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BRIEF REPORT

Recommendations from a Working Group on Obesity Care Competencies for Healthcare Education in the UK: A Report by the Steering Committee

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ABSTRACT

Introduction: Obesity significantly increases the risk of developing (or worsening) more than 200 chronic diseases, and it is also a risk factor for severe COVID-19. With the rising prevalence of obesity in the UK, there is a need to develop obesity care competencies that apply to healthcare professionals (HCPs) at all levels of the health service, to increase the capacity for contemporary, evidence-based treatment that is effective, compassionate, and avoids stigmatising patients.

Methods: A UK Obesity Care Competencies Working Group consisting of experts by profession and experts by experience was created to provide a framework of obesity care competencies for HCPs involved in specialist obesity care (tiers 2–4 in the UK). The framework was adapted from a set of competencies recently published by the USA-based Obesity Medicine Education Collaborative (OMEC) and was intended to be adaptable to nurses and allied health professionals, as well as physicians, owing to the multidisciplinary team approach used in healthcare in the UK.

Results: The UK Obesity Care Competencies Working Group developed a set of 29 competencies, divided into five focal areas, namely obesity knowledge, patient care and procedural skills, practice-based learning and improvement, professionalism and interpersonal communication skills, and systems-based practice. The working group recommends that the obesity care competencies are targeted at HCPs training as specialists. The competencies could be imported into existing training programmes to help standardise obesity-related medical

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education and could also be used to direct a new General Practitioner with Extended Role (GPwER) qualification.
Conclusion: This list of obesity care competencies aims to provide an initial framework to improve education for HCPs and therefore to improve patient care in obesity. The acceptance and integration of these competencies into the healthcare system should provide a stepping stone toward addressing trends in health inequality.
Keywords: Competencies; Education; Obesity; Training

Key Summary Points

There is a need to develop obesity care competencies that apply to all levels of the health service.

A working group consisting of experts by profession and experts by experience was created to provide a framework of obesity care competencies for healthcare professionals involved in obesity care at tiers 2–4, and adapted from a set of competencies recently published by the USA-based Obesity Medicine Education Collaborative (OMEC).

The UK Obesity Care Competencies Working Group developed a set of 29 core competencies, divided into five focal areas: obesity knowledge, patient care and procedural skills, practice-based learning and improvement, professionalism and interpersonal communication skills, and systems-based practice.

The framework is intended to be adaptable to nurses and allied healthcare professionals as well as physicians, owing to the multidisciplinary team approach used in healthcare in the UK; it could also be used to guide training for any patient-facing staff.

The working group recommends targeting the obesity care competencies at medical staff working as specialists.

INTRODUCTION

Advancing the education of healthcare professionals (HCPs) in the prevention and treatment of non-communicable disease (NCD) is a major challenge considering the rapid global rise in the prevalence of these diseases in recent years [1]. Obesity can be considered a cause of some NCDs, which together are responsible for 71% of mortality worldwide [1]. Obesity significantly increases the risk of developing, or worsening, more than 200 chronic diseases, including cardiovascular disease, asthma, osteoarthritis, gallbladder stones, obstructive sleep apnoea, chronic liver disease, subfertility, some cancers, and psychiatric diseases [1, 2]. It is also associated with metabolic diseases including hypertension and type 2 diabetes [3], with 37% of cases of type 2 diabetes being attributable to overweight or obesity in a recent study [4]. In addition, obesity is related to an increased risk of COVID-19 complications, severity, hospitalisation, and mortality [5, 6].

The prevalence of obesity almost tripled between 1975 and 2016 [7]. In 2016, more than 650 million adults worldwide had obesity, and 340 million children aged 5–19 years had obesity or overweight [7]. In England alone, in 2018, over one-quarter (28%) of adults had obesity; there were more than 11,000 hospital admissions directly attributable to obesity in 2018/2019, an increase of 22% since 2014/2015 [8]. Considering both direct medical costs and impacts on productivity, the expenditure relating to the obesity epidemic in the UK reached approximately £60 billion in 2018 [9].

There is currently a global lack of obesity education for physicians [10]. In England specifically, the provision of obesity treatment is geographically variable, and limited in comparison to other European countries, possibly because of ineffective policies and education on obesity [11]. The UK All-Party Parliamentary Group on Obesity recently published a policy paper highlighting that conversations between HCPs and patients should be supported by HCP training in techniques such as motivational interviewing, and that evidence-based treatment is required [12]. Literature supports the

benefits of educating HCPs in both the controllable (diet and exercise) and uncontrollable (genes and environment) causes of obesity [13, 14].

The US-based Obesity Medicine Education Collaborative (OMEC), composed of representatives from 15 professional societies/organisations, recently published a set of competencies to support medical education in the field of obesity [15]. A total of 36 OMEC members collaborated to develop the competencies using an iterative process, and the results were externally reviewed by 19 professional organisations [15]. OMEC produced a set of 32 obesity care competencies across six domains (practice-based learning and improvement, patient care and procedural skills, systems-based practice, medical knowledge, interpersonal and communication skills, and professionalism) to enable clinicians to work effectively with their patients to develop individual programmes of care. These competencies were subsequently officially endorsed by 20 stakeholder organisations [15].

In 2010, the Royal College of Physicians (RCP) published a set of competencies for obesity education targeted at physicians with a particular expertise, specialist nurses and dietitians with specific interests, and allied HCPs [16]. More recently, Health Education England published a Healthier Weight Framework, which sets out the competencies needed by HCPs to speak with patients about healthy weight [17], and the National Obesity Strategy in Wales also emphasises the need for further education to support HCPs in this area [18]. The UK All-Party Parliamentary Group on Obesity stressed that the Healthier Weight Framework should be promoted widely [12]. The aims were to:

- Enhance awareness and understanding of obesity as a significant medical condition.
- Extend knowledge and understanding of the aetiology of obesity and the physiological consequences of excess weight.
- Recognise the medical importance of modest weight loss and maintenance.

However, the Healthier Weight Framework is aimed at HCPs offering universal interventions promoting healthy behaviours and weight (tier 1 services in the UK) [17], and the 14 RCP competencies were developed over a decade ago [16]. Therefore, there is a need to develop contemporary obesity care competencies that also apply to services in tier 2 (community-based structured weight management), tier 3 (specialist multidisciplinary team approach to weight management), and tier 4 (bariatric and metabolic surgery).

Unlike the USA, there is no separate medical speciality or subspeciality for obesity medicine in the UK. Instead, an introduction to obesity medicine is taught to undergraduate medical students as part of the subspecialities of metabolic medicine [19], and endocrinology and diabetes [20], or to postgraduate HCPs in specialist courses. Therefore, obesity medicine does not get the comprehensive coverage that a highly prevalent disease associated with multiple morbidities and premature mortality merits. This means that the UK obesity care competencies will need to be disseminated in a different way, and to a different target audience, than the US competencies. First, the National Health Service (NHS) uses a multidisciplinary team approach for healthcare, and therefore the US competencies should be adapted and extended to target nurses and allied health professionals as well as physicians in the UK. Second, while the US competencies focus around six key domains that are central to medical school education in the USA, the competencies can be grouped differently in the UK. While these competencies are important for undergraduate training, they are aimed at all health professionals looking to specialise in obesity care. The UK does not currently have universally agreed competencies for obesity management especially at the postgraduate and continued professional development levels specifically for HCPs looking to specialise in obesity care. Finally, it was important that experts by experience, including patients,

played a key role in the process of developing the UK competencies. People living with obesity have a lived experience of the discrimination and stigma associated with obesity, including the stigmatising language and behaviour of some HCPs.

The aim of this article is to provide a framework of obesity care competencies for HCPs involved in specialist obesity services (tiers 2–4 in the UK), to improve professional education and patient care in the UK.

METHODS

Following the publication of the US obesity care competencies paper in July 2019 [15], leading UK-based clinicians and academics in obesity began an initiative to adapt the competencies to a UK audience. Prominent academics, leading obesity clinicians from the fields of medicine, dietetics, psychology and nursing, and obesity patient advocates and educators were invited to form a working group. Facilitated by the College of Contemporary Health, the purpose of the UK Obesity Care Competencies Working Group was to decide which competencies set out in the US publication were relevant and which needed amending for the UK, and to consider how best to disseminate the competencies to improve obesity-related medical education in the UK.

The steering committee consisted of the authors. The full working group included two UK-based leading academics in the field of obesity, a specialist nurse consultant, a specialist consultant dietitian, representatives from the Obesity Empowerment Network (UK), a representative from Obesity UK, and a specialist healthcare consultant.

The UK Obesity Care Competencies Working Group came together in September 2020 for an initial meeting to discuss the 32 US obesity care competencies across six domains as described in the "Introduction" section and the process employed by the US OMEC, including input from authors of the 2019 US paper. The outcome of this meeting was the generation of the initial draft of the UK obesity care competencies, which was distributed to working group members. This was followed by detailed discussion of the competencies by the working group. It was agreed the OMEC competencies should be largely adopted but changes made to reflect the specifics of the UK health system, and input from patient advocates. All members of the group were invited to submit their proposals for amendments to the US competencies, and an iterative process led to the final 29 competencies being agreed. Feedback from the working group was used to refine the competencies over two iterations, before the final set of competencies were agreed upon (Fig. 1). Disagreements were resolved through discussion.

As this article does not contain any new studies with human participants or animals performed by any of the authors, no ethics approval was required.

RESULTS

The UK Obesity Care Competencies Working Group devised a set of 29 core competencies, adapted from the US competencies, divided into five focal areas, namely obesity knowledge, patient care and procedural skills, practice-based learning and improvement, professionalism and interpersonal communication skills, and systems-based practice (Table 1).

Three of the OMEC competencies were excluded, two others were amalgamated into one competency, and one new competency was introduced. Several other competencies were slightly modified to make them more suited to the UK context. Competencies which involved the application of knowledge to develop a personalised care plan were moved from the obesity knowledge domain to the patient care domain as the working group decided these competencies were more relevant to patient care. Two competencies dealing with appropriate use of language in the interpersonal and communication skills domain were merged as they were very similar in objective. The competency dealing with cost of intervention was removed as this is an area HCPs usually do not discuss with patients in clinic, especially in the NHS. Finally, the working group agreed on the addition of competency 4 in the patient care and procedural skills core domain, which discusses the recognition of emergent obesity-

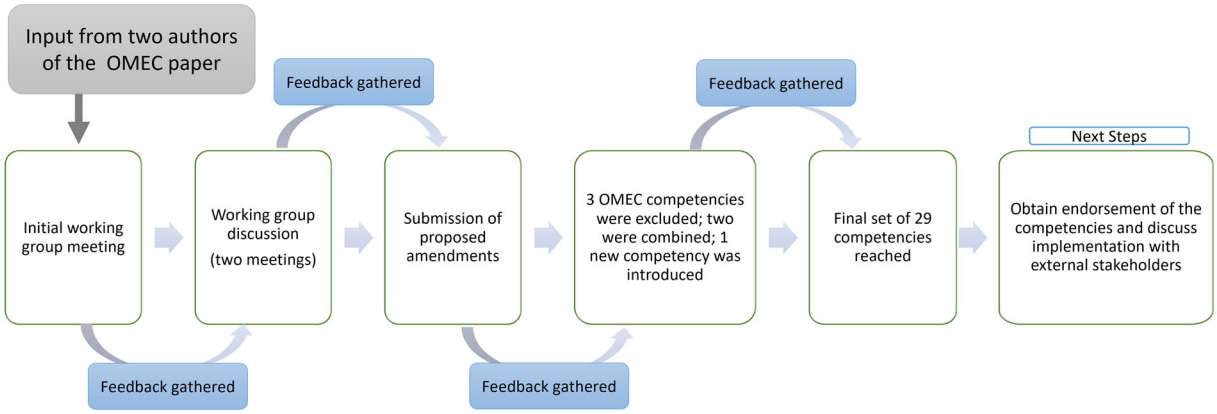

Fig. 1 Flow chart outlining the steps in the review process. An overview of the review process in 2020 which included an initial working group meeting to discuss all stakeholders for whom these competencies will be relevant and discussed the US competencies with two authors of the OMEC paper. There were two meetings of the working group for detailed discussion on the competencies relevant to the UK. Following this all members of the group were invited to submit their proposals for amendments to the US competencies, and an iterative process led to the final 29 competencies being agreed. *OMEC* Obesity Medicine Education Collaborative

related complications and appropriate response based on the scope of practice. This is adapted from a competency from Provider Competencies for the Prevention and Management of Obesity (2017) [21] and is appropriate for the wider range of health professionals targeted by the UK competencies.

In addition to these core competencies, the working group agreed that it is desirable that HCPs with an obesity speciality demonstrate an understanding of novel technologies that could be used to innovate and improve obesity care, knowledge about the costs of obesity intervention and/or prevention, and recognition of the social stigma and personal values and attitudes towards obesity. In addition, it is important that HCPs understand the psychological constructs of obesity, in order to counsel patients effectively.

The working group targeted HCPs involved in specialist obesity care (tier 2, 3, and 4 services in the UK) for the obesity care competencies, because Health Education England has recently developed competencies targeting HCPs working toward obesity prevention and the reinforcement of healthy eating and physical activity messages (tier 1 in the UK). Therefore, the more refined obesity care competencies recommended here are most suitable for HCPs working in specialised services.

Dissemination of the UK Competencies

In the USA, an obesity subspeciality in board certification and fellowship training has been created, with more than 5000 certified American Board of Obesity Medicine (ABOM) diplomates to date [22]. There are no ABOM equivalents in the UK, though HCPs can study for the internationally recognised Strategic Centre for Obesity Professional Education (SCOPE) qualification. Therefore, the working group recommends targeting the obesity care competencies at medical staff training as specialists in the UK; the competencies could then be modified for inclusion in undergraduate programmes of medical education.

The US obesity care competencies were developed for HCPs with prescribing ability. However, given the multidisciplinary team approach to patient care in the UK, the scope of the UK obesity care competencies was expanded to be applicable to any patient-facing HCPs in obesity.

Each profession will be able to select those competencies considered relevant/appropriate

Table 1 Core domains and associated obesity care competencies devised by the UK Obesity Care Competencies Working Group

Obesity knowledge
1. Demonstrates knowledge of obesity epidemiology
2. Demonstrates knowledge of energy homeostasis and weight regulation
3. Demonstrates knowledge of anthropometric (body composition) measurements and clinical assessments of energy intake and expenditure
4. Demonstrates knowledge of aetiologies, mechanisms, and biology of obesity
5. Demonstrates knowledge of obesity-related comorbidities and corresponding benefits of body weight reduction
6. Demonstrates knowledge of emerging treatment modalities in the treatment of obesity
Patient care and procedural skills
1. Elicits comprehensive obesity-focused medical, social and wellbeing history
2. Performs and documents comprehensive physical examination for the assessment of obesity
3. Uses evidence and applies clinical reasoning skills when ordering and interpreting appropriate biochemistry and diagnostic tests during the evaluation of patients with obesity
4. Recognises emergent obesity-related complications and responds appropriately on the basis of their scope of practice
5. Utilises evidence-based models of health behaviour change to assess patients' readiness to change in order to effectively counsel patients for weight management
6. Uses patient-centric techniques to engage patients and their support systems (e.g. family and friends) in shared decision-making by incorporating their values and preferences in the development of a comprehensive, personalised obesity management care plan
7. Applies knowledge of the principles of primary, secondary, and tertiary prevention of obesity to the development of a comprehensive, personalised care plan for patients with overweight or obesity
8. Applies knowledge of obesity treatment guidelines to develop a comprehensive, personalised obesity management care plan and/or provides personalised obesity treatment within their scope of practice
9. Applies knowledge of nutrition interventions to develop a comprehensive, personalised obesity management care plan and/or provide personalised obesity treatment within their scope of practice
10. Applies knowledge of using physical activity interventions to develop a comprehensive, personalised obesity management care plan and/or provide personalised obesity treatment within their scope of practice
11. Applies knowledge of using behavioural interventions to develop a comprehensive, personalised obesity management care plan and/or provide personalised obesity treatment within their scope of practice
12. Applies knowledge of using pharmacological treatments of obesity as part of a comprehensive, personalised obesity management care plan and/or provide personalised obesity treatment within their scope of practice
13. Applies knowledge of surgical treatments of obesity as part of a comprehensive, personalised obesity management care plan and/or provide personalised obesity treatment within their scope of practice
Practice-based learning and improvement
1. Evaluates strengths and deficiencies of own knowledge, experience, and skills in managing and/or treating individuals with obesity and sets and achieves goals for improvement
2. Analyses local practice systems using quality improvement methods to monitor patient outcomes and wellbeing, and optimise obesity care

Table 1 continued

3. Uses information technology related to obesity treatment to optimise delivery of care beyond routine use of electronic health records, such as software applications, and related devices (i.e. self-management health applications, accelerometers and resting metabolic rate/body composition analysis technology), when available and/or appropriate
4. Provides evidence-based education and guidance to patients, students, health professionals and others about the complexity and causes of obesity
Professionalism and interpersonal communication skills
1. Uses appropriate patient-first language in verbal, nonverbal, and written communication that is nonbiased, non-judgmental, respectful, compassionate, empathetic and considers others' levels of knowledge and understanding when communicating with patients with obesity, their support networks, and other healthcare professionals or staff (e.g. interpreters, learning disability teams)
2. Demonstrates awareness of how an individual's gender, social background, deprivation and culture impact on body weight perception and obesity management when communicating with the patient, family and other HCPs or staff
3. Displays compassion and respect toward all patients and families who are living with overweight or obesity
Systems-based practice
1. Works collaboratively within an interdisciplinary team dedicated to obesity prevention and/or treatment strategies, where organisational structure permits
2. Advocates for policies that are respectful and free of weight bias and stigma
3. Utilises chronic disease treatment and prevention models to advance obesity intervention and/or prevention efforts within the clinical, community, and public policy domains

to its members. Training aligned to a core set of competencies will serve to increase patient confidence in the healthcare staff advising and treating them for obesity.

A "Practitioner with Extended Role" Qualification

In the UK, obesity medicine is introduced to undergraduates as part of the subspeciality of metabolic medicine, where it does not get the in-depth coverage that it warrants, or it is taught in specialist postgraduate courses.

One way in which physicians can gain additional professional qualifications in the UK is through recognition as a General Practitioner with Extended Role (GPwER) as part of the Royal College of General Practitioners framework (2018) [23]. GPwER encompasses the General Practitioner with Special Interests (GPwSI) qualification of previous years [23]. With the rising prevalence of obesity in the UK, and the variable provision for treatment of this disorder, the working group suggests that the competencies presented here could be used to direct a new GPwER.

The competencies should also be extended to nurses via the Specialist Practice Qualification [24], and incorporated into specialist training for allied health professionals, and other patient-facing staff, including community pharmacists who offer weight management services.

DISCUSSION

To address the need for more structured obesity-related medical education in the UK, driven by the rising prevalence of obesity and the limited success in its management to date, the recently published US obesity care competencies have been adapted for UK stakeholders by a working group of diverse experts by profession and/or experience.

The production of a UK-focused competency-led programme of care, centred on the patient, but delivered through highly trained clinicians, is likely to be welcomed by policymakers, purchasers of healthcare (commissioners), and educationalists. The providers of competency training can adapt the programme to different cultural, environmental, and ethnic needs. Some degree of standardisation of obesity-related medical education, through a competency-based approach, would be importable into existing under- and postgraduate training programmes. In the new digital era, this would be accessible widely and offer the chance of delivering a nationwide, blended approach to training.

The UK is committed to reducing health inequalities—the differences in health status that arise from an unequal distribution of social, environmental, and economic conditions within societies, which determine the risk of people getting ill or the opportunities to take action and access treatment [25–28]. The inequality gap in obesity rates is widening; for example, the obesity prevalence gap between the most and least deprived areas of England has increased from 11 percentage points in 2014 to 17 percentage points in 2020 in women, and from 2 percentage points to 8 percentage points in men [29]. Improvements in medical education for specialist obesity care may lead to increased provision of these services, with the potential to improve access to these services for more deprived communities. The acceptance and integration of obesity care competencies into the UK healthcare system will provide a stepping stone toward this goal.

At present, patients outside of the USA are presented with little information on the competency of the HCP advising them; a competency-based approach will enable patients to feel more informed and empowered. While we have the OMEC competencies as well as the Strategies to Overcome and Prevent (STOP) Obesity Alliance standard of care for the treatment of adult obesity that can be useful for obesity training, both have a US-centric focus and so there is a gap for standardised competencies which reflect the UK context [30]. The adoption of this framework has the potential to drive a culture change surrounding the perception of obesity and individuals living with obesity.

Both economically and holistically, the benefits of a nationwide training approach aligned to a core set of competencies should easily repay the initial investment required for accreditation, endorsement, and dissemination (including the selection of applicable competencies by each profession and the development of training course content that incorporates them).

From the six core competency domains published by OMEC, five core domains were established to describe the 29 competencies presented here with the amalgamation of the professionalism domain with interpersonal and communications skills domain.

One study highlighted the need for guidelines and curricula that address obesity in depth. Universities, hospitals and organisations involved in the care of patients with obesity can incorporate competencies to better prepare staff and HCPs for the challenges related to obesity care [31]. The current undergraduate and professional training lacks adequate teaching on the causes of obesity and the impact on patient lives. This can lead to a disruption in the patient–HCP relationship and lead to increased stigma. Therefore, there is a need for a system-wide approach to bridge this gap by improving on existing training programmes.

Training aimed at promoting the use of patient-first language and increasing awareness of the bias and stigma that patients often experience from HCPs can help strengthen the patient–HCP relationship and improve patient outcomes. Furthermore, greater education about the aetiology of obesity as well as evidence of appropriate and effective interventions is an ongoing process and therefore continual professional development that utilises standardised competencies can bridge the gaps in information to produce highly trained HCPs [31]. This list of obesity care competencies aims to provide an initial framework to improve education for HCPs and therefore to improve patient care in obesity.

The next steps towards incorporation of these competencies into training programmes

will involve wider discussion and consultation with the relevant professional bodies such as the Royal College of Nursing (RCN), the British Dietetic Association (BDA) and experts by experience as well as endorsement by medical schools in the UK. Therefore, the development of instructional guides to equip programme directors with the familiarity needed to train and evaluate their students would be helpful. As with all medical education, it is important that these competencies are used alongside high-quality, evidence-based clinical guidelines (such as the National Institute for Health and Care Excellence [NICE] in the UK) for the diagnosis and management of obesity, and with appropriate supervision from senior medical staff.

One of the limitations of the paper is the lack of inclusion of an external review process by education and professional training boards who would be one of the users of this set of competencies. Another limitation is the lack of assessment tools for how the competencies may be assessed; however, this is beyond the scope of this paper and could be addressed in the future.

CONCLUSION

We aimed to develop a framework of obesity care competencies, targeted at HCPs involved in specialist obesity care, to improve professional education and patient care in the UK. The US OMEC competencies were adapted according to the specifics of the UK healthcare system and five core domains were established to describe a total of 29 competencies. The acceptance and integration of these competencies into the healthcare system should provide a stepping stone toward addressing trends in health inequality.

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Compliance with Ethics Guidelines. This article is based on previous publications and does not contain any new studies with human participants or animals performed by any of the authors.

Data Availability. Data sharing is not applicable to this article, as no datasets were generated or analysed during the current study.

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