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Original Article

Obesity Management in Europe: Current Status and Objectives for the Future

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Key Words

Behavior · Guidelines · Interdisciplinary · Obesity management · Weight loss · Weight maintenance

Abstract

Objective: This study aims at assessing the status of obesity management in the European region and identifying future goals and objectives of professionals working in the field of obesity. **Methods:** Presidents of all 31 EASO-affiliated (EASO = European Association for the Study of Obesity) national associations for the study of obesity were asked to invite 5 obesity experts from their country to participate in a survey. A total of 74 obesity professionals out of 23 countries participated. Questions addressed the development of guidelines, the status of obesity management, and goals and objectives for the future in obesity management. Further, EASO's three vice-presidents participated in in-depth, semi-structured interviews, in which they were asked to provide their reflection on the survey data. **Results:** Most countries define obesity as a clinical and chronic disease, but various differences in obesity management standards exist across Europe. Existing guidelines mainly focus on the acute treatment of obesity rather than on long-term approaches. **Conclusion:** Multidisciplinary approaches for obesity management and the collaboration between general practitioners and hospitals as well as between professionals at the local level and networks of obesity management centers need to be improved across Europe. Good practices and evidence are available.

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Introduction

In Europe, obesity prevalence has tripled over the last two decades and has reached epidemic proportions [1, 2]. Overweight is the 5th leading risk for global deaths, the 4th most important risk factor for ill health and premature deaths in Europe, a gateway to many other disease areas [3], and increases the number of unhealthy life-years due to morbidity and disability [4]. Thus, it is appropriate that obesity management should become a priority in both public health and clinical health agendas.

To date, there is evidence on effective diagnosis and treatment of obesity. The National Institute for Clinical Excellence (NICE) [5], UK, used this evidence to develop its latest guidelines both from a public health perspective [5] and for the clinical identification, assessment, and management of obesity [5], as has the English National Health Service, with its commissioning guidelines for ‘tiered’ treatment (including bariatric surgery) according to obesity severity [5]. The EASO (European Association for the Study of Obesity) has established European clinical practice guidelines on management of obesity in adults [6], interdisciplinary guidelines on metabolic and bariatric surgery [7], a network of Centers of Obesity Management (COMs) [8], and a set of recommendations for the primary health care provider targeting childhood obesity [9]. It is now agreed that obesity management strategies should include long-term approaches, including monitoring and follow-up strategies. The patient’s perspective has utmost importance when developing and implementing obesity management strategies [10]. However, despite the increasing attention for obesity and the increasing evidence for effective treatment strategies, appropriate and effective obesity management is not available to all patients. This study aims at assessing the status of obesity management in the European region and at identifying future goals and objectives of professionals working in the field of obesity.

Material and Methods

Both qualitative and quantitative methods were used to conduct this study. We conducted a survey among professionals, who are involved in their national obesity management process, and three in-depth interviews with professionals. Invitation of participants for our survey and interviews has been performed through the EASO-associated national associations for the study of obesity [11]. The survey consisted of quantitative parts as well as open-ended questions, serving as qualitative responses. Survey participants were selected and invited to participate in the survey through the snowball method in order to reach a high number of participants from different countries.

We aimed at involving 150 researchers from all 31 member countries of the EASO, by using the snowball sampling method. Presidents of all 31 member countries were asked to invite 5 obesity experts from their country to participate in the survey. Those, who agreed to participate, included researchers, general or specialized physicians, dietitians, psychologists, exercise physiologists, social workers, and other relevant professions. Participation was anonymous. While the presidents of the national associations were known to the researchers, the data did not reveal whether they took part themselves nor whom they had invited to participate.

Surveys were sent in October 2013 through an online link attached to an invitation email. The online survey tool used was *www.q-set.eu*. Participants could complete the survey anonymously. The survey took between 10 and 15 min per person and included 41 questions. Questions addressed the availability of guidelines, the aspects of care described in the national guidelines, multidisciplinary approaches, patient involvement, the type of care given, involvement of professionals in long-term care, monitoring practices, goals and objectives for the future in obesity management, the link between prevention and management, the quality of obesity management and finally reimbursement of treatment. Question types included open-ended questions, multiple-choice questions, single-choice questions and Likert scales. Most answers to the questions were opinion-related and subjective answers. For each country, average scores were calculated for the questions with Likert scores (for example: ‘To what extent have patients access to ...’). For ‘yes-no’ questions, the

Table 1. Number of participants per country

Countries	Number of participants
Denmark, Finland, Georgia, Germany, Greece, Hungary, Poland, Slovakia, Spain, Turkey	1
Croatia, Iceland, Sweden	2
Belgium, Israel, Norway, the Netherlands, UK	3
Serbia	4
Czech Republic, Italy	5
France	7
Ireland	21

country-average were defined as yes, in case that at least 60% of the participants within a country had ticked 'yes' (for example: 'Is obesity management in your country being organized according to a guideline?').

Further, the three vice-presidents of the EASO, representing the northern, middle, and southern regions of Europe, participated in in-depth, semi-structured interviews, in which they were asked to provide their reflection on the survey data, and to provide us their thoughts on research and clinical implications.

Results

A total of 74 obesity professionals out of 23 countries (71% of the invited countries participated) took part and filled in the survey. The number of participants per country ranged from 1 to 7 with Ireland being an outlier in which 21 professionals took part (table 1). Participation of 5 participants was the aim, but not an inclusion criterion; so countries with less or more participants were not excluded from the study. The Irish asked permission to distribute the survey on a large scale in order to get a high internal validity for Ireland. All three EASO vice-presidents accepted the invitation to participate in an interview.

Guideline Availability

17 out of 23 participating countries were reported to use obesity management guidelines, 3 countries were developing a guideline, and 3 countries indicated that a guideline was not being developed nor planned.

Guideline Implementation

Participants from 4 countries indicated that the guidelines are used 'somewhat to a high extent' or more in daily practice. Two countries indicated that a guideline was almost never used in daily practice. Not one country indicated that guidelines were being used to 100% in daily practice (table 2). Some participants indicated a lack of education and knowledge among professionals as well as guidelines being too complex for daily usage. A need for shorter and more compact guidelines was expressed.

Table 2. Extent of guidelines used in practice

Country	Participants per country	Mean of the answers to the question ‘To what extent are guidelines being used in practice?’
Belgium	3	5
Croatia	2	6
Czech Republic	5	6.8
Denmark	1	4
Finland	1	4
France	7	5.4
Georgia	1	5
Germany	1	3
Greece	1	5
Hungary	1	7
Iceland	2	5
Ireland	21	3.8
Israel	3	7
Italy	5	5
Norway	3	5.3
Poland	1	8
Serbia	4	5.8
Slovakia	1	2
Spain	1	5
Sweden	3	5.3
The Netherlands	3	3.7
Turkey	1	4
UK	3	4.7

^aThe mean of the answers per country, only serve as an indication and should be considered with caution as within-country variation was noticed. Score 1 denotes, guidelines are not used at all in daily practice. Score 6 denotes, guidelines are used to a somewhat high extend in daily practice.

Involvement of Different Professionals in Developing National Guidelines

From the 21 countries completing the questions regarding the involvement of professionals in developing the national guideline, a physician was involved in developing a national guideline in 18 countries, dietitians in 14 countries, health organizations and the ministry of health in 9 countries, physical activity experts and psychologists in 8 countries, and nurses in 4 countries. Patients were involved in 4 countries. Insurance companies were not involved in any country when developing a national guideline (participants from Iceland and Greece did not answer this question) (table 3).

Aspects of Care Described in the National Guideline

Participants of all countries except Greece indicated that their guidelines cover the classification of obesity and different treatment options. Monitoring and follow-up procedures after treatment were only included in a minority of guidelines. Some participants mentioned that lack of time and personnel and the lack of finances are the reason for long-term care not being included.

Table 3. Involvement of experts in the development of national guidelines by country

	General Practitioners	Clinicians	Nurses	Dietitians	Health Organizations	Ministry of Health	Patients	Insurance Companies	Physical activity experts	Psychologists
Belgium	x	x		x					x	x
Croatia		x								
Czech Republic	x	x		x					x	x
Denmark		x	x	x	x	x				
Finland	x	x		x					x	
France	x	x	x	x	x	x	x		x	x
Georgia	x	x			x	x				
Germany	x	x	x	x					x	x
Greece	n.a.									
Hungary				x						
Iceland	n.a.									
Ireland		x		x		x				
Israel		x				x				
Italy		x								
Norway	x	x		x	x		x		x	x
Poland	x	x		x	x	x				x
Serbia		x		x	x					
Slovakia	n.a.									
Spain		x								
Sweden ^b	Indications reached not above 60% of the national participants									
The Netherlands	x	x		x	x	x	x		x	x
Turkey	x	x		x	x	x				
UK	x	x	x	x	x	x	x		x	x

n.a. = Not available.

^aThe professional was indicated to be part of the development of national guidelines in a specific country if 60% or more of the participants indicated that professional to be part of the development.

^bFrom Sweden, one of the three participants provided information on the expertise involved in the development of their national guideline.

Multidisciplinary Approach

A dietitian was part of a ‘regular’ obesity management team in the guidelines of all countries (18 countries had data on this topic), a psychologist in 15, and a physical activity expert was part of the ‘regular’ obesity management team in 13 countries. In 7 countries, the ‘regular’ obesity management strategy implies the existence of multidisciplinary teams in most cases; however, when asked to rank the multidisciplinary collaboration amongst caregivers and between caregivers and patients on a scale from 1 ‘not at all’ to 10 ‘very much,’ only participants from 1 country indicated a score higher than 6. In 5 countries, obesity management is almost never delivered by multidisciplinary teams.

Patient-Centered Approach – Patient Involvement in Obesity Management

Answering the question ‘To what extent are professionals managing obesity from the patients’ perspective (involving the patients’ perspective in managing obesity)?’ on a scale from 1 ‘not at all’ to 10 ‘very much,’ 8 countries scored a 6 or higher, and 5 countries scored a 3 or lower. A total of 15 countries indicated a central element in their national health policy was for the patient to have responsibility for their own management. Three countries indi-

cated that this was not the case. Professionals manage obesity to some degree from the perspective of a patient; however, the average score for that survey question was a 5.1 out of 10. Participants of 8 countries indicated that patients are part of the decision making process in which decisions are made regarding treatment options.

Type of Care

Obesity management included clear individual support to live healthily in 7 countries, and to a lesser extent in 3 countries. Anti-obesity drugs were readily available in 9 countries. Anti-obesity drugs were rarely available for patients in 8 countries. At the time of the survey, one drug only was licensed in Europe. Surgery for severely obese patients was available in 19 out of the 22 countries. In 3 countries surgery is available for obese patients with BMI > 30 kg/m². In 16 countries counselling was available after surgery. In 4 countries, counselling was rarely or not available after surgery. All participating countries indicated that there is a need for promoting health behavior before a patient undergoes surgery.

Professionals Involved in Long-Term Care

In 16 out of 23 countries the primary care practitioner is seen to be responsible for the long-term care of his/her patient. Non-governmental organizations were not responsible for the long-term care of obesity in most countries (22/23). Psychologists were infrequently involved in the long-term care of a patient either (22/23).

Monitoring

Referring “To what extent is the health status of patients within obesity management being monitored?” participants indicated that national monitoring needs improvements in most of the participating countries. With regard to monitoring, participants indicated that existing guidelines do not ask for monitoring, and only in 5 out of 22 countries a specific health professional is identified as responsible for monitoring.

Reimbursement

Participants from 17 out of 23 countries indicated that social insurance would reimburse for bariatric surgery. Participants from 4 countries indicated that private insurance would have to pay for the expenses, and participants from 3 countries, namely Greece, Georgia and Slovakia, indicated that bariatric surgery was not compensated at all. Anti-obesity drugs are reimbursed by social security or national health services in 4 countries. Two countries (Denmark and Israel) reimburse anti-obesity drugs through private insurance, and in 12 countries anti-obesity drugs are not reimbursed at all. The monitoring of long-term success and involvement of patients in the long term is rarely reimbursed in 10 countries and is regularly reimbursed in 9 countries.

Linking Prevention and Management

Prevention and management was linked in 6 countries. Two countries indicated that prevention and management are rarely linked. In the open-ended questions it was often indicated that effectiveness of obesity prevention is not yet satisfactory.

Quality of Obesity Management

Scoring the overall quality of obesity management in their country on a scale from 1 'not effective at all' to 10 'very effective,' 6 countries scored a 3 or lower, and 3 countries scored a 6 or higher. On the same scale, effectiveness of obesity management policy in the country was scored 3 or lower in 8 countries, and a 6 or higher in 3 countries.

Goals and Objectives for the Future in Obesity Management

A total of 40 out of the 63 participants indicated that a patient with obesity should be cared for on a life-long basis, (answer categories were: one visit, less than a month, 1–6 months, up to a year, 2 years, 5 years, life-long). One participant mentioned that one visit would be enough.

In open-ended questions, participants mentioned that goals and objectives for the near future to improve obesity management across Europe should include the improvement and implementation of better prevention programs, networks between hospitals and general practitioners, networks between health professionals at the local level, and networks between obesity management centers or centers of excellence, although these terms remain unclearly defined. Furthermore, participants mentioned that it is important to improve monitoring practices and long-term care.

Participants mentioned the need for the reimbursement of dietitians, physical activity professionals as well as psychologists. Furthermore, participants identified the need for better promotion of healthy lifestyles and the reduction of obesity risks, especially in schools. The support of social media has been identified as an important aspect for the promotion of a healthy lifestyle. A multidisciplinary team approach needs to be implemented and/or improved in many countries.

Political will, the involvement of insurance and pharmaceutical companies, improved national guidelines and policies, involvement of the Ministry of Health, coordinators and developers as well as better education for professionals working in the field were identified as especially important for implementing any of the goals and objectives, participants mentioned.

Threats for plans to succeed include current socioeconomic conditions, the lack of awareness and urgency, the lack of support from the health ministries and health insurance companies, either or both financially and providing an infrastructure.

The In-Depth Interviews Reflecting on the Survey Findings and the Way Forward in Obesity Management

The challenge in implementing and using existing guidelines derives from being too lengthy and elaborate for daily use. Further, according to 1 participant, the network of general practitioners is poorly organized and developed for the distribution and implementation of guidelines. A need for a follow-up distribution and reinforcement of guideline use is needed.

Dietitians are involved more frequently than psychologists and exercise physiologists in obesity management. Interviewees mentioned that it is important that obesity is recognized as a disease in order to involve different experts in patient management. Specialists (medical personal) are often not specifically specialized in obesity and have a greater interest in other diseases. The multidisciplinary approach is still lacking or is in need for improvement. One of the vice-presidents of EASO indicated a need for further evidence on the effectiveness of a multidisciplinary approach, and that involving many experts in the care of a single patient may also not be very cost-efficient.

Official documents and guidelines are needed for the monitoring of the obese individual's process in obesity management. Monitoring progress in obesity management does not happen on a national basis yet in many countries. One issue is also that patients often stop their treatment, due to too high expectations in weight loss prior to the treatment.

One participant mentioned the difficulty for physicians to keep patients motivated to come back for long-term care, since results are often not matching the high expectations of patients in the first place.

Goals and Objectives for the Future and Challenges and Threats According to the Three Interviewees

Participants indicated that they see a role for EASO in providing scientific background on procedures, organizing congresses, and providing information on programs that have worked in other countries. The close collaboration with the WHO and the EU has been valued and will help in bringing obesity issues on the political agenda.

Participants indicated the need for education, not necessarily on the topic of obesity itself, but rather on how to work together in multidisciplinary teams of professionals and stakeholders. Further it was mentioned that the stigmatization of obesity is still a problem also amongst professionals in the field of obesity.

Discussion

'The ingredients are there, but it is difficult to make a meal out of it!'

Participant of an obesity conference

This statement summarizes the current status of obesity management very well. Different aspects (ingredients) of obesity management, such as the recognition that various professionals have a role and the understanding that obesity is a disease, have been identified in most of the EASO member countries; however, the solution on how to combine these aspects to come to a successful obesity management (tasteful meal) is still very difficult.

This study identifies differences in obesity management across Europe. Most countries do define obesity as a clinical and chronic disease, but various differences in obesity management standards are found across Europe. It is interesting to see that existing guidelines mainly focus on the acute treatment of obesity rather than on long-term approaches, even though existing literature shows the importance of long-term care to prevent patients from regaining weight [12, 13]. In some countries, one may argue that direct collaboration of general practitioners with hospitals in the care of obese patients seems unrealistic. However, in most countries there is a growing trend for chronic disease management to be moved away from secondary care into primary care – mainly on cost grounds. Long-term monitoring is not well established in Europe, despite evidence on the importance of long-term approaches. Further, it became clear from our study that only a few countries regard involving the patient as an important aspect in developing obesity management guidelines.

Acting from a patient's perspective includes improving the awareness of clues in his/her environment to unhealthily eating and inactivity. Involvement of patients in enabling management guidelines is perhaps or in fact very likely a crucial element, but rarely the case in Europe. The establishment of EASO's Patient Council during the European Congress on Obesity [10] in Sofia is a promising and important way forward in our efforts involving patients in our learning process.

Bariatric surgery is available in most countries and is considered to be effective and cost-effective. Pharmacotherapy was available in 9 countries, whereas obesity management focused on supporting the patient to live healthily in 7 countries only. All participants consider health promotion as essential prior to performing surgery; however, no question tackled the topic on how health promotion is provided. There is an urgent need to improve and expand the expertise regarding the organization of health promotion within obesity management strategies. Such health promotion strategies include nutrition, physical activity, and psychology. The approach towards patients involves a person-centered approach, taking into account the patient's physical, economic, and social environment, and implies a multidisciplinary and long-term approach [14].

The feasibility of implementing a multidisciplinary and long-term approach remains challenging. Applied or translational research methodologies are needed to show how health promotion strategies can be implemented in obesity management strategies. Professionals and policy makers need better exposure to the available data that is available already [14, 15]. It is noticeable that countries in which a multidisciplinary approach is well established were most likely to involve multidisciplinary teams when developing the national guidelines. The Netherlands have developed a national document and action plan to put forward health promotion strategies and to organize obesity management within multidisciplinary teams with expertise on nutrition, physical activity and psychology [10], but implementation is hard [16]. Central elements in the Dutch obesity management protocol include the perspective of the client, the role of health promotion, and the position of a central professional who organizes care and monitors progressions [10]. A very likely determinant of the difficulties implementing health promotion within obesity management strategies, next to a lack of skills, is the lack of finance. Health insurance companies were not involved in the establishment of obesity management guidelines in any country.

Joint efforts between EASO's Management Taskforce and EASO's Prevention and Public Health Taskforce could be helpful when developing and improving materials and support within EASO's Centers of Obesity Management, whereas expertise on the multidisciplinary approach and the patient-centered approach should come from EASO's Childhood Obesity Taskforce.

This study has a number of limitations. Only a few participants from each country answered the survey. For some countries only 1 or 2 participants have responded. The conclusions are based on the answers of the completed surveys. Answers reflect the opinions and suggestions of single participants and may not be representative either of more general national opinions or the reality of services within the country. Thus the reports of a lack of engagement of non-governmental organizations in obesity management would seem to ignore the major contribution made in many countries by voluntary and commercial organizations – present in 90% of countries in a previous EASO survey [13]. For many questions, a mean score of participants per countries was calculated, but this is only indicative since participant numbers in each country differed widely. Strengths of the study include the fact that respondents represented a varied range of professionals throughout Europe. The number of individuals responding was in excess of 20. The snowball methodology in selecting participants brings a potentially wide range of participants but does not allow for control over the number and type of participants.

A survey like this could be repeated in future years to identify possible developments or progress in obesity management in Europe. Moreover, further research into the challenges when implementing long-term care as well as on implementations plans for multidisciplinary approaches appears to be indicated.

Conclusion

Obesity management practices across Europe vary considerably by country. Most countries have adopted obesity management guidelines; however, the use of them in daily practice is limited. Multidisciplinary team approaches are not used in all of the countries. Components for successful obesity management with life-long success do exist across much of Europe. However, the overall quality of obesity management is scored low by expert physicians in many countries. Opinions strongly recommended that national health policies should focus more on health behavior, monitoring efforts should improve, and that professionals need better training in understanding an implementing care that includes obesity patients' perspectives.

For the future, members of the EASO indicated that they would like to improve multidisciplinary approaches for obesity management as well as the collaboration between general practitioners and hospitals and between professionals at the local level and networks of obesity management centers. Good practice and evidence are available within EASO member states that should be used to endorse health ministries, universities, and professionals to further improve their obesity prevention and management practices.

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Disclosure Statement

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References

- 1 World Health Organization: The Regional Office for Europe of the World Health Organization. The challenge of obesity in the WHO European region and the strategies for response: Summary/ eds Branca F, Nikogosian H, Lobstein T (ISBN 978 92 890 1388 8 (print)). Copenhagen, WHO Regional Office for Europe, 2007.
- 2 Visscher TLS, Heitmann BL, Rissanen A, Lahti-Koski M, Lissner L: A break in the obesity epidemic? Explained by biases or misinterpretation of the data? *Int J Obes* 2015;39:189–198.
- 3 Frühbeck G, Toplak H, Woodward E, Yumuk V, Maislos M, Oppert JM for the Executive Committee of the European Association for the Study of Obesity: Obesity: The Gateway to ill Health – an EASO position statement on a rising public health, clinical and scientific challenge in Europe. *Obes Facts* 2013;6:117–120.

- 4 Visscher TLS, Rissanen A, Seidell JC, Heliövaara M, Knekt P, Reunanen A, Aromaa A: Obesity and unhealthy life years in adult Finns. An empirical approach. *Arch Intern Med* 2004;164:1413–1420.
- 5 National Institute for Health and Care Excellence (NICE): Obesity: identification, assessment and management of overweight and obesity in children, young people and adults. NICE guidelines [CG189]. London, UK, 2014. Retrieved from: www.nice.org.uk/guidance/cg189 (last accessed July 12, 2016).
- 6 Tsigos C, Hainer V, Basdevant A, Finer N, Fried M, Mathus-Vliegen E, Micic D, Maislos M, Roman G, Schutz Y, Toplak H, Zahorska-Markiewicz B; Obesity Management Task Force of the European Association for the Study of Obesity: Management of obesity in adults: European clinical practice guidelines. *Obes Facts* 2008;1:106–116.
- 7 Fried M, Yumuk V, Oppert JM, Scopinaro N, Torres AJ, Weiner R, Yashkov Y, Frühbeck G; European Association for the Study of Obesity; International Federation for the Surgery of Obesity – European Chapter: Interdisciplinary European guidelines on metabolic and bariatric surgery. *Obes Facts* 2013;6:449–468.
- 8 Tsigos C, Hainer V, Basdevant A, Finer N, Mathus-Vliegen E, Micic D, Maislos M, Roman G, Schutz Y, Toplak H, Yumuk V, Zahorska-Markiewicz B; for the Obesity Management Task Force of the European Association for the Study of Obesity: Criteria for EASO-collaborating centres for obesity management. *Obes Facts* 2011;4:329–333.
- 9 Baker JL, Farpour-Lambert NJ, Nowicka P, Pietrobelli A, Weiss R; for the Childhood Obesity Task Force of the European Association for the Study of Obesity: Evaluation of the overweight/obese child – practical tips for the primary health care provider: recommendations from the Childhood Obesity Task Force of the European Association for the Study of Obesity. *Obes Facts* 2010;3:131–137.
- 10 Seidell JC, Halberstadt J, Noordam H, Niemer S: An integrated health care standard for the management and prevention of obesity in the Netherlands. *Fam Pract* 2012;29 (suppl 1):i153–i156.
- 11 EASO Membership. <http://easo.org/membership> (last accessed July 12, 2016).
- 12 Lang A, Froelicher ES: Management of overweight and obesity in adults: behavioral intervention for long-term weight loss and maintenance. *Eur J Cardiovasc Nurs*. 2006;5:102–14
- 13 Rigby N, James P: Waiting for a green light for health? – Europe at the crossroads for diet and disease (Appendix 2). London, International Association for the Study of Obesity, 2003. <http://easo.org/task-forces/obesity-management-omt/> (last accessed July 12, 2106).
- 14 Pi-Sunyer F, Becker D, Bouchard C: Clinical guidelines on the identification, evaluation, and the treatment of overweight and obesity in adults. National Institutes of Health, Bethesda, USA, 1998.
- 15 Goodwin S: The practical guide to the identification, evaluation and treatment of overweight and obesity in adults. *Clin Nurse Specialist* 2002;16:164.
- 16 Derksen RE, Brink-Melis WJ, Westerman MJ, Dam JJM Ten, Seidell JC, Visscher TLS: A local consensus process making use of focus groups to enhance the implementation of a national integrated health care standard on obesity care. *Family Practice* 2012;29(suppl 1):i177–i184.