Consternation, confrontation and collaboration: narratives of medical students broaching obesity in primary care

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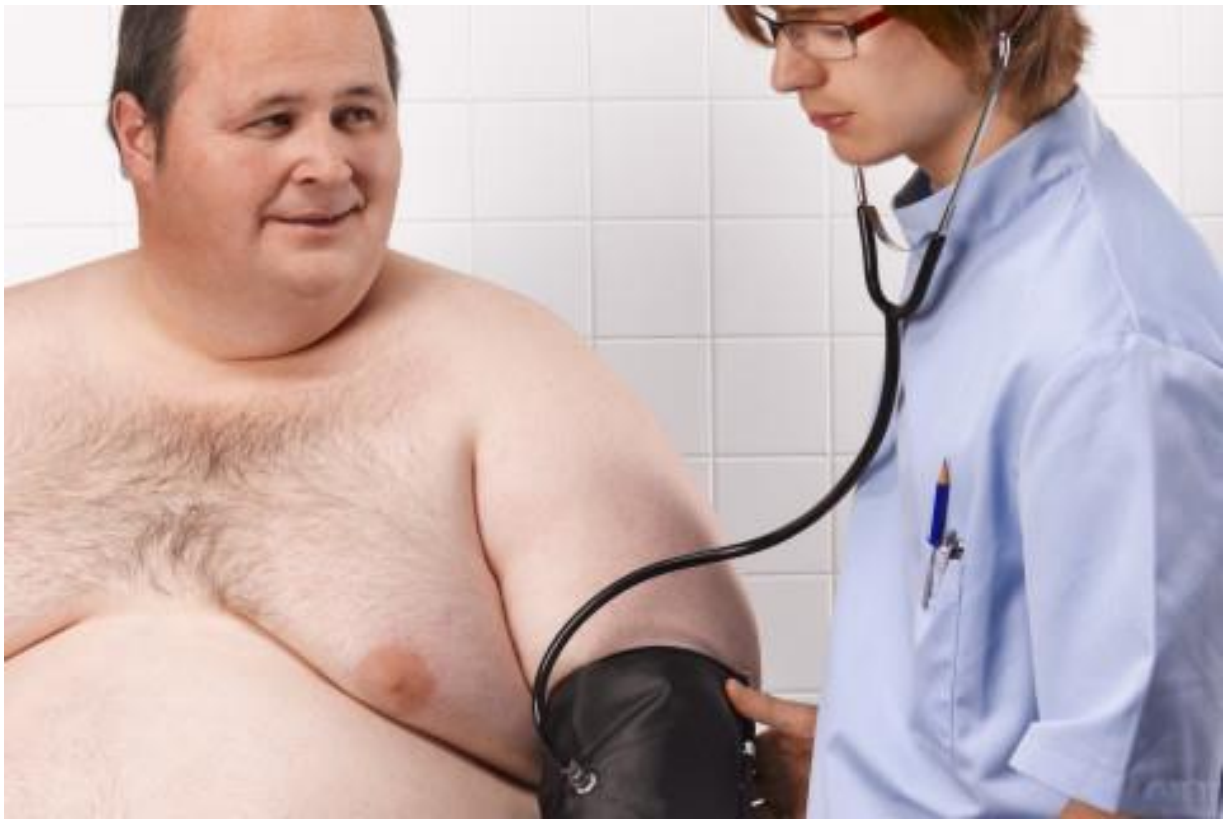

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This dissertation is submitted in part fulfilment of the Masters in Clinical Education at King's College London. Feedback has since been incorporated.

Abstract

This thesis explores one of the most important but neglected areas of medical education: obesity. I have worked in this area in an educational capacity with final year medical students for five years. I have published and presented at conferences extensively, and have become increasingly critical of the prevailing research paradigm in this area. I have had time to reflect on my journey and the drivers behind my educational practice, which were reflective narratives of my students' first consultations with obese patients. I have identified and analysed the stories that informed change to my academic practice through a retroductive explanatory narrative analysis: why might this student, in this context, write this story in this way? Why was it impactful on my practice at that time, and in what ways did it inform change? Finally, I have theorised about how practitioner narratives create educational value for the narrator, researcher and reader.

Contents

Chapter 1 Background & Research Rationale

1.1 Obesity in the UK

According to a recent paper in the Lancet (Newton, Briggs et al. 2015), dietary factors have overtaken smoking as the leading cause of morbidity in the UK. Our inability, and some might say unwillingness, to address this on a societal level has left the NHS and the patients it serves with an ever-increasing burden of diabetes, arthritis, heart disease, cancer and other largely preventable non-communicable diseases. Given the decades-long time lag between onset of obesity and the health problems it causes, and examining the trends in the prevalence of obesity particularly amongst the young, we can anticipate an increase in the associated financial and societal costs that ultimately threatens the sustainability of our healthcare system. The importance of this topic is unquestioned, and is reflected in a major national campaign to Improve the Health of the Public by 2040 (Academy of Medical Sciences 2016). Our response, however, appears to be in its infancy, with both clinical and educational practice lagging advances in theory and evidence (Chisholm, Hart et al. 2012).

1.2 My interest in obesity

I have spent five years leading an educational programme at one of the largest medical schools in the UK, that aimed to improve how our medical students consult with obese patients in primary care. This programme began as a simple task for all students to write about and reflect on a consultation with an obese patient. It has evolved through action research into a fully-fledged cognitive apprenticeship model for skills acquisition involving behaviour change theory, motivational interviewing, large and small group teaching, role-play, faculty development, e-learning, resources to support self-care, social & exercise prescribing, opportunities for students to put their learning into clinical practice, with associated assessments of both a formative and summative nature. This model has now been introduced internationally in Greece and Mexico and has been shared through publication and conferences, winning a prize at the International Clinical Skills Conference in 2013 as well as the education prize at SAPC Oxford 2015.

1.3 My motivations for this research

As part of a recent leadership course that I attended, I have started to explore stories as catalysts for change, and their lingering nature in our minds as we ruminate on and eventually work through aspects that inspire or trouble us. This led me to reflect on the factors that drove me to develop this educational programme. There was certainly a logical element, where I consciously decided that the topic was important and needed addressing, but each successive

change and improvement in my educational approach was driven by a story that was told by one of my students. Every term for three years, as over 120 reflective accounts of patient consultations were submitted by my students, I systematically analysed 30 essays for content and themes, looking for evidence of good or suboptimal practice to inform my next term's programme. However, on reflection, the transformational changes were not driven by my framework analysis of how students were consulting, but by my emotional and cognitive responses to perhaps one or two meaningful stories that I was reading.

Whenever I present my research I explain that my analysis has failed to capture the essence of these stories and the successes and struggles of my students. It is with this in mind that I have decided to move across to a new methodology, narrative analysis, in an attempt to meaningfully share and distil the essence of some of these stories. It was important for me to explore and explain my reaction to these stories, examining not only the meaning that the storyteller appears to be trying to convey, but their significance to me, their teacher and programme leader. I hope that by doing so, the reader gains an insight into what drove me to create this programme, and why, and to what extent, it works.

Chapter 2 Research question

The question at the forefront of my mind for years has been ‘how can I enable my medical students to consult effectively with obese patients in primary care?’ Now that that has been to a large part achieved, my aim now is to illuminate the stories that drove me to make changes to my teaching programme, and by doing so, to support other teachers, clinicians and students in examining and transforming their own practice.

Turning this into a research question has not been easy. I considered analysing my journey in creating this educational programme, which would suggest an auto-ethnographic approach. However, the interest isn’t so much in my story, but rather in the stories of my students and how they create meaning to the reader. I couldn’t however entirely exclude myself from the research question, as it was my intention to choose and reflect on the stories that I have found most impactful and to examine their meaning in the context of my own teaching practice.

I considered a purely theoretical paper that focused on the mechanisms by which stories can change educational practice. Ultimately however, I wanted my readers to experience the barriers and enablers to effective practice with obese patients through the eyes of my students.

Fundamentally my research question was quite simple:

> *What are the student narratives about consultations with obese patients that changed my educational practice? Why did they have impact, and what was that impact?*

(Cummings et al. 1988) suggest quality criteria for research questions that should be

- **Feasible**: yes, I can find a way to systematically identify the stories that have impacted my teaching, I can analyse them with narrative methods, and reflect on their impact.
- **Interesting**: to me yes, hopefully some of the stories will also engage the reader.
- **Novel**: a scoping literature search (see separate chapter) identified no studies that use narrative analysis to explore practitioner accounts of consultations with obese patients.
- **Ethical**: see separate chapter.
- **Relevant**: obesity is arguably the most important health threat in the UK, and there is a need to close the gap between current and best practice. I have narrowed that gap significantly by responding to specific high impact narratives, therefore identifying those narratives and analysing how and why they have had impact is important.

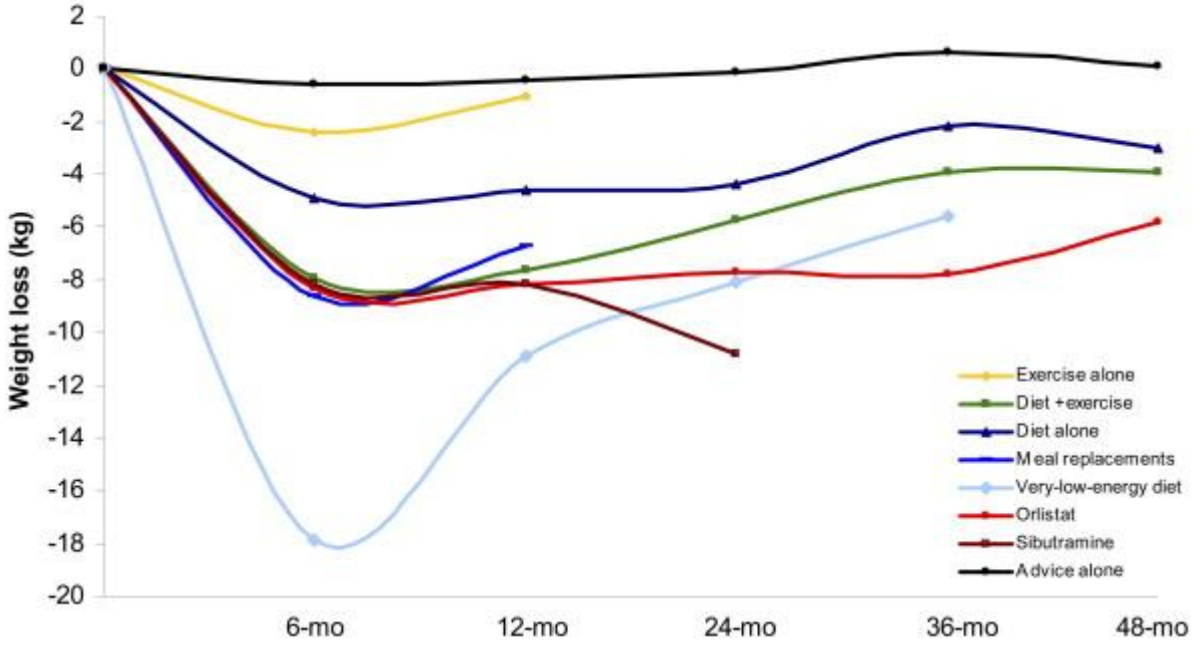
Chapter 3 Research paradigm

3.1 Critique of the prevailing paradigm in obesity research

Doctors and medical students, myself included, tend to be taught to accept a positivistic stance on the nature of existence. It is the interaction of ghrelin, leptin and insulin that controls our appetite and sense of satiety, and with knowledge and application of these facts, health practitioners can plan diets that will enable patients to lose weight. If we learn about sociocultural contexts it tends to be observational '*that's why they're obese'* rather than interventional: how to support this person, in this context, to make changes.

Medical students are also taught to think of meta-analyses of randomised controlled trials as the highest form of evidence (NHMRC 1995), where enormous numbers of patients' results are aggregated together to produce 'trustable' scientific knowledge about the impact of an intervention. A typical example of an obesity-related meta-analysis is given in Figure 1 below. This graph suggests that behaviour change counselling is ineffective (average weight loss a year later is 4kg) and only the medical model (pharmaceutical or surgical) works.

Figure 1. Weight-Loss Outcomes: A Systematic Review and Meta-Analysis of Weight-Loss Clinical Trials with a Minimum 1-Year Follow-Up



(Franz, VanWormer et al. 2007)

Even accepting a positivistic stance, this data is hugely misleading. Exploring the underlying data, approximately one in ten patients loses a significant amount of weight after a behaviour change consultation, or more with adequate follow-up, while the other nine patients, who

maintain or put on weight, mask that successful outcome within the aggregated statistic. Orlistat, the weight-loss drug, appears to have a miraculous impact, but (Padwal et al 2007) found the drop-out rates are over 90% as patients who continue to include any fat in their diet suffer from uncontrollable faecal incontinence. Surgery, often quoted as the only 'real' cure of obesity, is effective but we have a falling capacity in NHS England of 5056 operations per year with an estimated 2,150,000 people meeting the eligibility criteria (Ahmad, Laverty et al. 2014), leaving a 424-year operating list just to meet today's needs.

3.2 Narrative research within a critical realist paradigm

As a physicist (my first degree) I know that the existence of a single reality and relativism are not mutually exclusive. (Schrödinger 1935) postulated that although there is a single reality, we cannot know it unless we observe it, and by observing it we may change it. As a critical realist, I accept a continuum of research paradigms between positivism, which might suit research on how the hormone ghrelin stimulates appetite on a molecular level, and interpretivism, which would suit constructing an understanding of why people eat when they are not physically in need of food. Examining how stories have changed my practice requires me to adopt a stance towards the interpretist end of the scale, as it is not possible for me to fully describe or even know this truth. I argue that interpretivist approaches are an important and overlooked paradigm within obesity-related research.

There are several epistemological positions I could take, one of which is whether to try to approach an 'objective' truth, where steps are taken to minimise the researcher's influence. I argue that the knowledge I am creating can never be objective: as their teacher, I am deeply embedded in the stories that my students tell. I therefore must bring myself into the dialogue. I believe it is impossible for me to set out to eliminate this subjectivity, and instead I need to embrace and interpret my involvement in this project. It is for that reason that I am drawn to concepts of realistic evaluation as described by (Pawson and Tilley 1997), and consider that although ther might be an objective reality, and cause and effect are 'real', different people have different experiences of the same event and therefore different outcomes. The question then becomes, who does the intervention work for, in which contexts and why, and research into causality needed to consider mechanisms, contexts and outcomes.

As a critical realist, in this context, I think it is difficult to adopt an inductive epistemology, as we cannot say that another student in similar circumstances would have a similar outcome if they did the same thing. However, I do feel able to explore causality in a *retroductive* manner: given a particular outcome, what was it about the reported contexts, protagonists and mechanisms that gave arise to it?

Chapter 4 Methodology

4.1 Rationale for a narrative approach

From a personal perspective, I have struggled with how to share my experience of reading this data. The granular breakdown of content analysis loses aspects of the learning journey and sequence of events that some students describe, and misses the conflicting layers of meaning that I see within the text, where for example I disagree with the meaning that the author ascribes to a patient's reaction. During my previous content analysis of the same data, broad categories of experience emerged: for example, some students choose a more proactive approach, others a passive role. However, there was such a richness in the stories of often emotionally charged consultations and the sense-making that students construct as they reflect on their experiences, that it felt wrong to lose these aspects of the data through an overly granular approach.

I wanted to look beyond what was done, to explore what the narrator felt about what they were doing; and rather than aggregate experiences from multiple accounts, to look at how experiences unfold one after another within an individual story. By choosing narrative analysis, I hope to illuminate some of the inner thoughts and feelings of students as they describe and reflect on their very first solo therapeutic consultations with obese patients.

My aim is also to provide purposeful knowledge. These narratives have allowed me to build a framework for my teaching that addresses the needs of learners, builds skills in a way that students find useful, and addresses the many barriers they experience to effective practice. By sharing these stories, I hope that readers can draw personally relevant meaning that improves their practice and ultimately the health and experience of patients. I want readers to know more than what was done, I want them to see what was done through the eyes of the storyteller.

4.2 The literature on narrative research

As narrative research is new to me, I felt that I needed to explore some of the important and current literature on this methodology, particularly within health and education.

(Andrews, Squire et al. 2013) argue that there are few clear accounts of how to systematically analyse narrative data, and the discourse between different schools of thought is not well defined. Questions remain such as whether to strive for objectivity or to bring the participant and observer into the analysis; whether to try to build a general understanding from the data or to keep each narrative as a unique entity; or what ontological or epistemological significance to attach to narratives.

(Spector-Mersel 2010) has argued that narrative is not even a methodology but rather a research paradigm with its own ontology and epistemology. I would argue that the diverse range of epistemologies that can be used within the broad umbrella term of narrative research are not a problem, and the methodology can be adaptive and flexible as long as form follows function: the methods must be appropriate to the research question and the available data source.

(Charon 2001) explores health narratives as a form of healing for the writer, and a way of returning medicine to its more humanistic roots in the face of overwhelming technological change. (Bury 2001) concentrates more on the sociological reasons why patients tell stories about their experiences, and what can be learnt about people and society from the stories they construct. (Greenhalgh and Hurwitz 1998) also explore narratives as therapy and as tools for teaching and learning, however none of these authors give a clear framework for narrative analysis as a methodology.

Next, I explored (Connelly and Clandinin 1990) and their ensuing guide to narrative inquiry as a methodology (Clandinin and Connelly 1999). I found their focus on *constructing* narratives by distilling large amounts of data unhelpful, as I intended to use my short, written narratives more or less in their entirety.

Narrative analysis as outlined by (Riessman 1993) troubled me as I didn't want to dissect my stories stanza by stanza or focus on the *way* the story was told. This heavily linguistic form of analysis seemed more concerned with the form of the story, its metaphors and forms of language, than the reader's interaction with the story.

Moving to the most recent book on my reading list, I explored (Greenhalgh 2016) and was comforted to find an interpretation of narrative research that integrated more closely with my research paradigm:

> "In recent decades, narrative scholars have focused more on the act of storytelling (narrative as verb). They have sought to explore the circumstances of the telling and the shaping of a story through the interaction of the teller/writer and the reader/listener (real or imagined). Asking *why this person has told this story in this way to this audience* (or indeed, why someone has not told a story in a particular setting) may provide important insights, for example about the societal constraints on vulnerable groups in an unequal world."

(Plummer 1995) adds a further dimension by considering the sociology of stories, which he sees as entities themselves rather than as reflections of any historical truth. He asks that the researcher considers five dimensions: the nature of the narrative, the making of the narrative,

the consuming of the narrative, the strategies employed by the writer, and it's place within the wider sociocultural context.

4.3 Narrative methods

(McCance, McKenna et al. 2001) give an overarching framework for narrative research: 1) Generating narratives 2) Identifying narratives and 3) Narrative analysis.

My narratives have already been generated, but the essays that have been submitted are certainly not all narratives. (Denzin, Lincoln et al. 1994) suggest a helpful set of criteria for identifying narratives which they say should have a beginning, middle and an end, be past-orientated, be linear and sequential, have a plot and make sense to the narrator. This allows me to exclude text that relates to clinical guidelines and practice protocols, concentrating instead on the reported events of a consultation and students' sense-making of events.

The narrative analysis is the part that troubles me. As already mentioned, I am not interested in the methods proposed by (Riessman 1993) where the story telling is the subject of the research. I considered the descriptive approach proposed by (Polkinghorne 1995) that focuses on the use of narrative to illuminate human experiences and actions, emphasising plot rather than microanalysis of language. Again however, his methods are focused on *building* a narrative from data, as a historian might, rather than analysing the meanings that come from it.

(Mishler 1995) lists three main categories of narrative research: reference and temporal order (plot based), textual coherence and structure (linguistic), and narrative functions. Of most interest to me is this third category, which fits with critical realism and realistic evaluation. My aim is to provide insights into the narrators, the contexts in which their stories unfold, the actions and reactions of the protagonists, and the impact on myself the reader.

4.4 Criticisms of narrative research

(Greenhalgh 2016) explores a common criticism of narrative as a data source in research, as narratives "are not true in any direct sense of the word". My data is suffused with the subjective experience and selective memory of the student, and there is an added level of interpretation and sense-making by myself the reader. These stories do however provide immense potential for illuminating how my students feel about what they did, their sociocultural context, and the sense that they make of their experiences in what is essentially a private and unobservable space – a closed-door consultation between a patient and a (soon to be) doctor.

Analysis is further complicated by the inherent linguistic subjectivity of the text being analysed. The voice of the storyteller and nuances of the story may be clearer in some texts than others, partly relating to the skill of the storyteller, but also to the observational and interpretive skills of the reader who may either misinterpret meanings or project personal subtexts onto what is being described. I will need to adopt a carefully reflexive approach in describing and analysing my own interpretive processes.

Chapter 5 Literature review

The purpose of my literature review was partly to see whether my research was ‘novel’ in its field, but also to see if there were any helpful publications that might inform my analysis.

5.1 Literature exploring how healthcare professionals consult with obese patients

A systematic search process (Chapter 12) produced a list of 32 potentially relevant papers. The abstracts of these papers were read and summarised, including their findings and context, and scored for relevance (do they look at the experiences of students, trainees or doctors consulting with obese patients?). The five most relevant papers (Chisholm, Hart et al. 2012, Gunther, Guo et al. 2012, Chisholm, Mann et al. 2013, Blackburn, Stathi et al. 2015, Leedham-Green, Pound et al. 2016) are summarised in Table 1 below.

Interestingly all these papers originated in the UK, perhaps reflecting a greater emphasis on prevention in primary care within our healthcare system. These papers all use thematic analysis to explore experiences and attitudes to broaching and managing obesity in primary care, principally from interview data. Therefore, this thesis is possibly unique in using reflective accounts of consultations as a data source and narrative analysis as a methodology.

Table 1. Papers exploring healthcare professionals' experiences and attitudes to obesity

Title	Study	Strengths & Weaknesses	Findings	Background
Blackburn, M., et al. (2015). "Raising the topic of weight in general practice: perspectives of GPs and primary care nurses." Bmj Open 5(8).	Thematic analysis of 34 semi-structured interviews of GPs and practice nurses	Large well-designed study	Barriers included fear of offence, lack of knowledge as to how to treat obesity, lack of resources, time constraints, usually only addressed if relevant to presenting complaint.	UK, practitioner experiences - single area in South West
Chisholm, A., et al. (2012). "Current challenges of behavior change talk for medical professionals and trainees." Patient Education and Counseling 87(3): 389-394.	Semi-structured interviews of doctor and trainee experiences and views of behaviour change talk. Grounded theory 29 interviews.	Large number of interviews, multi-site.	Themes included role legitimacy, fear of offence, and 'personal challenges'	UK, looking at practitioner and post-grad trainee experiences
Chisholm, A., et al. (2013). "Are medical educators following General Medical Council guidelines on obesity education: if not why not?" BMC Medical Education 13(1): 53.	Part of her PhD, 27 semi-structured interviews, grounded theory	Large number of interviews assessing how clinicians and trainees were trained.	Little consensus on what the guidelines said/meant. Also highlighted issues of role legitimacy and poor knowledge or resources/support.	UK, range of clinicians and postgraduate trainees
Gunther, S., et al. (2012). "Barriers and enablers to managing obesity in general practice: a practical approach for use in implementation activities." Qual Prim Care 20(2): 93-103.	Semi-structured interviews with 7 GPs, 7 nurses and 9 patients	Good coverage of patient and practitioner perspectives	Barriers included stigma, cost, previous negative experiences, role legitimacy, lack of skills competency, lack of resources/protocols, trust, difficulty broaching.	UK practitioner and patient - based in and around Northampton
Leedham-Green, K. E., et al. (2016). "Enabling tomorrow's doctors to address obesity in a GP consultation: an action research project." Educ Prim Care: 1-8.	Thematic analysis of reflective essays of medical students broaching obesity in primary care, with associated action research.	My own paper, based on reflective accounts rather than interviews	Factors influencing students included fear of offence, role legitimacy, role competency and resource adequacy.	UK undergraduate, single university

5.2 Papers exploring healthcare practitioner narratives

Next, I looked for publications of healthcare practitioner narratives that might inform my analysis. Having tried a variety of indexed databases, I reverted to Google Scholar with its semantically and syntactically sensitive search engine so that I could differentiate between practitioner and patient narratives. I found several papers that used practitioner narratives as a data source, for example (Gunther and Thomas 2006, Crowe, Clarke et al. 2017) however only two that used true narrative analysis.

(Kristiansson, Brorsson et al. 2011) analyses Swedish doctors' narratives of managing chronic pain, and uses Labov's components of narrative (Labov and Waletzky 1997), informed by Riessman's analytical methods (Riessman 2008) which carve the narrative up into stanzas, with elements of Gee's discourse analysis (Gee 2014) which focuses on the way stories are told as an indication of their intended meaning. Although I enjoyed this paper, the methods do not fit well with my data. There is less linguistic 'meat' in my written narratives compared to their transcribed interviews, so discourse analysis is less helpful. Furthermore, my narratives are shorter and I intend to present them in their entirety, making the initial summary according to Labov's elements redundant. I did however, find the theoretical approach and conclusions helpful, which emphasise the strength of narratives, if well selected and presented, as enduring and student-centred educational tools, exposing the reader to the raw range of issues, and allowing them to accelerate their learning by reflecting on the experiences of others rather than their own mistakes and successes.

(Riley and Hawe 2005) is one of the papers that I was most drawn to, as the purpose of their research is probably most similar to mine: learning about *how* health promotion is practised through an analysis of reflective practitioner diaries. Their data source was different to mine, in that they were working with year-long diaries that required them to systematically condense and construct a plot through a segmental analysis. Ignoring those parts of their methods which are not needed with my data, they provide these relevant stages to narrative inquiry:

1. "Focus on why the story is being told the way it is, i.e. examine the narrative text in terms of the types of words or phrases chosen by the [writer]. How do they describe events or actions?
2. Examine the storytelling occasion. In doing so locate ourselves as researchers in the process of narrative construction. Are we only being made privy to some stories and not others? Why? When? Are some stories completed in differing contexts?
3. Explore how the process of meaning-making interacts with broader institutional or cultural norms or events. What stories are difficult to tell due to tacitly understood processes of social sanctioning?"

These fit with my data and research question and have therefore informed my methods.

Chapter 6 Research ethics

Addressing health risks according to NICE guidelines in primary care is part of normal clinical practice, and no patient-identifying information was gathered, therefore NHS ethical approval was not required. This research was undertaken as part of a wider educational research project, evaluating the health promotion curriculum across the final three years at GKT School of Medical Education, Research Ethics Committee approval BDM/11/12-57 (Appendix 2).

6.1 Narrative ethics

I have chosen (Greenhalgh 2016)'s criteria for research ethics relating to narratives as they are recent, specific to narrative research, are built on a review of the relevant literature, as well as her extensive personal experience as a narrative researcher. Greenhalgh states that:

'Ethical duties arise for those who collect and use the stories of others. Requirements of the researcher role include:

- honesty in being explicit and transparent about the purpose of the research;
- non-maleficence, that is intending to do no harm (unless balanced by a greater benefit);
- obtaining consent and undertaking only those activities to which the storyteller has consented; and
- confidentiality and protecting the identity of the storyteller (if that is his or her desire) and those implicated in the story.'

Applying these criteria to my project, the assignment was formative in purpose and no harm was anticipated in completing or submitting the assignment. Students had the option of writing about why they chose not to address obesity with a patient, if that is what they felt was appropriate. Students were told the purpose of the research, which we have adhered to, and were reassured of anonymity both during the analysis phase and in any subsequent publication. As the assignment was part of their normal course work, we had Research Ethics Committee approval to analyse all submissions with opt out consent. This was sought (see Appendix 2) and between 1 and 5 students in each rotation withdrew their consent. All narratives were fully anonymised by an administrator prior to analysis. We retained the ability to retrospectively return any worrying assignments back to the administrator so that students could be identified and appropriate support offered. We needed to do this only once in three years.

Chapter 7 Methods

7.1 Purpose

The purpose of my research is to bring to life the range of dilemmas and successes of my students' first consultations with obese patients, alongside my reaction as a medical educator to their stories. My intended audience is principally medical educators, although students and healthcare practitioners might also use these narratives to aid reflection on their own practice.

7.2 Data generation

During the period September 2012-2015 at King's College London GKT School of Medical Education (GKT), there were approximately 450 final year medical students in each year (1,350 across three academic years) split into three groups of 150 students, rotating through three eight-week placements in surgery, medicine and general practice. Stories were generated by requiring every student to submit a formative reflective case study on a consultation with an obese patient during their general practice rotation. Students would have generally been consulting on their own with 'next room' support from their General Practitioner (GP) tutor. The placement was preceded by two days of campus-based teaching that included lectures, seminars and role-play opportunities. As the learning needs of students became apparent through analysis of these assignments, the campus-based sessions were modified to meet their needs in an action research cycle.

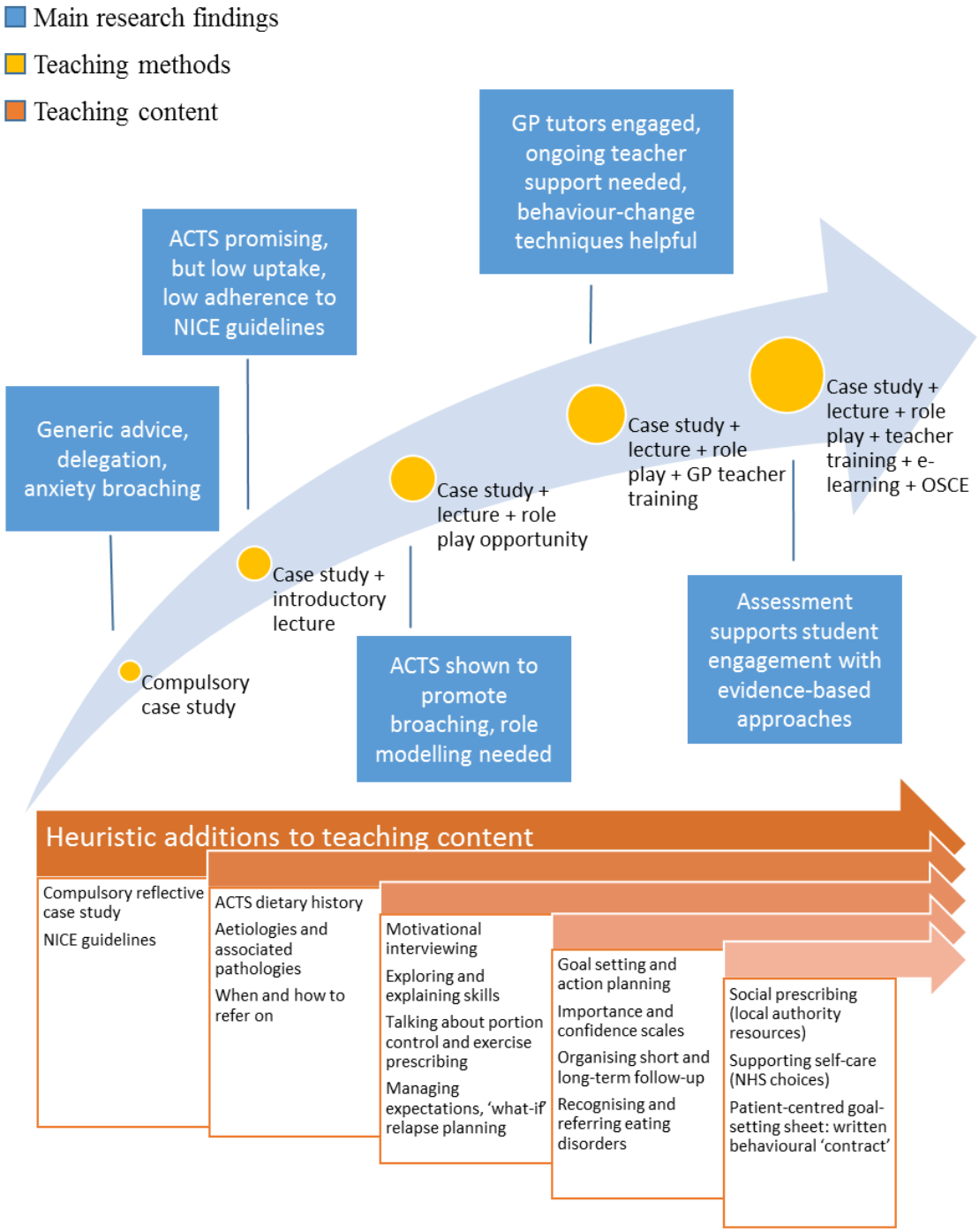
The suggested word count was 500 to 1000 words. Students were encouraged to choose a consultation that they found interesting, to describe what happened and to reflect on what went well and how it could be improved, drawing on clinical guidelines and practice protocols for guidance. We wanted students to reflect freely rather than write to impress, and therefore no mark or grade was attached to the assignment. Instead students were expected to use their writing as a basis for discussion with their GP tutor, which was encouraged but not centrally monitored. No student failed to submit an assignment in three years and the quality of writing and level of engagement was generally high across each cohort.

Students submitted their assignments online and administrators used a random number generator to select 30 out of 150 assignments in each eight-week block. These were fully anonymised by the administrator, removing any patient, GP practice, GP tutor and student identifiers, before releasing them for analysis. I coded the content of 30 assignments per term for three years using NVivo. It was through this process, that involved reading and re-reading each assignment, that I became intimately acquainted with the narratives.

7.3 Identifying and selecting narratives

Keeping the purpose of the research in mind, I needed to identify which assignments had impacted on my teaching practice. I therefore needed to plot how my teaching practice had evolved over the three years and find impactful narratives through purposeful sampling. The first step is illustrated in Figure 2 below and is taken from the published action research project that preceded this thesis (Leedham-Green, Pound et al. 2016).

Figure 2. Evolution of my teaching practice Sep 2012-15



My criteria for selecting assignments were that they

a) Were true narratives of evolving events (although some assignments that I have selected have sections which are non-narrative or second-hand patient narratives)
b) Were engaging and impactful, either through their characters, plot, or insights into the author's experience and emotions

c) Illustrated the evolution of my teaching practice, and therefore were written prior to changes in my teaching practice, or if they were illustrative of how students used their teaching in practice, were written after changes in teaching.

I began by selecting assignments that I remembered as having impacted on my practice, excluding those that were not true narratives. I then built a table (partially recreated in Figure 3 on page 52) so that I could see which aspects of my teaching practice they illustrated and I chose between duplicates based on how engaging I felt the story was.

7.4 Analysing the narratives

The choice of methods is necessarily dictated by the intended purpose of the research, and the qualities of the raw data. My focus was on narrative functions, rather than plot-based or linguistic analysis. I began by looking at the data as a whole through a sociological lens, then focused in on individual narratives, then expanded again to consider their overall impact.

As the narratives are short, I decided to include as much of the original text as possible, providing a running commentary to support the reader's own analysis, that included relevant contextual background and my unfolding reactions to the text and subtexts. My procedure for each story was:

1) To describe the particular context of the story and any relevant background information
2) To examine my impression of the attributes of the storyteller and other protagonists and to consider the interpersonal dynamics
3) To examine how the story was told, and why the writer might have chosen to tell it in that way
4) To consider the implications and impact of the story.

Chapter 8 Analysis

8.1 Sociological aspects

Considering (Plummer 1995)'s five sociological dimensions of stories (highlighted in bold below), and considering this set of narratives as a whole, we need to begin with the **nature of these narratives** and the intended purpose of the authors in writing them. As a formal submission in a medical school, we must assume that there is an element of display, where students might choose their most successful encounter to write about. This could be the case with Narrative C: Engagement, Narrative F: Progress and This story also acted as confirmation that some of the educational methods that I was using were now having a positive impact, including the threat of a summative behaviour change OSCE.

Narrative G: Collaboration. An alternative and perhaps higher form of display might be to present a more complex case and to demonstrate high level analysis or critical reflection which might be the case with Narrative D: Consternation and Confrontation. Finally, as this is an entirely formative assignment, with no marks for achievement, some students might genuinely be using these as a tool for learning, or perhaps as a way of highlighting difficult aspects of professional practice to their audience, which might be the case with Narrative A: Complexity and Narrative E: Despondency.

This brings me on to the **making of the narrative**, which was a short 500 to1000-word compulsory assignment, without grade, that students had eight weeks to complete, making it a low pressure piece of work. The **consuming of the narrative**, or the intended audience, was also relatively low pressure, as it was submitted by email to university administrators and only discussed with their GP tutors if they or their GP tutor wanted this to happen. This, combined with assurances of anonymity for research purposes, may have allowed students to express vulnerabilities that they might not otherwise have felt confident in sharing. In terms of **strategies**, the language used tends to be more reflective than persuasive.

Finally, considering the interaction between these narratives and the **wider world**, we have to consider the position of these writers as relatively low status students within the world of medicine which comes out clearly in Narrative A: Complexity; but concurrently high status 'trainee doctors' in the eyes of some of their patients, evidenced by the apologetic patient in Narrative E: Despondency.

8.2 Narrative A: Complexity

I have started with this narrative because it sets the scene for my research. I actually encountered Narratives B, C and D before this one, but I think it helps to read this first for

comparison. I was however cautious of including this narrative at all, as it is an extreme case, probably unsolvable even with the best skills and resources. It is not just the student that feels unable to help.

To set the context, this student was amongst the second batch of 30 essays that I analysed. The writer would have had a lecture outlining the NICE guidelines on obesity and ACTS: how to elicit a dietary history (Booton 2013). In this cohort, despite the lecture, very few students used the resources, although those that did showed that they were helpful and promising.

This student comes across as an observer rather than an adviser, perhaps lacking confidence to step up to the role of doctor. Their attempt at managing their patient's predicament, presented at a practice meeting rather than negotiated with the patient, is quickly rejected, as the true reason for the patient's obesity becomes apparent.

Our writer begins by setting the scene with words like 'curious' and 'cryptically' piquing our interest, and signalling that there is an interesting plot ahead.

> *I first met Ms BK whilst accompanying my GP tutor on an afternoon home visit. He said the surgery had been notified that an ambulance had attended her in the night, and we were to check she was stable as they were concerned she might have had an upper GI bleed. I asked why she hadn't been admitted and he then explained that she was only 52 years old, but on the palliative care register due to her weight, and cryptically I would see for myself why she couldn't be admitted. I was curious because I had never thought of obesity, which is a risk factor for disease rather than a disease itself, as a reason for putting someone on the palliative care register.*

Clinical note: the palliative care register is designed to ensure that patients who are dying are provided with a consistently high standard of care, where there is a focus on relieving symptoms rather than cure, and that unhelpful attempts to resuscitate are avoided. Bleeding is a complex and difficult symptom to manage in palliative care. Patients are usually entered onto the register with a terminal diagnosis such as cancer rather than a risk factor such as smoking.

The writer follows with what may be considered unnecessary details, given the clinical nature of the assignment, however, these help to paint a picture of low socioeconomic status, and provide an expansion of time, heightening the sense of anticipation of the events to follow.

> *The practice is in an area of high density social housing and all our patients are within walking distance, so we set off on foot carrying our doctor's bag. We arrived at her low-rise protected living block and we could see ECG stickers scattered on the floor outside her flat. The warden had been waiting for us and let us in.*

The reported cheerfulness of the patient creates a dissonance with our expectation of meeting a dying, bleeding patient in poverty. The writer skips through the biomedical assessment, pausing to emphasise the difficulties they had in navigating the patient's size.

> *She had a neat, sparsely furnished, modern flat with a tidy kitchen, however there was an unmistakable smell of ill health. When we entered Ms BK's room we were greeted cheerfully by a Congolese lady who was so large there was no way she could have walked through the door we had just entered. She was lying on a large double bed dressed in nothing but a sheet. My GP tutor asked her about her symptoms: nausea and vomiting; assessed her vital signs, although our blood pressure cuff wasn't big enough to surround her upper arm so we made an estimation with a forearm reading. He then asked me to assist him in a rectal examination. She was too big to roll onto into the left lateral position, so we climbed around to the far side of her bed and both of us leant in to lift her left buttock. Her skin was broken and oozing and seemed to have trouble containing her.*

Clinical note: the 'left lateral position' is the standard position for a rectal examination by a right-handed doctor. The patient lies on their left and curls their knees up toward their chest and the doctor uses their double-gloved right hand to examine the patient's rectum.

The phrase 'leant in' creates a feeling of doctor and student working together in silence, using their full body strength to raise one of her buttocks. Finally, the writer personifies her skin as if it is a separate entity to the patient, struggling alongside the doctor and student to cope with her size.

In the next paragraph, the writer adopts a passive observer role, reporting rather than engaging in the clinical reasoning process. We sense that this might be an under-confident student, as there is a tentative process in how they ask permission to return.

> *He was confident that this was simple diarrhoea rather than an upper GI bleed, however we reviewed her medicines, which included a PPI for stomach protection. He added a prescription for her anaemia which he said the pharmacist would deliver the next day. We had done all we could, so we wished her well and left. On the way out, I turned back and asked whether I could visit her that afternoon to talk with her for longer, she agreed.*

As the student continues, we again sense their nervousness as they feel the need to write out their questions, unconfident in their ability to find or remember the right words.

> *I made a list of all the questions I wanted to ask her and returned that afternoon. I started with an open question and asked her to tell me a bit about herself. Her first*

> *language was French but we got by with a mixture of broken English and my GCSE French. She said she had been a travelling sales woman, selling printed cloth across central Africa in a wagon with her family. When the war came she lost everything including her family and she arrived in the UK as a refugee. She was very lonely and didn't speak English and was befriended by Jehova's Witnesses, and converted to their religion which she takes seriously and she is grateful as they visit regularly.*

We sense an unspeakable and unspoken back-story. The trauma that this woman must have endured in the Congo, losing her family, her livelihood and fleeing as a refugee is not commented on: "*and she arrived*" feels disconnected from the first half of the sentence. Perhaps the patient does not want to re-live the details. The patient is reported as using the term 'loneliness' rather than depression or other mental health problem, perhaps due to the high prevalence of stigma surrounding mental health amongst Congolese survivors of trauma (Verelst, De Schryver et al. 2014).

Contextual note: students at GKT are taught to start with open questions and to explore their patient's story before moving onto closed questions. Students learn to broach sensitive subjects with oblique 'tester questions', such as 'how do you see the future', they are then supposed to follow up with more direct questions depending on the response.

We get a sense of this student moving down their list of prepared questions, before trying to broach more sensitive topics: obesity and death, with surprising results.

> *I started with my most mundane questions. It turns out she can still mobilise to her commode (she is grateful for this), her nephew makes her food (nothing but watery soup) which I saw in her fridge, she takes her medicines regularly (she showed me her dosette boxes in a plastic bag by her bed) and she is fundamentally happy. I then moved onto more difficult areas: how did she think she got this big and how does she see the future? She said that she had always been big boned, as had all her family. Her nephew worried about her though, hence all the watery soup, she laughed. I could see that this didn't add up. She was incapable of leaving her room as she couldn't physically fit through the door, her nephew was feeding her what looked like chilled cucumber and tomato soup, and she was gaining weight.*

Having written this in retrospect, the student gives us clues that there might be something else going on: the laughter at her nephew's attempts to control her weight with soup, and the impossibility of her size given her reported dietary intake. Finally, we sense the speechlessness of the student at the patient's future plans, quickly moving on via a disturbing mental image, to a safer biomedical topic: surgery.

> *I then asked her about how she saw the future. I knew that doctors were bad at talking about death – did she even know she was on the palliative care register? To my surprise, she announced that she and her boyfriend were trying for a baby. Not the actions of someone who knows they are dying. I couldn't help wondering how she intended to do this, at her age, especially given the difficulty the two of us had had trying to find her anus for a rectal examination. I asked her whether she had ever considered gastric surgery, and she explained that she could never have a blood transfusion because of her religion so this was not possible.*

As the student continues we can see that they must have been troubled by this encounter, both writing it up for this assignment and presenting it at a practice meeting.

They must have done a considerable amount of research to find a form of gastric 'surgery' that was outside the NICE guidelines at the time, that could potentially have been done inside the patient's flat without blood loss. Again, the student's lack of confidence is felt in their own description of their plan as 'far-fetched'.

> *I went back to the surgery and presented this case at our next practice seminar, including a far-fetched strategy to insert a gastric balloon endoscopically under simple sedation in her flat. One of the other GPs explained that she had what was known as a 'feeder'. A boyfriend who gets off on her size and her inability to move. She was lonely and liked the attention.*

We can feel the student's mortification at having entirely missed the point. The patient knew exactly why she was so large, and was keeping it private.

The student's previous judgement of doctors as being 'bad at talking about death' is now turned on themself.

> *I have realized that I am not good at talking about death or obesity either. None of my questions were really probing or direct. How had I failed to work out how she was gaining weight? I hadn't mentioned the word death or palliative care, and I wasn't going to go back and talk with her about it. She seemed so perfectly happy, it felt wrong to pull down her fantasy with the brutal truth. What was more important to her? Knowing she was dying, or having an adoring feeder boyfriend? I still feel guilty for not helping her and I am trying to come to terms with the fact that I can't save everyone. Health might not be everyone's priority – is loneliness worse than death?*

In terms of its impact on my teaching practice, this is one of the stories that lingered in my mind for several years, as I felt as helpless as the student in knowing what to do.

In the end, this fed into my teaching on recognising complexity and managing expectations. Simple goal setting and action planning is not an appropriate treatment for complex patients, who may have a significant psychological or psychiatric component to their condition, such as a history of complex trauma, mental health problems, personality disorders, or in this case paraphilia in a co-dependant relationship. Most tertiary referral centres for obesity provide specialist support for complex patients including Cognitive Behavioural Therapy (CBT), and this might have been a more appropriate referral in this case.

This story illustrates the psychological complexities of obesity, particularly morbid obesity (BMI >40), where the prevalence of eating disorders and depression is over 50% (Faulconbridge and Bechtel 2014). Binge-eating disorder, a form of self-harm highly prevalent amongst the morbidly obese, has an astonishing 50% remission rate to CBT (Grilo, Masheb et al. 2011). If a patient's obesity is the cause of their psychopathology then treat it first, but if the root cause of their obesity is something psychological, that needs assessment and support first.

In terms of managing expectations, I now remind students that even with the best of care, not every patient wants to change. Simply telling patients to change their behaviour has a success rate of approximately 1 in 10 to 12. Using evidenced behaviour change techniques: agreeing a goal, setting out an action plan, problem solving and following up, the success rate only rises to about 1 in 4 or 5 (Carvajal, Wadden et al. 2013). As practitioners, we need to be comfortable with treatment failure, recognise when specialist care is needed, and roll with resistance.

8.3 Narrative B: Preaching

This essay was the 14th essay of my first cohort of students. The only guidance that these early students had was a reference to the NICE guidelines on obesity in their student handbook. These guidelines included instructions to elicit a dietary and exercise history, to consider why the patient had become obese including psychosocial factors, to assess for associated pathologies such as diabetes or hypertension, to measure their patient's BMI and tell them their grade of obesity, and finally to recommend lifestyle changes, medication or surgery depending on whether they met certain criteria.

These students' previous education had focused more on hospital-based acute medicine than community-based management of long-term conditions. This means that students sometimes struggle to structure consultations with patients that do not have a 'presenting complaint'. Here the student refers to the patient as being "well in himself" and "asymptomatic", as if this was surprising in a patient presenting for a medication review.

> *I met an obese middle aged gentleman who presented for a medication review and repeat prescriptions. Although he was well in himself and was asymptomatic that day, he was a known hypertensive and was diagnosed with type two diabetes mellitus.*

The student intersperses their narrative with some background information about the patient, which they presumably read from the patients' notes before the patient entered the room.

> *He took amlodipine and was initiated on metformin approximately two months prior to our consultation. His GP was in the process of optimising his glycaemic control through metformin after a trial of management through diet control.*

Throughout this and the next paragraph, the voice of the patient is absent. We have the sense of a long, pre-prepared *spiel* being trotted out, and a one-way lecture rather than a conversation, perhaps relating to nervousness on the part of the student, who acknowledges that the topic would be more difficult to raise if he didn't have a biomedical reason for doing so.

> *After gaining a rapport with him, I advised the patient about his diet, his weight and his level of exercise. I related all information to his diabetic control and stressed the potential for improving his blood sugars and his insulin sensitivity by losing weight, and maintaining a healthy low sugar diet. The relevance of his weight to his insulin sensitivity and diabetes meant I did not find it difficult to discuss his weight. The rapport built earlier in the consultation also made discussing this easier. Raising the topic of obesity would be much more difficult when seeing an obese patient with no past medical history presenting with something unconnected to weight, like an upper respiratory tract infection.*

Students often referred to 'gaining rapport' with a patient without any credible description of how they actually did it. This probably relates to a learnt behaviour from rehearsing for OSCEs[1]. At the time of this assignment, there was a generic tick box for 'establishes rapport' in many OSCE stations at this medical school. A description of the patient, beyond his age, gender and body shape, is notably absent.

[1] 'OSCE' is an acronym for Objective Structured Clinical Examination, which is a type of assessment where students complete a set of timed clinical tasks such as suturing, examining a patient, explaining a procedure or writing a prescription, usually with standardised patients, simulated equipment and clinical observers that grade their actions against standardised 'objective' criteria.

The choice of the word ‘graciously’ in the next paragraph, implies that the student realises that the patient has in some way been generous in allowing him to talk for so long. We now have a sense of the patient coming back into the consultation to explain that he not only knew all the information that he had just been given, but that he had successfully lost a large amount of weight in the last year.

> *He took the advice graciously and also said that he had been trying to lose weight since his diabetes diagnosis and lost approximately three stone in the past year. He had received some advice on recommended foods and food portions, and has tried to keep to a healthy diet. He also started walking for an hour on weekdays, to and from the train station on the commute between home and work. This patient was motivated to lose weight, well-educated regarding the recommended diet for a diabetic individual and had incorporated exercise into his daily life.*

The student concluded his assignment with a description of the local practice protocols on obesity management, without further reflection.

This essay troubled me on several levels. Firstly, this patient, who appears quite capable of change, has two preventable obesity-related conditions: hypertension and type 2 diabetes, and yet this student is relying on the presence of obesity-related morbidity as a pretext for raising the topic with him. This would be the equivalent of waiting until a patient had COPD or lung cancer before raising the subject of smoking cessation.

Secondly, the student has launched into generic advice without eliciting a history first. I sense the patience and frustration of our anonymous patient as he listens without speaking and then explains the progress he has already made.

This narrative made me reflect on my own training in clinical communication when I was a student at this same medical school. Our OSCE stations on explaining medical conditions tended to encourage monologues, and learning about patient-centredness seemed to stop at ICE (ideas, concerns and expectations). The last formal teaching this student had on clinical communication would have probably been in his second year: three years ago, or perhaps four if he had intercalated.

As this narrative, and the many similar, settled into my schema of student learning needs, I rebranded the title of my lecture on obesity from ‘addressing obesity’ to ‘opportunistic health promotion’ to ‘advanced consultation skills’.

8.4 Narrative C: Engagement

To understand the impact of this story on my educational practice, you need to know that this was the 24th out of 30 that I was coding right at the beginning of my research project. Each essay so far had been a variation on one of two themes: keen students who saw the relevance of weight management and were enthusiastically handing out generic advice on exercising more, and/or eating less; and others who just listened to or observed their patients, reflecting on the hopelessness of their situations or not knowing how or even whether to help. I had been coding these stories according to the reported consultation content, noting what information was elicited and given, grading the level of enthusiasm of the student, and looking for clues as to the reaction of their patient.

This consultation was something else entirely.

> *For this obesity study I have chosen to write about the 11-year-old boy, as being a child, I found his case very interesting.*
>
> *During one of my independent consultation clinics an 11-year-old boy, Master KR, came to see me with his mother following receipt of a letter from the Change 4 Life group. Along with other year 7 pupils at his school, Master KR had been measured and weighed by Change for Life, calculating his age adjusted BMI to be on the 92nd centile, thus he was overweight, which concerned his mother.*

My students often write about the importance of addressing obesity before it becomes established, and yet in this cohort of 30 essays, only one student wrote about how they consulted with a child. Reasons cited for avoiding this conversation included fear of harming the child's self-image, and fear of defensive or even aggressive responses by parents who don't seem to see their own children as overweight. This student, however, cannot avoid the conversation, as this is the primary reason for attending.

Clinical note: the Change4Life letter, or 'fat letter' as it came to be known, is sent to all parents of overweight or obese children as part of a national screening programme at school, which has been widely criticised in the press (Finnigan 2015, Fruen 2017).

From his reported centiles (92nd rising to 96th), it appears that KR may have put on even more weight since receiving his letter.

> *Master KR was a charismatic young boy, who interacted well with me throughout the consultation; his mother was well-educated. After the initial introductions and eliciting the presenting problems I measured Master KR height to be 1.39m and weight 45kg, which made his BMI 23.3. I explained to the mother and master KR that we need to plot BMI's for children on BMI growth charts, and printed one of these for us to look at*

> *together. With my help master KR plotted his BMI versus age onto the graph, and we saw that his BMI was on the 96th centile, which I explained meant he was obese. Master KR had thought he was a little 'chubbier' than his friends, but had not realised that he was obese. He reported that he did want to lose some weight and that he would like some help from us and his family, to help him change. From here I explored with Master KR and his mother what their lifestyle was like, what his diet included (meals and snacks), and what exercise he did. Master KR is very active, walks the 20mins to school and back every day and plays football each lunch and break time. His diet however let him down: he skips breakfast, eats lots of sugary and fatty snacks, and little fruit and vegetables.*

We get a genuine sense of rapport and kinship as the student admires the 'charismatic young boy' and 'well-educated' mother. By inviting the child to look at the data with them, the student brings the child into the co-pilot's seat, showing both respect for the child's abilities, and creating a collaborative working relationship, supporting active participation and avoiding a passive or consumerist consultation dynamic (Hall, Roter et al. 1996).

I was initially sceptical that the student was following the NICE guidelines so accurately, however the exercise and dietary histories have enough detail to feel authentic. The student later explains that they are consulting the NICE guidelines as they go along, adding credibility to the story.

> *I assessed for any comorbidities or risk factors, including family and psychosocial factors at school and at home: Master KR was really enjoying his new secondary school, had some nice new friends there, and enjoyed being on the football team. He had two older sisters both who were within the normal BMI range, and a mother and father at home who were normal weight too. His mother reported part of the reason she had brought him in was that he was a fussy eater, so she had given in, and let him eat whatever foods he wanted, including at meals times when he would often eat a large plate of pasta and cheese. I consulted the NICE guidelines to check that I had explored all the required areas during the consultation.*

The student has quickly identified the cause of this child's obesity. The mother has 'given in' and feeds the child what he likes. The foods the child is eating are appetite stimulating (salt, fat, sugar) rather than foods which maintain satiety (fibre, complex carbohydrates, fat, protein) (Ahima and Antwi 2008). The EarlyBird study, a prospective cohort study, showed that sociocultural issues (other than parental obesity) including socioeconomic status are not predictive of obesity in children (Voss, Hosking et al. 2008). The same study also confirmed that physical activity does not make children lighter, only metabolically healthier (Metcalf, Voss et al. 2008), and that obesity in children is caused by dietary factors rather than inactivity

(Metcalf, Hosking et al. 2011). Here we have an archetypal illustration of the physically fit, middle-class child with a poor diet.

> *On the basis that Master KR was very responsive I directed the advice to him using appropriate language, whilst his mother listened. I gave him a pen and a piece of paper, which he decided he was going to stick on the fridge at home, and together we wrote a numbered 'action plan' of things he was going to try to do each day (in accordance with NICE and NHS healthy choices guidelines).*

The student has side-stepped the thorny issue of 'telling a parent how to parent' by putting the child into the driving seat. The mother adopts a passive role, while the student and child collaboratively draw up an action plan.

> *This included dietary advice: I explained that as he is still growing that any changes he makes should not be a diet, but healthy eating to allow him to grow to his full potential, meanwhile addressing his weight problem. I showed him a picture of 'the eatwell plate', which he copied onto his paper, and we discussed all the things he likes to eat in each category and correct proportions of each, with advice on which are good and not so good.*

The student continues to show an impressive adherence to guidelines, correctly suggesting KR grows into his current weight rather than loses weight, explained by the student's earlier assertion that they had the guidelines open in front of them during the consultation.

> *Despite his mother's previous views, it emerged that Master KR does like certain vegetables such as broccoli and carrots, which his mother vowed to include into his new healthy dinners. We discussed other diet recommendations, such as eating 5 fruit and vegetables a day, cutting down on cheese and other saturated fats, and alternative healthy snacks to chocolate bars and sweets. We also negotiated together that he would have pudding once a week at school, and an unhealthy snack once a week after school, in contrast to every day as currently.*

The student uses the term 'vowed' twice (once above and once below) when reporting the mother's commitment to change. This word has connotations of religious zeal and obedience, and we can feel the unspoken shame of the mother who didn't know her child liked vegetables or wanted to go swimming more, reflecting the powerlessness of the mother in the face of her determined child.

The student emphasises the collaborative nature of the consultation with the phrase 'negotiated together'. By learning about the patient, the student is able to create a goal that is relevant to the child's needs (not the student's or mother's): getting into a football team.

> *Master KR appeared to be an active young boy, walking to school every day and playing football at lunchtimes and matches. We discussed that to help him with his weight he should try to do at least 60minutes of moderate exercise a day, and more if he can. He reports that he wants to improve his fitness so he could get onto the first's football team this season, so he was going to try to become more active. We spoke about how spending less time watching TV or playing video games, and more time playing out with friends or cycling with his sisters would help. He said he always used to enjoy swimming, so his mother vowed to take him swimming twice a week too.*

Next KR and his mother are encouraged to identify barriers to change – social pressure, having snacks in the house – and rehearse strategies to overcome them.

> *During the discussions about food and exercise we discussed food related behaviours and identified strategies to improve these: he was going to tell his school friends that he was not going to buy crisps/chocolate from the shop on the way home from school because he wanted to improve his fitness to try to make the first football team: he felt this was a 'cool enough' justification. He was going to eat the meals that his family ate every evening, with modifications that his mother would make to include things such as broccoli that he likes. Additionally, Mum was no longer going to buy unhealthy snacks for the house, to encourage him and the rest of the family to eat more healthily.*

Next, the student organises follow up and support for self-care (keeping a progress chart, and referring his mother to the NHS LiveWell website) cementing expectations for change and creating social pressure to report progress by the next appointment. The student even leaves a plan in the notes for the follow-up appointment.

> *Master KR's mother agreed to weigh her son every week to monitor his progress. We would see him at the surgery again in 4 weeks time to monitor progress and address any issues which have arisen. Master KR & his mother were advised they could see the practice nurse for further dietary advice. Further points to be addressed at the next appointment may include looking at nutrition labels. Additionally I gave them the details for the NHS Live well website, which has an advice section for weight management in children. The GP checked Master KR's height & weight, reviewed the advice I had given and checked I had booked a follow up appointment with himself (as I would have finished working at the surgery by this time). The GP agreed there was no need for a referral as the patient and mother both seemed very motivated for change, and were going to make their first attempt with our support.*

In the final paragraph we can sense student's pride at the successful encounter in the phrase "the GP agreed there was no need for a referral…".

This was the first consultation where I could feel the engagement of the patient and his mother, and the first where I genuinely felt a life may have been changed for the better. Fundamentally it was the story that launched my enthusiasm for behavioural change approaches to obesity as I could now see the potential.

Interestingly this was written two years before the NICE guidelines on behaviour change were published (NICE 2014) and yet it follows the guidelines almost perfectly: establishing motivations and readiness to change, negotiating a SMART goal and action plan with problem solving, providing support for self-care including self-monitoring and addressing social factors, with short-term and ongoing follow-up.

8.5 Narrative D: Consternation and Confrontation

This was also one of the earliest reported consultations that I read – the 6th in the very first batch of 30 studies that I coded. It is one of the consultations where the student simply explores the patient's experience without trying to address their issues, however it's importance lies in the range of barriers and facilitators to broaching obesity that it highlights. This text has become very familiar to me, as I have used many quotes from it in my research to illustrate learners' needs. In my mind, the writer is male and I refer to 'him' as such. I acknowledge that this is a presumption, based partly on the direct often biomedical language, and the willingness of his male patient to open up to him. I was initially cautious of using this assignment as much of the text isn't true narrative, although there is a consultation narrative section in the middle, however the student is still telling a story: the story of this patient's weight gain.

The writer starts as if this is a formal clinical presentation: the patient's name, age and occupation, followed by the patient's clinical presentation and history, with relevant background.

> *Mr JM is 58 years old, married and recently retired. He used to work as a teacher and then moved into a teacher advisory role. He is 1.77 meters tall and weighs 154kg which results in a BMI of 49.2.*
>
> *He was athletic whilst at school, though his weight has slowly crept up since his twenties. Ten years ago he was diagnosed with hypertension (he weighed 127kg at the time) and managed to lose 25kg. He subsequently put the weight back on and his weight increased, however he did have another successful episode of weight loss three years ago when he lost almost 20kg. Since this time, his weight has again increased. His maximum weight has been 159kg.*

> *Mr JM was first referred by his GP to the practice nurse in 1997 for weight-loss advice and management. For the last 15 years he has seen the nurse approximately once a month and having developed a good working relationship with him over the years suggested I spoke to him.*

Having provided the background context, the writer then relaxes into a more reflective style, providing insights into his thought processes during the consultation. Obesity is a taboo topic of conversation that is outside our normal social discourse. In an ethnographic study of healthcare practitioners caring for morbidly obese patients (Hales, de Vries et al. 2016) described social awkwardness caused by fat stigma, and clinicians' tendency to avoid conversations that might cause mutual embarrassment.

> *That said, I approached the consultation with consternation. I'm accustomed to discussing people's smoking habits but confronting their weight is not something I felt very comfortable doing and have very little experience in. I have still not observed a single consultation where the doctor had approached the subject of weight, despite meeting many overweight and obese patients.*

The choice of the word 'confront' was not unusual in this batch of essays, as if students feel that they are the bearers of bad news that their patients should be ashamed of. This student is also sensitive to social norms, and his observation that he hasn't seen any other doctors do this, indicates that he sees this to be outside the normal role of the doctor.

The impact, both positive and negative, of role modelling by clinicians was a recurring theme across this academic year, with one student seeing their GP tutor address obesity successfully five times in a morning, and others not at all. The interesting thing about this consultation is that the student takes us through a process where they initially see addressing obesity as someone else's role (the practice nurse's), but by completing this assignment which effectively forced them to broach obesity with a patient, they can see that obesity matters to patients as well as doctors, and that patients might actually be relieved if the doctor broaches the subject in a supportive rather than confrontational way. The narrative has a digression, where the writer refers to a future consultation to illustrate how he has used his learning.

> *I was fortunate that Mr JM was happy to discuss his weight, the complications it had led to and the support and management options past, present and future.*
>
> *As a result of a very open and pleasant discussion with Mr JM, I brought up the topic of weight with another patient, an obese, 40 year old Muslim woman a few days later. To my surprise she was very receptive to the discussion and asked how to arrange an appointment with the practice nurse so that she could discuss weight loss options in more depth.*

Although this student doesn't yet have the skills to address obesity himself, and still refers onwards to the practice nurse, he seems to have had a transformative learning experience and to have got over his 'consternation'. The writer then reverts back to the biomedical model giving the patient's past medical history and drug history. Every condition in the long list (high blood pressure, diabetes, hyperlipidaemia, hernias, arthritis, cardiovascular disease, cellulitis) is attributable to obesity. The social, environmental and financial costs of supporting JM to manage these conditions, including his monthly appointments with the practice nurse, are considerable.

> *Mr JM is morbidly obese and this has led to other complications. As well as hypertension, (for which he takes Bendroflumethiazide 2.5mg, Doxazocin 2mg, Candesartan 16mg and Lercanidipine 10mg), Mr JM also takes metformin 100mg BD for type two diabetes, which he developed two years ago. He also takes Atorvastatin 20mg.*
>
> *He explained that he had had surgery to repair inguinal hernias and the weight has affected his joints and his circulation. He has in the past been seen by the orthopaedic team at King's and is currently under care of both the vascular team and the gastroenterologists. He saw orthopaedics for pain in his lower back and knees. They informed him there was little they would or could do until he lost some of the weight that had caused and now exacerbates the problems. His circulation remains poor and he has chronic cellulitis and venous problems of his lower legs. Mr JM was also aware that he was too large to fit into the MRI and therefore had not had access to this investigation during an episode where he had suffered from sciatica. In his words "I wasn't happy with the prospect of visiting the zoo".*

Contextual note: at the time of writing, large-bore MRI scanners were specialist pieces of equipment, confined to research laboratories and zoos.

The student then describes the social and psychological cost to the patient himself. It is here that we gain a sense of the patient warming to the student, and vice versa, as he shares quite intimate stories of stigma and embarrassment. We also gain a sense that the student has become interested in the patient as he discusses him later with the practice nurse.

> *We discussed the impact of his weight on his psychological and emotional wellbeing. Recurring themes included a sense of failure at not being able to lose weight and successfully keep it off. He also acknowledged the impact his weight had and that it now prevented him from living a full and active life. He spoke about the social awkwardness of having to get aisle seats at the cinema or theatre and that he no longer felt comfortable taking the bus. He experienced anxiety over simple actions that would cause embarrassment, such as not being able to get up off a friends sofa, and had taken*

steps to avoid these situations, thereby curtailing areas of his social life. When I later discussed Mr JM with the practice nurse who has known him for 15 years, she described that a lot of Mr JM's weight fluctuations were relationship orientated.

As the writer moves onto relate how the patient's obesity is managed, we get a picture of a patient who is actively engaged, buying himself expensive private treatments, setting himself personal goals with clear underlying personal motivation, perhaps, if the practice nurse is to be believed, related to a new partner or potential partner in his life.

Mr JM's interventions can be divided into NHS and private. Through the NHS he sees a practice nurse once a month. He also recently was placed under the upper GI team at King's and went to a presentation that discussed the three main gastric operations that were available. As a result of this he was most interested in the gastric banding operation, however he is reluctant to have any surgery if another option is available and is using the "threat" of surgery as motivation for weight loss.

In the past he has attempted exercise regimes, diets and food diaries however now believes that diet is the only option as he feels he is just too large to exercise effectively without causing joint damage and pain. He has never tried medical interventions such as orlistat and this might be a viable option if he is thinking seriously again about losing weight.

I spoke to him just after his first appointment with a hypnotherapist; a private intervention that is self-funded and costs £500 for six 90 minute sessions. He has a healthy scepticism but the hope is that the hypnotherapy will "suggest" that a gastric band is already in place and ideally avoid him having to go through the real thing. They had also discussed emotional freedom techniques. His goal is to achieve a sustainable lifestyle change and ultimately a weight of 100kg (which would bring his BMI near 30). He knows this would benefit both his psychological and physical wellbeing.

The student then reflects on the lack of coordination and haphazard nature of obesity services in the local area, which I have deleted as it is not part of the narrative, but he has taken the time and interest to look these services up possibly with the aim of signposting patients to them in the future. He finishes his essay by re-iterating the transformational learning that has happened: from consternation at the very idea of having to discuss obesity with patients, he now sees himself as being fortunate to be in the position where he can discuss it openly with a therapeutic rather than confrontational stance.

This experience has taught me to be more open and comfortable when discussing a patient's weight. Patients may just require some encouragement, motivation or the

> *knowledge that free services exist. Doctors are very fortunate to be in a position where they can discuss weight – not from an aesthetic perspective, but from a health benefits perspective, which is far less confrontational.*

This story illustrates the power of 'having a go' and the positive impact that this compulsory task was having on students' role identity: this student now sees broaching obesity as a legitimate part of his future role as a doctor. It illustrates several themes that I took up later in my teaching: supporting students in broaching obesity in a patient-centred way (asking if the patient would like to talk about their weight with role play opportunities), addressing the learning needs of GP tutors to support better role modelling (a day-long conference and an e-learning module), and providing an accessible way of finding social prescribing resources so that students at the very least knew what local resources there were to support patients. To quote an essay from the same cohort a year later "*My GP tutor explained to me that he went on an Obesity Management course organised by GKT recently, which was attended by several hundred GPs in the area. This course provided him with information about services to which overweight patients can be referred in the local area, and since he has had this knowledge, one service which teaches people to cook in a more healthy way, has gone from being on the brink of closing to being oversubscribed*."

8.6 Narrative E: Despondency

This narrative was from the first rotation of the second year of my action research project. It is possibly the one that best meets (Greenhalgh 2006)'s criteria for 'a good story'. It has aesthetic appeal, its characters feel real and come to life, it is well paced, has a plot with a twist, is coherently recounted, feels authentic; and more fundamentally it has a point and the story persuades the reader of that point.

Quite apart from it being an enjoyable read, its impact on my teaching practice was profound. It consolidated a theme that I had seen but not really noticed or named: despondency. We can feel the fatalism and self loathing of the patient, the resignation and low expectations of the GP tutor, and the disappointment of the student who ultimately struggles not to blame their patient.

The story brings out subtle ethical and philosophical questions, as well as educational ones. Has the doctor failed to treat, or failed to respect the patient's right to decide? Has the patient broken their side of the doctor-patient contract by asking for help and then not taking what was offered? As doctors we are used to treatments that fail to help, or that actually harm the patient, and we consistently overestimate the therapeutic power of our actions (Hoffmann and Del Mar 2017). Having a patient turn down what is offered challenges our role as the healer. Did the student fail to gauge how important weight loss was to the patient, thereby setting a goal that

the patient was unlikely to action? Or did they in fact fail to assess the patient's level of confidence, thereby underestimating the amount of support that the patient needed?

> *Ms McD was scheduled for a check of her blood pressure. She had been on ACE inhibitors for this since it was picked up two years ago. It had been bouncing around the intervention line for the past 6 months and she was now concerned that she might need to up her dose. She had not been cutting down on salt, TV, and 'treats,' she confessed, sheepishly. "I can't stand exercise," she said, and laughed nervously.*

By including the clan prefix in the patient's name, we get a picture of the patient's Scottish ethnicity. I also imagine the writer as being from the same region, perhaps having organised a peripheral placement for their GP rotation so that they can spend a term with their family, sharing the same lilting Scottish accent and sociocultural awareness.

The writer's choice of adverbs gives an early indication as to Ms McD's shy, diffident character, and we see her laughter as a mechanism for hiding her embarrassment rather than an expression of relaxation.

We can almost imagine sitting with our protagonists in the consultation, with the writer using a mixture of direct quotes and reported speech, broken up into short sentences to echo the conversational pace of the consultation.

> *She rolled up her sleeve and looked at me expectantly. Her blood pressure was indeed high. I explained that I thought this would probably merit increasing her current dose, or even starting a new med. Ms McD exhaled with disappointment. She didn't like taking so many pills. She was only in her 50s, she said, and it made her feel like an elderly person. She said that she wouldn't worry about it so much, but both of her parents died of heart disease. And their parents too. This was a fairly typical story among the island's population; Scotland is one of the cardiovascular disease capitals of Europe, and windy, wet, dark [Scottish Island] seems to encourage the rule, rather than the exception. She'd given up smoking 12 years ago – she was very proud of this – but since then had piled on the weight. She had put on around 6 stone over the past 10 years. She wasn't light to start with, she chuckled.*

The normalisation of obesity amongst certain sociodemographic sections of society was a common theme brought up by my students.

This student uses the strategy for broaching obesity that was proposed in their campus-based teaching: offering rather than imposing the conversation.

> *I hadn't quite noticed that Ms McD was so overweight. She seemed much like many other middle-aged women I had seen in the surgery; slightly round-faced in their*

overcoats, dressed in loose-fitting knitwear underneath. "Well, she's brought it up," I thought. "Would you like to have a chat about your weight?" I asked. She said yes. but she wasn't sure how much she weighed at the moment. She thought she might have lost some.

We can sense the low-power non-verbal language of Ms McD as the student goes on to describe her low-status clothing, shuffling gait, and wringing hand movements. The power imbalance is further emphasised through the patient's progression from hope to disappointment, and ultimately shame.

"We have this funny calculation that we do called a BMI," I said. "Have you heard of it?"

She said she had and would be willing to give it a go. She thought her last one was over a year ago. I asked her to take off her shoes and she shuffled over to the scales. I entered her height and weight into the computer. The answer came back as 41.7, in red and with a little computerised beep. A box on the screen asked me to discuss it with the patient.

"That sounded bad," she said.

I told her what the number was. She looked blankly at me. I said that this was really quite high. She squirmed and wrung her hands a little. I did too, internally. The word "morbidly" was on the tip of my tongue, but I didn't want to let it out. I was afraid I would crush this woman - who already knew she had disappointed us as doctors – a little more. Fortunately, she knew what I wanted to say already: a glutton for punishment, or wanting me to add to an uncomfortable truth, she asked me about "all those horrible words that they attach to the word 'obesity.'" I told her what her category was.

She said that she thought it might be. She sighed and looked at the floor. "I know I should make a bit more effort," she said.

The student, who has obviously sensed her discomfort, tries to build up her confidence again and adopts a collaborative stance, asking the patient for ideas rather than advising. The patient however slips into further despondency as she recounts everything that hasn't worked in the past.

"You obviously can do difficult things," I said. "You gave up smoking. Now it's a case of finding a way that works for you. What do you think that might be?"

She told me that she had tried to lose weight on her own before, but found it difficult on her own. She'd joined "Slimliners" (the island's version of Weight Watchers), but felt ashamed when she hadn't made a target and others had. She'd dropped out soon after joining. She said she felt trapped - that she needed support, but was afraid of disappointing others and herself at the same time when she didn't hit the mark.

Faced with a tightening appointment schedule and a downhearted patient, the student comes up with a bright suggestion that the patient diffidently agrees to.

I suggested that she might want to make an appointment with the nurse for an assessment for the practice's one-on-one programme of support, "Counterweight." I could understand the fear of disappointment well myself; I told her that it was something that motivates all of us in many facets of our lives, but perhaps a private series of sessions with someone helping her to set achievable targets would work for her. She nodded. She would make an appointment on her way out. She gathered her things and thanked me for taking so much time. I looked at my appointment schedule and realised I had given her a full 15 minutes extra. We made a whistle stop tour of my GP tutor's room, and I followed her on her way out to call my next patient immediately, saving the writing up to do for later.

The student notices their GP tutor's lack of eye contact during their debrief. Perhaps this is cynicism and disengagement as the student suggests, but perhaps there is also a touch of shame at her own compassion fatigue as she refers to "*these people*"?

When I discussed the case with my GP tutor in the afternoon, she looked over my shoulder while I described the intricacies of the barriers Ms McD faced in her struggle to lose weight. She had clearly heard them all before. I told her also that I had referred her on to Margaret, our practice nurse responsible for Counterweight.

"She won't do it," she said.

We looked at Margaret's schedule on the computer for the following few weeks. Ms McD's name was not there, among the tens of other McDuggens, McDougals, McTavishes and myriad other clan names.

"You need to literally hold these people's hands," my GP said. "Walk out with them and lead them to the appointment desk, or introduce them to the nurse there and then. Then follow her up with a barrage of letters or phone calls. She wasn't expecting to change the habits of a lifetime when she came in this morning, and I doubt she'll do it off the cuff. Shame that no one has any time to chase everyone up like that. Maybe one

of the many reasons everyone stays so fat." She patted her stomach. It was time for the next patient.

I left feeling a little angry at everyone: at Ms McD for leading me to believe she wanted to change, at the GP for being so cynical and knowing, and at myself for not foreseeing that Ms McD would need extra help on this. I also wasn't clear how a little computerised beep and red writing could help me achieve all of this in 10 minutes when I was a proper GP, most likely in a busy city surgery when patients actually minded running 15 minutes behind schedule. Something to put in my E-Portfolio, I thought darkly, and called in the next patient.

This narrative led me to introduce readiness to change (Prochaska and DiClemente 1983), and importance and confidence scales (Rollnick 1998), a technique I had come across in collaborative care planning. Ms McD is probably not yet ready to change – as the GP said "*she wasn't expecting to change the habits of a lifetime when she came in this morning, and I doubt she'll do it off the cuff*". Broaching the subject, assessing importance, and booking a specific appointment where the topic can be discussed with less time pressure might have been an option. In the e-learning module that I developed, this technique was called 'broach and book'.

Importance and confidence scales allow patients to self assess on a scale of 0-10 how important a goal such as weight loss is to them, and separately to score how confident they feel they are in achieving that goal. Confidence is arguably the variable most predictive of change (Bertholet, Gaume et al. 2012). It is not always necessary to score patients as you can tell from their speech where they lie on the graph of importance vs confidence. Ms McD didn't walk away because weight loss was unimportant to her, what she was lacking was confidence. She said she felt trapped - that she needed support (high importance) but was afraid of disappointing others and herself at the same time when she didn't hit the mark (low confidence). Strategies to support frustrated patients in the high importance, low confidence quadrant include patient-led problem solving, strategies for self-care, addressing health literacy, and social support (Resnicow and McMaster 2012).

8.7 Narrative F: Progress

This student is further on in the programme, in the second year it was running, after we had taught students how to elicit a dietary history using ACTS: asking to ask, eliciting concerns, take me through a typical day, special needs (Booton 2013) and how to structure a brief intervention (ask, assess, advise, agree, assist, arrange). I chose this narrative as it illustrates the ongoing anxieties that our students had about this assignment, including their own weight bias, and the transformational nature of having a go and getting to know patients.

The writer starts by using language steeped in weight bias and anxiety about having to 'confront' his patient. This choice of words is interesting and implies a paternalistic rather than mutualistic stance. I read this case study as if the writer is male, partly because of the direct writing style, and partly because of his misery at having to broach obesity with an angry female patient. He also seems to feel that he needs to 'break bad news' as if he is informing his patient for the first time that they are obese.

> *One of the skills I was dreading experiencing was how to confront an obese patient about their weight. The pressures of our society to look a certain way mean that implying that someone doesn't can be considered extremely offensive. I furthermore always try and shy away from confrontational situations, of which I felt this task to be.*
>
> *My actual case study turned out to be the worst possible scenario I could ever imagine. The fact she was female and therefore most likely to be very sensitive about her weight as well as the fact she was very angry due to a former consultation error (not mine – another doctor's) did not bode well for me. However, since I was in the situation already I tried to make the best outcome of it.*

It is not clear what 'in the situation already' means, however we can assume that the student knows he is going to have to address the patient's obesity as this is the first-line treatment for sleep apnoea. His strategy for calming his patient down isn't particularly mainstream either: repeating his point of view several times, rather than listening to and addressing the patient's concerns.

> *First, I dissipated her anger by addressing the reason she was angry. This took some time because she needed me to say the same things in different ways several times for her to be able to accept it. Then, when I felt that she was calm enough I asked about her general health and sure enough she began describing to me disorders that root from obesity – in her case specifically, obstructive sleep apnoea. I latched onto it and from there asked her if she was happy about her weight.*

Here the student uses the first tool he has been taught. ACTS: a dietary history (Booton 2013) contains a simple strategy for broaching obesity in a patient centred way: asking the patient if they would like to talk about their weight, or if they are happy with their weight. Its strength is putting the patient in control and attending to their concerns first.

> *To my surprise she immediately turned from an upset patient to an engaged, enthusiastic patient. She told me about how she used to be slim when she was younger but then after having her children it all went downhill. Her heaviest was 14 stone and since she was approximately five foot three, this was significantly obese. She had lost 2*

stone since 3 months ago due to the symptoms of her illness making her lose her appetite and so was now approximately 12.5 stones.

Now the student adopts a collaborative stance, figuratively and literally bringing the patient alongside him as they plot her weight on the BMI chart together.

We worked out her BMI to be 31 which is of course obese. It was definitely helpful working out the BMI with the patient because it increased her involvement in the consultation – this was further helped by my use of visual aids such as a colour coded BMI graph to show her where she was on the scale visually.

In the next paragraph, the student refers to an OSCE template. In my teaching I had hinted that there might be a 'brief intervention' OSCE and if there was, students might do well to follow this model which is an extension of the classic 5As model of (Glasgow, Emont et al. 2006) that these students learnt in their 3rd year, to include goal setting and action planning as recommended by (NICE 2014).

- Ask: broach the topic, set the agenda
- Assess: information gathering
- Advise: information sharing
- Agree: a goal and action plan
- Assist: support for self-care
- Arrange: follow up or referral

I was not aware of any practice guidelines in regards to obesity management so I just used the OSCE template I am used to. After working out her BMI I asked her about her daily diet and exercise regimen and gave her advice on how to change it to facilitate her weight loss. She had specific problems which we had to try and find solutions to such as the fact she was the sole carer for her autistic son, which made it hard for her to go to places like the gym since it meant leaving him alone.

Again, we have a sense that the student has adopted a prescriptive "why don't you…" stance, to which he has had the customary reply "yes, but…". After listening to her barriers to change, he moves across into a more collaborative stance using the personal pronoun "we". And in the next paragraph he uses another strategy he has been taught: informing and inviting a response, rather than telling someone what they should do.

Lastly, I let her know about the facilities and services in community that could help her to lose weight such as weight-watchers and asked her whether she was interested in any of them. She was determined but indecisive of the exact type of help she wanted so

she decided to have a think about it and return to the practice to discuss it with the doctor as soon as she had more idea.

Students are taught that behaviour change, including smoking cessation, is a process that requires patients to move from pre-contemplation, to contemplation, to preparation, to action, to maintenance and re-lapse management (Prochaska and DiClemente 1983). Each consultation generally only supports a patient in moving from one stage to the next. Here the patient has been supported in moving from pre-contemplation to contemplation, with follow-up needed for the next stages: preparation and action.

For me, the most interesting part of this narrative is the sudden engagement of the patient as the student switches from a confrontational approach to a collaborative approach. It also validates the broaching questions as suggested by (Booton 2013) which were commented on again and again by students as helpful. To quote another student: "*The questions felt natural, appropriate and sensitive, and allowed for detailed discussion within this context that is notoriously difficult to bring up in a consultation – perhaps due to the fear of offending or upsetting the patient, or simply from embarrassment from the interviewer."*

The student doesn't really reflect on his own weight bias, simply assuming that as the patient was overweight and female, she must be embarrassed. We have a sense that his discomfort dissipates as the consultation progresses.

Very few of the narratives I analysed were overtly judgemental, however I have tried to draw out subtexts which might imply stigma, bias or even frustration at patients' inability or 'unwillingness' to change. It is unlikely that my students would admit that they were disrespectful or dismissive of patients that were overweight, but this doesn't mean that weight bias doesn't exist.

Exploring the literature on weight bias (Phelan, Dovidio et al. 2014), there is an important difference between implicit (internalised) and explicit (enacted) bias. It seems that students can learn not to be explicitly biased, as this is cognitively and culturally driven – they simply learn not to enact their bias even though they still feel it. An implicit bias however, exists on a much deeper level and requires a transformative and enduring experience to overcome it.

I was also left in two minds as to whether to confront weight bias 'head on' with specific anti-stigma training. (Meadows, Higgs et al. 2017) found it to be counterproductive, particularly amongst students with the lowest empathy base-line score i.e. those most in need of it. Instead they found that positive contact with obese individuals correlated significantly with reduced weight bias. Instead, I introduced teaching on the psychosocial aetiologies of obesity, including food insecurity (Adams, Grummer-Strawn et al. 2003) and child abuse (Alvarez, Pavao et al. 2007), as well as the well documented obesogenic environment (Lake and

Townshend 2006). This aimed to challenge preconceptions about obesity being driven by internal laziness rather than external factors.

This story also acted as confirmation that some of the educational methods that I was using were now having a positive impact, including the threat of a summative behaviour change OSCE.

8.8 Narrative G: Collaboration

This narrative is from the penultimate rotation of the final year of my action research project. I have chosen it because, although it is by no means perfect, it illustrates a seismic shift in how my students were approaching these consultations, which were becoming increasingly patient-centred and using evidence-based approaches to behaviour change.

Firstly, the student feels comfortable and confident broaching the topic, even though the reason for presentation was totally unrelated: shoulder pain. In the first cohort students tended to only talk about obesity if the patient brought it up themselves, or if the patients' illness was directly related to their weight.

> *Whilst on placement I saw a 50y old gentleman (PG) who came in following a shoulder injury at work 2 weeks ago, still causing a considerable amount of pain and limitation of movement. As it was a relatively straightforward consultation I decided to broach the topic of his weight. He was clearly overweight and was sweating from the short walk in to the practice.*

The student refers to the ACTS tool which was my first teaching intervention to support broaching and information gathering (asking to ask, allowing the patient to talk about their concerns first, 'take me through a typical day' to learn about diet, exercise and lifestyle and any special needs). They also refer to having had 'adequate practice' i.e. the roleplay opportunities offered at campus block where students could practise finding the right words in a safe environment.

> *Although this was the first time I was discussing a patient's weight, I felt relatively confident doing so as I had established good rapport, and had adequate practise during the campus block. On taking the patients weight (104.9Kg), calculating the BMI (34.45) and knowing that the patient had previously tried Orlistat, I felt I had a good plan of action (ACTS tool) for what was to be discussed. I was surprised that despite having being started on orlistat some time ago, he denied any understanding of the abbreviation 'BMI'. Although he knew he was overweight, he seemed to fail to understand what such a high BMI meant, but welcomed the conversation. His typical daily intake did not seem to contain particularly high fat foods, although he admitted to*

once/twice weekly take-aways, skipping breakfast and eating large meals in the evening.

The student has begun with a detailed history, which also included an assessment of his patient's health literacy with respect to obesity. Next however, the student slips momentarily into a didactic model, and sets out to give the patient advice rather than ask the patient what they think they could do. As part of his training in motivational interviewing, this student would have been taught to recognise when they were encountering resistance: the answer to 'why don't you just…' is usually 'yes, but…'.

I felt like this was fairly straight forward and after establishing he did no exercise at all, I had a clear plan of what changes needed to be made.

On beginning to discuss these changes it became apparent that he worked extremely unsociable hours, with 7 consecutive nights, followed by a few days of 'late shifts' and then normal day shifts.

The student then describes a shift in their understanding of and empathy for their patient, as they explore a more root cause approach looking at the patient's underlying social determinants of health. The student is clearly frustrated by their perceived inability to 'cure' these determinants of health. We also witness the dissipation of their weight bias, which again backs up the research by (Meadows, Higgs et al. 2017) which found positive contact with obese individuals correlates with lower weight bias scores.

Although I didn't feel as though I had judged the patient at all for being borderline morbidly obese, I suddenly found myself feeling much more understanding and empathetic towards his situation, as there was little that could be done to change what seemed to be the cause of his obesity. He described coming home from late nights, feeling exhausted and having little time to incorporate exercise into his daily routine, as any sociable hours he had would naturally be spent with his family.

Looking at the trend of his weight, the start of his shift work was clearly corresponding with his increase in weight. I found myself with few suggestions to offer, other than encouraging regular meals, not skipping breakfast, not snacking between meals and exercising where possible (e.g. a brisk 30 minute walk daily).

The student's assignment included a BMI vs time graph that clearly linked the increase in BMI with the start of his shift work. Next the student organises short-term follow up, partly to re-assess the shoulder and partly to follow-up on his obesity, which is one of the evidence-based behaviour change strategies that is recommended by (NICE 2014). This student takes the

intervening period to develop a much more patient-centred set of recommendations that take the patient's social situation into consideration.

Clinical note: Orlistat is a medicine that inhibits dietary fat absorption. As previously mentioned, most patients discontinue Orlistat due to uncontrollable faecal incontinence, which is a side effect of continuing to ingest fatty foods.

> *I was to follow him up in 2 weeks' time with his shoulder pain, and agreed we would see if he had made any changes to his lifestyle and re-check his weight for progress.*
>
> *Before the follow up appointment I decided to look into shift work and obesity, and what changes could be made. He had previously tried orlistat but had such severe GI upset that he was reluctant to consider this again. I found several studies showing a positive association between shift work and weight gain, with evidence that obesity rates increased as lengths of night shifts increased. It was apparent that other risk factors such as smoking, increased alcohol intake and diabetes significantly increased complications and rates of obesity, so it was reassuring that Mr PG had never smoked, did not drink regularly and was not diabetic.*

By using the passive voice "*was recommended*" and sharing a list of evidence-based resources with the patient, the student appears to have become less didactic, and adopts an informing rather than prescribing role. He also talks about the changes that "*we had agreed on*" implying that he had moved towards a collaborative approach.

> *Advice that was recommended included:*
>
> - *24hr gyms*
> - *Good sleep hygiene –specifically to this patient: encourage longer periods of sleep (rather than the few hours at a time he was currently having)*
> - *Information on constituents of a healthy diet*
> - *Long term realistic plan of action of lifestyle modifications*
> - *Taking healthy pre-prepared food from home to avoid eating fast food at work*
> - *12 week weight loss plan (NHS Choices guide)*
> - *Self refer to dietician within practice (Practice guidance)*
> - *Educate on benefits of weight loss*
>
> *I reviewed PG after 2 weeks and gave him all the advice I had researched. I was also pleased to see he had lost 1 Kg in weight during this time by implementing some of the changes we had agreed on. He was happy that I had more guidance for him and his recent raised cholesterol result meant I also gave him advice on lifestyle changes to reduce this. I found this case both difficult and interesting as the underlying cause of his obesity, his shift work, was something that cannot itself be changed. Hopefully the*

advice on lifestyle management and highlighting the severity of the issue would be enough to help support his recent change in attitude and aid further weight loss.

This essay positively reinforced my educational approach, and I have since used quotes from it at conferences. This student refers to several strategies and techniques that I introduced and demonstrates their effectiveness. Again, it is not a perfect consultation with a relatively one-way stream of information from the student to the patient, but both the student and the patient appear engaged, and the patient has lost weight.

The consultation has moved beyond the 'default' mode, where neither the doctor nor the patient are engaged. The student moved directly into a behaviour change consultation, using some of the strategies they would have rehearsed during their campus-based teaching. At the follow-up consultation, the student takes a personalised 'root-cause' approach, recognising the patient's social determinants of health and supporting him in overcoming his barriers to change. We also witness a transformational learning event, where the student's weight bias dissipates through close positive contact with their patient.

This story was one of many in the final year of my action research project that made me realise my work was done and that my research was ready to publish.

Chapter 9 Research quality

Reliability and validity are the usual terms used to assess the quality of research. Reliability being the accuracy with which data is collected and reported, and validity being the closeness of this data to what is being examined. So, for example I might accurately sample the patients in my patient list, and ask them to rate the quality of care that they received on a scale of 0-10. If this was done well, the data might be reliable, however the validity of the data would depend on whether patients were actually giving ratings that genuinely reflected the quality of care, rather than their dislike of female doctors, or their annoyance at having to pay for parking.

(Kirk and Miller 1986) argue that reliability and validity need to be re-interpreted if we are to use them as indicators of quality in qualitative research. They argue that "reliability is the degree to which the finding is independent of accidental circumstances of the research, and validity is the degree to which the finding is interpreted in a correct way" and that objectivity is the "simultaneous realization of as much reliability and validity as possible" (p.20).

None of these concepts seem to relate well to my research: if I were to conduct the same research, would I choose the same narratives a second time around? If another researcher was to choose the narratives that impacted on their practice, it is unlikely that they would choose the same ones that I did, or that they would interpret them in exactly the same way, or draw the same conclusions from them. This is not a flaw of the methodology, it is part of its strength: I am examining the interaction of these narratives with myself, and sharing how and why they have impacted on my practice with the reader.

Instead, I will concentrate on (Greenhalgh 2016)'s concepts of quality in narrative research: trustworthiness, plausibility and criticality. I find these criteria resonate with my feelings about the potential flaws in my research, and they have been drawn up with narrative in mind.

9.1 Trustworthiness

9.1.1 Confirmation bias

Taking a step back, the greatest threat to the trustworthiness of this research is the potential for confirmation bias: have I selected stories that back up my teaching and rejected stories that don't confirm my beliefs about the learning needs of students? The fact that my findings are backed up by the themes identified in similar studies in my literature review supports the credibility of my findings. The rigour of my prior thematic analysis, conducted as part of my published action research project, also confirms that these narratives cover the broad spectrum of student experiences. This can be further supported by demonstrating cause and effect – the

narratives should genuinely precede changes in my teaching practice, and the narratives where the impacts of teaching are demonstrated should follow changes to teaching.

This can be demonstrated easily as many of the essays I have chosen are from the first or second cohort of the first year of my study, and most of my teaching programme was developed later that year. Changes to teaching that happened mid-way through my action research project included addressing role modelling (delayed as the GP tutor conference and e-learning took time to organise), despondency, judgemental attitudes and recognising complexity (which took time for me to recognise and respond to), as well as role play practice and the introduction of a 'brief intervention' OSCE (which were needed to increase uptake of evidence-based behaviour change strategies). I have been careful not to include stories that simply illustrate learning points, for example students talking about exercise rather than diet, as this was illustrative of a knowledge gap rather than a complex unfolding interaction.

In Figure 3 below, I have listed my narratives on the left, indicated how they have informed my understanding of learners' needs down the centre, and how I have modified my educational practice on the right. The arrows indicate which narratives contributed to my learning, and which changes to my educational practice were stimulated by this learning.

The chaotic nature of this diagram is illustrative of the complexity of this process, but it is helpful in confirming that every narrative informed my educational practice in some way, and that I have been rigorous in tracing the impacts of these narratives.

It is also helpful in illustrating changes that were informed by my framework analysis (listed at the bottom) rather than a particular narrative: e.g. the tendency to discuss exercise and avoid conversations about diet.

9.1.2 Collaborative processes

Finally, in terms of trustworthiness, I have not been working on these narratives alone. They have been registered and indexed by administrators as part of the anonymisation process, they have been coded by myself and double coded by funded research fellows that were not associated with my department or teaching, and my analysis has been shared and discussed with a research mentor.

Figure 3. How evidence informed learners needs and changes to my educational practice

9.2 Criticality

By its very nature, I cannot remove myself from this project, but I can identify how and why I have influenced it and criticise that influence, from narrative generation to selection and finally analysis.

9.2.1 Self-analysis

I am a white British, female, middle-aged academic and doctor of slightly above average weight for my height. I have measured my implicit biases on the validated Harvard Implicit Attitudes Test (Greenwald, McGhee et al. 1998) and I do not have any measurable age, race or weight bias, however I do have gender and class bias (against female academics). I acknowledge that I read some of the narratives with a gendered voice, and some of the voices that I subconsciously ascribe to women, are lower power voices than those that I ascribe to men, or more collaborative than assertive. I have acknowledged where I have made gendered assumptions in the narratives where this has happened. Rather than hide them, I have explained how and why I have made those assumptions.

I have mapped my values on the validated Schwartz Value Survey (Schwartz 1992) and they tend towards self-transcendence and openness to change, rather than their opposites of conservation and self-enhancement. These values have influenced my field of research and choice of research question. Education is relatively low status compared to clinical research (there is no career pathway for educationalists where I work) therefore self-enhancement is not my driving motivation, and my research is about transforming clinical and educational practice rather than perpetuating current practice.

9.2.2 Data generation

There was very limited opportunity for my biases and assumptions to impact on data generation. The student assignments were set by the medical school, and I could neither influence the wording nor the collection of these assignments. During the second year however, I did bring quotes from the previous year's assignments into my teaching, and I verbally encouraged students to reflect on the difficulties they were having as well as their triumphs. This was partly to give students a safe space to reflect openly, but also to support my research in finding both barriers and enablers.

9.2.3 Narrative selection

I have applied objective criteria to the definition of a narrative, however identifying the narratives that influenced my practice is necessarily subjective, but I have been explicit about the processes I used in my methods. The range of narratives that I have chosen, which illustrate both successful and suboptimal practice, should help to satisfy the reader that I have chosen them for their influence, rather than to showcase my students' abilities.

9.2.4 Narrative analysis

Finally, in terms of how my biases and values influence my analysis, I have presented each narrative in its entirety, only deleting non-narrative sections. The lens through which I conducted my analysis is therefore laid bare for readers to observe and criticise: nothing is hidden.

9.3 Plausibility

9.3.1 Veracity considerations

I have considered social influences on these narratives on page 22 in my section on Sociological aspects, and criticised potential 'polishing' of content by students during my analysis. I have chosen narratives with large amounts of what Greenhalgh calls "rich detail" which add to their verisimilitude, as the details bring the characters and events to life. To a certain extent, the trueness of the narrative to the events that actually happened is immaterial, as it is the intention of the storyteller and the purpose and influence of their story that is the subject of this research.

9.3.2 Member checking

Member checking involves taking back the results to those studied so that the researcher's reconstruction and conclusions about a narrative are "tested with those from whom the data was originally collected" (Lincoln and Guba 1985) p314. Riessman however, questions whether member checking can do anything more than affirm the content of a story, and even these are not static as "meanings of experiences shift as consciousness changes". She asserts that the validity of an investigator's interpretation, especially theorising across a collection of stories, must belong to the investigator, rather than individual narrators. "In the final analysis, the work is ours. We have to take responsibility for its truths" (Riessman 1993) p.67.

As these narratives have been presented in their entirety, other than deletion of non-narrative sections as already described, their trueness to the authors' intention is not in question, and member checking would not add to the validity of this research and has therefore been omitted.

Chapter 10 Conclusions and theorising from the data

10.1 Summary of research findings

Before theorising more generally, I have summarised my findings in Table 2 in relation to my research question: What are the student narratives about consultations with obese patients that changed my educational practice? Why did they have impact, and what was that impact?

10.2 Reflection on narrative vs thematic analysis

Comparing this narrative analysis with my previous thematic analysis and action research project, I feel more content with the presentation of data in narrative format on some levels, and less on others.

I was driven to complete this analysis because the gap between my understanding of students' learning needs and the data I was able to present through thematic analysis was so large. Narrative analysis, however, can feel cumbersome to those accustomed to information at their fingertips. It requires the reader to invest time and effort into digesting and drawing conclusions from a story. Quantitative studies can reduce information from thousands of patients into a single number or graph. Thematic analysis might reduce information from a few dozen interviews into a list of findings. Narrative analysis however, includes so much rich detail that a researcher might struggle to represent information from more than half a dozen participants before losing the attention of the reader. There are stories that I wish I could share, but as I had already covered their learning points they were excluded; and there are other learning points, for example illustrating the relative ease with which students were able to talk about exercise as opposed to dietary change, that I excluded as that particular change to my practice was influenced by a pattern that I observed rather than an individual narrative.

In my thematic analysis, I was confident that every discrete item of content was tagged, described, and categorised into groups to draw out themes. In this way, I was able to gather a collection of comments relating to, for example, social awkwardness; another collection of comments relating to how students used different aspects of my teaching; and I was able to map across each cohort a frequency chart of various reported behaviours. This data felt both reliable and valid: another researcher would have coded the data in a similar way as indeed my second coders did, and we drew concordant conclusions.

That analysis however, completely lost the drama of the situation that my students found themselves in: the dilemmas they were faced with, their internal voice as they reflected on their choices, and the dramatic unfolding of events as cause and effect followed one after another.

What I have lost in breadth and objectivity, I hope I have gained in depth and engagement.

Table 2. Summary of research findings

What are the student narratives about consultations with obese patients that changed my educational practice?	Why did they have impact?	What was that impact?
Narrative A: Complexity	Well written, frank and vulnerable confession of inability to help. Lingered due to dramatic nature of the dilemma, and the lack of resolution.	Informed teaching on recognising complexity and referring to tertiary care including CBT.
Narrative B: Preaching	Insights into suboptimal clinical communication, and barriers to proactive care.	Informed teaching on opportunistic health promotion, exploring and explaining skills.
Narrative C: Engagement	The first essay where I felt that the student had had a life-changing impact on the health of a patient.	Established my belief that skilful use of best-practice guidelines could be effective.
Narrative D: Consternation and Confrontation	Wide range of barriers and enablers to best practice illustrated with highly 'quotable quotes', including the patient's own barrier and enablers to change.	Informed teaching on how to broach, the need for senior role modelling and normalisation of conversations about obesity within clinical practice, the power of 'having a go', stigma, supporting social prescribing
Narrative E: Despondency	Detailed characterisations, minute observation of consultation details and debrief, had lingering impact due to unresolved dilemma.	Informed teaching on managing expectations, recognising both readiness and willingness to change, responding to patients with different levels of importance and confidence, as well as ensuring the goal was patient-led rather than physician-led.
Narrative F: Progress	A positive consultation by a student that, unlike Narrative C, doesn't find behaviour change easy, but is using what they have been taught and finds it effective.	Acknowledgement that it is not just WHAT you teach, but HOW you teach something that matters. Students need opportunities and motivation to rehearse and practise their skills.
This story also acted as confirmation that some of the educational methods that I was using were now having a positive impact, including the threat of a summative behaviour change OSCE. Narrative G: Collaboration	A positive consultation, where the student progressively moves upstream in his approach, from treating obesity-related morbidity, to behaviour change, to addressing the social determinants of health. Student describes his judgemental feelings dissipating as he develops an understanding of the patient's circumstances.	One of many in the final year of my research project where students were reporting successful consultations, with follow-up. Helped to reinforce our final teaching model, and demonstrated its effectiveness.

10.3 Comparison with the existing literature

I have highlighted in italics how my narrative approach has added to the existing literature (Table 1) that was based on thematic analysis.

(Chisholm, Hart et al. 2012) found that fear of damaging the doctor-patient relationship was a barrier to broaching obesity. My narratives however, show a longitudinal *sequence of events* so that we can see that students were able to overcome this barrier by using patient-centred techniques for broaching obesity: offering, rather than imposing the conversation. This analysis has also demonstrated insights into student learning and *reflections on their actions*, that includes an element of *causality*, for example the student who broaches obesity with a second patient because he had a good experience with his first. We also have insights into *reflection in action*, as the student makes decisions as they go along – such as the student who realises he is talking to an angry and upset patient, but that he is going to broach obesity anyway.

(Gunther, Guo et al. 2012) in their thematic analysis of patient and practitioner interviews, found that stigma, bias and distrust were barriers to talking about obesity. My narratives, however, show a *process* of patients moving from distrust to openness as they warm to invitations to talk about their concerns and daily experience, and indeed students moving from judgement to understanding as they develop insights into the barriers that their patients face.

(Gunther, Guo et al. 2012, Chisholm, Mann et al. 2013) and my own paper (Leedham-Green, Pound et al. 2016) identified role legitimacy as an issue, where students and trainees questioned whether addressing obesity was part of their future role as a doctor. This was notably absent from (Blackburn, Stathi et al. 2015) where practising GPs and practice nurses were interviewed about their experiences. We feel as though there is a piece missing between those that lack, and those that have acquired, role legitimacy. My narratives, however, show a *transformational event*, where a student goes from dreading broaching obesity to a position where he feels fortunate that he can, and we gain insights into the *multiple contingent factors* that have supported that process: being put in a position where he has to have a go (this assignment), *and* knowing what to do when the situation arises (he falls back on his 'OSCE template').

There is something about narratives that grasps the reader and transports them into the situation under scrutiny that creates a different kind of learning experience. Thematic analysis loses *depth of character* like the squirming, apologising Ms McD, *contextual details* like her understated clothing, and the loss of eye contact as the GP tutor's cynicism and despondency

comes through. Thematic analysis would lose the *vivid images* of our Congolese survivor of trauma, too large to roll over, lying naked beneath a sheet having an intimate examination; and it would lose the *plot line* of her dilemma: held captive in her dying state by her need for her religion and her boyfriend. We would also lose the *reaction* of the student to this dilemma as she describes her self-loathing for being unable to help. It is the *vivid nature of stories* that enter our imagination and change us, in a way that itemisation and categorisation of content will never do.

10.4 Theorising from the data

Hermann Schmitz, a perhaps underrated German philosopher, talked about the phenomenology of feelings (Schmitz, Müllan et al. 2011), which he said can be attached to things such as places, paintings or documents in what he described as 'atmospheres'. These atmospheres can physically grasp the reader or observer, and create intense corporeal sensations, such as shame, anger or sorrow. It is the creation of these feelings in the reader that makes stories so powerful and unforgettable, and therefore powerful educational tools. This is one of the reasons why narratives in clinical education must be chosen carefully and used responsibly: their potential to transform the reader, for example, to tear down what might have been a previously accepted social norm, has both the potential for good and for harm.

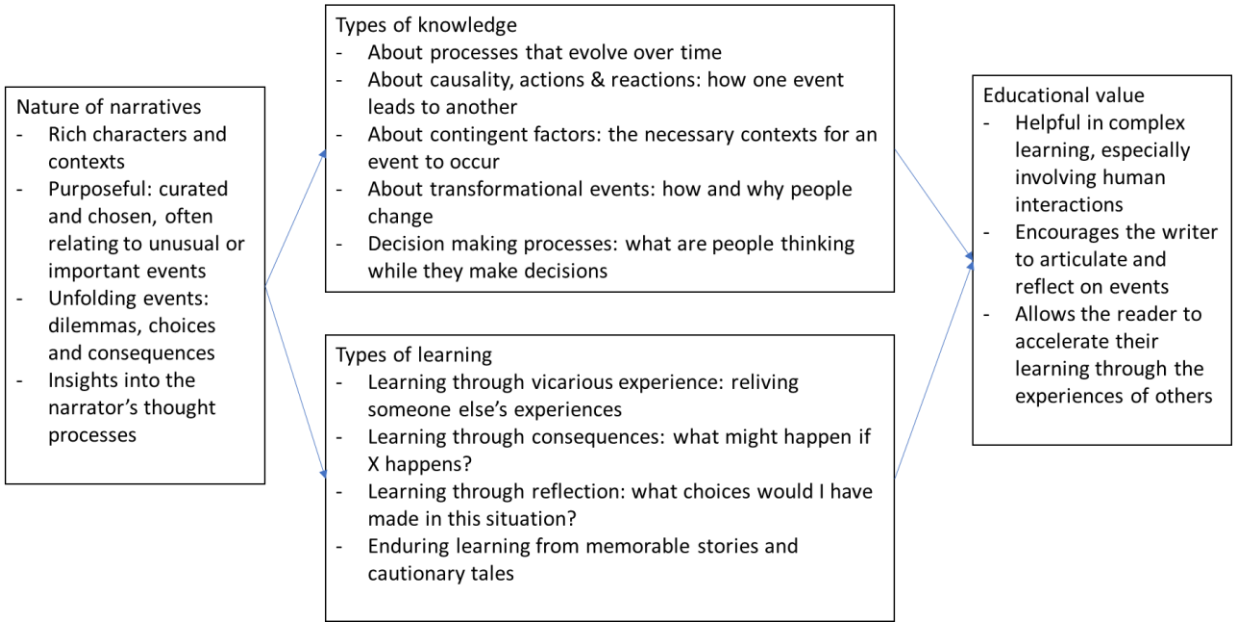
These stories supported my educational practice in various ways. Firstly, they impacted on my students, who were encouraged to engage in an activity that they might otherwise avoid, and to *articulate and reflect* on what happened. Secondly, they impacted on me as teacher and researcher as I have become increasingly aware of *learners needs*, but also, and perhaps more importantly, I have become aware of *what works* in the clinical environment, for example, how patients respond to different approaches. And finally, it is my intention for these stories to impact on the reader, so that their learning is *accelerated* in a way that is *easy to absorb and retain*, and indeed impossible not to *reflect* on: what might I have done in a similar situation? Why did this consultation work, or not work?

The type of knowledge that we gain from narratives is *complex*, based on human interactions and situated in particular contexts, and it is through the recounting of a story that we gain insights into the thought processes that might underlie a particular action.

It is through narratives that I have been able to research tools for supporting my students, such as ACTS, and then to see *how they are used* and whether they are helpful. I know, for example, that students seldom used the 'S' in the acronym (do you eat a Special diet?) as this usually became apparent during the 'T' stage (take me through a typical day). This was the essence of my action research project, where *cause and effect* were intertwined in a single narrative.

In Figure 4 below I have put together a schematic of how I have used these unique elements of narrative research to create a different kind of knowledge and a different kind of learning, which combine together to create educational value.

Figure 4. How narratives create educational value



10.5 Personal reflections

Finally, as a coda, I would like to reflect on the process of researching and writing this thesis. I have gone through a number of transformational learning events myself: I have developed the confidence to criticise the prevailing paradigm in obesity research; and the tools to research and communicate a different kind of knowledge. I can't say it has come easily to me. My background as a physicist and economist gave me an unhealthy confidence in numbers. I have been slow to pick up on certain concepts, but when I got them, they opened doors. For example, it took me days of reading to get to grips with phenomenology, but I am now an enthusiastic reader of obscure European philosophers. In the same way, it took me a long time to realise that it was the stories of my students, not the itemised content of their consultations, which had been driving my educational practice. It has also been a huge undertaking to systematically identify, analyse and reflect on these stories in a way that I hope is sufficiently engaging for other educators, clinicians and students to learn from.

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Chapter 12 Appendices

Appendix 1. Literature review methods and wider results

An initial search using PubMed to find articles with obes* or overweight in the title and 'medical education' as a MESH term, produced 260 results. Manual filtering, looking for papers relating to the education of medical students, trainees or doctors rather than the education of patients, reduced this list to 22 papers. Looking beyond medical education, I searched for papers that examined the experiences of healthcare professionals addressing obesity. For this I used Google scholar's syntactically advanced search engine, which includes synonyms and differentiates between subject and object allowing me to separate healthcare professional's experiences from patient's experiences. Using the search "healthcare professionals talking about obesity with patients" and scanning the top 50 titles for relevance, I found twelve more papers. I used a snowballing technique using Web of Science to scan the reference lists of the three most recent and most cited papers from my combined list including two systematic reviews, which expanded the list to 67 papers. Confining this list to countries with developed healthcare systems, and papers written in English or with English translations, published within the last five years (since the two systematic reviews were written) we have the following papers.

Medical education papers relating to obesity since 2012

Title	Study	Stengths & Weaknesses	Findings	Background	Relevance
Blackburn, M., et al. (2015). "Raising the topic of weight in general practice: perspectives of GPs and primary care nurses." Bmj Open 5(8).	**34 semi-structured interviews of GPs and practice nurses**	**Large well-designed study**	**Barriers included fear of offence, lack of knowledge as to how to treat obesity, lack of resources, time constraints so usually only addressed if relevant to presenting complaint.**	**UK - single area in SW**	**High**
Brown, J., et al. (2015). "A novel approach to training students in delivering evidence-based obesity treatment." Fam Med 47(5): 378-382.	Student volunteers engaged successfully in service learning - providing a 10 week free weight loss course to local residents	Not core curriculum	Residents lost on average a clinically significant amount of weight	US, interprofessional	Low
Butler, C. C., et al. (2013). "Training practitioners to deliver opportunistic multiple behaviour change counselling in primary care: a cluster randomised trial." Bmj-British Medical Journal 346.	A single opportunistic consultation, aimed at improving smoking, alcohol, diet and exercise; found to be effective in intention to	Outcome measure was a reduction in dietary fat. Low fat diets are not effective, compared to low carb diets.	Trained practices had statistically significant differences in physical activity, and ?too low powered to see differences in dietary change. OR 1.37 (1.04 to 1.80) for exercise; 1.37 (0.99 to 1.87 for diet)	UK, postgraduate continuing education. E-learning and small group seminars. Similar programme content to ours.	Medium - similar approach to ours but looking at health outcomes rather than educationa l

	change, but only marginal actual change (difference between usual care and trained behavioural change).				
Carvajal, R., et al. (2013). "Managing obesity in primary care practice: a narrative review." Ann N Y Acad Sci 1281: 191-206.	Narrative review of findings across multiple studies	Tends to aggregate weight loss across participants, only a few trials reported % achieving significant weight loss.	approx 1 in 10 achieve significant weight loss with brief advice, approximately 1 in 4 or 5 if includes regular follow-up.	US, primary care-based, looking at patient outcomes rather than educational	Low
Chisholm, A. (2013). "Investigating, designing and developing obesity management education within medical schools."	PhD thesis, reviewing, investigating, proposing and implementing changes to obesity education	Lacks high level evaluation of how students use tools in clinical practice	Obesity education in UK medicals schools tends to be patchy, vicarious, and lacking grounding in evidence-based behaviour change techniques. Designed 'TENT-PEGS' acronym to support students.	UK, undergraduate, educational	High – relevant sections published and highlighte d below
Chisholm, A., et al. (2012). "Current challenges of behavior change talk for medical professionals and trainees." Patient Education and Counseling 87(3): 389-394.	**Semi-structured interviews of doctor and trainee experiences and views of behaviour change talk. Grounded theory 29 interviews.**	**Large number of interviews.**	**Similar findings to my study - issues to do with role legitimacy, fear of offence, and 'personal challenges'**	**UK, post-grad, qualitative, looking at practitioner experiences**	**High**
Chisholm, A., et al. (2012). "Preparing Medical Students to Facilitate Lifestyle Changes With Obese Patients: A Systematic Review of the Literature." Academic Medicine 87(7): 912-923.	Part of her PhD	Thorough review of English language literature using PICOS criteria for inclusion	No studies used evidence-based behaviour change techniques therefore no evidence as to how to support students.	UK undergraduate	Medium
Chisholm, A., et al. (2013). "Are medical educators following General Medical Council guidelines on obesity education: if not why not?" BMC Medical Education 13(1): 53.	**Part of her PhD, 27 semi-structured interviews, grounded theory**	**Large number of interviewees**	**Little consensus on what the guidelines said/meant. Also highlighted issues of role legitimacy and poor knowledge or resources/support.**	**UK, range of clinicians and trainees**	**High**
Chisholm, A., et al. (2014). "Development of a behaviour change communication tool for medical students: The 'Tent Pegs' booklet." Patient	Attempt to validate a learning tool: Taking down barriers (T) Changing the environment (EN) Addressing Thoughts and	'Validated' by scoring by 11 'experts' who matched 33 behaviours in the booklet to the respective domain.	All domains validated except confidence in empowering people to change.	UK medical undergraduate teaching at Manchester University	Medium

Education and Counseling 94(1): 50-60.	emotions (Th) Perform and practice (P) Empowering people to change (E) Achieving goals (G) Social support (S)	Difficult to use/remember acronym.			
Chisholm, A., et al. (2016). "Investigating the feasibility and acceptability of health psychology-informed obesity training for medical students." Psychol Health Med 21(3): 368-376.	GP tutors delivered health psychology informed teaching on behaviour change to medical students. Acceptability explored qualitatively.	Acceptability of teaching is very low level educational evaluation.	Teaching found to be acceptable	UK medical undergraduate teaching at Manchester University - 41 students, not core	Medium
Colbert, J. A. and S. Jangi (2013). "Training physicians to manage obesity--back to the drawing board." N Engl J Med 369(15): 1389-1391.	Opinion piece	Not research	Training should start at medical school, not post-grad	US	Low
Dacey, M. L., et al. (2014). "Physical activity counseling in medical school education: a systematic review." Medical Education Online 19.	Positivist systematic review, looking for controlled studies with pre/post teaching efficacy scores	Low level evaluation	Teaching about exercise improves student efficacy scores	US	Low
Dietz, W. H., et al. (2015). "Management of obesity: improvement of health-care training and systems for prevention and care." Lancet 385(9986): 2521-2533.	Systematic review of the literature.	Large number of interviews	Need for more/better education, that addresses evidence-based strategies for behaviour change, interdisciplinary working, paediatric obesity and severe obesity. Different needs in low/middle income countries.	Global review of literature on obesity eduction and obesity management processes/systems.	Medium
Elwell, L., et al. (2013). "Patients' and practitioners' views on health behaviour change: A qualitative study." Psychology & Health 28(6): 653-674.	Focus groups involving seven patients and 13 healthcare professionals	Small number of focus groups/participants	Physician barriers included time and lack of resources. Patients needed earlier interventions, tailored to specific circumstances, that appreciated the difficulties of sustaining behaviours.	UK based, doctors and patients	Medium
George, D. R., et al. (2015). "Medical students as nutritional mentors for underserved patients." Med Educ 49(11): 1145-1146.	10 students volunteered to participate in a fruit & veg prescribing scheme	Not core curriculum	Deepened empathy and understanding of social determinants of health	US based	Low
Gunther, S., et al. (2012). "Barriers and enablers to managing obesity in general practice: a	**Semi-structured interviews with 7 GPs, 7 nurses and 9 patients**	**Large number of interviews**	**Barriers included stigma, cost, previous negative experiences, role legitimacy, lack of**	**UK-based in and around Northampton**	**High**

practical approach for use in implementation activities." Qual Prim Care 20(2): 93-103.			**skills competency, lack of resources/protocols, trust, difficulty broaching.**		
Kushner, R. F., et al. (2014). "An obesity educational intervention for medical students addressing weight bias and communication skills using standardized patients." BMC Medical Education 14(1): 53.	Students read two papers then participated in role play with reflective seminars. Pre/post questionnaires.	Lack of qualitative data	Increased confidence in counselling skills and empathy remained high on long-term follow up; stereotyping reverted to baseline.	US (Chicago) based study involving 129 students	Medium
Leedham-Green, K. E., et al. (2016). "Enabling tomorrow's doctors to address obesity in a GP consultation: an action research project." Educ Prim Care: 1-8.	**Thematic analysis of reflective essays of medical students broaching obesity in primary care. Three years of progressive changes to teaching to support identified learning needs.**	**My own paper**	**Factors influencing students included fear of offence, role legitimacy, role competency and resource adequacy. Strategies to support validate the cognitive apprenticeship model in this context.**	**UK, single case study**	**High**
Leiter, L. A., et al. (2015). "Identification of educational needs in the management of overweight and obesity: results of an international survey of attitudes and practice." Clinical Obesity.	Survey of 335 clinicians, ~50% in US, the rest in Europe	Survey not validated.	Clinicians underestimate behaviour change and think medical management works better than it actually does.	International	Low
Matharu, K., et al. (2014). "Reducing obesity prejudice in medical education." Educ Health (Abingdon). 27(3): 231-237. doi: 210.4103/1357-6283.152176.	Prescriptive (lecture) vs immersive (play) about fat bias. Three universities. Before and after 'fat bias' scores.	Not validated score	Immersive had better reduction in fat bias	US medical students	Low
McAndrew, S., et al. (2012). "Medical student-developed obesity education program uses modified team-based learning to motivate adolescents." Med Teach 34(5): 414-416.	25 medical students engaged in voluntary service learning, using gaol setting & action planning with school children.	Self-reported measures	Students felt better able to communicate with adolescents	US based, non-core	Low

Michie, S. (2007). "Talking to primary care patients about weight: a study of GPs and practice nurses in the UK." Psychology, Health and Medicine 12(5): 521-525.	Survey of 40 GPs and 47 practice nurses	Survey lacking qualitative elements.	Unwillingness to broach unless relevant to presenting complaint particularly by GPs.	UK - two London areas	Medium
Peters, S., et al. (2013). "Medical undergraduates' use of behaviour change talk: the example of facilitating weight management." BMC Med Educ 13: 7.	48 medical students at a single institution, completed 2 behaviour change consultations. Students self-scored the techniques they used, second scored via expert using recorded data.	All role play - nothing clinical.	Students through they were using more behavioural change techniques than the independent expert assessors gave them credit for. Students had insight that they needed more training.	UK undergraduate (Manchester)	Low
Phillips, K., et al. (2012). "Counselling patients about behaviour change: the challenge of talking about diet." Br J Gen Pract 62(594): e13-21.	29 practices in Wales - half trained in behaviour change. 40 simulated consultations recorded and transcribed (smoking or healthy eating)	Simulated rather than genuine clinical practice.	Healthy eating tended to be more heterogeneous and prescriptive than smoking cessation advice. Only one clinician mentioned weight-loss as an added benefit of healthy eating.	GPs and practice nurses in Wales	Medium
Poustchi, Y., et al. (2013). "Brief intervention effective in reducing weight bias in medical students." Fam Med 45(5): 345-348.	67 medical students watched a video about weight bias. Pre & post- weight stigma scores.	No long term impact assessed.	Video about weight bias reduced weight bias.	US based	Low
Robiner, W., et al. (2013). "Promoting health behaviours in medical education." Clin Teach 10(3): 160-164.	Set of recommendation for an obesity curriculum	Seems to be built on the author's opinion rather than consensus	Recommendations for immersion programmes	US based	Low
Rose, A. E., et al. (2011). "Factors affecting weight counseling attitudes and behaviors among U.S. medical students." Acad Med 86(11): 1463-1472.	Survey across 16 medical school at start, orientation to wards, and year 4	Large multicentre study. Not validated survey.	Students orientated to hospital specialities less likely to consider obesity counselling relevant. Correlated with personal healthy diet. Greater school support related to higher counselling rates.	UK base survey in 2003	Medium
Schmidt, S., et al. (2013). "Teaching by example: educating medical students through a weight management experience." Fam Med 45(8): 572-575.	Students were given optional extra credits for completing a 4-week weight-management course. Reflections coded for content and	No long-term impact assessed.	Students felt they had greater empathy for and understand for patients trying to lose weight.	US based	Low

	frequency counted.				
Smith, S., et al. (2015). "Primary Care Residents' Knowledge, Attitudes, Self-Efficacy, and Perceived Professional Norms Regarding Obesity, Nutrition, and Physical Activity Counseling." Journal of Graduate Medical Education 7(3): 388-394.	Post grad survey of 219 (62% response rate) trainees in 25 programmes in Ohio.	Survey not validated.	much room for improvement' some programmes did significantly better than others, but unsure why.	US based - Ohio	Low
Swift, J. A., et al. (2013). "Are anti-stigma films a useful strategy for reducing weight bias among trainee healthcare professionals? Results of a pilot randomized control trial." Obes Facts 6(1): 91-102.	22 students watched an anti fat-bias movie, controlled against 21 who didn't. Implicit and explicit attitudes were measured.	Low level evaluation, no long term or clinical impact measured.	Watching movie improves explicit bias but not implicit bias.	US based at Case Western	Low
Vitolins, M. Z., et al. (2012). "Obesity educational interventions in US medical schools: a systematic review and identified gaps." Teaching and learning in medicine 24(3): 267-272.	Positivist systematic review, looking for controlled studies with pre/post teaching efficacy scores	Only 5 studies found to meet criteria. All quite low level pre/post teaching score evaluations.	There are gaps in obesity education in US medical schools.	US based literature	Low
Wylie, A. and K. Leedham-Green (2017). "Health promotion in medical education: lessons from a major undergraduate curriculum implementation." Educ Prim Care: 1-9.	Case study looking at experiences of teachers & students across a range of topics including obesity.	Qualitative. My own paper.	Health promotion learning is hampered by positivist (multiple choice/OSCE) assessment modalities.	UK based, single medical school	Medium

Appendix 2. Ethics

Dr Ann Wylie
Department of General Practice and Primary Care
King's College
5 Lambeth Walk
SE11 6SP

09 February 2012

Dear Ann,

BDM/11/12-57 The impact of curriculum developments within broad disciplines for health promotion for medical undergraduate senior students at King's College London.

Review Outcome: Full Approval

Thank you for sending in the amendments/clarifications requested to the above project. I am pleased to inform you that these meet the requirements of the BDM RESC and therefore that full approval is now granted.

Please ensure that you follow all relevant guidance as laid out in the King's College London Guidelines on Good Practice in Academic Research (http://www.kcl.ac.uk/college/policyzone/index.php?id=247).

For your information ethical approval is granted until 09 February 2014. If you need approval beyond this point you will need to apply for an extension to approval at least two weeks prior to this explaining why the extension is needed, (please note however that a full re-application will not be necessary unless the protocol has changed). You should also note that if your approval is for one year, you will not be sent a reminder when it is due to lapse.

Ethical approval is required to cover the duration of the research study, up to the conclusion of the research. The conclusion of the research is defined as the final date or event detailed in the study description section of your approved application form (usually the end of data collection when all work with human participants will have been completed), not the completion of data analysis or publication of the results. For projects that only involve the further analysis of pre-existing data, approval must cover any period during which the researcher will be accessing or evaluating individual sensitive and/or un-

anonymised records. Note that after the point at which ethical approval for your study is no longer required due to the study being complete (as per the above definitions), you will still need to ensure all research data/records management and storage procedures agreed to as part of your application are adhered to and carried out accordingly.

If you do not start the project within three months of this letter please contact the Research Ethics Office.

Should you wish to make a modification to the project or request an extension to approval you will need approval for this and should follow the guidance relating to modifying approved applications: http://www.kcl.ac.uk/innovation/research/support/ethics/applications/modifications.aspx
The circumstances where modification requests are required include the addition/removal of participant groups, additions/removal/changes to research methods, asking for additional data from participants, extensions to the ethical approval period. Any proposed modifications should only be carried out once full approval for the modification request has been granted.

Any unforeseen ethical problems arising during the course of the project should be reported to the approving committee/panel. In the event of an untoward event or an adverse reaction a full report must be made to the Chair of the approving committee/review panel within one week of the incident.

Please would you also note that we may, for the purposes of audit, contact you from time to time to ascertain the status of your research.

If you have any query about any aspect of this ethical approval, please contact your panel/committee administrator in the first instance (http://www.kcl.ac.uk/innovation/research/support/ethics/contact.aspx). We wish you every success with this work.

Yours sincerely,

James Patterson – Senior Research Ethics Officer

Applicant: Dr Ann Wylie
Review Committee: BDM RESC (Health)
Title of Study: The impact of curriculum developments within broad disciplines for health promotion for medical undergraduate senior students at King's College London.

In order to evaluate the health promotion education programmes (HPEPs) that have been introduced recently at KCL School of Medicine by King's undergraduate Medical Education in the Community Team (KUMEC), we will elucidate the effect/impact on learners (medical students) and teachers (general practitioners, community seminar leaders) using mixed method approaches.

I. Outline of health promotion education programmes

The following is the brief outline of health promotion education programmes with description of curriculum change implemented in 2011.
Please note: Phase 3, 4 and 5 students are those senior medical students in their final three clinical years and successful Phase 5 students receive MBBS.

Years 1 and 2

We provide continuity for young students' learning in their first two MBBS years at medical school; clinical seminar leaders and campus facilitators teach the same groups of 12-14 students throughout both years. This continuity allows us to plan for students to follow and interview one "patient" family several times over the two-year period.

Phase 3

Phase Three students traditionally are allocated four GP visits, seeing recruited patients in a GP practice during their Chest rotation (clinical rotation with emphasis on cardiovascular/respiratory systems). Now wherever possible in their Abdomen rotation (clinical rotation with emphasis on gastrointestinal/endocrine/genitourinary systems) these students will also have four sessions where they take a patient-centred long history organized by a GP tutor. This is partially in response to evidence that in the third year some students seem to become less empathetic with patients as they focus on learning about clinical diagnoses. This additional teaching *"Patient Focus in the Community"* has been rolled out with hospital consultant teachers and as many GP practices as possible.

Phase 4

The key GP elements of Phase 4 remain a longitudinal pregnancy study, where by students follow up a women from late pregnancy to the infant's 3rd month and a review of a community health promotion intervention. The community Lead and Committee have added an element offering students four "consolidation and review" sessions in

general practice, where a student can either see patients or talk with any member of the practice team to revisit learning objectives for the year that still feel challenging. Students will arrange four sessions with the practice team to review several from a menu of Phase 4 learning objectives; this might include examining a child's ear or practicing conversations about contraception. A version of the brief well-known formative assessment tool *Mini-CEX* will be introduced for marking in at least one of these review sessions.

Phase 5

The Phase 5 team has revised the scheme of giving students ten unconnected community visits, and instead implemented a more focused learning objective where students track a "patient journey" to various community services with help from the GP. For example a diabetic patient might include visits generated from referrals to an eye clinic, a foot clinic, a nutritionist, a phlebotomy lab, etc. This is based in the case management objectives of Phase 5, and will help students understand the important relationships in referrals for primary care patients. In a 2012 rotation 2 pilot, students will ask the tutor to use the *Mini CEX* assessment form twice to give them some mid-rotation feedback about performance with patients – if successful this may be used in all Phase 5 rotations in 2012-2013. (this is also being piloted at one of the District General Hospitals). A new health promotion activity has also been added in general practice teaching, focused on the student writing a reflective account about management of a patient where obesity is a case management issue.

***On-line Smoking Cessation programme for Phase 3-5**

Students are invited to do this programmes which enable them to learn about approaches to cessation, and successful learners are awarded a certificate.

II. Qualitative methods

Qualitative studies will be conducted as follows, there are six components:

1. Smoking cessation data will be collated based those eligible for certificate and analysed simply into Phase 3, 4 and 5. Two focus groups will be arranged with a group of students who succeeded and a group who decline to participate.
2. Phase 3 students will be recruited to focus groups to explore what they gained from the new components related to patient-centredness, some from hospital settings and some from GP settings. GPs contributing to this teaching will also be invited to feedback via a focus group at the annual Tutor conference.

3. Phase 4 students will be invited to focus groups to explore their completed phase 4 community experiences with regards to social determinants of health and their self directed learning. Seminar leaders, possibly at the Tutor conference, will also be invited to focus groups with regards to the feasibility and sustainability of the revised seminars. GPs will be sent a survey about the consolidation and review experience in their practices, as will students.
4. The impact of the Phase 5 changes will be explored initially through assignment data regards the four community cases and obesity studies they did, using convenient sampling to assess satisfactory completion of all tasks; the range of patients and situations in the community case studies; the range of patients and context in the obesity studies; the ranges of approach to case management; issues of uncertainty.
5. A number of GPs and practices will be involved in all 3 cohorts and how they have approached the student management; what they have gained; and what challenges they faced; will be explored in interviews and or focus groups - this is especially important as most practices will be involved as a norm in implementing all these changes
6. We intend to recruit a small group of Phase 3 students to follow through and invite to focus groups at the start and finish of their Phase 4 and 5.

The research will have planned discrete components but also be akin to action research which would allow a heuristic and iterative dimension.

Qualitative data will be collected by one of the five researchers but it is envisaged that a transcriber will be recruited to also upload to NVivo (qualitative data analysis software) and each researcher will independently do some thematic analysis followed by collaborative triangulation for key themes.

III. Quantitative methods

Based on the results of focus group interviews, we will develop questionnaires to obtain quantitative data, which will be simply analysed based on Survey Monkey tools. This analysis will be simultaneous with data generation as in heuristic and action research approaches.

Additional research planned in future related to curriculum in Phase 4 and global health components may also influence approaches and interpretation of the findings in this project.

IV. Topic guides for focus group interview

There are six different groupings for focus group:

1. Smoking cessation
2. Patient-centredness
3. Social determinants of health and self directed learning
4. Obesity case studies and Community Case Studies
5. Managing Change in the Practice
6. Longitudinal student cohort

Following is a topic guide for each the of focus group groupings.

1. Smoking cessation

Phase 3, 4 and 5 Focus group topic guides for students awarded Stage 1 certificate

- What factors influenced your decision to do the Stage 1 option?
- Whilst doing it did you feel you were learning new facts or was this more of a consolidation experience?
- About how much time did you spend on this and do you feel it was good use of your time?
- What challenges did you experience if any?
- Now you have the certificate what difference is it making in your clinical placements, how relevant is it?
- What are your views about the value of this - for example should we expect all students to have Stage 1, should it be done in Phase 3 or does it matter which year?
- Any additional comments

Phase 3, 4 and 5 Focus group topic guides for students who decline the Stage 1 option

- What factors influenced your decision to not to do the Stage 1 option?
- Do you feel you are well informed about approaches to smoking cessation as relevant to your learning/clinical needs?
- Were you concerned about the time required and balancing your other learning?
- What difference could it make in your clinical placements if any?
- What are your views about the value of this - for example should we expect all students to have Stage 1, should it remain optional, should it be done in Phase 3 or does it matter which year?
- Any additional comments

2. Patient –centredness

Phase 3 student focus group Patient- centredness topic guide

- What do you understand by the term “Patient-centredness”?
- What do you understand by the concept of “Social determinants of health”?
- How do you feel Patient-centred approaches and consideration of social determinants of health may impact on patient care?

Additional questions for groups who did either GP or hospital PFITC rotation

- What do you feel were the advantages of extra Hospital/General Practice sessions, focusing on patient-centred approaches?
- What were the disadvantages of the extra Hospital/General Practice sessions, focusing on patient-centred approaches?
- Do you feel these sessions have changed your approach to patient-clerking? If so, how? (just in GP? In hospital? What about in briefer patient contacts?)
- Additional comments?

Phase 3 GP teachers focus group Patient centredness topic guide (possibly at annual Tutor conference in June)

- What do you understand by the term “Patient-centredness”?
- What do you understand by the concept of “Social determinants of health”?
- How do you feel Patient-centred approaches and consideration of social determinants of health may impact on patient care?
- What are the advantages of having an extra module focusing on patient-centred approaches?
- What are the disadvantages of having an extra module focusing on patient-centred approaches?
- Additional comments?

(The data gathered can be triangulated with information gathered from the end of rotation evaluation forms completed by students – Likert ratings and free text questions)

3. <u>Social determinants of health and self directed learning</u>

Phase 4 students focus group topic guide

- During your Ph 4 community experiences, and especially during the seminars and presentations, you explored wider issues that could be relevant to or impact on health and well being of patients and communities including mothers

and babies. How did you value these opportunities in term of enabling your appreciation of social determinants of health?

- What types of challenges were encountered, if any? Should we provide more support for students and teachers to address these?
- As you approach final year do you feel confident to discuss wider social issues/determinants with colleagues, other professionals and peers? As doctors to be are you anticipating a greater role in the future/your professional practice in addressing or engaging with social determinants perhaps through commissioning for example?
- As part of the consolidation and review sessions you set out you own four learning needs from a “menu”. Tell us about the benefits of that decision process for you. Were 4 topics realistic given the time and pragmatics? How did you find the negotiating arrangements? In what way will this help in final year and beyond with regard to becoming self directed learner?
- Within the elective portfolio you had a Global health essay and a section on personal health and well being. Do you want to comment with regard to your own progress/insights/relevance of these aspects?
- Any additional comments

Phase 4 seminar leaders topic guide (possibly at Tutor conference in June)

- During the Ph 4 community experiences, and especially during the seminars and presentations, students explored wider issues that could be relevant to or impact on health and well being of patients and communities including mothers and babies. How did you value these opportunities in term of enabling your appreciation of social determinants of health?
- What types of challenges were encountered, if any by you and or the students? Should we provide more support for students and teachers to address these?
- As they approach final year do you feel confident they can discuss wider social issues/determinants with colleagues, other professionals and peers? As doctors to be are they anticipating a greater role in the future/their professional practice in addressing or engaging with social determinants perhaps through commissioning for example?
- Any additional comments

Phase 4 GP teachers topic guide (possibly at Tutor conference in June)

- As part of the consolidation and review sessions students identified their own four learning needs from a “menu”.
- Tell us about the benefits of that decision process for you.
- Were 4 topics realistic given the time and pragmatics?
- How did you find the negotiating arrangements?
- In what way will this help them in final year and beyond with regard to becoming self directed learner?

4. Obesity case studies and Community Case Studies

Obesity cases

- Purposive sampling of obesity reports submitted by students, to be imported to Nvivo and thematically analysed, exploring approaches used; students' reflection; and level of Practice team support.

Themes emerging will be further discussed in focus groups.

We plan to conduct focus group interview with Phase 5 students, dependent on any emergent themes from the above analysis, including expanding on any unintended learning that might become apparent.

Community case studies

Purposive sampling of reports, submitted by students, to be imported to Nvivo and analysed as follows:

- Patient and morbidity
- Social context
- Changing needs and review process
- Type of community input and impact for patient and family
- Relevance to the student's journey and appreciation of community provision role in holistic health care.
- Student survey – using Survey Monkey to specifically inquire about skills/knowledge/attitudes and how they will change/modify their practice. These will be done in three stages, after each of the three rotations to explore any differences from rotation 1, 2 or 3 and what factors might influence differences

Phase 5 GP teachers topic guide (possibly practice visits meetings with teams), a purposeful sample

As part of the Community case studies and Obesity case:

Tell us about the benefits/impact of that process for you.

- Were these tasks realistic given the time and pragmatics?
- Have you or your practice changed your attitudes about behaviour change approaches, protocols and interventions?
- Were you aware of the smoking cessation stage 1 option the students have now?

- How important in your view are these activities for medical students?
- In what way will this help them with regard to becoming self directed learners; being aware of social determinants of health; accessing intervention evidence?

5. Managing Change in the Practice

Focus group of GPs and Practice managers involved in Phase 3, 4 and 5 teaching (possibly at Tutor conference)

- What approaches did you adapt in the practice to manage increase in student allocated time in GP settings and the "new" content?
- What have been the benefits in your view to the students and or your practice?
- Based on this year's experiences what might you modify in the next academic year, how and why?
- Do you feel the students are well enough prepared when they arrive at the practice? What challenges were there?
- Do you feel prepared and able to access relevant resources and support for these "newer" themes?

6. Longitudinal student cohort

We will recruit small number of Phase 3 students in July 2012 for longitudinal follow up and conduct a focus group interview at the following schedule:

Phase 4 Oct 2012, Phase 4 July 2013, Phase 5 Oct 2013, Phase 5 January 2014

Topic guide will be broad and emerge from other components of qualitative and quantitative studies.

Title: Written work for anonymous research evaluation:

(Ethics Committee Approval Number BDM/11/12-57)

Dear Phase 3-5 students,

A number of curriculum developments have been introduced this academic year [academic_year] following various pilots. It is important that we try to analyse various aspects of these and one option we would like is to be able to access your assessed written Primary Care/GP placement case studies, anonymise these and do qualitative analysis. Such research will have NO impact on your marks or examinations and will be treated confidentially with only researchers having access to these anonymised data. The purpose is educational evaluation and improvement.

If you wish your written work to be excluded from this research please indicate before [deadline] by email to [administrator]