 3 - 6pm. Most previous work in NSW has focused on nutrition, though the inclusion of physical activity has been strengthened with the Federal Government's *Active After School Communities* project funding.

- **Primary Schools**

Primary schools include the Government, Catholic and Independent sectors. Working collaboratively with schools is an opportunity to promote appropriate dietary practices through curricula and food services, and to increase the amount of physical activity in both free play and organised physical education. The most successful interventions incorporate a whole-of-school approach, consistent with the health promoting schools framework: that is curriculum, environmental and policy based strategies that involve the broader school community, including parents/carers.

The strategies in this Plan build on the existing policy work, such as the *NSW Healthy School Canteen Strategy*. All Government primary schools in SSWAHS will be encouraged to engage in the *Live Life Well @ School* project, a comprehensive program of activity to be implemented Statewide from 2008.

Evaluation and Research

Project-based evaluation and action research, including process and outcome measures, will be used to assess whether the prevention objectives of the Plan have been met. Monitoring of weight status and population physical activity and nutrition behaviours will be possible with future NSW child health surveys.

The research priorities for prevention are multi-factorial intervention studies across different settings and population groups, for example the *Healthy Beginnings* home-visiting intervention in the south west of Sydney, piloting brief intervention in the general practice setting, and a community based initiative focusing on reduced consumption of sugary drinks.

9.2 Treatment and Management of Overweight and Obese Children and Adolescents

In considering current literature regarding overweight and obesity in children, SSWAHS is cognisant of the paucity of evidence for treatment/management strategies for children and adolescents⁸⁹.

However the strategies outlined below are considered to be those which have the most potential for favourable outcomes.

The target group for assessment and management are children and adolescents with overweight and obesity problems less than 18 years of age. Due to childhood developmental and educational stages, three age groups are identified: less than 5 years old; primary school age; and secondary school age. Dependent on the age group, management strategies will differ. For children under the age of 5 years, management strategies will focus on parents and activity; for primary school children, strategies will focus on parenting groups; while adolescent focussed interventions, including groups and medical assessment of co-morbidities, with continuing parental engagement, has been deemed appropriate for secondary school children.

Although there are many definitions of overweight and obesity, as per the recommendations made in the NHMRC *Clinical Practice Guidelines for the Management of Overweight and Obesity in Children and Adolescents 2003*⁹⁰, age-related BMI has been adopted for use. The NHMRC define overweight as a BMI above the 85th percentile and a BMI above the 95th percentile as indicative of obesity.

The approaches will operate at three levels:

- A population based approach which ensures that information about diet, exercise and sedentary behaviour is incorporated into all programs;
- Targeted programs and approaches for children and adolescents with modest degrees of overweight; and
- Specialised services for very obese children and adolescents, which include repetitive and accessible intervention.

The model assumes that a broad range of strategies and actions will be required to make individual and population changes and that no single strategy alone will be effective. Further it assumes that some strategies will need to be specifically developed and targeted to disadvantaged and at-risk communities to reduce long term problems and ensure equity of access to diagnosis and treatment. Given parental obesity is a strong risk factor for future, if not present obesity⁹¹, many strategies will also be targeted towards families.

Referral Pathway and Model of Care

The model (illustrated in Figure 3) for the treatment and management of overweight and obesity in children and adolescents, proposes several levels of care:

- **Prevention in a Clinical Setting**

Information about weight, diet, exercise, sedentary behaviours, and behavioural management will be incorporated into all generic parenting and related programs. This will raise parents' awareness about the issue and ensure that they are aware of age appropriate strategies to prevent overweight and obesity in babies, toddlers, children and adolescents.

- **Identification**

All health professionals working with children and adolescents will have a role in identifying and referring children and adolescents who are overweight or obese. Staff will assess children and adolescents in all clinical settings for weight, height and waist circumference, and calculate BMI. If an overweight or obesity problem is identified, health professionals will be responsible for advising parents to contact their general practitioner for diagnosis and ongoing management.

Health professionals will use the NHMRC *Clinical Practice Guidelines for the Management of Overweight and Obesity in Children and Adolescents 2003* to determine the management needs of each child. Clinical guidelines and tools will be available to support staff in the identification and referral of children and adolescents.

- **General Practitioner Assessment and Management**

General practitioners should be responsible for identifying overweight and obesity, developing the management plan and monitoring its implementation. They should also be responsible for referring children and adolescents and their families/carers to appropriate support health professionals and services such as paediatricians, dietetics, psychology, and parenting groups.

General practitioners and paediatricians will be encouraged to use the NHMRC *Clinical Practice Guidelines for the Management of Overweight and Obesity in Children and Adolescents 2003* in assessing and developing management plans for children and adolescents and will be supported by the provision of education and resources by SSWAHS. Support will also be provided by SSWAHS to practice nurses and Aboriginal Medical Services.

- **Individual and Group Programs**

Children and adolescents will be able to access a range of support services provided by SSWAHS and/or private providers, including general practitioners and paediatricians. This includes:

- Individual medical, allied health and nursing assessment and intervention/treatment;
- Groups for overweight and obese children which operate continuously throughout the school term. These groups might include: behavioural, exercise and dietary strategies; incorporate child exercise and parent education; be designed so that families can join at any time; be conducted at a local level; build on existing programs/structures such as Schools as Community Centres, *Good Beginnings* and other NGO programs; and commence in locations with greater socioeconomic disadvantage such as Campbelltown, with progressive rollout across SSWAHS; and
- Inclusion of information and strategies in SSWAHS adolescent groups and services such as mental health and youth health. This information would cover nutrition and physical activity, and/or specifically target adolescents with overweight problems associated with their health problem or medication.

- **Multidisciplinary Specialist Obesity Services**

It is proposed that there will be two specialist multidisciplinary clinics in SSWAHS to assess, diagnose, treat and monitor children and adolescents who are very obese. There will be the existing clinic in the inner west, the RPAH MOS, and a clinic in the south west of Sydney. Criteria for admission to these clinics will be children and adolescents who:

- Are very obese (with a BMI well above the 97th percentile) and who have a paediatrician referral; or
- Have a diagnosis of a congenital or acquired problem where obesity is an issue e.g. Prader-Willi Syndrome, endocrine disease or major immobility; or
- Have co-morbidities such as mental health problems.

The services to be provided by specialist services will include assessment, treatment, monitoring and maintenance. Individual and group treatment will include coverage of: low calorie diets; pharmacotherapy; assessment for bariatric surgery and post surgical management for adolescents; meal replacement programs; and psychological assessment. Consultation with other specialists and experts, for example those who work in the area of disability, will be also occur as required.

In the longer term, specialist services may need to be supported by outreach hubs.

A GP Shared Care model will be developed and maintained, with potential for credentialing.

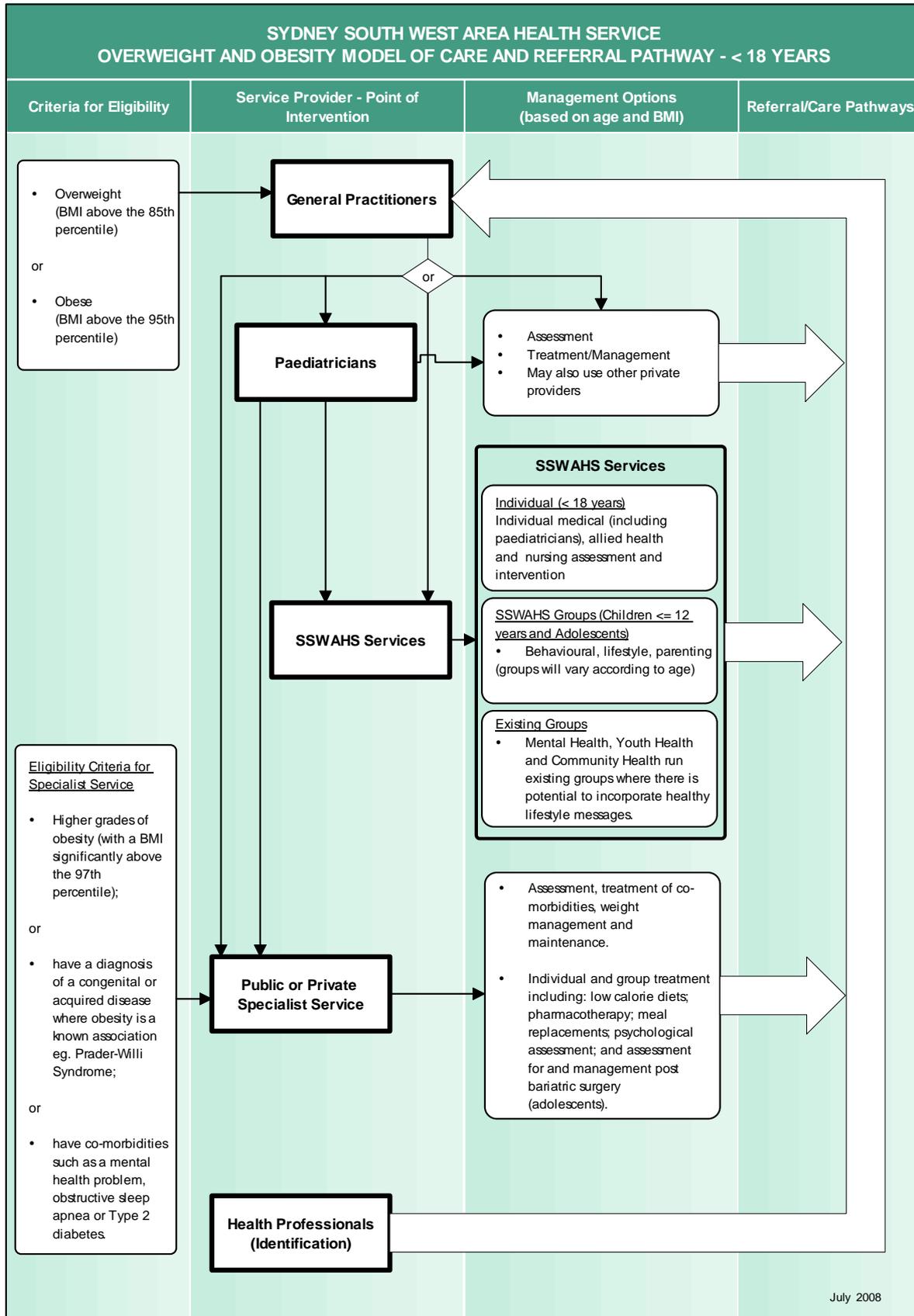


Figure 3: Child and Adolescent model of care for overweight and obesity and referral pathway.

Supporting Disadvantaged and At-Risk Communities

Some programs and services will be specially tailored for communities which historically have poorer access to health services or are at increased risk of overweight and obesity. This includes children

and adolescents from communities with greater socioeconomic disadvantage, the Aboriginal community, and identified CALD communities.

Partnerships

The model of care assumes that SSWAHS will work in partnership with general practitioners, government agencies, NGOs and commercial enterprises in building and providing a supportive network for children and adolescents. This includes working with a range of preschool and school aged services such as long day care, OOSHC, family day care, playgroups and other groups conducted by health and non-health services.

Evaluation and Research

Evaluation of the model of care will include: collection of patient statistics; individual and group treatment outcomes; educational outcomes such as change in practice, knowledge and attitude; and identification and referral rates. It will also allow review to ensure that the needs of priority populations are being met. The service will contribute to knowledge about management of overweight and obesity in adolescents and children through research.

9.3 Treatment and Management of Overweight and Obese Adults

The three target groups to be addressed through the adult management component of the Plan are: adults 18 years and older with a BMI above 27 with complications; adults 18 years and older with a BMI above 30; and special groups including Aboriginal and Torres Strait Islander peoples, identified CALD communities (such as Pacific and Middle Eastern communities), people with genetic or congenital disorders including intellectual disability, and people with medication related obesity, for example people with a mental illness. The BMI levels for intervention are based on the NHMRC *Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults 2003*. The Commonwealth Department of Health and Ageing has accepted these levels as when treatment with drugs can commence⁹².

As there has been an increasing focus on cardiometabolic risk and the health consequences of abdominal obesity, waist circumference as a referral criterion, which is increasingly being advocated as a screening measure for identifying risk individuals, will also be considered. As per the NHMRC guidelines for adults, a combination waist circumference and BMI will be used to measure overweight and obesity: a BMI of 25 and above or a waist circumference above 80 centimetres in women or 94 centimetres in men is considered overweight; and a BMI of 30 and above or a waist above 88 centimetres in women or 102 centimetres in men is regarded as obesity⁹³.

Adults who will not be managed through this model of care include those with a BMI between 25 -27 and adults with a BMI between 27-30 with no complications.

Some of the expected individual outcomes of the adult model of care are: a primary outcome of a 5% weight reduction with a minimum target of no weight gain as a secondary outcome; improved quality of life; improvement of chronic health problems; a reduction in medication required; increased self esteem; and reduced morbidity and mortality. For SSWAHS, expected outcomes include cost containment and coordination of services.

Referral Pathway and Model of Care

The model for the treatment and management of overweight and obesity management in adults proposes several levels of care (illustrated in Figure 4):

- **Identification**

Health professionals working with adults will have a role in identifying and referring adults who are overweight or obese. Staff will assess these patients in all clinical settings for height, weight and calculate BMI. If an overweight or obesity problem is identified, health professionals will be responsible for advising patients to contact their general practitioner or their specialist.

Health professionals will use the NHMRC *Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults 2003* to determine the needs of patients. Clinical guidelines and tools will be available to support staff in the identification and referral of adults.

- **General Practitioner Assessment and Management**

General practitioners should provide primary assessment and management services for adults who are overweight and obese. These patients may or may not have complications, for example diabetes.

Resource directories will be developed to ensure that general practitioners and service providers are aware of local resources and services available to their patients. This includes services such as gymnasiums, private allied health practitioners, private clinics, and council managed walking groups.

General practitioners and practice nurses will be supported in their assessment and management of adults with overweight and obesity through provision of education and training programs and the development of resources and strategies by SSWAHS in partnership with divisions of general practice and Aboriginal Medical Services.

- **General Community Programs**

As noted in Section 7, there are a range of programs and services in the broader community which focus on weight reduction or physical activity. Examples include *Weight Watchers* and local exercise programs in fitness centres. People with overweight and obesity problems managed by a general practitioner and/or specialist services may be referred these programs.

- **Complex Care/Lifestyle and Related Programs**

SSWAHS clinical services will continue to treat people who have chronic care problems for example those with diabetes, heart disease, and pulmonary problems. Some of these patients will be overweight or obese. The capacity of these services to treat existing patients with chronic health problems who are overweight or obese will be reviewed and improved through focused training and support.

It is proposed that people who are overweight (BMI 27+ with complications) or obese with or without complications will access existing lifestyle programs and existing and new group programs provided for complex care patients (e.g. complex care services such as diabetes, cardiac rehabilitation) and/or targeted programs managed by Allied Health Services or Community Health Services.

General practitioners and SSWAHS clinicians will be able to refer patients directly to these services. Services may be provided as group programs, for example exercise and nutrition groups, or on an individual basis.

Complementing adult strategies is a pilot community based diabetes prevention program that will screen people aged 40 to 65 years in 3 local divisions of general practice (Central Sydney, Macarthur and Southern Highlands), to identify those who may be at risk of developing Type 2 diabetes and therefore eligible to participate in a lifestyle intervention program. The program commenced in 2008, is a partnership between SSWAHS, local divisions of general practice and the Institute of Obesity, Nutrition and Exercise. Participants in this program will be encouraged to: decrease their body weight (by at least 5%); reduce fat intake (by at least 30%); increase fibre intake (by at least 15%); and increase moderate to intense physical activity (more than 30 minutes each day).

Commercial and private sector services, including private allied health practitioners and organisations such as *Weight Watchers*, will also be accessed to enhance access and ensure a comprehensive approach to care.

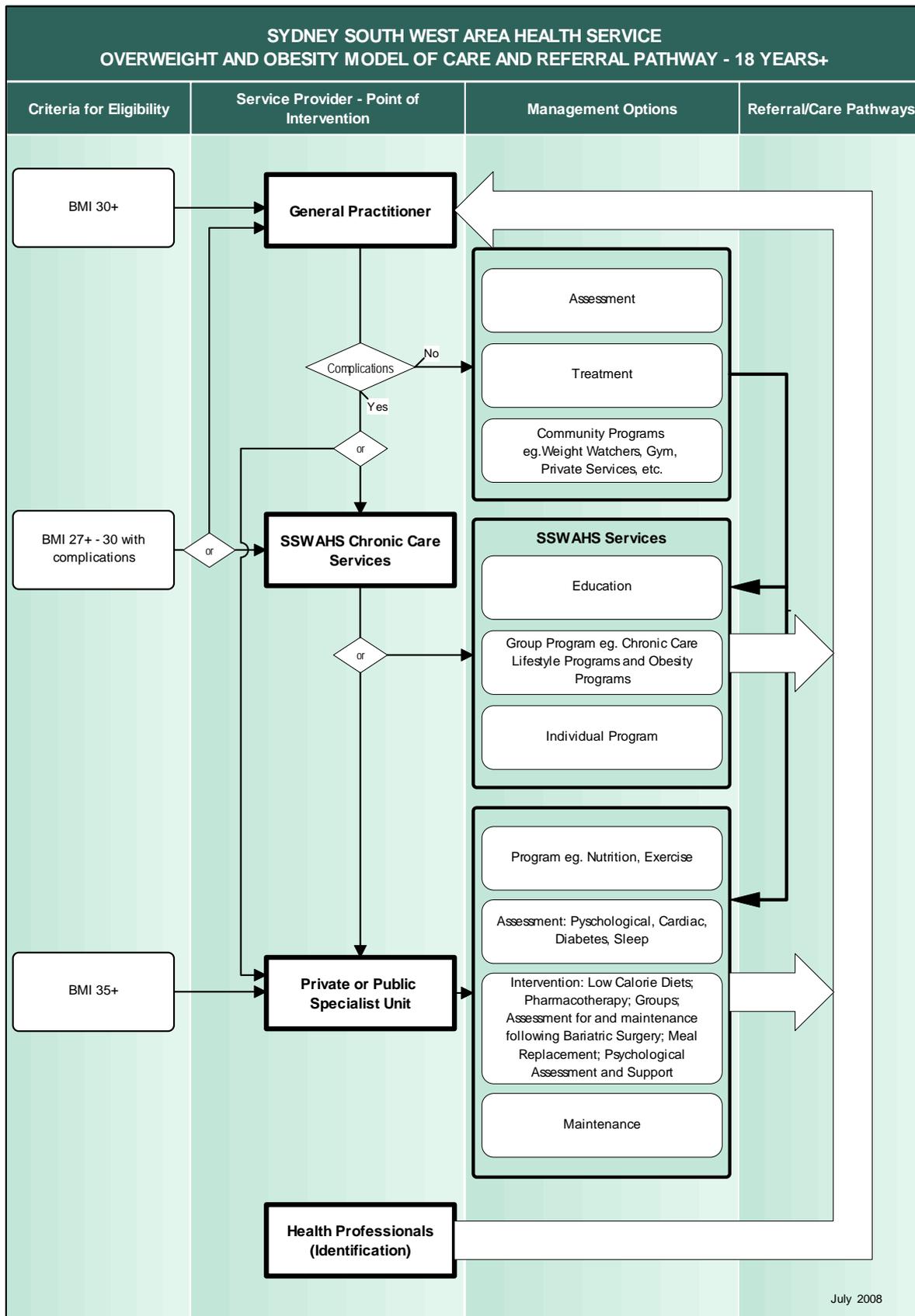


Figure 4: Adult model of care for overweight and obesity and referral pathway.

- **Specialist Multidisciplinary Obesity Units**

It is proposed that there are two specialised obesity units for adults provided by SSWAHS: one at RPAH (the existing MOS) and a second service based in the south west of Sydney with a satellite service. The criteria for admission to these clinics will be people who:

- Are classified with Class II or III obesity (i.e. a BMI greater than or equal to 35);
- Have medical complications and are obese;
- Seek assessment, follow-up, and discharge in relation to bariatric surgery; and/or
- Have a diagnosed medical condition with a predisposition to overweight and obesity. For example Prader-Willi Syndrome; those with a developmental disability; those with obesity problems associated with mental health medications; and people with craniopharyngiomas.

Referrals to this service may be direct from general practitioners (including Aboriginal Medical Services) or complex care services. Services to be provided by the specialised obesity units will include assessment, treatment, monitoring and maintenance. Similar to the specialised services for children and adolescents, treatment will include both group and individual services. Individual treatment and management will consist of: very low calorie (energy) diets; pharmacotherapy; and assessment for bariatric surgery and post surgical management. Assessment may include psychological, cardiac, diabetes control and sleep assessment. Treatment may include weight maintenance, referral for bariatric surgery and follow-up management post surgery for example of bariatric bands, meal replacement programs, psychological assessment, and maintenance. Given the potential demand on this service an interim program will be offered that optimises these patients' management until they can be seen by the specialised obesity service. Nutrition will need to be a component of this service.

It is anticipated that there will be referral back to general practitioners and specialist complex care units, and/or shared care arrangements will be established.

- **Bariatric Surgery**

Bariatric surgery is the surgical treatment of obesity. For the treatment of severe obesity, it is the most effective treatment currently available⁹⁴. Major weight loss following bariatric surgery, can result in a total or partial control of a wide range of common and serious diseases such as heart disease, diabetes and hypertension⁹⁵ and some major sleep disorders. For the community, these results translate into a general improvement in the health of the community, and a reduction in the burden of these chronic conditions on the acute and chronic services provided by the health systems.

Bariatric surgical procedures reduce energy intake by changing the anatomy of the gastrointestinal tract. Operations are classified as either malabsorptive or restrictive. Restrictive procedures limit intake by creating a small gastric reservoir with a narrow outlet to delay emptying. Malabsorptive procedures bypass varying portions of the small intestine where nutrient absorption occurs⁹⁶.

Restrictive procedures include adjustable gastric banding (wrapping a synthetic, inflatable band around the stomach to create a small pouch with a narrow outlet) and a partial resection of the stomach (sleeve gastrectomy), or a combination of these two approaches⁹⁷.

The NSW Department of Health Statewide Services Development Branch together with the NSW Surgical Services Taskforce is developing a service outline for the treatment of obesity in NSW, in particular severe obesity, including both non-surgical and surgical components.

Senior clinicians in SSWAHS have agreed that bariatric surgery should be provided in SSWAHS for adults aged between 18 and 60 years old who are obese and meet eligibility guidelines. The model of care for bariatric surgery will be a multidisciplinary medical-surgical model. In addition to the actual bariatric surgery, it will also involve extensive preoperative and postoperative assessment and management by physicians, surgeons and allied health personnel.

The model of care will include:

- Assessment and pre-surgical workup through the SSWAHS adult obesity clinics;
- Multidisciplinary meetings involving all members of the team including the surgeons, anaesthetists, endocrinologists, nurses, and allied health professionals to select suitable

candidates for surgery, determine the most appropriate type of surgery, and review patient needs and outcomes;

- Surgical services, including immediate post surgical care in hospital; and
- Ongoing follow-up through the SSWAHS adult obesity clinics. Consideration will also be given for access to follow-up via qualified services able to adjust bariatric bands where appropriate.

Referrals for bariatric surgery will be accepted through SSWAHS adult obesity clinics. These clinics will be staffed by a multidisciplinary team of staff specialists, specialist nurses, and allied health professionals, such as physiotherapists, dietitians and clinical psychologists. Clinics will be located at RPAH, Liverpool and Macarthur. Candidates regarded as potentially suitable for a detailed assessment for surgery will be identified by the team.

The team will determine which patients will have surgical options discussed with them as part of their overall treatment strategy. Options for surgery will be bands and sleeve gastrectomies. A detailed assessment protocol will be followed, and patients will be provided with comprehensive education and support. Decisions on the method of surgery will consider the patient's health problems, requirements for weight loss, access to post surgical care and patient choice.

Should it be determined by the multidisciplinary team that a bypass procedure is the most appropriate form of bariatric surgery for particular individuals, then arrangements will be made for the patient to be assessed in a unit with expertise in bypass procedures. Currently this expertise does not exist within SSWAHS but may develop during the life of this Plan according to demand.

Post surgical care after recovery from the surgical procedure will be managed initially through the SSWAHS adult obesity clinics and will include regular adjustment of the bariatric bands where appropriate. Training will be provided to other clinical services across SSWAHS to enable longer term adjustment of bariatric bands at a local level.

Eligibility criteria for surgery will be based on the NHMRC *Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults 2003*. The following criteria will apply for patients to be eligible:

- A BMI of 40+ without an obesity related comorbidity or a BMI 35+ with an obesity-related comorbidity;
- Have failed previous non-operative strategies for achievement of sustainable weight loss; and
- Are well-motivated obese patients who strongly desire substantial weight loss or have severe impairments because of their weight.

The initial focus of the SSWAHS surgical service will be to provide surgery to those individuals with a BMI of 35 or greater with early complications or a BMI of less than 45. This focus will ensure that expertise and skills in all phases of the service, pre surgical, surgical and post surgical, are developed by all team members before more complicated cases are considered. Those patients who are identified as unsuitable for surgery or who decline surgical options will be provided non-surgical management options.

Consistent with the draft *Sydney South West Area Healthcare Services Plan 2006 - 2016*, bariatric surgery will be provided at Concord Repatriation General Hospital and Campbelltown Hospital. Surgery will only be provided by suitably credentialed specialist upper gastrointestinal surgeons. Anaesthetists attending these operations will have expertise and interest in working with these patients.

In the longer term, some patients who have undergone bariatric surgery and who have successfully maintained a significant weight loss will require access to plastic surgery to remove excess skin (abdominoplasty, breast reduction, arm and thigh skin reductions). It is envisaged that approximately one third of patients will require plastic surgery approximately three years after bariatric surgery. This service may be required during the life of the Plan.

Information about patients assessed and treated by this service will be maintained on a data base, which will be adjusted to collect information on bariatric surgical patients. Information on assessment

results, surgical method, complications, and outcomes will be collected and will be accessible to all sites.

The quality assurance program implemented will include a separate Morbidity and Mortality Review. This will occur on a three monthly basis.

Partnerships

Both internal and external partnerships will be developed as part of the adult model of care to build a network of support for adults. Internal partnerships will involve cooperation across many SSWAHS streams, and will require the support of all clinical stream directors. External partnerships will include working with divisions of general practice, Aboriginal Medical Services, local councils as well as commercial enterprises such as private allied health practitioners, *Weight Watchers* and fitness centres.

9.4 Adult and Adolescent Overweight and Obesity Prevention

As previously stated, there will be a limited number of strategies around the prevention of overweight and obesity in adults and adolescents in this Plan. Strategies include implementing policies on healthier food and drink choices for staff and visitors in our facilities, providing opportunities for increased physical activity for staff, and providing information about preventing overweight and obesity to women of child-bearing age.

9.5 Infrastructure and Systems Support for the Plan

A range of infrastructure and systems support will be required to ensure that all components of the model of prevention and care operate effectively. The supporting mechanisms which will be addressed in this Plan include:

- Addressing access issues relating to transport, building design and service barriers;
- Ensuring the availability of equipment to support identification (for example height and weight scales, tape measures and BMI counters), and resources to support effective clinical care (for example flip charts, brief intervention checklists, and model group program formats);
- Education for staff, general practitioners and other interested health professionals including community paediatricians, regarding overweight and obesity assessment and management;
- Furniture and building design features appropriate for the clinical management of severely obese patients;
- Information systems (for example care plans which link to CERNER, and BMI counters on the intranet); and
- Identification and development of relationships with external agencies such as local councils.

9.6 Governance and Oversight/Coordination of the Plan

Oversight and coordination of the overall Plan and strategy will be required. It is proposed that governance will be addressed via the establishment of a *SSWAHS Overweight and Obesity Prevention and Management/Advisory Committee (OOPMAC)* which will be responsible for oversight of the Plan including implementation, monitoring, evaluation, adjustment of the Plan where necessary, and ensuring that the strategies implemented remain informed by best practice. Additionally, the Committee will be required to consider the implications for SSWAHS of any overweight and obesity plans and policies released by the NSW Department of Health.

The Committee might include representation from senior clinicians of the Area's specialist obesity services, health promotion, dietetic services, and public relations and marketing. Components of the oversight include: that local issues are addressed and that staff and service needs can be identified and resolved; leadership, monitoring and evaluation of effectiveness of the Plan; improving skills, interest and knowledge in SSWAHS and local general practitioners; and implementation of systems to monitor activity and service effectiveness. The Committee will also be responsible for providing advice and input into existing chronic care programs so that patients who are overweight and obese can be appropriately managed. The Committee will also be required to address the issue of linkages between service providers.

9.7 Evaluation Framework

This Plan has a number of goals and objectives as listed on pages 5 and 6. Broadly, the impact evaluation of this Plan will assess whether these goals and objectives have been achieved. This assessment will include monitoring of several key indicators collected in regular data collections (child, adolescent and adult focused). Major sources of data are:

- The *NSW Population Health Survey* (16 years and over), which is an annual survey with breakdown by area health service with a sample size of 1,500 per area, and a total of 12,000 per annum. Information is available on self reported height/weight, key nutrition and physical activity behaviours;
- The *NSW Child Health Survey*, last conducted in 2001 with another possibly planned for 2010/11. It relies on parent reported data; and
- The *NSW SPANS Survey*, which is a survey of school aged children first conducted in 2004 (self report and measured data). This survey is likely to be repeated in 2010/11.

The outcome evaluation indicator of interest is weight status (BMI and BMI for age).

Impact evaluation indicators of interest are:

- Physical activity levels;
- Fruit and vegetable intake;
- Sugary drink consumption; and
- Television/Screen time.

In the first year of the Plan it will be important to establish the baseline levels of these indicators. Where possible, these data can be supplemented by other available data, such as hospital CERNER data, or key behavioural indicators for SSWAHS children, adolescents and adults as collected by various services. Mid-way (i.e. 2010) through the Plan, there should be a review of implementation progress.

The summative assessment of the Plan should commence after four years, to allow sufficient time to commence planning for the subsequent five year plan. It is the responsibility of the *SSWAHS Overweight and Obesity Management/Advisory Committee* to oversee the monitoring of data.

To monitor implementation of the Plan, a number of indicators will need to be assessed. Possible process evaluation indicators for the first two years include:

- Delivery of specific strategies identified in the Plan;
- Number of services established/enhanced;
- Equipment and systems are in place for routine collection of BMI data in electronic inpatient/outpatient record system (CERNER);
- Training programs established for staff; and
- Audit conducted of existing referral options available in the community
 - Audit conducted of utilisation of clinics (referral and expansion)
 - General practitioner clinical audit in a small sample of practices to monitor training, recognition and referral for weight issues (BEACH system). If future divisions of general practice surveys are conducted, there may be an opportunity to review general practitioner awareness and practices
 - Survey of knowledge, attitudes and practices of Community Health staff
 - Audit conducted of the focus of prevention strategies/programs in relation to key behavioural and equity objectives identified.

Possible indicators for the second two years (Review 2012) include:

- Routine recording of BMI is occurring through electronic inpatient/outpatient medical record system (CERNER);
- Audit conducted of referral networks for general practitioners;
- Audit conducted of utilisation of clinics (referral and expansion); and
- Audit conducted with a focus on prevention strategies/programs in relation to key behavioural and equity objectives identified.

10. ACTION PLAN

The following action plan is divided into three sections: child prevention, child, adolescent and adult management and treatment, and overarching strategies. The child prevention strategies are further divided into settings or actions areas for implementation. Overarching strategies are also divided into four broad themes: create a safe and supportive culture and system for patients, staff and visitors; development of partnerships; knowledge and research; and leadership, coordination and effective practice.

The strategies outlined are consistent with available evidence and also incorporate the results of consultation. They support the objectives and goals of this Plan and the NSW Department of Health's seven strategic directions as outlined on pages 5 and 6. They include strategies for priority populations including communities with greater levels of socioeconomic disadvantage, Aboriginal and Torres Strait Islander peoples, Middle Eastern and Pacific communities and people with disabilities.

It is noted that considerable information was obtained through the consultation process about potential strategies which could be developed to address the overweight and obesity problem in SSWAHS. It will be important that as services develop strategies that reference is made to the consultation reports.

ACTION PLAN

PART A: Prevention in children aged 0 - 12 years

PART B: Treatment and Management in Children, Adolescents and Adults

PART C: Overarching Strategies

PART A: Prevention in children aged 0 - 12 years

SETTINGS:

Community Organisations and Environments

Health Services

Childcare (Early Childhood Care, Pre-school and Out of School Hours Care)

Primary Schools

And

Priority Populations

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
Setting/Action Area: A1 Community Organisations and Environment							
A. 1.1 General Strategies							
3.2 2.5 5.2	A. 1.1.1 Establish and strengthen partnerships with community and non government organisations, existing alliances and parent groups to develop advocacy strategies to promote supportive physical activity and food environments within Sydney South West (SSW)	Lead: SSWAHS Population Health and Health Promotion Key partners: SSWAHS Community Health SSWAHS Allied Health Service Local councils Sydney Food Fairness Alliance Non Government Organisations (NGOs) Local communities	•	•	•	•	•
3.2 5.2	A. 1.1.2 Support the development of healthy urban environments through the following strategies: <ul style="list-style-type: none"> • A. 1.1.2.1 Involvement with developers, planners, local councils and other agencies in urban planning processes; • A. 1.1.2.2 Promoting the use of Health Impact Assessments wherever appropriate; • A. 1.1.2.3 Development of an urban development and health evaluation and research strategy; and • A.1.1.2.4. Contribute to the development of state food policy. 	Lead: SSWAHS Population Health Key partners: NSW Ministry of Transport Western Sydney Regional Organisation of Councils (WSROC) Sydney West Area Health Service	•	•	•	•	•
2.2 1.1- 1.5	A. 1.1.3 Support state and national social marketing and media campaigns promoting healthy eating, increased physical activity and reduced sedentary behaviour, with a focus on priority populations	Lead: SSWAHS Health Promotion Key partners: SSWAHS Community Health SSWAHS Allied Health Service NSW Ministry of Transport Local Councils Primary schools Community organisations Royal Prince Alfred Hospital Metabolism and Obesity Service (MOS)	•	•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
A. 1.1 General Strategies							
1.3 3.2 5.2	A. 1.1.4 Work with relevant agencies to increase the availability of breast feeding friendly public places	Lead: SSWAHS Health Promotion Key partners: Local Councils Australian Breastfeeding Association NSW Ministry of Transport Chambers of Commerce Shopping Centre Council of Australia				•	•
2.5 5.1	A. 1.1.5 Advocate for co-funded health promotion positions with local councils in SSW, similar to Fairfield Partnership model	Lead: SSWAHS Health Promotion Key partner: Local Councils	•	•	•	•	•
1.1 1.2 1.4 2.5 3.2	A. 1.1.6 Establish and strengthen partnerships with local councils to implement the following strategies: <ul style="list-style-type: none"> • A. 1.1.6.1 Develop and trial a scoring system to prevent the development of obesity promoting neighbourhoods, commencing in new growth centres and extending to existing councils • A. 1.1.6.2 Develop or adapt an existing recognition and awards system for institutions/agencies that implement positive changes to food and physical activity environments • 1.1.6.3 Develop local food policy that address issues of supply and access to appropriate low energy dense foods at an affordable price • A. 1.1.6.4 Provide and promote free or affordable physical activity initiatives in the community • A. 1.1.6.5 Promote walking, cycling and active living by implementing best practice urban planning guidelines 	Lead: SSWAHS Health Promotion and Local Councils Key partners: SSWAHS Community Health SSWAHS Allied Health Service SSWAHS Public Health NSW Ministry of Transport NSW Department of Planning NSW Department of Housing Premier's Council for Active Living (PCAL) NSW Centre for Overweight and Obesity (COO) National Heart Foundation		•	•	•	•
					•	•	•
					•	•	•
			•	•	•	•	•
			•	•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
1.1 4.1	A. 1.1.7 Advocate for, implement and evaluate a community-based healthy weight initiative, focussing on reduced consumption of sugary drinks	Lead: SSWAHS Health Promotion Key partners: Local Councils SSWAHS Allied Health Service Primary schools Childcare services Community organisations NSW Centre for Overweight and Obesity (COO) MOS			•	•	•
A. 1.2 Priority Populations							
1.2 2.2 2.5 2.6 3.2 5.2	A.1.2.1 Implement the <i>Running on Empty</i> food security project with low income communities across the south west of SSWAHS	Lead: SSWAHS Health Promotion Key partners: Local Councils SSWAHS Community Health SSWAHS Allied Health Service NGOs NSW Department of Education and Training (DET) NSW Department of Housing Local Communities	•	•	•	•	•
1.4 2.6 3.2	A.1.2.2 Work with other government departments and local community groups to provide and promote free or affordable physical activity initiatives	Lead: SSWAHS Health Promotion Key partners: Local Councils NSW Department of Housing NSW Department of the Arts, Sport and Recreation Local communities and agencies	•	•	•	•	•
1.1- 1.5 2.1 2.2 2.5 2.6	A.1.2.3 Develop appropriate strategies to work with cross cultural community agencies/organisations to develop, implement and evaluate programs that promote healthy weight in infants and children	Lead: SSWAHS Health Promotion and Community Health Key partners: Local Councils Community organisations Childcare sector e.g. Lady Gowrie Multicultural Health Communication Service Ethnic media	•	•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
1.1- 1.5 2.1 2.2 2.5 2.6	A.1.2.4 Develop appropriate strategies to work with Aboriginal community agencies/organisations to develop, implement and evaluate programs that promote healthy weight in infants and children	Lead: SSWAHS Health Promotion Key partners: Local Councils SSWAHS Community Health SSWAHS Allied Health Service SSWAHS Aboriginal Health Tharawal Aboriginal Medical Service Aboriginal Medical Service, Redfern Aboriginal organisations Aboriginal media Childcare sector	•	•	•	•	•
2.2 2.5 2.6	A.1.2.5 Develop a capacity building strategy (skills, resources and structures) to support other community organisations working with priority populations to deliver programs that promote healthy weight in infants and children	Lead: SSWAHS Health Promotion Key partners: Local Councils SSWAHS Community Health SSWAHS Aboriginal Health Community organisations e.g. Supported Playgroups Childcare Sector	•	•	•	•	•
Setting/Action Area: A.2. Health Services							
A.2.1 General Strategies							
1.3 2.1 3.1	A.2.1.1 Implement the NSW Health Breastfeeding Policy in SSWAHS	Lead: SSWAHS Women's Health and Neonatology and Breastfeeding Steering Committee Key partners: Local Councils SSWAHS Health Promotion SSWAHS Community Health SSWAHS Human Resources Department Australian Breastfeeding Association Divisions of General Practice (DGP) MOS	•	•	•		
1.1- 1.5 2.1	A.2.1.2 Develop, pilot and evaluate a prevention focused, brief intervention model for community health workers in SSWAHS, for example linked to four year old screening	Lead: SSWAHS Health Promotion and Community Health Key partners: Local Councils SSWAHS Centre for Education and Workforce Development (CEWD) MOS	•	•	•		

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
A.2.2 Priority Populations							
1.1- 1.5 2.4 4.1	A.2.2.1 Implement and evaluate the <i>Healthy Beginnings</i> sustained home visiting project for new mothers in the south west of SSWAHS , commencing antenatally and continuing postnatally for the first two years	Lead: SSWAHS Health Promotion Key partners: SSWAHS Community Health NSW Prevention Research Centres	•	•	•		
2.4 5.1	A.2.2.2 Advocate for sustained home visiting programs for new mothers (meeting Level II NSW health home visiting guidelines), commencing antenatally and continuing postnatally for the first two years.	Lead: SSWAHS Community Health Key partners: SSWAHS Health Promotion			•	•	
1.3 2.4 2.5 2.6	A.2.2.3 Implement the priority population focused strategies from the NSW Health Breastfeeding Policy	Lead: SSWAHS Women's Health and Neonatology Key partners: SSWAHS Health Promotion SSWAHS Community Health Community agencies Australian Breastfeeding Association DGP	•	•	•		
2.1 2.4 2.5 2.6	A.2.2.4 Engage with the multicultural health workforce in SSWAHS to embed strategies in work plans that promote healthy weight in children	Lead: SSWAHS Community Health Key partners: SSWAHS Health Promotion SSWAHS Allied Health Service	•	•	•	•	•
2.1 2.6	A.2.2.5 Work with culturally and linguistically diverse (CALD) medical associations to support programs that promote healthy weight in children	Lead: SSWAHS WAHS Health Promotion and Community Health Key partner: CALD medical associations			•	•	•
2.1 2.4 2.5 2.6	A.2.2.6 Engage with the Aboriginal health workforce in SSWAHS to embed strategies in work plans that promote healthy weight in children	Lead: SSWAHS Aboriginal Health Key partners: SSWAHS Health Promotion SSWAHS Community Health	•	•	•	•	•
1.1 1.2 2.1	A.2.2.7 Work with Aboriginal Medical Services to support programs that promote healthy weight in children, especially focusing on reduced consumption of sugary drinks and energy dense/nutrient poor foods	Lead: SSWAHS Aboriginal Health Key partners: SSWAHS Health Promotion Aboriginal Medical Service, Redfern Tharawal Aboriginal Medical Service SSWAHS Health Promotion SSWAHS Allied Health Services	•	•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
Setting/Action Area: A.3. Childcare [Early Childhood Care, Pre-school and Out of School Hours Care (OOSHC)]							
A.3.1 General Strategies							
1.1 1.2 1.4 1.5 2.1 2.2	A.3.1.1 Implement the <i>Munch and Move</i> physical activity and nutrition project in SSW pre-schools and pilot in a number of long day care centres	Lead: SSWAHS Health Promotion and NSW Prevention Research Centre Key partners: Local Councils SSWAHS Community Health SSWAHS Allied Health Service NSW Department of Health Early Childhood Training and Resource Centre (ECTARC) NSW DET Childcare sector	•	•	•	•	
1.1 1.2 1.4 1.5 2.1 3.2 5.1 5.2	A.3.1.2 Work with child care and OOSHC services to develop and integrate appropriate nutrition, physical activity and small screen recreation policy, guidelines and programs into childcare and before and after-school care programs	Lead: SSWAHS Health Promotion, Community Health and Allied Health Service Key partners: Local councils Childcare sector e.g. OOSHC providers Active After School Communities NGOs	•	•	•	•	•
3.2	A.3.1.3 Implement award schemes for adherence to policies and guidelines in childcare settings	Lead: SSWAHS Community Health, Allied Health Service and Health Promotion Key partners: Local Councils Childcare sector e.g. Lady Gowrie Network of Community Activities	•	•	•	•	•
A.3.2 Priority Populations							
1.1 1.2 2.1 2.6 3.2 4.1	A.3.2.1 Implement and evaluate a culturally relevant pilot project with an OOSHC service with Aboriginal children, focusing on food security, fruit and vegetables and physical activity	Lead: SSWAHS Health Promotion Key partners: Local Councils SSWAHS Community Health OOSHC Service Aboriginal Liaison Officer Local Aboriginal community Community agencies	•	•			

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
1.1 1.2 1.4 2.1 2.5 2.6	A.3.2.2 Adapt and support implementation strategies of the <i>Munch and Move</i> project for child-care services working with priority populations, e.g. Aboriginal pre-schools, disadvantaged communities, relevant CALD community associations	Lead: SSWAHS Health Promotion and NSW Prevention and Research Centres Key partners: Local communities SSWAHS Allied Health Service SSWAHS Community Health ECTARC Relevant childcare providers e.g. Lady Gowrie Tharawal Aboriginal Medical Service Aboriginal Medical Service, Redfern		•	•	•	
1.1- 1.5 2.2 2.6	A.3.2.3 Within comprehensive projects, strengthen engagement strategies with parents and carers (including grandparents) to support healthy eating, physical activity and reduced screen time for children	Lead: SSWAHS Health Promotion Key partners: Local Councils SSWAHS Allied Health Service SSWAHS Community Health Relevant childcare providers Local communities and agencies	•	•	•	•	
1.1- 1.5 2.5 3.2	A.3.2.4 Implement and evaluate a physical activity and nutrition project with Family Day Care, in partnership with one local council	Lead: SSWAHS Community Health, Allied Health Service and Health Promotion Key partners: Local Councils Family Day Care workers				•	•
Setting/Action Area: A.4. Primary schools							
A.4.1 General Strategies							
1.1 1.2 1.4 1.5 2.2	A.4.1.1 Progressively implement the <i>Live Life Well@ School</i> project with DET primary schools in Sydney South West	Lead: SSWAHS Health Promotion Key partners: NSW DET SSWAHS Community Health SSWAHS Allied Health Service NSW Department of Health Local primary school communities Local media	•	•	•	•	

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
1.1 1.2 1.4 1.5 2.1 3.2	<p>A.4.1.2 Assist primary school communities to develop a comprehensive program of action, based on the Health Promoting Schools framework, seeking to combine curriculum, environment and policy strategies with family and community involvement.</p> <p>For example:</p> <ul style="list-style-type: none"> ▪ Support implementation of DET policy to eliminate sugary drinks; ▪ Promote implementation of fruit, vegetable and water breaks; ▪ Support easy access to drinking water; ▪ Preferential pricing and promotion of low energy dense foods in school food outlets; ▪ Promote healthy fundraising alternatives; ▪ Promote the timetabling of daily physical activity; ▪ Promote playground re-design and markings to encourage physical activity during breaks; ▪ Enhancement of physical activity, sedentary behaviour and nutrition education in the classroom; and ▪ Develop culturally appropriate and effective parent/carer engagement strategies. 	<p>Lead: SSWAHS Health Promotion, Community Health and Allied Health Service</p> <p>Key partners: NSW DET NSW Department of the Arts, Sport and Recreation Catholic Education Office Association of Independent Schools Local primary school communities Parents and Citizens Associations Healthy Kids School Canteen Association Local Councils</p>	•	•	•	•	•
1.4 2.1	A.4.1.3 Pilot a Personal Development, Health and Physical Education (PDHPE) network to support teachers to better implement physical activity in primary schools in local communities	<p>Lead: SSWAHS Health Promotion</p> <p>Key partners: NSW DET Local primary schools</p>		•	•	•	•
1.4 5.2	<p>A.4.1.4 Implement active travel projects with regional clusters of primary schools</p> <p>A.4.1.5 Advocate for improved structural supports for active travel to and from school</p>	<p>Lead: SSWAHS Health Promotion</p> <p>Key partners: Workplaces Local primary schools NSW Ministry of Transport Sydney Buses NSW Department of Environment and Climate Change Local Councils Premier's Council for Active Living (PCAL)</p>	•	•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
A.4.2 Priority Populations							
1.1 1.2 1.4 1.5 2.5 3.2	A.4.2.1 Engage with schools with priority populations to implement the <i>Live Life Well@ School</i> project, integrating additional support and parent/carer engagement strategies	Lead: SSWAHS Health Promotion Key partners: NSW DET SSWAHS Community Health SSWAHS Allied Health Service Priority schools and their communities	•	•	•	•	•
1.1 1.2 3.2 5.2	A.4.2.2 Support ongoing implementation of the <i>NSW Health Fresh Tastes @ School Healthy School Canteen Strategy</i> , focusing on schools with priority populations	Lead: SSWAHS Health Promotion, Allied Health Service and Community Health Key partners: NSW DET Healthy Kids School Canteen Association Priority primary schools	•	•	•	•	

PART B: Treatment and Management in Children, Adolescents and Adults

TARGET:

Children and Adolescents – less than 18 years

Adults – BMI 27+ with complications and BMI 30+

And

Priority populations

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
Setting/Action Area: B. 1. Health Services							
General Strategies							
2.3	B.1.1 Develop (or purchase) and distribute effective overweight and obesity identification tools including: <ul style="list-style-type: none"> • Testing equipment in all clinical areas; • The NHMRC guidelines; and • Patient intake/assessment forms which include height, weight and waist circumference assessment. 	Lead: Royal Prince Alfred Hospital Metabolism and Obesity Service (MOS) Key partners: SSWAHS General Managers SSWAHS Occupational Health and Safety (OH&S) committees	•				
2.3	B.1.2 Develop electronic based overweight and obesity tools e.g. Web page on the SSWAHS Intranet website with clinical practice guidelines, BMI calculator and standards	Lead: MOS Key partner: SSWAHS Information Systems Division (ISD)	•	•			
2.3	B.1.3 Include BMI measure in the SSWAHS electronic medical record (EMR)	Lead: MOS Key partner: SSWAHS ISD	•				
2.2	B.1.4 Promote the use of the NSW Health Records by parents and health practitioners: <ul style="list-style-type: none"> • <i>My First Health Record</i> (“<i>The Blue Book</i>”) for children, and • <i>My Health Record</i> (“<i>The Red Book</i>”) for adults as a record of height and weight 	Lead: SSWAHS Community Health and Women’s Health and Neonatology Key Partners: General Practitioners (GPs) and SSWAHS Clinical Groups	•	•			
2.1 2.3	B.1.5 Develop, distribute and maintain resources (and resource manual) of: <ul style="list-style-type: none"> • Group programs and services (health and non-health); • Brochures; • Educational resources targeting parents and staff; • Local general practitioner specialty services; and • SSWAHS services e.g. Dietitians. 	Lead: MOS Key partners: SSWAHS Community Health SSWAHS Allied Health Service SSWAHS Health Promotion	•	•	•	•	•
2.1 2.3	B.1.6 Work with divisions of general practice to identify barriers to the compliance with the NHMRC general practitioner guidelines for the management of overweight and obesity in children, adolescents and adults and develop strategies to improve clinical care including: <ul style="list-style-type: none"> • Develop (or modify) and evaluate existing lifestyle scripts/brief intervention approaches for general practitioners; • Promotion in DGP newsletters; 	Lead: MOS/ SSWAHS Endocrinology Services Key partner: Divisions of General Practice (DGP)	•	•			

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
	<ul style="list-style-type: none"> Clinical audits (Continuous Professional Development (CPD); and Development of resources to support good practice e.g. flips charts 						
2.1 2.3	B.1.7 Develop and implement with divisions of general practice a GP shared care model for overweight and obesity	Lead: MOS Key partner: DGP					
2.3 5.1	B.1.8 With divisions of general practice and colleges, advocate for the development of IT software for assessment of BMI, intervention and referral pathways	Lead: MOS/ SSWAHS Endocrinology Services Key partner: DGP		•			
2.1 2.3	B.1.9 Provide general practitioners with information about the chronic care plan and promote consideration of physical activity and nutrition	Lead: MOS/ SSWAHS Endocrinology Services Key Partner: General practitioners	•				
2.1 2.3	B.1.10 Develop and implement enhanced support strategies for general practitioners and paediatricians with skills and interest in childhood obesity including: <ul style="list-style-type: none"> B.1.10.1 Conduct clinical updates; B.1.10.2 Develop protocols which support GP shared care; B.1.10.3 Establish shared case meetings; and B.1.10.4 Develop opportunities for clinical attachments. 	Lead: MOS/ Endocrinology Services Key partners: DGP General practitioners Paediatricians				•	•
2.1 2.3	B.1.11 Assist divisions of general practice, general practitioners and paediatricians to keep up to date on chronic care initiatives and other initiatives which assist in the management of overweight and obesity	Lead: MOS Key partners: DGP General practitioners Paediatricians	•	•	•	•	•
2.1 2.3	B.1.12 Explore the feasibility of developing partnerships with other private health providers such as pharmacists and commercial enterprises	Lead: MOS Key partner: Peak bodies/associations			•	•	•
2.1 2.3	B.1.13 Provide education and support to practice nurses	Lead: MOS Key partners: DGP General practitioners		•	•	•	•
2.1 2.3	B.1.14 Work with divisions of general practice in identifying strategies to develop programs for individual and group management	Lead: MOS Key partners: DGP Tharawal Aboriginal Medical Service Aboriginal Medical Service Redfern	•	•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
2.1 2.3	B.1.15 Develop, distribute and promote clinical guidelines and resources for all health professionals regarding: <ul style="list-style-type: none"> • Identification and • Referral processes and intervention for children, adolescents and adults 	Lead: MOS Key partner: SSWAHS CEWD	•				
2.1 2.3	B.1.16 Provide all SSWAHS staff with training in: <ul style="list-style-type: none"> • Use of the clinical guidelines; • Identification and referral; and • Monitoring of overweight and obesity including the provision of appropriate messages. Priority target services will be Early Childhood Services	Lead: MOS Key partners: SSWAHS CEWD SSWAHS Community Health		•	•	•	•
2.1 2.3 2.4	B.1.17 Maintain the existing RPAH MOS under the Department of Endocrinology and continue access for children, adolescents and adults in the south west of SSWAHS	Lead: MOS	•	•	•	•	•
2.1 2.3 2.4	B.1.18 Establish, monitor and evaluate specialist paediatric and adult multidisciplinary obesity clinics in the south west of SSWAHS to diagnose, treat and monitor children, adolescents and adults who are severely obese Proposed new locations: Macarthur, building on existing sole paediatric practitioner service. Two sites are proposed for adults, one of which will be a satellite service	Lead: MOS and SSWAHS Overweight and Obesity Prevention and Management/Advisory Committee (OOPMAC) Key partner: SSWAHS General Managers	•	•	•	•	•
Setting/Action Area: B.2 Specific Child and Adolescent Strategies							
2.1 2.2 2.3	B.2.1 Roll out existing evidence based programs for inclusion in existing: antenatal classes, parenting and related toddler group programs, child group programs, and adolescent group programs	Lead: MOS Key partners: SSWAHS Community Health SSWAHS Women's Health and Neonatology Services SSWAHS Mental Health Service SSWAHS Allied Health Services	•				
2.1 2.2 2.3	B.2.2 Educate staff about the program content and work with services to ensure the effective inclusion of this content into existing programs. Include: information about healthy diet, physical activity and non-sedentary activities; group leader information and lesson plans; parent handouts; and behavioural strategies and advice to manage non-hungry eating.	Lead: MOS Key partners: SSWAHS Community Health SSWAHS Mental Health Service SSWAHS Allied Health Service		•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
2.1 2.2 2.3	B.2.3 Develop education group programs for parents of preschool children who are overweight and obese e.g. <i>Fussy Eaters</i> Preschoolers Group. Consider initial implementation in areas with higher needs and then progressive rollout. Investigate opportunities for <i>Train the Trainer</i> approaches for group programs (including community educators model and utilisation of parents)	Lead: MOS Key partner: SSWAHS CEWD SSWAHS Allied Health Service		•	•	•	•
2.2	B.2.4 Investigate models for community based parent support e.g. support groups	Lead: MOS Key partners: Local councils DGP SSWAHS Allied Health Service					•
2.1 2.3	B.2.5 Incorporate information and strategies for overweight management in multifaceted health service programs such as sustained home visiting. This will include development of curriculum and resources for services and provision of staff training in overweight and obesity issues and management	Lead: MOS Key partner: SSWAHS Community Health	•	•			
2.1 2.3	B.2.6 Work with divisions of general practice to develop approaches which incorporate weight assessment and healthy weight advice into immunisation programs for babies and preschoolers	Lead: MOS Key partners: DGP SSWAHS Health Promotion	•	•			
2.2 2.3	B.2.7 Investigate opportunities for school based and community health centre based groups that focus on young adolescents i.e. Year 7 children	Lead: MOS Key partners: Local Councils SSWAHS Community Health SSWAHS Allied Health Service NSW DET NGOs					•
1.1 1.2 3.1 5.1	B.2.8 Where appropriate, Infant, Child and Adolescent Mental Health Service (ICAMHS) facilities are to promote healthy eating, through for example menu choices in inpatient and day facilities and the food and drink items contained in dispensing machines located on or near ICAMHS facilities	Lead: SSWAHS Corporate Services Key partners: SSWAHS Mental Health Service SSWAHS Allied Health Service		•	•	•	•
1.4 3.1 5.1	B.2.9 Where appropriate, sport or other exercise is to be a routine component of inpatient and day treatment within a ICAMHS facility	Lead: SSWAHS Mental Health Service Key partner: SSWAHS Allied Health Service	•	•	•	•	•
2.3	B.2.10 Ensure that lifestyle factors contributing to obesity is assessed and addressed in the course of ICAMHS treatment	Lead: SSWAHS Mental Health Service Key partner: SSWAHS Allied Health Service	•	•	•	•	•
2.3	B.2.11 Ensure that growth parameters are routinely recorded for ICAMHS patients who are prescribed psychotropic medication	Lead: SSWAHS Mental Health Service Key partner: SSWAHS Allied Health Service	•	•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
2.2 3.1	B.2.12 Develop a 'lifestyle package' that addresses nutritional education and physical activity for adolescents with a mental health illness. This may include food preparation and shopping skills	Lead: SSWAHS Mental Health Service Key partner: SSWAHS Allied Health Service				•	
Setting/Action Area: B.3 Specific Adult Strategies							
2.1 2.3	B.3.1 Evaluate existing adult lifestyle and chronic care programs regarding equipment and staff skill in managing existing overweight and obese patients	Lead: MOS Key partners: SSWAHS Allied Health Service SSWAHS Chronic Care Program providers	•				
2.1 2.3	B.3.2 Provide training and support to staff involved in lifestyle and chronic care programs about effective overweight and obesity management	Lead: MOS Key partners: SSWAHS Allied Health Service SSWAHS Chronic Care Program providers		•	•	•	•
2.1 2.3	B.3.3 Develop specialised overweight and obesity groups	Lead: MOS Key partner: SSWAHS Allied Health Service			•		
2.1 2.3	B.3.4 Complete and rollout across SSWAHS the Obesity Treatment and Management Group Program (OT&MGP)	Lead: MOS Key partner: SSWAHS CEWD	•	•	•	•	•
2.1 2.3	B.3.5 Provide <i>Train the Trainer</i> education programs to staff and other relevant people about the OT&MGP	Lead: MOS Key partner: SSWAHS CEWD	•	•	•	•	•
2.1 2.3	B.3.6 Circulate other resource materials across SSWAHS	Lead: MOS		•			
2.1 2.3	B.3.7 Investigate and develop outreach models in assessment and treatment	Lead: MOS					•
2.4 2.3	B.3.8 Develop and implement a bariatric surgery service in SSWAHS. <ul style="list-style-type: none"> • Conduct an equipment audit of sites chosen to conduct bariatric surgery; • Develop a detailed business case; • Develop policies and referral pathways; • Train staff in the care of bariatric surgical patients including medical and nursing; • Establish an evaluation and quality improvement process; and • Provide training to staff in specialised units (new and existing) in the maintenance of bariatric bands. Investigate opportunities to train other health providers e.g. Aboriginal Medical Services 	Lead: SSWAHS Gastroenterology and Liver Clinical Stream Key partners: General Managers Concord Repatriation General and Campbelltown hospitals	•	•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)					
			2008	2009	2010	2011	2012	
	The development of a bariatric surgical service will need to consider the implications of any related plan or initiatives that include directives about bariatric surgery that are released by the NSW Department of Health.							
B.4. Priority Populations								
2.1 2.2 2.3	B.4.1 Provide education and training to SSWAHS and NGO CALD staff from priority populations about exercise, diet and sedentary behaviours, prevention strategies, myths, and referral pathways	Lead: MOS Key partners: SSWAHS Multicultural Services Peak NGOs		.	.	.	.	.
2.1 2.3	B.4.2 Provide general practitioners with resources and education to enhance assessment and treatment of people from priority CALD populations. Include information about motivators	Lead: MOS Key partners: SSWAHS Multicultural Services Peak NGOs, DGP		.	.	.	.	.
2.1 2.3 2.2 5.1 2.5	B.4.3 Investigate opportunities to improve access to care and treatment for high risk CALD populations e.g. Pacific Communities	Lead: MOS Key partners: SSWAHS Multicultural Services Peak NGOs DGP			.	.	.	.
2.1 2.3 2.5	B.4.4 Work with the Aboriginal Medical Services and SSWAHS Aboriginal Health Services in development of outreach services and approaches to assess and manage overweight and obese Aboriginal children, adolescents and adults	Lead: MOS Key partners: SSWAHS Aboriginal Health Tharawal Aboriginal Medical Service Aboriginal Medical Service, Redfern	.	.	.	.	.	.
2.1 2.3 5.1 2.5	B.4.5 Support Aboriginal Medical Service initiatives in management of overweight and obese Aboriginal patients	Lead: Tharawal Aboriginal Medical Service Aboriginal Medical Service, Redfern Key partner: MOS	.	.	.	.	.	.
2.1 2.3 2.5	B.4.6 Provide education and training to SSWAHS Aboriginal health staff in identification, healthy weight strategies and referral processes to reduce weight in Aboriginal people	Lead: MOS Key partners: SSWAHS Aboriginal Health Tharawal Aboriginal Medical Service Aboriginal Medical Service, Redfern	.	.				
2.1 2.3 2.5	B.4.7 Establish outreach services (including clinics and groups) in areas with greater socioeconomic disadvantage. Consider populations located in Macquarie Fields, Miller, Waterloo, Punchbowl, and Yennora	Lead: MOS Key partners: SSWAHS Community Health Local councils DGP			.	.	.	.
2.3 2.5 4.1	B.4.8 Monitor and review access by socioeconomically disadvantaged communities to clinical services, and develop strategies to enhance access	Lead: MOS	.	.	.	.	.	.

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
2.1 2.3 2.5 2.6	B.4.9 Ensure that carers' needs are considered in assessment processes and case management	Lead: MOS Key partner: SSWAHS Carers Program				•	
2.3 2.2 2.1 2.5	B.4.10 In consultation with carers and relevant agencies, develop and provide resources and information about weight management strategies for children, adolescents and adults with chronic illness and disabilities	Lead: MOS Key partners: SSWAHS Carers Program Department of Ageing, Disability and Home Care (DADHC) NSW DET SSWAHS Rehabilitation Services/Community Health					•
2.3 2.2 2.1 2.5	B.4.11 Provide education and training to services and carers about healthy weight strategies for children and adults with disabilities. Include: Carers; key health services; and DADHC group home staff.	Lead: MOS Key partners: Community Health Local councils DGP					•
2.2	B.4.12 Develop a brochure targeted to women regarding overweight and obesity and conception and pregnancy to be distributed via general practitioners	Lead: SSWAHS Women's Health and Neonatology Services Key partners: SSWAHS Health Promotion DGP				•	
2.1 2.3	B.4.13 Ensure there is a clinical pathway for the management of pregnant women who are identified as being obese and who decide to give birth within SSWAHS	Lead: SSWAHS Women's Health and Neonatology Services Key partner: DGP	•				
2.2	B.4.14 Develop resources for women which can be used in the antenatal and perinatal period (for example in antenatal clinics). This may include for example audiovisual materials providing information such as dietary and exercise advice, cooking tips, and family meal preparation	Lead: MOS Key partner: SSWAHS Women's Health and Neonatology Services				•	•
2.2	B.4.15 Explore opportunities to develop postnatal groups for overweight and obese mothers to address issues around overweight and obesity	Lead: SSWAHS Community Health Key partner: SSWAHS Women's Health and Neonatology Services					•
2.3 2.5	B.4.16 Incorporate information about healthy weight and weight reduction strategies into groups focused on mental health patients	Lead: MOS Key partners: Mental Health NGOs SSWAHS Mental Health Services Mental health patients					•

PART C: Overarching Strategies

BROAD THEMES:

Create a safe and supportive culture and system for patients, staff and visitors

Development of partnerships

Knowledge and Research

And

Leadership, coordination and effective practice

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
Create a safe and supportive culture and system for patients staff and visitors							
2.1 2.2 2.3 2.5 3.3	C.1 Develop a marketing plan to promote the SSWAHS <i>Overweight and Obesity Prevention and Management Plan 2008 -2012</i> . Include: <ul style="list-style-type: none"> C.1.1 A strategy to launch the Plan and distribute across SSWAHS and to partners; C.1.2 The promotion of a single overweight and obesity message for SSWAHS staff, general practitioners and the community; C.1.3 Positive stories about overweight and obesity management in <i>Healthtalk</i>; and C.1.4 Development and implementation of strategies to address negative attitudes about children, adolescents and adults who are overweight and obese. 	Lead: SSWAHS Public Affairs and Marketing Key Partners: OOPMAC MOS SSWAHS Health Promotion	•				
2.1 2.3	C.2 Provide clinical supervision and support to staff providing services to children, adolescents and adults who are who are overweight and obese	Lead: MOS	•	•	•	•	•
2.3	C.3 Complete a mapping exercise of SSWAHS staff in relevant overweight and obesity service positions	Lead: OOPMAC		•			
2.1 2.2	C.4 Provide regular staff education on overweight and obesity, and develop resources to support this education e.g. program materials, simulation programs; and E-learning programs	Lead: MOS		•	•	•	•
2.1 2.3	C.5 Work with key educational positions in SSWAHS e.g. nurse educators to ensure that overweight and obesity is incorporated into all clinical education programs	Lead: MOS Key partner: SSWAHS CEWD		•	•	•	•
2.1 2.2	C.6 Liaise with feeder clinical schools regarding more comprehensive inclusion of overweight and obesity content in undergraduate degree courses	Lead: OOPMAC	•	•			
2.1 2.3	C.7 Provide medical, nursing and allied health students with opportunities to assess and treat obesity in specialist clinics	Lead: MOS Key partners: DGP SSWAHS clinical stream groups SSWAHS Division of Nursing and Midwifery SSWAHS Allied Health Services SSWAHS Community Health			•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
3.3	C.8 Consistent with the NSW Health guideline GL2005_070 <i>Occupational Health & Safety Issues Associated with Management of Bariatric (Severely Obese) Patients</i> , ensure that each hospital has appropriate patient furniture and building design that is suitable for the care of severely obese patients, and has policies regarding the clinical management of these patients	Lead: SSWAHS Corporate Services Key partners: SSWAHS OH & S committees SSWAHS General Managers SSWAHS Capital Works Unit SSWAHS Purchasing Services SSWAHS clinical services	•	•	•	•	•
3.1	C.9 Include physical activity and healthy food choices in occupational health and safety policies and workplace health policies	Lead: SSWAHS Corporate Services and MOS Key partners: OH & S Committees SSWAHS General Managers	•	•			
3.1	C.10 Provide opportunities for increased physical activity for staff travelling to and from work, such as incentives to encourage workers to use active transport modes - public transport, bicycles or walk. Support programs promoting Transport Access Guides (TAGs)	Lead: SSWAHS Health Promotion Key partner: SSWAHS General Managers	•	•	•	•	•
3.1	C.11 Provide opportunities for increased physical activity for staff through workplace design - shower and change facilities, bike rack, facilities at all sites, signs to encourage using the stairs, etc.	Lead: SSWAHS Capital Works Unit Key partners: SSWAHS Health Promotion SSWAHS General Managers	•	•	•	•	•
3.1 3.3	C.12 Increase opportunities and support provided to promote breastfeeding in the workplace and appropriate return to work initiatives/policies	Lead: SSWAHS Women's Health and Neonatology Services Key partners: SSWAHS General Managers SSWAHS Health Promotion SSWAHS Community Health	•	•	•	•	•
3.1	C.13 Implement NSW Health policy PD2007_081 <i>Healthier Food and Drink Choices for Staff and Visitors in NSW Health Facilities</i>	Lead: SSWAHS Food Services Key partner: SSWAHS General Managers SSWAHS Corporate Services	•	•	•	•	•
3.2	C.14 Encourage other public sector agencies and private and non-government sectors to provide supportive healthy eating and active living workplace environments and workplace policies to assist parents with healthy eating and active living in their families	Lead: SSWAHS Division of Population Health Key partners: Government agencies Private organisations		•	•	•	•
3.1	C.15 Consider programs aimed at increasing incidental physical activity and self management approaches, such as pedometer plus guidebook regulated programs – <i>Rockhampton 10,000 steps</i>	Lead: SSWAHS Health Promotion Key partner: SSWAHS General Managers	•	•	•	•	•
Work collaboratively with other organisations, services and the community							
2.2	C.16 Seek sponsorship and or support from clubs, pharmaceutical companies and other organisations for equipment e.g. BMI calculators,	Lead: MOS	•	•	•	•	•

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
	programs e.g. community activities, and services e.g. groups						
2.2 3.2	C.17 Work with divisions of general practice, local councils and sports centres in developing strategies in partnership	Lead: MOS Key partners: DGP Local councils Private service providers	•	•	•	•	•
6.1	C.18 Monitor the environment for new opportunities, including new funding initiatives, to develop partnerships with commercial and private service providers and/or develop new SSWAHS programs or services	Lead: OOPMAC and MOS	•	•	•	•	•
2.3 3.2	C.19 Work in partnership with councils and community organisations to increase the number of community-based support programs for management of overweight adults and families, which are culturally appropriate for overweight adults and families	Lead: MOS Key partners: Local Councils NGOs			•	•	•
2.3	C.20 Consider access and transport implications for overweight and obese patients. Make recommendations, e.g. larger buses, to the SSWAHS Transport for Health Plan Implementation Group and SSWAHS Capital Works Unit	Lead: MOS Key partners: SSWAHS Capital Works Unit SSWAHS Corporate Services	•				
2.2 2.3	C.21 Work with local private and NGO weight management groups and gymasiums to develop specialised programs and other commercial services	Lead: MOS Key partners: NGOs Private providers		•	•	•	•
Contribute to knowledge & evidence about effective identification, management & treatment of overweight & obesity							
4.1	C.22 Further develop the evaluation framework to assess the effectiveness of this Plan. Factors that need to be considered: model of care; leadership; service delivery; program effectiveness; and degree of compliance with NHMRC guidelines	Lead: OOPMAC	•	•	•	•	•
4.1	C.23 Encourage staff to participate in and publish results of research and clinical trials which increase knowledge and improve clinical management of children, adolescents and adults who are overweight and obese	Lead: MOS	•	•	•	•	•
Develop sustainable overweight leadership, coordination and support effective practice							
6.1 2.1 2.3	C.24 Establish a management/advisory group to oversee implementation of the Plan.	Lead: MOS/SSWAHS Health Promotion Key partners: SSWAHS Clinical Groups SSWAHS Allied Health Service SSWAHS Community Health	•				

Obj	Strategies/Actions	Responsibility and Key Partners	Timeframe (year)				
			2008	2009	2010	2011	2012
2.1 2.3	C.25 Develop a web-based support service e.g. list server/single email address which is able to respond to and provide specialised clinical advice to local clinicians about obesity and overweight management issues	Lead: MOS Key partner: SSWAHS ISD				•	•
2.1 2.3	C.26 Identify an area-wide minimum data set (MDS) for use with overweight and obese patients	Lead: MOS Key partner: SSWAHS ISD	•				
2.1 2.3	C.27 Establish an area-wide data base/module which builds on the electronic medical record	Lead: MOS Key partner: SSWAHS ISD	•				
2.1 2.3	C.28 Investigate opportunities to link with General Practitioner patient management data bases e.g. Cardiab	Lead: MOS Key partners: SSWAHS ISD DGP				•	•
2.1 2.3	C.29 Establish an Obesity Interest Group Network to provide education and support to clinicians interested in obesity management	Lead: MOS Key partners: SSWAHS Community Health DGP SSWAHS Allied Health Service SSWAHS clinical groups		•			

11. APPENDICES

Appendix A: List of Steering Committee and Working Party Members

Overweight and Obesity Prevention and Management Plan Steering Committee Members

Dr Greg Stewart (Chair)	Director Population Health, Planning and Performance, SSWAHS (Chair from October 2006 - September 2007)
Peter Sainsbury (Chair)	Director Population Health, SSWAHS (Chair as of September 2007)
Professor Ian Caterson	Boden Professor of Human Nutrition and Director of the Institute of Obesity, Nutrition and Exercise, University of Sydney
A/Professor Kate Steinbeck	Endocrinology and Adolescent Medicine, Director Youth Consultancy, RPAH
Dr Helen Woodhead	Staff Specialist, Endocrinology, Campbelltown Hospital
Professor Steve Colagiuri	SSWAHS Professor of Metabolic Health
A/Professor Jeff Flack	Conjoint Associate Professor University NSW, Director, Diabetes Centre, Bankstown-Lidcombe Hospital
Ms Beatrice Brown	Consumer Representative
Ms Leslie King	Executive Officer, NSW Centre for Overweight and Obesity, University of Sydney
Dr Garth Alperstein	Community Paediatrician, RPAH
Dr Diana O'Brien	General Practitioner, Central Sydney Division of General Practice
Ms Amanda Larkin	General Manager, Campbelltown and Camden hospitals
Mr Rene Pennock	Chief Executive Officer, Macarthur Division of General Practice
Dr Chris Rissel	Director Health Promotion Service, SSWAHS
Ms Myna Hua	Senior Health Promotion Officer, Health Promotion Service, SSWAHS
Ms Lesley Miller	Professional Director Nutrition and Dietetics, SSWAHS – South West, Bankstown-Lidcombe Hospital
Ms Michelle Daley	Senior Health Promotion Officer, Health Promotion Service, SSWAHS
Ms Vicki Wade	Director Aboriginal Health, SSWAHS
Ms Wei Jiang	Multicultural Health Promotion Officer, Community Health Services, SSWAHS
Ms Erika Lehner	Manager of Child and Family Nursing Team, Narellan Community Health Centre
Ms Julie Marks	Nursing Unit Manager, Maternity Unit, Bowral and District Hospital
Ms Gay Horsburgh	Senior Planner, Health Services Planning, SSWAHS
Ms Anita Calderan	Senior Planner, Health Services Planning, SSWAHS

Child Overweight and Obesity Prevention Working Party Members

Dr Chris Rissel (Co-chair)	Director, Health Promotion Service, SSWAHS
Ms Michelle Daley (Co-chair)	Senior Health Promotion Officer, Health Promotion Service, SSWAHS
Ms Myna Hua	Senior Health Promotion Officer, Health Promotion Service, SSWAHS
Dr Garth Alperstein	Community Paediatrician, Community Health, SSWAHS
Ms Wei Jiang	Multicultural Health Promotion Officer, Community Health, SSWAHS
Ms Marie Tritsarlis	Public Affairs Officer, Public Affairs and Marketing, SSWAHS
Ms Melinda Morrison	Paediatric Dietitian and Diabetes Educator, Diabetes Australia (NSW)
Mr Darren Neagle	Senior Curriculum Advisor K-6 PDHPE, NSW Department of Education
Ms Brenda Gillard	Clinical Nurse Consultant, Early Childhood Health Services, SSWAHS
Ms Gay Horsburgh	Senior Planner, Health Services Planning, SSWAHS
Ms Anita Calderan	Senior Planner, Health Services Planning, SSWAHS
Mr Sayed Chowdhury	Policy Analyst, Strategy and Policy Unit, Bankstown City Council
Ms Deb Banovic	Community Nutritionist, SSWAHS

Child Overweight and Obesity Treatment and Management Working Party Members

A/Professor Kate Steinbeck (Co-Chair)	Endocrinology and Adolescent Medicine, Director Youth Consultancy, RPAH
Dr Helen Woodhead (Co-Chair)	Staff Specialist, Endocrinology, Campbelltown Hospital
Dr Arthur Jarrett	Paediatrician, Liverpool Hospital
Mr Brendon Kelaher	Deputy Director, Aboriginal Health, SSWAHS
Mr Gerard Faure Brac	Sports Psychologist, Infant, Child and Adolescent Mental Health
Ms Beatrice Brown	Consumer Representative
Ms Margaret Langman	Nursing Unit Manager, Paediatric Ambulatory Care, Campbelltown Hospital
Ms Judith Pryke	Dietitian, Campbelltown Hospital
Ms Kalliope Conomos	Early Childhood Nutritionist, Community Health, SSWAHS
Ms Anne McKenzie	Acting Clinical Nurse Consultant, Early Childhood Health Services, Community Health, Eastern Sector, SSWAHS
Dr Phillip Emdar	Head Department Paediatrics, Bankstown-Lidcombe Hospital
Ms Wei Jiang	Multicultural Health Promotion Officer, Community Health Services, SSWAHS
Ms Hilda Coombe	Administrative Officer, Tharawal Aboriginal Medical Service
Professor Janice Russell	Psychiatrist, Mental Health Services, SSWAHS
Ms Michelle Daley	Senior Health Promotion Officer, Health Promotion Service, SSWAHS
Ms Gay Horsburgh	Senior Planner, Health Services Planning Unit, SSWAHS
Ms Anita Calderan	Senior Planner, Health Services Planning Unit, SSWAHS

Adult Overweight and Obesity Treatment and Management Working Party members

Professor Ian Caterson (Chair)	Boden Professor of Human Nutrition and Director of the Institute of Obesity, Nutrition and Exercise, University of Sydney
Professor Stephen Colagiuri	SSWAHS Professor of Metabolic Health
A/Professor Jeff Flack	Conjoint Associate Professor UNSW; Director, Diabetes Centre, Bankstown-Lidcombe Hospital
Dr Barbara Depczynski	Staff Specialist, Diabetes and Endocrine Service, Liverpool Hospital
Professor David Sullivan	Specialist Biochemistry/Lipids, RPAH
Professor Maria Fiatarone-Singh	John Sutton Chair of Exercise and Sport Science, Discipline of Exercise, Health and Performance, Faculty of Health Sciences; Professor of Medicine, Faculty of Medicine, University of Sydney
Professor Craig Anderson	Director, Neurological & Mental Health Division Professor of Stroke Medicine and Clinical Neuroscience The George Institute for International Health
Dr Warwick Ruscoe	Chief Executive Officer, Southern Highlands Division of General Practice
Ms Julie Bligh	Nurse Practitioner, Diabetes Educator, Liverpool Hospital
Ms Janet Franklin	Dietitian, Metabolic and Obesity Service, RPAH
Ms Christy Bruce	Senior Cardiac Rehabilitation Physiotherapist, Liverpool Hospital
Ms Diane Jacobs	Clinical Nurse Consultant (CNC), Cardiac Rehabilitation, Bowral and District Hospital
Mr George Long	Deputy Director, Aboriginal Health, SSWAHS
Ms Wei Jiang	Multicultural Health Promotion Officer, Community Health, SSWAHS
Professor Craig Anderson	Director, Neurological & Mental Health Division, RPAH; Professor of Stroke Medicine and Clinical Neuroscience, The George Institute for International Health
Ms Kris Revson	Principal Clinical Psychologist, SSWAHS Area Director Psychology
Ms Rhonda Anderson	Head of Department, Nutrition and Dietetics, Concord Repatriation General Hospital
Ms Elisia Mason	Manager/Clinical Nurse Consultant, Metabolism and Obesity Services, RPAH
Ms Suzie Perak	Senior Social Worker in Cardiology, Liverpool Hospital
Ms Michelle Nolan	Nutrition Program Manager/ Senior Health Promotion Officer Health, Promotion Service, SSWAHS
Ms Janelle Borg	Nutrition Program Manager/ Senior Health Promotion Officer, Health Promotion Service, SSWAHS
Ms Gay Horsburgh	Senior Planner, Health Services Planning Unit, SSWAHS
Ms Anita Calderan	Senior Planner, Health Services Planning Unit, SSWAHS

Terms of Reference for the Sydney South West Area Health Service Obesity Prevention and Management Plan Steering Committee

A Steering Committee is being established to assist in the development of the Sydney South West Area Health Service Obesity Prevention and Management Plan, with an emphasis on childhood obesity prevention. This Committee will consist of representatives from Sydney South West Area Health Service (SSWAHS) clinical groups, the SSWAHS Health Promotion Service, research facilities, general practitioners and consumers.

1.1 Purpose of the Committee

The Steering Committee will:

1. Oversee the development of an Obesity Prevention and Management Plan for SSWAHS, with a focus on childhood obesity prevention;
2. Provide professional support to assist in the planning phase of the Plan;
3. Ensure the Plan addresses all relevant aspects of national and state policies, plans and programs;
4. Identify health priorities and strategies within the local community;
5. Consult with the broader community, and establish working parties as required; and
6. Recommend structures to support implementation, monitoring, and evaluation.

Process to develop the Plan

The development of the Obesity Prevention and Management Plan will include the following stages:

1. Establishment of working groups and Steering Committee;
2. Confirmation of key focus and scope of the Plan, identification of priority areas and clarification of NSW Health directions and actions;
3. Mapping of existing SSWAHS obesity prevention initiatives and clinical services;
4. Initial consultation workshops and meetings with key stakeholders about current issues, determinants and priorities for action;
5. Identification of potential strategies and partners, preferred models and resource opportunities;
6. Evidence-based review of identified strategies;
7. Development of a draft plan for broader consultation and review; and
8. Development of a final Plan for consideration by Area Executive

Ancillary Meetings and Working Parties

It is anticipated that the Steering Committee will draw on the expertise of senior clinicians, key staff and experts to ensure that the Plan is informed by state, national and international developments and focuses on current best practice. Structurally this will occur through issue-focused meetings and through the establishment of working parties, which will report back to the Obesity Prevention and Management Plan Steering Committee. At a minimum, it is expected that these formal arrangements will be required to assist with planning in the areas of health promotion and prevention strategies, treatment of children who are overweight and obese, and clinical management of obese adults.

1.2 Reporting

The Committee will report to the Chief Executive, SSWAHS.

Once completed, the draft Plan will be considered by the

- SSWAHS Clinical Council and the
- SSWAHS Area Health Advisory Council.

1.3. Representation

Membership of the Committee is listed in Attachment 1.

1.4. Meetings

The organisation of the Committee will be as follows:

- Meetings will occur every two months;
- Minutes will be distributed to members within 14 days of Committee meetings;
- Agendas will be set by the Chairperson and distributed one week before the next meeting. Items will be accepted from members up to 3 days prior to meetings;
- Duration of meetings no longer than 90 minutes;
- Sub committees and working parties will formed by the Steering Committee; and
- Extra ordinary meetings will be convened as necessary.

1.5 Office bearers

The Chairperson will be the Director of Population Health, Planning and Performance.

1.6 Timeframe

A plan will be prepared by the second half of 2007. Once the plan has been finalised an implementation committee will be established.

Appendix B: Key Reference Documents

National Documents

Healthy Weight 2008: Australia's Future. The national action agenda for children and young people and their families (2003)

This National Action Agenda, released in 2003, recommends actions across a range of settings such as child care, schools, primary care, maternal and infant health care, neighbourhoods, workplaces, food supply, family and community services, media and marketing. The focus is on children and young people.

Healthy Weight for adults and older Australians: A National Agenda to address overweight and obesity in adults and older Australians 2006 - 2010 (2006)

This National Agenda, released in 2006, focuses on adults and provides opportunities for the health sector, food industry, local government and communities to prevent weight gain in the first instance and to help people manage their weight better. The action agenda targets five population groups: whole adult population, older people, people living in rural and remote locations, Aboriginal and Torres Strait Islander peoples, and people with established risk for weight-related chronic conditions.

National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan 2000 - 2010 (NATSINSAP) (2000)

NATSINSAP provides a framework for action to improve Aboriginal and Torres Strait Islander health and wellbeing through better nutrition and was developed concurrently with the national strategic framework, *Eat Well Australia*. NATSINSAP highlights seven key areas for action including: food supply in remote and rural communities; food security and socioeconomic status; family focused nutrition promotion: resourcing programs, disseminating and communicating 'good practice'; nutrition issues in urban areas; the environment and household infrastructure; Aboriginal and Torres Strait Islander nutrition workforce; and national food and nutrition information systems.

Physical Activity Guidelines for Australians, Commonwealth Department of Health and Aged Care, 1999

The guidelines aim to: offer guidance and options for physical activity which are both achievable and sustainable across all age, gender, socio-economic and occupational groups; include the needs of target groups of the obesity strategy of the NHMRC report on *Acting on Australia's Weight*, that is, men aged 25 - 40 years; women of post menopausal age; children and Indigenous peoples; serve a similar purpose to the Dietary Guidelines for Australians (NHMRC, 1991); and complement the activities of the Active Australia initiative of the Australian Sports Commission and Department of Health and Aged Care.

NHMRC Clinical Practice Guidelines for the Management of Overweight and Obesity in Adults (2003)

This document provides clinical practice guidelines for managing overweight and obese adults. The guidelines are evidence-based and management practices are multifaceted, for example they encompass physical activity, diet and self-esteem. They also highlight health concerns with overweight and obesity and aim to improve outcomes for people with cardiovascular disease, some cancers and diabetes.

NHMRC Clinical Practice Guidelines for the Management of Overweight and Obesity in Children and Adolescents (2003)

These guidelines for children and adolescents were developed following a comprehensive assessment of current evidence. They provide detailed evidence-based guidance for the assessment and management of overweight and obesity in Australia. They were published separately from the adult guidelines as it was recognised that the health and psychosocial factors pertaining to the management of overweight and obesity in children and adolescents are very different. The guidelines emphasise the importance of appropriate clinical practice and highlight important health concerns associated with overweight and obesity in childhood and adolescence, as well as the associated future health risks.

While the guidelines focus primarily on the majority population in Australia, there is recognition that the problem of overweight and obesity among specific groups, and Aboriginal and Torres Strait Islander children and adolescents, has distinctive characteristics that are not well understood and require further examination.

NSW Documents

NSW State Plan. A New Direction for NSW (2006)

This ten year plan outlines the goals in five areas of activity for the NSW Government: Rights Respect and Responsibility; Delivering Better Services; Fairness and Opportunity; Growing Prosperity Across NSW; and Environment for Living. Childhood obesity is recognised as an area that requires intervention and the following targets have been set: stop the growth in childhood obesity by holding the 2004 level of 25 per cent to 2010; and then the reduce level to 22 per cent by 2016.

NSW State Health. Plan A New Direction for NSW Towards 2010 (2007)

The State Health Plan reflects the health priorities in the NSW Government's State Plan and contains a number of strategies to be implemented by NSW Health to address both childhood and adult obesity. These strategies include social marketing campaigns, increasing the access of disadvantaged populations to fruits and vegetables at reasonable cost and school based interventions. In addition to reiterating the state childhood obesity targets stated in the NSW State Plan, this Plan also provides a target for adult obesity; prevent an increase in the level of adult obesity above 50%.

Future Directions for Health in NSW – Toward 2025. Fit for the Future (2007)

This document outlines seven future directions for the NSW health system over the next twenty years. Key areas for action in NSW are identified. "Make prevention everybody's business" is the first future direction.

Healthy People NSW. Improving the health of the population (2007)

This document provides a guide for population health action in NSW that complements existing population health activities in NSW including *Healthy People 2005* and identifies key issues to be addressed including the increasing prevalence of chronic conditions and infectious diseases.

Eat Well NSW. Strategic Directions in Public Health Nutrition NSW 2003 - 2007 (2004)

This document provides a statement of health sector priorities for public health nutrition in NSW, including the promotion of healthy weight. These priorities were selected in consideration of the national document *Eat Well Australia*. The purpose of *Eat Well NSW* is to guide measurable population food and nutrition improvements.

The NSW Government Action Plan for the Prevention of Obesity in Children and Young People 2003-7 (2003)

This Action Plan contains 34 individual actions that the NSW Government will be implementing to address the prevention of obesity in children and young people and outlines why these areas were chosen as priorities for action, how action in each area will make a difference, and what the desired outcomes will be.

Report on the Weight Status of NSW 2003

This report on the weight status of the NSW population has been produced as part of the support material required to address the priority issues identified in *Eat Well NSW*. It includes information to indicate the size of the problem, its health, social and economic consequences, as well what is known about factors that contribute to the problem, and current services and programs that address the problem within NSW. It also provides potential action areas to address the issue.

NSW Schools Physical Activity and Nutrition Survey (SPANS) 2004; findings

This survey was conducted in 2004 to determine the prevalence of overweight and obesity in children and young people (years K-10) in NSW, as well as fitness, physical activity, sedentary behaviours, food habits, and risk factors for chronic disease. Some of the findings included: 26% of boys and 24% of girls in NSW aged 5-16 years were overweight or obese, compared with 11% of all young people

aged 7-16 years in 1985; and that although there has been a recent increase in the proportion of children who fulfil the exercise requirements of moderate to vigorous physical activity according to the *Australian Physical Activity recommendations for children and young people*, the level of sedentary behaviour for children is still high. (Centre for Overweight and Obesity 2006).

Best Options for Promoting Healthy Weight and Preventing Weight Gain in NSW (2005)

This report complements the *Report on the Weight Status of NSW 2003* and applies a structured planning framework to identify potential interventions to promote healthy weight and prevent weight gain. It synthesises findings from published studies of evidence on the effectiveness of different interventions and proposes the adoption of multifaceted interventions at a local level.

A literature review of the evidence for interventions to address overweight and obesity in adults and older Australians (2005)

This literature review was commissioned by the Australian Government Department of Health and Ageing on behalf of the National Obesity Taskforce and undertaken by the NSW Centre for Overweight and Obesity. It is policy oriented and is intended to guide the development of a framework of actions for addressing overweight and obesity. It is not a comprehensive systematic review.

Sydney South West Area Health Service Documents

A New Direction for Sydney South West Health Service Strategic Plan - Towards 2010 (2007)

The Sydney South West Area Health Service Strategic Plan is the highest level plan for SSWAHS and provides strategic direction for all the activities of SSWAHS over the period 2006 to 2010. It outlines the vision, values and objectives of SSWAHS and will guide further corporate and health service planning and reporting across all levels of the organisation. The Plan also reflects the priorities identified for Health in the NSW Government State Plan and the State Health Plan.

SSWAHS Area Healthcare Services Plan 2006 - 2016 (Draft)

This document establishes the strategic direction for SSWAHS for the next five years. It contains projections to 2016 and more broadly to 2021 and aims to better inform strategic service direction and development.

Sydney South West Area Health Service Health Promotion, Strategic Plan 2006 - 2011

This Plan presents strategic directions for the Health Promotion Service, for the period 2006 - 2011. It identifies the main prevention priorities and directions within the context of the SSWAHS, and the social and political environment of Sydney South West.

Appendix C: Overweight and Obesity Levels and Physical Activity by Local Divisions of General Practice 2002 - 2004

Across SSWAHS there are varying levels of overweight and obesity amongst local populations. According to the NSW Chief Health Officer's report (2006) in the period 2002 to 2004, the reported percentage of residents aged 16 years and over who were overweight and obese in the Macarthur, Liverpool and Bankstown divisions of general practice (in the urban south west of SSWAHS), was 55.9%, 53.7% and 51.4% respectively. These percentages were above the NSW state average of 47.3%⁹⁸. In the Canterbury and Fairfield divisions of general practice the reported percentage of overweight and obesity among residents was below the state average, 42.8% and 46% respectively. Residents of the Central Sydney Division of General Practice (in the inner west) reported significantly lower proportions of overweight and obesity while residents of the Southern Highlands Division of General Practice (on the rural fringe) reported proportions consistent with the NSW state level.

The NSW Chief Health Officer's report (2006) indicates that levels of participation in physical activity (2002 to 2004) are also not uniform among local populations within SSWAHS, with significantly lower levels of participation reported by residents of the Bankstown and Fairfield divisions of general practice and significantly higher than average levels of physical activity reported by residents of the Central Sydney Division. See Table 2⁹⁹.

Table 2: Adequate physical activity by urban and rural divisions of general practice, persons aged 16 years and over, 2002 to 2004 combined

Division of General Practice	Per cent
Central Sydney	54.9
Canterbury	50.4
Bankstown	39.7
Liverpool	46.6
Fairfield	33.1
Macarthur	47.8
Southern Highlands	48.7
NSW	48.1

Source: Report of the NSW Chief Health Officer (2006)

Appendix D: Local Health Promotion Projects

BRIEF DESCRIPTION OF PROJECT/INITIATIVE (May have focus on either/both Physical Activity/Nutrition)	Lead Agency	Target group/s	Setting	Timeframe
SSWAHS Health Promotion				
Healthy Beginnings Research Project: Home visiting intervention with first time mothers in south-western Sydney. Includes nutrition (breastfeeding, introduction to solids, family meals) and physical activity (active play, family physical activity and reducing sedentariness) components	SSWAHS Health Promotion Service	First time mothers and children aged 0 -2, from socio-economically disadvantaged backgrounds	Home/ family	Planning: 2006 Implementation and evaluation 2007 - 2010
Ngalawa Barawal Aboriginal Health Project : Pilot project with an Out of School Hours Care (OOSHC) Service in inner Sydney (Glebe) with Aboriginal children: Culturally appropriate food security/nutrition focus, with selected physical activity components	SSWAHS Health Promotion Service	Aboriginal children and their families; OOSHC service staff	Out of School Hours Care Service	Planning 2006 Implementation and evaluation 2007 - 2009
Community Kitchen with Tharawal Aboriginal Medical Service. Working with Tharawal to set up a Community Kitchen to promote healthy eating, good nutrition and culturally appropriate meals	Tharawal Aboriginal Medical Service	Aboriginal families/ community members	Tharawal Aboriginal Medical Service, Airds	2008 - Ongoing
Aboriginal Community Garden. Working with Tharawal Men’s Group and TAFE to establish a community garden in Airds, to promote physical activity and increased access to fresh fruit and vegetables	SSWAHS Health Promotion & Tharawal Aboriginal Medical Service	Aboriginal families/ community members	Tharawal Aboriginal Medical Service, Airds	2008 - 2009
Aboriginal Physical Activity Projects Current partnership projects include a walking group in the Macarthur area, a Line Dancing group in Redfern, the Koori Women’s Olympics in Bankstown and an aqua fitness program (<i>Move with Friends</i>) for Aboriginal women in the inner west. Although most participants are adults, these projects are an opportunity for parents/carers to engage in regular physical activity and role model active living to other family members, including children.	Aboriginal Medical Service Redfern (Line Dancing) Tharawal Aboriginal Medical Service (Walking group) SSWAHS Health Promotion	Aboriginal community members, especially women	Community	Ongoing

BRIEF DESCRIPTION OF PROJECT/INITIATIVE (May have focus on either/both Physical Activity/Nutrition)	Lead Agency	Target group/s	Setting	Timeframe
SSWAHS Health Promotion				
Aboriginal Physical Activity and Nutrition Promotion Various initiatives, including development and provision of culturally relevant information and healthy food at key community events and during NAIDOC, Diabetes and Nutrition weeks; education and awareness raising through Aboriginal media, and working in partnership with Aboriginal agencies to promote physical activity and healthy eating	SSWAHS Health Promotion Service	Aboriginal families/ community members	Community	Ongoing
Breastfeeding Promotion Project Development and implementation of SSWAHS Breastfeeding Policy Implementation Plan 2006 - 2008 in line with mandatory NSW Breastfeeding Policy. Health Promotion has specific focus on strategies that support SSWAHS employees to combine breastfeeding and work and the provision of support and education for mothers who are at risk of lower breastfeeding rates	SSWAHS Health Promotion Service (with SSWAHS Breastfeeding Policy Implementation Steering Committee)	Employees, visitors and patients of SSWAHS (particularly pregnant and lactating women)	SSWAHS	Implementation and evaluation of NSW Policy 2006 - 2008
Cycling Promotion Develop, support, and implement policies and infrastructure to encourage cycling Increase cycling skills through courses and community rides to increase cycling frequency/behaviour Reorient health and other professionals to support cycling and promote cycling through research and advocacy	SSWAHS Health Promotion Service	Not specific	Primary School and Community	2002 - Ongoing
Fairfield Partnership Project A partnership project with Fairfield Council and SSWAHS Community Health that aims to increase the number of physical activity programs and opportunities for residents in the Fairfield LGA (including children and families). The partnership funds a dedicated 0.6 full time equivalent position to work on physical activity and tobacco control strategies.	Fairfield Council and SSWAHS (Health Promotion/ Community Health)	Residents of Fairfield LGA	Community	2007 - Ongoing
Central Sydney Walk to School Research Project Intervention with 12 schools to increase walking to school for year 5 and 6 students and their parents who walk to school then to work by active travel. 12 'Control group' schools involved in healthy lunch intervention	SSWAHS Health Promotion Service	Year 5 and 6 students and their parents School community	24 Primary Schools in the Central Sydney area	October 2004 - June 2008

BRIEF DESCRIPTION OF PROJECT/INITIATIVE (May have focus on either/both Physical Activity/Nutrition)	Lead Agency	Target group/s	Setting	Timeframe
SSWAHS Health Promotion				
<p>Running on Empty Food Security Project Building community capacity and strategic partnerships to address food insecurity</p> <p>Running on Empty - Rosemeadow/Ambarvale Partnership projects include: Weekly community kitchen; community breakfast for families with donated food; community kitchen; development of a community plan; and work with local primary and secondary schools on healthy food initiatives</p> <p>Running on Empty - Warwick Farm Projects include: Community garden with residents and Liverpool City Council; food market with the Salvation Army; food market for local residents to access basic food needs at affordable prices; food market volunteer program for young people; work with primary schools; Warwick Farm Primary School community school garden; quarterly newsletter published and mailed out to 2000 homes in Warwick Farm.</p> <p>Running on Empty - Villawood Projects include: A community café; a volunteer training program that has included food safety handling and mental health first aid; Villawood Food Action Group; Villawood community garden for Housing Department flat-dwellers to grow produce, supply café and provide a venue for community events; work with local schools; and work with the NSW Refugee Health Service in Fairfield on a nutrition program.</p>	<p>SSWAHS Health Promotion Service SSWAHS Health Promotion Service</p>	<p>Community members and organisations in areas of greater socioeconomic disadvantage have been shown to experience severe food insecurity</p>	<p>Community</p> <p>Community</p> <p>Community</p>	<p>2002 - Ongoing</p> <p>2002 - Ongoing</p> <p>2002 - Ongoing</p>
<p>Physical Activity Promotion in long daycare settings: a pilot study Needs Assessment to identify best support for long day care centres to increase child physical activity levels and reduce sedentary behaviour. To test the validity of a parent proxy record of child physical activity and to explore family and environmental factors that influence patterns of sedentariness and physical activity in children aged 2-5 years.</p>	<p>SSWAHS Health Promotion Service</p>	<p>2-5 year olds, parents and long day care workers</p>	<p>Long day care centres</p>	<p>2006 - 2008</p>

BRIEF DESCRIPTION OF PROJECT/INITIATIVE (May have focus on either/both Physical Activity/Nutrition)	Lead Agency	Target group/s	Setting	Timeframe
SSWAHS Health Promotion				
<p>Active Travel: Travel Access Guides The project is to increase awareness, access and use of a range of active travel modes to and from SSWAHS hospital sites. Travel access guides (TAGs) have been developed for most hospital facilities across SSWAHS as well as a specific Aboriginal TAG linking key Aboriginal services in inner western Sydney.</p>	SSWAHS Health Promotion Service	SSWAHS Staff and visitors (adult and child focus) Aboriginal community members	Health facilities in SSWAHS	November 2002 – 2008
<p>Live Life Well @ School Program This is a joint initiative between DET and Health which aims to assist DET primary schools to develop quality nutrition and physical education programs, by working together in a series of professional development workshops and developing and implementing a plan of action for sustainable change, based on the Health Promoting Schools model. SSWAHS intends to support DET primary schools using a modified approach from the successful <i>Buddy Program</i> previously implemented with primary schools in south west Sydney.</p>	NSW DET & SSWAHS Health Promotion	Primary school communities	DET primary schools	2008 - 2011
<p>Munch and Move Project Munch and Move is a state-wide project that aims to influence systems and build capacity within the early childhood sector to encourage healthy eating, increased physical activity and decreased small screen recreation in 3-5 year old children attending pre-school and long day care.</p>	NSW Prevention Research Centres and SSWAHS Health Promotion	Early childhood sector-workers and parents/carers of 3-5 year olds	Early childhood sector	2008 - 2011

BRIEF DESCRIPTION OF PROJECT/INITIATIVE (May have focus on either/both Physical Activity/Nutrition)	Lead Agency	Target group/s	Setting	Timeframe
SSWAHS Community Nutrition				
<p>Nutrition in child care settings Nutrition focused intervention to improve provision of food and nutrition in long day care settings. Strategies included menu and policy development, cook's networks and staff training (see next).</p> <p>LDCC workshops: Training sessions on healthy eating for children and appropriate menu planning for LDCC</p>	SSWAHS Community Nutritionists	Staff, (e.g. directors, cooks, assistants) parents and children (0 - 5 year olds) attending long day care centres	Long Day Care Centres	2006 – ongoing (maintenance strategies in place)
<p>Childcare nutrition: parent education Information sessions on healthy eating to parents of children attending childcare.</p>	SSWAHS, Inner West Community Nutrition	Parents	Childcare	When requested (~12/year)
<p>Supporting Healthy School Canteens: Supporting local schools to implement and maintain the <i>NSW Fresh Tastes @ School Healthy School Canteen Strategy</i>. Includes a canteen workshop for primary and secondary schools once a year, case studies in the <i>Cool Schools</i> newsletter, District SRC meetings and individual school liaison/visits (on request).</p>	SSWAHS Community Nutrition Team, Inner West SSWAHS Health Promotion Service (South West)	School canteen staff School community	SSWAHS primary and secondary schools	2005 – ongoing
<p>Healthy Families – an action research project to develop a culturally relevant, community-based program for the prevention and early intervention of childhood obesity among families of 3 - 6 year olds in South West Sydney.</p>	Punchbowl and Lakemba School as Communities	Arabic and Pacific Community families 3 - 6 year olds	Associated schools, preschools and supported playgroups	Planning 2006/7 Implementation and evaluation 2007-2008
<p>YHUNGER Youth Nutrition Kit and training For youth workers to promote healthy eating to young people in supported accommodation services Annual YHUNGER workshop to recommence 2007 for local youth workers. Investigating other dissemination strategies (2007) for young people to also access YHUNGER resources</p>	SSWAHS Community Nutrition and Youth Block Health Service	Youth Workers and homeless youth in care.	Supported Accommodation (SAAP) services	Kit (manual and cookbook) completed in 2003. Evaluation 2006 Workshop to recommence 2007
<p>Weight Management Focus: Early Childhood Health Centre (ECHC) nutrition clinics: Nutrition counseling provided to ECHCs once/week for parents attending ECHCs in the Inner West. Appointments made with referral from early childhood nurses, paediatrician or other allied health professionals</p>	SSWAHS Inner West-Community Nutrition	Parents of 0 - 5 year olds	Early childhood centres	Weekly

BRIEF DESCRIPTION OF PROJECT/INITIATIVE (May have focus on either/both Physical Activity/Nutrition)	Lead Agency	Target group/s	Setting	Timeframe
SSWAHS Early Childhood Health Services				
Six monthly breast feeding snap shot Measures: predominant / exclusive rates of breastfeeding	SSWAHS- Early Childhood Health Service (ECHS) Central	Universal	Home/ Centre	Ongoing
Development of a clinical indicator regarding introduction of solids Investigating when and why solids are started	SSWAHS- ECHS Central	Universal	Home/ Centre	Ongoing
SSWAHS Multicultural Health				
Multicultural Home Visiting Program: bilingual staff visiting mothers at home to provide information in community language on parenting (including breastfeeding and nutrition) and to help mothers develop parenting skills.	SSWAHS Multicultural Health – South West	Arabic, Chinese, Khmer, Lao and Vietnamese speaking mothers of children 0 - 3 years of age	Home/ Family	Started in 2004 - Ongoing

12. ABBREVIATIONS

AHS	Area health service
BEACH	Bettering the Evaluation And Care of Health
BMI	Body mass index
CEWD	Centre for Education and Workforce Development
COO	Centre for Overweight and Obesity
CPD	Continuous professional development
CALD	Culturally and linguistically diverse
DADHC	Department of Ageing, Disability and Home Care
DET	Department of Education and Training
DoCS	Department of Community Services
DGP	Divisions of general practice
ECHC	Early childhood health centre
ECTARC	Early Childhood Training and Resource Centre
EMR	Electronic medical record
GP	General Practitioner
ISD	Information Systems Division
LDCC	Long day care centre
LGA	Local government area
MOS	Metabolism and Obesity Service (Royal Prince Alfred Hospital)
M	Million
NATSINSAP	National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan 2000 - 2010 (2000)
NHMRC	National Health and Medical Research Council
NGO	Non government organisation
OOS	Occasion of service
OH & S	Occupational health and safety
OECD	Organisation for Economic Co-Operation and Development
OOSHC	Out of school hours care
OOPMAC	Overweight and Obesity Prevention and Management/Advisory Committee
PDHPE	Personal Development, Health and Physical Education
PCAL	Premier's Council for Active Living
RPAH	Royal Prince Alfred Hospital
SPAN	Schools Physical Activity and Nutrition Survey
SEIFA	Socio-Economic Indexes for Areas
SSWAHS	Sydney South West Area Health Service
TAGs	Travel access guides
WHO	World Health Organization

13. GLOSSARY

Body mass index (BMI)	Body Mass Index (BMI) is an index of weight-for-height that is commonly used to classify underweight, overweight and obesity in adults. It is defined as the weight in kilograms divided by the square of the height in metres (kg/m ²). For both men and women, underweight is a BMI below 18.5, normal range is a BMI from 18.5 to 24.99, and overweight is a BMI between 25 to 29.99. Obese is a BMI greater than 30 however there are three classes: Obese class I (BMI 30 – 34.99); Obese class II (BMI 35 – 39.99); and Obese class III (BMI greater than or equal to 40) ¹⁰⁰ .
Bariatric surgery	<p>Bariatric surgical procedures reduce caloric intake by changing the anatomy of the gastrointestinal tract. Operations are classified as either malabsorptive or restrictive. Restrictive procedures limit intake by creating a small gastric reservoir with a narrow outlet to delay emptying. Malabsorptive procedures bypass varying portions of the small intestine where nutrient absorption occurs¹⁰¹.</p> <p>Restrictive procedures include adjustable gastric banding (wrapping a synthetic, inflatable band around the stomach to create a small pouch with a narrow outlet) and gastric stapling (gastroplasty), or a combination of these two approaches¹⁰²</p>
CERNER	A private software company providing information technology platforms for healthcare management
Divisions of General Practice	Divisions of General Practice provide local support to general practitioners and are involved in programs to enhance the quality of general practice and promote community health (such as immunisation).
My First Health Record (The Blue Book)	Presented to newborns, My First Health Record (The Blue Book), is a record in which a child's health information can be recorded. Parents/carers and health professional are encouraged to write in this patient held record. The updated version now includes updated growth charts and a BMI chart for children over 2 years old ¹⁰³ .
My Health Record (The Red Book)	My Health Record or the 'red book' is a folder that holds personal health information. It is used to store information about a person's medical condition and the treatment recommended by doctors and other health service providers. Initially designed for people with chronic disease, it is available to all adult patients in NSW ¹⁰⁴ .
Metabolic Syndrome (also known as Syndrome X)	Metabolic syndrome is not a disease in itself but a collection of disorders that occur together. The syndrome increases the risk of developing type 2 diabetes, stroke or heart disease. A person is classified as having Metabolic Syndrome when they have central (abdominal) obesity in addition to two of the following factors: high blood triglycerides; hypertension; low levels of high density lipoproteins (HDL); and/or impaired fasting glucose ¹⁰⁵ .
Obesity	Marked degree of overweight, defined as body mass index of 30 or over. See also Body Mass Index (BMI) and Overweight.

Obesity Hypoventilation Syndrome	Obesity Hypoventilation Syndrome is defined as a combination of obesity, awake chronic hypercapnia accompanied by sleep disordered breathing ¹⁰⁶ .
Obstructive Sleep Apnea Syndrome	Obstructive Sleep Apnea Syndrome occurs when the walls of the throat come together during sleep, occluding the upper airway. Breathing stops for short a period, (usually a few seconds up to one minute) prior to the brain registering that breathing has stopped or oxygen levels have stopped. The sleeper is then roused, will open their airway, typically snorting and gasping, prior to drifting back to sleep. ¹⁰⁷ .
Overweight	Defined as a body mass index of 25 or over. See also Body Mass Index (BMI) and Obesity.
Organisation for Economic Co-Operation and Development (OECD)	The OECD is a group of 30 countries that aims to promote economic growth and employment and improve living standards in member countries as well as contribute to the world economy.
Pacific Communities	A term covering indigenous communities from the Pacific region which includes Tongan, Samoan, and Maori communities. Each of these communities has its own distinctive culture.
Sleep Apnea	Sleep apnea is the medical name for interruptions in breathing during sleep ¹⁰⁸
Stadiometer	Equipment used to measure height

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