

INQUIRY INTO INQUIRY INTO CHILDHOOD OVERWEIGHT AND OBESITY

Organisation: The Sydney Children's Hospitals Network

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Submission for NSW Legislative Council, Inquiry into childhood overweight and obesity, from:
Weight Management Services, The Children's Hospital at Westmead (CHW), Sydney

Submission prepared on behalf of the CHW Weight Management Services (WMS) by:

Dr Shirley Alexander

Head of Weight Management Services

The Children's Hospital at Westmead,

Locked Bag 4001, Westmead NSW 2145

Professor Louise Baur

Professor of Child and Adolescent Health, University of Sydney

Weight Management Services, The Children's Hospital at Westmead

Contact person: Dr Shirley Alexander as above

Executive summary

Overweight and obesity in children and adolescents is very common with 1:4 Australian children and young people affected, with even higher prevalence among children from lower socioeconomic backgrounds and indigenous populations, and in children attending general practice or hospital outpatient clinics. Worryingly the proportion of children and adolescents with severe obesity is increasing and central obesity, which is associated with increased risk of cardiometabolic complications, is also increasing in prevalence.

Children with overweight and obesity are at risk of a range of health problems and have an increased risk of premature death in adulthood. There are both immediate complications and long term consequences of child and adolescent obesity. Prevention alone is not enough for those already affected with overweight or obesity – such children and adolescents need to be treated.

Despite the high prevalence of overweight or obesity, and the potential seriousness of the problem, children are rarely managed for their weight problems when they attend general practice or hospitals.

There are many barriers to management of paediatric obesity in general practice and secondary level health care settings. The true extent of services offered is unknown and thus management tends to be uncoordinated. There are also very few tertiary level paediatric weight management services in Australia (none in any of the territories and two of the states) and only one such service in NSW.

There are no well-established models of care for adult weight management, let alone for paediatric weight management. One proposed model of care, adapted from the Kaiser Permanente and UK NHS Chronic Disease Care Pyramid of Care, recognises the need for a tiered approach to service delivery depending upon severity of the problem. A major challenge with this, or any, model of care is that primary, secondary and tertiary level care services are extremely limited, both nationally and within each of the states and territories, and health professional training opportunities remain scarce.

In NSW two major initiatives, led by staff from the WMS at CHW, are in progress that can positively contribute to the management of paediatric obesity and require further support for broader implementation: Weight 4KIDS (online elearning health professional training modules) and SCOOP (Sustainable Connections for Overweight and Obesity in Paediatrics – mapping paediatric obesity service provision in western Sydney to redesign a collaborative approach to paediatric obesity management across all health care sectors).

Recommendations:

1. To address Terms of reference (d) Strategies to support health professionals to identify and address childhood overweight and obesity

Health professional training

- a) Support universal availability of a developed and evaluated health professional online eLearning training module, Weight4KIDS, specifically designed for the initial assessment and management of child and adolescent obesity. This training program is aimed at all relevant paediatric clinicians eg nursing staff, dietitians, clinical psychologists, physiotherapists, exercise scientists and doctors (GPs, junior medical staff, paediatricians).
 - b) Develop, evaluate and implement additional health professional training programmes, including recognising and raising the issue and making measurement of weight and height a routine part of paediatric assessment.
 - c) Develop dedicated training posts for nurses, allied health professionals and doctors in order that they may receive specialist training in paediatric obesity.
2. To address Terms of reference (g) Other: provision of effective treatment services for children and adolescents with overweight and obesity

A coordinated model of care of treatment for paediatric obesity

- a) Development of a coordinated model of care for paediatric overweight and obesity across the state, including the utilisation of healthcare pathways, with support for projects such as SCOOP.
- b) Implement, with evaluation, existing community-based group weight management programs for children or adolescents, with the aim of providing high quality services to the majority of affected children and adolescents.
- c) Development of tertiary care multi-disciplinary paediatric weight management services across the paediatric network.

Key issues

The increasing prevalence of child and adolescent overweight and obesity in Australia, and specifically severe obesity, highlights the importance of a whole-of-society approach to prevention of the problem. In addition, because of the large number of affected children and young people, provision of affordable and effective treatment services is also required. This submission focuses upon the issue of strategies to support health professionals identify and address childhood overweight and obesity and provision of treatment services for children and adolescents affected by overweight and obesity.

1. Overweight and obesity in children and adolescents is very common, especially in health care settings
 - Overweight and obesity in children and adolescents remain at high levels. The NSW Schools Physical Activity and Nutrition Survey 2010 (1) indicates the prevalence of overweight and obesity is one in four for school-aged children, making this one of the most common chronic health conditions in this age group. Furthermore increasing prevalence of severe obesity and central obesity adds concern for greater morbidity as a consequence. Between 1985 and 2012, severe obesity has increased from 0.2% to 1.8%, a 9-fold increase (2). Between 1985 and 2007, central adiposity has increased at a faster rate than total adiposity, especially in girls (3). Prevalence is also higher in those from lower socioeconomic backgrounds and in the indigenous populations (4).
 - Several studies from NSW and nationally have highlighted, that of children aged 2 to 17 years presenting to or utilising health care services for whatever reason, there is a higher prevalence with overweight and obesity compared with the general population (30% -39%). Moreover, 4% attending general practice surgeries have severe obesity, a level of obesity usually requiring specialist or tertiary level care. And yet less than 2% of children with overweight or obesity presenting to general practice are offered any form of intervention (5-10).
 - In a 2001 CHW audit of inpatients, overweight and obese status was associated with a longer length of hospital stay and an increased cost of admission, whatever the primary reason for hospitalisation (6, 10) and recent research indicates that even preschool-aged children with overweight and obesity have increased health care costs (11).

- Given the current trends in obesity prevalence, we can only expect more children and adolescents to present to clinical services in the future. It is an existing health problem that we need to deal with for the reasons highlighted below.

2. Child and adolescent obesity is associated with a range of health problems

- Overweight and obese children and adolescents are at higher risk of a range of health problems compared with children of normal weight status and have an increased risk of premature death in adulthood. There are both immediate complications and long term consequences of child and adolescent obesity (12). Complications include psychosocial, obstructive sleep apnoea, metabolic abnormalities (such as type 2 diabetes), orthopaedic, fatty liver disease and hypertension. Furthermore, treatment seeking children with obesity report a lower quality of life compared with children being treated for cancer. Abnormal physical findings and biomarkers are present not just in children with obesity but also in those with overweight (13).
- Several studies now show that, if left untreated, the natural history of child and adolescent obesity is to worsen with time. However with intervention, improvement in weight status and reduction of health risks can be achieved (14). Hence the importance of effective treatment services, not just to address weight per se, but also the obesity-associated complications.

3. Children are rarely managed for their weight problems in clinical settings

- Despite the high prevalence of overweight and obesity among children attending GP or paediatric hospitals, few such children present for management of obesity and thus intervention is rarely initiated. Despite an awareness of the issues and serious medical consequences of childhood obesity amongst health professionals there are several barriers known to prevent obesity management intervention. Barrier include recognition and raising the issue, time pressures, resource issues and lack of referral services, perceived lack of parental concern and parent and child sensitivities, and also lack of training for both general practitioners and general paediatricians (5, 15).

- To address lack of training and education in relation to paediatric obesity, Weight4KIDS, an online eLearning program aimed at enhancing the skills of health care professionals in the initial assessment and management of children and adolescents with overweight and obesity, has been developed and successfully piloted, indicating an improvement in knowledge and intention to change practice. Weight4KIDS is currently being modified to become SCORM (sharable content object reference model) so that it can be housed on different platforms allowing broad access. The definitive platform is yet to be decided but the aim is to house on a website for easy access for all health professionals who manage paediatric patients.
 - The level of provision of community, specialist allied health and group weight management services for children is not well understood, but is thought to be low. GPs want clear pathways for referrals to dietitians and physical activity providers, with simple systems for people to be reimbursed for weight management referrals. They would also like to see their role supported through community education campaigns (16).
 - A current mapping and redesign project SCOOP (sustainable connections for overweight and obesity in paediatrics) is in progress within Western Sydney and the Nepean and Blue Mountains Local Health Districts with the aim to determine existing level of paediatric obesity management intervention and developing a collaborative model of care across primary, secondary and tertiary healthcare services.
4. There is a need for a coordinated model of care for management of overweight and obesity in children and adolescents
- There are no well-established models of care for adult weight management, let alone for paediatric weight management. One potential model of care is shown in Figure 1. This is adapted from the Kaiser Permanente and UK NHS Chronic Disease Care “Pyramid of Care” and recognises the need for a tiered approach to service delivery depending upon severity of the problem. While the vast majority of affected people will require self-care or family-based care, supported by primary care and community base care providers, those who are more severely affected will require specialist care, sometimes by multidisciplinary care teams in tertiary care facilities.

- A major challenge with this, or any, model of care is that primary, secondary and tertiary level care services are extremely limited, both nationally and within each of the states and territories (17).
- At a community level, results from three community-based group programs, two of which were developed in Australia (PEACH and HIKCUPS) and one from the UK (Go4Fun), show promising results in terms of treating mild to moderate levels of obesity in children aged 5-13 years. The PEACH (Parenting Eating and Activity for Child Health) Program and the HIKCUPS (Hunter Illawarra Kids Challenge Using Parent Support) Program both lead to relative weight loss at least 12 months from baseline (18, 19). In relation to adolescents, the Loozit Program, an Australian program aimed at treatment of overweight or obese adolescents in a community-based group setting, has shown improvements in waist circumference and metabolic complications at 5 months from baseline (20).
- Thus, there are existing efficient and well-evaluated community-based programs for the treatment of moderate levels of obesity in children and adolescents. However none of the above programs with the exception of Go4Fun have been funded for implementation within NSW.

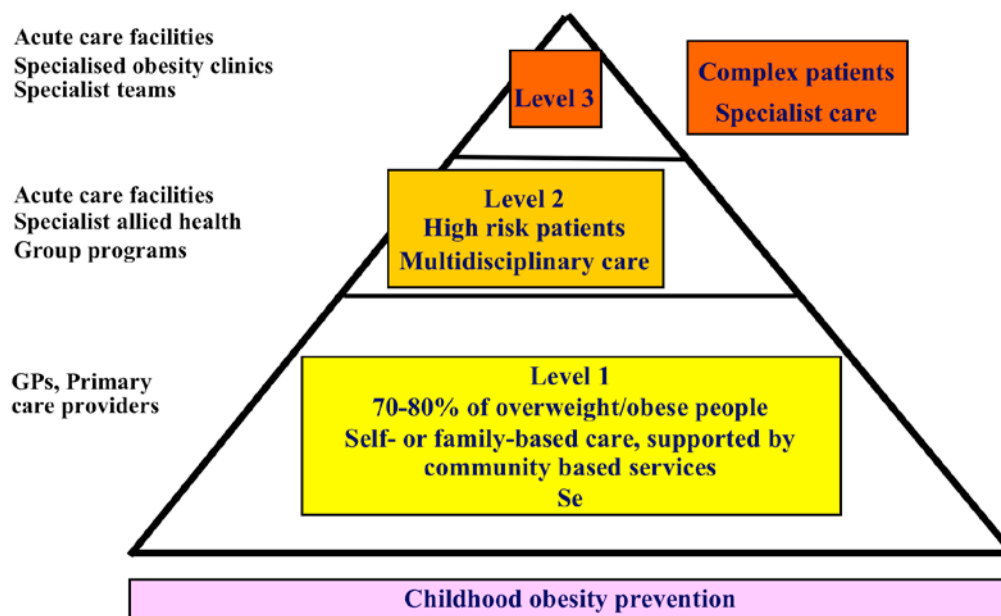


Figure 1: Chronic Disease Care model for paediatric overweight and obesity

(adapted from the NHS and Kaiser-Permanente Chronic Disease Management Pyramid of Care)

5. There are few clinical training opportunities for health professionals in weight management medicine
- There are urgent clinical training needs for child health professional staff in paediatric obesity assessment or management at all levels of service delivery. The only post in Australia where paediatricians in training (Registrars) can be trained in paediatric weight management is at The Children's Hospital at Westmead (shared Adolescent Medicine /Weight Management 6-month training post).
 - Likewise, to our knowledge there are very few, if any, paediatric weight management training positions for nurses, many allied health professionals (eg clinical psychologists, physiotherapists, exercise scientists and even dietitians) or GPs.

Summary and recommendations:

- Childhood obesity is a significant issue with both immediate and long-term health and cost implications.
- Service provision and training in childhood obesity is scarce, both in NSW and nationally.
- Recommendations:
 - o Support healthcare professional training programs and community-based intervention programs that have been developed or are in development phase for implementation to address the issue.
 - o Support additional needs for development of an integrated model of care and training positions for healthcare professionals to equip them in assessing and managing paediatric obesity.

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Recommendations

Health professional training

1. Development, evaluation and implementation of health professional training in the initial assessment and management of child and adolescent obesity. This should be aimed at all relevant paediatric clinicians eg nursing staff, dietitians, clinical psychologists, physiotherapists, exercise scientists and doctors (GPs, junior medical staff, paediatricians).

Comment: This should be across each state and territory and could be linked to existing undergraduate and postgraduate health professional training programs. Specific training programs for obesity recognition, assessment and management need to be developed and evaluated. Health professionals need to know how to treat this serious and common health problem.

2. Development of dedicated training posts so that nurses, allied health professionals and doctors can be given specialist training in paediatric obesity.

Comment: The workforce also requires training of specialist clinicians who are skilled in multi-disciplinary team management of children and adolescents with moderate to severe obesity and its complications.

A coordinated model of care of treatment for paediatric obesity

3. Development of a coordinated model of care for paediatric overweight and obesity across each state and territory.

Comment: This will require provision, and linking, of services at primary care, secondary care and tertiary care level. The diabetes prevention programs which are currently being evaluated in several states may provide useful lessons in service delivery. Recognition of the need for a whole-of-family approach and the need to be developmentally sensitive in service provision (eg adolescents are treated differently from young children) will be important elements of the clinical services. Linkage of paediatric services with adult services would be an additional way of ensuring a whole-of-family approach, and allowing effective transition between paediatric and adult services for adolescents.

4. Implementation, with evaluation, of existing community-based group weight management programs for children or adolescents, with the aim of providing high quality services to the majority of affected children and adolescents.

Comment: There is a need for accessible and effective programs to support families and young people in the self-care of obesity. Two such community-based group programs for children (PEACH and HIKCUPS), and at least one for adolescents (eg the Loozit program), all developed in Australia for Australian conditions, and of relatively low resource intensity, should be rolled out more widely.

5. Development of tertiary care multi-disciplinary paediatric weight management services in each state and territory.

Comment: There are few existing tertiary level paediatric weight management services in Australia, with none in three states or any territory. High quality tertiary level services should be available for specialist management of children and adolescents with severe obesity and obesity-associated complications. Such centres would also provide specialist health professional training and research in paediatric obesity.