Stakeholder Perceptions of the Bariatric Care Pathway on the Wirral

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Executive Summary

- The study involved interviews with stakeholders including service providers and commissioners who were involved with the NHS Wirral Bariatric Care Pathway (BCP), the perceptions of patients' and their families will feature in an ensuing report.
- Eleven interviews were carried out to gain a perspective of the impact and effectiveness of the BCP.
- Five main themes emerged from analysis of the resulting data:
  - Aspects of the pathway
  - Criteria for surgery
  - Organisational factors
  - Individual factors
  - Outcomes of the BCP
- A number of critical factors were identified as key to contributing to successful outcomes:
  - Multidisciplinary working
  - The patient profile
  - Selection of patients
  - Post surgery care
- There was consensus amongst those interviewed that the BCP relied upon motivated and compliant patients in order to achieve optimal outcomes.
- Interviewees agreed that psychological support was a crucial element of the pathway both during intervention and following surgery.
- There were indications that patients who had received care through the Wirral BCP were not meeting the national targets for weight loss post bariatric surgery.

1. Introduction

Obesity is defined as abnormal or excessive fat accumulation that may impair health, and studies suggest that without intervention reversal of obesity is uncommon (Colquitt et al, 2009). In Wirral, it is estimated that 1 in 4 adults are obese and although this is slightly lower than national and regional averages, above average levels have been found amongst Wirral's Year 6 pupils (10-11 year olds). The evidence that obese adolescents remain obese into adulthood (Gordon-Larsen et al, 2004) together with the predictions of rising obesity rates in England suggest that Wirral's adult obesity rates are set to increase.

According to Picot et al (2009), for a standard Primary Care Trust (PCT) population of 250,000, there would be 5,250 cases of morbid obesity (Body Mass Index (BMI) ≥40). For NHS Wirral, which is responsible for approximately 311,000 residents, based on the overall 2006 population value for England of 2.1% morbid obesity, this figure translates to 6,531 cases.

The National Institute for Health and Clinical Excellence (NICE), (2006) recommends that the components of a planned weight-management programme should be tailored to the individual's preferences, initial fitness, health status and lifestyle and should offer a care pathway which includes diet, physical activity, behavioural interventions, drug therapy and surgery. The National Institute for Health Research Health Technology Assessment report (Picot et al, 2009) provides evidence to indicate that bariatric surgery is a more effective intervention for weight loss and is more cost-effective compared to non-surgical treatment.

Referrals to the NHS Wirral Bariatric Care Pathway (BCP) are made by health professionals such as the patient's GP, practice nurse or hospital consultant. The bariatric pathway includes the Lifestyle and Weight Management Service (LWMS), for overweight and obese patients (BMI 25 to 35 plus two co-morbidities, e.g. diabetes, hypertension or BMI 35 without co-morbidities). The LWMS runs for a period of 12 weeks and focuses on healthy eating, physical activity and behaviour change; there are, follow up sessions to help patients remain motivated and to give supplementary support. There is also the opportunity for patients to attend activity classes and healthy cooking classes; patients may also be considered for weight loss drug therapy (Oristat). Following on from the LWMS, in order to ascertain eligibility for surgery, patients are assessed by a clinical psychologist; if not eligible for surgery, they are either referred back into LWMS or to their GP.

In August 2010, a revised version of the BCP was introduced in which patients no longer attend the LWMS service but instead are seen by a dietician for one-to-one lifestyle intervention sessions. As with the previous LWMS service, sessions with the dietician focus on healthy eating, physical activity and behaviour change and also offer opportunities to attend external classes. Current criteria also include each patient taking part in five cognitive behavioural therapy sessions and achieving a 5% weight loss before being considered for surgery. Post operatively, patients now also receive one further session of CBT.

NHS Wirral commissioned an independent study of the BCP from Liverpool John Moores University, to evaluate the effectiveness of the project.

1.1. Aims

The main aim of the study, which forms one part of the overall evaluation of the BCP, was to explore the effectiveness and impact of the BCP from a service provider perspective. Additionally, and in order to provide a broader view, the perspectives of health professionals who *refer patients into* the BCP were also sought.

2. Method

A qualitative approach to data collection and analysis was taken, the aim of which was to describe the views of health professionals (including the service providers and those who refer into the service) from two perspectives. The first aspect concerns the effectiveness of the BCP in terms of outcomes for NHS Wirral, and the second is concerned with the impact of delivery and the associated outcomes for patients.

2.1. Data collection

Data collection took place between October 2010 and February 2011. Professional groups recruited to the study included NHS service commissioners, health professionals, NHS administrators and private healthcare providers. Eleven interviews were completed in total and were conducted either face to face (9) or by telephone (2). Interviews were semi-structured and focused on the perceived strengths and limitations of the BCP. Suggestions for improvement were also invited (for interview schedule see Table 1).[1]

Table 1. Interview schedule

1. Please can you tell me about your role as part of the Bariatric Care Pathway (BCP)
2. In what ways does the BCP impact on the patient experience for those who have surgery?
3. In what ways does the BCP impact on the patient experience for those who do not have surgery?
4. In your opinion what are the main strengths of the BCP?
a. For the service
b. For the patients
5. Can you tell me whether you think the BCP represents good value for money?
6. Can you tell me what measures could be taken to improve the BCP?
7. Can you recommend any measures that could be taken to enhance the economic value of the BCP?

2.2. Data analysis

Data were analysed using a framework analysis approach to identify emergent patterns and themes (Ritchie and Spencer 1994). This five stage process involved familiarisation with the data; the generation of a thematic framework; indexing of all transcripts; charting data and mapping data extracts to the framework; followed by a process of interpretation.

[1] Multiple attempts to interview private service providers were made, however they were not successful in some cases.

Two researchers undertook the initial framework generation during which a selection of transcripts were scrutinised independently and an index of the key issues, concepts and themes was devised. These drew on *a priori* issues linked to the aims and objectives of the study and on issues expressed by the participants. Findings were compared and a final framework agreed; indexing, charting and mapping processes were then completed and an audit trail was completed by a third researcher to ensure that all relevant data featured in the framework and that the final map represents the data that were derived from each of the individual transcripts.

2.3. Ethical approval

Ethical approval for this research was granted by Liverpool John Moores University Research Ethics Committee. The protocol was also presented to Northwest 12 Lancaster Ethics Committee (NHS REC) who deemed the work a service review and advised that NHS REC approval was not required in this case (see letter in Appendix A).

Confidentiality/anonymity

To preserve anonymity, a code was allocated to each participant and was used on all recordings and ensuing documentation. The list of master codes is known only to the research team. The master codes and corresponding names are kept in a locked filing cabinet and on a password protected university PC, accessible only by the research team. Interview recordings were available and listened to only by the researchers and when not in use stored in a password protected PC and destroyed after transcription. All interview transcripts are securely stored in locked filing cabinets and in University password protected computers. According to Liverpool John Moores University guidelines, research data will be stored for ten years and personal data will be destroyed on completion of the study.

3. Results

Analyses of the data elicited five main themes:

- Aspects of the pathway
- Criteria for surgery
- Organisational factors
- Individual factors
- Outcomes of the BCP

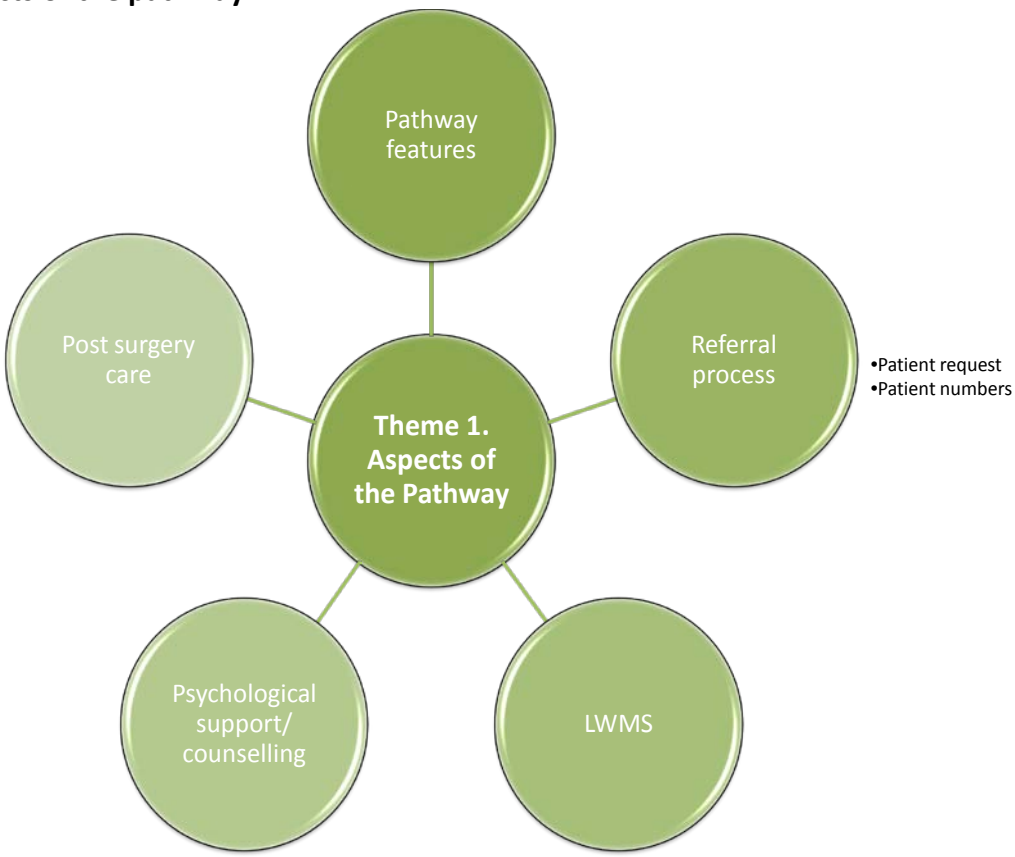
These themes were characterised by a number of categories and in some cases, sub categories.

The findings are illustrated with verbatim quotes from interviews.

3.1. Theme 1: Aspects of the pathway

The study revealed the existence of key aspects which contributed to the success or failure of the BCP and these were divided into five main categories of pathway features: referral process; LWMS; psychological support/counselling; and post surgery care (Figure 1).

Figure 1: Aspects of the pathway



Category: Pathway Features

It was evident from the data that the BCP was viewed positively, being described as well-defined and multi faceted. Incorporating a number of different services in combination such as lifestyle intervention, drug therapy and surgery was thought to provide an optimum service for the patient.

> *"Now we have a very well defined pathway…unlike some areas we have a lifestyle and weight management service, so they have to go through that and the drugs regimes, and they have to do the CBT"*

The well-defined structure of the BCP adds clarity to the process both for the BCP team and for their patients:

> *"…it is good to have a structure to follow. It has enabled us to get a bit of clarity around 'what is the process' – we are constantly dealing with challenges from GPs, nurses, patients (who haven't been put through and so forth)"*

There was suggestion that the previous BCP failed to provide adequate psychological support for patients, particularly in assessing whether individuals were suitable for surgery. However, it was considered that the new enhanced pathway addressed this problem through provision of several sessions of CBT for each patient.

"The pathway has changed quite a lot…there is a requirement for a psychological assessment for people's suitability…I could see the sense in that from two angles, one is the ability to withstand surgery, the risks attached psychologically – and the other one was their ability to benefit. So if their weight gain reflected a whole host of psychological problems it might be that they wouldn't benefit from surgery"

Previously, once patients had been referred for surgery (after completing the 12 week course) there was little further contact between the BCP team and the patient, however post surgical support from the BCP team/the lifestyle intervention team is now in place. There is increasing recognition of the value of psychological intervention both pre and post surgery as a means of motivating individuals to continue to lose weight and pursue a healthier lifestyle.

A fairly recent innovation on the pathway is the introduction of a five percent weight loss target for patients before they complete lifestyle intervention. There was praise for this target as it offers an objective way of deciding who might be suitable for the surgery in addition to a more subjective assessment of emotional state. The combination of the psychological assessment along with the target of 5% weight loss is considered a good positive addition to the pathway because:

"… the first is a judgement…whereas the five percent is more pragmatic. Despite the fact a patient may have psychological problems if they can lose the 5% the problems are not preventing them from losing weight"

Category: Referral Process

Referral takes the form of a letter from a health professional (for example a GP) to the BCP or through a LWMS referral form marked 'bariatric'. Following this a second assessment (triage and screening) is carried out by the BCP administrator to check the patient meets the criteria to be admitted onto the pathway. Not all who are referred are admitted onto the pathway and anecdotal evidence suggests that out of every ten referrals approximately three are accepted onto the pathway.

"…in spite of us going out and briefing them…and issuing packs, we are still getting inappropriate referrals"

However, there was praise for the BCP administered triage system and the way it allowed for inappropriate referrals to be 'weeded out'. There were also comments that other PCTs did not include this step on their pathways.

"It ensures we are receiving the most appropriate patients because of this triage system, it is something that is needed and it is more than other PCTs are currently doing, we are quite advanced, compared to my colleagues we are doing so much more, I think the patients can only benefit from that…"

Category: LWMS

The LWMS run a 12 week course for patients focussing on healthy eating, physical activity and behaviour change. Stakeholders generally viewed the LWMS as a positive step for patients as well as recognising it as a cost effective service, which adequately prepared patients for the lifestyle changes they would need to make.

> *"I think the lifestyle and weight management pathway is the strength for them, elsewhere some people don't have that and they get referred straight from GPs and are unprepared for the lifestyle changes that they have to make"*

> *"I think in terms of the costings that I did I think it worked out the whole service that's LWMS, I think to the point where they get to surgery it's reasonable cost effective yes it's about £350 per patient to go through the pathway"*

It was, however, suggested that LWMS may not be most appropriate method of lifestyle and weight loss intervention for all patients, with some patients preferring a detailed weight loss plan that they could follow easily, such as Weight Watchers.

> *"I had somebody in earlier today who's going to the LWMS and he's also going to Weight Watchers and he finds that it's easier for him to follow the Weight Watchers because in Weight Watchers they tell him how many points are in a baked potato or a portion of chips or mashed potato whereas the LWMS say potato, they're a bit too general for some people"*

It was also suggested that LWMS should incorporate web services, (e.g. online support groups for patients to access) as part of the intervention. This would give less mobile patients the opportunity to receive support from LWMS without having to travel to clinics. In addition, online services could also provide a support network for patients to discuss issues with other patients who are experiencing similar concerns.

> *"It (LWMS) could come up to speed a bit more with IT and I think that's something the new manager is very keen on and wanting to look at so instead of having to bring people in all the time you'll be able to keep in touch with them…just having an online support for those who can access online and having different options. Although there's an initial investment in the beginning I think those types of things will really make a big difference in the future"*

Category: Psychological support/counselling

In June 2010 an additional intervention was introduced for patients on the bariatric pathway in the form of CBT. Each patient attends five sessions of CBT during lifestyle intervention and some of the more complex cases have more sessions according to need via the Psychology Service. The CBT addition was succinctly described by one stakeholder as "…*the enhancement of the intervention by applying psychological principles*." Other stakeholders also supported this view of the positive effect of CBT:

> *"I think a lot of the time the counselling that goes alongside it gives them a greater insight into their health"*

"…a lot of patients have come back feeling very positive after that (the counselling), feeling very understood"

"They do reckon that people are more compliant once they have CBT…"

A key point about changing the mindset of an obese patient is the idea of changing someone's eating habits and attitudes to food for the rest of their life. See Box 1 for a stakeholder's cogent description of psychological processes related to overeating. Whilst some patients may be able to maintain restraint for a short while and lose the 5%, there was a suggestion that they may "*still secretly be waiting the ability to eat what they like*", although being incentivised by their weight loss post surgery and realising their aspirations may be extremely effective in helping maintain a healthier approach.

It was suggested that the BCP *without* psychological support negates the necessity for behavioural change, because patients may feel that once they have undergone surgery they can successfully lose weight without changing their behaviour, thus bariatric surgery is viewed as the 'magic bullet'. Therefore, commencing CBT early on the pathway is more beneficial for patients in terms of effecting lifestyle changes (especially the patient's relationship with food) and consequent weight reduction over the long term.

"The BCP in conjunction with cognitive behavioural therapy compared to other interventions is probably the most attractive way to run the programme…the toxic relationship with food … needs to be established very early on in the process. I don't believe that one issue is addressed early enough."

Box 1.

"…Weight gain is one of these self-exacerbating processes – once you are heavy, you tend to get heavier, for a whole raft of reasons such as you get depressed about being overweight so therefore you are inclined to eat more. It is a vicious cycle, if you are overweight it is harder to exercise, if you are overweight you tend to hide away – there are mobility problems and self-consciousness. If you hide away a number of other vicious circles come into play, you get more depressed because you are deprived of stimulation and company, therefore you are going to get more depressed, and therefore if you are an emotional eater you are going to eat more. If you hide away you are going to be in the house with food, so that means you are going to be more exposed to food if you are an external eater – in other words if you are someone who reacts to food cues…"

At the time the interviews took place the CBT programme was due to finish in March 2011. An interesting point that will be followed up by the research team is the success rates in terms of weight loss for those 35 patients who were involved in the CBT programme during June 2010-March 2011. This CBT programme focussed on establishing patients' suitability for surgery and supporting them to reach that 'goal'. However, the suggestion was made that some patients engaged in CBT feel they no longer require surgery as they have been able to bring their eating behaviours under control.

"The earlier we intervene the chances are statistically that it will negate the requirement for people to go to that pathway…i.e. elect not to go for surgery."

There are clear implications in terms of cost effectiveness relating to the idea of alternatives to surgery in some cases. In addition to supporting patients with complex psychological needs to return to work (thereby reducing state benefit claims), reducing the number of people requiring surgery by the use of a less costly approach in the form of CBT would appear to be to be an option worthy of consideration.

> *"…the cost purely of bariatric surgery is in the region of about 15-20k, there is another view that says that if we spend significantly less than that on CBT interventions and the process, then that is better value for money."*

Category: Post surgery care

Until recently, once patients were referred for surgery and left the pathway, the bariatric team tended to lose contact with them. Although the private provider is contracted to follow up the patients and inform the bariatric team of whether the surgery had taken place this appears not to have been the case. The patient follow up offered by the private provider tended to involve a medical check rather than psychological support. Before the surgery and whilst they are on the pathway, patients receive much in the way of support both physically and psychologically and until very recently this support appeared to cease at the point of referral for surgery.

Many of those interviewed for this report felt that there should be support and follow up for their patients after they had undergone their surgery. There were suggestions that patients were 'abandoned' after surgery, with no reinforcement of the messages and no psychological or practical support. One stakeholder stated:

> *"…they shouldn't just be cut off…maybe to make the best use of surgery they might need one post surgical intervention (one session of CBT), we don't know really because we just don't have a feel for post surgical patients."*

Very recently patients have started to receive one session of CBT post surgery, but some stakeholders expressed the view that a more extended form of support would be needed for some, especially in terms of positive outcomes and continued weight loss.

> *"For me it is making sure we get the outcomes and that is by picking the patients up after the surgery – this is a lifetime commitment for them they are always going to struggle with their weight – it is not a magic bullet – people have their reasons for being where they are in their life and having surgery doesn't change a lot of those reasons, so they are going to need support*."

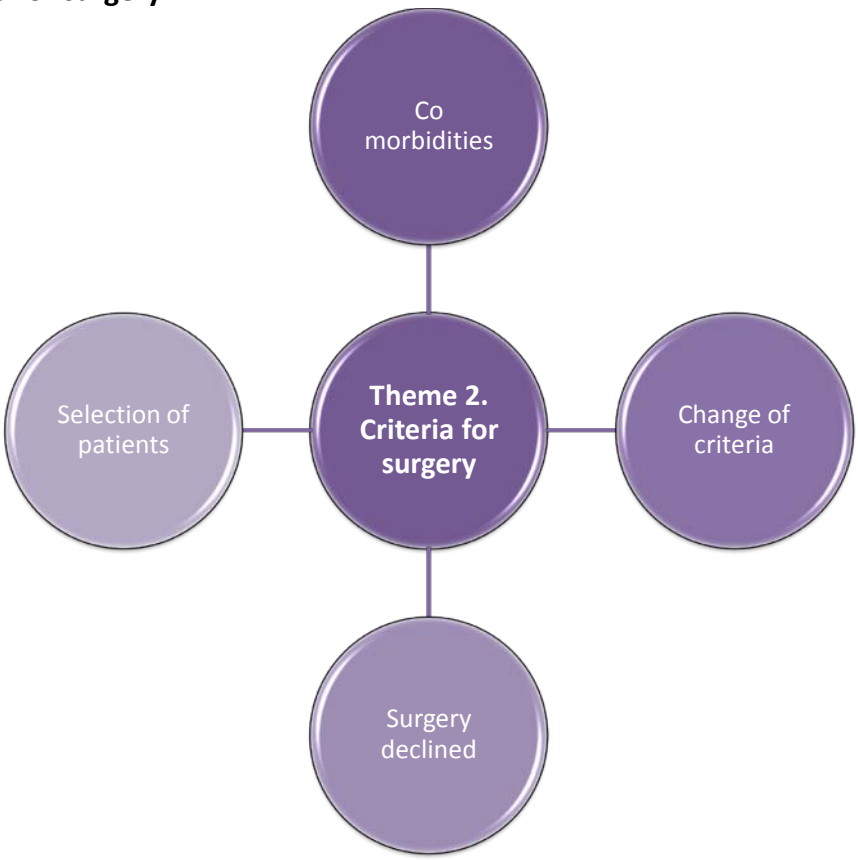
One interviewee indicated that there is evidence to suggest that those patients who attended post-operative support either individually or in groups had more successful outcomes.

> *"There is clear evidence about behavioural interventions and obesity, post surgical interventions have provided the basis to support the patients when (their) behaviour slips."*

3.2. Theme 2: Criteria for surgery

Participants discussed criteria for surgery including the recent change in criteria and four main categories characterised this theme; namely, co morbidities, change of criteria, surgery declined and selection of patients (Figure 2).

Figure 2: Criteria for surgery



Category: Co morbidities

Patients completing the pathway often have a range of complicated co-morbidities including diabetes and hypertension. By reducing a patient's weight it is assumed that this will have a positive effect on their co morbidities in the long term.

> *"They're better for it, a couple of patients we've taken off medication for hypertension medication and diabetics"*

Stakeholders commented that co-morbidities and problems caused by being overweight cost the NHS a large sum of money each year. Therefore reducing a patient's weight should lessen the cost caused by obesity related medical issues to the NHS in the long term.

> *"If you've got someone who is diabetic, grossly overweight pitches in every few days for dressing on ulcers on legs that won't heal because of their weight…they're already costing the NHS a huge amount. If you can then alleviate the problem and reduce their weight and therefore heal the ulcers and improve the diabetes and improve everything for them then I think it is good value for money"*

It was also suggested that the criteria for bariatric surgery of BMI 45 plus significant co-morbidities restricted the numbers of patients who could be referred. One stakeholder commented that in order for a co-morbidity to be considered significant a patient would need to be *"on the full whack of medication that they can possibly take…and it's still out of control"*. Stakeholders argued that this was limiting and restrictive for patients who had a BMI or between 40 and 50 but whose co-morbidities were not considered severe enough to be considered for bariatric surgery.

Category: Change of criteria

The criteria have recently changed from BMI 40 without co-morbidities to BMI 45 plus significant co-morbidities, or BMI 50 without co-morbidities. Fewer patients are being put forward for bariatric surgery since the criteria changed and at interview one stakeholder commented that this was 'a real shame'.

> *"I think having a cut-off of 50 or significant morbidity is not seeing the whole process…and I think these patients are also costing the NHS a significant amount of money…"*

Category: Surgery declined

A number of patients complete the pathway but for reasons such as failure to achieve the five percent weight loss or psychological unsuitability, they are declined surgery. The perception is that for this group there probably follows a downward spiral in terms of mental and physical health i.e. they tend to become disheartened and their morbidity worsens. One stakeholder commented:

> *"… it is a difficult sort of limbo, do you sit there and get fatter or do they actually try and do something? I can't see that those patients improve in any way…"*

Category: Selection of patients

A key concern to emerge from analysis of the stakeholder interviews was whether the 'right' people are being put forward to undergo surgery in terms of benefit. There is a dilemma regarding bariatric surgery being a life-saving intervention for those with a very high BMI, compared to those with a lower BMI who might gain more benefit from surgery (and consequent weight loss) in terms of being able to go back to work, look after their family and lead a more active life.

> *"Sometimes you are going to get patients who have a BMI of over 60 who even if you do surgery it will have no direct impact on their quality of life, or very little, ...and you may have people who are under (BMI) 45 who may be very compliant and who may make a significant difference to their life"*

There was criticism regarding the use of BMI as a criterion for selection rather than considering the patient's attitude in terms of compliance with their dietary regime and the benefits that might be gained from weight loss. There was also the suggestion that the driver for using the BMI criterion was an economic rather than a clinical decision.

"If you are looking at cost effectiveness and value for money it needs to be patients that are A going to be compliant and B that are going to see a measurable benefit and improvement in their life. …..I don't think this decision has been made clinically but for economic reasons, and they are not very valid reasons, because if you have got someone with a BMI of 43 and they know you have to have a BMI of 45 to get surgery, what are they going to do?"

There was further criticism for the use of BMI as an initial criterion for selection from the standpoint that rather than purely physical factors, emotional state should also be considered when referring a patient to the BCP.

"I don't think someone's BMI is necessarily a good way of deciding if someone is a good candidate for surgery or not because I think that the bigger they are the more deep-seated their eating behaviours, and the more deep-seated their mental health issues…it is about motivation and people who make good candidates emotionally"

At present patients are put forward for surgery on completion of lifestyle intervention providing they are deemed psychologically suitable and they have lost five percent of their body weight. One stakeholder suggested formalising this method for selecting patients for surgery:

"I think I'd like to go with ….a scoring mechanism about people's lifestyle issues and how compliant they are with the regimes they have been given, and make a scoring judgement about whether they are good candidates or not"

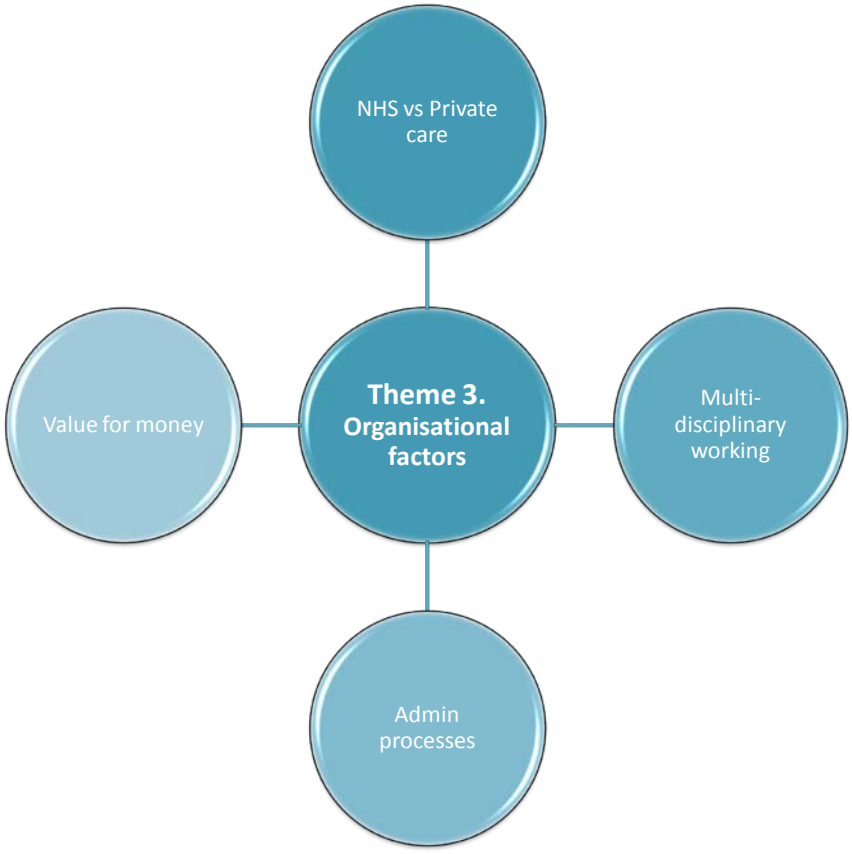
There was also suggestion regarding the type of surgery patients undergo relating to their eating patterns:

"… at the moment it's choice and we get some people who choose to have surgery that might not be appropriate, such as banding, probably because they are not entirely committed and they know this is reversible, or that they know they can get around it when they want to...I think we need to be able to say 'we are recommending you but only recommending you for this type of surgery because we know you are a snacker, having the gastric band is no good for you ……..whereas if you are a big carb eater having the gastric band is good because it will restrict you…."

3.3. Theme 3: Organisational factors

Interviewees gave detailed accounts of how organisational factors impacted on the effectiveness of the BCP. These were categorised into four main areas of NHS versus private care; multidisciplinary working; administrative processes; and value for money, (Figure 3).

Figure 3 Organisational factors



Category: NHS versus private care

A number of concerns were highlighted regarding the interface between NHS and private care which include the paucity of data regarding patient progress once they have left the BCP, the lack of (bariatric) surgical capacity within the NHS and poor communication from the private provider to NHS Wirral bariatric services.

There is a lack of information about patients who have been through the BCP and been referred for surgery with the private provider during the previous five years. In order to measure the effectiveness of the pathway by assessing the long term outcomes of former patients, it would be useful to have information on patient progress over time, particularly around weight loss and health. However this information has not been available, one explanation for this problem is that perhaps it was not stated in the initial contract.

> *"We have very poor information from the provider and I think that is because we didn't set up a minimum data set requirement within the contract*"

A system exists which is used by private providers to collect information but it is general rather than specific to a patient or PCT, a further criticism of this system is that although it is looking at the outcomes for the different types of surgical procedures patients are not measured at the same stage.

"…they don't measure patients at the same stage, they are putting patients together in the same group who have had surgery six weeks ago as those who had surgery three years ago – it looks as if you are performing more poorly than you are"

A broader issue concerns the lack of capacity within the NHS in the area of bariatric surgery. Whilst bariatric surgery is currently performed in private hospitals if there is a problem with a patient they are transferred into an NHS hospital where there may not be the equipment or the surgeons to manage this type of procedure. However, an arrangement exists locally giving honorary rights to a private surgeon to practise in an NHS hospital and thereby assist with any bariatric patients experiencing surgery-related problems.

"…there is a big lack of surgical capacity within NHS providers … and we are not building that expertise – and we may need it in other areas of bariatrics because if this is becoming a bigger problem we are going to have patients who are morbidly obese and require other types of surgery, and the equipment isn't there, so I think we should be building up some NHS expertise."

Some of those interviewed appeared unsure as to the private provider's duties towards their patients after surgery, whether the post surgery appointment is purely medical or if it includes nutritional advice.

"I think some of the people don't do well after surgery because…they go off to (private provider) and they get no follow up whatsoever after surgery…we have no evidence that they provide anything other than a doctor's appointment where they look at whether their band's working, whether their gastric bypass has healed, have they any medical symptoms that are causing them problems – they are supposed to get dietetics and psychology, but they don't. There is a question around what is in the contract and what isn't"

Category: Multidisciplinary working

A number of teams from both the private and the public sector are involved in delivering interventions at different time points to patients on the BCP. These range from those who manage the LWMS; the dietetics service; the commissioning team who manage the bariatric surgery contract (including the complex case team); those who deliver therapy in the form of CBT; clinical psychologists and the surgical team who carry out the bariatric procedures if the patients are approved for surgery. There was some suggestion that sometimes the different services do not always work together in an efficient way.

"One of the issues we have is that we don't, (work together) it is quite fragmented… there is the gap, which we don't think works very well, and we are trying to get someone who will have an overall responsibility for the whole pathway from beginning to end"

During 2010 there were regular meetings between the different service elements in order to redesign the pathway; however prior to this, poor communication appears to have been an issue as meetings between the services were irregular.

"Now (communication) it is a lot better, the last 12 months we have been sitting as a group and working through this pathway… we are now sharing a database so now know we have the same patients, and that is with the finance team as well"

The recent development of a spreadsheet through which patients can be tracked as they progress through the system appears to have contributed to an improvement in multi-agency working.

"…one of the things that have evolved is the database in terms of being able to track patients …it was difficult knowing who'd had surgery, who hadn't…hopefully that's got a lot more coordinated and simplified and everyone is working really well together"

There was praise for the BCP team for their approach and professionalism from a partner service:

"The people at the Wirral are very, very professional, very, very motivated team. I think my people bring something else to the equation that they haven't had before. I think by working in partnership with them I think we are seeing some real benefits, and not just from the bariatric surgery pathway"

Category: Administrative processes

Stakeholders recognised that administrative processes could be improved. This was especially apparent when patients were being referred into different aspects of the Bariatric Care Pathway. Global databases have been set up to allow all stakeholders access to the same information and to update patient information and progress. However, there was uncertainty around whether these databases are being used by all groups and also whether there were unresolved technical issues, such as database time lag.

"*We have a number of steps with a number of people passing off patients and at some point we didn't know who was on which list… we are trying to iron those kinks out now"*

"It has been set up, whether everyone is populating it as well as it should be, I think there is a bit of a time lag when people enter stuff and when people put the next bit in, so when you are looking at it you might not always have the most up to date information"

Interviewees whose main duties were administrative have procedures in place which allow them to assess the appropriateness of a patient referral; should there be uncertainty, advice can be sought from a health care professional.

"So I would go through that (medication list), check my little book, decide whether I feel that they're on the maximum whack of whatever it is. It's not cut and dry so I would speak to (dietician) about and say okay you're the dietician you're the person who's trained what do you think"

Category: Value for money

There were a number of responses at interview about whether the BCP represents good value for money. In most cases the response represented a long term perspective and focused on an improvement in patient health (with a consequent reduction in medication) and a return to work:

> *"…for us value for money means people might be able to go back to work…also that their co-morbidities have been resolved, and that only happens generally when you achieve a certain weight loss…"*

> *"…(it could be) five years before the NHS recoups its money because of the medication levels going down… people coming off benefits so they're gaining the money there, going back in the workplace they're gaining the taxes that's been paid and the reduction as well in medication…"*

Linked to these responses was the idea of selecting appropriate candidates for bariatric surgery, i.e. those who would be compliant and adhere to a healthier lifestyle over the long-term and thus benefit most from the intervention.

> *"I think it is about picking the right patients…I think if the selection is appropriate it is value for money"*

Although one individual reported the figure for average weight loss for patients on the 12 week course as 2.9%, there was some confusion about the amount of weight patients were losing after surgery due to the previous inconsistency between services in collecting patient data. There was also an assertion that patients were not losing as much weight as anticipated. However as the lifestyle intervention is now delivered by dieticians on a one to one basis, the percentage weight loss is considered to be calculated with a greater degree of accuracy.

> *"I think we are still struggling with that…because we are not getting the weight losses that we should be achieving...we need to be showing that what we are paying for we are getting results and getting the benefits for the patients"*

> *"At the moment we achieve 2.9% weight loss over 12 weeks for the bulk of the people referred in…(but) we have very poor information to date about patients and their outcomes"*

In terms of the obesity problem in general, a view was expressed that the Wirral BCP were only treating the 'tip of the iceberg' and that the numbers were so small it was not possible to;

> *"…look at it seriously in terms of the cost effectiveness to the NHS…so it really isn't dealing with the obesity problem per se across the service"*

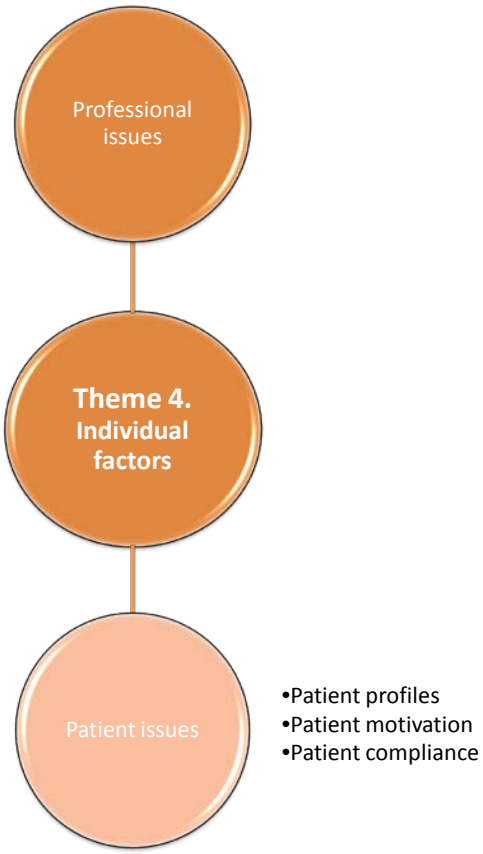
On the other hand there were positive comments regarding the value of using CBT as part of the BCP.

"I think the appropriate use of CBT interventions…it is never too late to get someone to change their behaviour"

3.4. Theme 4: Individual factors

Interviewees gave detailed accounts of how individual factors impacted on the effectiveness of the BCP. These were categorised into two main areas of professional issues and patient issues (Figure 4).

Figure 4 Individual factors



Category: Professional issues

Stakeholders in general expressed empathy towards obese patients and in some cases had over time, developed more understanding for those on the BCP.

"Having more empathy for people with obesity, experiencing more and more people who, I mean it is a significant condition that they struggle with".

Stakeholders also expressed views regarding patient motivation with some believing that patients just wanted the 'quick fix' of surgery and were reluctant to consider alternative weight loss strategies. In particular stakeholders discussed patients' lack of motivation to lose weight for themselves; *"I don't have to do anything I can get someone else to do the work for me, I can just go and eat and eat and eat*". The main suggestion for improving patient motivation was ensuring the most appropriate individuals who would be engaged

with the pathway were selected; with one stakeholder stating the pathway is a *"very positive thing if it's for the right patient".*

> *"My personal view is a lot of them it's a quick fix because they can't be bothered but that's just my own personal opinion. Some of them, yes, it will work for them but others I don't think that they want to. They like all the naughty things like we all do some cannot probably reduce the amount that they're eating, it's a quick fix"*

> *"Some of them do need more motivation to keep trying but they have been through the whole process"*

There was also discussion concerning the advantages of continuing professional development for stakeholders which can increase understanding of obesity, positively influence attitudes towards bariatric care and which may ultimately lead to improved information for patients and more appropriate referrals.

Category: Patient issues

Stakeholders discussed patient profiles and highlighted the fact that most patients who come forward for weight loss surgery were from the lower socioeconomic groups. However they recognised that this does not necessarily indicate that these are the groups most at risk of obesity; and suggested that patients in higher socioeconomics group may be more likely to seek private care than to use the NHS.

> *"If you look at the figures for Wirral the vast majority of patients who come for weight loss surgery come from the lower socioeconomic groups"*

Stakeholders were aware that patients may have underlying issues contributing to their obesity and understood that in these instances patients' required additional support and assistance.

> *"People have their reasons for being where they are in their life and having surgery doesn't change a lot of those reasons, so they are going to need support"*

Stakeholders also recognised that one of the key components to the success of the pathway was patient's motivation and compliance.

> *"I've got a few patients who'd like it but they're certainly not motivated enough to do it"*

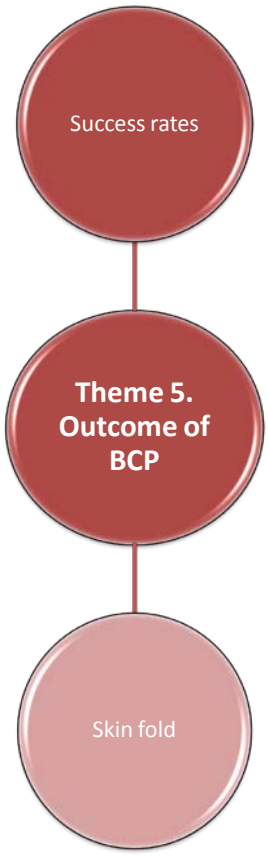
> *"There is also a commitment issue with it as well because we have some band patients coming in and saying 'can you take some fluid out because I am going on holiday and want to eat more"*

> *"We think it (poor outcomes) is due to compliance and follow up because the patients are dropping out"*

3.5. Theme 5: Outcome of Bariatric Care Pathway

Participants talked of the outcomes of the BCP in particular, the outcomes from surgery. These were categorised into two main areas of success rates and skin fold (Figure 5).

Figure 5. Outcome of Bariatric Care Pathway



Category: Success rates

Stakeholders recognised that for those patients who had been through the pathway and undergone surgery there had been *"a hugely positive response from it"* with patients successfully losing weight and subsequently being taken off medications following the pathway and/or surgery. However other stakeholders acknowledged that NHS Wirral was not meeting their predefined targets for weight loss.

> *"We are about 50% shy of what we should be expecting for average weight losses…our figures are currently showing after the 2 year point on average a 29% excess weight loss when there should be looking at closer to 50 to 55% on average"*

Some participants explained that the reason why NHS Wirral was not meeting national targets was that patients did not follow the pathway dietary advice after they had completed the pathway.

Category: Skin fold

Rapid weight loss after bariatric surgery can result in 'skin fold' due to a patient's skin not reverting to pre-obesity firmness. Cosmetic surgery can be used to remove excess skin, although this is not routinely available as part of the NHS Wirral service. Stakeholders described the issue of excess skin as something that patients find upsetting, and in some cases wondered if patients would rather be overweight than endure the trauma of excess skin.

> *"Really traumatic for patients because they are going around with huge amounts of excess skin, which in some ways is worse than being overweight in the first place"*

It was also suggested that some patients who would like cosmetic surgery to remove the skin fold were unable to do so because they were unable to achieve the required weight loss needed to have this particular surgical procedure (possibly due to the weight of the excess skin).

> *"She is unable to get below the weight that will allow her to have the surgery (to remove excess skin)"*

One stakeholder believed bariatric surgery patients were fairly pragmatic in their attitudes towards the excess skin arguing that those patients who could afford it, paid to have the surgery privately and those who could not, were saving up to do so.

> *"I've had a couple of patients who've said we've been fortunate to have had this, the ones who do have the means do go privately and the ones who don't are saving up for it to get that"*

4. Discussion

It was evident from the interviews that the BCP was considered to be well defined and incorporated the key elements of a planned weight-management programme described by NICE (2006). These key elements include diet, physical activity, behavioural interventions, drug therapy and surgery. In particular, stakeholders took pride in their Lifestyle and Weight Management Service (LWMS) which offers individual nutritional advice and support for physical activity. It was recognised that this service was not universally available and considered a crucial component of the service offered by NHS Wirral. Whilst the individual teams associated with the BCP report they work well together (within their own departments) an overall cohesion between the different elements appears to be lacking. However suggestions were made that this problem could be addressed through the appointment of an individual who would take overall responsibility for the whole pathway from beginning to end.

The introduction of CBT as an additional intervention to the pathway was greeted with enthusiasm, and the evaluation of outcomes for those patients who have been receiving this therapy is eagerly anticipated. The concept of addressing patients' underlying psychological issues associated with their weight gain and subsequently changing their eating patterns is considered innovative by most of those interviewed. Extending the support by providing further sessions of CBT for patients post surgery is also considered

necessary to ensure continued compliance with their dietary regimes and consequent weight loss.

There was discussion concerning the number of patients who are inappropriately referred to the BCP, which perhaps demonstrates a lack of understanding by referrers of the revised criteria for selection onto the pathway. Also highlighted was the situation in which patients whose BMI or co-morbidities are not acute enough to warrant referral but who are close to the criteria threshold; these patients become aware that they have to eat more to gain weight to reach the referral criteria, clearly not and ideal situation. In addition there were concerns expressed for patients who completed the pathway but were not referred for surgery as the outcome appears bleak for this group

At interview stakeholders appeared enthusiastic about their role and committed to their patients, demonstrating empathy and understanding for them. There was however doubt as to whether some of the patients who were being put forward for surgery were the most appropriate in terms of significant outcome. It was suggested that some patients with a very high BMI (e.g. over 60) may benefit little from surgery in terms of their quality of life whereas an individual with a lower BMI may gain more through being able to return to work and lead a more 'normal' life. There were also suggestions that instead of being driven purely by high BMI as a criterion for selection, patient attitude in terms of *compliance* with their dietary regime might also be considered. Thus, in addition to BMI measurement, compliance with dietary regime and *consideration of outcome in terms of quality of life* were suggested as key factors in the selection process. It was however also argued that the introduction of the five percent weight loss target during lifestyle intervention goes some way towards demonstrating a certain amount of compliance from the individual patient.

It appears that there have been a number of problems in the past regarding the use of a private provider for bariatric surgery. In the private sector, patient data has been collected in a different way to NHS patient data and therefore it was difficult for the BCP team to track the progress of their former patients. There was however suggestion of a recently developed database which may remedy this. There was also concern by the BCP team regarding lack of patient follow up by the private provider. However, the new pathway provides the opportunity for patients to have a further session of CBT after their surgery. From a broader perspective there was also concern over the lack of capacity within the NHS in the area of bariatric surgery, especially as this type of surgery may well increase.

In terms of value for money stakeholders believed that reducing patients' weight would have a financial impact on the NHS in the long term through a return to work and the lessening of co-morbidities (thus reducing the need for medication and care). However it was understood that patients who had been on the Wirral BCP were not reaching the national targets for weight loss in post-surgical patients. It was also suggested that due to the relatively small numbers who undergo bariatric surgery, they are only really treating the 'tip of the iceberg'.

5. Conclusion

The purpose of this evaluation was to explore the views of service providers and commissioners of services with regard to the effectiveness and impact of the BCP. There

have been recent changes to the pathway based on suggestions for improvement which have come into force since the interviews were conducted. However, key issues that emerged regarding the pathway remain relevant to the time both before and after these changes were implemented. Effectiveness is measured in terms of impact for the patients, the NHS and the economy i.e, enabling patients to enjoy an improved quality of life, reduce their co-morbidities and return to work. Whilst anecdotally these goals have been achieved for many patients who have experienced the Wirral BCP, there was acknowledgement that some patients were not achieving the national average for weight loss post surgery. However this was difficult to establish with any certainty due to the paucity of data regarding former patients. The introduction of a new database and data collection system may remedy this problem and provide more accurate measurement of outcomes. Despite this problem it was evident that those whose work involves them in the Wirral BCP are a strongly committed and enthusiastic team who celebrate the successes of their patients and where there is disappointment endeavour to find innovative ways to address those issues. An example of this innovative way of thinking is the recognition and introduction of psychological support (CBT) for patients both before and after surgery.

6. References

Colquitt JL, Picot J, Loveman E, Clegg AJ. (2009). Surgery for obesity. *Cochrane Database of Systematic Reviews*, 2.

Gordon-Larsen P, Adair L S, Nelson M C and Popkin B M (2004) Five-year obesity incidence in the transition period between adolescence and adulthood: the National Longitudinal Study of Adolescent Health. *American Journal of Clinical Nutrition*, *80*(3), 569-575,

National Institute for Health and Clinical Excellence (2006). *Obesity – guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children*. *Clinical Guideline.* London: The Stationery Office.

Picot J, Jones J, Colquitt JL, Gospodarevskaya E, Loveman E, Baxter L, *et al*. (2009). The clinical effectiveness and cost-effectiveness of bariatric (weight loss) surgery for obesity: a systematic review and economic evaluation. *Health Technology Assessment*, *13*(41).

Ritchie J. and Spencer L. (1994). Qualitative data analysis for applied policy research. In A. Bryman and R. Burgess *Analyzing Qualitative Data*, pp173-194.

APPENDIX A

From: Callaghan Rowen (NHSNW) [mailto:Rowen.Callaghan@northwest.nhs.uk]
Sent: 25 October 2010 15:52
To: Irvine, Fiona
Subject: RE: Advise re ethics approval

Dear Professor Irvine,

Your project proposal been reviewed by the Northwest 12 REC – Lancaster Chair. Based on the evidence presented to her, the Chair feels that this project is an evaluation of service and does not therefore require ethical review.

Please provide a postal address if you would like the formal letter confirming this decision sending to you.

Best wishes,

Rowen

Miss Rowen Callaghan | Assistant Co-ordinator

Northwest 2 Research Ethics Committee| Liverpool Central

Northwest 11 Research Ethics Committee| Preston

Northwest 12 Research Ethics Committee| Lancaster

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