Reforming NHS Dental Services: A Political Economy Perspective.

A thesis submitted to the University of Manchester for the degree of PhD in Dental Public Health in the Faculty of Human and Medical Sciences

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Abstract

The University of Manchester

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PhD in Dental Public Health

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Reforming NHS Dental Services: A Political Economy Perspective

“This thesis seeks to understand why NHS dentistry is yet to effectively respond to the changing demographic and epidemiological distribution of dental disease in the UK. The analysis suggests that the current stasis in NHS dentistry requires a broader explanation that situates the dental service within the wider political economy of healthcare reform. Drawing from Michel Foucault’s concept of biopolitics and a reformed critique of neoliberalism, it is argued that market logic, individualism and consumerism are holding NHS dentistry in a transformational stasis. As both a scientific discipline and a professional occupation, it is argued throughout that understanding the slow pace of reform in NHS dentistry requires a deeper understanding of how science and practise are shaped by neoliberal prerogatives. An extended critique of state-of-the-art dental science and an extensive qualitative study show that the further extension of the market has been accompanied by an obsessive political drive to quantify science and practise, disallowing a wider debate about the direction of the service. The NHS dental service hangs in a precarious balance as professionals try and manage competing objectives and align or converge with policy discourse. As such the political future of NHS dentistry is understood as the reflection of how professionals re-imagine and enact their roles under the restraints of contemporary political economy, and a new opening for a social scientific understanding of dental reform is outlined. The ultimate synthesis of the work suggests that reform of NHS dentistry must recognise, and work within, these constraints if progress is to be made. Closing with a discussion of a possible way forward, the final chapters seek to move beyond critique to outline how policy can effectively integrate dental policy reform within political economic constraints”
Declaration & Copyright

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Acknowledgements

However small a contribution to knowledge the PhD may be, this has been a labour of intrigue, curiosity, frustration and professional development for all parties concerned. Without the impeccable support from my supervisory team this would not have been possible. Kath Checkland, Martin Tickle & Paul Brocklehurst have all gone beyond what I would have expected from a supervisory team; they are intuitive, insightful, and each time we meet they draw out my best qualities and seamlessly dispense with my academic anxieties.

It would be a dis-service, however, if I did not give special thanks to Kath Checkland. What lies behind her eccentric demeanour and slightly intimidating character is an exceptionally talented woman who I will look up to for the rest of my academic career. With personal, academic or professional problems, Kath has been a sounding board, an understanding but bewildered listener, but always a source of sound advice and reassurance. I am extremely grateful for everything she has invested in me and this project and I hope our paths cross again.

Special thanks also go to my parents, John and Pauline Deal. This has been a long road but their interest and support has not wavered and belief in my academic ability has been a source of inspiration. This is a long way from our family background of mining and farming and as we celebrated at the beginning of the PhD I don’t think any of us were quite prepared for the following 4 years. My mother and father are full of spark, humour and (sometimes) good sense, but above all else they are genuine people who are good friends, and their support has been a constant source of inspiration.
Chapter 1
Introduction

There is a certain irony in writing this thesis, because I have never really been a big fan of the dentist and could be considered a dental phobic. This fear is a family trait of sorts and our collective attendance record has always been a bit patchy. Aside from having had a couple of fillings, before starting this project I also didn’t really know a great deal about the organisation of dentistry. Having read the press I was aware that the profession appeared to be constantly at odds with central government over one thing or another, and that a contractual change in 2006 had caused many dentists to exit the NHS and move into private practice. Friends, colleagues and family also complained about difficulties finding an NHS dentist, and I had the impression that access was a national issue, and had briefly encountered these problems personally. However, there was something curious about this project that piqued my interest. I couldn’t recall ever reading a piece of social science about dentistry or oral health, despite having a broad knowledge of the health policy and medical sociology literature. Oddly, the reasons why there is so little work published in the social sciences regarding oral health or the organisation of dentistry is one of the major themes addressed in this thesis.

In the broadest possible sense, the problem is that nobody really talks about dentistry within the social sciences, and the debates which matter take place within rather small isolated networks between a select few interested individuals. Moreover, dentistry (as a science) does not appear particularly interested in what the social sciences might contribute and dentistry (as a clinical practice) seems mostly unaware that there is much of a dialogue at all. So in this sense, my first observation turns out to be my biggest finding, though as with all social science, the ensuing question is always why. Here the question revolves around a number of complex issues, though at the most superficial level they appear rather simple. Although the system of NHS dentistry has always operated on quasi-market model, where the dentist leased their services and estate to the NHS under contract, the system of NHS dentistry was organised alongside the rest of the NHS in 1948, and was designed to treat a population that had
relatively poor oral health (see Ham, 2008; Klein, 2010). Though it was annexed from the “free” central NHS into a co-payment system after only 3 years due to uncontainable costs (Harrison and McDonald, 2008; Tudor-Hart, 2006), it was a system designed to address rates of decay and periodontal disease which were severe by today’s standards. For the most part the system is thought to have worked relatively well in the post war decades, though over the last 3 decades the demographic and epidemiological distribution of disease has changed significantly and the countries oral health profile now looks rather different, though the delivery mechanisms remain largely the same.

The population now has significantly less dental disease than it once did, and many younger people may never experience caries - the bacterial infection that causes decay - and will likely keep many of their natural teeth for their lifetime (Sheiham, 2013). However, the model of delivery is much the same, as patients are screened for dental disease at regular intervals (often every six months), whether they need it or not. The flip side of this problem is that there was, and remains, many people who either cannot or do not access dental services leading to oral health inequalities of various kinds. NHS dental services continue to be skewed towards over-screening (or over-treating) perfectly healthy people, while treatable and manageable dental diseases remain a persistent feature within many areas of society. Taken collectively the progressive literature suggests that in a population with declining needs and persistent inequality, the service requires ‘a paradigm shift away from an individualized treatment approach to a population public health model’ (Watt and Peterson, 2012; 147; Sheiham, 2013, 2015; Tickle, 2012; Currie et al. 2012; Watt, 2007), though progress towards this end is painfully slow and what this might look like is more than a little unclear.

At its most basic level this appears to be an organizational issue, inferring that we have a system built for a past cohort of patients, which needs to be reformed to reflect modern epidemiological trends. However, this debate has been taking place since the 1970’s and aside from several changes in the system of remuneration for general dental practitioners (GDP’s hereafter) there has been little meaningful change (Sheiham, 2013; Tickle, 2012). So the aim of this thesis is to examine in more detail
what is impeding reform of the NHS dental service and point towards a possible resolution. At the outset the working title for the thesis was *Rationing NHS Dental Services: Understanding the Sociological and Political Barriers*, though in hindsight this seems rather reductive, already insinuating that rationing is the solution and that a social scientist should identify these barriers and demonstrate how they can be overcome. As Checkland et al. (2007; 96) explain, the common-sense notion here is that if change is not occurring, barriers represent an obstruction. ‘This betrays the normative assumptions that underlie this model: change is by definition good and “barriers” can and should be removed’. In the Grundrisse, Karl Marx (1858) made a similar point when observing the language used by capitalist protagonists during the industrial era. Capitalism cannot abide limits or boundaries, they must be turned into barriers which can be circumvented or overcome by technocratic solutions (Harvey, 2008).

The problem with looking for barriers is that this instigates a search for unilinear or straightforward causal chains between social phenomena that can be singled out or removed to allow for the needed change to extend naturally. I begin here, not just to niggle with linguistics, but because it appears to indicate the way that problems in dentistry are approached. For the main argument sketched in the opening chapters is that the main “barriers” impeding reform have roots in the way dental knowledge is organised. What I mean by this is that dentistry is relatively isolated from the rest of medicine and the medical humanities, and the knowledge streams and knowledge production processes within the discipline are not designed to support or nurture debate about the social and political issues facing the NHS dental service. My analysis outlines the features of the discipline, to argue that as dentistry has matured it has hollowed out, as it has become fascinated with honing its scientific and methodological prowess, squeezing reflexivity from the research community. Over the last decades this has intensified as the research community has closed in on genetic and behavioural explanations for dental disease, and social causes such as inequality or poverty are pushed from the picture (Baelum and Lopez, 2004; Baelum et al. 2007).

Within the mainstream dental literature the mouth looks rather like an assemblage of parts, the social is cast as a subset or variable to be “controlled” and political debate
revolves around a narrow discussion of contracts and remuneration mechanisms. Extended commentary or reflection on political futures is not part of this discussion and those who talk openly about the problems are often left shouting about a crisis from the sidelines. Iain McGilchrist (2009) argues that the clarity obtained through this sort of science is bought at the cost of humanistic enquiry, and is only able to retain its consistency through an endless repetition of its core assumptions. This implies that it is consistent largely because it has made itself so and is very vocal on its own behalf, insisting that “soft science” or holistic enquiry be shut out or pushed aside. There is a certain power at work here that draws researchers into an endless confirmation of a model that appears robust but is grossly decontextualised, and is unable or unwilling to engage in the wider debates that surround it.

Extending these arguments, this thesis draws this out further to suggest that these tendencies are implicitly tied to late modern forms of governance. This is to say that dental science retains this abstract consistency, in part because it is consistent with the preferences of neoliberalism; the form of governance emerging from the late 1970’s that seeks to extend markets across the welfare state, privatise or “flexibilize” infrastructure, withdraw social support mechanisms, foster individualism and “responsibilise” its citizens (Cruickshank, 1999; Fraser, 2003; Crouch, 2011). Neoliberalism, Thatcherism, Reaganomics or whatever else we might call this emergent model of government, is either agnostic about inequality or expects it to be remedied by the further extension of markets or the elimination of “dependency” (Harvey, 2005). Within this frame, poverty is a reflection of laziness and disease is largely reframed as the result of the behaviour of irresponsible citizens (Williams and Popay, 1994).

There are good reasons to be sceptical about the monolithic theories of neoliberalism which pervade the social sciences, and the way the concept is asked to do too much and is to blame for all forms of contemporary despair (Cahill, 2011; Ferguson, 2011). However, even those who see neoliberalism as too conceptually stretched for sustained analysis recognise a proclivity to use markets to solve social problems, a shift of responsibility from the state onto individuals, a growing individualist and consumerist mentality, and an increasing disregard for the plight of the poor (see
Lewis, 2009; Ferguson, 2011; Cahill, 2011). But there is something more interesting about neoliberalism that is often not acknowledged by its critics, namely the late modern fascination with standardizing, counting, monitoring, streamlining and calculating “risk” (Bauman and Lyon, 2013; Bigo, 2008). We are often told by critics of neoliberalism that the state is hollowing out, being trumped by big business or transnational capital, and slowly letting the market take hold of our economies and our consciousness (Lister, 2008; Aldred, 2008). Though this misses the point that there is a positive relationship between how “globalised” a country has become and the size of the state (Cahill, 2011). The state is not shrinking, but taking on a new form. What we see emerging in this neoliberal era is better described as an increasing shift towards the market and attempts to exploit the “freedom” of peoples, coupled with an incessant need to assess the details and measure its performance.

As government divests its social responsibilities onto the market or individuals, it becomes obsessed with trying to measure the productivity of the population and the behaviour of its citizens. This is what is so well captured in Foucaults’ (2009a) concept of biopolitics, which refers to the method of governance which try to optimise the productivity and security of the population, though the next logical step is to model society as a series of economic calculations (Dillon and Lubo-Guerrero, 2008). The extension of this philosophy is not only to extend markets but transform services and citizens to adapt to those markets. This culminates in efforts to try and turn everything into units which can be accounted for and factored into econometric analyses, leading into a system which wants to exploit the benefits of market freedom but fears giving up control (Deleuze, 1995; Anderson, 2010; Gane, 2012).

This philosophy or programme of government affects the shape of dental science and the organisation of dental knowledge in subtle and overt ways. In the first instance it lends credibility to analyses that see disease as genetic and behavioural, legitimising disinterest for the examination of social determinants (Williams and Popay, 1994). Secondly as individualism seeps into the research community it impels researchers to follow the status quo to further careers or obtain lucrative grants (Caduff, 2012). Finally, and most importantly, it perfectly aligns with the governmental rationality that demands hard robust figures that can be factored into risk analyses and economic
models. There is a reciprocal relation between late modern governance and modern dental science where each draws on a similar lexicon. ‘The result of scientific biomedical research shows to the public that the body is an ever-present menace to itself, it is a continuous threat because of its fragility and illness proclivity’ (del Consuelo Chapela, 2013; 504). We are free, but always dangerously free, and while the free movement of people and things so desired by the proponents of neoliberalism is rolled out, we are constantly reminded of the fragility of the human body. Biomedical research can feed neoliberalism’s insatiable appetite for more risk analyses and more genetic observations, while neoliberal discourse inspires the further development of such scales, measurements and indices, encouraging research avenues to narrow and harden.

The purpose of this overview is to explain the depth of the challenge that progressive dental researchers face if they are to get a hearing in the dental mainstream. The dental world is not only ill equipped to handle the thorny political and social issues which need to be addressed to further debate, but is subconsciously shaped by contemporary forms of governmental philosophy to continue to pursue positivistic and hollow forms of enquiry. This argument is extended out across the next four chapters of the thesis, through analyses and case studies of the research which surrounds dental disease and the emerging research agendas within dentistry. I move away from a search for barriers in any conventional sense to trace this hollowing and hardening of dental science, exploring further how seemingly progressive programmes are shut down or fall foul to the trappings of individualism.

However, the main bulk of the thesis extends this analysis drawing on the findings from a large qualitative study using interviews and focus groups, involving 57 participants; 22 service users and 35 practitioner from across the various specialisms of NHS dentistry. Contrary to the caricature of the GDP as self-interested spin doctor, digging for gold, the study is illuminating precisely because the findings are contradictory to much of the research in the field. While there are numerous themes that are of interest, an overwhelming consensus amongst both providers and users of the dental service is how isolated dentistry has become from the rest of medicine. Practitioners across the spectrum complain that their role as a caring profession is
being stripped back to technical procedures and squeezed of wider patient centred care.

Despite the disparity in political outlook and views on inequality and patient care, two themes emerged broadly across the data set. The first is an increasing push to quantify each and every intervention in terms of numbers and cost. Pressure comes from a diverse array of actors that insist dentistry prove its credentials by carefully planning each intervention to fit into certain measurable parameters which can be subjected to performance measurements and statistical analyses. The most common complaint here is that this rush to quantify has a tendency to feed into a treadmill type of service that sees patients in terms of numbers, and performance in terms of “teeth counting”. An equally interesting facet of this quantification is the rise of a number of need indices, indexes, triage systems, risk factor analysis tools, and audit management instruments which have emerged in all areas of the NHS. From quality of life scales, quality assessment tools, to the quantification of preventative advice the development of these measurement indices has become a global industry. Dental health professionals find themselves in a contradictory position, both supporting these initiatives to make their work visible while simultaneously deriding such tools as degrading their professional integrity and stripping their work of context.

As dental professionals find themselves at the behest of largely political pressures to quantify, count and make visible, a further pressure is exerted from below from patients who have been reconfigured as customers. Here the themes of choice and patient empowerment weave through all the data collected, though not in necessarily uniform or predictable ways. Most often this is expressed in terms of the middle classes utilising their social capital to exert pressure through choice, while in other scenarios choice alters the patient-GDP relationship. Numerous examples such as patients with extensive disease demanding whitening procedures for a special occasion (which may be clinically unviable), or patients who want to improve the appearance of their anterior teeth but are happy to neglect the health of their posterior and molar teeth, exist throughout the data. Here the logic of choice and empowerment pushes from below, exerting pressure on professionals to knowingly practise ethically dubious or clinically dangerous procedures. However, the choice agenda pushes from above
also, with political pressure pushed onto GDP’s to offer all viable choices in any given clinical encounter, further squeezing limited clinical time and dictating the shape of the clinical encounter from above. A further interesting example is that many GDP’s in community and emergency care are unable to offer what they believe to be viable choices because it does not lie within their remit and their concerns are not easily addressed within this paradigm.

In each of these examples we see pressure from above and below. While each practitioner must account for and be accountable for every decision made so that their activity can be factored into models and indexes, patients exert pressure from below, utilising their newly configured status as consumers of healthcare to alter the outcome of the clinical encounter. This sheds fresh light on the conventional criticism of NHS dentistry that the status quo is held in place by supplier-induced demand and dentally indoctrinated patients, and the same set of governmental tendencies that alter the trajectory of dental research are also holding professional practice in a peculiar stasis. NHS dentistry is managed “from a distance” via the instillation of numerous market mechanisms and the stifling risk management and surveillance tools that accompany them. In the NHS dental system described by the participants in this study it is the twin forces of neoliberal biopolitics, which result in the insertion of numerous forms of monitoring and evaluative tools into the messy world of sentient life in order to extract probabilities, contain risk and manage contingency (Bigo, 2008; Rose, 2001; 2006), that are to blame for the lack of meaningful change within the profession. The ultimate finding from this study is that the way that power is threaded through systems of delivery creates confusion, apathy and a number of contradictions.

Three observations are worth drawing attention to at this point. The first is that we move beyond a conventional critique of a system of dental provision viewed as held in limbo because of conservative dentists and indoctrinated patients towards analysis of the political economy of healthcare provision in the (post) modern neoliberal era: A political economy of dentistry. The second is that we overcome a valid criticism that much Foucauldian research sits at the theoretical level, rarely moving into empirical research (see McKee, 2009; Philo, 2011; Ferguson, 2011; Peterson, 2003). Extending from this, neoliberalism is far from the homogenous all-encompassing paradigm that
many theorists envision and the picture which emerges is a confused and haywire system of neoliberal reform which is shot through with inconsistencies, hindering rather promoting a rational basis for progressive reform.

The thesis is therefore a two-pronged approach which blends theoretical insight with empirical research which sheds fresh light on the problem of NHS dental provision and the various forces of political economy which are impeding meaningful reform. However, the final chapters point towards a model which I believe can seek progressive reform, whilst finding resonance with political imperatives to use markets to improve efficiency, sit comfortably with the dictum of choice and empowerment, as well as meeting the pragmatic goals of cost-containment, reductions in inequality, improved access and shared risk factor approaches.

The way forward suggested here is that diagnosis and treatment should be split, with the former transferred into primary care medicine and the latter provided on referral. In a nutshell my proposal is that in a population with changing disease needs the distinction between dentistry and medicine is no longer valid, not simply because the need for NHS dentistry is declining but because the concerns of the two professions are both increasingly concerned with non-communicable diseases, long term conditions and co-morbidities, which are as important in the maintenance of oral as well as general health (Watt and Peterson, 2012; Nash, 2006; Tanaka et al. 2008; Sheiham and Watt, 2000). In much the same way as general medicine is practised, where GP’s act as gatekeepers, designating whether further care is needed and referring to the appropriate service when the need is identified, I argue that an NHS dental health professional (DHP) could act as first point diagnosis. Ideally the GDP or DHP might be stationed in a GP’s surgery or health centre and be free at the point of need, either routinely at 18-24 month intervals or when a patient experiences symptoms. If further need is identified the GDP would advise on the cost of expected treatment and refer the patient to any registered NHS provider for further care. Effectively the examination would be free but clinical provision would be outsourced to a provider of the patients choosing.
Four obvious benefits are accrued here. The first is that over-treatment or neglect can be filtered out and rationed at the point of diagnosis. Second is that the patient would be able to choose the provider of their care based on their preferences, such as location, cost or familiarity. In this scenario a market of providers might differentiate themselves on the basis of specialty, cost or environment. Third, a DHP acting in such a role would be visible and free at the point of need, working towards a solution to the access problem and away from the individualised approach to dentistry which would address inequality. Fourth, treatment would be outlined and costed at the initial visit and patients should be confident that their diagnosis is objective and financially disinterested. Furthermore, the GDP/DHP in the diagnosis role could offer advice on which provider might best suit the patients need; directing the patient towards providers who specialise in periodontal treatment, caries prevention or endodontics, for example.

My point here is that the proposed model is not free from problems (it is littered with potential pitfalls), but meets the criteria to ration services, improve access and cut costs, but is consistent with a market driven NHS service that integrates choice and encourages competition. Whether this model is something which can be implemented in steps or stages is something which requires debate, although I would propose that it is a model for the future rather than immediate implementation. So the two final chapters outline how this set of proposals draw from the result of the research and sets out the core objectives of the model for consideration, acting as an arching vision that each reform can work towards rather than the reactionary patch and stitch model of reform which NHS dentistry has suffered since its inception.
Chapter 2

An Encounter with Dentistry

This piece of work is about the contribution that the social sciences can make to the study of dentistry. It aims to introduce some of the methodological tools and theoretical insights from across the social sciences to examine a number of problems facing dentistry, provide a theoretical explanation of why these problems exist, and lay out a possible framework for the future of NHS dental provision. While the final sections are recommendations for clinical practice, for the most part I use the term “dentistry” in the broadest sense, not simply referring to the clinical practice of examining and treating mouths, but the whole political and social organisation of the service and discipline in general. This includes, but is not limited to, the political organisation of services, contractual, legal and ethical obligations, the institutional apparatus that surrounds its academic research agenda and teaching, the methodological and epistemological basis upon which the foundations of the discipline rest and the how it interacts with other services and disciplines.

It is for this reason that I frame this chapter as an “encounter”, for although the data for this thesis is largely derived from qualitative interviews, focus groups and observational inferences, the work feels more like an ethnography of a profession and practise than a methodologically constrained piece of research. I have watched with some curiosity at conferences as the latest dental science is displayed with obsessive attention to detail, read the frustratingly circular debates present in the dental journals, and seen the eyes of my colleagues glaze as I ask if they had ever considered whether dentistry might be a historical artefact or representation of a configuration of power. When sitting in a clinic waiting to interview a professional, patients move through spaces designed to collect and process their information, alter the shape and constitution of their mouths, and inspect, replace or restore oral tissue as quickly and efficiently as possible. Usually I am surrounded by numerous generic leaflets and messages advising patients on insurance plans, how to maintain the oral health of themselves and their children, what to do in a dental emergency and to wash their
hands. People and things circulate around me, people are greeted and provide details, instruments are sterilised, surfaces disinfected, payments made. Everything seems to flow efficiently, though as the surgery closes for lunch and I prepare my Dictaphone for the interview, I am usually told that it is not.

This situation has played out numerous times over the past three years, not always at a clinic, sometimes at a PCT (as they were then), community centre, dental school, hospital or trust premises. The reason for this is that there was perceived to be a number of problems with NHS dentistry, and that perhaps a fresh research angle might provide some further insight to guide a solution. It should come as no surprise that dentists appear to be unhappy, often disillusioned, with the current arrangement of NHS dentistry. Studies report multiple personal and professional problems ranging from occupational burnout, relationship difficulties, stress and anxiety and high rates of alcohol and drug abuse (Myers and Myers, 2004; McCormick and Langford, 2006; Hobson, 2009). Collectively represented through their associations and councils the profession complains that they are unable to effectively treat their patients under current contractual arrangements and maintain a consistently hostile relationship with central government and the Department of Health (Harris et al. 2009; Denton et al. 2008; Kennon and Wood, 2005; BDA 2015). Add to this that many dental professionals are personally liable for the financial stability of their practice, while national austerity exerts downward pressure to contain costs, the reasons for occupational dissatisfaction are understandable (see Besemer and Bramley, 2012).

Nevertheless, this research was not designed to capture further information about professional discontent; a brief look through the commentary pages of the *British Dental Journal* provides ample evidence of this, but to examine broader changes in the oral health profile of the UK and enquire into how the dental service is or should be adapting. The picture here is complex but begins with a simple observation that the oral health of the UK is improving (Ham, 2008; Gallagher and Fisk, 2007; Gallagher and Wilson, 2009; Tickle, 2012). For the most part, dentistry treats the causes and symptoms of two diseases, caries (decay) and a range of periodontal diseases (gum disease), and as epidemiological analyses show caries rates falling dramatically in recent decades, periodontal disease appears to be abating in severity across the
Western world (for reviews see Spielman et al. 2005; Holfreter et al. 2104). While periodontal diseases can be difficult to manage and may have some genetic causes (see chapter 3), the large part of the dental service is used treating diseases which are both preventable and manageable.

However, despite epidemiological gains in the declining incidence of oral diseases, the causal link between dental clinical intervention and population oral health is fairly tentative. While there is no doubt dentists can effectively treat disease processes at the individual level, declining rates of dental disease at population level are more likely due to social and environmental factors (Sheiham and Watt, 2000). Chief among these is that people now have wide access to topical fluoride products (toothpaste, mouthwash etc) and people are far more aware and engaged with appropriate oral hygiene practises (Marinho, 2009). Use of tobacco products is declining and many individuals are increasingly aware that a good diet and healthy lifestyle can protect oral health. Further explanations are found in the reduction of harmful additives, pesticides and toxins in the food chain, the decrease in manual labour and intoxication of damaging chemicals, and numerous other general trends in society that leave the body less susceptible to oral tissue damage from work or leisure activities (see Marthaler, 2004).

Confounding this problem is a recognition that many of the dental services supplied under the NHS have shown to have limited clinical benefit. A notable concern that regular biannual screening is largely unnecessary for most asymptomatic individuals (Sheiham, 1977; Wang and Riordan, 1995; Patel et al. 2010; Tomar, 2011), has been accompanied by emerging evidence that providing regular (biannual) preventative treatments, such as oral prophylaxes (scale and polish), do not significantly reduce the incidence or severity of periodontal disease (Jones et al. 2011; for a review see Horowitz, 2012). Similarly, chair side prevention, whereby the dental professional gives behavioural and dietary advice to patients on site, shows little effect in enacting meaningful change in patient behaviour in the medium to long-term (Kay and Locker, 1996; Gordon and Severson, 1998; Harris et al. 2012). Of course the picture here is not crystal clear and universals do not always apply. A patient with diabetes, for example, is likely to need regular screening due to increased frequency and severity of
oral infections (Mealey and Rose, 2008; Rees, 1994), and there will be numerous cases where co-morbidities will be treated with drugs which may increase the risk of oral diseases (Boyce et al. 2010). Rules often come with exceptions, though exceptions should not cloud judgement on the direction of service and allocation of resources for an otherwise healthy majority.

Of course, arguments which hold that dental services should be aligned to current epidemiological trends do not find resonance with conventional dental wisdom. When Aubrey Sheiham (1977) first suggested that dentally healthy adults and children may not need a dental examination every six months, a flurry of angry GDP’s addressed their concerns in the commentary pages of the popular dental journals. He was portrayed as blindly naïve, medically and scientifically ignorant (Kett-White, 1978), and out of touch: ‘The practice of dental surgery calls for wisdom not necessarily gained from academic observation’ (Knott, 1977; 755). The difficult issue with recall periods, as demonstrated here, has historically been dominated by a power struggle between those outside the profession looking at epidemiological trends and professionals whose autonomy and clinical judgement is perceived to be compromised (Horowitz, 2012). This intra-professional scuffle has continued through the decades since, eventually prompting a rather weak set of guidelines from the National Institute of Clinical Excellence (NICE, 2004; see also DoH, 2015) on recall intervals, though judgement on recall is still left at the clinical discretion of the GDP.

In light of the evidence it does not appear that falling disease and an improving population oral health profile has been met with a sufficient policy response. Previous work gives some explanation of why policy appears to lag behind evidence, which may be attributed to historically rooted patterns of conventional dental practise, supplier-induced demand on the part of GDP’s for business reasons, or political reluctance to ignite another round of professional outrage (Larkin, 1980; Taylor-Gooby et al. 2000; Welie, 2004; Holt, 2010). However, the public (or consumers) of dental care may also be resistant to a withdrawal of a service supposedly supported by clinical knowledge. As Martin Tickle (2012; 113) notes: ‘There is a view that this demand for asymptomatic attendance, irrespective of need, has been supplier-induced but is now embedded into the psyche of patients and the public’ (see also Brocklehurst et al.
Many patients have “bought in” to the idea of dental screening and surveillance which is subsequently reinforced by the dental practitioner at each visit. Many people in the upper and middle classes, or what one research participant aptly described as the ‘aspirational classes’, effectively have a dental habit which has passed across generational gaps despite radical changes in patterns of disease. However, as insinuated above the picture is far from uniform, and looking past overall improvements in the oral health profile of the UK, serious inequalities and deficits are extensive and becoming more visible.

2.2 Some Notes on Inequality

One area of particular concern is that like many industrialised nations the UK has an aging population who are living longer, have more medical needs and consume large amounts of medical resources. In dentistry this poses a number of complex problems for the NHS owing to the vast amount of past restorative dental treatments that will require constant maintenance over the life course (DoH, 2014). Sometimes referred to as the ‘heavy metal generation’ (Ettinger, 1993) many older individuals have extensive amalgam, bridge and denture work which was undertaken with the skills and materials available at the time. Root canal and deep fillings are constantly at risk of failure, and past denture work can lead to numerous problems affecting swallowing function and surface abrasion that may not be properly diagnosed for some years (often decades) later (Singla and Singla, 2013; Furuya et al. 2015). Furthermore there are many who retain their natural teeth only with the support of extensive maintenance. As Jimmy Steele (2009) writes:

‘Our high disease, high treatment (courtesy of the NHS) past is catching us up, our maintenance costs rise every year and we would quite happily consume everything that the taxpayer could throw at us to save our progressively damaged dentitions from failure and our collective horror at the prospect of dentures’

As well as nicely capturing the dilemma faced by the heavy metal generation, this group has also been colloquially termed the ‘Coca cola generation’ (Douglass, 1986).
Too old to have fully benefited from fluoride products or water, and unaware of the link between refined sugar and caries, increased consumption of sugar after post-war rationing was viewed as unproblematic and the dental fallout has been extensive. However, while there are many who will find that their sugary past lands them in the dental clinic more often than they would like, many older people accept dental pain as “just part of getting old” (Sabbah et al. 2010, Stoller, 1982; Ettinger, 1993) and do not seek appropriate dental care, likely suffering considerably as a result. Add to this that many older individuals experience dental anxiety, have trouble navigating the system or travelling to a dental clinic (Tinker, 2003; Borreani et al. 2008) and the picture of inequality grows. Furthermore, the quality and uniformity of dental care in nursing homes has been flagged by the department of health as an area of concern, (DoH, 2005) and has been a recurring theme in policy circles (Frenkel et al. 2000, Porter et al. 2015)

However, this particular demographic represents only one of many inequality gaps that NHS dentistry faces, and inequalities relating to class, race and other social demographics remain persistent features of the general dental economy. Most often the link between Socio-economic-status (SES) and higher levels of dental disease is highlighted to demonstrate a growing inequitable use of dental resources (Boyce et al. 2010; Chambers, 2006). Many economically deprived residents in urban and rural settings are unable or apprehensive to access dental services until they are in significant pain and in need of extensive treatment (Milsom et al. 2009). Concurrently their children often share the same fate, arriving in emergency dental clinics across the country with irreversible disease and high treatment needs (Nuttall et al. 2008; Cameron and Widmer, 2013).

Understanding of the political and social mechanisms that lay behind the relationship between social class and dental disease is patchwork at best, though fears over costs, stigma, bad past experiences, lack of knowledge about dental hygiene and disease, and general dental anxiety have all been cited as possible causes (Milsom et al. 2009; Gungoard, 2006; Kent and Croucher, 1998). Of course, social class and dental disease do not reside in a unilinear causal chain and must be viewed alongside multiple social problems, co-morbidities and numerous other factors associated with economic
disadvantage (Boyce et al. 2010; Marshall et al. 2007). When dealing with everyday life crises it is easy to understand how dental disease may not be a priority, and as many GDP's remarked throughout the course of this research, once pain is eradicated many of these people do not return to the clinic to complete the course of treatment or take necessary measures to ensure that pain does not return.

The entrenched relationship between SES and dental disease has been a recurrent concern among socially conscientious researchers, and continues to cause a headache for dental public health workers and commissioners. ‘We hear this over and over again in dentistry. Eventually a sense of hopelessness kicks in. We get used to it. Indeed it is in danger of becoming the accepted status quo’ (Doherty, 2015; 294). The unusually honest reflection offered by Doherty on the relationship between SES and dental disease, however, should be tempered by the emergence of inequalities relating to other forms of disadvantage, such as the need for the dental service to be sensitive to the cultural needs and attitudes of an increasingly heterogeneous society. Not only are treatment needs in various parts of a multicultural society likely to differ (Fiscella et al. 2000; Butani et al. 2008), but communication about treatment and prevention will require tailoring if inequality is to be reversed or mitigated for these patients (Boiko et al. 2010; Dolan, 2013). Furthermore, it is coming to light that many people in social care were not, and are still not, receiving appropriate dental care. The disease burden that exists in these groups has been particularly disturbing, and as community or “shared care” is becoming more main-stream, this issue is being pushed as an area of special concern for NHS dentistry (see Gallagher and Fisk, 2007; Dolan, 2013).

I could continue to list numerous disadvantaged groups (prisoners, current and ex drug users, vulnerable adults and other niches within society where dental care and coverage is insufficient and disease is high), though the purpose of the above overview was not to give an exhaustive account, but to make a simple point: While a significant proportion of NHS dentistry is being used to survey and appease the healthy teeth of the middle classes, the major disease burden resides elsewhere (Currie et al. 2012; Meadowcroft, 2008; Gallagher and Fisk, 2007, 2009). Like other areas of healthcare there is growing recognition of an “inverse dental care law” (Jones, 2001), where those most in need are least likely to receive treatment (Sheiham, 2013). Whether we see
this as an ethical black mark on the profession, or an economic consequence of a botched market; more money is being spent on treating healthier people while old and new demographic inequalities persist, worsen or become visible. More importantly these problems are social and political in nature, not due to a lack of scientific or clinical expertise, but part of wider cultural and social changes happening around dentistry, not within it. As epidemiological shifts lend weight to arguments that traditional dental practice re-evaluates its core clinical assumptions, demographic changes draw attention to the disease deficit that increasingly looks like a stain on the credibility of the discipline (see Watt and Peterson, 2012; Sheiham, 2013; Chambers, 2006).

An initial examination of the dental literature exposes a problem that there is no common thread or central concern that unites this commentary. Authors and researchers often restrict their analysis to a single epidemiological trend or demographic inequality, resulting in a thinly scattered and eclectic set of research findings (see Exley, 2009). Nevertheless it is becoming clear that if NHS dentistry is to remain a viable public service it will need to take seriously the inequitable use of resources and develop strategies to combat persistent inequality. It is both morally questionable to have people in need of care where resources are available or misused and economically inefficient in the sense that perfectly manageable conditions are not addressed until they are significantly developed and much more expensive to treat (Doherty, 2015; Sanderson, 2008; Sheiham, 2013).

In reviewing the state of NHS dentistry, Martin Tickle (2012; 115) provides a tempered conclusion: ‘If the future of the NHS is jeopardized because of an inability to contain costs, and dentistry is perceived to be an expensive service for which there is dwindling need, the tipping point for a decision on radical change may come’. While this pessimistic diagnosis may be accurate, the implication is that cost, not need, ethics or distributive justice will be the political driver that sees an end to NHS dentistry as we currently know it. The further implication is that if the primary concern is cost containment, the prospect that resources will be directed into the kind of public health measures desired by socially conscientious observers is unlikely. Such a stalemate would suggest that NHS dentistry will continue to provide ineffective services to
people who do not need them until financial pressures force a frugal health secretary to turn their eye to NHS dentistry. It is at this juncture that the first set of questions appears: If the pressing issues facing dentistry are clear and clinically confirmed, why can it not take the measures necessary to reform?

2.3 Understanding the Problem

An examination of the dental literature reveals three possible reasons for the slow progress in developing policy scenarios to address the change in oral health needs and their distribution. The first is that there is a problem on the demand side. As outlined above patients demand dental services regardless of their clinical efficacy because they have been told that they need them. There is a difficult line to be drawn between what David Chambers (2006) describes as *oral health*, which refers to the clinical treatment of disease processes and necessary dental intervention and *oral care*, which pertains to the range of available dental procedures that individuals may desire regardless of their clinical efficacy. However, such a definition appears at odds with the WHO (1948) mandate that health ‘is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’, meaning that if services are to be withdrawn, rationed or otherwise redirected, this action cannot negatively compromise “well-being”. In an era of public scepticism regarding austerity and government cuts, Brocklehurst et al. (2011) rightly comment that promoting a “less is more” argument is likely to be a difficult sell when there is still widespread belief that biannual dental attendance provides preventative benefits.

Against this background of public scepticism, further demands are likely aligned to societal trends that infer that perfect teeth are synonymous with a healthy appearance. In the information society and the age of the internet, subtle and overt images of bodily perfection pervade communication networks and advertising campaigns (Thorogood, 2000). “Sex sells” nearly everything from ice cream to car insurance, and mouths with perfectly white aligned teeth are routinely shown licking and kissing all manner of objects in order to stimulate consumer desire (see Phillips, 1997). Not only
is this perfect mouth increasingly exploited for the purpose of selling objects, but is progressively being transformed as an object of desire in itself (Ackerman, 2010). High tech industrial chemicals and extensive orthodontic and aesthetic procedures can now provide the consumer with a bright white set of perfect teeth, cut and varnished to their expectations. Such perfect sets appear to be a precursor for those in the public eye, and movie stars, pop singers and news readers appear daily on TV screens with their strangely identical white smiles.

While the Hollywood smile is likely to be outside the budget of the average consumer (over and above £20,000 for a celebrity dental makeover), these pervasive images have been documented to cause serious dents in our self-perception and judgement of others. Studies report more and more people who are dissatisfied or anxious about the quality of their smile or colour of their teeth, often worrying that a perception of poor oral health will lead to lost opportunities in employment or finding a partner (for a review see Van der Geld et al. 2007; Klages, et al. 2004). Consumer culture has implicitly succeeded in equating white straight teeth with general health and well-being, and elements of corporate and private dentistry explicitly use this as leverage to enhance demand and profit margins (Khalid and Quinonez, 2015; Ackerman, 2010).

It is not much of a stretch to suggest that popular culture has transformed our collective perception of oral health and what we can expect from the dental service. ‘The thing which is valued in this encounter is a mouth parading its conformity to a formalised orality under a gaze attuned to the slightest signs of oral delinquency’ (Vasseleu, 1998; 69). As Ackerman’s (2010) study of American Orthodontics shows, there has been a subtle but significant change in the discourse of Orthodontic practice, which has shifted from a clinical requirement to achieve a perfect bite to the aesthetic desire to obtain a healthy smile. Further studies have examined how the nature of whiteness or “purity” is associated with youth, and link the recent Western obsession with white teeth to anxieties about beauty and aging (Watts and Addy, 2001; Wilson, 2005). ‘Investing in teeth is just another step on the road to happiness that many believe is guaranteed by looking flawless’ write Khalid and Quinonez (2015; 784), though the obvious mirror image of this is that those who do not wish (or cannot afford) to conform risk social stigma or isolation (see also Horton and Barker, 2009).
Recent research coming from the US has shown that individuals with “bad teeth” fare only mildly better than the morbidly obese in the race to climb corporate hierarchies, revealing the juncture where social anxiety bleeds into material reality (see Smarsh, 2014; Spielman et al. 2005).

The second problem is that these trends are thought to be induced or exacerbated on the supply side, pointing to the fact that many dentists still believe that regular attendance is a warranted public good (Taylor-Gooby et al. 2000; Welie, 2004; Holt, 2010). Whether this is due to altruistic motives or business prerogatives is difficult to ascertain, though it is known that practitioners respond to financial incentives (Brocklehurst et al. 2013; Malone and Conway, 2015) and make use of loopholes in contractual frameworks to maximise income, suggesting that parts of the dental workforce may place economic gain over patient interest (Tickle et al. 2011; Chalkly et al. 2010; Holden, 2013). Recent reports show a number of practitioners “splitting treatment” in order to charge the patient twice for a procedure which should be included within one payment (see Davies and MacFarlane, 2010). More disturbing data has shown that after the introduction of the latest contract in 2006, clinical application of crowns, bridges and root canal treatments fell dramatically while extractions concurrently escalated (see figures 1 – 4 adapted from Tickle et al. 2011).

Figure 1: Bridgework Interventions 1993 - 2009

![Figure 1: Bridgework Interventions 1993 - 2009](image1)

Figure 2: Crown Applications 1993 - 2009

![Figure 2: Crown Applications 1993 - 2009](image2)
The obvious inference here is that GDP’s responded to financial incentives and extracted rather than restored teeth in order to contain the costs and risks associated with complex restorative work. These findings have been further considered in qualitative studies which report that many dentists think it ‘financial suicide’ to offer restorative treatment requiring lab work (Davies and McFarlane (2010; 3; McDonald et al. 2012). Reports have also suggested that some GDP’s resist offering such restorative work under the NHS and patients may be asked to pay privately if they wish to have such procedures (Sorrell, 2010; Sun and Harris, 2011).

All of the above examples expose a problem with a conflict between medical ethics and economic incentives, with macro-economic data showing how this multiplies out across the dental economy (see Holden, 2013; Tickle et al. 2011). Others have described this as “gaming”, broadly defined as playing the system to maximise personal gain over patient interest, which becomes a salient feature in target driven public services (Bevan and Hood, 2006a, 2006b, Hood, 2006; Meadowcroft, 2008). The logical extension of this argument is that as dental contracts are given fixed units
of dental activity, some GDP’s will try and accrue the maximum amount of cash inflow from each separate unit, by using their units in ways which require less time or materials. The policy contradiction is that the unit of dental activity (UDA) was intended to simplify the array of treatments into visible categories with fixed values, though many patients have found this difficult to interpret as manipulation by some elements of the profession steer patients away from costly treatments to suboptimal cost friendly options (Holmes et al. 2015; Sorell, 2010). In this study and many others, patients expressed difficulty understanding whether a particular treatment was part of an NHS treatment, quoting wildly different price estimates for restorative or therapeutic care (see Land, 2000; Calnan et al. 1999; Christenson, 2004). The likelihood is that patients were treated for some care under the NHS and knowingly or otherwise charged private rates for other services.

Dubious practises such as treatment splitting and deceptive charging structures are clearly unethical and in many cases illegal, though there is evidence of their persistence. While there has been unrest and a swathe of media scourge regarding professional manipulation of the contract, finding a solution has proven difficult. In the first case it is rather difficult to “prove” malpractice on a case by case basis (see Dancer and Taylor, 2007) and past experience has shown that GDP’s can and do “vote with their feet” and move out of NHS provision when political pressure is exerted from above and professional values and financial returns are perceived to be at risk (Tickle, 2012; Whittaker and Birch, 2012; Thomas, 1994). Losing publically practising GDP’s incurs a huge political cost, not simply because the skills migrate into private provision but because the estate is also owned by the practitioner, leaving commissioners without the workforce or premises to provide an NHS service (Chalkly et al. 2010). The dental profession is also accused of being highly protective of its autonomy and changes to practice guidelines often transpire into heated political contests and intra-professional discontent (see Thomas, 1994). As a result a comment in the White Paper Improving NHS Dentistry (1994; 20) that: ‘Every proposed model, including continuation of the current system, has found opposition from some. Any change and no change divide the profession’, remains as true today as it was twenty years ago.
2.4 The Fallacy of Access and Politics of Denial

The final part of this triad of problems is the most commonly cited and concerns levels of access. Here there is a ubiquitous assumption that there are not enough dental services to meet the oral health needs of the population (Kilcoyne, 2015; Bedi, 2006). Of all the policy problems that NHS dentistry has faced this is the most enduring since it appears to be the yard stick against which all government intervention into the dental economy is measured. Each contractual change from the inception of the NHS has been criticised on the basis of restricting or obstructing coverage of dental services and each new government proposal promises to remedy this and subsequently fails to convince the public that it has achieved success (see Whittaker and Birch, 2012). Recent government proposals have continued this populist line of policy commitment promising to restore access to one million people (Conservative Policy Document, 2010; NHS Commissioning Board, 2013; DoH, 2015). The access problem is often cited by patient interest groups and regularly flagged by the profession to argue that politicians and commissioners are unable to effectively manage NHS dentistry (see Kilcoyne, 2015; Chambers, 2006).

However, access is too often used as a blanket term without reference to who needs access or what exactly needs to be accessed. As such it has become an all-encompassing but largely meaningless measure of the performance of the service which rarely moves beyond aggregate statistics to include any measure of treatment need (Chambers, 2006; Sorell, 2010; Tickle, 2012; Sheiham, 2013). Meanwhile ‘as long as access issues are addressed, the NHS is happy to turn a blind eye to the quality of service that they commission’ (Sorrell, 2010; 423). Though this statement may be overly blunt, it does hit on an important point that access supersedes discussion of quality and entirely disregards issues of equality. There is no doubt that access is an important problem, particularly for disadvantaged groups and people with high treatment needs, though access is rarely the sole barrier to achieving a reduction in oral health inequality (see Gibson, 2003; Leake et al. 2008).
As discussed above, economic disadvantage, aging and social isolation stack with various other social anxieties, co-morbidities and lifestyle issues that make ongoing dental care difficult to achieve for many individuals and families (Boyce et al. 2010; Milsom et al. 2009). Recent commentary on these kind of issues have framed this debate in terms of addressing the “upstream” (social or economic determinants) rather than “downstream” (individual, behavioural or genetic) causes of poor oral health (see Watt, 2007; Newton and Bower, 2005; Baelum and Lopez, 2004; Baelum et al. 2007). As Sheiham (2013; 88) has argued: ‘Unless those determinants of NCDs are addressed, improving access to Dental care, the major current concern of dental planners, can only mitigate, but never significantly reduce the unabating burden of dental diseases’.

The line of argument here is that directing the right kind of services towards areas where disease is highest will not only stabilise oral health inequalities but free up capacity to improve access (see also DoH, 2015). These observations have led to a number of calls among the dental research community to redress the orientation of the dental service towards more equitable outcomes, moving from an individualist model of patient care towards a population based model (Sheiham and Watt, 2000; Watt, 2007; Watt and Peterson, 2012; Sheiham, 2013; Newton and Bower, 2005; Currie et al. 2012; Sheiham and Sabbah, 2010). Several strands of criticism exist amongst this literature set, including the observation that individualised care is associated with greater inequality (McGrath et al. 2012; Sheiham and Watt, 2000), that attention to the “upstream” determinants of poor oral health may deliver more equitable policy solutions (Newton and Bower, 2005), that the current “downstream” approaches tend towards victim blaming (Watt, 2007) and that aforementioned individualised dental care limits the ability of dentistry to communicate with other health services to develop common risk factor strategies (Sheiham, 2015; Watt and Peterson, 2012).

Over the last decade these authors have become evidently more frustrated and expressed their concerns in a more provocative tone. For example, Watt and Peterson (ibid; 147) have recently elevated their concerns to the global level, attesting that unless dentistry disbands its fascination with access and routine individualised care, important
opportunities will be missed to integrate preventative strategies to combat periodontal disease with emerging World Health Organisation (WHO) plans to contain the growth of non-communicable diseases (NCD’s). Sheiham and Sabbah (2010; 141) have further pressed the findings of previous work on the limits of behavioural analyses for understanding the aetiology of caries to question why ‘despite the availability of so much epidemiological data on dental caries there have been very few attempts to operationalise the data so that they can be readily used to plan dental care’ (for a review see Dorri et al. 2010). These are clearly important questions with equally important consequences for inaction, though it is here that dentistry meets with its nemesis, namely the question of implementation (Pitts, 2004). Moving from epidemiological findings through to the implementation stage is particularly troublesome because it relies on the equally problematic notion of evidence. More specifically, how much and what kind of evidence is required to establish if a given set of policies will provide outcomes that would be superior to current practice?

In the above we have two evidence related problems. The first is that enough evidence needs to be compiled to address over-treatment and demonstrate that services can be reduced or withdrawn without subsequent loss in oral health, which is a neutral way of asking how we can ration services. The second regards how much evidence is required to establish where best to place the freed resources to achieve the maximum improvement in oral health. There is no point hiding the fact that what is being suggested here is a redistribution of services that will be unpopular with many users and providers and therefore unlikely to be an easy sell to policy makers (Brocklehurst et al. 2011). In the broadest sense these might be considered the “barriers” to obtaining a more equitable and sustainable NHS dental service, and that the answer lies in the collection and dissemination of enough evidence to inspire the needed change. However, the problem here is that this “final step”, as Pitts (2004) observed is the part of policy making that is the most important and most neglected. Potentially well-meaning reforms and policy solutions have frequently been quashed under politically motivated or ideologically driven attempts which have fudged policy with implementation (Holt, 2008). While not a particularly uncommon problem in the NHS more generally (see Greener, 2004; Klein, 2010), in the microcosm of NHS dentistry, the after effects have demonstrably been inflammatory and fraught with
contradiction. So in closing this discussion and moving through the analysis towards a more holistic view of the problem, the following chapter looks in more detail at the problem of evidence and its relationship with implementation.
Chapter 3
Evidence of What and for Whom?

To briefly summarise, the problem conceived is one of an inequitable use of resources; a status quo held in balance by both suppliers and patients who retain a commitment to conventional dental practice, largely ignored by policy makers who remain fixated with issues of access in an effort to appease patients and professionals. The problem for those who wish to change the current status quo and draw on wider arguments about the contemporary relevance of conventional practice to focus on the benefits of dental public health, are immediately faced with the question of how to provide and communicate evidence for their recommendations.

In this chapter I wish to take on this question of evidence, knowledge and implementation and point the debate in a different direction. My argument relies on the proposition that attempts to re-orientate the dental service will struggle to gain traction, not only because of entrenched professional interests and political indifference but because these concerns cannot be addressed within the confines of dental science as it is currently constituted. There appears to be a gulf between researchers concerned with societal and political issues affecting the delivery of dental services and the disciplinary matrix of dentistry which tends to exclude insight which does not adapt to the scientific parameters of dental research. This shifts the territory of investigation from the problems as they are discussed in the mainstream dental literature, to examination of the meta-theoretical underpinnings of contemporary dental science to explore its unconscious commitments and influences.

The argument here is complex but begins with a simple observation that as dentistry has matured as a discipline it ‘has lifted itself from a trade to a profession’ (Joseph, 2005; 6, italics in original) based on scientific rather than mechanical principles. From the mid to late 1800’s dentistry’s most iconic historical figures (see for example, Black, 1908a, 1908b; Tomes; 1886; for reviews see Mount, 2007; Cope, 1952; Joseph, 2005), sought to align the science of dentistry with the methods and philosophy of the natural sciences. Within the linear history often presented, the treatment of the teeth moved
from the hands of inconspicuous “barber” dentists, black smiths, and back street surgeons, as the practice of dental surgery emerged as a learned and respected “profession” (Hyatt, 1906; Nettleton, 1988; Bishop et al. 2001). The credibility of dental science has since relied upon its ability to make causal connections between isolated genetic or environmental phenomena and the incidence of dental pathologies. There is nothing particularly unusual about this; identifying “constant conjunctions” as David Hume (1748) had called them, remains among the central principles of scientific positivism across the scientific disciplines. As the twentieth century continued dentistry extended its scientific standing, honing methodological tools and standards of reporting to eliminate bias and improve the feasibility of findings. However, as we move through the twenty first century there appears to be something distinctly late or post-modern about the way in which this philosophy has transformed the whole science of dentistry, as scientific positivism has reached its logical conclusion. This conclusion, it is argued, ends in a highly technical and scientifically sophisticated set of knowledge which is increasingly unusable and decontextualised. Furthermore the knowledge streams and research outlets have been shaped by a set of research agendas that privilege niche quantitatively generated reporting and professionals and researchers alike are increasingly directed towards these self-limiting reporting measures and scientific protocols.

Examples are abundant and are discussed in more detail below, though the ultimate conclusion is that as dentistry moves further towards specialisation and assumed methodological prowess two important consequences follow. The first is that the practice of dental research becomes exclusionary to the point where perfectly feasible knowledge cannot enter into debate because it cannot be easily factored into the disciplinary frame (see Kao, 2006; Tickner and Coffin, 2006; Susser, 1999; McMichael, 1999; Baelum and Lopez, 2004; Scholey and Harrison, 2003). The second is that dental science reaches a number of bottlenecks, finely tuned to answer hard scientific questions but apparently incapable of addressing pressing problems that fall outside the strict confines of disciplinary norms. Unlike its sister disciplines (medicine, nursing, psychology and so on) dentistry has few links with the social sciences or humanities (Exley, 2009) and when complex social or political problems are identified the frames of reference and intellectual tools available to articulate
solutions are limited, leading discussion into truncated and divisive debates. I shall conclude the analysis by arguing that contemporary or “genetic” epidemiology and dental science can communicate only within itself, leading to closed systems of scientific exchange that have serious social repercussions.

3.2 Hard Dental Science is a Social Problem

*The Case of Periodontology*

It is at the juncture where dental science meets practical application that the social sciences, or more specifically the sociology of scientific knowledge, can make a valid contribution to explain how the academic discipline of dentistry has arrived at such a position and identify possible routes forward. Organised around case studies of the main dental diseases, this first case study examines in some detail a recent debate regarding developments in periodontal epidemiology. Beginning in the early 1990’s a number of epidemiologists began expressing concern about an emerging “molecular” “genetic” or “modern” epidemiology, that had cast aside the dental public health concerns of traditional epidemiology to focus on the genetic and behavioural determinants of periodontal disease (see Cooper and Psaty, 2003; Baelum and Lopez, 2004; Baelum et al. 2007). Owing to developments in technologically enhanced imaging software and genetic screening it was hoped the ultimate molecular causes of periodontal disease were in reach. As explained by one of its primary spokesman:

> “When we learn what these molecules do and how they do it and when we apply the tools of molecular biology to manipulate and regulate them, we may well be on our way to the ultimate cure of not only periodontal diseases but other chronic inflammatory diseases that plague mankind as well” (Loe, 1994; xxi)

Such is/was the optimism capturing parts of the dental research community. Not only is a cure for periodontal disease a possibility, it is actually “there”, hiding within our DNA or a cellular configuration that if identified and disrupted will extinguish the disease.
Many others followed, espousing grand changes to the landscape of dental knowledge. Some were more tempered stating that we are getting closer to the “real cause” (see Madiano et al. 2005), while others surmised that ‘there will ultimately be a revised approach to patient care that will incorporate genetic information on a regular basis’ (Schenkein, 2002; 88). Several textbooks and handbooks of genetic periodontal epidemiology have since surfaced, guiding the interested researcher away from traditional approaches towards the “cutting edge” of periodontal science (see Genco et al. 1994; Bimstein et al. 2001). Within this literature the line of argument grows harder the further one delves. Rothman et al. (1998) are initially concerned with a complimentary approach, arguing that if traditional epidemiology can be reconciled with the modern genetic approach a fuller picture can be gained at all levels, from the societal through the behavioural into the genetic. Such a conciliatory approach is short-lived, however, as the authors state shortly after that ‘the further upstream we move from the occurrence of disease to the root causes, the less secure our inferences about the causal path to disease become’ (ibid, 812). There is an interesting though contradictory line of thought developing here. The actual incidence of disease is seen as the preferential site of research because it could or should be easier to elucidate, while at the same time there is a recognition that the real causes exist further upstream where scientific principles are more difficult to apply.

The context is important in this regard as it situates the problem directly between what can (or might be) clarified at the individual or genetic level, and numerous causes at population level which are likely to remain poorly understood. The preference, however, is clear; the research should proceed with organic interactions assumed to be knowable rather than continue to probe difficult questions at the level of society which are “messy” (Cooper et al. 2003). Other proponents of this modern epidemiological approach do not view traditional and genetic epidemiology as compatible but view the latter as the logical replacement of an outdated paradigm (Pearce, 1996). Traditional epidemiology is thought to be too crude to be of use in a modern era that is able to identify ‘subtler links between disease and environmental causes and lifestyles’ (Taubes, 1995; 165). However, as a review by Baelum and Lopez (2004) point out, subtle should not be confused with less important, since the implication is that such
subtle causes should take precedence over all other avenues of enquiry (see also Watt, 2007).

Of course there was and remains concern about the further consequences if the development of modern genetic epidemiology is followed through to its logical conclusions. Nicely summed up by Cooper et al. (2003; 1169); ‘There is a tendency for scientists to ignore the messy social implications of what they do. At the extreme end the argument is made that “we just tell the truth about nature” and its negative consequences are political problems which do not concern us’. This is a long standing critique of the scientific method, though its relevance is particularly salient in this example. The choice to focus on the genetic/behavioural model is seen as apolitical and value free; the natural extension of modern medicine making use of developments in technological advances. The guiding rationale is not choice but progress, though focussing research on this endeavour and away from “traditional” epidemiological research inevitably has ethical implications since this shapes where funding is placed as laboratories seek to redirect their interests from examining exogenous variables in society to focussing on individuals thought to be at “high risk” (McMichael, 1994; Krieger, 1994; Baelum and Lopez, 2004; Caduff, 2012). The result is that we see a transformation of a whole paradigm which relocates at the interaction between agent and host, leaving multiple causal pathways upstream that will remain a mystery.

At its root there is nothing wrong with pursuing a potentially useful level of genetic enquiry if there are reasonable grounds to believe that answers can be found at this level, though previous experience should alert researchers to the limits of what they may discover. As far back as the 1950’s huge population based studies have examined periodontal disease in relation to factors such as age, oral hygiene practises and socio-economic status. For example Russell (1956; quoted in Baelum and Lopez, 2004) concludes from a study of thousands that ‘90 per cent or more of the variance in the P.I. is accounted for by the combined effect of age and oral hygiene, no matter which combination of populations is studied’ (see also Russell, 1963, 1967; Sheiham 1969). While these studies are based on self-reported measures of oral hygiene, and are therefore subject to reporting bias and cloudy inferences there is little room left for
‘variation in periodontal disease levels to be accounted for by factors other than age and poor oral hygiene’ (Baelum and Lopez, 2004; 242).

Therefore it is not necessarily the case that molecular biology can now explain everything, in fact, it is left to explain very little. The point here is that what it seeks to explain it can explain very precisely, making direct causal inferences rather than fuzzy and opaque observations that do not meet the criteria to be considered scientific. Critics of this move towards the molecular (or at least individual level) have been concerned for a number of reasons, not only because they recognise the depoliticization of the scientific but because it infers that we have two different sciences, one highly sophisticated biological specialisation and an outdated epidemiology which has lost its scientific credentials in this area (McMichael, 1994, 1999; Sheilham and Watt, 2000, Watt, 2007, Baelum and Lopez, 2004, Cooper et al. 2003, Pearlman, 2000, Ordovas and Shen, 2008). Some commentators see this separation as foolish, calling for the two strands of research to communicate to understand the whole causal web rather than just its centre (Rose, 1986; Krieger, 1994, McMichael, 1994; Baelum and Lopez, 2004, Ordovas and Shen, 2008). Rose (1986) has previously noted that sick people are located in sick populations, and others concur, showing the irresponsible nature of trying to analyse a “sick tooth” outside of its societal context (see McMichael, 1999).

What we see here is a segregation of aspects of scientific discovery, propelled forward under the name of progress that works to split up the constituent parts of periodontal science. It is not the case that we are witnessing progress based on evidence, but upon what can be considered “hard” science that makes solid causal inferences and “soft” science where inferences are value-laden and biased. It follows that we can observe that the direction of periodontology has made a significant shift towards a very narrow area of research because it offers the possibility of obtaining relative absolutes. I would add to these studies that what we see here is a politico-scientific posturing, whereby to be “modern” is to be concerned with the molecule and “traditional” is cast as unscientific and socially naïve. Such dichotomies as hard/soft, modern/traditional, scientific/observational, represent sets of hierarchies that create oppositions which infer that the latter in each case are outdated and irrelevant.
Something else equally interesting is that what resides in these dichotomies is that while downstream science is neutral and apolitical, upstream science is tainted by values and politics. To focus on determinants at the level of society is to draw attention to political and social deficits in the fabric of society, to focus on the molecule is simply investigation for a cure, though it is difficult for this idea to hold against philosophical scrutiny (Susser, 1999). A recent article which outlines some ground rules for systematic reviews concerning genetic periodontology states that researchers should carefully segregate their samples by age, socio-economic-status and racial heritage, in order to fully eliminate bias from the results (Nibali, 2013). While this is perfectly defensible for the purposes of identifying “real” genetic causes - since it would be easy to draw a false-positive with a cause which was actually social if done otherwise - it betrays the notion that science is value free because ‘to accept the value of race as a category of nature is to accept its social meaning as well’ (Cooper et al. 2003). By extension the methods and language used, or suggested, to obtain the desired results are already socially value-laden and this cannot be escaped by adoption of a scientific method or any other.

However, a more obtuse politics of science is not difficult to find. ‘Public health professionals do not have a licence to tinker promiscuously with society’ write Rothman et al. (1998; 190), and regardless ‘however well motivated, epidemiologists cannot rid the world of poverty’. Such comments, while thankfully rare across the medical fields, are more concerning for the fact that they do not hide that their pursuit lacks neutrality but are openly committed to ignorance and disregard of the politics inherent in this endeavour. Each move further towards the individual level indicates a preference to stay out of the muddy world of politics, seamlessly anchoring this “new” genetic periodontology within a scientific paradigm which is ultimately individualistic and politically naïve.
3.3 The Quest for Material Perfection

The Case of Cariology and Materials Science

The example above shows one area in which research narrows around a “hard” set of questions, which regardless of their clinical relevance, are portrayed as the cutting edge of dental science. The ability of hard science to answer questions at the level of disease occurrence is viewed as progress, overcoming the politically difficult arena of upstream determinants which are increasingly viewed as someone else’s problem. However, the promise of an exact disease model for periodontal disease remains evasive, though even in the absence of any explicit model of disease, what we see emerging here is an implicit model of disease research and methodology which is far more insidious (Baelum and Lopez, 2004). This is not to imply that it is the only model that is in existence but that it is one that has become salient in dentistry over the last two decades. Whether we see this new biomedical paradigm as a step forward for medical science, a regressive lack of social conscience, or a development with mixed blessings, it demonstrates the nature of seeing the scientific as superior to the societal in the research process.

The second part of this chapter continues this exploration of how dental science is excluding or marginalising social explanations of disease processes, through an examination of the literature surrounding dental caries and materials science. At first glance it may seem counter-intuitive to analyse these two parts of dental science together since Cariology is primarily the study of the causes and treatment of a disease process, while materials science is concerned with the development of materials used in preventative and restorative dentistry (Anusavice et al. 2013). However, the paradigm within which caries research is framed remains fixated with either treatment and restoration of teeth already compromised or prophylactic interventions to stop its emergence, rather than the development of public health initiatives that do not require operative specialism or dental intervention.

The bottom line is that a firm belief has been instilled in the dental professional mindset that the role of the profession for caries control is chiefly a concern of
technical perfection and use of appropriate restorative materials’ (Baelum et al. 2007; 876). This appears to be an inexplicable contradiction; a disease which is so closely associated with social determinants oddly finds its research nexus in the oral cavity. For Baelum et al. (2007) this is boiled down to a familiar argument that this “choice” is a reflection of the dental professions wish to maintain a monopoly over the science of dentistry. Put another way, the ‘unfortunate dichotomy.... between restorative dentistry on the one hand and Cariology on the other’ (ibid, 876) is a historical tradition that has protected the dental professions autonomy rather well and has little to do with the best interests of patients.

Although I find myself in broad agreement with this proposition it only takes us so far in understanding the refreshed research landscape that we can see emerging in the treatment of caries in the current period. While it does help to see how the limited epistemology of caries management remains primarily a clinical activity rather than one which integrates appropriately with a public health model, we only see this as a reflection of professional power. This only goes as far as seeing historical tradition configured into the present and cannot explain the now obsessive interest in prosthodontics, endodontics, and implants and how the broad field of “materials science” is emerging as a recognisable force within dental science. Nor does it fully explain the renewed interest in the gene/host model of enquiry into caries development that has recently captured the interest of so many dental researchers (see for example, van Noort, 2010; Rupesh and Nayek, 2006; Wendall et al. 2010; Wright 2010).

There are two problems here, the first is while it is not disputed that caries is first and foremost a social problem (James, 1985), research is largely dictated by a clinical paradigm (Watt, 2007). The second is that the treatment of the dentition affected by caries has been largely monopolized by the materials sciences, which are espousing the same grand changes to the science of dentistry as those who look to the gene for answers in explaining the progress in periodontal disease (van Noort, 2010; Anusavice et al. 2013). Ultimately both these propositions lead towards the same argument presented in the previous section; that as dental science “improves” it leads down exceptionally narrow and increasingly specialised avenues of enquiry where the
relevance for the actual practise of dentistry is highly questionable. A further concern is that a peculiar translation problem occurs where these constituent parts of dental science develop particular sets of linguistic terminology and research parameters, which render communication between them and the relevance of them for practice extremely difficult.

In what follows I present a short case study of endodontic (root canal) research to examine in more detail the kind of research agendas which are emerging in the area of caries management, and though I have always believed that anecdote is a poor excuse for evidence, by way of example I will disregard this rule for a moment to describe a situation which nicely captures the basis of my argument. At a recent dental conference I attended a panel on developments in dental materials, hoping to get a broader understanding of what the future might look like in this area. Three of the four papers examined a material called mineral trioxide aggregate (MTA), a silicate cement, which can be used in deep fillings where caries (or its treatment) has left the pulp exposed (Torabinejad and Parokh, 2010). This material, it was suggested, should also be used in root canal treatments, as it has shown to have clinically better outcomes than the standard material gutta-percha. A search through the literature appears to support this; MTA is often referred to as the “gold standard”, largely because of its biocompatibility, the addition of bismuth oxide for easy detection in radiographs and the way it binds to the tooth surface, stopping fluid from leaking into the treated canal (for a review see Mente et al. 2014). The final presenter was particularly enthusiastic about this, stating that he always used MTA in root canal treatment and its use was preferable in all cases.

Several questions are worth asking about this, though a colleague asked among the most important: Did the high price of MTA make it unlikely that this material could ever be used in the NHS? The presenter looked puzzled and responded that it was unlikely that MTA would ever be used in a publically subsidised service because it costs over £300 per tooth. Another interesting response was that the “real” problem he encountered was not the cost of the material, but other dentists not recognising what it was and removing it in order to refill it with gutta-percha or some other sub-par material. A root canal is currently a band 2 treatment on the NHS costing the patient
(if they pay) £51.80. The patient typically pays 80% of the band charge, and though root canal treatment is often thought to exceed the costs of its banded cost (Davies and MacFarlane, 2010; Tickle et al. 2011), even if the dentist incurs a loss we would not expect the costs of clinical time and materials for a root canal to exceed £100. So even on these conservative estimates is MTA three or four times “better” than what is currently used, and if so, on what basis? What exactly are the benefits that the patient, GDP or government are likely to accrue from investment in a new material likely to be?

The problem is that after spending a significant amount of time trying to assess the evidence, I cannot report a definitive answer to these questions. This is not because the area is under-researched, quite the opposite; hundreds of randomised control trials and case reports are available, most of which appear to agree that MTA is clinically superior, though support is not unanimous. As the materials primary developer, Torabinejad and Parirokh (2010; 195) maintain that MTA ‘is one of the least cytotoxic materials’ commercially available. Other studies which have looked at the biocompatibility of MTA draw attention to its antibacterial properties (Fridland and Rosado, 2003; Islam et al. 2006), high pH level (Fridland and Rosado, 2005) and its more predictable clinical outcomes (Bogen et al. 2008). Although the precise biological mechanisms remain unclear there has also been significant interest in how MTA interacts with existing tissue and other agents and chemicals that could enter the mouth. It is reported that when in contact with human tissue it moulds to the tooth surface and creates a ‘biologically accepted surface layer’ (Tomson et al. 2014; 316), which may provide adequate protection without necessitating capping of the affected tooth. This commentary draws its validity from a number of studies which have examined the “leakage” into the root canal in comparison with other commercial materials (see for example Reyes-Carmona et al. 2009; Bozeman et al. 2006 for a review see Torabinejad and Parirokh, 2010).

It is not all good news, however, as some researchers have warned that over time the stability of MTA may decrease, owing to the long term stability of bismuth oxide when exposed to water for long periods (see Hilton, 2009). It has also been reported that a grey variant of the material has been shown to discolour the treated tooth (Aeinehchi
More worrying is the number of “generic” versions of MTA that have been developed, which are marketed to hold the same properties, but in some cases have been shown to contain arsenic, lead and other carcinogenic trace elements (Camilleri et al. 2012). It is questionable whether practising GDP’s will be able to use the material effectively as it shown to be difficult to manipulate and mix correctly and takes up to 3 hours to set, meaning that another material will be required to protect the MTA while it sets (Fridland and Rosada, 2005). Given these potential unknowns, one might expect that the science pursued in this instance would be tuned to examine the long term viability of the material, practical use by GDP’s, patient satisfaction and health outcomes, though this is notably absent throughout the literature. What are present are strings of RCT’s examining leakage and short term outcomes in comparison with other materials, with no consideration of its wider application. Even supporters such as Mente et al. (2014; 709) appraise such studies with caution; ‘their value as a reliable assessment of the long-term prognosis for this treatment option is limited. The actual number of cases reported is small, and the follow-up periods are sometimes relatively short’. Mente and colleagues (ibid) work is the broadest published trial to date with the longest follow-up period at 24 months.

This final comment should warn us that what is being pursued here is not a well-rounded research programme but a programme which has very unclear results for application. What Hilton (2009; 620) calls ‘MTA over-exuberance’ has resulted in a whole swathe of soundbite research, which often draw very robust inferences based on methodologically flawed research, relying on tiny sample sizes or otherwise poor design. A PubMed search for “MTA root canal” returns over a thousand results, the majority of which are short RCT’s or case studies with varying degrees of methodological sophistication. By contrast a search for “MTA dental public health” returns only fourteen, and only Hilton’s review (ibid) actually discusses the translation of materials research into practice. Reading through the technical literature on MTA it is easy to forget that what is being discussed is a treatment for a disease, because there is no reference to patients or the practicalities of diagnosis, only short discussions of biocompatibility and technical handling.
It is of little surprise that I was unable to obtain reasonable research to assess the relevance for dental public health because this is not part of the lexicon in this field. While absolute figures on cost are hard to assess, in a review on the use of MTA for pulp capping Hilton (2009; 620) writes that ‘one gram of MTA powder costs approximately the same as 24 grams of calcium hydroxide base/catalyst paste, making MTA much less cost effective per use’. Others have voiced similar concerns that the presentation of these materials as the gold standard is at odds with the needs of planners and public health professionals who want to save teeth on limited budgets (da Silva et al. 2015; Borges et al. 2014). Other warnings are that regardless of the material used, anywhere between 10% and 16% of root canals fail in the first year depending on the population studied, and Borges et al. (2014) are quite clear that the main problem in endodontics is accidents made during complex surgery, which cannot be remedied by the introduction of new materials.

The overall picture is rather unclear with advocates occupying the mainstream and small research pieces reporting difficulties in practice. What has emerged here is a pursuit of a scientific programme without any consideration of whether it would be useful for patients or how it would translate into practice. The inference I am drawing here is that knowledge is once again split; the scientific has become completely dissociated with practice, and has nothing to say regarding social policy or politics. Does this make it bad science? No, though some of it is not particularly sophisticated in its approach. The problem is that these scientists in dentistry do not appear to recognise or even think about how their work should be applied, nor is there anything or anybody translating this science. There is a gaping hole here, which has been left to others to fill (see below) and the debate here is not even one of scientific versus social explanations, or a gulf between upstream and downstream determinants, but quite simply a whole research paradigm that does not recognise that these debates even exist. In the chapters that follow a discussion of the research programmes which have attempted to fill this space will be discussed in more detail, though before moving into that terrain, I would like to draw out some of the more immediate consequences of the case studies presented in this chapter.
3.4 Splitting Knowledge and Defining Paradigms

The problem demonstrated across these case studies is that as we move further towards specialisation we move further from practical application. Despite all the calls of grand changes and paradigmatic shifts, very little is actually happening for patients and the political and sociological questions that could adequately contribute to debate are squeezed out of the picture. For what has been happening within the field of dental research so often labelled positivism is not about tradition or maintaining the status quo, but a move further towards genetic and behavioural factors at the cost of well-rounded research that can account for phenomena at multiple levels. This does not bode well for those in dentistry or any other part of medicine that see disease causation at multiple levels, since the research needed to elucidate these levels would exist in different (read competing) paradigms (see Morgan, 2007). This is important, not simply because it splits up disease processes into different levels of abstraction, but because it begins to structure how research is produced, how funding for research is allocated, the way that knowledge streams begin to adapt or support convention, and in the end, decide the shape of a problem field. This is to say that the act of splitting up knowledge of the same thing into various components means that each will have to contend with the others for money and space, that they will be evaluated as separate entities, and ultimately be valued and interpreted differently.

Such criticism has rarely been voiced within dentistry with a number of important consequences. The first is that the modern fascination with identifying behavioural or genetic causes of disease, does not really face adequate criticism from dental science, but rather finds a natural home. Within this paradigm, this fracturing of knowledge is cast as a legitimate move towards knowledge production with an apparently supportive philosophical basis. As a result, a clearer picture emerges about what is at stake in this moral economy of scientific exchange. As Caduff (2012; 344) observes, what we can see emerging from this newly defined biologically orientated paradigm is ‘not so much a situated science but a situating science – not a contextualised biology but a contextualising biology, a biology of context’ (see also Rose, 2006).
I take this to mean that as science moves further towards specialisation it is less concerned with the context that it contributes to, but to redefine the very exercise of that science in the image of its own self-limiting vision. The danger here is painfully clear, as while ‘true scientists have always worked intuitively, the vision of [Francis] Bacon has taken over societies vision of science.... by making it an industrial enterprise, in which each scientist is merely a specialised cog’ (Matthews, 2011; 9). This should act as a warning to researchers in dentistry who appear contented to shift the locus of investigation away from the “disease in society” onto the “gene in a host” since it finds little philosophical justification other than that which it provides for itself (see Roter and Frankel, 1992). They not only set the context of an increasingly limited discipline but impede the horizon of their own potential and those who might follow in their footsteps. Karl Popper, among the greatest empiricists of the twentieth century, saw this unfolding and observed the tragic and disturbing consequences.

‘More and more Ph. D. candidates receive a merely technical training, a training in certain techniques of measurement; they are not initiated into the scientific tradition of questioning, of being tempted and guided by great and apparently insoluble riddles rather than by the solubility of little puzzles. They call themselves specialists and reject any claim to authority outside their specialism. Yet already they do so proudly, and claim that specialism is a necessity. But this means flying in the face of the facts which show that all the great advances still come from those with a wide range of interests’ (Popper, 1970; 259)

Here Popper is as disgusted with the features of modern positivism as he is with the increasingly specialised way that critics of science frame their arguments. Each specialism uses language so incomprehensible and specialised that intellectual exchange becomes encumbered by the lexicon upon which their specialism relies. With that in mind, I view Popper’s commentary as largely cautionary, pointing towards a future in which, like Adam Smiths (1776) pin factory, scientific knowledge suffers a division of labour where the exercise of scientific enquiry is split into tiny abstract problems; a production line where researchers become so specialised in the subset of a field but have little awareness of how the part relates to the whole.
If we began this chapter in search of evidence of how to model a dental service that fits with prevailing epidemiological trends, then by now there should be some severe warning sounds regarding how we might translate contemporary dental science into a newly formed NHS service. Not only are these knowledge streams becoming increasingly difficult to reconcile with the practise of dentistry itself but are changing the direction of dental research towards genetic and behavioural explanations at exactly the time when we need to be examining political and social determinants, explanations and propositions. Even among those working within the genetic field there are some authors who openly admit to the limitations of their research but pursue genetic explanations because it holds greater promise of harder and more robust inferences (see Rothschild, 1998 for a good example). On a purely practical level the concern is that dental research becomes less a companion for dental practice than a scientific endeavour in its own right, located far away from the clinician-patient interface and obscured behind scientific jargon in high tech laboratories. As Pearlman (2000; 1) writes;

‘As periodontics has progressed towards an understanding of the influences of risk factors such as genetics, smoking and stress in the occurrence and severity of periodontal disease, the question of prognosis, so essential to treatment planning, has become even more perplexing to the clinician’.

The practical implications are easy to discern here. Practising GDP’s might be interested in genes and DNA but are far more interested in how to treat their patients, what advice to provide and how to judge the validity of their prognoses (see also Grace, 2002).

A more important consequence is that the “structures” of dentistry, its research outlets, publication streams, textbooks and teaching materials begin to reflect the prevailing paradigm. Word counts in prominent dental journals become exceptionally small, research papers must frame their findings within the increasingly specialised lexicon of the science, and conferences are dominated by genetic theories and the presentation of exquisitely (or not) designed randomised control trials. There is no space here for inspired reflection on what to do with this knowledge once we have it, whether it is
financially viable for a general service, whether patients want or understand it (Harrison, 2004; Grace, 2002), or whether practitioners should have a stake in what is researched (Iqbal and Glenney, 2002). More importantly, while the dental journals fill with biomedical research there is precious space left for a broader discussion of policy formulation, workforce planning or social research (Sanderson, 2008).

If anything, socially inclined research must ape the format and methodological principles of positivism in order to gain credibility within those forums (del Consuelo Chapela, 2013). The ensuing social research in dentistry is presented in a scientific format, addressing single issues as if they were separate from the wider social and political context that dentistry operates within. Outside these knowledge streams the literature appears reactionary often pointing to imminent crises in policy failure (Thomas, 1994; McArdle, 2006; Harris et al. 2009; Denton et al. 2009; Boseley, 2007; Kilcoyne, 2015), fiscal deficits (Hancocks, 2009; Brocklehurst et al. 2011; Tickle, 2012; Bersch et al. 2008), skills shortages (Woods, 2005; McArdle, 2006; Brocklehurst and Tickle, 2011), social inequalities (Gibson, 2003; Borreani et al. 2009; Fiscella et al. 2000) and professional inertia (Hobson, 2009; Denton et al. 2009; Myers and Myers, 2004).

These sets of problems are all reflections of a human science which appears to have lost its humanity. It has become exclusionary to the point where the knowledge required to improve the dental service is seen as some kind of secondary activity that is forced to the edges of the research community and discussed in an inflammatory format emphasising “crises”. This so called evidence is only evidence for practice in so far as it may have some implications down the line, though who will actually benefit is far from clear. So in closing this discussion it may be worth looking past the somewhat reclusive science which occupies mainstream dentistry and enquire where we might start to build an alternative that will provide a theoretical and conceptual rationale for a service which is technically innovative, socially inclusive and politically aware.
Chapter 4
Developing a Social Scientific Theory of Dentistry: Three Theories of Dental Science, Policy and Practice.

The purpose of the previous chapter was to provide a contextual account of how contemporary problems in dentistry are approached; leading the discussion back towards the question of how evidence is produced and what purpose it is supposed to serve. By contrast this chapter looks beyond the dental science literature to examine opportunities and research programmes which hold the potential for a different kind of discussion, and if they exist, how they might become part of the conversation. In many ways, the opening sections of this chapter rely on an observation from general medicine regarding the political situation that proponents of upstream or socially progressive public health professionals grapple with. As documented by Williams and Popay (1994; 99), after the election of the Conservative government in 1979, “traditional” public health concerns were marginalised, leading to a situation where ‘the problems of poverty and squalor with which public health had wrestled since the nineteenth century, had been vanquished’. This concurrently fed into a reconfigured political framing of ‘illness produced only by the irresponsible acts of misinformed individuals’ (ibid).

By now we are all familiar with the critique of the New Right as the arbiters of a new model of the health service that wrought ‘the development of quasi-market relationships and attempts to encourage prevention and personal responsibility for welfare’ (Nettleton, 1999a; 130). Chris Ham (1992; 1997; 2008), though generally tempered in his assessment of health policy during this era, has commented that in light of what had been a previous Keynesian norm, such polices were a radical break from the past and looked “foreign” in the UK’s welfare state. While these developments are given more attention in the following chapter, here I want to explain their relevance for the process of dental research. For while the new orthodoxy on
public health as a paternalist activity best left to so called “community researchers” (DoH, 1991) had become very much part of mainstream thinking by the start of the 1990’s (Williams and Popay, 1994; Acheson, 1988; Armstrong, 1993), the withdrawal of government interest in issues regarding poverty, inequality and insecurity have ‘provided the opportunity for others to renew the debate’ (Williams and Popay, 1994; 100; Smith and Egger, 1993).

This “research in the borderlands” as Williams and Popay (1994) term it, refers to the multiple emerging frames of research enquiry which developed, partly in response to, and partly as an effort to reconcile, research in light of a new policy environment. The implication is that research in any field is in part a reflection of prevailing policy preferences and the stance that researchers take towards this. Not least among these is a renewed enthusiasm for looking at the organisation of the NHS from a Marxist perspective (see Gough, 1979; Paton, 2006; Aldred, 2008; Lister, 2008), a plethora of research from across the feminist spectrum (see Exton, 2008; Ford, 2005; Ussher, 2002), liberals in defence of a more liberal form of distributive justice (Rawls, 1989), critical but supportive advocates of the development of the policy framework (Ham, 1992), and the emergence of a range of critical constructivist and poststructuralist perspectives that began to enter the debate during this period (see for example Fox, 1998, 2002).

4.2 Three Theories of Dental Research at the Margins: A Brief Overview

While dentistry has never been host to the lively debates in the medical humanities more generally, a similar form of critical and conciliatory outsiders can be seen emerging during this period. The first and most prominent is the emergence of Evidence Based Dentistry (EBD), which recognises that abstract dental science has little relevance unless it is made intelligible to mainstream practice (Horowitz, 2012; Kao, 2006). Adopted from the principles of the precursor of Evidence Based Medicine (EBM), EBD takes a seemingly pragmatic approach that pulls dental science
and the disorganised networks of information sharing between GDP’s towards ‘knowledge and use of EBD in everyday practice, using a systematic approach with strategic planning’ (Iqbal and Glenny, 2002; 591; Pitts, 2004). This inherently liberal approach, draws on the argument that ‘evidence both invalidates previously accepted diagnostic tests and treatments and replaces them with new ones that are more powerful, more accurate, more efficacious and safer’ (Sackett et al. 1996; 71 – 72). EBD is thus posited as a logical extension of a philosophy which accepts dental science as growing in its capabilities and technical prowess to engineer a conciliatory approach that merges science, diagnosis, treatment planning and dental public health within a comprehensive understanding of what dentistry can and should do.

The second draws from the lexicon of the sociology of health to examine how individuals are impacted by the state of their oral health with the hope that such research might help direct service organisation (Slade, 1997). Pioneered by Cohen and Jago (1976), this programme has been driven by the concept of “sociodental indicators”, which refers to how dental problems, such as chronic or recurrent pain, periodontal status, dentition stability (among others) are experienced by individuals, and if so, how. By their very manner of being indicators, this framework traverses an examination of inequality and the experience of oral health related problems towards investigation of how to measure the outcomes of dental intervention (Cohen, 1997). Remarkably, given the scant social research in dentistry, there is now a whole range of relevant literature that has drawn from these humble beginnings which measures how individuals experiencing a range of oral health related problems understand and manage their conditions, and the possible policy implications. Most commonly this has culminated in research pieces which utilise the concept of Oral Health Related Quality of Life (OHRQoL), quite literally meaning an examination of how people’s daily lives are impacted by poor oral health, or how well being is improved (or not) by dental intervention.

While it is difficult to tie down a third as anything that has a coherent paradigm, for the purposes of this analysis, I am referring to a number of other research pieces, which have pulled away from convention and began to experiment with theories and methods derived from the social and policy sciences. Typically this research is hosted
outside of the dental mainstream, either in speciality journals such as *BMC Oral Health*, or *Community Dentistry and Oral Epidemiology*, or scattered thinly across the medical humanities field. Though eclectic and thinly distributed, this form of dental research might be broadly thought of as “theoretically informed” empirical research, and while it is generally not overly critical in its outlook, it takes an interest in qualitative and mixed methodologies and/or social and political theory. While this hardly sounds radical, the use of such methods and theories have allowed researchers to move away from restrained paradigmatic dogma to dig a little deeper into the subjective experiences of patients and providers (see for example Taylor-Gooby et al. 2000; Fiscella et al. 2008; Butani et al. 2008; Exley 2009; Locker, 1997; Boiko et al. 2011; Nettleton, 1991; 1993; 1999b; McDonald et al. 2012). Some of this research has sought to gain a finer picture of the patient-clinician interface (Boiko et al. 2011), flesh out how such methods can be used in dental education (Edmunds and Brown, 2012; Pooler, 2013; Chambers, 2012), investigate hidden causes of dental inequality (Milsom et al. 2009; Tinker, 2003) or illuminate the social and political context and consequences of dental policy formulation (Brocklehurst et al. 2011; 2013; Tickle, 2012; McDonald et al. 2012). While there is limited scope to argue that this is a paradigm or research agenda of any kind, it does represent a subset of literature which is generally overlooked.

What follows in this chapter is a critical overview of each of these positions in order to appraise their relevance as theoretically informed platforms which can be used to inform future policy formulation. This is not a literature review in any conventional sense, since the purpose here is to show how each of the positions outlined above relies on a particular understanding of the political and social realm. Since the aim of this chapter is to identify a useful starting point to build from, this is the first necessary step in moving away from an increasingly inward looking dental science towards a social scientific theory which can provide theoretical support for future dental policy. Ultimately the conclusion is that each is found wanting in several core respects and while I find no reason to reject the notion that we should build on evidence, the fashion in which this is happening relies on a charade of political progress. Similarly, there is reason to take seriously the concerns of those working in the paradigm of OHRQoL, but equally good reason to question the concepts it tries to measure and
the limited epistemology that it works with. Finally, there are several useful starting points within the patchwork literature which represents the remainder, particularly in areas that examine the broader social and political context of the delivery of services and treatment of patients. While the chapter closes with the argument that we need to look at dentistry as an object of social interest in itself, the existence of qualitative insight and social research within dentistry should be viewed as an important step forward.

4.3 The Broken Promise of Liberal Particularism?

*The Case of Evidence Based Dentistry*

As proposed in the previous chapter dentistry considers itself a science, though as it has sought further specialisation it reaches a number of bottlenecks. As dental research begins its journey towards specialisation it appears to become self-supporting as other researchers begin to respect the hard causal inferences that can be gained from such research. Add to this that dentistry has its own journals and reporting standards, maintained and supported by those in the profession, it becomes easier to understand how shortcomings can be cast aside or missed entirely. As described in the previous chapter the specialised research being produced in the dental journals is losing its relevance for the actual clinical practice of dentistry (Pearlman, 2000, Grace, 2002, Chambers, 2006).

In recognition of this problem, around the mid to late 1990’s efforts began to translate the findings of dental research into a language and system that could be readily applied in dental practice. Thus EBD was born and talk of revolution and transformation marked the beginning of this new movement. It would create a force that would refocus dentistry towards ‘dental research answering clinically relevant questions’ (Bader et al. 1999), provide a reflexive forum where ‘dentistry can receive and communicate with the scientific community on specific topics that warrant research’ (Frantsve-Hawley and Meyer, 2008; 65; Kao, 2006) and redefine dentistry as ‘the integration of the best evidence with clinical expertise and the preferences of patients.'
and, therefore, it informs, but never replaces, clinical judgement’ (Sutherland, 2000; 241). Furthermore it would work to educate and communicate with patients, ‘protecting them from inefficiencies and ignorance, as well as enabling them to be informed collaborators in the treatment process, not just victims of it’ (Clarkson and Bonnetti, 2009; 145; Pitts, 2003). The value of EBD is further deepened as familiarity with the evidence base grows, since the knowledgeable GDP will be able to provide the patient with valuable information on the benefits and risks of various treatment options (Pitts, 2003; 2004; Frantsve-Hawley and Meyer, 2008; Thomas and Strauss, 2009; Sutherland, 2000; Romanowicz, 2001). The patient is therefore emancipated from ignorance through the GDP’s knowledge and application of the best available evidence.

From these propositions EBD is posited as a progressive force within dentistry, though these seemingly neutral propositions have far reaching consequences. In the first instance we can see both a rationale for a new type of dentistry following from scientific principles combined with an underlying critique of the “old boys” network of traditional dentistry. Not only will this work to provide a platform for the dentist to undertake their duties with the latest scientific evidence to hand, but provide a transparent forum for discussion, blending and dissemination of science, practice and implementation. It follows that the increasing use of evidence to aid clinical judgement ‘reflects a very basic ethical commitment to provide optimal care in the best interest of patients’ (McNally, 2004; 91; Kerridge et al. 1998). The further development and integration of EBD is therefore situated as both a practical and moral imperative for the dental profession.

Put in this way, I have no problem with using evidence to support an intervention or proposition in any context, dental or otherwise, particularly when it is put into operation to help guide enquiry and provide solutions.

‘In all fields of intelligent inquiry we insist upon evidence, we abhor inconsistencies, we examine alternative hypotheses, we are open-minded, we consider hypotheses as fallible and probable, we judge hypotheses in terms of consequences, and our inquiry aims to resolve problems’ (Nash, 1996; 292).
Using evidence is little more than the endeavour of discovery in any format, though it is at this point that it is worth considering if the collective representation of dental science through EBD actually meet these aspirations. In support of EBD, Osborn et al. (2003; 189) define evidence simply as ‘the ultimate product of the analysis of a series of observations’, and conclude that sieving through available evidence and presenting a synthesis of its strongest elements will improve knowledge and feed into practice.

This definition appears intuitively rational, asking that we collect what we know and summarise it for practical purposes. EBD is positioned as some kind of machine, overviewing relevant knowledge, passing it through a checking system and providing an improved synthesis. It is customary to see in such reviews something similar to “a search for x revealed 574 possible articles of which 52 were found to be suitable. 38 were excluded due to methodological bias, leaving 14 for the final review”. Whatever x is (usually some kind of procedure, new drug or material), is then recommended or not based upon the knowledge accumulated through the synthesis of the literature selected. What is the problem? In principle, not very much, but in practical terms there is very much a “rubbish in rubbish out” scenario, not unlike the question posed to the mechanical engineer and industrial philosopher Charles Babbage (1864; 67); ‘Pray, Mr Babbage, if you put into the machine the wrong figures will the right answers come out?’

The question is less about the wrong figures going into the metaphorical machine of EBD, but regards what type of information goes in and what the ultimate product might look like. The first practical issue here is publication bias, generally defined as ‘any influence that reduces the amount of good science appearing in the literature’ (Scholey and Harrison, 2003; 235). Most notable is a tendency to only publish very strong positive results (Dickerson, 1990; Caduff, 2012), because prominent journals reject studies that do not present solid inferences, or because researchers might worry that their studies will be rejected. The ‘file drawer problem’, identified by Rosenthal (1979), where research showing inconclusive results is shelved for later consideration, leaves such results out of the net of literature searches. A related problem is that only a
part of a study where strong inferences can be made are published, decontextualizing research findings. This point has been picked up by Guyatt et al. (2011) who further note that while strong isolated results appear in prominent journals, the full research is only published later, often in the so-called “grey literature”, such as thesis’ or book chapters (see also Hopewell et al. 2007).

In line with the arguments presented in the previous chapter, a move towards hard inferences at the genetic and behavioural level may accompany publication bias in general, a proposition that is perfectly feasible but impossible to measure. Unfortunately this might be the tip of a large iceberg in an academic industry that has a monopoly over the production of scientific information. The work of Barley (1986; see also Zabusky and Barley, 1996; Boje, 2001), for example, demonstrates how choice of research career and professional trajectory are directed through “career scripts” that mediate between individual aspirations and perceived or real institutional imperatives. This is to argue that there is a strong impetus put on researchers to configure their aspirations to institutional norms in order to further careers, where ‘progress is scaled in terms of increments of skill and position in a network of practitioners’ (Zabusky and Barley, 1996; 197). In their study of scientific careerism Duberley et al. (2006; 1135) propose that ‘these scripts prescribe patterns of legitimate thought and operate as modalities between individual actions and social structures’.

This type of sociological theory is usefully malleable in the context of examining careerism because it shows how researchers must adapt to situated norms if they are to achieve status, space and access to lucrative networks. The darker side of this picture is that these networks and norms may themselves be constituted by other forces outside of the picture. Many researchers are acutely aware that the futures of their careers are reliant on their commitment to the scientific status quo and their ability to gain funding from research bodies or external private finance. Dependent as much academic research is upon external finance, critics from divergent positions have drawn attention to the shape of science that results from the precarious balance between professionalism, managerialism and commercialism (Turpin and Deville, 1995; Duberley et al. 2006; Guyatt et al. 2011; Charlton, 2008). On several occasions commercial organisations have pulled finance for very large studies because of
impending negative results, as seen when GlaxoSmithKline (GSK) terminated a study for the controversial asthma drug Salmeterol (see Lurie and Wolfe, 2005; Nelson et al. 2006). While difficult to qualify with certainty, a cynic might imagine that researchers might carefully design trials to look attractive to potential sponsors and make efforts to ensure that their research portfolio is free from potentially controversial research.

Other drivers emerge from the wider imperatives which impel university researchers to publish quick and easy pieces of research that will garner referencing scores as quickly as possible, often by producing small pieces with solid inferences, even though they add little to practical knowledge. Charlton (2008) calls this “zombie science” which emerges less from the invigorated pursuit of knowledge but from the enlightened self-interest of the scientist.

“Self-interest’ because the primary criterion of the ‘validity’ of a theory is whether or not acting-upon-it will benefit the career of the individual scientist; ‘enlightened’ because the canny career scientist will be looking ahead a few years in order to prefer that theory which offers the best prospect of netting the next grant, tenure, promotion or prestigious job’ (p327)

‘Zombie science is science that is dead but will not lie down. It keeps twitching and lumbering around so that (from a distance, and with your eyes half-closed) zombie science looks much like real science. But in fact the zombie has no life of its own; it is animated and moved only by the incessant pumping of funds.’ (p329)

While it is doubtful that any academic research can truly be captured in such strong criticism, many university researchers might recognise the shadow of an ugly reflection in what is said here. Taken a little more lightly, a more adequate criticism is that science is not only defined by its methods and results, but by numerous preferences, objectives and personalities that make an object attractive to study in the first place.

It may be worth taking a breath here to ask how EBD deals with all these social, political and professional problems, and the answer is that it does not. The syntheses produced by EBD are at best compromised by these outside forces or at worst constituted by them. In previous work I have argued that EBD has a structuring effect
on how dental knowledge is organised, since it demands such strict scientific criteria of its researchers that it is likely to encourage soundbite research with hard inferences and squeeze out reflexivity from the research community (Deal, 2012). On reflection I recognise that this argument may have been over-stated since EBD probably does not have the power or credibility to be attributed such grand status. Some arguments remain valid, however, since while EBD recognises that there are politics in the clinical encounter it does not appear to recognise that there are politics in science. It has little to say about publication bias, careerism or any other social background noise, though it is keen to intervene in the clinical encounter and “discipline” practitioners to accept and adapt to its central tenets (Pope, 2003; Mykhalofskiy and Weir, 2004).

Others have noted that EBD looks suspiciously at anything methodologically alien to it, such as anything mildly qualitative in form (Dietrich, 2006; Newton and Bower, 2005; Mjor, 2008; Petticrew and Roberts, 2003; Tickner and Coffin, 2006; Patrick et al. 2006). Intentionally or otherwise EBD has become part of the structure of dental knowledge and causality works in both directions, impelling researchers to adopt quantitative persuasions while reifying that such positions are the norm. If we accept the argument presented in the previous chapter that hard dental science is among the major problems impending movement towards a more progressive system of delivery then EBD is tainted by proxy. Moreover, since it encourages the further production of biomedical and genetically orientated research it is unwittingly allied with the vision of an individualised society and the norms of the New Right and neoliberal doctrine.

More recently it is becoming clear that while EBD has become a significant force in dental research, its stated aim of improving practice is less evident. It is not clear that GDP’s are really using it since its scientific orientation is not readily applicable for practice (Clarkson et al. 2003; Pitts 2004). Others have noted that practising GDP’s have found it cumbersome and stressful to interpret (Hersh and Wickham, 1998; Minton, 2004) and the question of whether patients can access or understand it to become part of the conversation is doubtful if not wildly fanciful. Finally, Gillette (2009; 2) has noted that the notion of “evidence base” has provided dubious corporate actors with a common lexicon with dental science to market questionable products; “These information channels are likely successful because in a world of time-strapped
and spread-thin lives, these organizations have mastered the art of providing dentists with discrete, simple and time-saving snippets of “scientific” information’.

It is for this reason that I called this section “broken promises” since for all its apparently rational attempts to streamline a more pragmatic dental service, it is more likely to streamline science to fit more comfortably with liberal notions of the political. While EBD has shown that evidence is important, its neglect of the sociological nature of science and the politics of implementation are clear. In its current state it acts as a cumbersome and exclusionary force, privileging the scientific over the social, and if my previous arguments are taken seriously it is more likely to be inflating problems rather than solving them.

4.4 A Keynesian Masquerade

Oral Health Related Quality of Life Research

Few can argue convincingly that quality of life is not important, though it is so entrenched in the language of the welfare state and common sense that we rarely question whether it is a meaningful or useful concept for social policy; it just is. Credibility accrued during the 1960’s and 1970’s as several countries, the UK among them, began looking for alternative ways to assess and measure the health and happiness of their populations, which would move beyond raw aggregate statistics such as Gross Domestic Product (Veenhoven, 1996; Cummins, 1997; Rapley, 2003). The WHO (1948) mandate that ‘health is a state of complete physical, emotional and social well-being and not simply the absence of disease or infirmity’ is further provided as justification for a wider research agenda for health, directing left leaning policy analysts towards alternative rationales for service design that were “patient centred”.

There are two admirable pillars which QoL research rests. The first is that ‘the patient’s perspective has equal legitimacy to that of the clinician and should be taken into account when evaluating the consequences of disease and the outcomes of treatment for that disease’ (Locker and Allen, 2007; 408; Leplege and Hunt, 1997)
and the second relies on the notion that once we untangle how well-being or quality of life impacts daily activities we will be in a better position to evaluate whether policy corresponds. As Bauer (1966; 1) argues, such social indicators will not only inform policy but will ‘enable us to assess where we stand and are going as regards our values and goals’ (see also Noll, 2002). There is a certain subtlety in this argument which implies that once we are able to understand quality of life, a moral compass should guide well-meaning organisations and politicians towards meeting need. As such we will be able to understand both the impact of disease and the outcomes of treatment and use these indicators to align policy with outcome measures.

It should be no surprise that we are already faced with some notoriously slippery problems, not least how we can measure something so conceptually stretched as quality of life, though this has not stopped the swell of publications (Moons et al. 2006). In dentistry we now have the newly formed paradigm of Oral Health Related Quality of Life (OHRQoL), which aside from some exceptions (see Locker and Allen, 2007; Tsakos et al. 2012; Locker and Quinonez, 2012) has accepted the concept rather uncritically. This has come at some cost, however, for when dental researchers began working with these concepts and frameworks they were soon faced with the muddy issues of conceptual clarity, subjectivity, how to model their results and compare aggregate findings. What has emerged is a somewhat warped version of the vision that gave birth to this enterprise as scholars have become bogged down in issues of construct validity and have produced little more than a whole series of measurement tools which have tenuous links to policy. Far from a socially inclusive paradigm, OHRQoL resides on the margins as a basket case, decried by those who built it (see Tsakos et al. 2012; Locker and Allen, 2007) and of little use for practice or policy.

The deconstruction of the OHRQoL story should begin with analysis of a landmark conference held in 1997 to bring together the brightest scholars ‘from psychometric and social survey backgrounds, who had developed instruments measuring oral health related quality of life, and another group of researchers, primarily concerned with dental health services and clinical trials, who potentially
could use those instruments in the assessment of oral health outcomes.’ (Slade, 1997; iii)

The tone is optimistic, the big names are present, and all the papers spoke of great changes to come. Cohen (1997) talked of a flexible theory, with interdisciplinary links and clear communication with government and its associations. David Locker (1997; 14) presented an unusually philosophical critique of the Cartesian nature of dentistry that has isolated the mouth from ‘both the body and the person’, and called for the rediscovery of both through OHRQoL. Helen Gift (1997) followed with a now familiar argument that disease prevalence has dominated dental policy for decades and now requires a multi-disciplinary perspective, while Sheiham et al. (1997) and Reisein (1997) laid out some sketches of research tools to capture coverage and severity of dental disease respectively.

The prose in all the above is couched in social progress and a distinct sense of the political context and the contribution it intended to make. What has happened since is a somewhat sorry tale, since after this conference publications have rocketed but the interdisciplinary, policy orientated, whole body approach which characterises these pieces has disappeared. As regards the latter, why oral health needed to be separated from medicine was never made clear and in this regard OHRQoL as an entirely separate entity is itself a curiosity. What is really at stake here, however, is the bridge between ontological fantasies limited by epistemological constraints. Nicely summed up by (Camfield and Skevington, 2008; 766) ‘methodology and instrument design seem to be well ahead of the theoretical work’, where the mainstay of OHRQoL remains dominated by developing Likert scales and other measurement tools that can capture subjective experience, while the theory that backs it lies dormant.

An explanation of this can be traced back to the wish to overcome the purely clinical derivatives of dental policy such as the Decayed Missing and Filled Teeth Index (DMFT), and how researchers can move beyond simple indicators to capture lived experience. This is the subjectivity / objectivity problem, or what had previously been discussed in medicine, the line between normative need defined by experts and perceived need felt by patients (Bradshaw, 1972; 1994). The first problem here is that
in order to assess quality of life the assumption is already made that the patient has a
dental problem identified by a practitioner. Thus the patient is in the “sick role”
identified by Parsons (1951) and therefore in need of surveillance and policing by the
dental profession (Brondani and MacEntee, 2014). In contrast to the idea that
OHQoL studies ‘allow adequate expression of the way in which individual patients
determine their own quality of life’ (Prutkin and Feinstein, 2002; 89), patients are
already diagnosed and can only report negatively about their effects. This problem is
further compounded by the fact that the tools needed to measure perceptions are pre-
defined (usually by professionals) indicates that patients are hardly co-contributors in
these matrices. It is now recognised that qualitative research to test for psychometric
coherence should inform the development of these scales (Locker and Allen, 2007;
Brondani and MacEntee, 2014; Tsakos et al. 2012; Brod et al. 2009), though it is
conceded that component questions needed for each scale ‘may be as varied as
individual personalities’ (Gough et al. 1983 quoted in Farquhar, 1995).

Building from this may be difficult when considering whether “psychometric testing”
has been accurate. We cannot assume that all individuals in a large N study will
interpret questions similarly, regardless how rigorous the pilots. Consider the following
QoL interview transcript adapted from Rapley (2003) which scales answers on a 3
point scale.

    Interviewer : D’you feel out of place out and about in social situations?
    Anne : No
    Interviewer : Never?
    Anne : No
    Interviewer : Sometimes?
    Anne : No
    Interviewer : Or Usually?
    Anne : Sometimes I do
    Interviewer : Yeah? OK, we’ll put a two down for that one then

Intended as an extreme example, the sequence of questions or interviewer
interpretation can clearly influence these types of ratings. Moreover, where there are
large cohorts other discrepancies can creep into analyses. For example, if a five point
Likert scale is measuring the severity of a handicap across fourteen factors (social, psychological, pain, eating etc) an individual scoring one across all categories may accrue the same aggregate score as an individual who scores very highly in three (Tsakos et al. 2012). Thus one individual who is mildly troubled by whatever disorder will aggregate the same as someone who is suffering considerably. Add to this that individuals from middle and upper classes report consistently higher on these ratings (Klages et al. 2004), and we may find that inequality gets fudged in aggregate scores.

Finally it is worth considering what these scales are actually measuring. For example we have the Geriatric Oral Health Profile (GOHAI), Child Oral Health Related Quality of Life Scale (COHRQoL), which adapt to the perceived differences in these demographics. Other scales measure severity and / or handicap, the most common being The Oral Health Impact Profile (OHIP), Social Indicators of Dental Disease (SIDD) and the Oral Impacts on Daily Performance (OIDP). Sometimes these might be used in conjunction with other measurement instruments such as the Family Impact Scale (FIS) to examine the impact of a child’s disorder on family life (see Barbosa and Gavaio, 2009), or an Oral Health Literacy (OHL) test, used to assess whether low health literacy rates correlate with quality of life scores (Divaris et al. 2012; Protheroe et al. 2009; Nutbeam, 2008).

The validity of these constructs is derived from their demographic and contextual sensitivity, though as Locker and Allen (2007) admit, these measures are really measuring health status rather than quality of life. Since assessing quality of life would require that respondents can actually assess the value detracted from impairment or value added by treatment to their life overall (Guyatt and Cook, 1994; Leplege and Hunt, 1997), these constructs fail to make the step from capturing symptoms and functioning to the criteria necessary to claim measurement of quality of life. At best this endeavour has resulted in a set of tools which capture subjective oral health status rather than QoL (Locker and Quinonez, 2012). Locker and Allen (2007; 410) further warn that ‘from an ethical point of view, precision in the use of language is necessary so that claims about health interventions are not exaggerated’. In several respects this is an unstated recognition that the enterprise of OHRQoL is a misnomer since dental
indicators in isolation cannot be separated from health in assessment of general well-being and doing so may cause dental problems to be overstated.

By now the cat should be out of the bag, but this has not stopped the enterprise from generating more publications. Citing Locker and Allen (ibid) as support, He et al. (2012; 707) state that ‘generic measures are too broad to assess accurately the links between specific oral conditions and OHRQoL’ and suggest that specific indexes be drawn up for each condition. Their particular concern is the development of a halitosis scale to ‘assess the burden of oral malouder’ (ibid), though this is not an isolated case. Others have fought to create their own scales for implant failure (Allen and McMillan, 2007), dry mouth conditions (Gerdin et al. 2005) and dentin sensitivity (Bekes et al. 2009; Sixou, 2013). This move towards specific disorders for the case of conceptual clarity was clearly not what David Locker had in mind when appraising the direction of the model and could not be further from the wish to overcome the Cartesian nature of dental research critiqued at its inception. The result is the creation of a monster that has looked inwards in the face of criticism and has lost sight of its theoretical basis to link patient voice with clinical activity and policy relevance. Rather than the broad agenda set out in 1997 OHRQoL has become reclusive and self-serving to the extent that its relevance to practice and policy is increasingly questionable.

What has been explained here is that the search for dental need through such models has ended with an obsession with construct validity at the cost of its social orientation. Part of this problem is that such social factors were never adequately integrated into the model in the first place and the socio-environmental factors affecting oral health always occupied an odd position outside the model; assumed relevant but not factored in (Brondani and MacEntee, 2014). Furthermore, as this model has developed across a significant transformation in the political landscape, the initial theoretical assumptions, limited as they were, now seem rather alien in the prevailing policy paradigm. ‘Living within a political economy that emphasizes individualism and the individualizing of risk makes discussion of society-based health determinants difficult for health workers, policymakers, and the public that understand these concepts’ (Raphael, 2006; 663).
In the above Raphael is making reference to how such frameworks cannot be integrated into policy unless they share similar assumptions, a point picked up by Muntaner (2001) who argues that political and economic determinants are not easily reconciled into the mind-sets of students and professionals trained in the biomedical sciences. If this point is expanded, the rather individualist route taken by the proponents of the “disease specific” variant of OHRQoL bereft of its social theory may be more attractive and accessible to the biomedical paradigm. This is more than a warning about the relevance of science, as given their slippery nature, concepts such as “need” and “quality of life” are easily hijacked in order to support regressive policy programmes (Noll, 2002; Rapley, 2003; Bradshaw, 1994; Navarro, 2007; 2009). Jonathan Bradshaw (1994; 49) observed that in the absence of a socially derived concept of need, ‘needs assessment has been advocated as a means of containing the growth of health costs’, alongside other right wing preferences. Similarly, Navarro (2009) has recognised that QoL is now being put to work to argue that quality of life can be improved by empowering individuals to take responsibility for their health, and reduce access to welfare services (see also Rose, 2001; Briggs and Hallin, 2007). The proposition that developing a concept without an appropriate theoretical basis is something the OHRQoL researchers should take very seriously lest they get more than they bargained for.

4.5 Beyond the Mainstream

*Struggling with Limits*

It is worth drawing out two consequences of the analysis so far. The first is that neither of the programmes reviewed have been able to meet their stated aims, either that of collecting “good” evidence or capturing anything close to patient need. More serious is that as each has developed, broad ontologies have been arrested by individualist epistemologies that are more suited to biomedical paradigms. While this has been a residual feature of EBD since its inception, this development within OHRQoL has been a result of its inability to answer its own research questions, loss of its social
theory, and consequent relocation of enquiry in a limiting individualist research programme. Stated more critically we can view each of these research endeavours engineering their components to fit with prevailing policy preferences of cost benefit analysis, risk assessment and economic utility. The question remains of where we should turn if we are to build an alternative theory which can address the substantive questions of how NHS dentistry should develop in the twenty first century. However, in light of the previous analysis it becomes equally important that we obtain a theory which can account for the reasons why potentially useful avenues of enquiry are shut down, become self-limiting and end as bottlenecks.

While the third set of literature addressed here goes some way to providing a bridge between the social sciences and dentistry it is also problematic is several respects. The first is that is does not really represent a set of literature in any coherent form, composed of critical policy studies, qualitative research pieces and the occasional piece of social scientific enquiry. Often these critical policy studies are only related to dentistry because they are using it as a case study to demonstrate the wider relevance of a theory or method from another field (see for example, Boiko et al. 2011; Horton and Barker, 2009; Dharamsi and MacEntee, 2002; Taylor-Gooby et al. 2000). Sometimes they might be offshoots or commentary pieces that are the by-product of another wider study (for example Milsom et al. 2009) or commentary pieces born from any variety of conferences or symposiums (for example, Tickle, 2012).

An equally interesting, though less prolific, development in the dental literature is the emerging interest in qualitative research and methods. Over the last decade or so a number of researchers on the fringes of the research community have been encouraging the use of such methods to bring into sharper focus issues with patient perception, ageing and oral health, the facets of oral health inequality and the shortcomings of dental education, as well as other areas (Butani et al. 2008; Bullock, 2010; Curtin and Trace, 2013; Edmunds and Brown, 2012; Pooler, 2013; Chambers 2012). While we might expect a degree of criticism directed towards the growing tide of positivist dental science, the authors of such papers appear less concerned with the science of dentistry than with carving out a distinct position that demonstrates the validity of their own research. Many of these pieces begin with cursory comments that
‘the contrasting theoretical underpinnings of different methodologies need to be acknowledged’ (Bullock, 2010; 65), or that ‘if we are to avoid inconsistencies is research design, research design should begin with an examination of the philosophical assumptions through which we view the world’ (Pooler, 2013; 24). What often follows is a string of potential research methods shown alongside the philosophy with which they are associated, not all that different from an outdated exposition in an introductory sociology textbook.

While I find no explicit problem with explaining the use of these methods for the study of dentistry, the extension of these arguments is that qualitative research in dentistry exists in a temporally different universe from dental science. At worst they are viewed as mutually exclusive enterprises working on entirely different things, or occasionally positioned as complimentary in so far as qualitative research might triangulate research findings or help to generate hypotheses (see Edmunds and Brown, 2012; Stewart et al. 2008). Either way the validity of dental science is left untouched, viewed as a legitimate mainstream that qualitative researchers should either avoid altogether or help support. This is worrisome since the picture that emerges is a warped genetic/behavioural positivism at one end and a qualitatively oriented and somewhat confused set of literature dealing with questions of meaning and experience on the other, leaving a gaping hole where a discussion of service design and implementation should be.

Of course there are exceptions though broadly speaking there is no conversation about the future of NHS dentistry taking place here. There is an ongoing dialogue on Direct Access and recall periods (Brocklehurst et al. 2011, 2013; Tomar, 2011), for example, and though these research avenues are achieving some success (see DoH, 2014), they remain concerned with specific issues rather than the general field of dentistry. There is good reason to see this particular group of studies as a progressive force within dentistry, though they remain firmly within dentistry, confined to strict research questions or brief opinion pieces. Unfortunately the communication channels that these researchers have to promote their proposals are already configured around models for dissemination of dental science, making it extremely difficult to claim that this represents a coherent platform for change.
For what has been discussed in these chapters are bottlenecks and disappointments, regressive science played out as social progress, and those outside the mainstream struggling within the limits of the paradigm. There are, however, few examples that could be considered social scientific studies of dentistry. Two reviews; the first by Margaret Exley (2009) and a more recent contribution from Kleinberger and Strickhauser (2014) both malign the limited extent of social or political scientific interest in oral health and oral health care. Sociological interest has typically examined either processes of professionalization or the interplay between oral health and personal identities (Larkin, 1980; Nettleton, 1992). Thorogoods (2000) work on how the mouth acts as a social mediator in establishing sexual boundaries is an interesting example of the latter, though it hardly acts as a guide for service design. Horton and Barker (2009) use critical historical narratives to document how border control and immigration officials frequently draw on the orthodontic constitution of immigrant workers children to question parental abilities, revealing new anxieties within public health which justify the exclusion of racial groups on eugenic grounds (see also Stern 2005; Bashford, 2004). Drawing on both Foucault (1991) and Lupton (1995) they suggest that the “sanitary contract” which sets the parameters for acceptable migrants increasingly focusses on the dental health of migrant workers children. Viewed as both preventable and manageable, dental disease becomes a responsibility and is frequently referred to ‘as a “stain” on their parents caregiving skills signalling unfitness for citizenship’ (Horton and Barker, 2009; 790), ignoring the fact that these families have little or no access to dental care or preventative services.

The above study exposes both the hidden role of dental health in modern eugenic screening and indicates something interesting about contemporary anxieties in Western societies about the sight and smell of the oral cavity (see also Khalid and Quinonez, 2015). While interesting for building a critical understanding of the previously hidden role of oral disease in modern eugenics, this work represents a fraction of the possible research which could inform a social science of dentistry. As such reviews by Exley (2009) and Kleinberger and Strickhauser (2014) both conclude that our sociological understanding of dentistry is extremely limited because of a lack of previous work and an unwillingness to begin a dialogue.
There is an interesting question here about whether we should be advocating for more social science within dentistry or more social science of dentistry, for the former would look to integrate theories and methods into the discipline of dentistry, while the latter would indicate that we should be looking at dentistry as an object of social scientific interest. This is awkward terrain, since the cradle of dentistry is not yet ready to properly integrate social science research into its frame, owing to its biomedical orientation and concurrent publication streams and research outlets. As a result, we see only fractured pieces of social science within dentistry, and even in those instances, they remain marginalised. A more persuasive argument is that we need more social science of dentistry before social science can enter the mainstream of dentistry. We need to know how it works, how it has developed historically, the way it maintains and reproduces itself, and how it relates to the other parts of the welfare state of which it is part. To this end we will be in a better position to see where points of entry are possible and where contributions are best placed, so in the following chapter there is an attempt to bridge this gap, seeking further explanation for the current shape of NHS dentistry, and developing a set of theories and methods which can open debate.
Chapter 5
Stuck in Circulation

So far this thesis has moved through several layers of abstraction. In the opening chapter I described the problem put forward by dental public health specialists and others who see continuing patterns of screening and provision as embedded in ritual and shielded by political indifference. Not only are these practises outdated and wasteful but they are unjust as various dental inequalities persist or emerge which cannot be easily addressed within the prevailing paradigm. The solution to this problem is often framed as one of trying to overcome the political fascination with access to gather enough evidence to support a change in policy, though the analysis which followed demonstrated that the search for evidence tends to coalesce around extremely limited avenues of enquiry. Case studies of the main dental diseases have shown that traditional epidemiology and public health concerns become dwarfed by an individualist pursuit of hard inferences at the genetic and behavioural level, locating enquiry in the oral cavity and shying away from upstream or societal explanations.

Research programmes which have emerged from broadly liberal and leftward leaning policy approaches have also been stripped of context and have so far failed to make a substantial impact. EBD has unwittingly shown support and further streamlined the unhelpful positivism which characterises contemporary dental research, while OHRQoL has fallen foul to its own methodological flaws and provided a common lexicon to produce a similarly stunted and reductive research programme. I have two possible explanations of why this is happening which are outlined in this chapter. The first is that in the absence of an agreed clinical, professional, epidemiological, social or political consensus of what the service should be doing; various well-meaning groups of scholars and professionals have attempted to fill this gap. Where there is a lack of a viable conception of need or service design these research programmes have provided seemingly pragmatic solutions to the problems facing the service and sought to inject this space with sets of tools and research methods to gather, disseminate and implement evidence. Whether this is a new evidence based research programme or socially derived notion of quality of life, each arrives with a visionary ideal, predicting
grand changes to the organisation of dentistry, but fails to achieve its stated goals. In reality each reverts to the trappings of individualism, the genetic and behavioural emerge as the dominant vision, as progressive programmes become tangled in problems of perceived validity, translation and implementation.

The second is that as admirable as these programmes may be, problems emerge because they are entering into an arena where what is possible is already constrained by powerful forces. Researchers must face the prevailing policy preferences of late modern governance that hold a proclivity for market based solutions to social problems, assign economic value to all forms of human endeavour and recognise validity only if it can convincingly associate with economic utility (Navarro, 2009). This is now a well-established critique of neoliberalism, generally defined as a system of political economic governance which seeks to extend the market wherever possible, sees individuals as economic units responsible for their own health and well-being, and encourages human action to become transactional (Crouch, 2011; Daly 2004; Cruickshank, 1999; Dillon, 2004).

The purpose of pursuing this critique is to explain the kind of constraints which socially progressive researchers face in finding support for their recommendations and acquiring the necessary consensus to implement proposals. Under neoliberalism implementation is either conflated, or seen as synonymous with, the further extension of managed markets and the transfer of risk previously underwritten by the welfare state to individuals (see Harvey, 2005; Aldred, 2008; Blinkley, 2006). Unless research can offer either an analysis that aligns with biomedicine or partake in economic analyses that align with cost saving, patient empowerment or “choice”, such research is unlikely to find a sympathetic hearing outside academia (see Greener and Mannion, 2009; Salecl, 2011). So the argument extended across this chapter maps the contours of contemporary British and/or Western neoliberalism, to explain that the shape that dental science has taken over recent decades is a residual effect of the preference for market economics and neoliberal political economy more generally. However, moving the analysis forward I suggest that engaging with the neoliberal critique, if not embracing it entirely, will provide a platform for a more thorough investigation of what the NHS dental service is doing and its future direction.
Admittedly it is easy to get carried away with critiques of neoliberalism; they appear to expose everything that is wrong with Western civilization and provide an alternative space outside the outside to postulate endlessly on the demise of progressive politics (see Daly, 2004; Cahill, 2011; Lewis, 2009; Barnett, 2005). The poor are getting screwed, culture is degraded, high finance runs wild, everything is “flexibilized”, and insecurity reigns for the many as the top 1% amass an incredible pile of wealth. This is all perfectly feasible if not particularly illuminating (Ferguson, 2011). However, I do not want to get caught up in a simple denunciation of neoliberal doctrine as an ideology, but move a step forward to suggest that the system which is often described as neoliberalism is hardly new or radical, but represents a work in progress which spans several centuries of political governance (Gamble, 2005; Rodan, 2005). In doing so I present neoliberalism as simply the most recent attempt to model society in some kind of optimal way that seeks to organise things, organisations and civil society to be as productive as possible. Foucault (2009b; 96) refers to this problem in terms of circulation; ‘the right disposition of things arranged to meet a suitable end’, or stated in less abstract terminology, a new model of governmental practise, which proposes a novel set of arrangements where population, sentient life and its productivity is taken as the referent object of governance (Dillon and Lubo-Geurrero, 2008). Taken in this way neoliberalism is simply among the most recent forms of governance that attempts to order, secure and model sentient life to achieve its optimal potential. In the broadest sense, it is about security, and the way that systems are designed to secure populations.

This is not the typical reading of Foucault used to critique master discourse, but a way of using his later work to understand how neoliberalism is shaping our present, to create a platform for examining how things might be done differently. Doing so requires several steps, and the chapter is organised thematically to move from the archetypical use of poststructuralist analysis which would see dentistry as part of the disciplinary matrix of power, to seeing it as a warped reflection of how neoliberalism attempts to inculcate security. Approached initially through Sarah Nettleton’s (1988; 1989; 1991; 1992; 1999b) Foucauldian analysis of dentistry, it is argued that we need to move beyond discipline that was the hallmark of the earlier Foucault, towards an
analysis of biopolitics in his later work. Doing so allows us to move from critique to enquiry, away from socio-historical analyses of power towards configurations of political economy and its consequences. Through this philosophical transition, it is shown that neoliberal thought emerged as a governmentality which replaced all forms of co-dependency with economic individualism, the re-imagination of the human subject as simply the sum of their human capital. Though what is argued in the concluding part of the chapter is the further we move towards individualism, the more likely we are to see the emergence of restricted scientific research and the further marketization of services. So in the broadest sense the chapter acts as a bridge between the case studies and reviews examined in the first part of this thesis, while laying the groundwork for the empirical study which follows.

5.2 Power & Pain

*The Discovery and Monopoly of a Dental Object*

Sarah Nettleton’s (1988, 1989, 1991, 1992, 1999b) work on dentistry, power and pain is widely credited as the most sustained social scientific enquiry into the practice of dentistry (Exley, 2009; Kleinberger and Strickhauser, 2014). Nettleton’s work approaches dentistry with curiosity, the early chapters of her published doctoral work are couched in a sense of intrigue as she reports on some observational studies with an opening question: ‘Why would anyone employ a sociologist to look at teeth and dentistry?’ (1992; 7) What follows is an exploration of the history of the professional monopolization of the oral cavity through the crafting of a discourse that encompassed the mouth within a professional commitment to end fear and pain. What Nettleton traces is the way in which the major barriers of pain and fear that impeded the dental profession in earlier decades became the primary objects from which the profession accrued power from the turn of the century. ‘Dentists, through trying to eliminate the supposed experiences of pain and fear, have paradoxically ensured the existence of these two concepts’ (1989; 1184). To adopt Judith Butlers’ (1999) terminology it brought into being the thing which it named, allowing the profession to claim expertise
in their treatment and measurement. ‘The mouth and its attendant disease only became part of our reality once it was perceived’ (Nettleton, 1988).

Through this process fear and pain become both manageable and quantifiable (Vasseleu, 1998), and the patient is encouraged to submit to the expert knowledge of the dental professional who manages fear and abates pain rather than incites both. What Nettleton (1989; 1185) calls the ‘mind-mouth-teeth-behaviour complex’ allowed the dental profession to both claim the mouth as its object of expertise and mould agency to align with prevailing dental wisdom. This relocation of expert knowledge did not stop at the patient – clinician interface but allowed for the development of a number of anxiety and pain indexes which could be generalised to the population. Within this schematic the dental profession pursued control over the discourse of the oral cavity and extended its reach across the population, which like Foucaults’ (1975) idea of the medical gaze instituted a “dental gaze” which captured all individuals in its matrix of calculation.

Such an institutionalisation of dental power was initially put to work to discipline individuals to attune their behaviours, to train and supervise their own mouths (Nettleton, 1988), though soon extended outwards. ‘Those people who did not submit to regular dental inspections clearly constituted a hindrance to the dentists surveillance and the very refusal to comply has made those people an object of dental interest’ (1989; 1189). Further extension of dental health specialists into schools and pre-school clinics, drew on a moral discourse of maternal responsibility, extending the reach of the dental gaze into the home (Nettleton, 1991; Horton and Barker, 2009). The family unit was identified as a key site that dentistry needed to penetrate to alter behaviours (particularly that of the mother) to shape dental habits and work on the consciousness of the child at the earliest opportunity.

The above description of Nettleton’s work is distinctively Foucauldian, capturing the diverse way in which a seemingly neutral or benevolent institution is constituted upon a matrix of disciplinary power. All the orthodox concepts are present, the transformation of power that attempts to control the soul or mind and not just the body, the projection of this power across all domains of life through a medical gaze
and the inculcation of the ethic of self-care mediated by expert knowledge/power, so characteristic of Foucauldian inspired analysis during this period (see also Finklestein, 1990; Rose and Miller, 1992). Like the “discovery” of madness, deviance and sexuality described in Foucault’s (1975, 1977, 1984) own work, brought into being through medical discourse, the mouth and teeth are discovered, made the object of medical enquiry and monopolised as the domain of expert professional knowledge.

Another feature of Nettleton’s work is a critique directed towards previous social scientific studies in dentistry which had privileged an analysis of the professionalization of dentistry without considering the mouth and the teeth. Current work at the time had critically examined how the creation of the profession relied on a hierarchy of its workforce, where dentists laid claim to knowledge which ancillaries or “dental dressers” did not possess (see Larkin, 1980; Davis, 1980). Others see dentistry as a reflection of growing demands of capitalism to secure a healthy and disease-free population (Norman, 1980), or as the growing need or demand for dental care from the public, induced by the profession (Birch, 1988; Sheiham, 1977; Richards, 1968). These perspectives are found wanting on two accounts. Firstly ‘while these studies have addressed the issue of knowledge no consideration has been given to the object of dental knowledge’ (Nettleton, 1988: 158). The second is a little more subtle in arguing that ‘not only has the independent existence of the mouth been accepted, but also the experience of disease and the demand for treatment’. As such, Nettleton’s analysis moves beyond previous work by examining how the mouth and teeth themselves operated as the mechanism through which the profession gained power.

This Foucauldian reading appears to capture everything in the development of the dental object and the dental gaze which extended power over it. It was seen as refreshing and original, applied social science in a novel area (see Exley, 2009), though reading these works on dentistry are as illuminating as they are frustrating. Are things really this simple? If the development of modern dentistry can be boiled down to an historical process of defining social objects and encasing them in discourse, there is little left to say. Dentists are by definition power hungry and resistant to change, dental public health workers are the master-weavers of a totalising discourse who burrow into the subconscious and plant the seeds of guilt until individuals conform. Failure to
conform only serves to attract more interest, more surveillance, until the owner of every tooth is accounted for and labelled as either suitably controlled or deviant.

This is admittedly a nihilistic account of what has been a huge contribution to the social science of dentistry, but they are legitimate criticisms nevertheless. Several other important criticisms follow; some of which are the by-product of following Foucault’s (1977) thesis of the disciplinary society and the docile body too closely, and some arise from its interaction with the subject matter. The first is that within this discourse only those creating it are attributed agency, patients are simply docile subjects, whose minds are encapsulated, leading to a discursive essentialism that implies an inverted Cartesian dualism (see Shilling, 2012; Crossley, 2001; Vasseleu, 1998). It is not that the mind transcends the body as in Descartes (1641) famous articulation, but that the mind exists only as a subset of discourse, which perishes along with the body. The mind is distinct from the body only in the sense that it is the mechanism through which power can anchor an otherwise unruly body to conform.

While I have sympathy for Nettleton’s approach it raises some important questions regarding the nature and status of this “dental object”. The subsequent analysis seeks to demonstrate how this object was re-imagined as a perverse but manageable object, though in the process the mouth becomes somewhat disembodied (Vasseleu, 1998). As it is illuminated and brought to the fore of analysis, the body of which it is part drifts into the background and the separation of the mouth from the body that this work seeks to critique is oddly reified. The “body” in Foucault’s early work is denied sensuous materiality in order to emphasise the dehumanising processes associated with modernity (see Turner et al. 1998; Shilling, 2012). The “mouth as discourse” seems to accept this totalising discursive model and follows it to the letter, squeezing out reflexivity for the sense of theoretical clarity. Subsequently we are faced with another problem: What are we supposed to do with this analysis? It contains no implications for policy, there are no alternatives postulated, should we try and destroy this power or simply recognise its existence and live with it?

There are two further criticisms, which seem particularly apt in reviewing this literature and summarise some more fundamental problems with the approach in general. In
relation to my point above about the purpose or direction we are pointed towards in studies relating to institutional power, James Ferguson (2011; 62) writes:

‘This is a reasonable thing to do, but too often such a simple demonstration is apparently seen as the end of the exercise. Power has been “critiqued”, an oppressive system has been exposed as such, and that seems to be taken as a satisfactory end to the matter. This impasse is related, I think, to a wider predicament that progressive or left politics finds itself in today. The predicament is that the left seems increasingly to be defined by a series of gestures of refusal - what I call “the antis” - anti-globalization, anti-neoliberalism, anti-privatization, anti-Bush, sometimes even anti-capitalism - but always “anti”, never “pro”.

This is a reasonable critique and nicely captures the way which researchers enthusiastically embrace all kinds of anti-system analyses to expose power, but rarely accompany their critiques with pragmatic proposals (see also Tobias, 2005; Philo, 2012). Based upon these charges the discursive power model could be accused of being guilty of exactly the same charges as the new gene seekers whose work shows something interesting but lacks application.

A further concern is the general context of Foucault’s work; the period within which he was writing and the period he wrote about. As widely discussed in the secondary literature the medical gaze, Panopticon and docile body theorised by Foucault were seen as the very foundations to the emergence of modernity. Described as ‘an anatomy of Fordist regulation’ (Frazer, 2003; 160; Lemke, 2003; 2009; Gane, 2012; Woods, 2003; Anderson, 2010), these metaphors of disciplinary power represent the making of individuals in the image of modernity. The concern is that these theories accrued popularity just as the political landscape was shifting:

‘It is only now with hindsight becoming clear, this was also the moment at which discipline’s successor was trying to be born. The irony is plain; whether we call it post-industrial society or neoliberal globalization, a new regime oriented to “deregulation” and “flexibilization” was about to take shape just as Foucault was conceptualizing disciplinary normalization’ (Frazer, 2003; 160-161).
The implications are clear, if we accept that Foucault – and by extension others influenced by him – are using theories developed to dissect the inner workings of Keynesian social democracy, they have become relics of a time gone past. By the mid 1990’s theorists were lining up to resign Foucault to history, asserting that his theories were too inflexible to be of use in “liquid” modernity, characterised by more complex forms of control (Deleuze, 1995; Bauman, 1998; 2000; Hardt and Negri, 2000; Lyons, 2003; Bigo, 2008).

The point here is that Nettleton’s work on dentistry, much like other studies using Foucault’s earlier theories, becomes subject to scrutiny on both its practical and historical relevance, and emerged at just the time when such forms analysis were brought into question. Whether we should simply move on and dispense with Foucault has been hotly debated since the publication of his later work (Lazzarato, 2005; Ferguson, 2011; Weiskopf and Munro, 2010; Marsland and Prince, 2012; Lyon and Bauman, 2013). Just as critics were ready to bury Foucault (metaphorically), the English publication of his work on governmentality, security, liberalism, neoliberalism and biopolitics (2003, 2009a, 2009b) provided a set of theoretical concepts finely tuned for contemporary analysis of the state and market, predicting many of the features of late-modern Western societies and postulating on their future. While I do not disagree with his critics that there are some rifts and potential contradictions between the earlier and later texts (see Bauman, 1998; 2000; Bigo, 2008), the argument pursued in the following section is that through an analysis of these later texts we can draw a line through “anti” critiques of power to build an explanation of how neoliberal biopolitics is driving a wedge between the scientific and practical worlds of dentistry. In doing so, the gulfs between policy, research, practice and implementation are reconfigured as residual effects of late modern governance and the direction of a refreshed approach to the examination of NHS dentistry is outlined.
5.3 Between Discipline and Biopolitics

*From Critique to Enquiry*

As the acclaimed psychologist Gordon Allport (1937, 1950) warns on several occasions, in the social sciences and humanities we rarely solve problems we just get bored of them. So rather than dispensing with Nettleton’s account as historically irrelevant, it is worth seeing what can be taken forward. I am reminded of Foucault’s (1977; 202) comment that ‘he who is subjected to a field of visibility, and who knows it, assumes responsibility for the constraints of power’. There is a timeless quality to this statement, which reminds us that visibility is a trap that once accepted we help to construct (see Bauman and Lyon, 2013). Despite all its problems, I think this is what is at the heart of Nettleton’s account of the dental object; that once the mouth is made visible by the holders of power, we are impelled to take responsibility for it. The genius of power is to make subjects do what power would otherwise have to do itself, and this is as applicable to dentistry as to many other disciplines.

The problem is that dentistry is portrayed as a kind of ‘totalising institution’ to take from Goffman (1961) akin to a psychiatric ward or prison matrix, though in the final sections of her major work on dentistry, Nettleton (1992) does argue that this system she describes was a “dental dream” that was always something to be worked towards rather than already existing. In the final realisation the dental profession would only supervise the mouths of subjects who already supervised their own mouths, and this remains the ultimate aim of preventative dentistry. In this sense, we are enlightened to a deeper understanding of why dental habits and patterns of over-screening are so difficult to break or reverse despite changing epidemiological trends; they are not simply a result of “demand” (supplier induced or otherwise), professional resistance or political indifference, they are (in part) a reflection of the development of modernity. No wonder academics are still throwing up their arms in disbelief after decades, exclaiming that the system is hopeless and beyond repair, since they are fighting against a system much more embedded than they might realise. For all the sense that the proponents of a shift towards a dental public health model speak, all appear to appraise the policy process as if it is, or at least should be, pluralist in nature, meaning
that they are frustrated with the fact that NHS dentistry does not reflect the balance between evidence, collaboration and implementation, without realising they are grappling with a feature of modernity per se.

Here, however, we should depart from this line of critique, because as much as it reveals about the frustrating impasse between knowledge, science and implementation, the answer is only partially exposed through this reading. Instead, we should move between discipline, as a feature of modernity that works to make agency conform, towards biopolitics, which refers to a strategy or set of methods for examining how populations are governed collectively. Discipline is individualising, biopolitics is massifying, addressing phenomena collectively (Ingram, 2011). Amongst other things this implies a move away from a discourse of professional power towards an analysis of the mechanisms of control that power employs when it reorganises its apparatus’ to address species life as its referent object (Dillon and Lubo-Guerrero, 2008). However, I am sensitive to the fact that some scholars have gotten a little over excited about this swing in Foucault’s’ work, often overstating the conceptual shift (see Chappell, 2006) and presenting governmentality, biopolitics or neoliberalism as if they are sets of objective truths. I do not believe that this is an accurate portrayal, and as Foucault (2009a) argues in the latter part of *The Birth of Biopolitics*, this later work did not seek to identify exactly how governments were organised the way that they were, but to expose the regimes of truth that could underpin various governmentalities and bring them into reality. In essence we are asked to examine the “regimes of truth” that underpin any given set of institutions. In Foucault’s terminology; “veridictions”, referring to the constellation of discourses, modes of thought and ontologies through which we can ‘establish the intelligibility of this process by describing the connections...... establishing the intelligibility of reality consists in showing its possibility’ (ibid; 33 – 34).

My understanding of Foucault’s later work is that he is tracing the numerous veridictions that underpin a central problem from the late 1600’s onwards; that of how to organise economy and society to be as productive as possible. Mercantilism, and later industrialisation, emerged as the key driving forces of modernity and thus constituted the major problem field for the bearers of power (Aradau and Blanke,
2010). The state could no longer rely on its ability to “take life” it needed to “make it live”, and doing so meant acquiring the knowledge to understand and measure life to make it visible. This is what Foucault indicates when he speaks of “political economy”, which ‘refers to any method of government that can secure the nations prosperity... a sort of general reflection on the organization, distribution, and limitations of power in a society’ (ibid; 13). The hinge is that this admittedly vague notion of political economy finds its expression in ‘a number of economic problems being given a theoretical form’ (ibid; 33).

It is this idea that methods of government attempt to secure populations, which is worth examining for a moment. For what is being argued here is that methods of government, be they Marxist, Keynesian or neoliberal are all methods of government which take species life as their referent object and attempt to “secure” it. Security, in this sense is not about existential threats, but about how to manage a social body that is both free and an inherent danger to itself (Bigo, 2008). Under any given system people need to circulate; this is to say they need to be able to move between jobs and locations; they require services to enable their health and prosperity and may need to move across borders. Similarly, arrangements need to be in place to secure the movement of things. What we might call the logistics of a given social body, the arrangements between businesses, services, contracts, citizenry and the distribution of responsibilities. ‘The walled town of medieval ages was replaced by a town which made possible the circulation of commodities, people and even air’ (Aradau and Blank, 2010; 1). Roads, sewers, street lighting, town planning, emergency services, regimes of taxation and so on are all in place to ensure that the system can exploit freedom but contain “bad circulations” such as crime, disease or famine. Whereas discipline works at the individual level, security watches from a distance and ‘establishes an average considered as optimal on the one hand, and, on the other, a bandwidth of the acceptable that must not be exceeded’ (Foucault, 2009b; 6). When we talk about biopolitics we are necessarily also talking about security, we are referring to the methods used to allow for “good circulations” while curtailing the bad (Dillon and Lubo-Geurrero, 2008).
At the centre of this is that the economy becomes in the broadest sense the object of security and the “politics” of security regards how to organise relationships within the economy. What emerges in the industrial era is the theorisation of economic relations and debates about how to get ‘the components of reality to work in relation to each other, thanks to and through a series of analyses and specific arrangements’ (Foucault, 2009a; 47). These abstract relations are related to various methods of economic management that seek both security and productivity, though each “system” proposes radically different formats to address the problem. As is well known Marxism sees society best secured through the collectivisation of the production process to equally distribute economic risks. Keynes (1931) theory, which largely dictated the theory of the economy which underpinned post-war social democracy, accepts the instability of the economy and idealises a strong state that fixes certain economic variables, and insures labour against the irrationalities of capitalism. Meanwhile, physiocratic liberals from the 1700’s and 1800’s are able to accept certain social deficits in the short term in the belief that the market will, in the medium term, naturally address circulation problems and deliver equitable solutions with minimal state intervention.

These great debates that took place across the nineteenth and twentieth century were based on how to distribute and limit power, how to organise relationships and how to secure territory and population. The theme of circulation, particularly that of how money and goods would circulate, were the cornerstone of all these debates (see Hayek, 1931, 1935; Keynes, 1931). But biopolitics, the logical extension of security that seeks to calculate, map contingency and contain present and future unknowns is omnipresent in the backdrop of them all. As Marxist, or at least socialist economies, ran into production problems, power became obsessed with monitoring worker output and the circulation of second order goods (O’Neill, 1996; Meadowcroft, 2003). This led into grossly inflated administrative bureaucracies, which were as powerful as they were blatantly obtrusive. Meanwhile, the circulation envisioned by Keynes in many of Europe’s social democracies, could not contain inflammatory class relations, nor could it retain its grasp over economic variables as external economic pressures bore down and oversaw its collapse (Shapiro, 1989; Giddens, 1998).
What is at stake in looking at the emergence of modern forms of social and political organisation in terms of the management of circulation for the sake of security is that it is never (and cannot ever be) complete. More importantly, each “system” which has proposed a remedy, whether this is Marxist, Keynesian or broadly liberal, cannot satisfy the conditions of both freedom and security and biopolitical tendencies run wild attempting to statistically contain the threat to order (see Elden, 2008). So what we see are “circulation problems” where things do not fit together and the political methods used to contain threats and manage contingency activate a number of unintended consequences.

What we see emerging in contemporary neoliberal regimes is really a new set of economic and political arrangements which present novel ways to improve the circulation of people and things and redistribute responsibilities, accompanied by new sets of security technologies to manage and oversee circulations. We see above all else a turn towards the individual as the primary economic unit and economic analyses extending over what was previously considered social terrain. As Foucault (2009a; 236, italics in original) explains:

‘Homo economicus is an entrepreneur, an entrepreneur of himself. This is true to the extent that, in practice, the stake in all neoliberal analyses is the replacement every time of homo economicus as partner of exchange with a homo economicus as entrepreneur of himself, being for himself his own capital, being for himself his own producer, being for himself the source of [his] own earnings.’

This individual unit, or homo economicus as Foucault calls it, sits as the centrepiece of neoliberal thought, and from the 1960’s onwards we see all kinds of analyses which model all forms of human behaviour as if they were economic transactions. Gary Becker’s (1960, 210) analysis of marriage, divorce and fertility, where marriage is construed as ‘psychic income’ and children are ‘considered a consumption good’ exemplify this appetite to extend economic analysis across social forms. The next logical step is that human actions are considered little more than the sum of individual interests (Buchanan, 1969).
What is mapped by Foucault (2009a) is a kind of economic imperialism which models human behaviour as merely the sum of human capital. The attempt to secure the population begins with the task of individualising the social order, weening people off the state so that they bear responsibility for all their actions. Margaret Thatcher’s comment that ‘economics are the method...... the object is to change the soul’ (quoted in Garnett and Lynch, 2014; 451), relies on the conception that if people can be encouraged to see themselves as economic units they will be cleansed of state dependency. The circulation envisaged here is one of individualised bearers of risk moving through a social terrain that is considered an economic playing field. This extends to businesses and services, as government control is seen as necessarily stifling to the proper free circulation of goods and services. Privatization and flexibilization are the proposed methods, the introduction of markets to encourage providers of all services to see themselves as economic actors who serve “customers”. Individuals are no longer patients or recipients, they are consumer-citizens who will utilise their social capital in such a way that markets will necessarily coalesce efficiently around the collection of expressed individual interests.

The point is that while the true “economic method” has never been fully realised, neoliberals have posited a potential solution to the problem of capitalist circulation that envisions circulation in terms of formalised markets and consumer-citizens. However, the turning point is that the state does not disappear but realigns itself in the same economic vision. Politics becomes synonymous with inserting markets wherever possible and overseeing their proper functioning; it is ‘an active policy without state control’ (Foucault, 2009a; 133), but as with other forms of circulation, deficits appear, humans do not act as they should and markets fail. So the state takes on the role of supervisor of the economic order and deficits and inefficiencies are singled out as elements that require correction. There is a necessary trade-off between the idealised circulation of people and things and the thirst to keep control, to watch, to count and police the social order that is being created. This is what Dillon and Lubo-Geurrero (2008) term the ‘biopolitics of security’, which is never satisfied to let go of control (see also Deleuze, 1995). What we see extending over the neoliberal period is a set of mechanisms expected to work to market logic with an obsessive need to control them,
and all services are expected to communicate with each other and with the state in abstract market formulas.

5.4 NHS Dentistry and the Biopolitical Era

*From Theory to Research*

What I have presented in the above is an account which demonstrates the relationship between an organisational ontology and the antagonisms inherent in its application. This is the analytical step required to bring Foucault into the present, allowing us to see how biopolitics seeks to remedy the deficits that arise from managing circulations. Neoliberal biopolitics refers to the way that power retains control by transforming services and citizens into units that can be mapped onto a market matrix, through the insertion of numerous methods of measuring, standardizing and calculation. The contradiction that sits at the heart of the neoliberal project is that to have markets means that everything must be able to be assessed in economic terms to satisfy power. This is the curious face of the present; an obsession with cost-benefit analysis, econometrics and standardization. Services which have been marketised are also expected to be standardized, performing universal activities that are visible and accountable.

However, biopolitics always has one eye on the “exterior event” (see Neal, 2008), and all manner of contemporary problems are recast as “risks” that need to be accounted for. Influenza, HIV, or TB, for example are “securitized” (see Lakoff, 2009; Elbe, 2005, 2008), no longer human tragedies but possible economic disruptions. The environment, in the broadest sense becomes a danger that must be calculated and detailed. Adverse weather conditions, human migratory patterns, obesity, or drug use are recast in terms of their probability to damage the economy (see for example Osborne, 2013). It has become common place within the media to hear about how much alcohol abuse costs the NHS or how much it costs the economy in days off work. These types of statistics cloud human life, pointing towards how fragile the
freedom upon which the system rests can be turned upside down by deviations from normal distributions.

What we see here are “bad circulations” being securitized and subjected to increasingly detailed analyses, though this leads into a system that demands that everything be standardized and economically visible so that it can be controlled and factored. The existence of human frailty becomes a systemic risk; biology is slowly transformed into a string of economic conditions. Commentators from broad critical spectrums are now asking what impact this is having on the shape of biomedicine. At the far end the individualist pursuit of hard inferences and robust statistics is seen as a residual effect of the persistent hegemony of neoliberalism (O’Manrique, 2004; Rose, 2001). At the very least neoliberalism is agnostic about poverty or inequality but gives a free pass to genetic and behavioural explanations. Some argue that biomedicine has become so entwined within the logic of individualism that social science or holistic enquiry cannot penetrate it (Caduff, 2012; del Consuelo Chapela, 2013). Each step towards finer biomedical expertise is rewarded for its clarity not for its application.

To draw back to many of the analyses presented in the earlier chapters, much of the biomedical literature that draws on genetic or behavioural explanations for disease align very succinctly with the imperatives of neoliberal biopolitics. Dental science presents human biology as strings of robust and abstract connections, and while they are oddly quite useless, they are valued because of their clarity and easy manipulation. More importantly, the social and political determinants of disease are not only unclear and difficult to elucidate with the same level of clarity, but are viewed as the responsibility of individuals rather than deficits emerging from the system.

To be perfectly clear: Neoliberalism is not doing this, it is not an objective thing, but a set of discourses, prerogatives and interlinking programmes that encourage this kind of scientific endeavour and devalues others. Biopolitics is not a master discourse, but a whole series of methods which seek to tease out and measure social life, so that neoliberal ideals can be extended out and circulations can proceed naturally. Within this idea of “neoliberal biopolitics” we can see an attempt to roll out market ideals and the economisation of social life, while seeing how power seeks to install all manner of
security mechanisms to oversee and contain it. This goes some way to explaining the current shape of dental science, but also lays the foundations for the study which follows. For what emerges from the study is that over the last thirty years, frontline providers of NHS dental services have increasingly been pushed into quasi-market style relationships, required to streamline and standardise every clinical action and encounter. As their role as professionals is increasingly subject to economic evaluation and statistical oversight, the practise of dentistry gets increasingly caught in a void of counting and monitoring. So in the chapter which follows, a methodology is laid out which can move these theoretical insights into a workable format for further empirical enquiry.
Chapter 6
Theory and Method

In the previous chapters I have so far outlined a set of problems related to the inequitable provision of NHS dental services. Moving beyond the related problems of over-screening, inequality and political stalemate, further problems were identified in the increasing move towards specialism and the concurrent structure of dental knowledge. The patchwork research and self-limiting knowledge streams are shown to be intimately tied to a system of political-economic management that sees things in terms of calculation, probability and risk management; the realisation of the contradictory forces of late modern government which insist on precision and visibility at the cost of context and application. The picture becomes organised and manageable, its features are explicit and concrete, and as a result it attests a claim to represent progress but is trapped in regression. This is not to attribute fault or point towards a failure of dental professionals, government ministers, publishers or researchers, but to point towards a system in which all of the above are drawn into a self-referential set of tendencies; what Ian McGilchrist (2011) calls the “hall of mirrors effect” where systems of knowledge organisation become trapped in a system within which ‘everything refers to something else... but never breaks out into reality’.

It is this construction of reality as abstract and virtual that is so well captured in Foucault’s (2009b) expression of biopolitics, which exposes the late modern fascination with the governance of life in terms of calculable economic relationships. It understands things in categories which can be subjected to calculation, comparison and risk analyses. The precise trajectory is unclear, yet in our late modern societies it is not only individuals, organisations and services that must conform to this attuned visibility but the state itself becomes entwined within its own discourse (Ferguson, 2011). The state becomes, to use an admittedly vulgar neologism, governmentalized; as it seeks coherence with its own self-limiting vision, aligning its own logics to receive and communicate in the same abstract formulas that it imposes on the services provided on its behalf. So too must individuals become numbers (or at least units)
who tick boxes and make choices within matrices that exist prior to their engagement with them. As argued in the previous chapter the individualization of agency is a reflection of this tendency, inferring a set of desirable behaviours that make patterns of social behaviour more predictable, while simultaneously trying to nurture a falsified flexibility upon which innovation and progress are thought to extend (Veitch, 2010).

In the previous chapter the argument flowed from recognition that these various forces are attempts to secure the effective circulation of the population. More aptly, they are tools required to govern a population conceived of as free but constantly at risk from the dangers that arise from that freedom; a paradoxical complication at the heart of neoliberal biopolitics. Here the operative security is rewritten as a technical exercise in mapping externalities and managing contingency, which ‘is thus a dispositif of circulation in a life environment’ (Bigo, 2008; 107, emphasis in original). We are free, but dangerously free, required to innovate, produce and consume, but always a risk to ourselves and others and therefore the whole system relies on an over-arching framework of securing technologies that watch, manage and constantly formulate probabilities (Bauman and Lyon, 2013). Drawing on Foucault’s (2003) work in Society Must be Defended, Elden (2008; 21) calls this process of obsessive statistical calculation and the transformation of individuals into self-sufficient and visible units, ‘strategies of waging peace’, while Dillon and Reid (2010; 148) dryly state; ‘It is not so much what life currently is as what life may become, which is the preoccupation of biopolitics in the age of life as information’.

6.1 Life on the Edge or Within Biopolitics?

In the above we have a brief overview of the theoretical framework which sees biopolitical management as the prevailing framework for governing population in late-modernity. Governmentality refers to the multiplicity of discourses and mechanisms that instil appropriate conduct and behaviour into people and institutions, while security acts as the logical extension, mapping the terrain of possibility, in a constant state of contingent planning. However, there is a problem here, at least as far as the
literature flowing from the social and political sciences are concerned, in that these forces are often described as if they are omnipotent. Too often it appears that the forces of neoliberal biopolitics cover our worlds, leaving nothing untouched, and the resulting analysis is a rather nihilistic picture of discursive coherence. For example Peterson (2003; 197) argues that ‘governmentality scholars continue to privilege official discourses in their studies and overlook the messy actualities of social relations’, while O’Malley et al. (1997; 514) voice concerns about the ‘ritualized and repetitive accounts of “governing” in increasingly diverse contexts’ (see also Stenson, 1998; Garland, 1997; McKee, 2009). I believe that this problem results from a worthy analysis which suffers from a lack of practical research. The literature on governmentality and biopolitics in the social sciences swells with each new set of publications, though what is sought is most often theoretical refinement with very little empirical work to establish it as a field of research.

This has been one of the prevailing, and withstanding critiques of Foucault’s own work, since his research primarily rested on analysis of archival documents and historical texts (Gordon, 1991). Despite the objections outlined above appearing over a decade ago, this particular problem has not been adequately addressed and the critique has deepened and widened, with further criticism claiming that ‘the monolithic conceptualization of governmentality…. found in many of the studies in governmentality can be linked back to Foucault’s own history of governmentality’ (Biebricher, 2008; 364). The foundation of this criticism is that since Foucault’s work is drawn from predominantly secondary sources and interpretive analysis, the way it has been adopted as an all-encompassing and comprehensive analytical framework for modelling sentient life involves a further philosophical step that remains unacknowledged.

Furthermore, the fact that decades span between these publications yet the same criticisms emerge implies that there is both an empirical and methodological hole in the literature that needs to be addressed. So before moving the discussion towards the technicalities of the research design and the formalities of data collection and analysis, I would like to draw attention to the methodological contributions of the research and development of the literature more generally. In turn this relies on providing a
response to two primary concerns expressed by critics of Foucault’s later work. The first, already outlined is that the literature concerning biopolitics and governmentality is trapped by a form of discursive essentialism (Schilling, 2012) which limits its ability to be of any use for empirical research design. The second is that biopolitics and governmentality are “thin” theories that have no attached causal models or testable hypotheses, and studies which have employed these concepts in empirical research ‘deliberately concern themselves with “minor aspects” of governance such as crime or alcohol consumption’ (Merlingen, 2011; 151). Perhaps more concerning is that the latter form of research accepts the broader picture as given and merely seeks to tease out its workings at a lower level.

There is a rather ugly shadow here that plagued Foucault’s (1977) earlier work in Discipline and Punish, which gave birth to a skewed research programme that promoted grand theoretical overtures of the disciplinary society on the one hand and studies examining the minutia of resistance on the other (see Frazer, 2003). Unfortunately there is an element of truth behind this distinction, what McKee (2009) identifies as research focussing on the discursive field which seeks to examine configurations of power and rationalities of governing, and research regarding interventionist practices examining individual responses to the aforementioned rationalities (see also Dean, 1999; Lemke, 2001; Peterson, 2003). While the former has dominated the theoretical literature, the latter has received less attention. Within the medical humanities, authors have sought to illuminate the lived experience of ill-health as subjects become entwined within biopolitical regimes that rewrite existence in terms of a biological identity. Caufen’s (2004) study of living with Type 2 Diabetes offers a chilling account of how sentient life becomes synonymous with the biological state of the human body mapped as a set of statistics and risk factors. Clinical dialogue becomes a discussion of the significance of blood tests and “care” is supplanted with the transfer of risk through a narrative of self-care (see also Novas and Rose, 2000; Rose, 2001). In a similar vein, Nguyen (2005; Nguyen et al. 2007) speak of “therapeutic citizenship” in relation to HIV and TB, where infected individuals learn to live through diagnostic categories, urged to understand their actions and behaviours in relation to those categories, while also disciplined to recognise the risk that their existence poses to the vitality of the population; ‘a set of claims and ethical projects
that arise out of the conjunction of techniques used to govern populations and govern individual bodies’ (Nguyen, 2005; 126).

Such insight is useful because it shows us how biopolitics translates onto bodies through inserting categories of risk into lived experience. Others, however, have been more interested in the way in which individuals are unable or unwilling to accept notions of biological citizenship. Recent studies have looked at how individuals have sought alternative ways of managing disease (through spiritual or traditional methods, for example), and how the forces of biopolitics seek to extinguish or rework such alternatives into the frame of Biopower (Marsland and Prince, 2012). Such studies seek to tease out the edges and margins of Biopower, drawing attention to both its practical and theoretical limits, as have others who have demonstrated how individuals seek to negate governmental discourses of responsibility and choice, showing the inconsistencies in how people both embody and reject such forms of distant governance (see Crawshaw, 2012). Further research has sought to track how biopolitics deals with that which is unknowable or unable to be captured. Wald’s (2008) study of so-called “super spreaders” – invisible and undiagnosed individuals with drug resistant TB – shows that even those who are not captured in the medical matrix are still pulled into the calculation.

6.2 The Governmentality / Research Dilemma

Evident in the previous discussion is a tendency for scholarship working with themes of governmentality and biopolitics to split into separate research programmes, one which privileges the discursive realm and the other which seeks to illuminate lived experience or resistance, leading to a dominance/resistance thematic which echoes that of earlier Foucauldian research. However, it is precisely this polarity between the macro political economy of biopolitics and the micro sociology of resistance that I want to challenge. More specifically, I want to move the analysis away from the macro picture which sees only subjects bound in discourse and the micro picture of subjects resisting those discourses, towards a schematic that can be of use to critical social
policy analysts. This relies on two observations that are pursued in this section. The first is that it is relatively hollow to outline how abstracted rationalities of governance are said to work without proceeding to analyse how they actually work in practice (see Garland, 1997; Peterson, 2003; Stenson, 1998; 2005). The second is that in order to assess the coherence of the discursive realm we must be able to see how it is interpreted by various actors in the field. The realisation of these aims are mutually dependent but it is argued here that there is potential to resolve this problem if studies in governmentality and biopolitics integrate ethnographic and qualitative research into their analyses, moving from critical theoretical posturing towards active engagement with policy reform.

Of course, this is not an entirely novel set of claims or arguments. As previously discussed, Peterson (2003; 198) pointedly remarks that: ‘In neglecting social relations in their analysis of the political, particularly the exclusion of contestation and diversity among the governed, governmentality scholars have limited their ability to contribute to change’. Within the current literature, analysis rarely makes any move towards ‘anything approaching a transformational politics’ (Philo, 2012; 498; Sibley and van Holden, 2009; Tobias, 2005; Thrift, 2007). Such gloomy criticism gives the impression that Foucauldian scholarship lies beyond the scope of meaningful contribution to social change, and will forever be part of a dysfunctional leftism where one form of domination can only be displaced by another (see Simons, 1995). ‘Does it not lead to the following dilemma: either the acceptance of the system or the appeal to an unconditional event, to an irruption of exterior violence which alone is capable of upsetting the system?’ (Burchill et al. 1991; 53).

The above question, posed to Foucault in an open invitation, exposes exactly the kind of interpretation that has been the cornerstone of Foucauldian scholarship, namely the dominance of discourse and the impossibility of emancipation from it. The question is neither incorrect or poorly stated and in response Foucault (1991; 53) answers; ‘With diabolical pertinence you have succeeded in giving a definition of my work to which I cannot avoid subscribing, but for which no one would ever reasonably wish to assume responsibility’. Though the remainder of the answer unfolds in a winding fashion, exploring the relationship between political praxis and scientific discourse, three
prominent themes are worth examining from the point of an interested researcher. The first is the statement that ‘my work takes place between unfinished abutments and anticipatory strings of dots..... What I say ought to be taken as propositions, game openings where those who may be interested are invited to join in' (ibid, 73 - 74). The second is a definition of progressive politics as ‘one which sets out to define a practise’s possibilities of transformation and the play of dependencies between these transformations’ (ibid, 70), and finally an emphasis on ‘the diversity of systems and play of discontinuities into the history of discourses' (ibid, 61 emphasis in original).

The prose here is concerned with the interplay of political and scientific discourses of progress, the conditions that make particular forms of knowledge and institutions possible, though the emphasis is not placed upon their coherence but on their fragility, their equal possibilities of non-existence, and the possibility of change. The quotes above may seem out of character for Foucault, especially given the monolithic and essentialist way that his major works are presented and interpreted. However, as Simons (1995) argues it often appears as if there are two Foucault’s ; one who speaks of master discourse and implies there is no escape, and one who playfully denounces such coherence, keen to emphasise the discontinuous and contingent nature of the work. In the latter analysis there is no “system” but multiple systems that may be of different origin, which clash unexpectedly, revealing where dependencies for coherence may be at their weakest.

From a methodological point of view the implication is that the current use of Foucault’s texts to examine abstract rationalities of power, with the corollary subset of research which tends the voice of the repressed - not a great distance from the structure / agency problem that plagues social science more generally - is a matter of misinterpretation on the part of secondary researchers rather than an inherent feature of the theory. Of course this is a matter of interpretation in itself, though several commentators have been keen to issue warnings that such top-down interpretations of Foucault do not fit comfortably with the way power was construed in his later texts (see Rutherford, 2007; Marston and McDonald, 2006; McKee, 2009; Ferguson, 2011)

Advancing this argument from a broader social policy perspective, Hunter (2003; 331) comments that this tends towards seeing ‘the social as a machine’ that simply spits out
subjects consistently, assuming that power works in uniform ways and always realises its effects (Marston and McDonald, 2006; Clarke et al. 2007; Clarke, 2005). More specifically it glosses over the problem that policy making is full of contradictions and inconsistencies and fails to recognise the ‘gulf between rhetoric, implementation and practice, and the fact that outcomes are often partial, uneven and unpredictable’ (Flint, 2002; 621).

This all leads to rather a lot of problems for those who wish to integrate Foucault’s work into social policy analysis, though it also opens up several useful levels of enquiry. For example if we recognise neoliberalism as a form of biopolitical governance, which seeks to align numerous actors and institutional forms into a newly imagined market based schematic, it should be of equal import to examine how it tries to do so, whether it succeeds and where there are points of convergence or antagonism (Habermas, 1970). This implies advancing research into arenas where institutions and actors are subject to numerous competing discourses, to enquire about how they manage the contradictory forces of biopolitical governance, illuminate possible consequences and ask how things might be improved. This seems in keeping with what Foucault (1982; 780) had envisioned in a discussion of the relationship between empiricism and discourse analysis:

‘[A] way that is more empirical, more directly related to our present situation, and one that implies more relations between theory and practice. It consists in taking the forms of resistance against different forms of power as a starting point..... Rather than analysing power from the point of view of its internal rationality, it consists of analysing power through the antagonism of strategies’

What is suggested here is that the role of antagonism and contradiction might take precedence over abstract theories and overtures. This leads us away from several problematic notions inherent in much Foucauldian analysis, namely the top-down perspective of governmentality and resistance as a footnote (Clarke et al. 2007; McKee, 2009). In turn this situates the site of research inside the area of interest, not theorising from above, or exploring the exclusions and margins, but the arena in which multiple forms of power are interpreted and contested. This is an important, albeit short, step forward for critical social policy, since it is able to move beyond
conventional critiques that the concept of biopower designates a merely diagnostic or heuristic set of theoretical tools. Instead, research can highlight the ways in which various forms of power constrain or enable social or institutional change, collapsing the dichotomy of so-called “critical” and “problem-solving” (Cox, 1971) approaches into an approach which is both a study of the limits and constraints imposed upon us and an experiment in the possibility of moving beyond them (Taylor, 2010).

6.3 Where It All Began

At the end of this chapter I intend to return to exactly how the theory and method have blended throughout this project and informed the analysis of the data, though before engaging that particular debate, it is worth drawing back to the subject of the thesis to outline how the research was designed and how the initial research questions were formulated. For in much of the above, the theory I have presented appears as if it was formed prior to the research, when that could not be further from the truth. So by means of offering an explanation of what exactly I have done and why, requires moving back to the original problem of the inequitable use of dental services and the search for a potential solution.

As has been adequately outlined in the opening chapters of the thesis, the central problem here is that the NHS dental service is not operating as it should. Epidemiologically speaking disease is falling, inequality is rising, and neither professionals nor patients appear to be particularly happy with how the service is organised and delivered. As part of a wider push to foster links between the social sciences and dentistry, and the accompanying hope that such an endeavour might help guide towards a potential solution, I obtained a grant to look in more detail at the problem. The brief was, to say the least, brief, and since there was little social science on the subject there was also very little to build on. However, after sifting through the available literature there appeared to be an impenetrable problem that there was not enough evidence to make objective diagnostic decisions about many aspects of basic dental care, which is compounded by the assumption that current patterns of delivery
may be influenced by a number of other factors such as tradition, business interests or just plain greed.

The time between recall periods was (and remains) the most obvious, with bitter disputes erupting periodically about whether someone actually requires a check-up or screening. The status of children’s’ oral health, the elderly, individuals with co-morbidities, pregnant women and others all are regularly flagged to indicate the complexity of the problem, though to brush all that to one side, the “real” problem here is that no-one could decide on who should decide (see Speirs, 2008). While there is broad (though by no means unanimous) support for the idea that a centrally funded service should make efforts to rationalise the service based on need, what that need is and who should make decisions about it remains a matter of dispute. Ozar (2006) believes that dentists in their professional capacity should be able to draw up suitable guidelines, though others disagree on the basis that their decisions may not be objective or because it may be beyond their scope of expertise (see Chambers, 2006).

In contrast, a growing cohort of researchers argue convincingly that dentists may not even be required to screen healthy patients, calling for direct access for many basic dental services to qualified therapists or hygienists (Brocklehurst et al. 2011). Others have called for further research to establish policy guidelines through the EBD model, though that has been questioned on the basis of its overly scientific approach, “ivory tower” academic style, slow progress, dependence on expensive and inconclusive trials and so on. Others worry that patients should decide, or at least be involved, since they are the ones receiving care. A recent OFT report clearly advocates this, as well as direct access, though the issue of need is fudged in this instance amid calls for competition and a demand led service (OFT, 2012). NICE has also issued guidelines (2004; 2012), though how far they have been integrated into practice is a matter of further debate.

Despite these potential conflicts a curious development across all the specialties of dentistry are emerging treatment indexes, indices, case mix tools, triage systems and pathways, each of which is purported to rationalise care and allocate resources efficiently. Explicitly or otherwise all these various tools appear to be designed to address the concept of patient need, acting as rationing tools or priority setting
instruments to ensure that the correct patients are seen by the correct specialists. Among these the Index of Orthodontic Treatment Need (IOTN) is the best established, though the Index of Sedation Need (IOSN) and Bateman Case Mix Tool are now fairly well established in community dentistry. The pilot contract using the RAG system also provides supposedly evidence based recall periods and treatment pathways, and the triage systems in emergency dental services operate on rigid criteria for care. As such the route in to the research was an enquiry about how these were being used, whether they achieved their stated aims and if not why? Behind this was the central research question: Is an NHS dental service based on need possible or desirable, and if so, what progress has there been in meeting this end?

6.4 Research Design, Sampling and Strategy

As an exploratory piece of work, the strategy was developed to gain in depth understanding of how professionals understand, define and categorise need, using broad semi structured interviews, complimented with a set of interviews with the general public. The choice to explore professional accounts through interview was intended to provide adequate space for full accounts to emerge without guiding too explicitly. Not only would this allow for broader narratives to be discussed and negotiated, but was explicitly intended to encourage professionals to construct and interrogate their own interpretations of need.

The design and sampling strategy aimed for maximum variety (Patton, 2002) across the dental specialties in order to collect data from the full range of experts in conventional practice, community dentistry, emergency dentistry, orthodontics and a range of other divisional managers, organisational professionals and commissioners. The Research Proposal, Participant Information Sheet and Consent Form are included as appendices 1 - 3 below. This was a direct response to observations in the literature that dentistry has too many specialties to acquire an agreed measure of need (Chambers, 2006; Ackerman, 2010; Tsakos, 2009; Morris and Burke, 2001) and recognition that community dentistry is often under-represented in general studies.
about dentistry (Gallagher and Fisk, 2007). For these groups of professionals the sampling was theoretical, defined as sampling targeted at specific groups or individuals because they hold specialist knowledge (Murphy et al. 1998), though it was expected that other professionals might be snow balled. For the service users the sampling strategy arose from recognition that individuals use the dental service differently and that non-attenders and regular attenders expressed different visions of need (Milsom et al. 2009; Gregory et al. 2007). As such the sampling was intended to be non-randomised to obtain representative samples of attenders and non-attenders (see Alsop and Saks, 2007; Murphy et al. 1998).

A short pilot study of 2 professionals and 4 service users was undertaken shortly after ethical approval to test the interview schedule and re-evaluate for the remainder of the data collection. Interestingly, while the ethics committee appeared concerned about the sampling strategy, nobody had considered the psychological impact this might have on participants. While the interviews with professionals went better than expected, when interviewing service users the participants often recoiled when asked about their experiences with dentistry. A couple of participants began covering their mouths, apologising for not cleaning their teeth or noticeably shuddering when talking about dental interventions. One man in particular began expressing extreme anxiety about the possibilities of gum disease, and another younger woman who repeatedly apologised for not brushing her teeth.

_R: When I’m talking about it, it really worries me. All my teeth will fall out one day and there’s nothing really that you can do about that, but put false ones in. I don’t know whether I’ve got gum disease, I might have, I don’t know. I worry about the fact that it’s not all to do with pain._ (PB 4)

_R: I know I said this before, but I think that because I don’t brush my teeth at night, and I’ve heard that’s really important, I will need treatment on a second tooth. But because there is no pain I’m letting that slide._ (PB 1)

Of course there is a plethora of research outlining the facets of dental anxiety, though Humphries and King (2010; 3-4) argue that ‘dental trauma does not only affect oral health through avoidance of treatment but can also affect mental health more
generally’. While the argument is a little blurred in terms of exactly how oral health is related to mental health, the fact that participants would come out with these comments unprompted was cause enough for concern regarding participant protection to halt interviewing service users. While I have limited sympathy for methodological writers who insist that interviews act as subjectifying exercises (Fadyl and Nicholls, 2013) that “extract” data from unwitting individuals (Burman, 1997), where ‘trust may be used as a social lubricant to elicit unguarded confidences’ (Kvale, 2006; 482), a certain power asymmetry did appear to be at work in the pilot phase, where I unintentionally prompted individuals to relive or reflect upon uncomfortable experiences with little gain for either party. Involving service users in the research was intended to give equal voice to the people using the service, though since they had little knowledge of the wider organisation of NHS dentistry and regularly appeared uncomfortable it added little to meeting the research aims and the initial sampling frame was adjusted.

However, after the collection of data from the professional participants was complete and a broad theoretical schematic had been drawn from the results, an alternative strategy to incorporate patient voice was designed in the form of a range of focus groups organised with the help of the Mayo centre at Salford Royal Hospital. At this stage the main components of the theory and results had been drawn up and the focus groups were specifically designed to steer away from questions about dental intervention towards service organisation. A new participation information sheet was drawn up for recruitment and a different set of preliminary questions for the focus groups was also put together (see appendices 4 and 5). In addition two exercises (see appendices 6 and 7) were used to guide the focus groups, including an initial survey which listed 12 items currently available from the NHS dental service from which the participants were asked which 3 they would cut if in the position of an advisor. The second administered half way through asked participants to rank the importance of 10 factors associated with the dental service (cost, distance, cleanliness etc). These exercises were intended as prompts to help guide participants towards the research questions, a widely accepted way to keep momentum and interest during such data collection (Wilkinson, 2004; for a review see Tong et al. 2007), and were not quantified or reported as part of the data collection. The focus groups allowed for a
space to “test” or triangulate the findings (see Gibbs, 1997; Morgan, 1988) of the broader research and did add significant depth to the findings. However, while the initial sampling strategy was aimed at collecting data from attenders and non-attenders, the focus groups were instead stratified by demographic, including one with retirees (7), one with working people (5) and one with unemployed persons (5). As part of standard good will and procedure at Salford Royal each participant was paid £10 to cover expenses and time.

As the research progressed it also became difficult to maintain the original targets for the professional groups, and while the principles of the strategy did not alter, practical constraints and unexpected opportunities altered the trajectory. Most noteworthy is that Orthodontists were particularly difficult to recruit and did not respond to repeat follow up mails and are therefore somewhat under-represented in the sample. Meanwhile, outside of the major teaching hospitals the line between community and emergency dentistry is often unclear, and only three participants actually classified themselves as emergency dentists. Owing to ongoing changes at the higher institutional level, community and emergency dentistry were becoming amalgamated across parts of the North West, and several GDP’s who took part also ran out of hour’s emergency clinics. So while this group may appear absent, enough data was obtained on the processes and need indexes associated with emergency dentistry.

In contrast to Orthodontics, I was able to make several useful contacts in community dentistry who were particularly interested in sharing their experiences and opening up further connections. As a result the study snowballed within this network and the data which emerged was largely unexpected, though became instrumental to the wider analysis. Due to the unique transformations taking place in this area of dentistry the data obtained from this sub-sample offers a distinctive insight into the processes of institutional transformation under current economic and political conditions to the point where it occupies a central part of the narrative in the discussion of the data. Even within this small sub-set (7 interviews), the central themes of contestation and negation of biopolitical mechanisms were actively being played out as my research took place in a setting where 8 district community services were joining to form one of the largest community dental services in the country. Finally, but no less importantly,
at some larger clinics I was able to interview some Vocational Trainees (VT’s) and Hygienists who had not initially been included in the sample. Again, this proved beneficial as it offered the opportunity to speak with professionals at the beginning of their careers; a group that had been overlooked at the design stage.

For purposes of clarity and comparison the original sampling frame at the design stage and the final sampling frame at completion are outlined in tables 1 and 2 below. Despite a continuing disquiet about sampling at the design stage, particularly regarding how ‘sample sizes are often selected in a seemingly arbitrary manner in many research studies and little or no rationale is provided for the sampling scheme used’ (Onwuegbuzie and Leech, 2007; 106), little attention is paid to emergent or so called opportunistic sampling that transform the research during the fieldwork (see Teddlie and Yu, 2007; Ritchie et al. 2013). Instead the current literature maintains an unhealthy fascination with how many cases should be used in what type of study to achieve “saturation”; a term defined as reaching a point in the research when no new themes or patterns emerge (Glassier and Strauss, 1967), though exactly how such a point is reached appears a rather subjective exercise (Bowen, 2008; Mason, 2010). Typically a number is chosen, though few empirical arguments are presented as to why that particular number and not others.

Table 1: Sampling Frame at Design Stage

<table>
<thead>
<tr>
<th>Participant</th>
<th>Method</th>
<th>Strata</th>
<th>Strategy</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Users</td>
<td>Interview</td>
<td>10 Regular</td>
<td>Non-randomised</td>
<td>PB#</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attenders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Users</td>
<td>Interview</td>
<td>10 Non Attenders</td>
<td>Non-randomised</td>
<td>PB#</td>
</tr>
<tr>
<td>GDP’s</td>
<td>Interview</td>
<td>10</td>
<td>Theoretical</td>
<td>GDP#</td>
</tr>
<tr>
<td>Orthodontics</td>
<td>Interview</td>
<td>5</td>
<td>Theoretical</td>
<td>ORTH#</td>
</tr>
<tr>
<td>Emergency</td>
<td>Interview</td>
<td>5</td>
<td>Theoretical</td>
<td>EMR#</td>
</tr>
<tr>
<td>Community</td>
<td>Interview</td>
<td>5</td>
<td>Theoretical</td>
<td>COM#</td>
</tr>
</tbody>
</table>
Table 2: Sampling Frame upon Completion

<table>
<thead>
<tr>
<th>Participant</th>
<th>Method</th>
<th>Strata</th>
<th>Strategy</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Users</td>
<td>Interview</td>
<td>4</td>
<td>Non-randomised during pilot</td>
<td>PB#</td>
</tr>
<tr>
<td>Service Users</td>
<td>Focus Group</td>
<td>17</td>
<td>Non-randomised</td>
<td>PB#</td>
</tr>
<tr>
<td>GDP’s</td>
<td>Interview,</td>
<td>13</td>
<td>Theoretical, Opportunistic</td>
<td>GDP#</td>
</tr>
<tr>
<td>Vocational Trainees</td>
<td>Interview</td>
<td>3</td>
<td>Opportunistic</td>
<td>VT#</td>
</tr>
<tr>
<td>Hygienist</td>
<td>Interview</td>
<td>1</td>
<td>Opportunistic</td>
<td>HYG#</td>
</tr>
<tr>
<td>Orthodontics</td>
<td>Interview</td>
<td>2</td>
<td>Theoretical</td>
<td>ORTH#</td>
</tr>
<tr>
<td>Emergency</td>
<td>Interview</td>
<td>3</td>
<td>Theoretical</td>
<td>EMR#</td>
</tr>
<tr>
<td>Community</td>
<td>Interview</td>
<td>7</td>
<td>Theoretical, Opportunistic</td>
<td>COM#</td>
</tr>
<tr>
<td>Policy makers, Managers,</td>
<td>Interview</td>
<td>6</td>
<td>Theoretical</td>
<td>PCT#</td>
</tr>
<tr>
<td>Commissioners</td>
<td></td>
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</tbody>
</table>

Morse (2000) suggests that 30 – 50 should provide enough data to reach saturation while Strauss and Corbin (1998) deem 20 – 30 to be acceptable. Meanwhile, Guest et al. (2006) draw from Bertaux (1981) to argue that 15 should be considered the minimum, though may occur with as little as 6 in a homogenous population. Green and Thorogood (2009) argue that few new themes will be discovered after 20
transcripts have been coded, but again provide no rationale as to why this might be the case. These are clearly estimates, intended to provide some guidance and are mostly based upon an assumption that qualitative studies are working with some variant of the grounded theory approach.

The frustration here is that research studies are not homogenous in nature, study different phenomena, have multiple subsamples and breadth of research question. Even when other research methodologies are considered numbers of 5, 20 or some other rounded number are often presented as benchmarks. In a review of 560 recently completed PhD studies, Mason (2010) finds that nearly half have a sample size that ends in zero, concluding that this is more likely due to the requirements of funding procedures, ethics committees or clarity for examiners than any reasonable grounds for reaching saturation.

‘There is no logical (or theory driven) reason why samples ending in any one integer would be any more prevalent than any other in qualitative PhD studies using interviews. If saturation is the guiding principle of qualitative studies it is likely to be achieved at any point, and is certainly no more likely to be achieved with a sample ending in a zero, as any other number’

While all this may be helpful in guiding sample design, it appears to rely on a concept of saturation which is an empirically slippery and elastic notion. Furthermore, it implies a pre-meditated approach that is often inconsistent with the methodological framework presented. In turn I would suggest that “analytical closure” may be a more appropriate guide, since this does not rely on a false notion of an end point but a rationally informed decision to close analysis. To situate it in the context of the study, by the thirtieth interview I was still finding interesting data, though this tended to be more (or sometimes clearer) expressions or examples of phenomena already identified. This does not imply that no new data was emerging, simply that there was a diminishing return on further investment of time and resources (see Ritchie et al. 2003). As a result I cancelled 2 interviews towards the end of the fieldwork owing to the fact that I felt it was unlikely to reveal any new or even discomformatory, data. By
this time the themes and conclusions were already taking shape and further
information would be unlikely to inform the analysis.

6.5 Collection and Analysis

As argued in the above section the methods literature concerning qualitative
methodologies remains largely fixated on the data gathering, particularly the design
stage. This may be due to the residual effects of the 1990’s being a period of
consolidation of the qualitative tradition and its ongoing comparison to its quantitative
counterpart (Sutton, 1993; Talja, 1999; Morgan, 2007). For unlike quantitative analysis
there are no pre-defined rules for approaching swathes of textual interview data, other
than a reasonable expectation that the method chosen must be made explicit and that
there should be some explanation of how observations are made and how this links to
theory (Meyer, 2001). We need not go back too far to find the roots of why qualitative
analysis appears problematic. Initially conceived as a debate between quantitative and
qualitative researchers, each compelled to establish their epistemologies as the correct,
or at least equally valid, version of social science (King et al. 1994; Guba and Lincoln
1994; Lincoln and Guba, 1985; Patomaki and Wright, 2002), the debate fractured the
social sciences into two opposing camps (Morgan, 2007) whose differences are yet to
be adequately resolved.

Since then, qualitative textual analysts have been in a similarly polarising debate of
their own, with multiple positions that sit at various points on ontological and
epistemological spectrums, arguing over what methods do what best. ‘Normally
approaches obtain and maintain their identities by distinguishing themselves from
other approaches’ (Meyer, 2001; 30). We now have content analysis, conversation
analysis, discourse analysis, “critical” discourse analysis, grounded theory and its off-
shoots, deconstruction, thematic analysis, and narrative analysis among others.
Handbooks can guide would be researcher through the dos and don’ts of each
position and tell them which metaphysical position they are allied with. All this may be
fine for the purposes of obtaining a broad understanding of perceived limits and
benefits of each method when first getting acquainted, but in practise they are quite stifling and are seldom followed.

While it would be a dis-service to state emphatically that a particular method was chosen and spanned the collection and analysis of the data, both elements of the research are influenced to a great extent by a constructivist epistemology, informed by the central tenets of discourse analysis. However, as stated above, the interviews were not designed to extract data which I could then “subject” to textual analysis, but were designed to engage participants on certain issues and encourage them to dissect what underpinned their rationalities. The interview method is often presented as a ‘conversation with a purpose’, though interview practise is often unevenly described. ‘Descriptions of it are more common when some aspect of it becomes salient because it is seen as novel, unconventional or problematic’ (Platt, 2012; 3).

While there is limited scope to argue that the interview method employed here is particularly novel, it does rely on the notion that the interviewee was not simply part of a sample but a participant who co-constructed the narrative and was given ample room to direct the flow of conversation. As is general good practise, at the beginning of the interview, I would explain who I was, what I was researching, make sure they were comfortable with being recorded (see Harvey, 2011) and then begin the interview (see appendix 8 for the initial schedule) with neutral, easy questions to put respondents at ease and build rapport (see Gill et al. 2008). In this case I simply asked why they chose dentistry as a career and picked out anything interesting from the initial responses to probe further into the substantive issues.

While the interview schedule was rarely of much use other than to provide prompts to guide the conversation, each interview broadly broached the participants’ view of the profession, how they conceptualised need, their opinions on the organisation of NHS dental services more generally, and their views on patients’ needs, rights and responsibilities. While the broad themes were covered in each encounter, the majority of the interviews are composed of narratives, stories and examples offered by the participant, while I asked for more information or probed for more clarity. This encouraged the participants to examine their own views and, in many cases, act in a
position to deconstruct their own narratives and the meanings attached to them. As Gunnarsson et al. (1997; ix) write; ‘discourses typically complexify as they draw on and frequently contend with other discourses associated with other social practises’, and it was this unfolding and examination of the links between different discourses which was brought into the interview encounter.

This was not, however, universally successful and there are several cases outlined in the following chapter where the participants were unwilling to engage with the interview on the level intended and often steered away from offering examples or more complex narratives. This is not to say that these encounters were not valuable in themselves, but does show that interviewing (and being a participant) is a somewhat complex art, and some participants may have viewed themselves as at risk of divulging information which would be manipulated or taken out of context at a later date (Platt, 2012; Berry, 2002). Upon reflection it was clear that many participants were not expecting an open ended discussion, which was underlined by a couple of participants (also discussed in more detail in the chapters following), who stated that they were expecting something more akin to a questionnaire or structured interview.

However, once the participants were comfortable the interviews flowed with both meaning and direction, and to avoid simply taking discourses and engaging in a one-sided interpretation, at the end of the interview I would debrief the respondents and set out the broader context of the work, the theories which were being developed and how their input had contributed. This kind of respondent validation or member checking was done “in situ” rather than post-analysis, so that participants could ‘be asked to comment on whether the emerging account is recognised as a fair and reasonable reflection of the situation as they understand it’ (Torrance, 2012; 5). Rather than presenting a sociological analysis some years later, where participants might search for their voices within generalised accounts (see Long and Johnson, 2000); this debriefing enabled a personalised opportunity to obtain perspectives on models as they were emerging and generated useful reflective data. Thus the ethical imperative to overcome a purely constructed approach of the researcher was overcome, without the problems associated with respondent validation more generally.
As stated above the interviews were approached with a broad idea of wanting to capture how dental professionals thought about need, in what ways they addressed need in their professional capacities, what kinds of measurement tools they used to measure need and whether they were used consistently. I approached the data collection armed with various political and sociological variants of “needs theory” and had hoped to use these conceptual apparatuses to compare the data in some way. The classical hierarchy of need presented by Maslow (1970) and Bay (1968; 971) formed the basis of this, though the concepts of justice drawn from Rawls (1976), developed into the capabilities approach by Amartya Sen (1999, 2005, 2011) and Nussbaum (2000; 2011), and the theories of human need exemplified in the work of Doyal and Gough (1991; see also Gough, 2004), were accompanied by more interpretivist variants of the theory, such as Bradshaw’s (1972; 1994) typology and Nancy Frazer’s (1989; 2008) constructivist account of need as an ‘interpretive contest’.

However, both the guiding theoretical rationale, and inductive approach changed as it adapted to the findings emerging from the data collection. Interestingly when asked about need professionals would typically talk about contracts, when asked about contracts they would talk about politics and from there numerous concerns, personal stories and narratives ensued. It appeared that need was something which professionals found extremely difficult to reconcile, and while it was clearly an important concept which guided professional conscience, it rarely coincided with the theoretical concepts which appeared in the academic literature. As a result attention was paid to this “unfolding”, where questions about need would typically transpire into conversations or examination of some other related phenomena. This unfolding process ultimately guides the remainder of this thesis, as the analysis moves through the problems inherent in observing a coherent vision of need, to the strategic and discursive power dynamics which many professionals report being bound by.

In several distinct ways, the method which informed the collection also underpins the broader analysis. As far as the practicalities of the analysis are concerned the interview recordings were transcribed verbatim by a third party, though the first step of analysis was to listen to the interviews as I read through the transcript and make notes about context, pauses and other phenomena that is not so easily captured in a block of text.
Sometimes I would listen several times, writing small summaries and observations about what the respondents said and things I had said myself. An examination of how phrases, themes or words were used and in what context was undertaken to look for similarities in semantic structures in discussions regarding the word need. The point of interest here is to get a broader handle on exactly what was taking place as conversations about need constantly shifted onto other territory. While discourse analysis, phenomenology, grounded theory and other offshoots all begin at various points on the philosophical spectrum, the analytical dimension of each is ultimately tied to decontextualising and recontextualising themes or codes (see Starks and Brown Trinidad, 2007). Though while discourse analysis is often assumed to be concerned with the intricacies of picking apart statements which may unearth the speakers ideological commitments or unconscious thought processes (see Gee, 2011), it is equally well suited to examine how groups of individuals talk about similar concepts. A number of codes and sub-codes were generated to organise responses into categories for how participants talked about need, and the mechanisms they used to defer onto other topics.

However, as the study proceeded the analysis turned towards an examination of what was driving clinical activity in the absence of a concrete conception of need. While the scope is admittedly much broader, the codes here relate to processes of communication among professionals, between professionals and other institutional actors, and their perceptions and concerns regarding the compromises they were making in terms of the professional integrity and professional identities. These codes are explored in depth as the discussion moves through the numerous ways that professionals speak about their changing roles under conditions of late-modernity. Ultimately, while the overall picture is bridged within a broad critique of neoliberalism and biopolitical management, the explanation for the stasis in contemporary NHS dentistry is drawn together through a close examination of these accounts, which show the web of discourses and alignments that professionals grapple, reconcile or resist.

Starks and Brown Trinidad (2007; 1376) argue that in using discourse analysis, ‘analytic credibility depends on the coherence of the argument: Readers will judge the trustworthiness of the process by how the analyst uses evidence from the interviews to
support the main points’ (see also Gee, 2011; Finlay, 2002). This is partially true of all qualitative research using interviews, since the analyst is the tool which produces the analysis. Though what is achieved here is a slightly more methodical view of the process which is both flexible enough to move through the process and change direction, while maintaining consistency in both collection and analysis. Captured in this process is the transition from searching for a construction of need to discovering underlying structures of power. In this vein the chapters which follow reflect this discovery as it happened, beginning with an analysis of need and contracts and moving into a deeper investigation of the relevance of biopolitics and security in the study of dental organisation.
Chapter 7
Understanding the Concept of Need in NHS Dentistry: Mixed Metaphors and Telling Silences

The following chapters of this thesis are an examination of the political constraints placed on NHS dentistry, seeking clarity for systemic inertia, professional discontent and an explanation of the gulf between evidence and implementation. If the reader has found any sympathy with the theory and methods laid out in the previous chapters, there is good reason to believe that many of the problems apparent in the UK’s NHS dental service can be traced through analysis of the contradictions and perversions which arise from late or post-modern forms of neoliberal governance. While this theory is developed in more detail towards the end of the thesis, the analysis starts at base level with an exploration of how need is conceptualised by those in NHS dentistry who are employed to treat it. As explained in previous chapters the initial problem was conceived as a problem with the isolation of the profession, a squeeze between ethics and policy, and outdated historical traditions. Combined with the limiting nature of dental science presented in earlier chapters, this study was designed to get perspective from those who worked in the service and those who used it. How were these problems configured, how does warped science affect the clinical encounter, why is the profession so reluctant to change?

These were all cursory questions that resided in the background as subsets of the initial research questions pertaining to how professionals measure and treat need. So I was surprised that few of the professionals interviewed for this work objected to the idea that NHS dental services were being misused. Many respondents happily offered their opinions on the inequitable distribution of services, unwarranted screening, and critiques regarding the credibility of the science. Some went further, speaking eloquently of the potential sea change in organisational structure if these problems were adequately addressed at the policy table, and the reluctance of their colleagues and superiors to do so. With that said, nobody could tell me what a dental need was,
and after a dozen or so interviews I was acutely aware that these encounters were not really answering my research questions. What was taking shape was an emerging critique of the relevance of the concept of need in dentistry and a growing understanding of the political context that these professionals worked within. Across the spectrum, openly or otherwise dental professionals were admitting that they did not have a working definition of need, that definitions of need are likely to be as varied as professionals, and were much keener to talk about the reasons behind this and how they managed to operate a service in the face of limiting clinical evidence.

The importance of starting here is that through these encounters the research questions changed, since if most of these professionals were fully aware that NHS dentistry was shot through with problems, and they could not evaluate what they were doing in terms of need, what was driving patterns of clinical behaviour and motivating the occupation? This chapter is best described as the starting point from which the original idea of need is abandoned and the grounds for the political analysis are laid. Outlined in three sections the first deals with stunted encounters where respondents appeared difficult to engage, dodged questions or whose responses do not fit the general themes of the wider data analysis. What might be thought of as deviant cases (see Barbour, 2001; Silverman, 2013) or discomformatory responses (see Mays and Pope, 2000) are introduced here in order to understand why some elements of the profession were unable or unwilling to talk fluidly about needs.

This is followed by a more thorough investigation of how talking about needs often strips back to talking about contracts, remuneration and purely clinical definitions. This took place across various contexts, though it is here that the politics of the dental encounter are most visible in their superficial form. It is no surprise given the politically contentious contract changes pushed through in 2006 that need is often reframed as a contractual problem, and this resounds with much of the dental literature which sees the identity of the dental professional emerging through their balancing of business and caring ethics (Taylor-Gooby et al. 2000; Harris and Holt, 2013). By contrast the third section directs the analysis towards instances where participants would fall out of conventional patterns of professional talk and offer wider reflections on the wider political and social problems informing professional practice.
This often took place where participants “broke rank” from official scripts and slipped into narratives about difficult circumstances, historical or personal narratives or other methods of describing their experiences.

In these instances the limits of the dental mindset drifted into the background and the encounters took on a more reflective hue. In part this could be attributed to the methodological flexibility of the research design and indicates the significant contribution that open ended qualitative work can bring to the study of dentistry. Closing on a reflection of the potential of these more open and fluid engagements, a more in depth understanding of the limits of needs theory and the potential for a social scientific explanation of power and politics is discussed as groundwork for the remainder of the analysis.

7.2 Dealing with Politics in the Absence of Politics

From all of the interviews undertaken for this work, one encounter sticks in my mind. An interview with a high ranking dental health specialist, with an interesting work history and publication record full with papers on tackling inequalities in high need areas, I was sure this would be good. I had become comfortable with interviewing, tweaked my questions, began analysing themes and narratives and was hopeful this opportunity would add some significant insight and depth to the emerging analysis. So I began:

I: I was wondering if we could go back and talk about your motivations for choosing dentistry as a career.

R: Really I supposed it was my interest in science and my abilities were in the scientific side of the curriculum, and then knowing I wanted to work with people and wanted to do something about improving health. (PCT 2)
I waited a little and nodded to indicate that she could carry on, but the silence lingered, and after a couple more general questions we continued onto more substantive topics.

\textit{I: How do dental professionals typically address dental need?}

\textit{R: We carry out more interventions than most others and, you know, your GP will prescribe, quite often they may not refer you on if it’s not required, but the intervention type of treatment is fairly limited that your GP would carry out. It’s procedures I think that dentistry focuses a lot on, and that’s to do with payment systems as well as diagnosis. (PCT 2)}

Need becomes a subset of procedure in this instance and while it does not come across in the text, the answer was concise, almost rehearsed. On another issue the question was met with a closed and dismissive response:

\textit{I: Would you agree that the dental profession is quite resistant to structural change coming from the top down level?}

\textit{R: Yes there is a degree of that, I think when you change any system there will be reluctance out there. (PCT 2)}

In both the above examples the answers were blunt, the line of questioning seemed uncomfortable for the participant and my open questions were being answered as if they were closed. Berry (2002) comments that while open ended unstructured interviewing with elites is potentially the most rewarding it is a “high wire act”, more difficult to judge than interviewing people who have less to lose and no political standing. This may explain why I was also redirected on other themes deemed pertinent to the research, for example, regarding whether choice within dentistry is limited by access.

\textit{R: I think that that has improved and a lot more practices are taking on new patients than they were in the past, and of course the recession has played a part in that as well}
because many patients that were actively seeking care will now not wish to do so in terms of cost. (PCT 2)

I: Mm. Yes, absolutely.

R: But also if you’ve sampled a service and you don’t like it, you want to be able to move somewhere else, and in dentistry that’s always been much easier for patients than in medicine, where you’re registered with the GP and it’s much more difficult to move or change practice (PCT 2)

While this may be true, the question has been deflected away from problems in NHS dentistry to compare with medicine. Other similarly interesting items such as inequality, rationing and auditing were simply talked about as “challenges”, and in particular a challenge to build a supportive evidence base.

R: I suppose it’s going back to the evidence base isn’t it, as in what’s going to be an improved health outcome for the patient. So we’re looking for the highest level of evidence on systematic reviews to try and base our investment in terms of the future. (PCT 2)

The whole interview felt stunted and awkward, there was no dialogue, no examples were offered, no critical reflection. I spent the remainder of the interview probing with more questions and left feeling that it had been a wasted opportunity. Was I not making myself clear, was the participant just having a bad day, what had gone wrong? It took some time to reconcile myself with this encounter because while it felt bad in person it looks worse on paper. In hindsight, aside from possible personal idiosyncrasies possible reasons have become clearer and I can understand why this participant may have been guarded and not wanted to divulge anything sensitive which could personally incriminate them. On considering this further I was reminded of a particularly interesting interview with a recently retired senior dental professional from North East England, who stated bluntly that;

R: I no longer have to sing their song so I can tell you anything you like. I am actually looking forward to having a frank conversation where I am not somebody else’s
mouthpiece..... Now that I'm retired I can actually see clearly some of the stupid things that happened right under my nose, but I'm not tied to that institution anymore.... (PCT 5)

While this particular respondent was keen to talk about a number of, what he considered poor operational decisions, the comment is interesting because it demonstrates the extent to which professionals are bound by discursive institutional code, but also indicates how difficult it may be to actually “think” differently when encompassed by institutional norms.

Other reasons may be that this group of professionals might not be well versed in qualitative research and may have even been trying to help my keeping answers short and concise. While this did not have the same impact on other interviews, clues are littered throughout the transcripts which point towards cognitive dissonance between my aims and their expectations, such as the below where a younger GDP realised she was about to step out of conventional boundaries.

*I: How far do you think it is the state’s responsibility to continue to provide care when people do not take your preventative advice and return with the same problems?*

*R: You can get quite controversial here, can’t you?*

*I: Quite, some of these questions are controversial*

*R: Because in my opinion, I’m allowed to give an opinion, aren’t I? (GDP 8)*

Others expressed concern that their responses were overly complex or misguided

*R: I hope that’s okay, I feel like I was rambling all the way through (VT 1)*

*R: I’ve done a few of these things, you know, and most are just like, why didn’t you just send me a questionnaire? But while I thoroughly enjoyed our conversation, I tried to stay focussed, I really tried, but your questions aren’t really about dentistry and I wasn’t prepared so I do apologise (PCT 6)*
This last quote about being prepared and it “not really being about dentistry” is telling because it gives some impression about what dental professionals think research is, showing further evidence of the dental ontology outlined in earlier chapters. Other researchers warn about such instances of cognitive dissonance (Alvesson, 2003; Nunkoosing, 2005), and others have noted that participants can sometimes feel like they are being tested (Murphey et al. 1998) and the analysis here needs to be sensitive to those concerns. For example both Orthodontists brought an array of charts and pictures and appeared disappointed that the interview did not address the clinical minutia of malocclusion. However, while these are themselves interesting observations, it also sensitised me to some of the underlying reasons why some other interviewees seemed reluctant to stray from discussion of clinical routines and actively tried to divert or shield the conversation when it strayed outside, such as this encounter with a “family” GDP.

R: When you actually integrate and say to the patient you don’t need to come necessarily more than once every 9 to 12 months the patient will quite happily turn round and say, well, I like having my teeth cleaned every six months so would it be all right if I come back and have that done? Which of course you’ll say that’s okay, that’s not a problem. (GDP 6)

I: But in the context in which people’s oral health is generally improving they don’t necessarily need that visit and it’s using up NHS resources that could be targeted towards something else.

R: Well, there’s always an easy argument to that, isn’t there; if somebody is obese and we’ve given them advice to lose weight but they don’t so then have a medical problem as a result of it where does the onus of responsibility stand? With the clinician on the basis they haven’t put the information across, or with the patient who doesn’t want to adhere to what they getting told? (GDP 6)

I: Are you making an analogy to say that because these patients are adhering to what you’ve told them that they...

R: Yeah. If the patient comes on side... most people - I mean you’ll say to me probably that you service your car once a year, don’t you, and you’ll tell me the reason
you do that is to make sure the car is looked after and maintained. Patients also know - and quite a few, quite astute really - that if they effectively get regular treatment provision, just to check to make sure, then at the end of the day that’s going to be a better option for them than waiting until they’ve got a problem or come back once every two or three years or something. (GDP 6)

While this is a notably conservative argument, likely to make Aubrey Sheihams’ blood boil, it is an interesting rhetorical technique which shifts the onus of responsibility back onto the interviewer. The insinuation is that I had not fully considered the ethical considerations of my propositions, though in the same brush, the question of need is subsumed by a rather abstract analogy which makes little tangible sense and the conclusion is that the patient deserves more treatment because they have already had treatment and their views concur with the GDP’s expectations.

The above interview was full of metaphors about patients “buying in”, “coming on side”, “integrating” and “converting”, almost to the point where it felt like being a part of the practice was similar to being part of a family or religion. This fits with the whole context of the interview where the participants’ views were laid down very specifically at the outset;

I: Could you tell me a little bit about why you chose dentistry as a career?

R: I’ve been here for more than 30 years now and I’ve gone through the process where the children are now adults and the adults are now grandparents and we have a very much family based service which caters for the local population. Medicine has a much wider spectrum of treatment provision; dentistry involves solely and only - generally speaking, in my field - dealing with teeth. (GDP 6)

R: I have built up this business cold squat and the families that came liked it and then brought their families. We got them off sucking Ribena in dummies and eating chocolate; so obviously prevention does work, if you look at the families we have - some of which are quite large - as you go down the age groupings from grandparents down to parents to children there is an improvement in cavitation problems and extractions. (GDP 6)
This is a linear model; the practice is set up, oral health improves and the benefits feed through generations. There is no wider context set out, all benefits accrued are accredited to the practice and its ethos, and this participant would not be swayed from this script and became disagreeable when pressed about wider political and societal changes that lay outside the doors of the practice. When asked about widening recall periods - a possible feature of the new contract - I was given a particularly odd answer;

**R:** I wouldn’t be happy with any political interference on the basis that they’re going to tell me how to do my job. Well, if you want to tell me how to do my job why don’t they come and get a coat on and do it instead? (GDP 6)

**I:** I see it more as trying to reconcile treatment with the patients need, based on their current status across a number of factors they would be given a treatment plan that may extend their recall periods.

**R:** Yeah. Well, I think probably I have very little faith in politicians in general, I’m afraid. I think certainly if I look at what’s going on - certainly over the last year or two - the debacle about MPs’ pensions, which they still haven’t managed to sort out but is substantial but they’ve managed to brush it off into the long grass, it’s probably just dishonest I think. (GDP 6)

In this instance anything to do with politics is an instance of meddling from the outside. There may be an element of role confusion here, since I had been introduced as a social scientist, I may have been perceived as part of the problem. Nevertheless, both these interviews analysed in some depth here show a notable unwillingness to engage with politics, but for very different reasons. The first is an excellent example of how occupational structures disallow deviation from official discourse, while the second shows how politics is conceived as a nuisance which only serves to get in the way of experience, which is considered much more valuable than anything outside it. What is really at stake here is a tendency for need to be subsumed within scripted accounts, where participants for whatever reason cannot or do not wish to discuss it because it falls outside of the bounded entity of what is considered their professional capacity. On reflection these interviews represent opposite ends of the spectrum - one where those in power cannot break rank, and another where the life trajectory is
bound by history, tradition and experience – though both culminate in the same problem; an inability to address need. However, whilst interesting in themselves these two examples represent typical deviant cases, since they neither resonate with any other accounts, but reveal a rather telling story about the limits of the dental imaginary.

7.3 Contracts and Clinical Routines

The limits to obtaining a theory of dental need are already indicated in the above discussion where my questions were avoided, redirected through metaphor or otherwise rendered null. While these are extreme examples, further evidence of the limits of “needs talk” are apparent in many of the interviews and when directly asked about how they defined need a process of “framing” took place, where the issue was interpreted by the participant as something else. Tellingly this was often a placed directly in relation to current contractual arrangements.

_I: In the most general sense, could you tell me what level of dental care is required to meet the needs of the population?_

_R. For me, I’ve always liked the capitations payment system…. So it wasn’t based on units but on people. You provide care for this person or this number of people and we will pay you such and such per year, I think most people like to be associated with a practice or whatever near where they live or where they work or whatever’s convenient. (EMR 1)_

In this particular example a direct answer to the question of need is rewritten as a question about contracts and the perceived idea that people want a service close by. Strictly speaking this has nothing to with “need” as a concept, but is rather a description of a contractual system and set of values that _might better suit need_ but do not say what that need is. While this is an obvious example others were more subtle;

_I: Could you tell me about how you classify need? Do you have any particular measures of how much pain somebody is in before they are referred to you or how bad their dental problems have become?_
R: Pain isn’t high need, that’s not the problem, its difficult procedure. All dentists can deal with pain; dentists are very good at dealing with pain. (EMR 3)

I: Many people would argue that if a person is in pain then they are in need of care.

R: Yeah, obviously and that’s fine, but that’s totally different from procedural difficulty. If it’s malignancy, or we’ve diagnosed a malignancy and it’s outside our scope and it’s going to need much more major treatment, or very, very severely medically compromised patients who might need quite a straight forward procedure, they just have to be managed in a hospital with all the back up of all the other facilities and all the other departments. (EMR 3)

It is unclear why pain is not a need, and the discussion revolves around procedural routines and the availability of material resources. At the very least concerns about human welfare are secondary to the procedures used in practice.

Others were keen to talk about the limits of using population need as an indicator of population oral health, as is nicely captured in this unusually frank conversation with the commissioner of that particular service:

I: Does it concern you that there are many people out there with poor oral health who are not visiting a dentist?

R: No it does not concern me at all. (PCT 1)

I: No?

R: I think I’m offering a service that people don’t particularly want, I think 62% are happy with it but I think 38% are quite comfortable turning up to a dentist only when they need a dentist, in the same way that I don’t get my car serviced every three years, I just go when something falls off it. I think many people have taken the view, many adults have taken the view that they only want to use a dentist for whatever reason, when a filling falls out or they’ve got pain. 20 years ago I would have said that’s terrible, now, as providers of dental care and policy makers of dental care, we need to
address the needs of those people who don’t want to be regular visitors at a dentist. 
(PCT 1)

This is a notably radical argument (despite a reliance on the mechanical metaphor), though even within this frame, the needs referred to are not defined and the conversation verges back towards contracts and methods of remuneration.

I: Why do you think these people do not want to attend regularly?

R: I’m straying into areas of my profession that I know nothing about, there is no doubt that financial disincentives are alive and well, we know that. The contract is cumbersome, it’s unhelpful and it doesn’t help patients. (PCT 1)

The point here is that across the data set even when professionals are directly asked about need, responses are reframed or deferred and little useful information is gained until probed much further. What is happening here is that need is reconfigured as procedural or contractual, which is pulling the wide and varied concept of need into the strict delineation of how it is considered in that life environment. Within this life-world, the imaginary space within which NHS dentistry exists, need is about teeth and the contractual rules that govern intervention and the procedures which are allowed or disallowed within it.

Other instances came across as purely clinical and almost routinized accounts when asked to define what a dental need was:

R: It’s difficult to define, but I would say if you have got more than two cavities I would say that’s pretty high need (GDP 8)

R: We define them really clearly in terms of having the patients going through a clinical examination, gathering of social history including self-care regime, looking at their medical history and looking at actual disease level and trying to quantify risk (GDP 1)
R: I generally would expect, I suppose an average patient to need some work, to need some restorative work possibly. Possibly some perio work. (GDP 2)

In all these responses need is synonymous with clinical routines, disease ratios and interventions, something which one participant indicated had extended from his dental training:

R: From my experience at university it was just kind of like, right let's have a look, let's diagnose what's wrong. It wasn't kind of like okay they've got caries in 20 teeth they obviously have need or whatever, there was none of that, it was just like right they've got caries in 20 teeth what would you do with those 20 teeth to fix them sort of thing. (GDP 9)

Other responses were keenly aware of the difference between normative and perceived need, a long standing definition (see Bradshaw, 1972; 1994) that appears to have traction with a number of dental providers:

R: From the clinical findings of examination, history, radiographic and actually clinical examination, what, in the dentist’s opinion, because it’s only your opinion, a patient actually needs to be done, I would say, or what you, in your professional opinion and training feel to make that patient better, or more dentally fit, or cure the problem they’re presented with, I’d say it’s that. (EMR 3)

R: that all hinges on that I understand what their needs are in the first place, because there’s a difference, isn’t there? I might be looking at it saying, this patient’s got a tooth that needs the bulb taking out, so that’s my perception of what they need. Their need might be, from their perception, might be something quite different, and I mightn’t always be identifying that. (COM 1)

R: You know, the model I don’t like - the very traditional model - is the telling people what they need (GDP 5)

R: Oh gosh. I think need is difficult in terms of, especially on the NHS contract, because to me need is what...I don’t want to use the word need, but what needs doing
to prevent the disease and to treat disease whereas most patients expect or they see the need as that plus anything else they might need or want (VT 2)

In all the above remarks there is recognition that need does not sit entirely with the clinicians perspective. It is only the expert opinion, and while valuable should not necessarily transcend that of the patients.

This is worth pursuing a little further because while expert and patient (normative and perceived) need were often recognised as different, the patient need remained elusive - something which was recognised but could not be described. For example, in the final comment need is estranged from its purely clinical or procedural components and drawn into a comparison with want, somewhat reminiscent of Maslow's (1970) and Bay’s (1967, 1970) conventional hierarchies of needs, wants, desires and demands. Though inspected more closely in order to explain need the participant excludes it from her definition. The comment that “I don’t want to use the word need” allows her to instead focus of the thing which might bring about that need (lack of prevention) and an option if the need does arise (a treatment). The very thing that requires defining is absent to allow for a definition.

Developing the difference between perceived and normative need a couple of other comments where professionals contemplated answers more thoroughly drawing on historical narratives revealed a much more cautious approach to assessing need.

R: You know people will tell you how much pain they’re in and everything but people lie, not intentionally, but people have different pain thresholds and tolerances and it’s knowing really, asking those kind of questions to get the information that you can then make an accurate diagnosis on, to get closer to the real need. Whether you get there, you’ll never know because even if the dental problem is tied up fixed, I don’t know what’s in their head. (GDP 7)

R: If somebody says they’re in agony and they’ve not slept all night, you know, it doesn’t necessarily mean that they are in a lot of pain. Just be wary, don’t jump to the conclusion that that tooth needs taking out, do you know what I mean, it might just be that there’s other questions you can ask to try and find out. You know what I mean, if
somebody comes in and doesn’t really complain of pain if you like, just you know just watch out there might be something quite advanced there. Don’t assume that you know something, something severe can be wrong (GDP 7)

For this participant need clearly important but they clearly find it difficult to define. Firstly it resides somewhere between professional judgement (asking questions and diagnosis) and hidden patient perception (what’s in their head). Secondly it can be expressed as pain or reside where pain is not present and nothing can be assumed. Whatever this need is, it is certainly rather elusive. A similar problem presents itself in the following:

R: The person’s got Alzheimer’s, can’t communicate for themselves, and the carer’s identified that the person hasn’t got any teeth, they’ve lost their dentures, and they’re telling me that the need is this person needs new teeth..... Anyway, through the process of realising how difficult this was and seeing how upset this lady was becoming when I was attempting to make dentures, I really challenged myself and had to challenge the daughter then about whose need were we addressing here? And we had lost sight, the two of us, the daughter and myself, had lost sight of what the real need for that patient was, which was actually for her to be left alone, as regards her teeth, and actually helped to eat an appropriate diet, and the need we were addressing was the daughter’s need, who wanted to see Mum with some teeth, and myself who in my naivety thought, well yes, she’s edentulous, the daughter’s probably right, she does need some teeth making (COM 1)

This is interesting because through a dental encounter the “true” need turns out to be something that has nothing to do with dentistry. If anything it is related back to the carers’ emotional need to diminish the signs of her mother’s psychological decline and the need to help the mother keep healthy.

In each of these accounts need is recognised as important, though there is no universal account given. Each participant clearly takes need very seriously, though what emerges here is that its expression is haphazard. Most often this is tied to contract designs and organisational and political issues, or purely clinical definitions, which state that a need is present, but do not explain why it is a need. For these reasons it should be no
surprise that dental providers did not couch their accounts in terms of universals, capabilities, functioning, satisfiers or any of the language associated with the philosophy of human needs, since these are not part of their professional lexicon. Instead these responses to questions of need reside around contractual and clinical problems, inefficiencies and material resources, the bread and butter of priority setting and institutional policy design. For this group of professionals need is something to do with intervention, treatment planning, resource allocation and is tied to their practical conception of care provision rather than their philosophical or social conception of what universal needs should properly be considered true or real.

As a result the limits of the sociological and philosophical literature on need are exposed as distant debates, which have limited purchase in real world healthcare provision. This is not to argue that the participants have no conception of objective need, but that it is limited to clinical, procedural or professional definitions that compete with one another. As argued by Avis (1999; 87) ‘health professionals often fall into the trap of believing that people have fundamental, objective health needs, because the professionals are using their own conceptions of the purpose of health and what someone ought to want’. It is a conception which arises from personal experience, priorities and professional imperatives which appear as disjointed characterisations of their own views projected into the vacuum where a concrete concept is absent. This is more of a critique of how theorists of need write and conceptualise need than it is of how dental providers think of need. What is uncovered here is how need is part of professional identity and the commitments they feel they have to their patients. So before beginning the broader analysis for the rest of the thesis, the final part of this chapter takes dissects the concept of need in relation to the role of identity in professional practise.

7.4 Need / Logic / Politics

If there is one point worth taking from the above it is that if there is such a thing as a “dental need” it is not easily captured. The idea of need being a distinct or concrete
concept used to define appropriate intervention (or not) is a distant notion, far from objective and clean. Even in the examples where needs are stated very clearly, such as the presence of two cavities or a string of examinations and assessments, these definitions are descriptions of processes or diseases rather than needs. There are some very good reasons for this, because even in turning to the philosophical or socio-political literature, need is somewhat difficult to define and no definitions fit comfortably with the participants responses.

At the root of the problem is the nature of the concept, since there is no agreement on whether need is categorical and universal or purely instrumental and therefore relative (see Avis, 1999). For many liberal philosophers it is possible to tie down some fundamental “human needs”, typically including food, shelter and health (Nussbaum, 1999; Sen, 2008). Others have added to this that there is also a need for autonomy or freedom of choice (Doyal and Gough, 1991; Gough, 2004). Tied to all these accounts is the argument that if individuals are unable to access the material resources to fulfil these basic categorical requirements they will likely suffer as a result and the ‘moral condition of the culture’ (Springborg, 1981; 9) is called into question. The extension of this argument is that categorical needs then transform into rights or an argument that the individual in need has a moral claim on the shared resources of the collective (Hartley-Dean, 2010; McAlistair, 2011), though others have argued further that individual responsibility should also be taken into account (see Dean, 2014).

Ann Robertson (1998; 1420) summarises the debate succinctly in stating that ‘to invoke the notion of need is to invoke what may well be the most useful rhetorical device in a social policy debate. To argue that X needs Y is to argue that X should have Y. The concept of need thus carries with it an aura of moral suasion’. The problem for all categorical accounts is that while it may be philosophically possible to argue that human beings have categorical needs, such as health, they are unable to say how much health or shelter is needed (Bradshaw, 1994). As these concepts are ambiguous and potentially limitless, how much food, shelter or health someone “needs” is clearly mediated by culture, climate, genetics and environment and may therefore differ between nations, communities or individuals. In a revision of earlier work (Doyal and Gough, 1991), Ian Gough is pushed to recognise that while needs
may be universal, the means of satisfying them are relative and ‘can be met in a multitude of different ways’ (Gough and McGregor, 2007; 13). This implicitly recognises that policies must be specific and local rather than universal if needs are to be met, and by extension needs become philosophically universal while social policy remains practical and relative.

If we recognise that policy is only tenuously related to universal needs, the means of how needs are met, the extent of how far they are met and the resources allocated to meet them resides at local level, be that community, regional or national. The problem is that at this level, needs are less about universals and more about the practicalities of resource allocation, health needs assessment and ‘interpretive contests’ over material resources (Fraser, 1989). While theorists of human need often square themselves against the proponents of health needs assessment or priority setting, in their quest for universals and admittance that means are relative, they have unwittingly pardoned themselves from the policy table.

Where many participants appear to suggest that needs reside somewhere between professional opinion and patient perception, the way need is expressed appears at the juncture where the professional determines that these two competing visions coincide. This shifts the territory of investigation from looking at how need is expressed as a philosophical conscience to how it emerges as a subset of professional identity. In making this turn, there are some useful comparisons to be made with some of the more thoughtful studies in the dental policy literature, which have examined how competing dental identities emerge through “institutional logics”. While the institutional logics literature has always shown an interest in how professional motivations are shaped by structural constraints (DiMaggio and Powell, 1983; Meyer, 1992; LeGrand 1997; Harrison and Dowseall, 2002), it has found renewed interest in the wake of the increasing commercialisation of the medical professions. Within this field professional identities are viewed as styles, practises, strategies and motives that seek to cohere and/or innovate to provide services which adapt to emerging policy frameworks.
Within dentistry Taylor-Gooby et al. (2000) seek to understand how both egoistic and altruistic behaviours map onto providers’ decisions to stay in NHS practice or opt out into private provision, in response to wider government objectives. Kitchener and Mertz (2010) show how a dominant logic of professional excellence compliments and competes with a strategic management approach in examining the professional identities of dentists in the US. This moves beyond the resistance or reception of policy which has characterised much of the literature (see Currie et al. 2012) to view identities and professional motives that co-exist, compliment or slip over time in relation to wider structural changes. More recently Harris and Holt (2013; 63) couch their study of four prevailing logics found within NHS dentistry within a critical approach which sees ‘neither individual agents nor institutional structures, but their mutual expression, which informs, sustains and upsets the logics through which everyday activity finds legitimation’, meaning that the ethics and activities of dental professionals are the result of weaving individual aspirations and values through institutional imperatives (Battliana, 2006). In this expression activities and processes are the outcomes of both professional values and institutional structures.

Much of the discussion above, where talk about need is expressed as contractual, clinical, economic or reflexive finds resonance with the typology of Harris and Holt (2013) who demonstrate prevailing logics of business ownership, professionalism, public health managerialism and commercial entrepreneurialism. The specific elements of each are outlined in table 3 below, and while the principles and expression are taken from Harris and Holt the third row draws from the data presented above to show how these positions align with how professionals speak about patient need.

Table 3: Institutional Logic and Need: Adapted from Harris and Holt (2013)

<table>
<thead>
<tr>
<th>Principles</th>
<th>Ownership responsibility</th>
<th>Professionalism</th>
<th>Population Health Managerialism</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Part of Community Authority and Managerial Responsibility for Practice</td>
<td>Best Interest of Patients Clinical Excellence Altruism</td>
<td>Govern Public Practice Cost containment and managing of resources</td>
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Using frameworks such as these have some benefits; though also present many problems and limitations. In the first instance, they do help us move beyond seeing the dental profession as a homogenous unit with a single identity, characterised as holding a united set of values. Secondly, positioning the analysis between institutional change and professional identity in order to recognise their co-construction avoids the trappings of both purely structural analyses that see identity as a reflection of power, and the excessive individualism of rational choice approaches which see only individual actors acting on self-interest. The approach is thus both agent centred and sensitive to structure and politics. While Harris and Holts’ (2013) typology is largely used to demonstrate how one of the four logics typically prevails in professional accounts, they also identify several permutations where individuals hold two or more potentially contradictory positions. Those where commercialism and public health managerialism, or ownership and professionalism coincide or compete for dominance within a professional account are mediated by policy changes and wider structural shifts. This leads them towards the conclusion that ‘care is processional, infused with settlements and tensions playing out through history and across different spaces’ (p 69).

On this last point, I am in full agreement, since the data presented here supports this, where participants views on need slip back and forth between different conceptions. However, while the recognition of how such slippage becomes a key feature of professional identity is useful in understanding the reflexive nature of dental provision, it is also one of the major weaknesses. While Harris and Holt display these

<table>
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<tr>
<th>Expression</th>
<th>Practice as part of community</th>
<th>Ethical values seen as central</th>
<th>Concerns over access</th>
<th>Rationing and gatekeeping</th>
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<tr>
<td>Patients seen as family and friends</td>
<td>Charge structures second</td>
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| Vision of Need | Clinician led | Clinically defined by practitioner | Contractual restraints seen as problematic | Emerges from clinician / patient exchange | Ethically defined | Patient has equal voice | Procedural and technical | Governed by availability of resources | Terms of contract seen as central |
permutations as still bounded entities within their typologies, in the data under examination here these typologies appear more like flashes which appear sporadically and sometimes all four may be present in the same statement and then disappear as the narrative goes elsewhere. For example:

**I:** Could you tell me the main problems you encounter when trying to determine a patient’s need?

**R:** Efficiency: Terrible inefficiency and if they are a new patient no continuity of care and you have to build that relationship to be able to diagnose and provide care. Actually with new patient’s it’s a business-style interested question - “How did you hear about the practice” - “Welcome” because that’s me wanting to know if they’ve come here from a little bit of trust or if they’ve fallen out elsewhere over a problem and we’re about to mop up a difficult scenario. (GDP 5)

Each of the four typologies are present here, where there are clearly concerns over professional standards, efficiencies and managerialism and ownership responsibilities, all of which are coloured by hints of entrepreneurial spirit. The problem is that it would be a dis-service to say that any dominated, and a misnomer to characterise the interview as one that exposed a contradictory professional identity because the remainder of the interview led elsewhere and did not return to these themes. As such the typology becomes both too rigid and somewhat redundant, both too wide and too limited to infer that a professional identity resides somewhere in between.

However, there are larger conceptual and theoretical issues at stake in using these meso-level analyses. For while such studies are typically couched in a broad account of the commercialisation of services, they do not say why services are being commercialised or what the wider political drivers are. As such they disregard discussion of the wider policy framework to focus on how professionals cope and adapt. The extension of this argument is that despite the wish to obtain an agent centred theory, it is more accurately described as a top - down theory of how individuals act under constraints without an examination of why those constraints exist and where they have come from.
A related problem arises from the conception of how patients should be considered within this matrix. As it currently stands patients are notably absent from these frameworks, construed as something that the dentist treats differently because of structural constraints but not part of the analysis. This is worrisome, not only because it is out of step with the agenda of “patient centred research”, but because it fails to recognise that patients themselves intimately change the perceptions, identity and clinical behaviour of providers. In line with the arguments laid out in the previous chapters, contemporary health governance not only imposes constraints on providers but actively works on patients to transform their agency from passive recipients of care to active consumers and co-producers of that care. This inevitably changes the way that patients perceive their role in relation to the provision of care and alters the nature of the clinical encounter in a number of unforeseen ways. Increasing demand (Ackerman, 2010), challenges to provider expertise and stratifying differences in the exertion of social capital into medical encounters have all been examined elsewhere (LeGrand and Dixon, 2006), and are integral to understanding the constraints placed on providers both in public and private care.

This omission of the patient and neglect of the wider field of health governance put such “institutional logics” studies in a rather unusual space, seeing only the middle ground of an unfolding process, where the forces working to reconfigure the landscape of healthcare provision are opaque. If we accept the arguments of critical scholars that the field of healthcare is transforming both the macro-economy of healthcare provision to become commercialised while simultaneously seeking to transform patient agency to become consumerist, an “institutional logics” approach which only nods tacitly at structural change and disregards patient empowerment is lacking in political awareness.

If we are to understand what is driving clinical activity, this chapter has demonstrated that it is not “need” in any way derived from philosophical or sociological origins, nor is it “evidence” which remains peripheral, distant and difficult to implement. Rather, it is politics, and while there is no doubt that a key in understanding this puzzle is a clearer examination of the clinical encounter and the constraints that are placed on practitioners, attempts to examine this through the meso-level have proved wanting,
exposing the weaknesses of the theoretical and conceptual tools available to dental policy analysts. A fuller account of the clinical encounter must be sensitive to broader transformations in healthcare governance if it is to accurately capture the pressures faced by dentists working in contemporary NHS practice. This means understanding how wider discursive and biopolitical imperatives are attempting to reconfigure clinical behaviour from above, while simultaneously encouraging patients to take responsibility, become consumers, and exert influence from below. The following chapter is positioned as a system wide approach, moving away from the distracting concept of need and the limits of meso-level theorising, to examine the variety of forces that bring us a step closer to understanding the mechanisms at work in NHS dentistry.
In the previous chapter we saw the strains and limits of the dental imaginary. Any operational concept of need is dodged, redrawn as a contractual issue or rewritten as a matter of clinical procedure. Where there is a recognition that need refers to something wider and socially constructed the discourse struggles to break out from its limited ontology to offer any understanding of what it is actually for or what it enables people to do. Instead we get drawn back towards examples of checklists and indexes which show little other than an attempt to provide clinical justification or map treatment onto a matrix. It is unlikely, however, that this is anything particularly unique to dentistry. The previous chapter exposed the limits to the very concept upon which many services are supposedly designed. Need is at best a eudemonic fantasy and at worst a pernicious rationing tool, invented to disregard political responsibility for the health of disadvantaged groups (Bradshaw, 1994). Even in relation to its most idealistic notion as a universal set of values, “satisfiers” or developmental aims it relies on such abstract criteria that it can be of little use for social policy analysis (Robertson, 1998). We may agree that individuals may need health or freedom to have any potential for a good or productive life, but that provides no basis upon which to build or redesign a service.

So if the dental profession lacks sufficient theoretical or evidence based criteria upon which to provide the services that it does, and it has no working concept of need, then what mechanisms drive current clinical activity? Previous chapters examined the effects of tradition, business ethics, demand or contractual imperatives, but all that has been shown to lead to the sort of nihilistic thinking that things can never change. Instead, I propose that while these might be considered the conventional “barriers to change” that policy makers often refer to (see Checkland et al. 2007 for a critique), are actually much broader constraints in the political economy of healthcare delivery that are seldom discussed in dentistry.
Such conventional constraints are understood here as superficial manifestations of the contradictions at the heart of neoliberal biopolitics, discussed in the previous chapters. The central part of this problem is that dental professionals become so encumbered by these perverse incentives that they begin to embody them, both attempting to integrate the various tools that insist that their work should be visible and accountable while simultaneously deriding these mechanisms as false and misleading. This speaks directly to a well-known truism that ‘people, it seems are eminently capable of talking about an issue in different and apparently contradictory ways’ (West, 1990; 1229; see also Power, 2004). This first chapter examines this in terms of governance from above drawing out the constraints which emerge among the wider imperatives of measurement, management and the political economy of control mechanisms which attempt to model how professionals are expected to work.

Many dental professionals report being squeezed by the imposition of targets, the never ending push to quantify their professional decision making, the rationalisation of the clinical encounter, and the processes involved with being (or becoming) visible and accountable. Moving through the hierarchy from commissioners, consultants and manager towards those working in practice, we can see that the same pressures are significantly altering the operation and delivery of services. Broadly speaking these two themes arose more frequently at either end of the professional hierarchy, where service managers, commissioners, epidemiologists and public health professionals consistently talked of encroaching risk management models, political demands to reach arbitrary targets and the creation of masses of data to satisfy higher powers. Conversely (though not particularly surprisingly), GDP’s and other dental care providers were keen to emphasise the strains that the imposition of targets and measurement tools, exerted on their ability to deliver a satisfactory service.
8.2 Satisfying Higher Powers

“The Ravens are Circling”

The analysis in the previous chapter drew on an encounter with a senior DPH professional where certain problems within the organisation of NHS dentistry were off limits. Difficult questions were carefully modified with scripted responses and others were brushed aside as challenges. The opposite is true of other dental professionals in positions of power, such as the following conversation with a commissioner:

I: Just to recap briefly you were saying that there were two broad agendas emerging in your role. The first is to measure access and the second is to look at oral health improvements. So, to take each in turn could you tell me how you measure access?

R: Right, we don’t measure access by choice, the PCT I work for is required by the SHA [Strategic Health Authority] to measure the number of new patients seen by a dental practitioner in the past 24 months, that’s the measure of access that the government have decided we need to slavishly follow. So what we do is we do everything we can to make sure that number is on a rising trajectory over a three year period, and we are systematically measured by the SHA; each month they produce figures to show how well we are getting on with achieving the stated objective of improving access. (PCT 1)

I: I’m guessing from the tone that you don’t necessarily agree with this measure of access?

R: Well I can see the advantages and disadvantages, we can manipulate the system using the output that the government wants, for example, all you have to do to improve numbers is to invest in a new dentist, on average a new dentist takes about 2,500 patients. So if you decide to invest in a new dentist, if you can spend the money bringing a new dentist into the patch you will increase access over a period of time, and over the last six years we’ve increased the number of dentists by eleven. So it won’t come as a surprise when I tell you that our access figures are as good as anywhere in the region using the government’s criterion for access. (PCT 1)

I: So you would describe this as a well performing unit as far as access is concerned?
R: We’re playing the game that the government wants us to play is how I would describe it. So we can work the system and the figures show that we are always in the top two or three [of the 24 PCT’s] in terms of access. (PCT 1)

There are a few things worth drawing out from this. The first is that it is not hidden that the drive to improve access is seen as a reductive way of measuring the performance of the service. However, the fact that this is referred to as “manipulating the system” seems rather odd given that this has been stated as a one of the government’s central aims for NHS dentistry (Conservative Policy Document, 2010). In a recent report commissioned by the NHS Commissioning Board (2013; 4), commissioned NHS dental services are congratulated on meeting the governments targets. ‘Many PCT’s have been able to tackle previously intractable difficulties and access to NHS dental services continue to grow with over a million more people now visiting a NHS dentist compared to May 2010’. The irony here is clear; this commissioner has done exactly what has been asked of them, though the discourse remains couched in manipulating outputs and “playing the game”. They have aligned themselves with this project despite recognising its arbitrary way of setting targets.

However, their somewhat laidback attitude and cold assessment of centralised targeting becomes a little more frustrated as they begin to talk about the consequences for the general dental economy for the area.

R: We’ve saturated the system with more dentists than you can shake a stick at, and they are cross because they haven’t got enough patients so they don’t meet their contractual obligations and we have to take money off them every year because that’s how funding works for dentists. So the dentists are mightily pissed off that we’ve brought in some more dentists. (PCT 1)

The interesting thing here is that the amount of adult patients regularly seeing a dentist in this area is 62%, so the fact that money is being retracted because of a failure to reach contractual obligations would seem to be counter-intuitive, and the participant seems to be concerned that maintaining a rising trajectory of new patients will be impossible.
R: We chucked a bit of money at some bus advertising, amateur social marketing, advertising the fact that dentistry was available for everyone. We did it for three months and we saw no increase in patient attendance figures. We’ve found that a letter sent to parents inviting them, if they haven’t got a dentist, to go and see a dentist is no bloody use at all. It hasn’t had a correspondingly successful impact on access, we’ve sort of plateaued out where, in my view, all the patients that want to go to a dentist on a regular basis are going and feel comfortable moving around the different dentists if they want to. (PCT 1)

The picture which emerges from this conversation is that using access to measure the improvement of the dental economy reaches a certain limit point, where little else can be done within the given model. In essence it has been exhausted, and not only is the available capacity being underused, but money is being spent trying to fill it with no public health benefit.

Organising commissioning around the central aim of increasing access is not only rather hollow in itself, but leads towards a system of delivery that is both constraining and quite wasteful. This is typically a concern of those working as consultants in dental public health, who appear both keenly aware that that their jobs appear to be both concerned with access and other downstream measures, while they struggle to carve out an upstream position within a system which privileges the former.

R: One area that interests me is the value for money angle of the services that we commission or are commissioning now through the NHS because I no longer work for the NHS. So I think that’s a hugely important thing as well. But so often we get wound up in process issues which lead me side-tracked; issues about performance management and small area issues, and that’s not my job, my jobs about wider population issues because I think that’s where we’re going to make the biggest difference. I have to remind myself everyday what it’s about. (PCT 6)

R: We’ve tried very, very hard and we’ve spent a lot of money trying to get access and what happens then is you will develop dental services in an area you believe to be high need and you will have an influx from people who are accessing care in the independent market in to use those services. These kinds of weaknesses in the system
of delivery don’t really show up in epidemiological data, it kind of masks this kind of thing sometimes. (PCT 6)

This is an excellent example of a situation where key issues are often fudged by process issues and the evaluative tools at hand are not sufficient to capture the problem of whether services actually meet those who need them. This situation plays out over a number of scenarios for this participant who talked at length about the kind of constraints which emerged when trying to implement and evaluate processes and structures while wider institutional imperatives are tied to arbitrary figures and statistics.

I: So we were talking about public health initiatives and how difficult they were to quantify. So could you tell me a little bit more about how you justify them?

R: Well I think we are often constrained because the one thing I learnt about public health you’ve got to take the long term view, because the sort of changes we need to make are essentially about the way people live their lives, not just over a couple of years. And that’s why we have these issues because often people will ask us for statistics and numbers and outcome measures and it’s very, very difficult. And without any understanding of the amount of effort it takes to collect this data and process it. (PCT 6)

R: I find it particularly interesting when I’m speaking to councillors actually because they want dental epidemiological data which they’re absolutely thrilled to receive, they want it every week, what is it next week, you know? But I’m always asking my coworkers for exactly the same data, it’s just the way it is and we have to have a paper trail. When I hear myself say this it sounds ridiculous and I am always wondering, what is the value added for our patients through this? (PCT 6)

In this example the primary complaint is that any longer term view is squeezed out or constrained by an incessant need to satisfy higher powers that want short term statistical data, which is quickly produced and neatly packaged. This was a concern which is returned to a number of times during the interview.
R: If you actually look at the way the data is collected there are clues if you delve deeper into the data, but the only statistics which are published tend to be what the DMFT [Decayed Missing Filled Teeth Index] in an area is, it doesn’t give a flavour of how bad it is and whether a condition is manageable or if it’s totally hopeless. There’s a huge difference because oral health is not only about disease it’s about how you eat, speak and socialise. We must remember that, though we are all hung up on the DMFT and getting people over that is a big hurdle. (PCT 6)

Here it is not the quality of the data which is collected but what is taken from it and how it is manipulated. In fact, it is insinuated that the data could allow for a deeper analysis of prevalence and severity, though what is produced is typically agnostic about the complexity of the problem in a quest for clarity in measurement. However, the participant moves on to outline a very real consequence with using this data to judge the quality of NHS services:

R: So when I put a graph up when I’m talking to people and we say DMFT in the 1990’s was this and DMFT in 2008 is this and you ask that question; have dentist’s improved oral health? The answer is no. But I think it’s wrong to say that they don’t impact on oral health in people’s lives because they do. Yes they have. Have they filled teeth so they can smile and interact and eat? Yes they have. (PCT 6)

There are clearly a number of circulation problems within these accounts. The first is that in order to appease public opinion, government issues a call to improve access which becomes the primary objective. The consequence is that the dentist population becomes over inflated and are unable to meet their contractual targets, effectively encouraging a system of gaming and over-screening. It is recognised in both accounts that the people who are actually using these newly commissioned services are not necessarily the people that they want, but the respondents are at a loss about how to move much further, particularly with the adult population. The second account insinuates that this is because of a lack of interest in long term public health goals, a short-termist mentality which remains fixated with improving access and measuring tooth loss and decay rates. The turning point is that the main “barriers” here are not what the respondents can or cannot do, but a wider obsession with targets, meaningless statistics, which hide the qualitative dimensions from view and portray the
dental profession poorly. Everyone in the cycle is demanding data; there is always a “them up there” who want this data. Depending on where the participant sits within the hierarchy the next rung up is blamed for squeezing out the qualitative dimensions of their work in order to produce or achieve hollow targets and statistics.

Managers who report to commissioners often express concern about the statistically driven and qualitatively bereft way that the profession communicates among its constituent parts.

R: We’ve come up with all these expertly creative ways of managing the performance of our ancillaries which I have to admit are perfectly useless. Though we are in the process of aligning our management indexes so that we can communicate with commissioners, because that’s the way that everyone communicates with commissioners. (PCT 3)

R: When you try to add them all up, or make sure you’ve recorded all the information, I’m aware that sometimes it’s taken so long to record all the information, treating the patient, or examining the patients become a minor matter that you spend a long time recording the information and you don’t spend nearly as long treating the patient. (COM 4)

This idea that communicating with commissioners relies on a transactional and muted series of calculations is evident across the data set from epidemiologists and practice managers in particular.

R: So now we have this thing called the Bateman Case Mix where you give a score for communication, medical problems, physical disability etc, to try and put a figure on how difficult people are to treat, which I think was more to prove to commissioners that we could or couldn’t see some of these patients. So it’s a bit like the IOTN [Index of Orthodontic Treatment Need] but for disability, but our new dentist might give a score of 12, whereas our other dentist might give a score of 3 because she’s used to treating patients like that. So the IOTN you can measure those millimetres and it’s definitive, but this case mix thing is subjective and depends on your experience. (PCT 4)
Another epidemiologist who was currently working on building a quality index for general dental practice had similar concerns over the things that were valued from the indexes he produced. This extract is taken from our discussion of the use of a quality assessment tool called the ISO9000, which is a universal quality management tool that can collate various measures 'for companies and organizations who want to ensure that their products and services consistently meet customer requirements, and that quality is consistently improved’ (ISO website, 2015).

**R:** So what is meant by quality, that’s so massive, from being able to adhere to things like core training, to ensuring if there’s a requirement for regular updating of medical history, recommendations from the UK Resuscitation Council, it could be looking at levels of complaints, how are these complaints effectively dealt with, looking at things like, how are you using evidence-based practice and how that fits into the practice that your clinicians are actually carrying out, how do you know that that’s being done?

**COM 1:**

**I:** How effective would you say that it is, in general?

**R:** It’s as good as the information that you feed in at the start of that. One of the weaknesses of it – not with the standard – but one of the weaknesses with where we are is I think that in terms of our understanding of what we really mean by quality in dentistry is not as sophisticated as it should be. So the system we’ve got, it’s only as effective as the commission in the first place, so if the commission isn’t saying to us, we want you to report PRO’s [Patient Reported Outcomes] we wouldn’t be collecting that, because that’s not what our commissioner is asking us to collect. If our commissioner was asking us to do that, ISO would be very effective in ensuring that we were providing that data. (COM 1)

**I:** Why do you think these things are not currently requested or been developed in the framework?

**R:** I guess you’d have to speak to the commissioner about that, really. Dentists are always driven down the route of how many fillings have been done because we can count them we know how many teeth are taken out because we can count them; we’ve got lots of indices measuring those things and periodontal problems. But the thing that
is difficult for us is getting around the mechanistic part of dentistry. One of the things
we practice very much now is preventative dentistry, but it’s hard for us to quantify
that, and that’s where we struggle. So we go back to almost that mechanistic counting
process, in terms of our quality assessment, and look at things like how many
duraphat applications we’ve carried out, how many fissure sealants we’ve applied.
(COM 1)

Evident in this snapshot are a number of recurring themes that reach back to the
earlier chapters of the thesis. Firstly we see how the tools available could be used to
capture a much wider spectrum of qualitative phenomena relating to patient
satisfaction and preventative dentistry but that this is neither requested nor thought to
be valued by commissioners. However, this final point that preventative dentistry can
only be expressed within the same framework of the mechanistic counting of
applications resounds with the arguments laid out in chapter 3 that prevention and its
measurement remain eclipsed within the restorative paradigm. The next logical step is
that anything which cannot be quantified within this framework is either overlooked
entirely or becomes at risk of being cut, as in the following example:

I: It’s interesting when we talk about something being valuable, because it’s difficult to
establish cause and effect with population based measures, so could you give me an
example of how these things become valuable?

R: I think from the health visitor’s point of view, they’re giving dental health advice
and they feel that the parents are more likely to listen if you’re giving them something
and it backs up what you said. So they can talk about diet and fluoride and all that but
giving them a sample of toothpaste to give out gives them an opening to start talking
about dental health. And I think this is one of the areas that the profession doesn’t
take responsibility because the vast amount of resources are going into the dental
practices where its only people who go to the dentist, and it’s my perception, I could
be wrong but I think whenever there’s cuts its always that that gets cut isn’t it? (PCT 4)

R: Sure Start was cut wasn’t it and now they’ve cut health visitors, and as the health
visitor said to me, you can’t prove that you going in to that mum with post-natal
depression is going to impact on her child’s dental health, or stop her from killing
herself and child later on that day. (PCT 4)
In all these examples there are deficits in communication, things that are perfectly reasonable and give a human face to the profession remain invisible and are subject to cuts, though in a discussion with a divisional director of emergency and community services, the processes associated with becoming visible put this concern within a broader picture, pointing towards the opaque powers which constantly ask for calculations and benchmarks:

\[ R: \text{Some of them look at things in the same way that we do and some of them don’t because of where they’re coming from. So we have to do all this stuff alongside the work we already do; how much are you doing to them, how are you going to do that, and if you can’t treat that patient within four weeks you discharge them, because you don’t have the time and resource anymore. But now we have ravens circling, big names looking over our shoulders, oh tell us where you do this and how many of these you’re doing and you’re like hang on a minute are you getting ready for tendering. (PCT 3)} \]

It is difficult to assess whether the concerns over tendering are overstated or conjectural, though regardless the service is being propelled to act like it could be put out to tender. In other words the imperatives of these “ravens” is to make the whole service more business-like, instil accountability and make each transaction accountable.

8.3 Moving Through the Hierarchy

Visibility and Its Consequences

These accounts, largely taken from professionals in management and consultancy roles paint a broad picture of the wider bureaucratic pressures to maintain visibility and accountability. Each account derides these processes for their lack of application, and the way that things which are seen as humanistic or qualitative are invisible and lack value or must be transformed into things which can be counted. The further we move down the chain the more exposed these tendencies become as GDP’s and
others in frontline provision talked about how the service pressed their time and clinical expertise into accountable units.

*R: I think dentistry for you and your dentist is less of a caring exercise than it used to be, because they’re severely limited by contractual obligations, and it’s too narrow, and the preventative ethos that has been nurtured since 1978, you just can’t do now (GDP 10)*

*R: At one stage we would take medical histories, we’d take peoples drugs, diabetes, we’ve got all the information and then that should actually be fed back to the doctors. But now there isn’t time to do that kind of thing, so it’s the concept of the Greeks and the Romans that the mouth is a window on the body, and it has been for thousands of years, but that’s gone. 2000 years’ worth of wisdom has disappeared within all the political manoeuvrings. (GDP 12)*

This GDP is clearly making reference to the focal theory of infection which sees the health of the oral cavity as intimately linked to the health of the body (Pizzo et al. 2010). While this particular theory has been dwarfed by the “genes plus behaviour” model, so typical of modern medical discourse (Caufan, 2004) in the era of non-communicable diseases (NCD’s), there is emerging evidence that many dental problems may be linked to a number of endemic diseases and medical problems, such as rheumatoid arthritis, adverse pregnancy outcomes, kidney disease, osteoporosis, and others (Offenbacher, 1996; Pizzo et al. 2010; Vieira and Caramella, 2009). However, regardless of whether the focal theory is “true” is beside the point that this GDP is not given the capacity to consider it within his limited remit, as he goes on to explain:

*R: We can give you the names and addresses of everybody who’s got periodontal pockets over 5.5mm, and any household with caries, then all the families related to that child with caries because caries is affected by families, usually through habits passed down through grandmothers. We say to the primary care trust, should we target our healthcare and make sure we hit those people in greatest need? Oh no, we don’t want you to do that, we just want you to hit these new UDAs for new patients. I can’t do it, it’s not allowed. We’ve been able to do it for years, we used to do it, why did you stop us targeting it? (GDP 12)*
Similar complaints are addressed throughout the data, though all relate to the theme of visibility, accountability and monitoring of professional conduct and behaviour.

R: We were in the PDS pilot which was pre-2006, which worked really well. But the problem was with a couple within the pilot that didn’t fulfil what they should’ve done really; because of the outliers they got rid of the whole thing. But the real problem was they noticed the dip in patient charges. They could see that the amount of work, fillings, crowns that were being done dropped off, but they didn’t see that we’d swapped that time for prevention. We were basically salaried to keep our patients as healthy as we could and it worked great, but there were a couple of people who didn’t behave properly and they scrapped the whole lot. (GDP 10)

R: Anecdotally there’s been quite a drop off in activities in the [capitation pilot] models because the models are looking at quality. I’m not sure how exactly how that’s been determined or what the quality indicators that have been outlined. Nobody seems to have said that the volume of work or activity needs to be part and parcel of what’s been quantified here, which is a thing which makes me a little bit nervous. (GDP 1)

There is a slightly contradictory line of thought developing between the two statements above. While both are speaking about pilot contracts that operated on capitation models, the first is an expression that because the system could not be measured or assessed it was scrapped while the second is identifying the same problem and worries that their preventative work will be unrecognised. Put another way, the problems with exactly what is being measured and what is quantified as activity is a concern for the participant because they recognise that their professional credibility, and long term financial viability, relies on such things being visible. In a pure capitation model there are powerful drivers which encourage dentists to become “minimally invasive” (Jones, 2001) and ‘carry the risk of under treatment or neglect’ (DoH, 2015; 16). By contrast UDA’s put all the emphasis on treatment, all of which can be measured. So what emerges between these accounts is the rift between how visible these professionals want to be and how they want their work to be accounted for.
For other GDP’s this was a primary concern as they felt their experience and values were not captured in this push to attain visibility through the current system.

**R**: You have to be in it for the long term and you have to do it blind faith and say prevention works, nothing else does, and put your money into that. **But** you can’t measure how time with a patient turns into a benefit and that’s why the system is so bad is there’s an obsession with people trying to measure things. Its econometrics and it doesn’t fit with healthcare and it doesn’t fit with psychology and it doesn’t fit with behavioural change. **So** you see cycles in the system. **Let’s introduce prevention, you do it, but they haven’t got time to see it work, so then they change it again and then they realise it was a mistake, and then they change it again. And now we will move into another cycle, it’s just the latest trend.** (GDP 12)

This quote is telling because they frame their story in terms of “blind faith”, knowing that what they are pushing for is not easy to quantify, and the cyclical process is seen as largely the result of different political imperatives which value different things but do not have the faith to see it through to its eventual conclusion.

There are, however, some serious knock on effects a little further down the line from following the visibility heavy UDA target system for patients who are not regular dental attenders or who experience dental anxiety. One interesting feature of this is how practices manage the costs associated with high needs patients by moving them around the practice.

**R**: **Difficult or high needs patients get sent through to me because the associates can’t afford to do all the work that needs doing on the 3 UDA’s that they’ll get. The associates wouldn’t do all the treatment on one course, so they might wait two months and then you claim for another course or something. At the moment I’ve got one which is five crowns so the lab bill will be higher than the UDA value the practice get. But because they get paid by the PCT to have us they let us do that, I’m salaried and my materials are all paid for so it’s best to give those patients to us.** (VT 2)

It would be easy to slip into moral denunciation about how the contract is played by referring high needs patients through to salaried VT’s to contain costs; though a more pertinent consideration might be what happens to these patients at practices who do...
not have VT’s to defer costs onto. There are several reports about dentists splitting treatment or refusing to see patients who need dental work that will exceed the costs they will receive from the PCT (Sorrell, 2010; Davies and MacFarlane, 2010). There is a gap here where patients who are not easily accounted for within this system will get squeezed out for a number of reasons. As explained by an emergency dentist employed in a hospital setting:

R: Building in all these rigid timeframes for examinations and all that might look great from a central point of view, but for our patients you see here many of them are dental phobics. You can’t start prodding them straight away, they don’t fit in that mould, and they know, or think that’s what will happen if they go to your standard high street dentist. So they leave it until its pain. So they’re not difficult to treat. They just need more time and that’s part of the problem with practice because they need more explanation at the beginning, during and at the end of their treatment to counteract their anxiety. There isn’t the flexibility to see these people in general practice, so they end up here and that’s an awful lot more expensive in the long run. (EMR 1)

This idea that high street dental practice is now a quick routinized experience fits well with Rudolph Kleins’ (2010) well known observation that the NHS has transformed from a caring institution (the church) into automated mechanical system (the garage). This particular practitioner identifies this as one of the major problems that would explain why Milsom et al. (2009) found that people in emergency clinics typically have more extensive treatment needs and higher levels of dental anxiety. Whether it is true that NHS dentistry is less caring and more invasive is secondary to the fact that there is a perception that it is, and this drives anxious patients to disregard their oral health until they are in extensive pain and in need of extensive restorative work.

As we moved through the hierarchy of NHS dental provision we see both the hollowing out of the qualitative dimensions of dentistry and the consequences for front line provision. In an age of austerity there is certainly reason to believe that some of this can be attributed to cuts and the roll back of elements of welfare provision not seen as “essential”, though given that a lot more dental services have been commissioned since 2008 would suggest that austerity cannot account for the wider
picture. In fact there is evidence of a much deeper set of political imperatives driving these ongoing processes. As demonstrated by the opening accounts, the obsession with access is among the most important, though the continual fascination with measuring the performance of the service using measures such as the DMFT, aggregate access figures, UDA’s accounted for or fluoride varnishes applied, points towards a larger problem with what is valued in this scientific and political exchange of information. Some of these accounts insinuate that this is something inherent to dentistry; given its technical nature, it is too easy to slip into counting extractions or duraphat applications than it is to try and develop more patient focussed indicators of quality, patient satisfaction or inequality. DPH professionals suggest that the data needed to provide the basis for a broader conception of service design is or can be collected but is not valued or effectively used within dental public health, and some dentists have the ability to effectively target disaffected groups, though they are not impelled to and may be actively steered away from these avenues.

The obvious question would be why this obsession with targets, units, visibility and accountability? Is this a function of an overly bureaucratic welfare state or a profession that remains fixated with counting things and has failed to adequately develop its human side? Both are plausible explanations though the accounts presented here do not sit comfortably with this type of reading. There is good reason to take a step back and consider why these tendencies have become more pronounced since the late 1970’s, just as the UK and many other Western nations disbanded collectivist notions of welfare and began extending market principles into the heart of the Welfare state.

It has been widely documented in medicine that these biopolitical mechanisms which seek clarity over complexity are intimately tied to changes in late modern forms of governmental philosophy (Foucault, 2009b; Peterson, 2003). Imperatives become tied to visibility, cost benefit analysis, econometrics and are agnostic about inequality and poverty (O’Malley, 2004; Williams and Popay, 1994; Nettleton, 1999a; Rawls, 1989). Stripping back the qualitative aspects of care and population based interventions for quantifiable procedures and hard statistics (regardless of their meaning or effectiveness) has been the hallmark of this transformation, and the reasons for this I believe are to create the necessary and sufficient conditions for market mechanisms to
be extended over the delivery of services. What has been explained in this chapter are the processes by which the conditions for NHS dentistry to become more market based are laid down, and the communicative mechanisms are developed that seek to instil matrices which impel providers to see themselves as competitors in a formal market. We have already seen how this type of rationalisation ripples through the service, creating dissatisfaction and problems at all levels, and explored some of the consequences for front line provision. However, the following chapter explores this in more detail by examining the further consequences as these imperatives begin to cover the service, changing the landscape of NHS dentistry and the nature of the clinical encounter.
Chapter 9
Invisible Hands, Visible Fists and Political Engineering

Before presenting the analysis of the data for this chapter, for purposes of clarity, and in anticipation of potential criticism, it is worth reiterating that NHS dentistry has never been a centralised service in the same way as medicine more generally. While the market was not formally integrated into medicine until the passing of the Community Care Act of 1990, NHS dentistry has always held an independent status modelled upon a quasi-marketised model where providers competed for contracts to provide dental care under the NHS (Tickle, 2012; Klein, 2010; Tudor-Hart, 2006; Ham, 2008). During its brief tenure as part of a universal free NHS from 1948 - 1951 dentists operated as self-employed business owners who leased their services, facilities and estates to the NHS under contract, and even during this period there remained a comparatively large private sector (see Kelin, 2010).

However, while there have been market mechanisms at work within NHS dentistry since its inception, what is presented here is evidence of their further extension and intensification. As explained in the previous chapter we see a proclivity for visible, standardised economic indicators and measurement tools typical of the political economy of neoliberalism, which have been vigorously pursued, placing parameters around what is and what is not valued by the authorities which oversee the delivery of NHS dental services. However, moving the analysis forward the argument pursued in this chapter is that while this is inconsistent with improving dental public health, preventing the misuse of available services or overcoming inequality, it is entirely consistent with attempts to introduce further market logic into the service.

As dental providers are pushed into these matrices of calculation they are concurrently encouraged to see themselves as market actors who treat patients within these parameters. Though “the market” is not only about constructing a base upon which
provision becomes accountable to higher powers, but supposedly creates a level playing field so that the individuals who use these services can move through them as if they were customers. Over recent decades individuals are no longer seen as recipients of care but consumers of services, so while the previous chapter outlined how the broader architecture of the market is imposed from above, this chapter looks in more detail at how it is engineered from below. As Miller and Rose (1192; 174) write; ‘Power is not so much a matter of imposing constraints upon citizens as much as “making up” citizens capable of bearing a kind of regulated freedom’. As we saw in previous chapters Foucault (2009a) talks of this in terms of the re-imagination of the ideal citizen as homo economicus, a society of individuals who are construed as the sum of their human and social capital.

Within the politically right leaning literature it is often argued that if consumer citizens were able to make meaningful choices within an internal market of healthcare provision, services would be more responsive and “invisible hands” would emerge which would realign services to meet need (LeGrand, 2007; Spiers, 2008). In the ideal formulation, systems naturally configure around expressed actions and the collective sum of individual interests, eliminating bureaucracy to foster efficiency. However, as pointed out by many scholars this is far from a naturally occurring phenomenon but is a constructed system of political engineering (see Veitch, 2010). Human agency is nudged, persuaded or forced to consider actions as transactional, encouraging the development of a consumerist ethos fit to compete and consume within the newly configured market place. However, what is argued here is that this construction of the consumer citizen plays out in a rather odd and skewed fashion within NHS dentistry, complicating rather than solving problems with the distribution of services.

The first section of this chapter unpacks in more detail how providers of dental care see the market being constructed around and pushed onto them. The second continues the analysis by looking at the themes of choice and responsibility, terms which frequently arose in discussions of healthcare consumerism throughout the data collected. What emerges through these accounts is that the construction of the market might better be described as a visible fist which is imposing itself across the dental economy rather than an invisible hand which emerges naturally as a result of
enlightened competition (Armada and Muntaner, 2004). Furthermore, even where patients / consumers engage in the discourse of choice and consumerism, this is often expressed as consumers drawing on the lexicon of choice to pursue individualistic ideals of dental beauty, constraining (or inspiring) the ethical judgements of professionals.

9.2 Integrating Choices

The Visible Fist of the Market?

Using the metaphor of an invisible hand versus a visible fist is a crude distinction, though it is adopted here as a heuristic counter-point to idealistic notions that if governments just got out the way, or better, provided the right infrastructure and information to citizens, and then got out the way, markets would coalesce around something more natural, driven by patient interest rather than professional preferences. Leaving aside the question of whether medical professionals or patients are in the best position to make decisions about healthcare for now, (for this debate see Le Grand, 2003; Harrison, 2003; Campbell, 2003; Klein, 2003), there is a more pertinent issue raised by many dental professionals about how markets are created in the first place. This issue is raised here because it appears to explain the type of biopolitical imperatives forced onto the profession and the type of consumerist ethos that patients are impelled to adopt, which in turn shows what is “neo” about this neoliberalism that I am arguing can be seen in this reading of the data.

When respondents were asked about healthcare consumerism, or how they delivered choices, almost all had stories to tell about uninformed patients exerting social capital or demanding patients who refused to accept diagnoses or their related costs, though it was the idea that choice was something that was being forced from above as well as below that appeared as a greater concern. The following extract is taken from a conversation with an experienced community dental practitioner whose expertise was with special needs patients.
R: I go round, or try to go to as many as these of these round table meetings and regional discussion groups as I can, and that’s because I want to show them that “we’re here”, don’t forget the dentistry part. Because I’m CDS [Community Dental Service] that’s even more important, because otherwise our issues would be really easy to forget and I spend a lot of time just trying to maintain a presence even though there might only be one thing on the list of twenty one items to be discussed that relates to us. But the last five or ten years, it’s as if nothing can be raised or considered unless it comes with some kind of caveat that it’s going to enable choice or make the service more flexible and all. I know this gets the other people really riled up because that’s more often the issue than the solution, but it’s a brick wall and we sit and we listen, but it’s all political chatter for nothing. Now, our issues are nothing to do with this really – don’t get me wrong – I would love more choice for our patients, but our issues are not related and it’s difficult to get through to them. (COM 5)

I: So because there are wider drivers and political agendas you feel like it’s even more difficult than before to push for issues that are relevant for community dentistry?

R: Yes that’s part of it, definitely, but my worry now – because we’re bigger now – that all the attention will get turned to the parts of the CDS where this can happen. So, there’s all this attention on oral surgery because that’s within our remit too and it’s partly I think because they can talk about oral surgery in those terms. So my worry is that the CDS will get too focussed on oral surgery and people will think that the CDS just does oral surgery for special needs people and it’s so much more than that. As well, the carers don’t have proper contracts now, that’s all been done away with and they think that’s great because it makes it cheaper. But it takes time to develop a relationship with the carers because they’re the ones who will have to do the cleaning and help, but it’s a different one nearly every time now, some don’t even speak the language that well or may not even think that much about their own oral health. So you have these conversations and you feel like you’ve got the message across, but then it’s someone different next time, that’s a really big issue for us. (COM 5)

This example is particularly illuminating because it puts dentistry and community dentistry in particular, within the wider spectrum of how getting discussion to the policy table must be framed in terms that are compatible with market ideals. Greener and Mannion (2009) report almost exactly the same findings when interviewing senior
managers of a hospital trust who consistently talked about how difficult it was to communicate with commissioners unless their proposals were presented in terms compatible with market logic.

The other finding here, that within a highly complex web of services, attention is turned to parts of the service (oral surgery in this case), which can be easily assessed in market terms. While the participant does not say exactly how this will affect their role, the insinuation is that their role may be devalued as it becomes less visible, or that what is seen to work in oral surgery may be generalised to the rest of the service without adequate consideration of the technical and clinical differences. Whichever is the primary concern, there is clear evidence that even within the CDS these logics are structuring the way in which problems can be addressed, issues can be communicated, and preferences adjusted. The final comments regarding the flexibilization of the carers role was also raised by other community dentists.

*R: They're low paid workers, a lot of them now are coming in from other countries where the dental health isn’t a priority. So we’ve got a problem with carers being low paid, change a lot. In the past they were all employed by social services and they had training like we have in the NHS, so you could do a session. Now people are getting their own individual budgets and employing their own carers so you haven’t got that easy access to groups of carers like you had before, yet we rely on these people so much more to pass on these habits. But they are so worried about the legal side; “if I force them is that assault?” And they will say if they don’t want their teeth brushing that’s their choice. (COM 3)*

The informalisation and flexibilization of caring roles was a prominent theme for all those who worked in community service roles, though a district manager expanded on some of the consequences of how the service was becoming more market orientated and how these carers were expected to shoulder this burden.

*R: Now because they are trying to give more control to people in terms of budgets and other choices one of the easiest things to do for well-meaning carers and institutions to do is to give them more choices about what they wear, when they get up in the morning and food. And if you’re doing choices, if you’re teaching them daily living
skills and trying to get them to take more responsibility the best way is to give them some control over their money and they get a bit of pocket money to buy sweets. Its typical Labour, there are good intentions but it was a big guns sort of policy and no one thought of the consequences. So all this stuff falls onto poorly paid and unqualified carers, and now our survey showed that caries is rising and I predict it will rise again because of the lifestyle choices and nobody to help manage it. We used to get in early, get dental in there right at the beginning, but now we don’t really have those openings anymore so it’s all on carers, and it’s not their fault because why would they be thinking about oral health with all the other stuff? You can’t take away all the supports and then insist that people make choices, so that’s where this high caries is getting in. (PCT 4)

Nobody would take the stance that helping disabled or handicapped individuals to exercise more choice over how they live their lives, and helping them to live more independently is a bad thing. It is more that this was a policy that was pursued without the necessary supports in place to ensure that the system could work; the whole policy assumed that this could be adequately managed by relying on a deskilled labour force that has been flexibilized. This may well be a progressive policy though the unintended consequences emerge because it is unable to be properly managed within the flexible market system that surrounds it. This final comment that caries is getting in, is particularly illuminating as it demonstrates a poor fit between policy, implementation and the labour market, a circulation problem by definition, which allows in rising levels of dental disease.

This example of how community based dentistry is feeling the unintended consequences or market logic is of note precisely because it would intuitively be the last place we might think to look for evidence of this transformation. However, we can see clearly how communication between the CDS and its related services are forced into market relationships and how the work they carry out is encumbered by the wider political arrangement of a flexible labour force. This was not unique to the CDS, however, and other professionals in frontline positions spoke at length about wider changes in the labour market. For high street dentists this most often arose in relation to encroaching competition with corporate dentistry.
Right, so we might be telling everyone that they’ve got access or whatever and they can see a dentist when they need one. That’s fine but what are they accessing because if you walk into a practice and they say yep we want new patients, it’s got the NHS logo and people in the right get up, and quite often the premises are nice and clean and people will trust that. Trust is the main thing for people, if you can bottle that you can sell it. But the guys they’ve got in these practices are put in by corporations, Spaniards or Lithuanians and what are their skills? (GDP 4)

We’ve already had quite a few patients, cases where we have had to clean up after the corporations. Roots and bulbs mainly and the patient comes in and the moment you see what’s in there, bits of stuff poking out of their roots, it might only be a few practices that are that bad but what does that say about our profession? (GDP 7)

I’ve got experience working for dental corporates where the biggest driver for behaviour and policy will be share price or profitability versus civic responsibility. So there’s a huge contradiction in terms of what the organisation should be providing. (GDP 1)

It should come as no huge surprise that dental professionals are uncomfortable with corporate dental practices, foreign owned, and often foreign staffed entering their local areas. However, these concerns may well be justified, since the laws on dental corporates have been significantly relaxed since 2005 and because the GDC is not a licencing body, dental corporates do not require its approval to set themselves up (see Purohit and Singh, 2012 for a good overview). This comment from a retired DPH professional put this in a wider context.

I can see why people are concerned because this has kind of crept up on us, that’s not quite true actually, but I mean that we have let it slide because it sorted quite a few problems really, that maybe we let it go a bit. It’s been a life saver for some patients because they can get in to see a dentist and, this is going to sound awful, but it also siphed a few problem dentists out and gave them a route out of practice. Most [dentists] I expect will say they are awful, can’t do the job, but that’s a gross generalisation. For me the problem is that our dentists don’t always have the best networks anyway, a bit loose, and getting these corporate dentists involved is next to impossible, you might get a representative or something along but not the dentists. So there’s a lack of
oversight and they are in control of a large sum of UDA’s and I think people are now waking up and trying to get more oversight but our options are quite limited. (PCT 5)

This is a notably balanced assessment and a useful counter-point to some more reactive overviews of the problem. Despite this there is an obvious admission that this has crept into the system somewhat unchecked and has got a hold in the dental economy, generating mistrust amongst professionals and ushering in questions regarding the quality of NHS dental services they provide.

In a discussion with two practice owners this led back towards a wider discussion of how the growth of corporates was changing the whole system of competition in a number of ways

R: They can negotiate higher UDA rates because they can turn the screw on the PCTs, because they can’t possibly take those big contracts away. And then they move them to make sure there’s no continuity of care, they move them from one practice to another, so they never get to know the patients. So there is a practice on [road name] as far as I’m aware, and it is 100 per cent NHS and it’s funded 100 per cent by the Bank of America. So we have a large section of NHS owned by the Bank of America and they have big purchasing power. (GDP 12)

R: Yeah, well they do, they will get 50 per cent off their dental materials, so that’s 50 per cent of our costs right there. This gives them massive clout, because they will own however many contracts of however many UDAs and if they turn around and say well, we’re not going to do it for that, what’s the government going to do about it? (GDP 10)

I: So it sounds like you have pushed into a model of competition that nobody really designed specifically, but can you compete on the continuity of care aspect?

R: I mean we’ve got a lot of patients who come here because they’re tired of seeing a different person each time, but the downside to that is they have pushed the goodwill value of NHS practice through the roof and that means that associates can’t afford to buy them (GDP 10)
R: We’re competing with less because we’re now at a point where we can’t complete check-ups to NICE guidelines at the same time as hitting the PCTs percentage of new patients without going over UDAs, but that’s now rationed, so you can’t have any. So then we end up having to privatise it. It’s not the way it should be working; it’s not our vision of what should be happening. So we stop being able to compete when our UDAs run out and we don’t have the leverage to get an increased NHS budget to use. (GDP 12)

There is a perception running throughout this conversation that the model of competition is not only enforced but stacked in favour of corporate providers, because of their size and their ability to expand on economies of scale. The final comment shows that their ability to compete within the NHS reaches a plateau with their UDA allocation, though perhaps more concerning is the point about how associates cannot enter the market when the goodwill value has been inflated. However, taken alongside the comments from the PCT there is also a sense that this was an accidental consequence of trying to solve access and human resource problems, which has grown into a much larger and intractable problem.

So while there are a number of competing pressures that frontline providers have to deal with, the clinical encounter was also reported to be the subject of scrutiny for overseers who push for the encounter to be a more transactional process.

R: I wonder whether the professionals have been nudged into providing more and more choice in order to push patient self-funding especially in the kind of present economic climate. I just wonder whether the dental, the professionals will be the ones who will shoulder the blame for choosing to provide patients care under a private contract first, as an NHS contract, if the NHS contract is undeliverable. (GDP 1)

R: The problem is that there are choices available to them and we have to offer everything. Now, we professionally have to offer them everything that's available, but everything that's available isn't available through the NHS. (GDP 12)

R: We have to offer them choices, so we've had the Care Quality Commission in and they have to look and see what's available. We have to show that we're offering what's available within the NHS and what's available privately to them. (GDP 10)
This idea that NHS dentists must offer private care (if they are a mixed practice) as well the conventional “menu” was mentioned by several GDP’s and two participants reported that they had stopped providing private treatments partly because of this. The first comment frames this in terms of an active decision by government to push dentists into offering private care in order to shift cost and risk onto the provider, while the narrative which surrounds the latter comments are based more in frustration that the choice agenda is eating up valuable clinical time and turning the clinical encounter into a transactional process.

In all these examples the markets which these providers are working within are not natural, they are not the extension of innate tendencies for markets to extend competition. In fact it is quite the opposite; markets have been introduced with little consideration of the wider political consequences. Whether these are problems arising from trying to integrate further choices when the necessary supports are not in place, allowing corporate actors into the market without appropriate oversight, or forcing providers to integrate choice into their clinical routines, these are adequate examples of providers trying to balance the consequences of poorly constructed markets and poor policy design. It is certainly not an “invisible hand”, nor is it quite the “visible fist” which would imply a much more coherent programme of marketization than can be seen here. It is better described as ham-fisted neoliberal reform, where poorly constructed markets are ushered in by the state, labour markets are flexibilized, and professional conduct is engineered and disciplined to accept market logic as sacrosanct, in the vain hope that it will improve efficiency. This is not the all-encompassing neoliberalism most often presented by critics, but a patchwork and awkwardly implemented programme of neoliberal type reform that tries to exploit the market formula with little consideration of its consequences.
9.3 Adaptation, Choice and Responsibility

*Learning to be a Good Customer*

Nobody really thinks that choice is inherently bad; if you ask people if they want more choice, invariably they will say yes (Greener and Mannion, 2009), though it is equally true that when faced with choices individuals find it frustrating or overwhelming, even when facing choices about what to buy in a supermarket (Salecl, 2009; 2011). Choice, however, has become so ubiquitous in the language of welfare reform that it is wheeled out at every opportunity in support of almost every policy programme, quashing dissenting voices as “anti-choice”. Amongst the most vocal proponents of introducing choice into the English NHS, Julian Le Grand (2003; 2007) reduces this down to a simple question of who should be in control of the choices that are made about an individual’s healthcare; professionals or patients. To use Le Grand’s terminology, who should be the queen and who should be the pawn? While many have taken issue with Le Grand’s reductive presentation of the problem (see Klein, 2003), it does represent a political and academic appetite to foster more patient choice. As Greeners’ (2004) analysis shows, the new healthcare consumer became a particular feature of Tony Blair’s NHS strategy, relying on the comparison that as we consume in a market economy so too should we consume our healthcare, though more recent reports (see DoH, 2008) have taken this a step further to couch choice oriented policies in terms of “empowerment” (Veitch, 2010).

For others in more critical traditions, however, choice is more often seen as a political technology, designed to try and discipline a perceived monopoly on professional discourse, shift risks and responsibilities onto patients, or place distance between the government and health outcomes (Aldred, 2008). Further criticisms are that it is part of a more general trend to marketise individual agency and inculcate a consumerist ethos that sees the self as project and consumption as reward (Lemke, 2001, 2003, 2009); part of a distant governmentality which implicitly encourages human agency to act and think transactionally (Dillon and Reid, 2013).
Like many of the other themes which arose through the interviews, this was not something that had initially been pursued, though arose unprompted and regularly across the data set. Rarely stated in the terms laid out above, the very word choice was something that inspired a great deal of interest whenever it was raised. Though much like in the above analysis of the introduction of a market infrastructure, the discourse was fractured and fragmented, policies which sought to implement it were loose and poorly constructed, with the result that choice and empowerment are seen to create a peculiar inertia which benefits nobody and sucks up clinical time. As might be easily predicted at the most superficial level this was often expressed as a concern that some patients tried to exert social capital to obtain treatments on the NHS drawing on consumerist discourses.

R: Low treatment needs individuals who want to just seek the, sort of, surveillance aspect of dentistry are extremely difficult to reason with on these types of things. They have been taught to challenge the dentist on every decision and it's often easier to give in and just say okay, fine we'll see you in six months (PCT 6)

R: White teeth, everyone wants white teeth and you often see patients and I mean sometimes you actually see they’ve got crowns and not very good white fillings at the front of their mouth and want tooth whitening and you can see they’ve got quite a high risk of decay, they might have active decay and you have to actually say well ideally we’d like to get your teeth healthy before we go on to improving the appearance (GDP 2)

R: Patients that think that oral health is tooth whitening, you know, and tooth whitening is demanded by all different cross sections of society. (PCT 2)

R: So we have been trying to do this stuff, and the NICE guidelines have helped us a bit on this, even though they are not evidence based. I went through a phase for a year to two of having a conversation very regularly with patients over, “Why can’t I have a scale and polish? I always get a scale and polish.” People will push much more than they used to and though some have come around, we will have lost some of our patients who will go to another dentist who might do a little scrape or something (GDP 5)
These comments give only a brief snapshot of the ways that consumerism can play out in the clinical encounter, eating away at clinical time, and no doubt the energy of the practitioner. Some suggest that it’s easier to “give in” than challenge consumer discourse, though with teeth whitening (a common complaint from GDP’s) this is often seen as a battle ground, where the dentists desire to improve oral health is at odds with the patient demand for aesthetic improvement.

For some dentists, and for younger dentists in particular, there was often a sense of frustration about this as they felt unable or unwilling to challenge people’s health related decisions because of the wider frame of patient choice.

*R: I’ve had a shock, I’ve got a patient that she’s beautiful, she’s pristine and then she’s got black teeth all at the front and it doesn’t seem to bother her. I can’t understand it, if someone said I need to get something done I’d wanna get it done but a lot of the patients it doesn’t seem to bother them. If I could I would say, sort yourself out otherwise you’ll be in the emergency clinic. I’m waving interdental brushes at her and she’s playing with her phone, doesn’t listen to anything. I ended up asking the associates and they sort of say you know, can’t pressure them, but they need to have that I think* (VT 3)

*R: I don’t disagree with that, I don’t disagree with choice and patient powers but I just feel that that has almost brought a complication around itself. On these programmes and magazines etcetera there’s no focus whatsoever on prevention, so these patients come in and they expect this wonderful thing to be done and they expect it on the NHS. They don’t understand that they can’t look after what they’ve already got. It’s totally giving patients unrealistic expectations of what’s going to happen and you’ll say here’s your choice of treatments and they’re not happy with that, so we’re juggling that constantly* (GDP 8)

For these two dentists the dilemma of choice or “patient power” is a negatively impending problem where their professional power is diminished and they are unable to impel patients to take better care of their teeth for fear of crossing a perceived boundary. The second statement looks much like an expression of Baudrillard’s (1994) simulacrum where the consumer culture which embraces society creates completely fictitious expectations of aesthetic beauty with no bearing on reality. For
other dentists, choice was recognised as a much more ideological driven policy programme, much closer in theoretical terms to the neoliberal critics.

**R:** It’s choice and the perception of choice without any information or aim other than to put distance between the cabinet and health outcomes. If patients are choosing their also to blame if it goes arse over tit, but then it’s our fault, because the patient will come back saying “why didn’t you do it properly” and we can’t very well say that you made that choice so deal with it! So it falls on the dentist to make patients make the right choices, which actually means that it’s our responsibility to make choosers choose. (GDP 4)

The rather colourful prose in the above has a number of interesting points. The first is a clear recognition that to make adequate choices there needs to be adequate information, though in the absence of that information the professional finds themselves in the contradictory position of trying to get people to choose what the dentist considers to be a good choice. It is a pointed remark that the dentist is the most likely person who will feel the negative consequences if the patient is unsatisfied with the choices they make, so it makes logical sense to try and steer these encounters. However, it is the intimate relationship between choice and responsibility which comes across strongly here, and this respondent clearly feels that in the absence of full information, patients are likely to make poor choices, and responsibility therefore lies with the professional to steer patient choice.

This could not be further from the patient being queen of their own choices as Le Grand (2003) would like, but a complicated balance between choice and responsibility which appears to be carefully managed. The following extract with a practice manager draws on very similar arguments, though presents the quandary in a notably different tone.

**R:** It’s a bit like the more you get the more you want in a way with modern society and affluence and that just grows. But that’s really unbalanced and I spend a lot of time in conversations with patients which include, “We’re able to provide you this because it’s necessary, but these are the things you would like that aren’t necessary. You can choose and you can have them and it’ll cost this or it’ll cost that.” They might leave
here think “He said it’s not necessary but I think it is”. But I’m following what I see as the NHS rules and regs on trying to determine what I see as necessary to maintain or improve oral health. But people say “I’ll feel happier if I’ve got really clean white teeth. And if I’m happy, I’ll be healthier, so why can’t you put that under the NHS bit?” (GDP 5)

I: Some other dentists have talked to me about how patients are being more assertive in using public services and demanding more. Sounds like you have some experience of that.

R: There’s definitely... I think there’s two things that get linked in here. One is there’s a push for patients to have choice and more control, but there’s also the push for patients to have more responsibility of their own health. When some patients get the sort of onus put on them to be more responsible or take more care sometimes they will react with a, “It’s not just me. I should be getting more care from the system”. So it’s sort of... I think they both come together - if I’m more responsible for my own health I should be choosing more what I want to get (GDP 5)

R: Where this gets tough is that it encourages people with high levels of decay and neglect to not come and they’ll be feeling the responsibility on their part for that. Very rarely do you get someone coming in demanding things who’s got a neglected mouth. The people who tend to come in demanding tend to be in a healthier position and maybe annoyed that they can’t have a bridge and they have to be offered a denture when other people are getting stuff and, “Why can’t I have it?” (GDP 5)

In all of the above statements, the background is cased in recognition of a consumer society where the more people have the more they want. However, in the above there appears to be a choice / responsibility paradox, which makes people turn to the system or profession and demand that they make choices for them, though this only holds for people who are actually accessing care as insinuated in the final comment. Choice is seen as a stratifying factor because the responsibility which accompanies it actually stops people from entering into the system when disease is present. Again, emergency dentists often see the fallout of this.
R: The first thing that patients say when they see me is “I tried to register with a dentist” and I will have a conversation with them about how to get the details of the dentists taking on from NHS direct. I don’t know why, but this sort of freezes people and they won’t phone the numbers and I think the lower social economic groups are, I suppose I’m generalising incredibly, have got lower confidence in that situation to actually push things along than somebody else does. (EMR 3)

I: Is this maybe something to do with the cost of having to make the phone calls or a wider problem with anxiety? What do you think is driving this?

R: I think a big part of it’s about anxiety, yes, you can see that here when you say “what would you like me to do” and it’s all “no no whatever you think is best”. I find choice anxiety inducing [Laughs]. I go into buy sausages don’t want 20 different types of sausage because that’s just going to take me ages to make up my mind. So this is much more serious but when you’re choosing a dentist, especially if you are a bit anxious anyhow, people won’t be able to assert themselves and it will be a real confidence knock when they work themselves up to it and the first one they phone says no, they’ll register that as a personal failure (EMR 1)

Though this conversation is couched in a sense of light humour there is actually a quite a unsettling story unfolding here, where some people will have such low levels of confidence that they find it difficult to contact a clinic, let alone exercise any choice over the provision of their care.

In all the conversations reported here, the market created on one side and the consumerist ethos emerging on the other is most often portrayed as something that dental professionals “deal with” rather than something which is already fully implemented. The market, the consumer-citizen, and the rest of the biopolitical infrastructure which surrounds their professional lives is not really a fully-fledged neoliberalism which encompasses and controls everything, agency is not simply a subset of discourse. In fact this could not be further from the story being told here. These theories which see the whole market being created as a kind of biopolitical net, disciplining professional conduct, consumerising citizens and so on, hold a set of transient properties, evident but constantly negotiated, and this should force us to think more critically about the application of these theories to practice. I agree fully
that outlining the features of particular neoliberal governmentalities is a useful exercise, but they are just that, desired sets of governmental rationalities, which have been shown in this instance to be implemented in an exceptionally poor and haphazard way. In several key respects, this draws back to the methodology adopted here, and in keeping with Foucaults’ (1991; 2002; 2009b) own observations, that we need to look at the analysis of consequences rather than simply denounce power (see also Ferguson, 2011).

For what has been described in these two chapters is the patchwork and contradictory forces that dental professionals work with, adapt to or reject. The result, not surprisingly is a peculiar stasis, rather than anything looking particularly transformational. Professionals are constantly having to count what they are doing, satisfying higher powers that they are taking market reform seriously whilst constantly deriding it and trying to dodge it’s obvious pitfalls. Meanwhile clinical time is eaten up in “conversations” with consumer oriented patients who desire a fictional beauty, or trying to encourage patients to make responsible choices. At the extreme end professionals are left to mop up where the markets are failing, where circulations allow in high disease or allow people to slip out of the system until they are in significant pain. However, I am acutely aware that what has been shown here is the perspective from those in the profession, so before drawing all the strings together to discuss the theoretical and practical implications, the final data chapter puts this in the wider picture drawing from the perspective of service users and how they see themselves and the dental profession in the newly drawn landscape of late-modernity.
Chapter 10
Two Stories of Tooth Whitening

As explained in the previous chapter tooth whitening was often referred to as a contentious point for dentists, spoken about at great length as a site where aesthetic idealism and professional ethics clashed. In this chapter I would like to take it as a starting point because this was also a major issue for patients taking part in the study. Not because they necessarily wanted it, though some younger participants did, but because it represented for the majority of participants all that was wrong with modern dental practice. Almost all participants complained that when they entered an NHS dental clinic they were rarely able to decipher what was part of the NHS and what was not, the structures of charges were unclear, and information was non-existent. The whole process was reported to be opaque, and worse, given the very commercial nature of the dental clinics, many of the participants found it difficult to trust that their diagnoses or treatments offered were derived from unbiased assessments.

It is not particularly difficult to imagine that if someone walks into an NHS clinic which looks very much like a private salon of some kind, they might be sceptical or confused about professionals dictating what treatments they can or cannot have. The clearest expression of this was a pointed remark made during the focus group with working people, who were the most vocal about what they saw as the marketization of NHS dentistry.

*R: There is something perverse about professionals deciding what should be free and what should be paid for when they are all going down the all singing all dancing route. Mines doing collagen injections and there’s posters about tooth whitening everywhere and I’d be really cynical if the dentist would then turn round and say you can and can’t have this and I’m going to decide when you have your next appointment. (PB 6)*

This is a subtlety that appears to have been missed by the majority of dentists, who were keener to point blame at wider trends in consumer culture, government rhetoric
or demanding patients, than reflect on the impression that is given by their own practice and premises.

The analysis in this chapter pulls this rather interesting finding into the wider picture and explores its various facets, and therefore acts as a useful window to examine what service users experience when they use NHS dental services. While the above statement is a pointed example, it was not unique and simply represents the clearest expression of a general theme that service users were uncomfortable in trusting the credibility of dental professionals and disliked what they saw as the commercialisation of the NHS. An obvious objection, and one that many dentists mentioned, was that they did not really “want” to be operating in this “part NHS part private” system, but had been forced into it by wider changes in the structure of the market. So what is pulled out in the analysis throughout this chapter is the reciprocal nature of how dental providers experience and respond to biopolitical constraints, which are then interpreted rather differently by the users of those services.

At the very least we can see some of the further difficulties that might be encountered moving forward on some of the most basic elements of dental reform such as recall periods or reducing unwarranted preventative treatment. For if service users have been discouraged from trusting dental professionals because they are viewed suspiciously as business orientated market actors, we end up back at the question of who should decide who decides (Spiers, 2008; Ozar, 2006; Chambers, 2006). In fact it is also of question of who should implement, since the credibility of dental professionals is under question there are wider questions about who should make these decisions and how information should be communicated about wider changes to the provision of NHS dental services. The problem is more accurately described as a trust issue, the wish for decisions to be made independently of professional or political interests and the desire to be adequately consulted. So the wider argument sketched here is that there is both a trust and communication deficit that needs to be resolved if much headway is to be made in implementing reform.
10.2 An Alternative take on the Consumer Citizen

Comparing Narrative Structures

Before presenting the findings from the focus groups undertaken for this work, it would be worth drawing attention back to some of the comments made by frontline providers in the previous chapter. At all levels dentists reported being constrained by market forces, whether those come from a higher political level that encourages the integration of choice (both private and NHS) into the clinical encounter, introducing competition into the system, or by poor contractual design which pushes dentists to provide care privately because the run out of UDA’s. This was always presented in negative terms, which forced them to act competitively, and therefore the natural extension to stay financially viable would be to develop their private practice or provide other products and services.

It is unlikely, and there is nothing in the transcripts which suggests otherwise, that the public are aware of these pressures and much of the mistrust and scepticism reported below could well be interpreted as a by-product of wider competitive arrangements in service design. However, while I have sympathy for the accounts presented above and recognise the constraints which dentists act within, how this is perceived by the users of those services is of equal importance. So in presenting this data, I have adopted a slightly different methodological position which has been called elsewhere a ‘comparative narrative analysis’ (Ezzy, 2002; Franzosi, 1998; Abell, 1989) which has been used in other work to compare accounts provided by different groups of people on the same issues. Sometimes this has been used to compare narratives provided by experts and novices, though has also been used in comparing accounts between patients and doctors on a variety of issues (for a review see Shachack and Reis, 2009). Consider the following comparison on the issue of good patient care as both an example and starting point for analysis.

R: I just take as long as it needs for every appointment which I do, you know, I just focus on the patient when they’re there and people understand that and that is how I work and they’ll wait or they can rebook. I try not to feel rushed cos it’s stressful and
the patient will pick up on that, so I just like to take as long as everything needs. (GDP 2)

For this dentist, taking their time and not rushing through procedures and allowing extra time for externalities was seen as absolutely necessary for patient satisfaction, though this was a common complaint for people who used NHS dental services.

R: Ours [dentist] charges for missed appointments, but I have never once been to them and been seen on time. Twice over the last few years, I've had to cancel and leave because I didn't have the time to wait. Maybe I should charge them my petrol (PB 15)

R: I've been at this dentist maybe two years, every time I've been to them it's quite a long wait and they are always running behind. (PB 3)

R: Unless it's a morning appointment I won't go now because I'll be waiting forever. They're notorious for that and there's no apology; you are just expected to wait as if you've got nothing better to do. I do get fed up with that because I've paid the tax to have that service and I'm paying the charges on top. (PB 7)

R: It's not easy to get an appointment because you have to fit in with what's convenient for them and then when you get an appointment they never actually see you at the time they say they're going to see you (PB 6)

This may be a somewhat trivial example, as nobody likes waiting for appointments and the availability of out of hour's services has been bone of contention between government and the medical professions for decades now. Though what is obvious here, is that while the GDP couches their narrative in what they consider is best for patients is viewed on the other side as a reflection of a poor service. As proposed by another participant, this was a major impediment to visiting a dentist, despite talking about intermittent pain.

R: I wouldn't go unless I had savings because I don't want someone telling me there's loads of stuff wrong with my teeth, and then not being able to afford to pay for it. I'd rather just not know what's wrong with my teeth. And then the other side of it is,
people who go to an NHS dentist seem to spend hours sat waiting to see the dentist and I guess I don’t feel I can take time off work to go and see the dentist. I can take time off work to go for a doctor or hospital appointment, but not to see the dentist. I'd have to somehow arrange a holiday and it’s not a holiday is it? So that’s it really; waiting and money. (PB 4)

There are a few mixed perceptions in the above account, and when asked how much the participant expected to pay, their guess was somewhere between £80 and £200 per filling. Research into patient perceptions of the NHS dental service has consistently found that patients often find it difficult to distinguish between what is provided under the NHS and what is provided privately, and confusion over costs has been a central finding of this work (Holmes et al. 2015; Land, 2000; Calnan et al. 1999). However, this final comment about dentistry not holding the same status as medicine, and therefore not worthy of taking time off work, represents a trend for many participants who felt they had to work dentistry around their schedules. Not surprisingly, being kept waiting when time is tight was a pet peeve for many and a barrier to entry for some participants.

These snippets could be easily construed as excerpts from dis-satisfied customers, and in consideration of this I was reminded of a GDP who provided only NHS services who reflected on exactly this kind of problem. During our interview the participant invited me to look out of the window of the examination room to view the surroundings.

R: Over there is a McDonalds and next door is the co-op and these ones [shop units] there is a hairdresser, and she is lovely, does nails and other bits and I think it’s an estate agent and off licence a bit further on. And this is a bit like where I am stuck, and the way some patients are makes me think, do you just think I’m a shop or something? I’m not the same service, but because of where I am it does make me wonder about how I’m perceived, like a little bit of the state in the middle of a row of shops. The problem is it’s like the McDonalds world they expect a quick fix straightaway and to be sorted and they can’t expect the state to do that (GDP 7)
This quote is pulled from a wider story about how every year there is an influx of non-attenders on the week running up to Christmas who want to be relieved of pain before the holidays, though often have fairly extensive treatment needs that cannot be addressed within one appointment. Though this was not something which was mentioned by other GDP’s, many dental clinics often sit in the middle of a parade of shops and other services, and could well be a reason behind the way people perceive of dental services.

The comparison with a shop came up several times in the focus groups though not always in ways that might be expected. However, of all the complaints, the main source of frustration was with a perception that prices were difficult to decipher, and there were several instances where visibility and accountability were in question.

R: I cannot think of any other service where you get so little information about what you’re buying, because you are really buying a service. I mean I’ve never seen a price list or been told about how much things will cost, and sometimes I get to the desk and they’ll say it’s this much and I think that I’ve only been here five minutes and you want nearly twenty quid, but when I had my denture done I was expecting to pay a lot more so felt like I had got a bargain (PB 12)

R: They are [price lists] always displayed in a nice little quiet corner where nobody will stand and nobody would think to look. And there might be other information but it will be hidden and you just don’t think to question what is going on because they will tell you and you have to believe them (PB 5)

R: What choice have I got in this matter because I don’t have a clue really, not a clue. So when I was given the option when I needed a denture, she said that the denture available on the NHS might not be the best for my circumstances, so I took her up on that offer. That’s my point, I don’t know anything about dentistry and she does and she is a dentist so I have to. (PB 10)

There is a clear concern over a lack of information circling in these accounts making it very difficult to imagine how patients might ever make meaningful choices or improve the efficiency of the market. While some of the participants in the focus groups were aware that regulations had changed, this was often referred to as “when there were the
queues”. So, in many ways the GDP’s concerns are warranted as many of these participants did seem to think they were buying a service, and though these comments appear to suggest that they would like to engage with their treatment, the lack of information, and concurrent deficit in knowledge of both policy and process culminated in a focus on how much money they were spending on a service they could not clearly judge.

Given the difficulties in deciphering the cost of treatments, and lack of knowledge regarding what was the best course of action when making potentially life changing decisions (for example when first getting a denture), it is of little surprise that many of the participants were frustrated with the service. In a commentary piece addressing knowledge, cost and responsibility within the NHS, Sorrell (2003; 14) argues that markets are unlikely to work and ‘pressure cannot be exerted if the prices are kept dark or vaguely grasped by those using them’. Furthermore, even if prices were readily available and adequately presented, expecting patients to be able to partake in a meaningful exchange regarding their actual treatments would mean ‘understanding the health service from a perspective deeper than, or at any rate different from, performance tables geared to disputable performance targets’ (ibid).

On these points I would expect most would agree, though Sorrell appears to argue that patient-citizens both can and should take responsibility for making sure that information is correctly communicated and lift themselves’ out of the trap of medical ignorance to become properly informed on the prices and efficacy of their care. Sorrell’s commentary piece is not making the same reductive arguments as Le Grand (2003, 2007); that patients have this innate ability already but are shackled by the state, but a normative argument targeted at both professionals and patients that the former need to be more visible while the latter should learn how to consume. However, in response Harrison (2003; 19) notes that such responsibilities ‘imply a substantial programme of social and political education if they are to be capable of being enacted on the scale required to have any purchase on the problems described’

This debate, which took place over a decade ago, is one that bears an extremely close resemblance to when the themes of responsibility and information arose with
participants, where many participants were uncomfortable with what they perceived as responsibility which they did not have the knowledge or information to bear.

*R*: It’s this really niche thing going on just out of view and if you’re disaffected for any reason the last thing you’re going to do is try and search around and find the best dentist. Who would have the time or know who was the best? There’s no outreach for dentistry and the whole thing would be much better off trying to educate people than just opening up and waiting for people to turn up somewhere. (PB7)

*R*: You’re on your own with dentistry because often the GP might say look at your blood pressure or cholesterol, drinking and fatty foods etc etc, and give you that advice you need all in one go, and you can work with that. Then there’s a responsibility because it’s been explained properly. But not the dentist, there is no chance to really engage with the care (PB 12)

*R*: I actually get this thing about being a customer, and I do think that if people aren’t happy they should try another one, but it’s not easy to get in, and then you wonder if the ones taking on are the bad ones. You can read up a bit on the internet but it’s usually just a few comments, not any real information. So you might try and move around a bit, see another one because you might want to engage with your care a bit more, and that’s the way things are moving, but your sort of taking a risk then because you might end up with something worse (PB 2)

*R*: We all generally want to do the right thing but to take responsibility we have to be taught responsibility from a young age and I don’t think that responsibility is being taught very well (PB 5)

The problematic relationship between information and responsibility is easily pulled out here and as the last comment indicates, even if people want to engage and do the right thing, responsibility is not something which comes naturally. What is taking place here is more akin to what was presented in the previous chapter, that when faced with both more responsibility and more choice, there is a tendency to turn towards professionals or “the system” to help guide decisions. As such, better information, more engagement and better organised outreach were the most common responses when asked about where responsibility lied.
10.3 Should Dentists just be Dentists?

A Case of Reciprocal Market Confusion

I do not think the participants quoted above are being particularly unreasonable. If we were all to know about every single part of the NHS, let alone the other parts of the welfare state, we would have little time for anything else (see Harrison, 2003). In the absence of any accessible sources of information, it is not surprising that people are likely to turn to their health care providers for that information, even if it is a starting point so that they can be more active in their decisions. However, it is at this point where the analysis takes a sharp turn, because the main complaint was not only a lack of information, but a lack of trust in the quality of that information. As stated at the outset of this chapter, the “all singing all dancing” nature of modern dental practice was seen as the main barrier to obtaining unbiased assessments and redraws the relationship between provider and patient in a rather unnatural way. While chapter 9 examined professional perspectives on the way mixed practice is encouraged (or forced) from above to align the service with prevailing policy norms and epidemiological trends (DoH, 2015), this was largely interpreted by service users as the development of a dislocated service, more interested in business than care.

When speaking with a commissioner about how practising dentists might adapt in the future when caries rates (and thus need for dentists) might be lower, the response was framed in terms of a dental workforce that would be entrepreneurial.

R: Look at the Adult Dental Health Survey, the number of adults with no teeth of their own has gone from something like 26% to 4% for 50 year olds. So we are going to have dental unemployment in the next 30 years without a shadow of a doubt, people in the younger ages haven’t got caries they’ve got next to none, so what are they [dentists] going to do? (PCT 1)

I: My guess is that we will see more of what is already happening. I guess they might move towards more cosmetic treatments and other similar procedures.
R: They’re one of the great things and I quite like dentists for the entrepreneurialism, that’s exactly what they will do. There is absolutely libraries full of evidence that show if you leave dentists alone because there’s no decay to fill they will find something else to do, they will get into cosmetics, Botox, you name it they will do it. These guys aren’t stupid, even in the North West where decay rates are worse than anywhere, if you ask new dentists what they want to do they will say “I want to be good at implants”. Why? What they mean is there ain’t enough caries to fill. (PCT 1)

This was an interesting conversation, largely because it signals a future aesthetic cosmetic dentistry, alongside, or even superseding the NHS component. It is posited as a natural extension to an inevitable decline in the need for NHS dentistry, and the introduction of private choice into clinical work is clearly happening already, as shown in chapter 9. Though as this feeds down through the chain, the problems this might cause are not always lost on practising GDP’s.

R: Well, we’re going to run out of our units [UDA’s] within, I’d say, five days. So until March 31 we will have no UDA’s. What should we do then? There is nobody to talk to that actually gives a bother, so we either cancel or tell our other patients that the treatment will have to be done privately, and that brings about, in my eyes a real contradiction because I’ve sold myself under the NHS brand, and people will be very suspicious if I saw their friend a couple months ago on NHS, when they have to pay private. (GDP 6)

Not exactly the enlightened entrepreneurialism that might have been hoped for, as is easily discerned in these comments from another GDP:

R: This contract is not perfect, by any means, but it has made us into NHS dentists, for those who want to be just NHS dentists. Doing private treatment and all the rest that comes with it would damage my reputation, so when I get asked about tooth whitening I can just say “I’m only NHS and we don’t do that on the NHS”. (GDP 7)

These concerns highlights exactly the type of contradiction which is expressed by a number of participants who were concerned or confused about what care was supposed to be provided under the NHS and what care was to be privately provided.
R: I had two teeth that both need a new crown and he said I’ll do this one on the NHS and this one privately. So I said that’s ridiculous I want them done together and I think he deliberately inflated the price so that I wouldn’t have them done with him because he knew I’d be back if I didn’t like it. So I was forced to treat them like they treat me and I shopped around like I was buying a new car. Got the right dentist, right experience, and I’ll go to my normal dentist if I need a check-up. (PB 15)

R: Dentists should be dentists, not these odd job people, who will be doing your teeth one minute then selling you some other product once you’ve finished. I don’t like the way that’s happened. (PB 8)

R: It encourages people to take their business away and in the process you start to think about your rights. Because years ago you wouldn’t even think to ask, because you believed they were looking after your own good, but that belief is gone now somehow. (PB 6)

R: It’s a business and I would never expect to go to my GP and have them tell me that if I pay you privately I can slip you in a bit earlier. Dentists are maximising the amount of money that they are trying to make out of you as a customer (PB 7)

R: Now I hear the others talk about it, I’m thinking I can get better treatment on the NHS. Because, it feels like it’s not NHS anymore it’s almost like a business rather than NHS. (PB 5)

For these participants it was the nature of mixed practice and the business style with which the clinical encounter took place which encouraged or forced them to think about NHS dentistry as a business, eroding their belief in the credibility of the profession. For others, it was the nature of the premises and the way that the service was taking on the form of an enterprise.

R: We were talking before about the prices, and there is this massive rolling TV in the waiting room. Now if they wanted to be clear about the prices that would be the place to put it, but it’s actually just advertising white teeth – they sit you in front of that for 20 minutes – tell me that’s a good service. (PB 7)
R: Because it’s so difficult to tell what you’re buying anyway, with all those posters and products that when I needed some work done I didn’t feel I could trust my dentist. So I decided to treat it like I was getting a new shed, and I interviewed four dentists until I found one that I was happy with, and got it done privately. (PB 6)

R: It’s like all the enhancements coming through from American culture. They are probably looking at that and thinking “I wouldn’t mind a bit of that”, and then people are going to be led by the advertising and the film industry to believe in what’s basically a fairy tale isn’t it? The NHS shouldn’t be encouraging that sort of behaviour because it can really damage your teeth and it’s not good for you I don’t think. (PB 8)

R: What I expect is a reasonable standard of care for everyone and I think that’s important. I personally feel that I’ve got no room to complain about the availability, but I would complain about the quality of service. Because I just want NHS care, I feel like they’re not so interested in me unless I want to pay for other stuff, bit like a second rate customer. They offer all this stuff but when I left a message on the answering machine to cancel an appointment, the receptionist said they’re too busy to listen to the answerphone, which is basically admitting that the service actually isn’t operating properly. (PB 1)

There was not one participant who took part in this study who stated unequivocally that they trusted their GDP, and comparisons were often made with participants’ experiences with their GP who was referred to as a trusted source of information and guidance. What is more interesting in these accounts is that the line gets blurred as to where and how exactly patients are being “consumerised”. While GDP’s and other dental professionals most often reported this was coming from outside, the impression given here is that dentistry itself is encouraging, if not actively enforcing, patients to become more like customers. As there is (usually) an exchange of money in the dental encounter we might expect a little more scepticism towards the dental profession than other fields of medicine. As Reichland (2006) observed people perceive ‘bad profits’ as anything that extracts value from customers, while ‘good profits’ give value to customers, and within dentistry many patients are reported to believe that GDP’s often extract ‘bad profits’ (see Busby et al. 2015). As the GDP’s quoted above insinuated, moving towards private provision would give a poor impression to their patients, and as the participants here demonstrate the more they perceived their dentist to be...
commercially driven, the more sceptical they became about the quality of their treatment.

The final comments that the NHS is actually encouraging the Americanisation of healthcare at the frontline is worrying; as although other services such as teeth whitening will be private they were often perceived to be bundled up under the NHS banner. Equally concerning is the perception of a two tier system where unless the patient wants to engage in privately provided care they will be perceived as second rate customers. In this reciprocal system of market confusion it is difficult to imagine Le Grand’s (2003; 2007) invisible hand allocating resources in any coherent sense, even if presaged by Sorrell’s (2003) proposal of informed responsibility for healthcare. What we see here are further consequences emerging from the interface where enforced markets meet consumerist discourse, generating apathy and mistrust between consumer and provider.

This mistrust, however, has some serious consequences if we are to implement progressive reform, since the platform from which these reforms would logically flow (the dental surgery) may well be perceived in a negative way, and the neutrality of the provider is also under question. How this was perceived between providers and patients is again expressed in somewhat different ways. The following quotes are taken from discussions over recall and oral prophylaxes with GDP’s; two key procedures within NHS dentistry which are currently under scrutiny.

*R: When you talk about recall it’s that old six month thing isn’t it, and it’s more habitual than necessary, but patients might not want to disengage with that. So we’re talking about behavioural change and trying to address that problem. Most of the time I’ll be brave enough to say 12 months to my patients. It’s very rare that I’ll go past 12 months for adults. (GDP 1)*

*R: So you’ll tell them they need to come every 12 months instead and they’ll ring up and make a six monthly appointment anyway and then come and you’re like well I can’t really sort of say no you can’t have you check-up and send them away. (GDP 9)*
R: There might be a little bit of tartar that builds up around the gums, but removing that is not improving health, but patients are used to a check-up and scale and polish. Now we are talking about that as gum treatment and trying to only do it on the NHS if you have gum disease. If you’d like a polish to make them feel nice, you can pay separately for that and see the hygienist. (GDP 5)

R: Our NHS patients who require deep pocket scaling will see our hygienist, so they can access that if they need it and fall into the right criteria, which at the moment is BPEs [Basic Periodontal Examination Scores] of three or over. Those who don’t can opt to if they want to pay; the NHS will pay for it if they are suffering with a condition (GDP 10)

In all the above cases what the participants are explaining are the ways they are trying to adapt to new regulations and evidence regarding necessary recall and preventative treatment, and many in dental public health would surely welcome evidence of more appropriate use of guidelines. For patients it is not that these things are seen as rationing or a reduction in their right to care, but that there appears to be no proper guidelines on how they are implemented.

R: My issue is that you have to come every six months and he says if you don’t come every six months we’re going to take you off the books. In the past nine years I’ve not had one iota done to my teeth so I asked could I come every twelve months and he said no you have to come every six months or we’ll take you off the books. So last time I timed it and after getting out the chair it had been 42 seconds, now I have no idea how they can check your teeth in 42 seconds. Then they try and send me to the hygienist which is now an extra £32, and I won’t pay that for a five minute sit down and lecture about flossing. (PB 5)

R: I think the problem is that patients or whatever you want to call us, we don’t have any idea what rights we’ve got. So now they’ve imported some fancy person in a white uniform to do it as an extra cost; it’s just adding up extra bits to make what looked like a service cost more when I just want a clear explanation of what I need doing (PB 6)

This is a rather different take on how service delivery is interpreted by these participants, who are not necessarily against reform but are extremely sceptical about
the way it is implemented, and have no idea of the rationale behind the split in service delivery. As discussions of various different experiences were shared several participants became more irate about these inconsistencies.

**R:** They shouldn’t be doing things to us without us. Why are we in this situation where the person being treated doesn’t know what they’re being treated for, have no real say, aren’t given any information, can’t make any meaningful input until after the event to satisfy some box to say that they consulted someone. (PB 10)

**R:** Especially now when some say come every six months some don’t, some treat things under the NHS some don’t, so how can I make a comparison when I’ve no idea what I’m really comparing. Is it sufficient to go every six months or maybe just when your teeth hurt, I’m not in a position to make that judgement? How preventative is it, how much of a waste of time is it, what is actually going on here? (PB 7)

**R:** I get fed up with them going on like the NHS is a treat they give us free when we’ve all been paying in the NHS, so I’m fed up with the idea that you’re doing me a favour because you’re not actually I’m keeping you in a job. You don’t get to see who sets the prices and its inflated salaries, inflated drug prices and all this confusion over what we actually need, like a ball of string where you can’t see how it all got like that. (PB 6)

Splitting off periodontal work from the screening procedure, while clearly in line with current evidence, is not understood as following an evidence base, but as inflating a service to derive more patient income. The clear inference in this example is that whatever the rationale behind rationing periodontal scaling is not clearly stated or understood by the patient group. In all of the above it is the disjunction between how the dental services is operating and how professionals practise, and the perception of how these processes are understood by service users. Few of the participants objected to a more evidence-based, or even rationed service, providing there was consistency between different practises and clear explanation of how and why procedures were needed or not. It is of no surprise that as the participants listened to the narratives being told by each other, they became increasingly irate about how they could ever make a meaningful choice when inconsistency is so rife between providers within a
small geographical area. However, what is ultimately at stake in this analysis is that as NHS dentistry increasingly mixes practice, the credibility of the profession is brought into considerable disrepute as patients are expected to make meaningful choices within an increasingly commercial environment with little or no personal aptitude to steer their own care.
Chapter 11
Selecting A Way Forward

The name for this chapter is taken from a commentary article of the same title written by Susie Sanderson (2008), the then chair of the BDA executive board, reflecting on her experiences explaining the shortcomings of the 2006 dental contract to the Health Select Committee. The tone of that article was couched in a sense of relief that the BDA’s concerns had been seriously considered, a gratified observation that the Department of Health had been suitably humbled, and tempered optimism about the future. However, despite the title of the article, a way forward was not selected or outlined, and what is present in that piece is that the hard-done-by profession had won a small but important victory, but the battle must continue.

‘I speak on behalf of dentists but also for our patients and the public because the two sets of stake-holders are inextricably linked. To a degree, the politics and contracting for services, whether with the government, third party funder or the patients themselves directly, are a huge distraction from the delivery of dentistry and health care as we were taught to do and that for which we entered the profession in the first place.’ (ibid; 279)

The politics of dentistry are portrayed in this account an extraneous nuisance, and it is up to the profession to fight for a better future, but what will it be fighting for, and against whom? The disinterest or distaste for wider political issues, only leads back to the dogma that the profession knows best and that dentists must fight politics, or rather politicians, so that patients can be “protected”.

This may be an overly critical reading of the situation, though it seems particularly apt, because it disregards all of the problems which make NHS dentistry an object of interest in the first place. While I do not want to stoke the fire of crisis talk, NHS dentistry is malfunctioning, and has been for some time, but not only because of contractual issues. As demonstrated throughout this thesis, as dental science marches towards perceived genetic and technical utopias, those in frontline provision are
consumed and constrained by forces of political economy, the origins of which lie far from the interface of the DoH, Whitehall and the profession, and patients are increasingly frustrated and disenfranchised, despite being told otherwise. Meanwhile the demographic and epidemiological landscape has shifted significantly, though those who want to speak openly about it are often frozen out of the frame and rarely get a fair hearing. But the solution is not to deny politics or reduce it to acts of government, nor is it to pester the profession to accept academic wisdom that they need to adapt now or become irrelevant, but to lay out workable plans for the future rather than continue reacting to the present.

In this penultimate chapter I do not want to talk about what the profession “should do” or what it “should want”, but consider the theoretical consequences of what my analysis has achieved, pointing towards a system of NHS dentistry worth further consideration. Over the final chapters of this thesis, the analysis drew from a Foucauldian reading of political economy, drawing out the contemporary features of biopolitics in late modernity, which seek to measure, standardize, calculate and manipulate both services and consumer agency so that markets can extend in the realisation of a neoliberal dream. However, what was really at stake in the analysis was the patchwork nature of our neoliberal present, its inconsistencies and the contradictions inherent in its application, even if it relates only to NHS dentistry. In presenting the data and analysis in this way maybe I have broken rank from the critical poststructuralist tradition, fallen foul to Foucault-lite theorising, or could be accused of neoliberal sympathising, though these criticisms are easily countered and matter little.

The analysis is stronger for exactly these reasons. It would be a disservice to the subtleties of Foucault’s (2009a, 2009b) later works to claim that neoliberalism is or was ever truly realised; rather he was mapping the increasing appetite (both practical and academic) to extend economic relations onto terrain that had previously been outside of the purview of that discipline. The nuance of neoliberalism is that social relations and individual agency began to be theorised in an “economic form” as the concept of homo economicus extends across social and political life. Earlier work (ibid, 1982; 1991) signalled that such discourses should never be read (from text) to be totalising, and despite their obvious presence, discourses of neoliberalism should be subjected to
examination in context, not simply denounced in theory (ibid, 1991). Of course, I am not alone in this terrain, and credit is due to both theoretical (Harvey, 2005; Gane, 2012; Crawshaw, 2012; Anderson, 2010) and methodological writers who have found such simplistic notions of the neoliberal unsatisfactory for the purposes of practical fieldwork (McKee, 2009; Ferguson, 2011). In a lightly contradictory sense, I believe my analysis is better described as Foucauldian, even as it pulls further from abstract poststructural analyses.

The remainder of this chapter draws back to the theoretical frame sketched in chapter 5, to reflect on what an analysis of the circulation problem, or more precisely a theory of neoliberal security technologies, reveals about NHS dentistry’s seemingly intractable problems. It is argued that what we see throughout this analysis are systems designed to effectively manage and secure people and things, which have serious deficits in practice. To extend this argument, this is largely because the ontology of neoliberalism has a fundamentally flawed notion of human agency; people do not behave as they do in the textbooks, so inefficiencies stack up, inequality goes unchecked, and bureaucracy flourishes. Providers and consumers become tied into perverse arrangements, consumerist discourse doesn’t mould agency the way it was intended and overseers are left looking at systems and markets which are grossly inefficient, wondering if more data, more standardization, or more choice might solve the problem.

11.2 Pointing Fingers

The analysis could stop here; explaining why so little progress has been made in widening the debate about progressive policy or reducing inequality, concluding that NHS dentistry is a basket case that will remain stuck in its current dysfunctional state. Commentators often throw their hands up in disbelief at exactly these problems, claiming that the system is broken and cannot be fixed. Dentists are seen to be self-interested, government is only bothered as long as access is sufficient and patient charges are rolling in, patients are “hoodwinked”, supplier-induced or otherwise
apathetic, and despite the rack of evidence there has been no meaningful change in
decades (Sheiham, 2013). ‘I have had enough’ writes Christenson (2004; 83); the
profession should be ashamed; there is no justice in NHS dentistry (Holden, 2013).
NHS dentists are on the edge of collective meltdown (Myers and Myers, 2004) and
crisis talk pervades communication channels. Even more moderate analyses view the
situation through a tempered nihilism; resistance is futile, only when it finally dawns on
politicians that they are subsidizing a service that has limited benefit will change come
(Tickle, 2012; Sheiham, 2015). The emerging picture is one of finger pointing, where
academics point at dentists, dentists blame academics and patients, patients blame
dentists and everyone blames government.

However, a circulation of finger pointing was not what I had in mind for this chapter,
and drawing on the arguments presented in earlier chapters and the methodology
developed throughout, I do not take these contradictions to be end points but starting
points for a wider discussion of how they can be overcome. This requires taking more
seriously Foucault’s (2003; 129) own suggestions that neoliberalism should be
investigated ‘by analysing power through the antagonism of strategies’ attending how
we can account for how those who live through these discourses alter their trajectories
in novel and interesting ways. In doing so I am rejecting any notion that agency is
simply a subset of discourse or that sentient life has been consumed in text. Such
theories are, in my view, quite unhelpful, and we need to move away from talking
about totalising discourse towards a discussion of what Burchill (2009), following
Foucault, calls “conducting”. Conducting is the wider set of imperatives which try and
orchestrate the behaviour of systems and the people who act within them. It is
something which government or its associations do to encourage behaviour which
aligns to what those in power consider to be healthy norms (see Veitch, 2010). Hence
we see the mass emergence of biopolitical measurement tools, swathes of
standardization, a love for market mechanisms and attempts to poke, nudge or
otherwise discipline individuals to shoulder more responsibility, and treat services like
businesses in the hope that choice can make markets more efficient and the security of
the population can be ensured.
All this may sound efficient on paper, though as demonstrated throughout this thesis it does not work. This is admittedly a loose way of thinking about security, and there are plenty of academics within the political sciences who would scoff at such a conceptual stretch (see Williams, 2003 on this debate). They would prefer that security be kept only for the designation of existential threats, so that the word does not lose its special imperative for action. But this is a different way of thinking about security; it is looking at the technologies and ways of governing that attempt to secure individuals. For what is the welfare state if it is not a set of interlinking mechanisms to secure the population from the deficits of capitalism; unemployment, ill health, old age and any other form of “risk”? The very name “social security” implies that this is exactly what it is for. As Foucault shows security is always a balancing act in the sense that all things need to be factored in so that security can map the terrain of the possible, contain future unknowns, and map the costs and risks which are ever-present within the population itself.

It may read as counter-intuitive to write about security in such a way when the West appears so keen to shed its welfare obligations, shift risk onto citizens and flexibilize economic and social relations (see Frazer, 2003). The social becomes dislocated as people become more mobile, extended families are fractured, technological progress and social media make everything virtual, transactional and above all else transient. This is the major complaint from Foucault’s critics who deride this take on security as some backward Keynesian way of looking at security. Among the most outspoken is Zigmaunt Bauman who writes that neoliberalism is “liquid”, our world is transient and holds no real relations that could be called secure: It is a return to Laizzes-Faire in a cyber-world where our lives and voices are effectively meaningless in a sea of dystopia (see Anderson, 2010; Gane, 2012). But to follow this line of thinking would be to miss the point; it is precisely because economic and social relations have become so flexible that biopolitics becomes so relevant.

Clues are littered throughout the history of political thought, past and present. As de Toqueville writes, ‘society will develop a new kind of servitude which covers the surface of society with a network of complicated rules, through which the most original minds and the most energetic characters cannot penetrate.’ These tiny little abstract
rules suffocate originality, covering the surface of life, privileging the technical details over the bigger picture; in the process strangling freedom and sucking out the essence of humanity (McGilchrist, 2009). Deleuze (1995) describes a ‘control society’ which sits where neoliberalism cannot quite let go of modernity’s panoptic tendencies, but instead transfers them to the market to discipline individuals (see Gane, 2012; Anderson, 2010). This new market individual Deleuze (1995) calls the “dividual”, a little slice of neoliberal life that accepts market order, individualism and responsibility or perishes on the margins, not unlike Agambens’ (1998) formulation of “bare life”. These clues remind us that however free we may “feel” or be, there is always something watching, something controlling, calculating, “conducting”, but this does not mean it is someone. Whether we see it as a transfer of panoptic responsibility or a new regime of laissez-faire, we must accept that every move towards further neoliberal reform comes with a plethora of oversight mechanisms. This is what Didier Bigo (2008) calls a ‘governmentality of unease’, referring to the multitude of security measures that are omnipresent across the West as we introduce more markets and more flexibility but are increasingly fearful of the consequences of doing so.

There is an inescapable contradiction at the heart of neoliberalism in that power cannot let go, it wants the freedom that markets are supposed to give us from the economics textbooks, but strangles the possibility at birth. Every new reform comes with a new method of measurement, something to check that the market is working as it should. But how would we ever know? Markets are theoretically only supposed to work when they are free to operate without constraint, but there is no market within the UK’s public sector (or private for that matter) that can properly be described as free (see Meadowcroft, 2008). An interesting question that requires further investigation, though there is no space for it here, is whether there is a fundamental distrust of markets, because it is really known that they cannot or will not ever really allocate resources particularly well (see Rodan, 2006; Gamble, 2006). More likely is that power is unable to trust the individuals within the market to behave as they should, so we see monitoring tools and evaluative measures put in place to oversee professional decision making so that inefficiencies can be pulled out and “corrected” when identified.
This is what is so often referred to as “governing from a distance” as government repositions itself in relation to the services it provides and re-scripts its responsibilities to citizens. It is not the provider of services per se, but an overseer of a market of services delivered on its behalf: It is not responsible for the actual messy actualities of services provided but acts in a role of arbiter or contractor. Hence when services begin to fail, ministers do not scrutinise their own practise, but seek to weed out poor providers, “open dialogue” with alternative providers or seek to alter or enforce monitoring mechanisms which can exert leverage to reconfigure the shape and constitution of those markets, or reshape the behaviour of people within them.

In the earlier discussion of the shape of dental knowledge, we saw how “specialism” emerged right on the cusp of the neoliberal turn. Karl Popper (1970) had already predicted its arrival and warned that if science continued down the path of specialism, it would render itself incapable of communicating with the outside world, or even its constituent parts. That has, I believe, already happened within dentistry as the mouth becomes an assemblage of parts that are split off and studied as abstract pieces of genetic code or biomechanical oddities (see Tanaka et al. 2008). In part, this can be implicitly tied to the condition of the present: In the political economy of late modernity, research and practice become intimately tied to the preferences of neoliberalism, as hard individualist science aligns itself with the prerogatives of governance. ‘The biomedical approach is entirely consistent with the ideological hegemony of neoliberalism’ writes O’Manique (2004; 50) and the kind of science which is produced appears hard and robust but is contextually ambiguous and unusable (Epstein, 1998; 2007; Caduff, 2012; Stillwaggon, 2006; Oppenheimer, 1995). At the most extreme end disease becomes almost purely biological and genetic (see Rose, 2007; Novas and Rose, 2000; Baelum and Lopez, 2004) while other more tempered perspectives allow us to see how political preferences shape research outlets which extend genetic and behavioural explanations over social determinants (Caduff, 2012; Elbe, 2005, 2008).

A new specialism or ology arrives in dental science every few years, as dental scientists become specialised cogs in an increasingly large machine that appears to be getting harder but is hollowing out in the process. It cannot answer basic questions that should
be at the forefront of any basic human science. How often does someone need to see a dentist, what should the dentist do and how should we respond to changes in the epidemiology of disease? Nobody really knows, and this is by far the saddest part of the story. The reason nobody knows is that enquiry of this sort has never been part of dentistry as an academic discipline, as research finds solace in mechanical sophistication and biological purity. Everything must be clean and elegant: To pursue individualist biomedical research is considered an act of progressive realism, though to point upwards at social determinants is considered risky or superfluous (Baelum and Lopez, 2004; Navarro, 2009).

It is at the level of research that the imperatives of biopolitics are at their strongest. Further standardization is encouraged and everything must follow a particular biomedical rhythm. Neoliberalism is not responsible for this per se; it has only deepened and legitimized this tendency. However, the fact that alternative research programmes appear to end in the same trap is concerning, inferring that neoliberalism has a tendency to subvert progressive avenues of enquiry and bend them into reflections of itself. EBD privileges the technical details, and conducts the activities of researchers to perform quantitatively or risk their future careers (Mykhalofsky and Weir, 2004). Ugly neoliberal tendencies reside just beneath the surface, as scientists may seek only to further careers, or blindly follow in the footsteps of those who taught them, ending with a fixation with RCT’s and other niche reporting methods, leaving it to others to work out how to implement their findings. In trying to remedy some of these perceived shortcomings in dental research David Locker (among others) spent the majority of his later career trying to develop an alternative model of dental research that could improve quality of life, but spent the final years of his life trying to rescue OHRQoL from the trappings of individualism.

This is the biopolitical hallmark of neoliberalism, a faceless kind of streamlining that impels continuous intervention in the name of non-intervention that has a never-ending thirst for more data, more risk analyses and more counting. This is what is at stake in contemporary debates about knowledge, and how potential ontologies are so easily consumed by limited epistemologies. Such frames were at the centre with discussions with managers and commissioners of NHS dental services. There was
always some opaque force that they were unable to effectively explain; a target setting
culture that was as opaque as it was ubiquitous. Sometimes the blame was attributed to
other managers, the government, councillors or some other kind of higher interested
power, all of whom wanted everything to be more accountable and visible so that
processes could be assessed. The curious part of this was that it led into a
transformational stasis where everyone got caught up in this counting process; each
participant embodied it at the same time as they recognised its limits. At this level,
more effective or patient centred measures got squeezed out as simplistic measures of
the performance that could be easily compared remain the norm. The DMFT, the
omnipresent measure of population oral health, was seen to be a totalising and rather
misleading measure of the health of the population, strangling more sophisticated ways
that data could be collected and used. Issues of quality fell by the wayside, patient
reported outcomes were underdeveloped, and the qualitative dimensions of what
dentists actually do outside pulling and restoring teeth get fudged within matrices of
communication.

So too were parts of the CDS and emergency dental services increasingly pushed
towards these kinds of standardization so that they could “align” with the rest of the
service. The tools developed in these areas were seen to be particularly subjective and
constraining, but each participant conceded that they would be unable to
communicate with other branches of the profession without them. The point is that by
instilling these biopolitical measures the profession gets stuck in transition, a process
where everyone wants data from everyone else so that the service can become more
efficient but does not progress. For the CDS, the manager of that particular network of
services talked about how fragile the whole thing had become, how communication
between the constituent parts of the service hung by a thread, and worried that even
small changes would expose the precariously fragile mechanisms upon which the
service rested.

R: There we go the million dollar question; how do we measure outcomes?
Absolutely the million dollar question and the short answer is we don’t. Now that’s
scary because I have spent a lot of time on this and we have finally got to the point
where we are just stable in the dental economy and each time someone comes along
and starts asking about measures and targets it could bring the whole thing down. I would argue that it [the CDS] needs an enlightened dictator to run it. I wouldn’t want to put myself in that position, but if it got put out to the private sector... or even a GDP, they would tinker with this that or the other to try and measure outcomes and months of work would go down the drain because the whole thing would crumble piece by piece and they wouldn’t be able to see why. (PCT 3)

Within the neoliberal model the complexity of these services, the methods of communication and measurements used brought a precarious balance, which was carefully constructed to fit with prevailing policy norms. Services align at just the right balance but cannot move because they risk collapse.

However, this was only a part of a major problem for those in frontline positions. At the level of service delivery every procedure had to be counted and monitored, market mechanisms were forced into the clinical encounter and dentists reported being squeezed of any ability to really treat their patients to what they considered to be professional standards. Prevention was given short shrift as clinical time was eaten up by offering choices and navigating patient-consumers through the matrix of choices, carefully directing them away from unhealthy procedures towards a healthy attitude towards their oral health. The story unfolded in a contradictory way as dentists reported having to direct patients through the market of possible dental scenarios, some of whom were only too keen to draw on the lexicon of consumer choice while some only wanted this responsibility lifted.

What was illuminating in this discussion was that the whole practise and profession begins to coalesce around these market based ideals, and anything which sits outside of this discourse is unable to be considered. I have genuine sympathy for the accounts emerging from the CDS that their concerns cannot be addressed within this frame and for those who deal with emergency situations where patients appear in emergency dental clinics when they have been unable to bear the weight of responsibility involved in the new healthcare consumerism. These services have always sat on the outside of the profession, rarely given adequate attention in wider analyses (Gallagher and Fisk, 2007), and now they appear to be subject to the wider prerogatives facing the profession even when their patient bases experience qualitatively different problems.
In all of the above there is a sense that power conducts from above, insisting that the profession aligns itself with market logics and communicates with government associations in abstract biopolitical formulas. Meanwhile pressure comes from below from patients who have been given a new status and have been taught to think of themselves as empowered consumers in a transactional situation. The latter pressure documented here should be of no surprise to those working on healthcare consumerisms who have adequately documented the shift of responsibility onto the consumer through the logic of choice (Cruickshank, 1999; Greener, 2004; Greener and Mannion, 2009; Salaeel, 2011). Neoliberalism encourages such consumer behaviour, and the fact that it turns up in dental clinics appears to indicate that such discourses are seeping into the public consciousness, even if they do not have the intended effect. In fact the intended effect of solving the circulation problem falters because over-screening, better treatment planning, a move towards population based health measures, are all squeezed out at the interface where biopolitics meets healthcare consumerism. Nobody has been given the remit to develop the basis for alternative policy scenarios because they are trapped within a regressive system of biopolitical management. Similarly patients report that they are rarely aware of the reasons that change is needed, as some look at the service in despair over how difficult price structures are to interpret, and others begin to adopt a consumerist mentality and take their business elsewhere.

In all of the above we see that when we talk about biopolitical security technologies we are talking about the way that risk is managed, contained and communicated. It is not only a critique that neoliberalism is structuring social relations in a new market orientated fashion, but that through this process it activates a number of unintended consequences and accentuates existing ones. Within the market schematic sketched by neoliberalism, security problematics are solved through making services accountable and transparent, encouraging providers to see themselves as market actors and moulding consumer agency (Aradau and Blank, 2010; Cruickshank, 1999). Populations would be more secure and more productive if a market ethos can be successfully threaded throughout the social realm, though this all falls flat because everyone in the circulation is trapped by stifling technologies of security. In many ways
this is because of a fundamentally skewed ontology which assumes that actors within the network necessarily place self-interest over all other values; an idea which can be traced back in liberal thought as far as Smith, Hobbes and Locke. Though what is neo in our present variant is the governmental appetite to actively intervene to ensure that self-interest is effectively nurtured and directed, watching everything through statistical manipulation. In reality, however, nothing moves; actors in the system are frozen by these imperatives and fear the consequences of stepping outside, and in this piece of the welfare state neoliberalism only exacerbates this stasis.

11.3 Resistance from Within?

When I had initially sketched the themes from the data, one element that appeared to stand out was that regardless of how constrained dental professionals felt, how insecure the neoliberal regime made them feel, they all managed to carve out positions that gave their professional lives value. This might be something small like developing particular linguistic tools to communicate with certain patient “types”, taking small solace in spending a little extra time speaking with a patient they had known for a long time, ignoring the evidence-base to continue practising in a way preferable to them or knowingly misleading commissioners. Ollin (2005; 152) calls such instances ‘acts of constructive subversion’, which draws attention to the numerous ways that professionals resist discourse. Initially, I had conceived of a power / resistance type thematic explaining how dental professionals carved out a caring position in the face of cold bureaucracy, maintained a professional identity where they were being stripped of their clinical competencies, and “manage” wider structural imperatives being forced upon them, in order to ‘modify their objectives to better match their ability to perform’ (Lipsky, 1979; 142).

However, while this would make an interesting analysis, and further explain the transformational stasis described across this chapter, the “resistance” I want to refer to in this final section is of a notably different hue. For while there were certainly instances of “constructive subversion”, a more interesting finding was the way the
dental professionals talked about the future of NHS dentistry. Often comparisons were made between dentistry and primary medical care and several participants ruminated on the convergence or integration of medicine and dentistry as risk factors aligned and dental futures looked more uncertain. So I want to return to the data one last time to pull out these suggestions to examine them as expressions emerging from within the profession to biopolitical constraints that are imposed from outside.

Admittedly not all GDP's talked about this, or showed enthusiasm for the idea, but there appears to be support for some kind of integration in the future from across the spectrum and some even considered it a necessary step if NHS dentistry was to remain credible. Though what is important in these final accounts is the way it was expressed, almost as if the idea had not really been thought about properly but required more consideration.

R: I think it's purely historical how the two professions have developed. If we were starting from scratch nobody would even need to have this discussion. If you've got something wrong with you why go to a separate place and not your GP who's the gatekeeper for absolutely everything else, and refers you for everything else apart from anything to do with your mouth. I don't think it's based on any kind of rationality just how the professions have evolved. Now whether this should be a GP or GDP or someone else in a skill-mixed world, that's another discussion. (COM 1)

I: So if we have future dental unemployment or dentists move off into other areas to do cosmetics or whatever, would you still think there should be a core service?

R: There'd come a time when we won't need them. Maybe, I don't know whether instead of having 20,000 dentists we only need say 2000 to fix the very serious problems, the feckless, ne'er do wells who need all the care or the really complicated cases that need various things. Should it be bolted onto medicine? (PCT 1)

R: I have this vague interest of how the medical profession and the dental profession have got to where it's got in the last 400 years. Traditionally it was that dentistry will take responsibility so that you will have to pay us to take the responsibility, which is the sort of social economic kind of thing. But it's fascinating because over the years dentists have found ways to get around any system and the government is clumsily
asking why, so eventually they [dentists] will find that that split at the outset was a bad idea. (PCT 3)

R: I think it’s about time we have that conversation again because it’s not just the [dental] profession that needs to sort its act out, the medical professions should be starting a dialogue about that, but I don’t see it happening any time soon. Our practice is less involved with the GP’s than ever and it’s getting bothersome for patients, because it’s not a GP anymore it’s a building. “Dear [road name] I’m discharging this patient who has had a transplant back to you”. We wouldn’t even get told, though we really should know and be involved with those decisions, because we are part of that care, but no one’s talking about it and I don’t think we can carry on like that. (GDP 12)

R: And we do have doctors too who still have lollipops on their desks. So it’s about engaging all of those people at the same time as widening our very limited dental public health minds and engaging all of these people to walk the walk as well as talk the talk. It’s all very good me saying that but I’m just one piece of this puzzle, talking about engagement and the rest, when I’ll walk past the offices next door and they’re talking about alcohol and I’m thinking why am I not in there talking about alcohol with them? (PCT 6)

What is interesting about these comments is they reflect the future and the present of NHS dentistry. The split between the professions is seen as irrational and purely historical, though as the third comment points out dentistry will be the main casualty of this split in the years to come as government tightens its grip to obtain more transparency over the service. Whether it is because of falling patient need within NHS dentistry or the need for closer relations with medicine to adopt shared risk factor approaches, a dialogue is thought to be necessary though how to get everyone on the same page seems a step outside the data here.

Although the talk of shared risk factors and a wider engagement or integration with medicine is apparent across the data, there was a frustration that this dialogue was not opened by someone else. Regardless, the resistance I’m referring to here is an appetite to let go of the professional monopoly of the mouth, to align itself with medicine in order to address common problems and epidemiological trends. Outside of these
comments, however, there were few solutions posited, only ruminations about what the consequences would be for both professions if a closer dialogue was not fostered. However, there were two instances where something interesting regarding “credits” were mentioned:

**R:** If we are talking about patients relying on the state for care, I don’t see why we can’t have some kind of incentive system. Not for your urgent A & E stuff or chronic management, but have it where they get a certain number of credits. So they have their check up and if that’s all fine then they can have certain amount of credits that they can spend on what they want after, and that would sort of allow them to choose what they want and gets around this sort of, “this is what you need”. Plus if they go along to their doctor or their dentist and it seems like they are caring for themselves well, that could generate extra credits to spend on the extras that might improve health a bit but aren’t exactly necessary. That would give them some extra control and responsibility without determining what they need, so you get around your need problem there. (GDP 5)

There is something a bit uncomfortable about this because it appears rather close to paying patients to look after themselves; an idea which has consistently shown to be unpopular with the public (see Long et al. 2008; Prieb et al. 2010), even though it has been shown to work in controlled trials for various conditions (see Promberger et al. 2012). Though what is at stake here is splitting off unnecessary treatments from the core service and rationing them via patient choice, with the caveat that patients have done their part. While this might seem a little fanciful, it does solve a problem laid out by Harrison (2003; 18), that if we are to “reward” good patients, as supposed to penalising bad ones, ‘this would be self-defeating in policy terms because no example would be set to “bad” patients’. The problem here is that a certain amount of discretion would be left to professionals to decide if the patient deserves the credit and the problem of diagnostic objectivity cannot be escaped.

Keeping with this idea, another proposal which seems to run on similar lines but is expressed in a different way appeared with another participant:
R: Going back to the other question about funding systems and I said that there wasn’t really a suitable model apart from capitation or fee for item, but there is another one which has been around for donkey’s years but has never really been tried. I’ve heard it called grant in aid, where the patient gets a grant depending on the item of treatment. So if they need a molar root canal they get £100. They go to a dentist it might cost £200 from that dentist, it might cost £500, £800, they still get £100. That should be quite attractive from a government point of view because it fixes the cost, the total costs, and it also transfers some of the responsibility both in terms of finance and preventing disease to the patient. So they’ve got an invested financial interest in actually maintaining their health. (EMR 1)

This particular interview was a surprise, since this was something very close to an idea that I had been working with for some time. These comments foreshadowed a paper presented at an earlier organizational studies conference where I had outlined a system of “split provision”; advocating for diagnosis and treatment within NHS dentistry to be decoupled in order that diagnosis is divested from the economic interests of GDP’s (Deal, 2013).

This set of recommendations has been further developed in several smaller presentations and symposium contributions since to argue that diagnosis and provision should not only be split, but that the former could be integrated into primary medical care, while the latter should remain quasi-privatised and accessed via referral. Occasionally these recommendations have been met with surprise, though more often the ensuing discussions have been couched in intrigue and tempered support, though never have I encountered outright resistance to such ideas. So in closing this theoretical discussion, having outlined the problems with NHS dentistry and explaining the contemporary features of the current stasis, the concluding chapter takes a radical step forward to outline a system of delivery which can work to overcome the neoliberal tendencies to quash innovation, while making services accountable to the population, fostering better relations with the medical professions, improving access, introducing meaningful choice and reducing inequality.
Chapter 12
Conclusions

Split Provision: A Viable Solution?

As indicated in the previous chapter, this extended conclusion presents a considerably updated synthesis from a number of papers and presentations undertaken throughout the preparation of this thesis. While it is not an orthodox conclusion in the sense that it summarises all the main issues discussed, it moves beyond convention to draw together all of the problems to suggest an alternative, which I believe could have considerable purchase on the problems described. To be more precise what is suggested here is that integrating NHS dental diagnoses into primary medical care and treating disease on a referral basis solves many of the policy contradictions and political problems associated with service delivery. It is intended as a model for consideration for the near future, as something that we should consider as a potential alternative that should be on the policy table for debate. The question mark in the title of the chapter is there for a reason, and while I sketch the details here and point out its central elements, it is a model proposed for debate, not implementation.

While the main part of this chapter will outline this model in more detail, and draw attention to its main benefits and shortcomings, I first need to deal with a couple of elephants in the room. The first of these is that during the preparation of this thesis a new contract for NHS dentistry is now firmly on the horizon as the Department of Health (2015) surprised the profession and the research community with a new phase of implementation, moving from pilots to prototypes. It was a surprise, both because of its timing (15th January 2015) and its content, which is significantly different from the pilot contracts which had been in place since 2011. While only three months prior, the GDC (2014; 1) had been dispelling myths of contractual reform, insisting that ‘there is no definitive reformed contract pilot….. Contract reform is currently 4 years in the making with prototypes expected in late 2015’, applications for participation in the prototype phase were already closed by the end of February 2015. The fact that the new prototype contract was issued on the same day as 32 severe flood warnings
(Guardian, January 15\textsuperscript{th}, 2015), and the national news headlines were feeding the insatiable British thirst for all things weather related, a cynic might suggest that the timing was “convenient” as this snippet of reform passed somewhat unnoticed.

However, regardless of the circumstances it may seem a little foolish to suggest a new set of contractual arrangements when these new prototypes appear inevitable, though the curious thing is that the content of these new prototype arrangements appear to add extra weight to many of the themes and arguments laid out across the thesis. Chief among these is that power cannot let go, and the “blended” approach, within which practices are remunerated on a mix of activity and capitation, with 10% of the contract value attributed to quality is easily seen as a response from the DoH to retain blunt oversight. The prototype model has reintroduced an activity measure based on band 2 and 3 UDA components, while band 1 treatments have been bundled into the capitation component with the addition of interim (1A) prevention charges, making the model look rather similar to what is currently on offer.

The report states that ‘conclusions on how the new approach to care, and particularly the way it was delivered through the pathway, operated in the pilots has to be tempered by their limited financial risk and limited performance management’ (DoH, 2015; 14). This is another way of saying that a lack of risk or oversight put upon pilot practices has been a central failure to assess the validity of this phase. Though what is “learned” here is quite narrow and is mostly focussed on a drop in patient numbers and activity, and that assessing the pilots was difficult because ‘even allowing for increased time spent on prevention, we would have expected patient numbers to increase’ (p 15). As a result ‘the intention is to increase the level of risk in the prototypes to address this’ (p 16). The way this will be introduced is through a new remuneration system: ‘The blended activity/capitation system together with the greater financial risk should result in more treatment or, if this is not required, more patients seen. Either will increase patient charge levels in the prototypes compared to the pilots’ (p 22).

However, why more treatment or more patients seen is the object of this exercise (rather than a better service) is not explained and it can only be inferred that this is to
maintain oversight over activity and stabilise revenue from patient charges. This could not be further from the stance taken in the 2010 document *Transforming NHS Dentistry*, which promised to ‘deliver far better preventative care,... [and] remove the perverse incentives that drive dentists to deliver unnecessary treatments’ (2010; 2). So what we see here is rather much the same thing as has been outlined throughout the analysis, that when systems do not configure as expected, when the numbers do not add up, the proposed solution is always the insertion of sets of security mechanisms to count, analyse risk and oversee processes, stifling the aim of the exercise in the first place.

This is the emperor in new clothes and the BDA and others are already lining up in opposition. ‘The BDA believes that the two prototype options on offer are decidedly unambitious, as the Department has proved unwilling to make a clean break from discredited activity targets in the shape of the UDA system’ (BDA, 2015). Others have expressed concern that the Dental Quality Outcomes Framework – the mechanism to assess the 10% of the contract at risk for failing to meet quality targets – is rather unclear on how it will measure patient experience or score outcomes (Woodington, 2015; Mills et al. 2015). In the DoH (2015) document, ongoing issues with the IT set up and how to factor in emergency appointments were referred to as “challenges”, leaving it ‘unclear how successful the reforms will prove’ (Woodington, 2015; 696).

So while it may seem odd to present a new framework on the cusp of a new contract, my analysis remains relevant as we move into another round of piecemeal reform which largely intends to patch up a faulty system. Furthermore, what is on offer here does not really adequately address the main findings identified in this thesis. The gulf between a technically indoctrinated dental science and the wish to provide a preventative service will likely remain, and it is not likely to relieve frontline providers from the paired constraints that arise from the quantification of practice and the consumerisation of healthcare. Nor is it likely to reduce inequality, and though the commissioning board (2013) and DoH (2015) are both keen to emphasise increased access to NHS dentistry since 2010, the latter recognises this has nothing to do with the reforms, and does not say who is accessing care, making it difficult to assess whether intractable difficulties with inequality are ever going to be addressed. So what
I have in mind here is something which will, if taken seriously, speak to those policy problems.

12.2 Rationing, Access & Choice

To briefly return to the aims outlined in the opening chapters, the situation we face with “rationing” is really a problem with recall and over-screening; an attempt to break the habit of a lifetime so that services can better address the equity deficit. Nicely summed up by Currie et al. (2012): ‘Ethical and moral consideration should be given to making services needs-driven to address high treatment requirements rather than the high care demands of the worried well.’ In assessing this problem, much of the literature discussed in this thesis can be summarised as a series of policy dilemmas, which look much like figures 5 and 6 below. Figure 5 represents a typical “social” critique, which sees NHS as socially embedded while figure 6 is the typical “political” critique which sees the system held in stasis due to political posturing and professional discontent.

Figure 5: The Sociological Critique
As seen in the figures, each ends with the proposition that change is difficult. The first sees historical patterns of treatment embedded in social structures, where the second looks at the interface between the profession and its association with the government. While these critiques often combine in the same analyses, these are our basic formats for critique, leading into propositions that we need to move away from downstream determinants (Newton and Bower, 2005; Watt, 2007), disband with individualised care (Sheiham and Watt, 2000; Peterson and Watt, 2012) or drive the whole system into a crisis. As stated at the outset political futures are rarely discussed in any detail, leading into truncated and rather stale debates which often conclude that everything is broken and there is no political will to fix it.

This is the cursed state of the political future of NHS dentistry seen from outside the positivist mainstream, and for all the good intentions of these commentators there are few solutions. As several of the participants throughout the study remarked the future of NHS dentistry is likely to be one of declining need for the service, with a core component retained to provide ongoing care for an aging population, and others with ongoing dental problems or co-morbidities. However, this core component would need to be able to effectively manage disease processes within the population more
generally and provide some kind of interim screening, even if the time frames are significantly wider. None of this implies that we need to stick with the current model of individualised care, and much of the literature would support this assumption. However, while there are good reasons to integrate further with primary care medicine, there will remain at least another thirty years or so before the cohort of younger disease free dentitions become the norm. Even within that scenario any proposed system will still need a function to maintain healthy mouths and treat disease within the population. So the model outlined below in figure 7, shows the basic premise of an alternative model, which does not “integrate” with primary medical care but aligns with it to address both policy problems, and emerging epidemiological concerns.

The basic premise for the model draws from the findings of the thesis in both theoretical and practical ways. To draw back to the central theoretical architecture, much of the thesis has drawn on the notion of circulation. Under conditions of late-modernity the doctrine of neoliberalism has firmly taken root in the UK and is shaping both research and practise in a number of explicit and contradictory ways. In its most obvious form, neoliberal proponents seek to extend market mechanisms across services, insisting that services adapt to market logic, encouraging providers to see themselves at competitors, while goading patients or service users to behave as customers. The underpinning rationality for this is that as services and the people that work in and use them adopt these mentalities, services will become more adaptable, slicker and more accountable as they answer to market (rather than bureaucratic) logic. How far this is actually achieved is a matter of debate (Gamble, 2006; Lewis, 2009), though the aims are clear: If the state and welfare services can exploit the freedom that is supposed to accrue from economic models then people, things, commodities and ideas will circulate more efficiently saving time and money, while flushing out inefficiencies.

However, the parts of the discourse require linking in practice if they are to realise their effects, though discourse and practise fail to link, and holes emerge as disease slips in, services falter, professionals dig in their heels or the capacity to make a market a viable form of allocation in the first place is absent (see Tickle, 2012). Instead,
services become encumbered through constant surveillance of their activities, as practitioners must make their work standardised and accountable, while also trying to steer newly configured customers through matrices of choices. Such is the nature of the circulation problem; everything has to fit together neatly if it is to properly order and secure the populations and if it does not then the consequences are poor allocations of resources, professional discontent or consumer apathy. What sits at the heart of this problem, as demonstrated throughout the discussion of the data, is that communication becomes increasingly problematic.

For many of the participants in the study, communication between the constituent parts of the dental service become mediated by this logic as GDP’s must communicate with commissioners and other dental professionals in standardised forms. Communication with patients also becomes problematic as valuable clinical time is eaten up discussing possible choices, and trying to be clear and explicit about what treatments are available under the NHS and those which are not. For dentists this was most often stated as a problem with the consumerisation of health care, while for patients the problem was more clearly expressed as a knowledge deficit, where they were unable to evaluate the efficacy of the care they were receiving. The uniformity of the dental service was questioned universally, as patients were sceptical that their diagnoses or treatment was financially disinterested, and reported difficulty in finding or assessing information. In this sense there is a double bind for patients as they are impelled to act like consumers but were given little direction to be able to effectively gather or use information to steer their own care. It should come as little surprise that the interface between professionals and service users has become confused, with both parties struggling to communicate effectively about the care needed or provided.

As demonstrated in the penultimate chapter, one particular area where this has had a profound effect is where the relationship between dentistry and the other medical specialties has been slowly reconfigured, and dentists find themselves unable to engage appropriately with the medical profession. What many GDP’s consider good patient care involves clear lines of communication between dentistry and medicine so that co-morbidities, drug regimes, and other medical abnormalities do not compromise the efficacy of the dental care provided. All of the above can be described as circulation
problems, which are driven in by market logic, but make communication and dissemination of information extremely difficult. So the model outlined below speaks directly to the identification of these contradictory findings, to outline how services can align with medicine, solving many of the problems with current arrangements and working towards a resolution to these communication problems.

Figure 7: The Split Provision Model
At the centre of the model is a dental professional, who would act as first point of contact for individuals accessing dental care, and would be salaried as an NHS professional. Their role would be to screen for dental disease, provide any basic interim services (for example a temporary filling or a prescription), and refer the patient on to an appropriate dental specialist if a problem is identified. I have called this model “split provision”, as screening would be undertaken by the dental professional in the diagnosis role, but any other treatment would be “split” and undertaken on referral. On the edge of the model to the left are the emergency dental services, which would remain much the same as they are currently organised, where access would be mediated by a triage system to treat severe cases that need emergency treatment. The community dental services also sit on the outside of the model and would continue to take patients who cannot be treated in public practice, though the decision on how these patients should be referred would require careful consideration. Care which would be accessed via referral would include at least the following: Periodontics, Orthodontics, Prosthodontics, Oral Surgery, Restorative dentistry, and Paediatric dentistry, though may also include Implantology and Maxillofacial surgery.

Although much of this thesis has disregarded a discussion of rationing in order to engage a wider debate about why NHS dentistry remains stuck providing outdated methods of screening and treatment provision, this model would act primarily as a rationing tool. While the sixth monthly recall period was widely recognised by the participants in the study (both patients and dentists) to be something habitual rather than necessarily “needed”, it was also accepted as persistent. So the first benefit of this model would be to target the inextricable link between economic incentives, historical patterns of screening and patient expectations, and channel it through a single provider who will work to NICE (2004) guidelines to shake out unwarranted screening at the point of access. Though ideals never play out in practice, the ideal scenario here would be that the objectivity of the diagnosis or recall period would be the same whichever DHP was accessed. If a patient is otherwise dentally fit they can access the dental professional again at the given recall time or if they experience symptoms, and if they wish to maintain a six monthly schedule this can be accessed in the private sector.
Similarly, while I have rejected the idea of access as void of substantive content, this must feature into the debate if we are to address inequality (Sheiham, 2013). Within this model, among the central propositions is that freeing up capacity through rationing recall, enough resources would be available to make the initial visit free, overcoming a major hurdle in addressing inequality. Since the dental professional would also be integrated, or at least more closely aligned with primary care medicine, patients are more likely to actively see where the dentist was stationed and book appointments when they accessed primary care medicine. Similarly, if the GP or other medical professional recommend that a patient should visit a dental professional, they would already be in the right place to book an appointment. So we would move some way to solving the inequitable use of services, while making access much more affordable and visible in the process.

The third element of the model addresses the referral process, and is the most controversial piece of the schematic which would require much finer analysis than is offered here. In the first instance it assumes that a number of private dentists would be available and willing to provide subsidised care under the NHS upon referral, within the given geographical area. If we make that assumption, and it is quite a big assumption, a reasonable outline of how treatment would be costed requires further work. Whether this would operate on a fee per item basis or a more suitable scale of banded activity, a major part of making this clear and concise is that regardless of the actual cost of the treatment, the patient would be given a fixed amount towards the cost of that treatment. For example, if the patient requires a denture, a voucher or grant would be allocated to offset the charges they pay when they undertake their care. That care would be provided in the private sector, and much like how vouchers work within eye care, the patient would be able to use the voucher at any provider of their choosing, providing they accept NHS patients.

What is being put forward in this final part of the split provision model is an element of choice, where patients can choose a provider based upon their preferences. Providers may differentiate themselves on price, availability, geographical locale or any number of other factors, introducing meaningful choice into the dental economy. There is also a certain knowledge problem that is addressed within this as the DHP in
the diagnosis role may be able to point the patient towards providers who are known to be good at dentures, have fair prices for bridgework, or are technically skilled in endodontics. While these are just some examples, once in operation the knowledge accrued by a DHP in such a role as they see the work undertaken by numerous local providers, may help foster a genuine improvement in the efficiency of the market and a more suitable match between patient needs and the skills of providers.

The central argument is that while this model may seem alien, it represents a progressive step which addresses all of the findings laid out across the chapters of this thesis. A fairer and more accessible dental service can be provided which demystifies the process of dental provision for patients, as any diagnosis will be economically disinterested. While it is doubtful that the biopolitical constraints which run deep through the fabric of our welfare state will be wholly avoided, nationalising diagnosis and privatising treatment may go some way to relieve contemporary market based pressures. Frontline providers of treatment should no longer find themselves strangled by numerous prerogatives to engage in a never ending and reductive system of counting procedures on behalf of the state, because what is paid for by the NHS will already have been costed before the visit. As Sanderson (2008) would like, dentists can just “get on” with treating patients the way they were taught to, because all of the contracting and “politics” of the dental encounter will have been dealt with before any treatment is carried out. In this way “politics” is nationalised and treatment is routine and clinical. The consultation will no longer be full of traps where providers steer patients through a maze of possible choice scenarios and discourses of empowerment, because it can be made clear exactly what the NHS is going to pay for and why.

This appears to be one of the major benefits of such a model because it relieves patients of the continual worry that they don’t know what they are buying or whether the decision to treat (or not) is economic or clinical. However, in exactly the same way, patients who require further treatment can make a meaningful choice about who provides that care, and if required can have a reliable source of information to help make that choice. There is no reason why government should not find the model attractive; as the participant quoted in the last chapter states, it fixes the costs, but allows an active market to surround diagnosis, that can be steered by engaged patients.
who are making informed choices. As Clarke (2005) argues, as citizens have been “responsibilised” to take control of their health, they have also been abandoned as if they hold all the knowledge relevant to do so (see also Harrison, 2003). What has been seen throughout this thesis, however, is that patients are rarely in the position to make those choices, and any improvement in the market is difficult to see. So while the model accepts that individual choice can be beneficial in configuring a market in NHS dentistry, the responsibility does not lie only with the patient.

However, there are several other unintended consequences of further integration of the diagnostic role into primary medical care. Not least of these is that in an era of NCD’s and chronic conditions the interests of dentists and doctors should be more closely aligned and the case should be underlined to bring the mouth back to the body. ‘By sharing information, providing basic diagnostic services, and consulting one another in a systematic and sustained manner, dental and medical professionals in integrated practice arrangements would have a far better chance of identifying disease processes and underlying conditions’ (Grantmakers in Health, 2012; ii; Mealey and Rose, 2008). Furthermore, if we accept the epidemiological finding that dental disease is largely concentrated in the aging population and other sub-populations, we must also accept that these groups have a number of co-morbidities and / or risk factors, which make the case for closer alignment more compelling (see Tanaka, 2008; Spielman et al. 2005; Nash, 2006; Boyce et al. 2010). Consistent gaps in symptom reporting and risk factor identification between GMP’s and GDP’s for oral cancer, for example, would be expected to fall as professional dialogue becomes easier (Macpherson et al. 2003). In addition, if the patient allows it, work duplication, whereby both GDP’s and GP’s collect the same information on a person’s biological and behavioural risk factors and pharmacological profile could be eliminated, through the shared use of records (Jones et al. 1999).

Where this model could also help is that it would come someway to overcoming a problem regularly flagged throughout this study, that dentistry is unable to effectively integrate with a shared risk factor approach (Watt and Peterson, 2012; Newton and Bower, 2005; Watt, 2007; Sheiham and Watt, 2000). This was not only a concern in the dental literature, but also a worry for the participants in the study, who consistently
complained that they were not consulted by others in public health, or that the
dentistry part was “tagged on” to public health campaigns at the end. Finally, but not
least importantly, is that we may see some convergence and closer dialogue between
the two research communities. As Tanaka et al. (2008; 1078) argue, ‘the isolation of
dental education and research from medical education and research has resulted in a
lack of understanding of oral health and its importance in the general medical
community’. If we are to expect a closer dialogue as a by-product of closer alignment,
dental science may also be impelled to readdress the direction of its research agendas
and the contribution to the human sciences that it hopes to make.

However, it is recognised that the model is far from perfect and several practical
problems are immediately evident. The first regards the status of the professional in
the diagnostic role. In the figure this role is currently filled with a GDP or a DHP,
since there is a growing evidence base to suggest that fully trained dental professionals
are capable of diagnosing a range of periodontal conditions, oral cancers and need for
further restorative dentistry at similar levels of accuracy to GDPs (Brocklehurst et al.
2015). However, whether a DHP would be able to provide an accurate diagnosis
within all of the competencies that would be required of this role, it would be more
likely that the role would be suited to a GDP. A more reasonable proposition for the
medium term is that a DHP may be more suited for certain services supplied on
referral, such as periodontics and some restorative or preventative dentistry. The
second concern is an extension of the first and regards how potential conflicts between
professionals might be mediated. An obvious example is that an individual may be
referred for a root canal, while the provider of the treatment may believe that a root
canal and a crown would be more appropriate for the patient. This problem would
likely extend if there is a time lag between when the patient receives the diagnosis and
they see the provider, as other problems may emerge in the interim. Clear lines of
communication would be a necessary corollary of the model, so that any problems
between diagnosis and provision can be remedied and endless referrals back and forth
can be avoided.

A similar concern arises regarding what the newly configured status of GDPs in the
provision role might be within this arrangement. Many patients taking part in this study
suggested that they used the NHS for check-ups, but had done work privately and vice versa. The question at this point would be whether other GDP’s outside of the central diagnostic role would also be given the capacity to allocate vouchers or grants on behalf of the NHS, if a treatment need is identified. This is really a question over power and who holds the key to NHS resources. While a principal element of the model is to concentrate that power in a centralised role, whether, or under what circumstance other GDP’s in mixed practice might use it so that patients do not lose out would require investigation.

To briefly summarise, what I have proposed here is a set of basic arrangements which realign NHS dentistry with primary medical care to overcome the difficulties outlined in the thesis. It speaks to policy concerns and epidemiological trends to align diagnosis and provision with wider economic objectives. While it solves many of the problems identified, the power shift that is inherent within the model will likely not be popular with the dental profession, though I can see few reasons why it would not be a popular initiative for service users. What we have here is something to debate; a model which should be of interest to policy makers, professionals, social scientists and policy analysts. For as argued throughout, the problems facing NHS dentistry are social and political in nature and this is a potential political future, which describes an opening for others to get involved.

12.3 Objection!

In almost all respects these proposals are outlines and the benefits that I am arguing will accrue from their adoption are only logical assumptions. However, the case for integration, or more properly “alignment”, is based on a set of potential solutions to a set of intractable problems which have eluded dental public health workers for decades. To date proposals that bear similarity have only been debated across the Atlantic (Grantmakers in Health, 2012; Tanaka et al. 2008), and I have done little more than offer a sketch that can act as a platform for debate. My analysis has pulled out these problems and put them in the wider frame of political economy, explaining
in more detail why they exist. So this final chapter has only gone as far as proposing a model which seeks policy solutions, which align with the findings of the work presented. We are unable to see the future, though continual reform of the NHS dental service in the past, can only lead to the inevitable conclusion that we have a broken system that is stitched up periodically to little avail. Not only are we now looking at a significantly different demographic and epidemiological picture, but are situated in the novel political economy of late modernity and such problems will likely tighten rather than abate. Now might be the time to have this debate.

If I were to start the thesis over again, I would have started with this model; costed it, taken it to the dental community for consideration and critique; I may have interviewed GP’s or other healthcare providers to obtain their views, examined the contexts where it was possible, and maybe even suggested a pilot. But that is not the process that has happened here. This is oddly where the research has led over the course of the work, as the problems became clearer, and the points of possible entry for the social sciences to contribute showed themselves. So the objection that I would like to address in this final section does not relate to potential problems with the model, but theoretical and practical objections that can be applied to my analysis as a whole. The major possible objection is best stated as a question: Has the analysis not drawn on a critical reading of neoliberalism, only to request that a model which contains many of the core values associated with that programme be considered a viable solution?

Casually, I would have to answer in the affirmative, though that should not mean that my own political conscience is aligned with that programme. The political scientist Nick Lewis (2009; 113), ponders over whether he will end his academic career before arguing that we should ‘seek to explore how we should imagine and enact better futures by developing alternative political projects within neoliberal frames’. This is to argue that in the absence of an alternative and the strength that neoliberal doctrine holds in contemporary politics, the task should be to try and bend neoliberal concepts towards progressive ends. This is not to admit defeat, quite the opposite. It is to try and work within constraints and get around conceptually stretched and self-defeating
notions of neoliberalism that simply critique power and bring only deep political disaffection.

As James Ferguson (2011) argues, the decades after neoliberalism’s birth saw a demise of the left as it struggled to find an alternative that could gain any traction. The arguments of the New Right left little room for the left to draw on its conventional lexicon of collectivism, tainted by union politics and poor budgetary management (see Harvey, 2005). As has been argued countless times the traditional left realigned itself with neoliberal values, fell in love with markets, and has followed neoliberal doctrine across its policy programmes in the decades since (Greener, 2004). However, as the political establishment found solace in the centre right, enacting implicit and explicit neoliberal reforms under the name of progress, the social sciences appear to have lost their voices. The analysis of the messy actualities of implementing neoliberal reform were largely swamped by ‘specific critical narratives expressed via overly simplistic critiques of power, weak analysis of its operations, casual empirics and naïve and ineffectual politics’ (Lewis, 2009; 114). Barnett (2005) calls this critical positioning a “consolation”, a space that critics used to pursue endlessly nihilistic accounts of neoliberalism but rarely offered any fresh alternatives. The extension of this argument is that if many critics of neoliberalism find that their analyses have little impact on the wider structures of government it is largely a problem of their own making.

There are certainly reasons to take these arguments seriously, since the 1990’s and the early 2000’s saw a huge overhaul of the range of critical positions available to social scientists, though as argued in chapter 5, these have largely been used to critique power rather than engage it in any meaningful way. It has only been over the last decade or so that some are now asking where this will all lead, and question what kind of contribution all this makes. For what has been achieved in this thesis is the use of critical theory to examine the messy actualities of the NHS dental service, which uses these critical frames, but is not constrained by them. When used in context they can show us why things fit (or don’t), why there are so many problems, and what we might be able to do about them. It appears to me that Foucault’s (2009a, 2009b) concepts used here seem particularly fluid and adaptable to be used for exactly these purposes. However, it is a question of theory, method and design; letting go of totalising notions,
allowing methodology to adapt in practise and examining in more detail where the
findings point. Admittedly, the “design” I have put forward at the end is only a sketch,
and is arguably a step outside the data collected. Though it demonstrates that critical
theory does not, maybe even should not, be the end point in itself, but the starting
point for explaining why problems exist and outlining a way forward.
List of Appendices

Appendix 1: Research Protocol

University of Manchester

Research Protocol: Understanding the concept of ‘oral health need’ in planning dental services.

Principle Investigator
Nicholas Deal

1. Background and Policy Context

The organisation and coverage of dental services in England remains high on the political agenda. The government White Paper, *Equity and Excellence: Liberating the NHS*, provides the rationale for a new dentistry contract ‘with a focus on improving quality, achieving good dental health and increasing access to NHS dentistry’ (p 26). This pledge from the coalition government speaks directly to consumer and media concerns that access to good quality NHS dental services is difficult to obtain.

While the *British Dental Association* (BDA) has broadly accepted the central tenets of the new contract, it has expressed concern over the lack of detail in the White Paper and has resisted a premature national rollout of the new contract, calling for further engagement with the profession and the public. [http://www.bda.org/dentists/policy-campaigns/research/government/leg-reg/health-reform/equity-bda-response.aspx](http://www.bda.org/dentists/policy-campaigns/research/government/leg-reg/health-reform/equity-bda-response.aspx). Among the BDA’s concerns is that measures to tackle inequality and meet the oral health needs of the population will be lost amid a period of structural and financial uncertainty. Barry Cockcroft, the governments’ principle dental advisor, has expressed similar concern regarding the lack of attention to oral health inequalities and community oral health programmes within the government proposals. [http://www.dh.gov.uk/health/files/2012/03/CDO-Newsletter-SPRING_2012.pdf](http://www.dh.gov.uk/health/files/2012/03/CDO-Newsletter-SPRING_2012.pdf).
As indicated above, it is not clear how the new dental contract will address oral health inequalities, or direct services to those most in need. However, the concept of “need” could be considered a fuzzy concept, which is difficult to tie down in any absolute sense. What do these commentators mean when they talk about oral health needs and what would be the necessary measures required to meet them? It is likely that multiple (and possibly conflicting) visions of what constitutes need in relation to dentistry will be present among the professionals who organise and deliver services, and among the individuals who use them. In turn this may lead to difficulties in planning services when the core concept upon which services are designed is not properly defined.

The planning of health services around the needs of the population has been the cornerstone of the NHS since its inception, and remains the guiding policy objective. Since the late 1990’s, the provision of services within the broader field of medicine has increasingly been determined upon clinical need and the effectiveness of medical intervention. However, despite efforts to establish a suitable evidence base, dentistry does not currently have an agreed concept of clinical need and the utility and effectiveness of the simplest procedures are still hotly debated.

It is against this policy background that research into what constitutes need in dentistry is both desirable and increasingly necessary. Very little is known about what exactly the public expect from the dental service, what they consider to be their oral health needs, and what kind of coverage or service provision would satisfy those needs. Similarly there has been little research into what dental professionals and commissioners consider to be the core needs of their patient base. The research which exists in this area has so far given mixed results. While some dental professionals insist that more one to one time with patients will lead to better oral health outcomes, others have indicated that resources would be better used to tackle oral health inequalities. Other research has suggested that investing in population based measures, such as public health campaigns, may show higher levels of clinical effectiveness in reducing oral disease.
In summary how oral health need is defined, and how services should be designed to meet that need, remain disputed questions. It follows that further investigation which examines various concepts of need will contribute to the available literature and supply clinically relevant data for policy discussion.

2. Research aims and research questions.

The broader aim of this study is to better understand what health professionals, GDP’s and service users consider as oral health need. Following from this, a further aim is to elicit the views of these various groups on what services should be offered by the NHS to meet those needs.

- What do these various groups consider to be the core aims of NHS dentistry?
- How is need considered when planning and delivering services?
- How do the views of the public, professionals and commissioners compare when talking about oral health need?
- What measures should be taken to promote oral health and reduce oral health inequalities?
- What are the common narratives that emerge when addressing the idea of need, and how do these differ among the sample?

3. Project design, sampling strategy, research methods and analysis

Research which examines the interests and views of dental professionals tends to focus on the impact of certain policies, technologies or interventions, while research that attends the experiences and views of service users tends to focus on specific issues or groups of service users. However, as argued by Bowling (2002) it is important to compare the views of both patients and professionals providing a wider
role for patient input into public policy research. Owing to the lack of literature in
the area of oral health need, this study will take an exploratory approach guided by
observed gaps in existing knowledge while working within the restraints of resources
and time available for the project. The study will utilise open-ended, semi-structured
interviews designed to obtain as much information as possible from participants.

**Sampling Strategy and Research Methods.**

The aim of qualitative research is seldom to gain statistical inference (May and Pope,
1995) (Britten, 1995) and the sampling strategy employed here is designed to gain
maximum variety, capturing as many different dimensions of need as possible. The
research will use 50-55 interviews of which 20 will be with the public, 25 with
practising GDP’s and 5–10 with commissioners, health professionals and managers
(dependent upon access). Due to the variation of the participants I propose a mixture
of sampling methods adapted from Murphy et al. (1998) for the different groups of
the study.

**Theoretical Sampling** is a method by which participants are chosen because they
have particular knowledge related to the research topic. This strategy will be used to
recruit participants from the dental profession.

Research by Morris and Burke (2001) and Chambers (2006) has indicated that
dentists have been unable to establish a clinically relevant definition of need because
the profession is segmented into various specialisations with different interpretations
of oral health need. As such it is necessary to recruit participants working in the NHS
across the various specialisations as well as “generalists” working within the
community. Recruiting commissioners and managers may also require a degree of
**snowball sampling**, where participants may be referred or contacted through other
participants. A summary can be seen below in table 1.

**Non-randomised sampling** is a strategy employed when RCT or cohort strategies
are inappropriate, or when the research requires participants to exhibit a particular
attribute or quality. As such it is often used as a strategy to gain representativeness
(Murphy et al. 1998; Alsop and Saks, 2007) to ensure that each group within the
study is adequately represented in the data. This strategy will be used to recruit participants from the public.

Much research has examined the variation of oral health need along the lines of age, cultural background, gender and socio-economic-status. However, recent research by Milson et al (2009) and Gregory et al. (2007) has found that differences in oral health behaviours and attitudes towards dental health are particularly pronounced between individuals who regularly attend the dentist, and those who do not. It follows that more in depth research into how these two groups perceive oral health need may yield particularly interesting data.

**Sampling Frame.**

Table 1.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Interview schedule and strata</th>
<th>Sampling Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Public / Service Users</td>
<td>Regular Dental Attendees (at least once every 18 months or more) – 10 interviews¹</td>
<td>Non-Randomised for representativeness</td>
</tr>
<tr>
<td></td>
<td>Non-regular Dental Attendees (less than one visit in the past two years, or only visits when in pain) – 10 interviews</td>
<td></td>
</tr>
<tr>
<td>GDP’s working within NHS dental services</td>
<td>Generalists working in high street clinics – 10 interviews</td>
<td>Theoretical Sampling</td>
</tr>
<tr>
<td></td>
<td>Orthodontists – 5 interviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Dentists – 5 interviews</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dentists working in emergency care – 5 interviews</td>
<td></td>
</tr>
<tr>
<td>Policy makers, Commissioners, managers, service planners</td>
<td>5 – 10 interviews</td>
<td>Theoretical Sampling Snowball Sampling</td>
</tr>
</tbody>
</table>

¹ The 18 month figure is drawn from recent NICE guidelines which state adults should receive a dental check at least every 18 months. http://guidance.nice.org.uk/CG19
**Interview Method and Analysis.**

The interviews will be digitally recorded and transcribed ad verbatim. Following some generic profiling and general fact finding questions the interviews will be broadly based around three themes.

1. **The patient experience and expectations.** What do patients think their oral health needs are? How do patients, dentists and commissioners define need? Do dentists feel they are fulfilling their role in meeting the needs of patients? What measures can be taken to improve the patient experience and meet needs?

2. **Dentistry and social responsibility.** What is the role of the dentist, or organised dentistry more generally, in contributing to the well-being of society? How far is dentistry perceived to be meeting public policy objectives to better educate patients and move towards preventative care?

3. **Oral health inequalities.** How far are participants aware of the extent and severity of oral health inequalities? What measures do participants feel are necessary to tackle oral health inequalities? Would participants support community and population based initiatives to improve oral health inequalities? Would participants support a redistribution of resources from other parts of dentistry in order to address inequalities?

As previously outlined the interview method will be semi-structured around these themes, allowing the interviews to be guided without distracting from the overall narrative. The three tiers of the interview are structured in order to progress from the individual level of personal experience, through the intermediate level of dental delivery and its related problems, finally looking at the wider societal problems and future of the dental service.

The method of analysis will draw on the narrative approach, a method which seeks to identify key themes, concepts and stories which emerge throughout the interview process. The use of this method has developed from grounded theory (Glaser and Strauss, 1967) which seeks to reach theoretical saturation through the categorization of data until no new or novel themes emerge. Although the sample sizes used in this study are relatively small it is plausible that saturation of relevant narratives can be
achieved within small sample sizes (Weiss, 1994) (Britten, 1995). The narrative method is also relevant due to the structure of the interviews. Narratives can be compared within and between strata, and within each interview – identifying if a coherent narrative flows through all tiers of the interview. As a result both micro level and macro level data can be gleaned from the interview data.

In order to improve validity, a small amount of interviewees will be contacted for follow up interviews after analysis. Respondent validation of this kind is relevant here as a means of triangulation in order to allow participants to challenge the constructed narrative or add any finer details that may have been overlooked in the analysis stage.

**Outputs**

This research will provide data for a wider PhD thesis on oral health need and dentistry reform to be submitted in 2014. The data collected will also be used to inform articles to be submitted to peer-reviewed journals.

**Timetable**

April 2012 – June 2012 – Pilot study and further refinement of interview questions.
July 2012 – August 2012 – Recruitment of research participants. Obtain ethical clearance
September 2012 – April 2013 – Data collection and transcription
April 2013 – July 2013 – Interpretation of data and initial analysis
August 2013 – September 2013 – Follow up interviews and further analysis

**References**


Appendix 2: Participant Information Sheet

University of Manchester
Participant Information Sheet

Research Title: Understanding the concept of ‘oral health need’ in planning dental services.

Principle Researcher: Nicholas Deal
nicholas.deal-2@postgrad.manchester.ac.uk

Introduction
You are being invited to take part in a research study on understanding oral health needs being conducted by the University of Manchester. The project is funded by the Manchester Oral Health Unit, though the research, conclusions and any publications will be the responsibility of the researcher. Please take the time to look over this information sheet in order to decide if you would like to participate in the research. Below you will find information on the aims of the study and what is required from you as a participant. If you have any further questions or concerns please feel free to contact the researcher via the contact details given at the top of the document.

The context and aims of the study
The most recent changes to the NHS approved by the UK government in March 2012 include a change in the way dental services will be delivered. A new dental contract is currently being trialled across England which will focus on reducing waste and increasing access to NHS dental services. As of February 2012 seventy pilot sites are active across England, each trialling different models of dental delivery. It is hoped that the government's pilot exercise will guide the way for a new dental contract to be rolled out nationally in 2014.

The government’s chief advisor on dentistry and the British Dental Association (BDA) have insisted that any change in the dental contract must be designed to meet the oral
health needs of the UK population. This research has been designed to assess what exactly those needs are and how they can be met. The method of research involves interviews with the users, providers and other health professionals involved in the organisation and delivery of dental services.

The study aims to provide answers to the following questions:

- What should be the focus of NHS dentistry?
- Does NHS dentistry currently meet the needs of patients, and if not why?
- What could be the possible barriers to achieving a better NHS dental service?
- What could be done to better meet oral health need in England?

**What does the research involve for you?**

If you would like to take part in the research, you will need to spare roughly 1 hour of your time for an interview. The interview is designed solely to collect your experiences and opinions regarding NHS dental services and does not require any documents or further information from you. The interview time and location can be arranged so it is most convenient for you. The interview will be tape-recorded and field notes will be taken by the researcher. Prior to the interview you will be asked to complete a consent form, although you are free to withdraw from the research at any time. You may be asked about levels of clinical activity, professional approach, and patient interactions, though we will not require specific information on particular patients.

**What happens after the study?**

When the interview is complete the tape recording will be transcribed and analysed by the researcher and will be used to inform research studies and conference papers. If, for any reason, you wish to withdraw from the study you may contact the researcher and ask to be removed from the study. You may also contact the researcher at any time after the interview if you require any further information. If you would like to see any publications that arise from the research you are welcome to contact the researcher for an electronic copy of the research. The details can be found at the end of this document. In some instances the researcher may wish to contact you again about your participation in the study. This may be to clarify some of the issues that were discussed in the interview or to obtain some further details about your answers. It is unlikely that this will require any further face to face meeting and is will likely be a few short questions via email or phone. If you do not wish to be contacted again after the initial
interview, your contact details will be removed from our database and you will not be approached in any follow up study.

**Confidentiality**
As stated above all interviews will be tape-recorded and transcribed. Only the researcher and the research team will have access to the interview data. All interview data will be kept in an encrypted file on a university laptop and transferred to university servers as soon as possible. The information gained from interviews will be used in studies, presentations and academic publications. Any findings reported will be presented anonymously **without identifying the person or organisation.** When or if any direct quotes are used for reports and studies pseudonyms will be used and no information will be presented that could identify the person or organisation.

**What if there is a problem?**
If you have a concern about any aspect of the study, you should speak to the researcher who will do their best to answer your questions. If they are unable to resolve your concern or you wish to make a complaint regarding the study, please contact a University Research Practice and Governance Co-ordinator on 0161 2757583 or 0161 2758093 or by email to research-governance@manchester.ac.uk.
Appendix 3: Consent Form

Consent Form

Principle Investigator: Nicholas Deal

Please tick the boxes to consent to the study

<table>
<thead>
<tr>
<th>I have read and understood the participant information sheet.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am willing to be contacted at a later date regarding my participation in the research</td>
<td></td>
</tr>
<tr>
<td>I am willing to undertake a tape recorded interview</td>
<td></td>
</tr>
<tr>
<td>I understand that the information given in the interview may be used in academic articles and publications.</td>
<td></td>
</tr>
<tr>
<td>I understand that I am free to leave the study at any time</td>
<td></td>
</tr>
</tbody>
</table>

Signed (Participant) ______________________  Date _____

Signed (Researcher) ______________________  Date _____
Appendix 4: Participant Information Sheet (Focus Groups)

University of Manchester
Participant Information Sheet

Research Title: Understanding the concept of ‘oral health need’ in planning dental services.
Principle Researcher: Nicholas Deal

Introduction
You are being invited to take part in a research study on understanding oral health needs being conducted by the University of Manchester. The project is funded by the Manchester Oral Health Unit, though the research, conclusions and any publications will be the responsibility of the researcher. Please take the time to look over this information sheet in order to decide if you would like to participate in the research. Below you will find information on the aims of the study and what is required from you as a participant. If you have any further questions or concerns please feel free to contact the researcher via the contact details given at the end of the document.

The context and aims of the study
The most recent changes to the NHS approved by the UK government in March 2012 include a change in the way dental services will be delivered. A new dental contract is currently being trialled across England which will focus on reducing waste and increasing access to NHS dental services. As of February 2012 seventy pilot sites are active across England, each trialling different models of dental delivery. It is hoped that the government’s pilot exercise will guide the way for a new dental contract to be rolled out nationally in April 2014.

The government’s chief advisor on dentistry and the British Dental Association (BDA) have insisted that any change in the dental contract must be designed to meet the oral health needs of the UK population. This research has been designed to assess what exactly those needs are and how they can be met. The method of research involves
interviews with the users, providers and other health professionals involved in the organisation and delivery of dental services.

The study aims to provide answers to the following questions:

- What should be the focus of NHS dentistry?
- Does NHS dentistry currently meet the needs of patients, and if not why?
- What could be the possible barriers to achieving a better NHS dental service?
- What could be done to better meet oral health need in England?

**What does the research involve for you?**

If you would like to take part in the research, you will need to spare roughly 1 hour of your time to take part in a focus group. The research is designed to collect your experiences and opinions regarding NHS dental services and does not require any documents or further information from you. The interview time and location can be arranged so it is most convenient for you. The interview will be tape-recorded and field notes will be taken by the researcher. Prior to the interview you will be asked to complete a consent form, although you are free to withdraw from the research at any time.

**What happens after the study?**

When the interview is complete the tape recording will be transcribed and analysed by the researcher and will be used to inform research studies and conference papers. If, for any reason, you wish to withdraw from the study you may contact the researcher and ask to be removed from the study. You may also contact the researcher at any time after the interview if you require any further information. If you would like to see any publications that arise from the research you are welcome to contact the researcher for an electronic copy of the research. The details can be found at the end of this document. In some instances the researcher may wish to contact you again about your participation in the study. This may be to clarify some of the issues that were discussed in the interview or to obtain some further details about your answers. It is unlikely that this will require any further face to face meeting and is will likely be a few short questions via email or phone. If you do not wish to be contacted again after the initial interview, your contact details will be removed from our database and you will not be approached in any follow up study.
Confidentiality

As stated above all interviews will be tape-recorded and transcribed. Only the researcher and the research team will have access to the interview data. All interview data will be kept in an encrypted file on a university laptop and transferred to university servers as soon as possible. The information gained from interviews will be used in studies, presentations and academic publications. Any findings reported will be presented anonymously without identifying the person or organisation. When or if any direct quotes are used for reports and studies pseudonyms will be used and no information will be presented that could identify the person or organisation.

What if there is a problem?

If you have a concern about any aspect of the study, you should speak to the researcher who will do their best to answer your questions. If they are unable to resolve your concern or you wish to make a complaint regarding the study, please contact a University Research Practice and Governance Co-ordinator on 0161 2757583 or 0161 2758093 or by email to research-governance@manchester.ac.uk.

nicholas.deal-2@postgrad.manchester.ac.uk
Appendix 5: Focus Group Schedule

Focus Group Schedule

1. What are your general perceptions of the dental service?
   1a. What was the nature of the visit? Pain relief / check up / restorative
   1b. Were you pleased with the outcome of your last dentist visit? If not why?
   1b. Was there anything that could have gone better – anything you would have liked that didn’t happen?
   1b. Did you feel that you were given appropriate advice by your dentist about how to maintain good oral health?
   1b. If you found yourself in need of emergency dental care, would you know how to go about obtaining this?
   1c. How would you generally describe your oral health at the current time? Good / middling / poor
   1c. Is there anything in particular that bothers you?
   1c. How important is your oral health to your sense of well-being?
   1c. If you could change anything about your teeth or your oral health, what would it be?

2. Thinking about dentistry in general, how well do you think that NHS dentistry is performing at the current time?
   2a. Do you think that it should be the government’s responsibility to provide dental care to the population generally?
   2a. Do you think there are any barriers to achieving a better NHS dental service?
   2b. What do you think should be the ultimate aim of NHS dentistry?
   2b. What level of care do you think should be provided?
   2b. Do you think that patients should be given a degree of choice regarding their dental provider. If so in what way?
3. There is an enduring stereotype that the British do not take good care of their teeth; do you think this is fair?

3a. Do you think that certain measures should be taken to reduce oral health inequality?

3a. If a person does not take good care of their oral health do you believe they should still be treated the same as other patients?

3a. Sometimes patients are described as “difficult” – not turning up to appointments, being rude etc. How do you think the NHS should deal with these cases?

3b. Would you support further initiatives to reduce oral health inequalities? If so, on what grounds?
Appendices 6 & 7: Focus Group Tasks


Experiences of service use

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would be willing to pay more for dental services if they were</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>better quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I make sure that I always take care of my oral health</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have had difficulty obtaining good quality dental services</td>
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<td></td>
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<tr>
<td>I trust my dentist to give me the best diagnosis and treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>My dentist is more concerned with profits than patient care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied that the NHS provides adequate dental services</td>
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<td></td>
<td></td>
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<tr>
<td>I have had bad experiences with NHS dental services</td>
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</tr>
<tr>
<td>My dentist often tries to sell me services I do not need</td>
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<td></td>
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</tr>
<tr>
<td>I feel like I have a choice over the services provided by the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dentist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please tick the boxes. 1 indicates that you strongly agree and 5 means you disagree

Service standards

Please rate the following aspects from 1 - 5. 1 would mean you do not find it important and 5 would mean you think it is extremely important.

<table>
<thead>
<tr>
<th></th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>The dentist is friendly</td>
<td></td>
</tr>
<tr>
<td>It is easy to get an appointment</td>
<td></td>
</tr>
<tr>
<td>The surgery and clinic are clean</td>
<td></td>
</tr>
<tr>
<td>I am treated like a human being</td>
<td></td>
</tr>
<tr>
<td>I am able to move dentist if I find the service unsatisfactory</td>
<td></td>
</tr>
<tr>
<td>The costs of treatment are clear and accurate</td>
<td></td>
</tr>
<tr>
<td>The dentist is near to my home or work</td>
<td></td>
</tr>
<tr>
<td>All treatment is explained in language I can understand</td>
<td></td>
</tr>
</tbody>
</table>
The reception staff are welcoming
I am able to discuss all my concerns at the appointment
I am able to access the full range of treatments
I am given oral health advice by the dental health professional

<table>
<thead>
<tr>
<th>The reception staff are welcoming</th>
<th>I am able to discuss all my concerns at the appointment</th>
<th>I am able to access the full range of treatments</th>
<th>I am given oral health advice by the dental health professional</th>
</tr>
</thead>
</table>

**Rationing Core Services**

Please imagine that the budget for dental services has been cut by one third. Which of the following services would you cut or increase charges for in order that NHS dentistry can save money and meet its budget. Please choose 4.

<table>
<thead>
<tr>
<th>I would extend examination times from 6 months to 18 months</th>
<th>I would introduce further payments for Orthodontic care (teeth straightening)</th>
<th>I would introduce further charges for basic procedures such as scale and polish and cleaning.</th>
<th>I would cut the amount of time the dentist could spend with each patient from 12 to 8 minutes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would stop free dental care for children or increase charges significantly.</td>
<td>I would stop free dental care for pregnant mothers, special needs groups, unemployed persons, and others who are exempt from charges.</td>
<td>I would increase charges across the board for all types of treatment and dental care</td>
<td>I would increase charges for dentures</td>
</tr>
<tr>
<td>I would remove extensive restorative work (such as bridges and crowns) from the subsidised NHS service.</td>
<td>I would reduce the amount of time to discuss preventative dentistry (eg, advice on diet, smoking, alcohol etc)</td>
<td>I would cut the money available for Dental Health Education campaigns</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 8: Interview Schedule

Interview Schedule

1. I was hoping that you could tell me a little about your work and your involvement with NHS dentistry.

   1a. When you chose a career in dentistry what were your motivations?
   1a. Can you tell me about the extent of your involvement with patients?
   1b. How would you define your role in relation to the patient? Carer / Teacher / Medical / Paternal
   1b. What do you think a patient expects when they come to you for treatment / care?
   1c. In turn what are your expectations from the patient? Polite / Clean / Respectful / Taken care of their oral health / Other

2. Thinking about clinical practice. Can you walk me through how you assess a patient when they come to you for a treatment / check up?

   2a. Have you ever had difficulty in assessing a patient? If so why, what was the problem?
   2b. Do you think that all individuals require regular dental care?
   2b. Is dental care universally necessary for everyone?
   2c. What would be the baseline level of dental care required to maintain a healthy dentition?

3. I was hoping you could tell me your opinions on the current organisation of NHS dentistry?

   3a. Have you been consulted, or do you feel appropriately informed, about the changes proposed by the most recent government?
   3a. Do you believe that a centrally funded NHS dental service is necessary to maintaining the oral health of the population?
   3a. What should the role of the state be in providing for the dental care of the population?
3a. Does the individual have a role also?
3b. How do you deal with ‘difficult’ patients?
3b. Can you tell me about a time when you encountered a difficult patient? What was the problem, how was it resolved?
3c. How far do you feel responsible for the oral health of your patients?
3c. If you come across a patient with extensive oral health problems how would you approach the situation?
3c. Are there barriers which stop you from being able to treat patients as well as you would like?

4. Would you say that the aims of NHS dentistry have changed over the course of your professional career? In what ways, for better or worse?
4a. How extensive do you perceive inequality in oral health?
4a. What impact do you think this might have for individuals?
4a. Do you think that NHS dentistry is doing enough to tackle oral health inequalities?
4b. Do you think there may be professional barriers to tackling inequality? If so, in what ways, and how might they be resolved?
Acknowledgments

This research was supported by the National Institute of General Medical Sciences of the National Institutes of Health under Award Number P50GM071556. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Bibliography


Bibliography


Shape of the Oropharynx in Edentulous Older People that Affect Swallowing, Gerodontology, Forthcoming.


