

**A qualitative study to explore the attitude of clinical staff to the challenges of caring for obese patients**

LUMLEY, Elizabeth, HOMER, Catherine <<http://orcid.org/0000-0003-2571-6008>>, PALFREYMAN, Simon, SHACKLEY, Phil and TOD, Angela

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A qualitative study to explore the attitude of clinical staff to the challenges of caring for obese patients. Dinsdale E, Homer, C, Palfreyman S, Tod AM.

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## **Abstract**

**Aim:** To examine, from the perspective of staff, if obese patients have any additional care needs, and what the impact of these care requirements are on care provision. We have selected obese patients with venous leg ulceration as an example patient population to explore these questions.

**Background:** Anecdotal evidence indicates obesity can increase care requirements and have implications for obesity for care provision. However, little research exists nationally or internationally that provides evidence from a health care perspective. Obesity is a contributory causative factor of lower limb ulceration. In addition to affecting the development of venous leg ulceration (VLU), obesity may also impact on the care an obese patient may require and receive.

**Design:** Qualitative study using semi-structured in interviews and framework analysis.

**Methods:** Interviews were conducted with 18 HCPs, and one focus group with 12 HCP who cared for patients with venous ulceration. Data were analysed to identify recurring themes relating to the impact of obesity on care provision.

**Results:** This study found that the increasing numbers of obese patients with leg ulcers are currently presenting challenges to care delivery in many different ways. There was an impact of obesity on patient experience in terms of dignity, safety and quality. Data indicated that neither hospital nor community care services were adequately set up to meet the needs of obese patients in general.

**Conclusion:** Healthcare providers need to recognise that increasing numbers of overweight and obese patients are presenting challenges to care delivery. The study also indicated the need for senior strategic leadership in planning for meeting the needs of obese patients.

## **Relevance to Clinical Practice:**

Nursing is well placed to provide specialist support to co-ordinate services for obese/oversize patients if a suitable strategic and leadership role is developed.

Nurses are used to offering patients help in areas of health promotion such as smoking cessation. Lessons learnt from this area could be applied to help and encourage staff to support patients with weight management.

**Keywords:** obesity, overweight, venous leg ulcers, leg ulcer, nursing, impact on care, qualitative research.

### **What does this paper contribute to the wider global community?**

- As the obesity epidemic increases, health workers are experiencing challenges delivering care to a growing number of obese patients. This study provides initial evidence, from the perspective of health care professionals (HCPs) caring for people with venous leg ulceration, that obesity creates additional care needs.
- Patients who are obese may experience a number of challenges when accessing healthcare. These include: delays in care and care processes, a reduced quality of care, and missed opportunities for behavioural and lifestyle support and education.
- Growing levels of obesity, and the associated care needs, may have diverse implications for healthcare organisations. Healthcare organisations need to ensure a co-ordinated and comprehensive approach to care of obese patients, and to provide the education and resources to nurses and other health professionals to deliver that care.

## **Introduction**

There can be a perception amongst healthcare professionals (HCP) that obese patients present a challenge to the nature and complexity of health care (Gilbert 2009, Dean 2011). Anecdotal evidence, and findings from a local research prioritisation event with health care staff, suggests this may be due to a number of reasons including: the patients' size and weight, lack of appropriate equipment and resources, or the care setting itself. Although there is some evidence of the treatment complications related to obesity there has been little research, both nationally or internationally, that provides insight into the realities that clinical staff experience when providing care and treatment for obese patients.

## **Background**

Obesity is a major health problem globally, with rates worldwide nearly doubling since 1980 (World Health Organisation 2014 (WHO)). Obesity was once considered a problem solely for high income countries. However, it now impacts on low and middle income countries, particularly in urban settings (WHO 2014).

The most widely used indicator used to classify weight is the Body mass Index (BMI): the measurement of weight relative to height. A BMI  $\geq 25\text{kg/m}^2$  is considered overweight, a BMI of  $\geq 30\text{kg/m}^2$  obese and people with a BMI of  $\geq 40$  are classed as morbidly obese (National Institute of Care Excellence (NICE) 2006). In the UK 1993-2012, the proportion of obese adults increased from 13.2% to 24.4% in men, and 16.4% to 25.1% in women (Health and Social Care Information Centre (HSCIC) 2014). In 2012-2013 in the UK, the NHS recorded 10,957 finished admission episodes with a primary diagnosis of obesity, an increase from 1,275 in 2002-2003 (HSCIC 2014).

Obesity can be associated with lower limb ulceration. Studies have shown that patients with venous ulcers have a higher median BMI than those with non-venous ulcers. A higher proportion of patients with venous ulcers were obese compared to the general population (Nelzen et al 1994, Willenberg et al 2010; Vlajinac et al 2013;). People with a higher BMI are also more likely to have ulceration and skin changes compared to those with a lower BMI (Danielsson et al 2002). The predisposition for more obese patients to develop leg ulcers is thought to be linked to the presence of increased abdominal mass and restricted movement leading to impaired function of valves in the leg veins resulting in chronic venous insufficiency and the resultant risk of ulceration (Tobin et al 20013).

The treatment and management of lower limb ulcers can also be more complex, and less effective, in overweight and obese patients (Anderson and Knight 2011). For example, the application of wound dressings and compression bandages can be difficult. A particular issue may be the presence of 'champagne bottle' shaped legs which means that there is a need for the reshaping of the leg using padding before applying compression bandages and the need for more complex dressings (Charles, Moore and Varrow, 2003). Obesity can also have a direct impact to wound healing. This may be due to poor diet and nutrition (Collins 2003), or poorly vascularised fatty tissue impeding blood flow and nutrient delivery to wound sites (Wilson and Clark 2003).

On a practical level, obese patients also present challenges in terms of moving and handling as traditional techniques and equipment may not be suitable (Drake, Dutton, Engelke et al. 2005). Furthermore, obese patients' often require increased numbers of clinical staff to meet their care needs, and the amount of clinical time necessary may be significantly longer than for a healthy weight patient (Davidson, Kruse, Cox et al. 2003).

Patients with leg ulcers may receive their treatment in a variety of settings including acute hospital inpatients, outpatient clinics, GP surgeries or their own home. Treatment is often nurse-led by Clinical Nurse Specialists or Community Nurses. Within clinical settings there is anecdotal evidence related to the care of this patient group, but there has been little published evidence on how obesity impacts upon the care needs for patients and care delivery for staff.

The research presented here is an initial exploratory study that was developed following discussions during co-production, research prioritisation events run by the Collaboration for Leadership in Applied Health Research and Care – South Yorkshire (CLAHRC-SY), within the obesity theme and a NIHR funded study examining the process of care. Pre-protocol consultation with academics and health and social care practitioners had also supported the need for research in this area.

## **Methods**

### **Aim**

The aim of this exploratory study was to examine, from the perspective of staff, if obese patients had any additional care needs, and what the impact may be on care provision. The focus was on patients who had a venous leg ulcer but the aim was also to explore issues that may also be applicable to obese patients in other settings and with other illnesses.

### **Design**

A qualitative approach was employed using semi-structured interviews and a focus group. Framework Analysis was used to analyse the data.

### **Sample**

In order to explore the care needs of obese patients we decided to limit the study to one patient population where there seemed to be an association with obesity. This allowed an in depth exploration from the perspective of staff caring for one patient group. To include staff perspectives on more than one patient population would have required a much larger study. Consequently, due to our limited resources it was decided to focus on the staff perspectives of obese patients with venous leg ulceration to explore if the additional care needs of obese patients. Our justification for selecting this group was the associations between leg ulceration and obesity which have been outlined earlier.

A project advisory group was established consisting of the Trust Moving and Handling Lead (nursing background), a Practice Development Co-ordinator (nursing background) and a Bariatric-Surgery Nurse Specialist. We targeted recruitment at clinical staff involved in the care of patients who were obese and had venous ulcers.

The advisory group helped to map out a patient pathway for venous leg ulcer patients in order to identify staff groups involved in the care of these patients (figure 1). Purposive sampling was then used to try and ensure that the participants recruited reflected the roles identified within the pathway. As the focus of the study was to examine the patient in both primary and secondary care, key clinicians from both settings were recruited for interview. The participants included nursing, allied health professionals and medical staff (Table 1). Later in the study, data from the earlier interviews were used to inform sampling decisions regarding which other staff needed to be included. For example it became clear from the

earlier interview data that it was important to gain the views of a staff members involved with discharge planning and a community tissue viability nursing specialist.

Eighteen one-to-one interviews were conducted. The study participants were recruited from both primary (community) and secondary (hospital) care settings in a large city in the north of England (participant demographics shown in tables 1 and 2).

Emerging findings from the interviews were verified and expanded upon within a focus group consisting of twelve HCP's, who were also the hospital Trust's moving and handling trainers. The moving and handling trainers were selected as they were an informed group who could comment from the perspective of previous training and experience of working with obese patients in their role.

### **Ethical Issues**

Ethical review was obtained from a local NHS Research Ethics Committee. Participants were asked if they were interested in participating, given a participant information sheet and invited to ask questions about the study. They then had at least 24 hours to consider participation. Contact details of the research team were provided should any further information be required. Consent was obtained from all participants. All recordings were transcribed, anonymised for identifiable information and were erased after transcription.

**Data Collection:** The data were collected between April and November 2013.

Individual face-to-face staff interviews were conducted within the clinical setting, in a private area, at a time of the participants choosing. The focus group was conducted during the trainers' annual moving and handling session. All interviews, and the focus group, were audio-recorded. Consent to participate was verified prior to interview.

Interviews were semi-structured and conducted using an interview schedule. The schedule was developed from published evidence and consultation with the advisory group.

Interview questions aimed to explore, the impact of obesity on clinical workload, experiences of providing care for obese patients, knowledge of assessing weight/BMI, any identified differences in care provision, how well they thought services were set up and what could be done to improve services and staff understanding of the links between obesity and leg ulcers. As the interviews progressed the ordering of the questions was altered to reflect the flow of information from participants, but the questions remained the same.

Emerging themes from early interviews were fed into later interviews to confirm their applicability. For example, the original interview schedule did not ask about attitudes

towards obese patients; however this was brought up by one of the first interviewees. Therefore this topic was added in the following interviews and continued to elicit a strong response. Adaptations were made to the schedule when interviewing managers who no longer had a clinical role. We explored their understanding of issues but appreciated they were no longer able to relate it to current hands-on clinical experiences. Each participant was asked a final question to see if there was anything that had not been addressed in the interview that they wanted to discuss further.

### **Analysis:**

Interviews were recorded, transcribed verbatim, and the data anonymised. The recordings were then listened to with the transcripts to confirm missing or inaccurate data. Framework Analysis techniques, as described by Ritchie and Spencer (2003, 1994), were used for analysis. This is an established analytical approach in health and social care research. It offers a robust, systematic process that was appropriate to generating the required insight into the issues related to the topic. It was not the purpose of the study to generate theory or examine “lived experience” therefore approaches such as grounded theory and phenomenology were not appropriate.

The first researcher initially carried out a familiarisation analysis, reading and re-reading the data, and noting ideas. The first eight interview transcripts were coded systematically by the first researcher (ED) and initial codes were established, with data collated to each code. Coding was repeated independently by a second researcher (CH) for verification. As further interviews were conducted the data produced was added to the initial codes where appropriate or new codes were developed.

Qualitative analysis software was not used and coding was conducted manually. The analysis was supported by using a word processing package to cut and paste the data into lists and charts by theme and participant, and to help search and manage the data.

The first codes were collated into 10 sub-themes (Figure 2). The 10 sub-themes were checked in relation to the coded extracts and verified independently by a third researcher (AT). A subsequent thematic framework of three main themes was then developed that incorporated the original 10 sub-themes (Figure 3).

Validation of the data analysis was examined through concurrent analysis and discussion within the advisory group.

## **Results**

Participants reported that obesity created additional care needs and that these care needs impacted upon staff. In this section, the paper focuses on selected findings within the sub-

themes that illustrate and illuminate that impact. Relevant quotes have been included to exemplify some of the key points raised.

### **Patient Care Factors**

Participants reported that there are an increasing number of overweight and obese patients passing through their service. It was apparent that many of the staff felt that patients who were overweight or obese on the care pathway and within the NHS in general, had negative care experiences.

Participants reported that it can be difficult to provide typical or standard care to obese patients because of the challenges created by their weight. Examples included the difficulty in applying dressings for larger patients.

*‘One of the difficulties I would say...it is more difficult to apply the dressings appropriately because it is very difficult for somebody to hold the leg up while they are doing the dressing...because at the end of the day the person doing that it is only human. The dressings take an age to do.... you are manhandling a massive great big leg then it’s really, really hard’ (P3 Strategic Nurse)*

Delays in care and care processes for obese patients were mentioned in almost every interview. Examples included delays in weighing patients due to lack of suitable scales, delays in assessments and starting rehabilitation due to lack of adequate staffing, or because bariatric equipment wasn’t available, or couldn’t be found. The reported knock-on effects included delayed discharges and unnecessary extended length of stays in hospital.

*‘It is more noticeable because we are having more patients that you need to make special arrangements for....going home will be a problem and it can delay their discharge....it can be down to equipment or the transport itself....From our point of view looking at capacity it’s no good me getting one bariatric patient home if I am going to lose six other discharges because they wouldn’t have time to do them’ (P8 Patient-Flow Manager)*

Participants also expressed concerns about compromising patient dignity due to lack of suitable equipment for obese/over-sized patients. Examples given often related to care associated with hygiene and going to the toilet.

*‘We had an obese lady with a stroke and for toileting we had to hoist her then take her off the ward to a spare room and onto a bariatric commode because we couldn’t get her into a toilet, we didn’t have the space, it is horrific, how undignified is that.....you can try but I do think obese and overweight people often get a poor deal just through no fault of their own and not necessarily for any fault of the staff just a poor set up and poor thought’ (P17 Physiotherapist)*



Not all clinical staff had negative responses and some participants reported that they thought care and recognition for overweight patients was improving.

*'The NHS is getting better because we have to deal with more overweight and obese people....there are more things available but still a long way to go'*  
(P15 Discharge Liaison Sister)

Overall it was felt that care was not always of good quality and that services were not set up to deal with the needs of obese people. This was not anyone's fault; it was: *'just the way things were'*.

### **Raising the Issue of Obesity**

One key finding of the interviews was that clinical staff found it difficult to talk to patients about their weight, and the likely impact being overweight has on health, disease, care and treatment. Participants recognised that it was a sensitive topic and needed to be discussed at an appropriate time. However, they were unclear which clinician was responsible and where accountability for discussing weight-loss and weight-management lay.

*'It's not easy to do but I will do it.... It's a difficult conversation but I would try and explain weight-loss in terms of helping the leg ulcer to heal...a positive approach'*  
(P12 TVN/VNS)

*'Obesity and weight problems are something I don't mind addressing, it is variable between GP's though, and I do think you have to do it very sensitively'* (P9 GP)

Some clinicians felt that having conversations about somebody's weight may lead to them being open to accusations of discrimination:

*'If you bring it up are you the right person? Is it your role to bring it up? Are you going to get accused of being discriminatory against them or bring something up that they don't want to talk about?'* (P16 Physiotherapist)

However it was recognised that clinical staff have a duty to address the issue of weight due to the health impact it can have:

*'ALL staff have a responsibility to help with any healthcare issue, whether its smoking or weight'* (P14 Lead Nurse)

The participants generally reported they thought that the most appropriate setting for weight-management discussions was in the community. This was because they believed community staff had more chance of building a rapport, and more time for the discussion.

*'I think it can be difficult...wards are busy and is it the right environment? When you are going into a patients home...you can go through leaflets with them and leave them and go back so you are building on it...whereas someone might come in for two*

*days...and you're probably not seeing them again'*  
(P15 Discharge Sister and an ex-Community Nurse)

### **Clinical Staff**

All the participants reported during the interviews that the increasing number of obese patients was having a detrimental impact on staff and their capacity to care for all patients; in terms of both time and staffing numbers.

*'It puts more demand on staff. Yes definitely more staff to.....help with care and things and then especially everything becomes more complicated....definitely takes more time'* (P7 Staff Nurse)

Time was an issue for clinical staff who provided hands-on care. They reported that it took longer to assess or care for a patient who was obese. Administering basic care or wound care required more time. As a result clinical staff described how obese patients were often getting: *'left till last'* (P16 Physiotherapist).

The increased physicality of caring for heavy patients was stressed by the majority of staff. They reported that providing care for an obese patient was much harder work, required more effort and that more staff were often needed. Participants commented upon the impact on their own, or co-workers, health. For example, injuries had occurred to shoulders and backs due to moving heavy patients, or having to hold up large legs, or abdominal aprons of fat, whilst they undertook wound care. Each participant that delivered hands-on care to obese patients stressed that it was physically more demanding. In their experience the extra numbers of staff necessary were not factored into staffing levels or formed part of management decisions.

*'I know that it's awful but you know that it's going to take a hell of a lot longer, so the time management has got to be better. You've got to be so prepared....I think psychologically as well as physically it's a challenge because you know you are going to be stuck for probably an hour if it's two legs and it's heavy, it is physically very hard work. It would be unusual to take somebody.....back to Vascular Clinic it was impossible because there were only two of you and if the clinic was full there was no way you could ask for help'* (P12 TV/VNS)

*'The demand on staff and you know extra staffing.....staffing doesn't usually allow for it so that it difficult'* (P7 Staff Nurse)

*'There is the expectation that staff just get on and deal with it regardless of whether that patient is very obese and needs additional care....I don't think anybody is flagging up and thinking we will need some extra staff'* (P3 Strategic Nurse)

It was acknowledged that much of the care impact of obesity was related to the reduced mobility of the patients. The larger and heavier the patients were the more they struggled

to move themselves, especially when they had a large abdominal girth. Therefore, larger patients relied on staff to assist in moving them. The impact of this varied depending on the clinical area. For example the ITU in the hospital had been refurbished to include overhead hoist systems that went above the standard size and were able to take the weight of extremely obese patients. The hoist's that were available in most other clinical areas were not able to do this.

Paradoxically some staff, particularly those that were moving and handling trainers, indicated that clinical staff often overestimated the number of staff needed to move obese patients. This appeared to be due to worries about moving and handling, and health and safety. Such caution could be due to past experiences, or lack of understanding or training on equipment usage or moving and handling techniques.

*'We have a very much hands off approach now if somebody appears to be a bit fat...it is probably because of my job that I am a little bit more confident in the equipment.....and making the judgement-call. I think sometimes that staff err on the side of caution and are a bit scared'* (P3 Strategic Nurse)

### **Organisational Factors**

Inadequacies in the provision, access and funding for specialist equipment appeared to present major challenges. The issue of spending time searching for appropriate bariatric equipment was frequently highlighted. This included finding and sourcing the necessary equipment to provide care. An example was perceived delays created by having to order custom made hosiery for obese patients. In comparison non-obese patients could access hosiery already held in stock.

*'It is hugely problematic...we could really do with somewhere a bit more central where you can keep.....bariatric chairs and commodes.....it is like looking for a needle in a haystack sometimes'* (P14 Lead Nurse)

HCPs were also sometimes unsure of the weight restriction of routinely available equipment and furniture. It was not recognised that using specialist bariatric equipment may not always be necessary - some larger patients can be within the normal tolerance range for general equipment. There was also discussion surrounding the types of bariatric equipment available, whether it was the most appropriate or useful, and who should fund it.

*'There is a need for smaller equipment like leg lifters.....they used to fund it then we had an email saying that they weren't even funding.....anything under £50....now that was retracted because there was outrage but leg lifters never came back and they are so useful'* (P2 Occupational Therapist)

Sometimes the difficulties in obtaining equipment were due to a lack of organisational responsibility for this group of patients:

*'We haven't got frames that we can loan patients to take home.....if you have a bariatric patient you have to apply for funding for it.....quite often the doctors will say well we're not funding it.....then our bosses will say it is a consultant because the patient is under that consultant.....you end up being stuck between saying they need that equipment' (P15 Physiotherapist)*

Staff with fixed length treatment slots for patients spoke about the difficulties caused due to care, therapy or treatment taking longer with obese patients. In their experience this was not considered within the organisation when arranging appointments or allocating timing.

*'Even getting them (obese patients).....to the treatment room can take half an hour or so, and that is never factored into clinic times. I think it is a 15minute slot per patient and if you have got two legs it can take an hour' (P18 TVNS)*

## **Discussion**

This study provides evidence from the perspectives of staff that obese patients, with leg ulcers, have increased care needs when compared to those of normal weight. The study also articulated the impact of these additional care needs on staff. It was apparent that the increasing numbers of obese leg ulcer patients within health services were presenting challenges to care delivery.

Participants described how treatment settings were often not suitable for providing adequate care for obese patients due to lack of appropriate seating in waiting areas, inadequate treatment couches, and no room for bariatric size beds or chairs on wards. Participants highlighted how neither primary nor secondary care services were adequately set up to meet the needs of obese patients. The extent and severity of the difficulties encountered may have differed between each settings, but the problems encountered and themes identified were similar across all participants. The evidence reported echoed the findings of Drake et al (2005) who examined the concerns of nurses caring for obese patients in acute care settings. They also reported worries about staffing requirements, physical challenges, equipment and settings issues; as well as the safety implications for both staff and patients.

The difficulties reported by participants in delivering care included: conducting diagnostic tests, assessment, treating and dressing wounds, finding adequate sized compression hosiery (as this had to be sourced via a custom made service) , sourcing suitable equipment, or conducting physiotherapy or occupational therapy assessments. The associated impact on the patient was continuous delays that affected their treatment and assessment. It also delayed commencing rehabilitation or leaving hospital if they had been an inpatient. The impact of obesity on the time and number of staff needed may mean that existing procedures for allocating staff time and numbers need further consideration. This could be

achieved by developing systems that are able to identify or flag up when obese patients will be attending clinics and services.

Raising the issue and the discussion of weight-management were common themes within the interviews, and stimulated some of the most heated discussion within the focus-group. Staff were concerned that raising the subject of weight may cause offence, and this may leave them vulnerable to having complaints made about them by patients. There appeared to be a lack of knowledge and confidence in discussing weight with patients as it was seen to be a difficult conversation to have with patients. This was a major disincentive to discussing weight-loss or weight-management with patients.

Equipment was often raised as problematic, in terms of access, availability or appropriateness. This was most acutely felt by those who worked in the community. Current funding policy for care of obese patients appeared to be disjointed and inadequate to meet the demands on the service.

Timing and opportunity also appeared to be barriers to commencing weight-related discussions. The suggestion was that within hospital there was not the time to fully discuss such a complex issue and it was not thought appropriate when people were acutely ill. There was also a perception that there were more community weight-management services compared to the hospital setting. None of the hospital staff were aware of available weight-management information booklets or of the appropriate community services to refer patients to upon discharge. This indicated a need for more cross setting awareness, improved referral systems and collaboration regarding weight-management service delivery.

It could be argued that the difficulties related to weight and health promotion mirror those of smoking cigarettes. A number of interviewees compared the problem of approaching the subject of the patients' weight to the concept of helping people to stop smoking. Such a link is supported by a Cochrane review that highlighted similar barriers in smoking cessation to those identified in weight management, including beliefs about whether it was an effective use of time, lack of confidence in clinicians' knowledge and ability, perceptions that the discussion may be unpleasant or inappropriate, and that it may be ineffective (Vogt, Hall and Marteau, 2005). However, unlike smoking cessation services, staff within our study were unaware of what weight-management services were available, or how referral mechanisms worked.

In order to improve HCP training, skills and ability in weight-management discussions lessons could be learned from the success of embedding smoking cessation into health promotion advice, by utilising the wealth of evidence based information available (Lancaster and Fowler 2000). However, it must be acknowledged that interventions aimed at improving how HCP's address weight-management need to be separated into those targeted at HCP's themselves, and those aimed at healthcare organisations. Currently there would appear to

be little evidence about the best methods for helping overweight and obese patients achieve weight-loss (Flodgren, Dean, Dickinson et al 2010).

For staff, the impact of obesity can be seen at its most rudimentary form as presenting difficulties in providing even the most basic care. For the patient this can have a major impact in terms of compromising their dignity and safety, and essentially the quality of the care they experience. At an organisational level the impact can be seen in terms of delayed discharges and extended length of hospital stay. This could be due to the extra time and staff needed for assessments, increased rehabilitation needs, ordering and waiting for specialist equipment, and the complexities of finding appropriate transport or off-site beds for obese patients.

The findings from this study highlighted that the increasing number of obese patients, alongside the complex impact of being obese, will have wide ranging implications for healthcare organisations. The participants' experiences raise a further significant question regarding the lack of any specific strategic lead with responsibility for obesity within healthcare organisations. Such a role could improve care for obese patients through improved planning and management in order to mitigate the impacts on services and care delivery. Currently, there would appear to be a lack of specialist advice or support to help clinical staff care for obese patients - except in the area of moving and handling. Other long-term conditions, such as stroke and diabetes, often have clinical nurse specialists who can act as a resource to support staff with their expertise. A similar role would seem to be urgently needed to help with the care of overweight and obese patients.

## **Study Strengths and Weaknesses**

To the authors' knowledge, this study was the first to examine the impact of obesity on providing care for leg ulcer patients. It provided new insight into the complexities encountered by clinical staff when caring for this group. The small nature of the study and the fact it was conducted in one location, focusing on one patient population (those with leg ulcers) may mean that the results are not transferrable to obese patients in other care groups or geographical locations. Further research would be needed to do test this.

The original target of recruiting 20 staff was almost met as 19 staff were interviewed. We originally identified 18 different care roles on the leg ulcer patient pathway. In the final study, participants were recruited from 13 of the 18 roles (72%).

## **Conclusion**

This study indicated the importance of healthcare providers recognising that growing numbers of obese patients present challenges to care delivery and that these will continue as the population of obese people continues its inexorable rise. Caring for an obese patient has an impact on many different areas in terms of basic care, moving and handling, length of stay, discharge planning and transportation, resources use, education and training, and nutrition. Although obesity is considered to be a long-term condition it currently does not appear to have a strategic position within healthcare organisations. This results in difficulties in the planning and commissioning of services and also the lack of support for clinical staff. Whilst HCPs might be ideally placed to help with weight-management they often lack the confidence and skills to raise the issue of weight with patients. Therefore there is a need for additional training to do this, in addition to signposting for healthcare professionals regarding what resources and services are available to help them broach what may be a difficult subject.

## **Relevance to Clinical Practice**

The increasing number of obese patients within society as a whole mean that nurses will need to have an aware of the impact and needs for this group of patients. This study highlighted that obese patients have additional care needs, compared to those within the normal weight range, linked to infrastructure, equipment and training. Clinicians were also finding it a challenge to deliver care to obese patients. This was made more challenging due to a perceived lack of strategic leadership at the organisational level which can lead to gaps in the co-ordination of services for obese or oversize patients. This study highlighted Nursing is well placed to provide specialist support if a suitable strategic and leadership role was developed.

Nurses also felt unsure about how and when to deliver weight management advice to patients. Nurses may be ideally placed to provide a key role in terms of advice and management of weight as they undertake this role for other groups of patients such as in the area smoking cessation. Healthcare organisations should be encouraged and supported to transfer the lessons learnt from this area in terms of developing seamless services across healthcare settings, and for staff in supporting patients with weight management.

## **Future Research Opportunities**

This study highlighted some future opportunities for further research. The current study was focused on the perspective of clinical staff but it will also be important to examine the experiences of overweight and obese patients with leg ulcers from the patients' perspective.

The findings that clinical staff feel a lack of confidence in delivering lifestyle and weight management services for those patients who have a leg ulcer needs to be tested in other patient populations and services, to identify any similarities and differences. There also needs to be further exploration of the experiences of HCPs in raising the issue of weight and weight-loss with patients including an examination of the facilitators and barriers, and the development and evaluation of interventions to overcome these barriers. Finally, there needs to be an examination of the strategic leadership roles within the healthcare setting to improve the planning and management of the impact of obesity on service delivery and care.

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## Tables

**Table 1: Interview participant demographics**

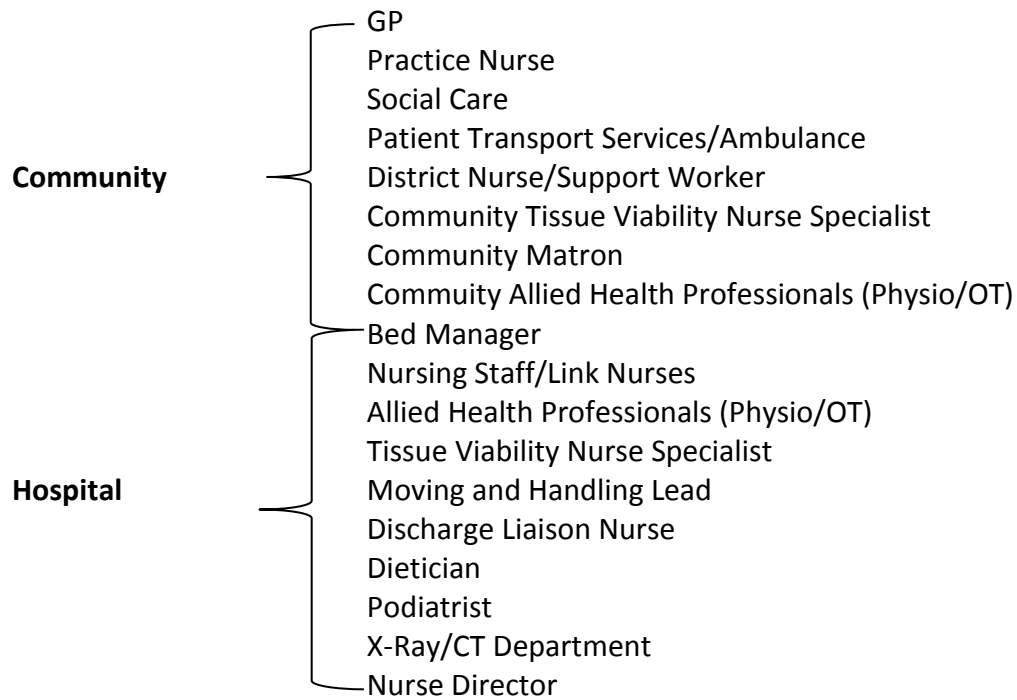
Role	Setting
Dietician	Hospital
Occupational Therapist	Hospital
Moving and Handling (M&H) Co-ordinator	Hospital
Podiatrist	Community
ITU Sister	Hospital
Bariatric Surgery Nurse Specialist	Hospital
Staff Nurse	Hospital
Matron – Patient Flow	Hospital
GP	Community
Physiotherapist	Community
Occupational Therapist	Community
Tissue Viability/Vascular Nurse Specialist (TV/VNS)	Hospital
Tissue Viability Nurse Specialist (TVNS)	Community
Lead Nurse	Hospital
Discharge Sister	Hospital
Physiotherapist 1	Hospital
Physiotherapist 2	Hospital
Tissue Viability Nurse Specialist (TVNS)	Community

**Table 2: Focus group participant demographics**

Role	Speciality/Setting
Practice Development Advisor	Surgery
Moving and Handling Advisor	Medicine
Sister	POSU/ITU/HDU
Clinical Educator	Cancer Hospital
Senior Operating Department Practitioner	Hospital
Clinical Skills Teacher	Medical Education
Clinical Educator	Neurology
Clinical Education Site Lead	Operating Service Hospital
Sister	Renal Unit
Staff Nurse	Vascular Angio
Senior Physiotherapist	Therapy Services

## Figures

**Figure 1: Leg Ulcer Patient Pathway developed to identify staff involved in provision of care.**



**Figure 2: Thematic Analysis**



**Figure 3: Three main themes**

Patient (staff perception of)	Staff	Organisation
<ul style="list-style-type: none"><li>• Who and How Many</li><li>• What difference does obesity make to developing a leg ulcer</li><li>• Patient Experiences</li></ul>	<ul style="list-style-type: none"><li>• Knowledge and awareness of obesity</li><li>• Attitudes</li><li>• Roles</li><li>• Impact of weight in care provision</li></ul>	<ul style="list-style-type: none"><li>• Equipment/Resources</li><li>• Training</li><li>• Setting</li></ul>