UNIVERSITY OF SOUTHAMPTON

FACULTY OF HEALTH SCIENCES

Podiatry and Diabetes: An Exploration in Specialisation

By

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ABSTRACT

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Within healthcare, the concept of specialisation remains both poorly defined and under-debated in the literature. This research analyses the concept of specialisation and assesses the maturity of the concept of the diabetes specialist podiatrist; tracing the origins, change over time and current status of podiatric specialisation in diabetes. Literature pertaining to the legal implications of specialist practice, settings and titles is reviewed and a definition of specialisation within the context of healthcare is proposed.

The initial concept analysis led to refinement of research questions which directed further enquiry. Because answers to the research questions lie within the knowledge and experiences of key actors, managers and individual podiatrists who have held specific posts; a qualitative methodology featuring focus group and key actor interviews was utilised. The meaning of podiatric specialisation in diabetes, how diabetes evolved as a podiatric specialty, the impact of specialist titles and the longer-term, wider implications which accompany specialisation were explored. In presenting analysis of the data, the researcher focuses on theory which illuminates the findings. The centrality of Weber's concept of charismatic authority to the development and contemporary face of specialist practice is illustrated by the data; thus it represents a guiding theoretical concept within the author's thesis.

Documentary analysis was used as a triangulation strategy, in a bid to corroborate findings elicited through interview techniques. The documentary data also illustrates both the scale of and the context within which podiatric specialisation in diabetes evolved – not in isolation, but rather as one of many specialist foci.

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Academic Thesis: Declaration of Authorship

I, Dawn Bacon declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

Podiatry and Diabetes: An Exploration in Specialisation

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;

2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;

3. Where I have consulted the published work of others, this is always clearly attributed;

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1.0 LITERATURE REVIEW

1.1 Introduction to the Literature Review

In a departure from the norm in podiatric research, a concept analysis (allied to the literature review) has been undertaken. Reflecting the interrelated nature of reviewing the literature and analysis of a concept (a process of interrogating the literature, approaching it as data) the literature review and concept analysis are presented concurrently. This method of presentation avoids duplication which would otherwise be inevitable. The concept analysis is presented first (section1.1.1) as the author seeks to provide an overview of the concept of specialisation. Having addressed the concept of specialisation, the maturity of the concept of diabetes specialist podiatry is assessed. Within section 1.7 the literature review explores theoretical perspectives associated with specialisation. Finally consideration of medical dominance and authority and how they impact upon the profession of podiatry conclude the literature review in section 1.8.

1.1.1 Concept Analysis

The aims of this concept analysis were to explore the concept of specialisation and to assess the maturity of the concept of diabetes specialist podiatry. The analysis begins with an overview of the concept of specialisation, the everyday and scientific uses of "specialist" and "specialisation" are considered as are the setting and context of specialist activity. The comparable cases of medicine and diabetology (medical specialisation in diabetes practice), nursing and diabetes specialist nursing are also examined. These cases are compared with the case of podiatry and diabetes specialist podiatry.

To evaluate the maturity (or clarity of the scientific concept) of diabetes specialist podiatry its preconditions, characteristics, outcomes and consequences are explored and compared with the preconditions, characteristics, outcomes and consequences of both nursing and medical specialisation in diabetes. This information is presented in section 6.1, using comparative conceptual maturity matrices (tables 6-14).

1.1.2 The Concept of Specialisation

Historically "specialist" and "specialisation" are derived from the word "special" the meaning of which dating from circa 1225 was "*better than ordinary*" or from circa

1303 *"marked off from others by some distinguishing quality*" (Harper 2008). The sense of "special" indicating engagement *"in a special study or line of business*" was first attested in 1881. While "specialization[1]" is recorded from 1843, "specialist" is first attested in 1856 – originally in the medical sense (Harper 2008). Contemporary uses of the word specialist include that of a noun meaning "*a person who is highly skilled or knowledgeable in a particular field"*, or an adjective, meaning "*relating to or involving detailed knowledge or a specific focus within a field*" (Compact Oxford English Dictionary 2008).

In evolution and economics specialisation has historically been assigned meanings in terms of adaptation to the environment and natural selection (Darwin 2003), or the division of labour which can maximise production (Smith 1789). Theodorson and Theodorson (1970, p408) defined specialisation as:

> "*The division of labour or territorial areas of a group, community or society into a number of interrelated and specialized functions. Occupational specialization and ecological specialization are types of specialization"*.

Competing theoretical perspectives point to workforce specialisation as a phenomenon which encourages individuality (Durkheim's 1964 evolutionary theory of professions) or, within the Marxist tradition one which dis-empowers workers (especially professionals who have enjoyed relative autonomy) through the process of proletarianisation (Oppenheimer 1973, McKinlay and Stoeckle 1988).

Within contemporary economics, the economist Simon Domberger (1998, p78) considers that specialisation at the organisational level is seen to *"fragment monolithic corporations and public sector behemoths into smaller, more focussed constituent parts"*. Domberger (1998) discusses specialisation in the public and private sector, within the context of operational boundary changes and outsourcing (purchasing goods or services from specialised suppliers). These facets have resonance with current patterns in healthcare – both in terms of boundary re-design and the purchase of services – for example purchasing the services of a diabetes specialist podiatrist. Domberger argues that this form of purchasing is mutually

[1] British texts usually refer to specialisation; however the alternative spelling specialization is also used. The author has used the British spelling within her writing, but where quotes are made the original spelling has been retained.

beneficial for the organisation and the specialist providing the service. The former is allowed to narrow the range of its internal production activities while the latter gains a new client, increases their share of the market and thus extends the degree of specialisation on the supply side of the market. Economy of scale results from the reduced cost of investment in training for a comparatively small number of specialists as opposed to the relatively high costs involved in training many people – while for healthcare practitioners for whom continual professional development is a requirement, there will be on-going training costs – the specialist does not have to invest in complete new training for each new customer.

Related to the notion of the specialist, are "expert" and "consultant". Definitions of "experts" and "consultants" have been proposed (Evers and Menkhoff 2002), which highlight the centrality of knowledge and the "knowledge economy"

> *"An expert has obtained knowledge. He is a professional knowledge broker, a middleman between knowledge producers and knowledge users."*
>
> *"A consultant is an expert, who acquires packages and sells specific and confidential knowledge for a fee with the expectation that his knowledge is applied and his advice is acted upon."*

Specialisation is by nature divisive (Domberger 1998, Freidson 1988), erecting barriers between those who have gained the required complex technical skills and specialist knowledge and those who have not. Within professional groups such as lawyers and doctors it is considered to confer monopolistic advantages to those groups (Domberger 1998, Freidson 1988).

1.2 Specialisation in the Context of Healthcare

Within healthcare, Nancarrow and Borthwick (2005) highlight that the concept of specialisation remains both poorly defined and under-debated in the literature; also making a distinction between specialisation – which occurs within a profession, and substitution – which occurs across disciplinary boundaries. The lack of a clear definition of specialisation is also noted by Grilli et al (1999), while Leicht and Fennell (2001) point to the paucity of research which asks professionals from different backgrounds, working in different organisational contexts, what they view as the nature of their professional role or how they view their professional roles.

Within the context of healthcare (using the example of neurosurgeons), Murphy (1990, p73) describes:

> *"…the specialisation of professionals in deepening niches of abstract utilitarian knowledge."*

He contrasts this with the specialisation of the proletariat in different segments of routine unskilled labour; the former to a very large extent retaining control over their work, while the latter become de-skilled and dis-empowered. Proletarianisation of the healthcare workforce is also rejected by Freidson (1988) and Elston (1991) who point to extensive criticisms of a thesis of proletarianisation as applied to healthcare professions and specifically medicine, concluding that theories of diminishing medical power are not satisfactorily developed or amenable to rigorous testing (see also section 1.8 medical dominance).

In healthcare settings Strauss et al (1963, p151) argue that:

> "*…the division of labour is a complex concept, and at hospitals must be seen in relation to the professionalized milieu".*

Further, Freidson (1988, xii) speaks of the:

> "*…system-supported differentiation within professions*"

and of how the credential system works to establish positions for ordinary practising professionals and other strata within the same profession. Bennett and Grant (2004) point to specialised knowledge as the product of long, intensive academic preparation. They consider this to be the hallmark of a profession, signalling the maturity of physiotherapy and confirming its status as a profession as opposed to an industry (Bennett and Grant 2004).

Kanton et al (2001) developed a model of "stepped care" (table 1.) in which the function of the "specialist" is clearly defined:

> *"Specialists provide consultation services to primary care physicians in managing more-complex cases, supervision of nurse or case managers, "collaborative care" or co-management for patients in the primary care clinic not responding to initial primary care-based treatment and on-going specialty care for the most severe or complicated cases"* (Kanton et al 2001).

Table 1. Kanton et al (2001) Stepped care model.

Step care levels	Type of problem	Healthcare practitioner roles
Level 1	Preventative services and diagnosis of subclinical disorders.	Primary care physician provides screening, diagnosis, preventative services and patient education and monitors outcomes.
Level 2	A newly diagnosed disorder or relapse or exacerbation of chronic disorder	Primary care physician provides diagnosis and prescription of medication and recommends lifestyle changes. Allied professional helps with increasing frequency of contact, monitoring symptoms and side effects, support for self-management activities (i.e. exercise, diet change, checking blood glucose) and referral back to primary care doctor for adverse outcomes. Specialist supervises caseload of allied health professional.
Level 3	Patients with adverse outcomes in level 2 care	Specialist consults with patient and primary care physician and recommends changes in medication and/or lifestyle alterations; specialists may provide several visits, preferably within primary care.
Level 4	Patients with adverse outcomes in level 3 care	Specialist takes over care for patients with adverse outcomes despite level 3 care or those with higher initial level of complexity.

Summarised from: Kanton, W., von Korff, M., Lin, E. and Simon, G. (2001) Rethinking practitioner roles in chronic illness: the specialist, primary care physician, and the practice nurse. *Gen Hosp Psychiatry*, 23:138-44.

While the Kanton et al model applies the term specialist to doctors, Gask (2005) highlights that for some conditions it could also mean a non-medical specialist.

1.3 Related Case: Medical Specialisation

Specialisation of medical function has existed since primitive times (Rosen 1944). Weisz (2003) documented the emergence of medical specialisation in the nineteenth century London. In concordance with Rosen (1944), Weisz (2003) argues that the desire to expand medical knowledge through research and the increased bureaucratic efficiency associated with classifying patients into groups, were important drivers for medical specialisation. Brain (1953) also linked the evolution of medicine to a process of differentiation intimately related to increasing knowledge and Cohen (1960) considered that advancing knowledge led inevitably to specialisation in all fields. While Brain (1953), Cohen (1960) and Godber (1978, 1961) considered that specialisation was an inevitable and necessary condition of progress in medicine, Weisz (2003) and Rosen 1944) both consider such overdetermination (apparent inevitability) of medical specialisation to be an incomplete explanation - though they

maintain that a transformation of intellectual perspective involving the production and dissemination of knowledge was the starting point for the specialisation process. Rosen (1944, p6) describes medical specialisation as:

> "*…a process of differentiation within a definite realm of social activity with a distinctive inner order of its own"*

The Foucauldian analysis of the birth of medicine highlights the social, historical and economic conditions required for the construction of an "independent field" (Fournier 2000). Foucault (2003) emphasised the advent of scientific medicine, which based upon anatomy and pathology allowed the development of localised pathology (conceptualisation of diseases relating to specific organs, tissues and body sites). Rosen (1944) considers that this concept of localised pathology permitted the cultivation of foci of specific interest. Further, Armstrong (1997, p173) points to the

> "*…struggle to combat disease that elicits an organised response, that in its turn coalesces into a formal discipline*"

and Strong (1984) highlights the links between "*scientific medicine*" and the division of medical and scientific labour, leading to the new *"research-based approach*" to medicine.

Stevens (1966) points to the forces which supported and maintained generalist approaches to medicine which prevailed during the nineteenth century, highlighting the advent of the specialist hospital movement in England and Wales as the way in which centres of specialist teaching and research were established despite the hostility of the older generation of physicians. Weisz (1997) in focussing on the history of ways in which medical specialisation has been represented and classified documents that medical specialists practised in small numbers during the first half of the nineteenth century; it was only from 1865 or so that specialisation emerged as a widespread phenomenon and specialists became a recognisable social category. Though separated by approximately one hundred years, there exist certain parallels between the early emergence of medical and podiatric specialisation; initially claims to specialist status lacking educational underpinnings, followed by a pattern of establishing foci of interest, special interest groups, standards of practice – and currently within podiatry attempts to establish accredited educational and career pathways (see section 5). Weisz (2003) notes that during the last three decades of

the century, specialist journals, societies, professorships, and hospital positions all emerged and some medical practitioners began referring to themselves as specialists. The conditions of specialist medical practice remained very fluid for more than half a century; anyone could call himself or herself a specialist of virtually any sort, as is currently the case in podiatric specialisation. During the latter part of the nineteenth century it was argued by some that membership of a specialist society, possession of a specialist post, exclusive practice in a given specialty, or mandatory certification and examinations should be demanded of those claiming medical specialist status (Weisz 2003). However, within medicine, for many decades simply calling oneself a specialist was as valid a criterion as any for determining specialist status. The organisation of medical societies developed in the last twenty five years of the nineteenth century was a key step in the consolidation of medical specialisation forming the basis for the specialist sections of the then new Royal Society of Medicine (Stevens 1966). At this time medical directories constituted a potential and particularly visible location for making claims to specialism. However the emerging specialties experienced difficulties in terms of inclusion of their specialist claims and credentials in medical directories, which Weisz (1997) considers:

> *"…undoubtedly reflected real professional opposition to the formal recognition of specialization. British directories found themselves confronted by the hostility of the British Medical Association to any overt recognition of specialization that would permit patients to bypass GPs and the referral system".*

Such tensions between General Practitioners (GPs) and the hospital based physicians and surgeons, focussed around competition for patients, led to the initially informal system where GPs could refer patients to specialised colleagues for a second opinion, while still maintaining a continuing relationship with the patient (Stevens 1966).

During the interwar years while some medical practitioners accumulated a variety of hospital posts, suggesting that specialist appointments had not yet become the preserve of committed specialists, other individuals developed a consistent profile of diplomas, posts, and society memberships that signify a career-long specialism (Weisz 1997). This would seem to corroborate the view that medical specialisation was rather weakly developed in Britain until after World War II (Weisz 1997). Indeed Godber (1978) and Stevens (1966) point to the effects of the Second World

War in promoting the development of pathology and radiology, and the impact of the Armed Forces in helping the emergence of specialised practice in neurosurgery, thoracic and plastic surgery. The phenomenon of generalist practitioners undertaking part time specialist roles was also to be found in medicine between the wars. Weisz (1997) notes that GPs were permitted to claim specialist status as anaesthetists, surmising that the hospitals had not yet established consultant posts in the field, thus leaving anaesthetics open to GPs. In 1935 a diploma in anaesthetics was developed for GPs, prior to this anaesthetics had been considered to be of low-status (Stevens 1966). The time between 1950 and 1975 saw a threefold increase in the numbers of formal specialist anaesthetists (Godber 1978), with consultant anaesthetists becoming one of the largest specialist groups in medicine by 1978. Thus, between the period of 1935 and 1978 anaesthetics was transformed from an area considered to be of low-status where generalist, community based practitioners acting as part time specialists were active and accepted, into one of the largest groups of specialist medical consultants. Despite the extraordinary fragmentation of medicine into different specialties, Strong (1984) highlights that the profession has maintained a separate community with a solitary and isolated way of life which normally overrides internal divisions of labour.

The report of the working group on specialist medical training, chaired by the then Chief Medical Officer Kenneth Calman, was published in Spring 1993 (HMSO 1993). The review stemmed from the European Commissions' concerns that the system in the UK for the mutual recognition of specialist medical qualifications among EEC members did not comply with the 1975 directives (Meadows 1996). The government accepted the recommendations in full; the report brought major changes to medical specialist's training which were phased in from December 1995 (Calman 1995):

- A reduction in the time doctors spent in specialist training from an average of twelve years to an average minimum of seven years (Meadows 1996).
- Training became more structured, managed, supervised and assessed (Meadows 1996), with formalised curricula stipulating the required competencies and experience trainees were expected to acquire and the

duration, entry and assessment requirements of specialist training (Calman 1995).

- The former apprenticeship style training which incorporated three training grades was replaced in April 1996 by two training grades for the period of specialist training (Calman 1995):
    1. Senior House Officer, for a period of general professional and basic specialist training.
    2. A second training grade of Specialist Registrar, encompassing the former Registrar and Senior Registrar grades, providing higher specialist training.

- The National Training Number (NTR) was introduced for all Specialist Registrars, as a means of managing their progress and as their "passport to training" (Calman 1995).
- The Certificate of Completion of Specialist Training (CCST) was introduced, which allowed the doctor's name to be included in the new specialist register, maintained and published from 1996 by the General Medical Council (GMC) (Calman 1995). The CCST clearly marked the defined end point of specialist training, indicating that a doctor has completed training to a standard compatible with independent practice and is therefore eligible for consideration for a consultant appointment (Meadows 1996). Though Calman (1995) stresses that it is inclusion on the specialist register (rather than the award of a CCST) which makes the doctor eligible for appointment at consultant level and indeed that from 1997 inclusion in the specialist register was to become a legal requirement for NHS consultants. The impact of this was to allow doctors who, under the former system, would remain in senior registrar posts for several years, to apply for consultant posts (Meadows 1996).
- The ratio of consultants to doctors in training was changed. Consultants' commitment to training, supervising and assessing trainees was increased.

1.3.1 Diabetology (medical specialisation in diabetes)

Within the field of diabetes care the route to medical specialisation is clearly defined with a formal pathway for career progression to consultant level.

Table 2. Pathway from initial qualification to consultant diabetologist

1. Initial graduation and registration with the GMC.
2. Two years of general professional training in an approved Senior House Officer post.
3. Membership of the Royal College of Physicians.
4. Obtain a post with a national training number as a specialist registrar in diabetology and endocrinology (four years further training). Some doctors achieve an MSc during this phase.
5. Certificate of completion of specialist training in diabetology and endocrinology awarded for successful completion of a recognised specialist registrar training scheme, run by the Specialist Training Agency.
6. Entry to the GMC specialist register and eligibility for consultant diabetologist post.

Summarised from Health Career Net
http://www.healthcareernet.co.uk/Physician/CareerProfiles/PID00179.aspx (accessed 13.11.06)

In considering the impact of the Government led transfer of chronic disease management from secondary to primary care, Greenwood (2005) points out the "downsizing" of some specialist units by local primary care trusts, increasing frustration and discontent among diabetologists, declining recruitment into the specialty and unfilled consultant posts. Further Greenwood (2005) raises concerns about the viability of integrated care, concluding that without diabetologists and their multidisciplinary teams, general practitioners will be left unsupported and access to specialists for patients with complicated, diabetes related problems will be reduced.

1.3.2 General practitioners with special Interest in Diabetes (GPwSID)

In 2000 the NHS Plan described a new role for general practitioners with a special interest (Department of Health 2000). Against a background of the growing burden of diabetes care in Britain, health policy has driven the increasing the role of general practitioners with special interest in diabetes (GPwSID). Practice Based Commissioning, the National Service Framework for Diabetes and Payment by Results have all played a role in developing and extending "shared care" or "stepped care" models of service provision in diabetes.

Education for GPwSIDs is less formalised than that of diabetologists. Competence is considered to be achievable by following the steps outlined in (table3.):

Table 3. Competence for GPwSIDs

- Gaining experience of working under direct supervision of a consultant physician with special interest in diabetes in a hospital or community setting.
- The preparation of a personal development portfolio showing evidence of advanced clinical skills and knowledge including input/education from professionals from other disciplines, e.g. podiatrists, dieticians, psychologists etc.
- Evidence of attendance at relevant courses, self-directed learning or other means to meet learning gaps identified through the Professional Development Plan and annual appraisal.

Summarised from "Guidelines for the appointment of general practitioners with special interests in the delivery of clinical services: diabetes" http://www.natpact.nhs.uk/uploads/PDF%20Diabetes.pdf (accessed 03.10.08).

In outlining the service provided by Practitioners with Special Interest (PwSI) which includes GPs, Dentists, Optometrists and Pharmacists, a suite of documents published by the Department of Health in 2007 (Department of Health 2007a, b and c) places a duty on the commissioners of care to:

> *"…ensure that the same quality and service standards apply to all NHS specialist care delivered in community settings, whether that care is provided by accredited PwSIs or by NHS specialist staff."* (Department of Health 2007a, p5).

A broad role-definition for PwSI was offered in document two:

> *"The role of the PwSI is not a generic one in the way that the role of a primary care GP, community pharmacist, nurse or a hospital consultant is. PwSIs are appointed to deliver a particular clinical service within a defined patient pathway…"* (Department of Health 2007b, p6).

Document 3 offered a formal definition of the role of GPwSI and Pharmacist with Special Interest (PwSI):

> *"A GP or a Pharmacist with a Special Interest supplement their core generalist role by delivering an additional high quality service to meet the needs of patients. Working principally in the community, they deliver a clinical service beyond the scope of their core professional role or may undertake advanced interventions not normally undertaken by their peers. They will have demonstrated appropriate skills and competencies to deliver those services without direct supervision."* (Department of Health 2007c, p4).

Evidence required for accreditation as a GPwSI (which may be presented in portfolio format) includes:

- *Evidence of current registration*

- *A portfolio of evidence to demonstrate appropriate education, motivation, training and development*
- *All relevant certificates to be submitted with the application*
- *How appraisal and personal development planning will be realigned to take account of their new role*
- *How core role will be protected as they take on the new role*
- *Audits of core role and outcomes for practice development*
- *Summary of the supervised clinical work that they have completed, and participation in appropriate local clinical networks, where this exists*
- *For GPwSIs inclusion on the generalist register of the GMC and on a PCT performers list*
- *Evidence that the applicant meets the requirements of any specialty specific guidance, where they exist*
- *A detailed reference from an appropriate specialist that confirms that the applicant is competent to take on the new role*

(Department of Health 2007c, p11).

At the heart of the accreditation process is the notion of competence, GPwSIs must:

> *"Demonstrate appropriate levels of skill and competence to fulfil the role described"* (Department of Health 2007c, p7).

There are concerns about the move from secondary to primary care including: the motives for such a move which some consider to be more about containing costs than attempting to improve global patient care (Kenny 2005), the adequacy of training for GPwSID, the provision of diabetes care by practice nurses rather than the GPwSID and the lack of medical input into nurse consultant's contracts of employment (Wroe 2002).

1.4. Related Case: Nurse Specialisation

> *"[Nurse] specialists are experts in a particular area or about the needs of a specific client group, with advanced education and a research base firmly rooted in nursing"* (Humphris 1994).

Nursing posts involving higher levels of practice arose from three types of initiative (Walters 2000): nurse specialist developments, nurse practitioner developments and role expansion in response to the Scope of Professional Practice published by the United Kingdom Central Council for Nursing, Midwifery and Health Visiting (UKCC) in 1992 and the New Deal for Junior Doctors, published in the same year (NHS Management Executive 1992).

The **clinical nurse specialist** role in areas such as infection control and tissue viability has existed informally since the 1970s (Humphris et al 1999, Nursing and Midwifery Council [NMC] 2005). The title was not regulated and post holders usually achieved such jobs through extensive experience and appropriate post-registration courses. Clinical nurse specialists were usually managed within the nursing service (NMC 2005).

Nurse practitioners developed first in primary care in the late 1980s (NMC 2005) offering an alternative service to that provided by general practitioners and filling gaps in service provision. Nurse practitioners diagnose, refer, prescribe and provide complete episodes of care for clients with undifferentiated health problems. The NMC (2005) describe how in the 1990s, posts emerged in secondary care with the titles of nurse practitioner, advanced practitioner and advanced nurse practitioner. Such posts frequently involved nurses giving care or performing tasks previously undertaken by medical doctors (NMC 2005), practitioner posts being more closely linked to medical practice and the adoption of medical tasks as opposed to higher levels of "nursing" (Walters 2000).

The beginning of a formalisation process for titles and career progression can be traced to the 1994 report of the Post-Registration Education and Practice (PREP) project and the UKCC's 1998 proposals for the regulation of a higher level of practice (NMC 2005). The PREP project identified two levels of practice beyond the point of registration; "advanced" and "specialist". Explicit standards, in the form of learning outcomes, were set for specialist practice and a conceptual descriptor of advanced practice was offered. The NMC (2001) drew a clear distinction between practising within a speciality and holding the recordable qualification of specialist practitioner. In order to become a specialist practitioner the nurse must have completed a programme of preparation that is: at least first degree level, no less than an academic year in length and made up of 50% theory and 50% practice. Latterly, consultant nurse, midwife and health visitor posts have been introduced in the NHS (NMC 2005): consultant nurses, midwives and health visitors are expected to be competent to initiate and lead significant practice, education and service development. Consultant nurses, midwives and health visitors are to have been

educated to masters or doctoral level, be registered as a nurse, midwife or health visitor, and hold additional professional qualifications (NMC 2005).

Whether the specialist nurse is more advanced than the generalist nurse remains unclear. Pearson and Peels (2002) consider that there is broad agreement that the advanced practitioner possesses expertise and competence at a level higher than the professional nurse or the nurse specialist and that this is acquired through extensive experience and advanced education. Confusion is compounded by the array of titles currently in use. These include (Longley et al 2004): nurse practitioner, nurse clinician, specialist nurse, highly specialist nurse, diabetes specialist nurse, stroke nurse, tissue viability nurse, clinical nurse specialist (infection control), consultant nurse, specialist nurse practitioner, advanced nurse practitioner, enhanced nurse practitioner, senior clinical nurse, behavioural psychotherapy nurse, clinical nurse facilitator and nurse co-ordinator. Differences in title have been attributed to preference (Walters 2000), rather than any attempt to describe the post based on role content. Wilensky (1964) noted that changing professional titles, discarding those associated with low status and replacing them with alternatives could be seen as a strategy to link new titles with higher status.

1.4.1 Diabetes Specialist Nurses

MacKinnon (2002) highlights the employment of nurses in diabetes care in the home setting before the discovery of insulin in 1921. The first diabetes specialist health visitor was appointed in 1950 (MacKinnon 2002, Baksi 1995) by Dr Joan Walker in Leicester, laying the foundations for subsequent diabetes nurse specialist posts (Baksi 1995). Specialist nurse posts in diabetes arose out of an appreciation that some patients had specific needs that were not being met by existing medical and nursing staff (Walters 2000), spurred on by the advent of new more dilute forms of insulin suitable for patient self-administration (MacKinnon 2002). Clinical nurse specialists in diabetes have come to be known as “diabetes nurse specialists” (Humphris et al 1999); the advent of U100 insulin during the 1980s seeing a significant expansion in diabetes nurse specialist numbers, linked to the need for patient education in order to safely self-manage the new insulin regimes (Lucas and Walker 2004, Da Costa 2000). This expansion was generally locally driven and

piecemeal in nature (Wroe 2002) and subsequently diabetes nurse specialist roles developed with little guidance and support (Da Costa 2000).

The most recent data located concerning educational preparation of existing diabetes specialist nurses, is the 2003 national survey of 653 diabetes specialist nurses (Liahana et al 2003). Of the 334 respondents, the majority (69%) had undertaken the (no longer extant) English National Board 928 Course in Diabetes Nursing Care (ENB 928), with 14% holding a BA or BSc (Hons) in specialist practice. Only 290 respondents answered the question "what is your highest qualification in nursing"; of these 24% held a diploma, 39% a bachelor's degree, 6% a postgraduate diploma, 22% a master's degree and 1% a doctorate. These qualifications were not necessarily within the specialty of diabetes nursing. The first formal English course in diabetes nursing was established at Birmingham General Hospital in 1978 (MacKinnon 2002), this later became the ENB 928. Liahana et al (2003) consider the ENB 928 (or a similar course) to be essential for newly appointed diabetes nurse specialists. However Crowley (2000) highlights the variable curricula and duration of the now no longer extant ENB 928 (which should have taken 20 days and included clinical visits), and the current inadequacy of educational programmes in preparing diabetes nurse specialists appropriately for the requirements of their multifaceted role.

The British Diabetic Association (BDA, later to become Diabetes UK) Directory of UK Specialist Nurses in Diabetes was originally devised in 1986 through a joint Royal College of Nursing/BDA initiative. Registration is voluntary and is updated annually, appearance on the register is perceived by most diabetes nurse specialists to be of value (Humphris et al 1999). In 2000 there were 1044 diabetes specialist nurses listed in the Diabetes UK Diabetes Specialist Nurse Directory, with some 126 different titles assigned to them (MacKinnon 2002). The only official document guiding the role of these nurses has been the 1991 Royal College of Nursing guidance document, before and since that time the nurses have defined their own roles (MacKinnon 2002). The lack of a nationally recognised infrastructure to support the development of specialist practice raises concerns over roles, responsibilities, accountability and liability (Walters 2000) which despite repeated

attempts aimed at providing a career and competency framework (Hicks 1999a, Tipson and Turner 2002) persists today.

1.5 Podiatric Specialisation

Historically podiatry has held (Lorimer 1995) and been successful in defending (Page and Dagnall 1992) the right to diagnose and treat pathological conditions relating to the foot without medical referral. Contrastingly, Hugman (1991) highlights that the right to practise independently, to diagnose and prescribe treatment is a comparatively new issue in nursing, as medicine has long been successful in keeping these issues off the public agenda. Degree courses for podiatry were established in the early 1990s, (Lorimer 1995), and unlike nursing, the current minimum entry level qualification for podiatry is at graduate level. Despite these factors and its long history (Page and Dagnall 1992), since the beginning of the twentieth century, podiatry has struggled to win a valued place in the provision of modern health care (Larkin 1983). The perception amongst podiatrists can be that other professions consider podiatrists to have low status (Vernon et al 2005). Medical and nursing professions were considered not only to hold this view, but also to communicate it to the general public (Vernon et al 2005) and within the UK Young (2003b) considers that podiatry has not been afforded the status it deserves. Vernon and Borthwick (2006) point to the drive for specialisation and the "virtuoso role" coupled with attempts to shed less glamorous work. Indeed podiatric specialisation in a specific area such as diabetes (Vernon et al 2005), or podiatric surgery (Mandy 2008) as opposed to practice in routine work has been linked to increased status, however echoing Weber (2005), Mandy (2008) points out that increased status is not necessarily related to increased remuneration.

Early references to specialised practice in chiropody[2] are sparse. However before the inception of the NHS Lorimer (1995) highlights the value of chiropodists in orthopaedics and diabetes, while Dagnall (1962) points to child health and orthopaedics as specialist fields. More recently Borthwick (1999, 2000) has detailed

[2] Podiatry is now common nomenclature for what was previously known as chiropody. Practitioners in the United States officially adopted podiatry as the name of their profession in 1958 - considering that it described the study and treatment of the foot and avoided confusion with chiropractic. In the UK, the Society of Chiropodists added the term 'Podiatrist' to their name in 1993, to become the Society of Chiropodists and Podiatrists.

the evolution of podiatric surgery. The comprehensive review of the podiatry workforce in Northern Ireland (Project Group 2002) highlighted a need for the creation of clinical specialist posts, providing the opportunity for career progression along a clinical route; one focus group respondent observing that *"You're clinically dead after Senior I."* The review identified potential clinical specialist roles in wound care, biomechanics, podopaediatrics, falls prevention, rapid response, rheumatology, vascular, A&E and nail surgery (Project Group 2002).

1.5.1 Prescribing

While for appropriately qualified pharmacists and nurses independent prescribing has been established (Department of Health 2006), only limited forms of prescribing or access to prescription only medicines are currently available to podiatrists. Supplementary prescribing which was extended to podiatrists in 2005 (Stuart et al 2010), allows practitioners to prescribe medicines within their scope of practice to identified patients (Department of Health 2005b). It is however a constrained and inflexible form of prescribing; for each individual patient a Clinical Management Plan (CMP) must be signed by an independent prescriber (Department of Health 2005b), who is usually a physician (Stuart et al 2010). In August 2010, 114 Society of Chiropodists and Podiatrists members were supplementary prescribers (Society of Chiropodists and Podiatrists 2010). An alternative form of access to prescription only medicines utilised by podiatrists is that governed by patient group directives (PGDs). This allows named practitioners to access (supply or administer, not prescribe) medicines for any patient within a defined group (Department of Health 2005b). Such supply and or administration of medicines is also constrained, being protocol led with restrictions imposed by both local pharmacy and medical protocols (Society of Chiropodists and Podiatrists 2010).

1.5.2 Special Interest Groups

The Society of Chiropodists and Podiatrists web site contains sections for special interest groups, including: The Podiatric Biomechanics Group, Podiatry Rheumatic Care Association, Lower Limb in Dermatology, Foot in Diabetes, Hospital Podiatrist's Panel, PodoPaediatrics, the Foot Health Trade Association, the Committee for Private Practice, Therapeutic Footwear, Skills for Health, Forensic Podiatry and Homeopathic Specialists' Group, the Faculty of Surgery and the

Faculty of Management. Thus of the clinical (as opposed to managerial) specialist areas, podiatric surgery alone enjoys faculty status, though a Faculty of Podiatric Medicine is also extant. Uniquely amongst podiatrists, podiatric surgeons could be employed by trusts under lucrative MC21 (medical consultant grade) contracts, though the Agenda for Change banding structure has now superseded this.

1.5.3 The Establishment of Podiatric Surgery

The origins of podiatric surgery were characterised by the activities of a small group of podiatrists challenging the jurisdiction of medically qualified surgeons - and the ensuing boundary disputes and inter-professional conflict (Borthwick 1999, 2000). During the 1970s, faced with increasing numbers of members taking unapproved courses in local anaesthesia, the then Society of Chiropodists campaigned for and secured state approval in local anaesthesia techniques (Lorimer 1995, Borthwick 2000). Legitimate and accepted access to local anaesthesia in 1972 allowed podiatrists to encroach upon the boundaries of the medical profession and using phenolisation techniques imported from America, to establish and practice nail surgery (Lorimer 1995), which had hitherto been the domain of orthopaedic surgeons. The medical profession retained the right to oversee training in local anaesthesia with guarantees intended to prevent use of local anaesthesia for surgical practice a condition of state approval (Borthwick 1999). However these guarantees were ambiguously worded and combined with the open nature of the scope of practice set out by the Chiropodists Board, provided an opportunity for a small group of podiatrists working in the private sector to extend their scope of practice and in effect begin to compete with orthopaedic surgeons for the provision of invasive foot surgery (Borthwick 2000). The medical establishment opposed surgical procedures being undertaken by any non-medically trained practitioners and in 1980 The Royal College of Surgeons (RCS) of England sought to limit the "*intrusion of podiatrists into areas of surgery*", citing that for reasons of "patient safety" chiropodists should be limited to operating on "*the skin of the foot and those structures (such as callosities and toe nails) which derive from it*" (Lorimer 1995). The actions of the podiatric surgeons, represented by the Podiatry Association pursuing a policy of non-negotiation with the medical hierarchy (Larkin 1983), independently established legal rights to practise podiatric surgery within the private

sector and their subsequent campaign for inclusion of podiatric surgery within the NHS "guaranteed medical hostility" (Borthwick 1999). The response of the Podiatry Association to the hostile environment in which they worked had been to develop a policy of rigorous audit practices for surgical fellows, closely monitoring procedures and outcomes in order to develop an evidence base (Borthwick 1999). In this way a policy of strict clinical governance allowed the Podiatry Association to justify practices and present podiatric surgery as a safe and effective competitor to orthopaedic surgery, to a Conservative government, fundamentally opposed to monopolies and seeking a solution to long waiting lists. The Griffiths report (House of Commons Social Services Committee 1983) brought about enormous change in health service management, ending consensus management and establishing new general managers, empowered to act across disciplines, at all levels (Webster 2002). The case for podiatric surgery, based on accessibility, effectiveness and cost effectiveness met all the criteria set out in the Griffiths report, offering the same costs and effectiveness as orthopaedic surgery, but much greater accessibility. The argument that podiatric surgeons were more practised (and therefore more proficient) in foot procedures than orthopaedic surgeons, served to reinforce support from general managers (Borthwick 2000). Thus podiatric surgery became established in the NHS, sanctioned by government and managed by general managers.

1.5.4 Diabetes Specialist Podiatrists

Unlike podiatric surgeons, diabetes specialist podiatrists have not mounted a direct challenge to the authority of medicine; they do not appear to be in competition for medical roles and while medical authority over the profession of podiatry may be decreasing (see 1.8.3 and 1.8.4), in 2003 Young (2003a) expressed the opinion that [medical] consultants were still considered to be the leaders of the diabetes team. Strategies developed by the Association of British Clinical Diabetologists (Winocour 2010) to ensure that medical consultants retain leadership of diabetes teams, such as the King's Fund diabetes leadership course for registrars have been developed (Department of Health 2008).

Podiatrists have a long history of involvement in the management of patients with diabetes. Specifics of the role of chiropodists in preventing:

> *"…those distressing complications of the diabetic, infections and gangrene of the lower extremity…*"

were outlined in 1925 by the American physician Elliott Joslin, including patient education in self-care:

> "…*he* [the chiropodist] *is it who can instruct in cleanliness…"*

and vascular assessment:

> *"…detect early changes in the circulation from his examination of the arteries of the feet…"* (Joslin1925).

Before the inception of the NHS, appointment (usually without remuneration) of chiropodists to the larger, mainly teaching hospitals:

> "…*proved useful in making the value of the chiropodist understood in orthopaedic and diabetic departments*" (Lorimer 1995).

1.5.4.1 Drivers for Specialisation in Diabetes Podiatry

The notion that diabetes represented an immense and growing health problem was first expressed by the Expert Committee on Diabetes convened by the World Health Organisation (WHO) in the late 1970s (Keen 2000). The subsequent 1985 WHO Study Group Report linked improved quality of care to specialised diabetes provision, recommending that:

> "*Community-based primary health care schemes should be linked to specialized levels to optimise the quality of care, depending on the requirements of the patient and the availability of resources…"* (WHO 1985, cited in Keen 2000).

In 1989, with the objective of formulating a European diabetes strategy the WHO convened a meeting in St Vincent, Italy. Targets for reducing the major complications of diabetes were produced, including reducing limb amputation by one half. Calls for the employment of more senior-level podiatrists and diabetes specialist nurses ensued (Connor 1997). At the national level the St Vincent declaration 5 year target on amputation was not achieved in Britain (Connor 1997),

Denmark (Ebskof and Ebskof 1996) or Germany (Trautner et al 2001) and the declaration has been criticised for setting such ambitious and quantitative targets (Keen 2000, Trautner et al 2001). However, substantial reductions in the incidence of amputations have been reported in localities as a consequence of hospital based diabetic foot clinics, featuring multi-disciplinary teams (which include podiatrists) working collaboratively to prevent diabetic foot disease (Larsson et al 2008, Ronan et al 2008, Krishnan et al 2008, Trautner et al 2007, Anichini et al 2007, Lavery et al 2006, Driver et al 2005, Wraight et al 2005, Van Hotum et al 2004, Holstein et al 2000, Dargis et al 1999, Van Gils et al 1999, Crane and Werber 1999, Thomson et al 1991, Edmonds et al 1986) most recently such teams in Ipswich and the Imperial College Healthcare NHS Trust have amputation rates amongst the lowest in Europe (Society of Chiropodists and Podiatrists 2011). Inadequacies in provision for the diabetic foot have been highlighted (Bending and Foster 2004) and calls for the wider establishment and funding of such teams are made (Rogers et al 2008, Tseng et al 2007, Bending and Foster 2004, Holland et al 2002). Amputation reduction and reduced levels of diabetic foot complications have also been linked to treatment by podiatrists who are considered to employ a unique skill-set (Viehe 2002, Wormwald 1995, Thomson et al 1991).

In Britain, podiatric specialisation in diabetes has become inextricably linked to working within an inter-disciplinary team. Access to specialist, multi-disciplinary care (which includes podiatry), for patients with diabetic foot disease is enshrined in national recommendations and guidelines including:

- The National Institute for Health and Clinical Effectiveness guidelines on Type 2 diabetes: Prevention and management of foot problems (National Institute for Health and Clinical Effectiveness 2004)
- The Scottish Intercollegiate Guidelines Network advice on the management of diabetic foot disease (Scottish Intercollegiate Guidelines Network 2002)
- NHS national support team's Diabetic Foot Guide (NHS Clinical Governance Support Team 2006a)
- Payment by results, diabetes fact sheet (NHS Clinical Governance Support Team 2006b)

1.5.5 Foot in Diabetes UK

Formed via a merger of Scottish Diabetes Specialist Podiatrists and Podiatry Diabetes United Kingdom, Foot in Diabetes UK describe themselves as "*an organisation dedicated to continuous improvement in the care and management of people with diabetic foot problems*". In changing the title both bodies sought to make their existing organisations more interdisciplinary. In 2005 the Foot in Diabetes UK executive committee consisted of 14 podiatrists and 2 medical doctors, while at the time of writing (October 2008) 13 podiatrists, 5 medical doctors, 2 nurses and 1 orthotist comprise the executive committee, evidencing some achievement of this goal. The stated aims of the Foot in Diabetes UK Committee are to:

> "*…support healthcare professionals to deliver high quality clinically effective care in order to improve the lives of people living with diabetic foot problems*" and to "*become the voice of foot care in diabetes, to influence the future direction of healthcare policy in this field*". Foot in Diabetes UK (2006)

The group offers free membership and has made a statement of its constitution and aims (table 4.).

Table 4. Foot in Diabetes UK Constitution and aims

- To create a register of interested members.
- To develop a network of individuals who have an interest in working with people with diabetes.
- To develop recognised and nationally accredited post-graduate qualifications in the management of the diabetic foot.
- To promote this aspect of podiatry as a speciality in its own right.
- To generate an increased awareness of the role of the podiatrist and other members of the healthcare team within diabetology.
- To promote, encourage and support research on the diabetic foot.
- To establish links with other appropriate professional organisations and to liaise with relevant professionals.
- To develop an internet-based diabetic foot information resource.

Summarised from: Foot in Diabetes UK (2006) *Foot in Diabetes UK (FDUK): Become a member*.

Young (2003a) considers that membership of Foot in Diabetes UK will give diabetic foot practitioners a voice in the process of developing a specialist career structure. Indeed have been active in developing national policy; in 2006 in conjunction with Diabetes UK, The Association of British Clinical Diabetologists, The Primary Care Diabetes Society and The Society of Chiropodists and Podiatrists, Foot in Diabetes

UK developed and published the *"National Minimum Skills Framework for the Commissioning of Foot Care Services for People with Diabetes"* (Foot in Diabetes UK et al 2006). The minimum skills framework addresses the skills needed for the management of the diabetic foot and concentrates on the following issues: routine basic assessment and care of the foot without any ulcer or lesion; expert assessment and care of the foot at increased risk, but without an ulcer or lesion; expert assessment and management of foot ulceration; management of the person whose foot ulcer or lesion has resolved. A subsequent document, the "*Putting Feet First*" report (Foot in Diabetes UK et al 2009) presented a specification and integrated care pathway for the management of active diabetic foot disease in secondary care, incorporating preventative measures to reduce the onset of new foot disease whilst in hospital. The report stressed the need for specialist management of diabetic foot disease and made the case for the presence of specialised services:

> "*The specification of specialist services for the management and prevention of diabetic foot disease is one that should be adopted by all hospitals providing emergency medical care"* (Foot in Diabetes UK et al 2009, p5)

Accountability for ensuring adequate service is detailed, responsibility remaining:

> *"…with the admitting team until care is transferred to a team with specialist interest in the management of disease of the foot."* (Foot in Diabetes UK et al 2009, p7)

This second piece of national policy was underpinned by support from a still wider group of organisations, being formulated in conjunction with:

- Association of British Clinical Diabetologists
- Joint British Diabetes Societies Inpatient Working Group
- National Diabetes Inpatient Specialist Nurse Group
- Primary Care Diabetes Society
- Scottish Diabetes Foot Action Group
- Society of Chiropodists and Podiatrists
- The Vascular Society of Great Britain and Ireland
- Welsh Endocrine and Diabetes Society

An explicit link between the specifications of the report and delivery of the aspirations within the Department of Health (2008a) High quality care for all: NHS Next Stage Review final report, was made (Foot in Diabetes UK et al 2009), lending further weight to the document.

1.5.6 Education and Career Pathways in Diabetes Podiatry

Young (2003a) highlights the medical career model, consisting of undergraduate training, followed by basic training and then higher specialist training, making the point that diabetologists are unlikely to study cardiology or surgery. He contrasts this sharply with the situation in podiatry which he considers, favours generalism over specialty (though interestingly the established and successful specialty of podiatric surgery has emulated this medical career model). Further Young (2003a) argues that this situation cannot continue, citing the need for each member of the diabetes foot care team to be a specialist in their own right, and calling for a career structure for podiatrists and nurses to reflect this. A needs analysis study for continuing professional development (CPD) in podiatry undertaken by Borthwick and Vernon (2002) elicited support for a model of CPD "*that would recognise as 'core' the requirements outlined within the specialty groups*". The authors also discuss the possibility that institutions other than the Society of Chiropodists and Podiatrists may play a role in delivering specialty-driven, individual led CPD, (possibly based upon a specialty-driven CPD framework) and that inter-professional modes of CPD could present broader educational opportunities within specialties. In the area of wound healing diabetes specialist podiatrists, diabetes specialist nurses (DSN) and tissue viability specialist nurses may all have potential involvement. The interest of, and potential specialisation for several professions in this area is reflected in the advent of multi-disciplinary education (Jones et al 2004, Sibbald and Orsted 2004, Baxter 2003, Jones 2001).

Frequently the only opportunities for career advancement in podiatry were through moves into management or teaching (Young 2003b), though the effects of NHS modernisation may alter this. It remains the case however that diabetes podiatry lacks any formalised educational preparation for specialisation or agreed career pathway for progression.

1.5.6.1 Establishment of a Diabetes Specialist Podiatry Assistant Grade

The origins of the foot care assistant (FCA) grade can be traced to 1977, a time of retention and recruitment problems within podiatry, as a bid to supplement the numbers of qualified podiatrists (Webb et al 2004). The advent of assistant grades

was generally opposed by the podiatry profession (Lorimer 1995, Webb et al 2004). Eventual approval was bound to a policy of strict supervision, with a defined structure for FCAs being established during the early 1980s (Lorimer 1995), debates about the role and function of FCAs continue. The diabetes specialist podiatry assistant grade is considered by Holland et al (2002) to have a pivotal role within secondary care, essential to the development of co-ordinated follow-up of those patients already at high risk of re-ulceration and amputation (Holland et al 2002). Though within diabetes specialist podiatry the activities, scope and level of skills attributed to the diabetes specialist podiatry assistant by Holland et al (2002, table 5.) appear to be greater than those with which the Society of Chiropodists and Podiatrists (2006a and 2006b) policy of supervision for assistant grades (appendix 2) can be reconciled.

Table 5. Diabetes specialist podiatry assistant - main team role

1. Maintain and update 'at risk' patient register.
2. Initial assessment self-care/social status – identify barriers to self-care.
3. Patient education about foot care/wear, warning signs and when to seek help.
4. Identification of problems with glycaemic control - refer to DSN as necessary
5. Liaise with ward staff/named team about patients' requirements/management issues and record in patients' medical notes as well as diabetes centre patient notes.
6. Provide education about the diabetic foot on an informal and formal basis with the DSN.
7. Meet with DSN for liaison with patient case studies.
8. Refer to advanced podiatry team for follow-up.
9. Liaise with the multidisciplinary diabetic foot service team as appropriate.

Summarised from: Holland, E., Land, D., McIntosh, S. and Meeking, D. (2002) Development of diabetic foot service since the introduction of a multidisciplinary diabetic foot referral pathway. *Practical Diabetes International,* 19(5):137-138.

The diabetes competence framework was launched by Skills for Health in October 2004. Its focus is the routine management of people with diabetes and its intended use is the development of job descriptions and identification of training needs for healthcare assistants.

1.5.7 The Image of Diabetes Podiatry

At the first Malvern Diabetic Foot Conference in 1986, chiropody was listed by a vascular surgeon as one of the causes of gangrene (Foster 2001), while advanced

diabetes podiatrists working in the community are frequently blamed for causing amputations (Bending and Foster 2004). Thus diabetes podiatry is doubly disadvantaged, there being both issues of low status associated with treating feet (Mandy 2008, Vernon et al 2005) and poor understanding of what diabetes podiatry is.

Awareness of the full role that can be played by the podiatrist is still not widespread and in some quarters podiatrists are still perceived as the 'bunion-scraping pillock' described by the GP in Alan Bennett's film: A Private Function (Foster 2001). Indeed "*having an interest in the diabetic foot is considered by many to be on a par with train-spotting, anorak-wearing and an ability to memorise all the capital cities of the world*" (Kerr and Richardson 2000).

1.6 Specialisation and Specialist, Conclusion and a Proposed Definition

Evaluation of the concept of specialisation elicits areas of consensus about the definition of the concept, and therefore a level of conceptual maturity (Morse et al 1996). Within the context of healthcare professions, the pragmatic utility of "specialisation" and "specialist" (being one who specialises) conveys differentiation, usually accompanied by stratification. Such differentiation can be based on activities, roles and functions, education, credentials, client groups, knowledge and skill levels. Specialists may confine their practice to a specific, identified area or also undertake some allied generalist roles.

Development of specialisation within healthcare professions is a complex, multi-factorial process, often occurring over significant periods of time; involving demand for services, scientific advances, the production of new knowledge, professional agendas and health policy; though not necessarily in equal measures. Recognition of specialisation (both social and legal) is bound to issues of status and image, title, validity and legitimacy, but not necessarily to levels of remuneration.

Before moving on to analyse the maturity of the concept of diabetes specialist podiatry, the author would conclude the evaluation of specialisation and specialist

by suggesting that a definition of specialisation within the context of healthcare which can be summarised thus:

> Differentiation usually accompanied by stratification, based on a variable blend of client groups, activities, roles and functions, education and credentials, knowledge and skill levels.

Tensions and disparities between the scientific meanings and use of "specialist" and "specialisation" and the everyday use and meanings assigned to them (with which the concept analysis opens) are extant. The origins of "specialist" and "specialisation" from the word "special" may still impart emotive and judgmental connotations.

The following section (1.6.1) assesses the comparative maturity of specialised practice within diabetes across three different professions. The literature relating to diabetology (medical specialisation in diabetes), diabetes specialist nursing and diabetes specialist podiatry have been interrogated to elicit the preconditions, characteristics and outcomes associated with specialised practice in diabetes. These findings are presented in comparative conceptual maturity matrices (tables 6. to 14.) and discussed in section 1.6.2.

1.6.1 Comparative Concept Maturity Matrices

Three areas of critical enquiry were used to assess the comparative maturity of specialist practice in diabetes across the professions of podiatry, nursing and medicine:

1. **Preconditions** for specialist practice in diabetes (table 6.)
2. **Characteristics** of specialist practice in diabetes, including:
   Ways of working (table 7.), Services provided (table 8.), Assessment (table 9.), Management, (table 10.), Educational output (table 11.) and Service and policy (table 12.)
3. **Outcomes** and consequences of specialist practice in diabetes, including:
   Professional (table 13.) and clinical outcomes (table 14.)

Table 6. Preconditions for specialist practice in diabetes.

Podiatry	Nursing	Medicine
Graduate status in podiatry. Threshold set via Benchmark Statements published by the Quality Assurance Agency (QAA) for the Department of Health in 2001 defining threshold levels of both academic and clinical achievement (including management of the diabetic foot) for graduate status in podiatry (McInnes 2002). Postgraduate training varies, comprised by a mix of recognised MSc modules, the Hospital Podiatrists Panel Diabetic Foot Module(Robbie 2002, Rayman et al 2000), ENB 928 Diabetes in Practice course, pharmacology (prescribers' course) (Robbie 2002) and short courses and study days including Scotch-casting, wound care and cultural awareness (Robbie 2002) and conference attendance (Rayman et al 2000).	Post-registration training (varying) is undertaken by 80% of nurses to prepare for specialism in diabetes (Liahana 2003). ENB928 is the standard against which education and practice can be evaluated (Young 2002), 88% of employers stipulated ENB928 as a requirement (Winocour et al 2002a); ENB928 was often used as an entry requirement (Da Costa 2002). ENB 928 no longer extant, now diabetes nurses gain access to education "*when and where they can*" (MacKinnon 2002). Entry criteria vary, there is no agreement or consistency nationwide regarding entry level, roles and titles (Da Costa 2002) and no agreed national training programme (Cradock 1999). Of 299 diabetes nurse specialists surveyed: Professional registration only 12% Registration plus ENB928 (short course) 39% Registration plus ENB870 (introduction to research) 2.3%	Defined, route to specialist status: 1. Initial graduation and registration with the General Medical Council. 2. Two years of general professional training in an approved senior house officer post. 3. Membership of the Royal College of Physicians. 4. Obtain a post with a national training number as a specialist registrar in diabetology and endocrinology (four years further training). Some doctors achieve an MSc

No standards against which education or practice can be evaluated. No clinical examinations, no apprenticeship, no career pathway (Young 2002). Specialist titles can be self-appointed or adopted with little merit (particularly in the community) (Rayman et al 2000). There may be qualifying podiatrists who do not have sufficient expertise to provide high quality diabetic foot care (McInnes 2002, Rayman et al 2000). Practitioners for specialist centers can be community podiatrists (Young 2002). Care provided by a 'dedicated' diabetic podiatrist shows wide regional variation, from 55% (Northern and Yorkshire) to 100% (Northern Ireland) (Winocour et al 2002b). Podiatrists are uniquely qualified in basic debridement, vascular, neuropathic, and biomechanical structure and functional assessments, and off-loading strategies (Young 2002). Key skills are debridement of calluses and ulcers and the diagnosis and management of minor foot disorders (Foster 2001).	Registration plus ENBA05 (Diabetes Nurse Specialist course) 2.3% Bachelor's degree 17.7% Master's degree 4% PhD 0.7% (Humphris et al 1999). Of 599 diabetes nurse specialists surveyed: 85.3% had completed accredited courses relevant to their current position, 74.3% the basic diabetes course, ENB 928 (Thompson et al 2002). Nurse consultant in diabetes (7 posts extant in 2002) is allied to clearer entry requirements prospective post holders are expected to have a first degree and master's degree, or commitment to undertaking a master's degree (Da Costa 2002). Attending national and international conferences and workshops (Bale 2002). Continuing professional education and development (Siddens and McAughey 1992). Skills in communication, counseling, motivating and education (Wallymahamed et al 2003) Clinical practice and expertise in diabetes (Da Costa 2000). Expertise in nursing people with diabetes (Watkinson 1998). Clinical, teaching and counselling skills (Hicks 1999a).	during this phase. 5. Certificate of completion of specialist training in diabetology and endocrinology awarded for successful completion of a recognised specialist registrar training scheme, run by the Specialist Training Agency. 6. Entry to the GMC specialist register, eligible for consultant diabetologist post. Summarised from Health Career Net http://www.healthcareernet.co.uk/Physician/CareerProfiles/PID00179.aspx (accessed 13.11.06) Research and audit training an integral part of education (Winocour et al 2002a). Consultant is the member of the team most up to date in the specialty (Gask 2005).

Table 7. Characteristics of specialist practice in diabetes - Ways of working.

Podiatry	Nursing	Medicine
Membership of multi-disciplinary team (Krishnan et al 2008, Ronan et al 2008, Bending and Foster 2004, Parr et al 2002, Robbie 2002, Boulton 1998, Boulton et al 1998, Siddons and McAughey 1992, Thomson et al 1991, Edmonds et al 1986) though in 2000 a coordinated 'team' approach to foot care still took place in less than 50% of secondary care centres (Winocour et al 2002b). Shared management planning (Thomson et al 1991). Shared assessment and management of non-ulcerated painful neuropathy (Murphy et al 2002). Joint diabetologist/podiatrist clinic for painful neuropathy not responding to first-line treatment (Murphy et al 2002). Joint footwear clinic with orthotists (Robbie 2002).	Membership of multi-disciplinary team (Krishnan et al 2008, Ronan et al 2008, Bale 2002, Parr 2002, Hicks 1999a, Boulton 1998, Boulton et al 1998, Lowes 1997, Siddons and McAughey 1992, Thomson et al 1991). Working exclusively in diabetes care (Hicks 1999a, Watkinson 1998). Of 599 diabetes nurse specialists surveyed, 71.0% were employed full-time in their current positions (Thompson et al 2002). Employment almost exclusively within the NHS (Winocour et al 2002a), of 599 diabetes nurse specialists surveyed the majority (69.2%) normally worked between hospital and community settings, 24.7% were hospital-based and 6.1% community-based (Thompson et al 2002). Banding assigned to specialist posts varies widely (Winocour et al 2002a, Da Costa 2000); posts lack uniformity of remuneration (Da Costa 2000, Watkinson 1998), titles, responsibility, career pathway or role definition (Da Costa 2000). Clinically accountable to the consultant diabetologist (Wroe 2002). Shared role in managing late complications of diabetic neuropathy (Boulton et al 1998). Following the patient across organisational boundaries (e.g. hospital to home or school) (Hicks 1999a). Own clinical caseload (Sadler 1990).	Membership of multi-disciplinary team (Krishnan et al 2008, Ronan et al 2008, Parr et al 2002, Boulton 1998, Boulton et al 1998, Siddons and McAughey 1992), leadership of multidisciplinary team implied (Thomson et al 1991, Winocour et al 2002a, 2002b). Shared role in managing late complications of diabetic neuropathy (Boulton et al 1998). Shared management planning (Thomson et al 1991). Joint diabetologist/podiatrist clinic for painful neuropathy not responding to first-line treatment (Murphy et al 2002). Supervise the role of allied health professionals (Kanton et al 2001). Advising diabetes specialist podiatrists and diabetes specialist nurses managing non-ulcerated painful neuropathy, providing prescription only medications for patients as needed (Murphy et al 2002). Work closely with general practitioners and specialist nurses or therapists,

Shared role in managing late complications of diabetic neuropathy (Boulton et al 1998). Working with peer health educators in providing diabetic foot education (Robbie 2002). Referral of patients to vascular consultant or orthotist as required (Robbie 2002). Develop and maintain close links with community podiatrists, acting as a resource and accepting referrals from them (Bending and Foster 2004). Enhanced communication and collaboration (Holland et al 2002). Rolling out screening programmes to primary care (Robbie 2002). Improved links with community nursing teams (Robbie 2002).	Accept referrals from diabetes specialist podiatry assistant (Holland et al 2002). In 60% of trusts out of hours working (Winocour et al 2002a). Evening and weekend working to provide house-calls to children with diabetes (Lowes 1997). Liaising with medical colleagues at any time for prescription of insulin dosage and advice (Lowes 1997). Referral to medical colleagues (Cradock 1999). Enhanced communication and collaboration (Holland et al 2002). Liaison with primary care teams, particularly practice nurses (Wroe 2002, Winocour et al 2002a). Acting as a link between hospital and community care (MacKay 2002). Link person within diabetes team and with primary care (Sadler 1990).	advising on treatment and lifestyle alterations using a "stepped care" approach. Provide the specialist overview – being most up to date in specialty (Gask 2005). For paediatric consultant – manning out of hours telephone helpline (Lowes 1997). Take over care for patients with adverse outcomes despite level 3 care or those with higher initial level of complexity (Kanton et al 2001). Direction of shared and integrated diabetes care services (Wroe 2002). Most consultant diabetologists also provide an endocrine service and make a substantial contribution to acute general medicine (Greenwood 2005).

Table 8. Characteristics of specialist practice in diabetes - Services provided.

Podiatry	Nursing	Medicine
Provide service to meet the needs of medium and high risk patients (Holland et al 2002). Provide a rapid-access service (Bending and Foster 2004, Robbie 2002, Foster 2001). The majority (82%) of trusts provided podiatry services for both 'trouble-shooting' and regular foot checks and advice to patients, although urgent access 'trouble-shooting' alone was offered in 15% of responses (Winocour et al 2002b). Provide pre and post-operative support and counselling for amputees (Bending and Foster 2004). Provision of preventative treatment: Prevention of diabetic neuropathic ulcers by callus removal (Foster 2001, Thomson et al 1991, Edmonds et al 1986). Provision of customised orthoses (Foster 2001, Wormwald 1995), provision of special footwear (Robbie 2002, Boulton et al 1998) or making adaptations to footwear (Foster 2001). Input in this area appears variable, podiatrist fitting and application of foot protective apparatus was only recorded in 61% of diabetologists' responses and was absent in 15% (Winocour et al 2002b).	Nurse-led clinics (Miles 2002) and services (Cradock 1999). Manning telephone helpline (Rayman 2000, Cradock 1999) both in hours (Miles 2002) and out of hours (Winocour et al 2002a, Lowes 1997). Provision of telephone appointments (Miles 2002). Supporting home-care for children newly-diagnosed with diabetes (Lowes 1997). Maintaining a register of patients with diabetes (Mackay 2002).	For paediatric consultant – manning out of hours telephone helpline (Lowes 1997). Advising general practitioners and specialist nurses or therapists on treatment and lifestyle alterations using a "stepped care" approach (Gask 2005). Assume responsibility for care of complex patients and those with adverse outcomes (Kanton et al 2001). Provision of diabetology service, a broader endocrine service and substantial contributions to acute general medicine (Greenwood 2005).

Table 9. Characteristics of specialist practice in diabetes – Assessment.

Podiatry	Nursing	Medicine
Assessment of risk factors for ulceration (Thompson et al 2004) and assessment of high-risk patients (Holland et al 2002). Shared assessment and management of non-ulcerated painful neuropathy, ordering extensive haematology screening to exclude other causes of neuropathic pain, Doppler assessment to exclude pain secondary to compromised circulation and referral for biomechanical assessment to exclude musculo-skeletal pain (Murphy et al 2002). Assessment and classification of ulceration (Mousley 1998). Over 70% of diabetologists sampled indicated that diabetes specialist podiatrists employed in their service used at least one form of equipment to assess peripheral neuropathy (Winocour et al 2002b). Access to isotopic and/or MR foot imaging and peripheral angiography and angioplasty were recorded in 83% of responses (Winocour et al 2002b).	Undertaking individualised assessments (Hicks 1999a). Assessment and classification of ulceration (Bale 2002, Mousley 1998). Detailed record keeping including ulcer charting (Bale 2002). Undertaking patient neuropathy assessments (Bale 2002). ABPI (Bale 2002). Recording physical and biochemical parameters (osmotic symptoms – polydipsia/ polyuria, Body mass index, BP, HbA1c, total cholesterol, HDL cholesterol ratio, smoking habits) (Wallymahamed et al 2003) Screening for diabetic complications (Sadler 1990) and ensuring that screening for diabetic complications is up to date (Mackay 2002). Shared assessment and management of non-ulcerated painful neuropathy, ordering extensive haematology screening to exclude other causes of neuropathic pain (Murphy et al 2002).	Examination and diagnosis of peripheral neuropathy (Thomson et al 1991). Screening for diabetic complications (Sadler 1990).

Table 10. Characteristics of specialist practice in diabetes – Management.

Podiatry	Nursing	Medicine
Diagnosis and management of minor foot disorders (Foster 2001). Treatment of at-risk and high-risk patients (Robbie 2002) Shared management of non-ulcerated painful neuropathy (Murphy et al 2002). Role in management of diabetic ischaemic foot: Meticulous care of nails (Edmonds et al 1986). Ulceration prevention by removal of callus from sites of high pressure and provision of nail care (Thomson et al 1991). Manufacture and application of plaster-casts (Winocour et al 2002b, Foster 2001) indicated by 39% of diabetologists sampled (Winocour et al 2002b). Fitting of orthoses (Foster 2001) indicated by 59% of diabetologists sampled (Winocour et al 2002b). Fitting of 'scotch cast' boots indicated by 49% of diabetologists sampled (Winocour et al 2002b). Fitting of other foot protective apparatus indicated by 61% of diabetologists sampled (Winocour et al 2002b). Availability of 'aircast' boots indicated by 52% of diabetologists sampled (Winocour et al 2002b). Role in management of foot ulceration:	Ulcer treatment including dressing (Rayman 2000, Edmonds et al 1986) and debridement (Bale 2002). Management of glycaemic control (Holland et al 2002, Boulton et al 1998). Advising patients about their diabetes medication (James 2004, Loveman et al 2006). Adjusting dosages of hypoglycaemic agents (in 77% of Trusts) (Winocour et al 2002a). Optimising blood glucose control (Murphy et al 2002, Rayman 2000), including where appropriate the use of insulin pumps (Murphy et al 2002). Adjusting doses of insulin (Loveman et al 2006). Commencement of insulin therapy for type 2 diabetics (Sutton 2000). Patient re-education and dietary advice	Shared management planning (Thomson et al 1991). Joint Diabetologist/Podiatrist clinic for painful neuropathy not responding to first-line treatment (Murphy et al 2002). Management of patients with painful neuropathy and diabetic amyotrophy (Boulton et al 1998) Management of glycaemic control (Boulton et al 1998). Consult with patient and primary care physician. Recommend changes in medication and/or lifestyle. (Kanton et al 2001) Take over care for patients with adverse outcomes despite level 3 care or those with higher initial level of complexity (Kanton et al 2001). Advising diabetes specialist podiatrists and diabetes specialist nurses managing non-ulcerated

'Prescription' of local treatments and dressings indicated by 88% of diabetologists sampled (Winocour et al 2002b). Use of 'Dermagraft' indicated by 27% of diabetologists sampled (Winocour et al 2002b). Use of 'Regranex' indicated by 22% of diabetologists sampled (Winocour et al 2002b). Treatment of diabetic patients with active foot ulceration by sharp debridement (Foster 2001, Mousley 1998). Role in management of diabetic neuropathic foot; ulcer treatment by callus removal which facilitates wound drainage (Thomson et al 1991, Edmonds et al 1986).	(Young, A. et al 2002). Management of intercurrent illness (Loveman 2006). On-going monitoring of patients (Rayman 2000). Coordinating the on-going care of patients (Loveman et al 2006) and facilitating delivery of care to patients (Rayman 2000). Responsibility for not undermining other health professionals (Loveman et al 2006)	painful neuropathy, providing prescription only medications for patients as needed (Murphy et al 2002). Prescription of diuretics and analgesics (Edmonds et al 1986) and antibiotics (Mousley 1998 Edmonds et al 1986), ordering x-rays and arranging admissions (Mousley 1998).

Table 11. Characteristics of specialist practice in diabetes - Educational output.

Podiatry	Nursing	Medicine
Patient education (Robbie 2002, Foster 2001, Sutton 2000, Wormwald 1995, Boulton et al 1998). Patient education sessions had input from podiatry staff in 84% of diabetologists' responses (Winocour et al 2002b). Provision of training and clinical supervision of doctors and nurses in callus debridement (Bale 2002). Provision of staff training events, student teaching and shadowing opportunities (Robbie 2002). Giving presentations at national conferences and in-house training events (Robbie 2002), Submitting work to publications that promote the foot screening service within the NHS arena (Robbie 2002).	Patient education (Loveman 2006, Winocour et al 2002a, Rayman 2000, Boulton et al 1998, Watkinson 1998, Baksi 1995, Siddens and McAughey 1992, Sadler 1990), counselling (Loveman 2006, Rayman 2000, Watkinson 1998) and advocacy (Rayman 2000). Education includes group education sessions (Miles 2002) and encompasses: lifestyle changes (such as diet, activity, smoking cessation and adherence to medication), the benefits of optimal glycaemic control and cardiovascular risk reduction Wallymahmed et al 2003), use of home monitoring, injection techniques and insulin dose adjustment (Baksi 1995) and foot health education (Sutton 2000). Patient re-education, dietary advice and insulin dose adjustment (Young, A. et al 2002). Provision of age-banded education sessions for children with diabetes (Lowes 1997). Education of professional and non-professional carers (Cradock 1999). Compilation and provision of a range of educational materials (Lucas and Walker 2004, Mackay 2002). Educating colleagues and other health professionals (Loveman et al 2006, Winocour et al 2002a). Educating and supporting Practice Nurses (Farmer 2000). Provision of education and support to generalist nurses, facilitating their patient-education activities (McDermott 1995). Provision of education for patients, nursing and medical students and postgraduate nurses (Sadler 1990). Advising the multi-disciplinary team regarding dressings (Mousley 1998).	Patient education (Boulton et al 1998). Foot health education for patients (Sutton 2000). Consultant has an educational role through regular meetings with staff at all levels (Gask 2005). Provision of education for primary care practitioners (Greenwood 2003). Provision of training and supervision for Podiatrists and Nurses in neuropathic assessment (Bale 2002).

Table 12. Characteristics of specialist practice in diabetes - Service and policy, table.

Podiatry	Nursing	Medicine
Development of services, local policy and guidelines: – e.g. foot screening and joint clinics with other professionals (Robbie 2002), referral pathways (Holland et al 2002), Joint diabetic wound care guidelines, Antibiotic guidelines for the infected diabetic foot and formalised Discharge guidelines for the care of the diabetic foot (Holland et al 2002), negotiation of fast-track referral routes to vascular surgery (Robbie 2002) Research and development of services (Holland et al 2002), including devising assessment tool (Robbie 2002)	Development of services in primary care (Mackay 2002) including quality improvement (Cradock 1999). Promotion of shared care. Acting as a resource for patients, staff and carers (Mackay 2002). Developing systems of care (Cradock 1999) and health promotion programmes (Siddens and McAughey 1992). Evaluation and integration of research into practice (Humphris et al 1999). Generation of research evidence (Winocour et al 2002a, Humphris et al 1999, Watkinson 1998, Siddens and McAughey 1992). Audit activity (Winocour et al 2002a, Rayman 2000). Professional leadership (Cradock 1999).	Leadership role in bringing about innovation and change (Gask 2005) Direction of shared and integrated diabetes care services (Wroe 2002).

Table 13. Professional outcomes and consequences of specialist practice in diabetes.

Podiatry	Nursing	Medicine
Blurring of professional roles (Bale 2002). Highlighted need for increased podiatry input into paediatric services – such input is low, of 91 paediatric diabetic services sampled only 3% had podiatry input (Winocour et at 2002b). Podiatry access at all diabetic clinics increased the likelihood of associated preventative as opposed to reactive 'trouble shooting' care ($P < 0.05$) (Winocour et al 2002b). Highlighted need for structured, recognised postgraduate training (Rayman et el 2000) and desire to produce a competency based national standard for diabetes specialist podiatrists at advanced level; utilising a pupilage model similar to that used by podiatric surgery (Young 2002, Rayman et al 2000). Such a pupilage to be based in major centers for diabetic foot care that are able to demonstrate good practice, audit of process and outcomes, and ability to teach. As well as specific foot pathologies the course will provide knowledge and skills in general diabetes (Young 2002). Establishment of multidisciplinary referral pathways (Holland et al 2002).	Blurring of professional roles (Bale 2002). Overlapping of roles within diabetes team (Sadler 1990). Used as role models by other nurses (Cradock 1999). Nurse-led services in diabetes (Wallymahamed et al 2003, Miles 2002, Cradock 1999), clinics in primary care often have little or no GP involvement (Wroe 2002, Rodgers 1999). Dilemma for diabetes specialist nurses forced to choose between allocating time to clinical activities with patients or to educating colleagues (Farmer 2000, Rodgers 1999). Increased knowledge and skills in wound care Bale 2002). Development of sub-specialties: Paediatric diabetes specialist nurse (Winocour et al 2002a, RCN 1999, Lowes 1997). Renal specialist diabetes nurse (Marchant 2002, Atherton 2004, Marchant 2008). Diabetes specialist midwife (Siddons and McAughey 1992). Diabetes foot educator (Siddons and McAughey 1992). Evolution of roles for diabetes specialist nurses in private occupational health schemes (O'Driscoll 2005) and advent of consultancy roles for diabetes related companies (e.g. pharmaceuticals) (Rodgers and Walker 1999).	Blurring of professional roles. (Bale 2002). Development of sub-specialty of Paediatric endocrinology/diabetology (Edge et al 2005). Generation of interest within and enhanced communication with specialties not originally connected to the multidisciplinary team and hence team expansion – involving orthopaedic surgeons and elderly care physicians in the team (Holland et al

Establishment of multidisciplinary assessment tools (Elliott et al 2002, Holland et al 2002). Increased number of face-to-face contacts (Mousley 1998) and increased workload for podiatrists (Holland et al 2002). Highlighted need to improve communication with primary care (Mousley 1998). Highlighted need for outcome monitoring and clinical audit (Holland et al 2002, Mousley 1998). Identification of a specialised role for assistant practitioners and development of formal diabetes specialist podiatry Assistant posts (Holland et al 2002). Generated interest within and enhanced communication with specialties not originally connected to the multidisciplinary team and hence team expansion – involving orthopaedic surgeons and elderly care physicians in the team (Holland et al 2002). Improved staff awareness of diabetic foot disease (Robbie 2002). Improved profile of podiatry with key stakeholders (Robbie 2002). Continuing professional development is an issue for podiatry staff involved in the foot screening service (Robbie 2002).	Formation of the UK Association of Diabetes Specialist Nurses in 1997 by diabetes specialist nurses with the explicit purpose of providing a national voice for diabetes specialist nurses (Da Costa 2000). Interests of diabetes specialist nurses represented by the Royal College of Nursing Diabetes Forum and The UK Association of Diabetes Specialist Nurses (Winocour et al 2002a). Need for a career framework for diabetes specialist nurses (Tipson and Turner 2002, Hicks 1999b). Disagreement over level of academic qualification needed to demonstrate higher level of practice (Hicks 1999b). Identified need for degree level courses for diabetes specialist nurses (Winocour et al 2002a). Diabetes specialist nurses tend to define their own roles and engineer their own career progression (MacKinnon 2002). Highlighted need to improve communication with primary care Mousley 1998). Highlighted importance of administrative support and a reliable call/re-call system for patients (Mackay 2002). Highlighted need for outcome monitoring and clinical audit (Mousley 1998). Generated interest within and enhanced communication with specialties not originally connected to the multidisciplinary team and hence team expansion – involving orthopaedic surgeons and elderly care physicians in the team (Holland et al 2002).	2002).

Table 14. Clinical outcomes and consequences of specialist practice in diabetes.

Podiatry	Nursing	Medicine
Reduction of amputation rates (Wormwald 1995). Improved healing rate for diabetic foot ulcers (Bale et al 2002, Robertshaw et al 2001). Rate of ulcer healing 60.7% (Bale 2002), 86% healing rate for neuropathic and 72% for ischaemic ulceration (Edmonds et al 1986). Improved record keeping (Wraight et al 2005, Elliott et al 2002). Podiatry access at all diabetic clinics increased the likelihood of associated preventative as opposed to reactive 'trouble shooting' care ($P < 0.05$) (Winocour et al 2002b). Empowered patients to take responsibility for their own foot care, supported by the specialist podiatrists (Robbie 2002).	Improved healing rate for diabetic foot ulcers (Bale 2002, Robertshaw et al 2001). Rate of ulcer healing 60.7% (Bale 2002), 86% healing rate for neuropathic and 72% for ischaemic ulceration (Edmonds et al 1986). Improved recording of ulcer status, facilitating outcome assessment (Bale 2002). Increased dressing costs Mousley 1998). Intensive nurse-led intervention over a short period of time has beneficial effects on glycaemic control, BP and lipid profiles, without a significant increase in BMI. No reduction in BMI or reduction in number of current smokers was achieved (Wallymahmed 2003). For diabetes patients with poorly controlled blood glucose levels almost two-thirds (63%) of patients achieved improvement status, with no increase in body weight or hypoglycaemic episodes. Disappointingly, however, the non-improver group (37%) showed a mean deterioration in HbA1c. (Young, A. et al 2002). Reduced non-attendance rates in paediatric and adolescent diabetes clinics (Lowes 1997). Reduced length of hospital stays for children with diabetes (Lowes 1997). Reduced length of hospital stay and increased levels of satisfaction (in inpatient settings) (Davies et al 2001). Improved screening programme for diabetic complications (Mackay 2002).	Improved healing rate for diabetic foot ulcers (Bale 2002). Rate of ulcer healing 60.7% (Bale 2002), 86% healing rate for neuropathic and 72% for ischaemic ulceration (Edmonds et al 1986).

1.6.2 Maturity of the Concept of Diabetes Specialist Podiatry

Examining the conceptual components (the pre-conditions, characteristics of practice, outcomes and consequences) of specialist practice in diabetes across podiatry, nursing and medicine elicits significant inter-disciplinary differences (tables 6-14). Differences are most marked between medicine and the other two professions.

1.6.2.1 Preconditions of Specialised Practice in Diabetes (table 6):

Medicine shows a clear route of progression culminating in specialist status as a consultant in diabetes. While actually attaining a diabetologist's post will in part be dictated by vacancies; eligibility to apply is bound to a defined period of training and the attainment of a recognised, validated qualification. Unlike the case of medicine, podiatric and nursing specialisation in diabetes lacks clear pre-conditions. Eligibility to apply for a post specialising in diabetes is not linked to any educational or experiential pre-requisites and incumbents in post display wide variation in qualifications.

1.6.2.2 Characteristics of Specialised Practice in Diabetes:

Ways of working (table 7.)

While nurses, podiatrists and medical doctors specialising in diabetes may all be members of a multi-disciplinary team, leadership of such a team is linked to the medical doctor. Supervision and guidance of nursing and podiatry team members and direction of integrated care services are considered to be the diabetologist's remit. The diabetologist's role is also considered to fulfil the level 4 stage in Kanton's "stepped care model" (Kanton et al 2001), discussed in section 1.2 of this document. Across medicine, podiatry and nursing while some characteristics of practice demonstrate boundary blurring and shared roles, leadership and supervision are linked to the diabetologist.

Nurses and podiatrists show more activities which cross organisational boundaries. For nurses this often involves working in both primary and secondary care venues, while for podiatrists the development and maintenance of close links with the community podiatrists, acting as both a resource and a point of referral, is considered central. Such referrals may also link podiatrists to level 3 and 4 activity

in Kanton's stepped care model, though given the supervisory role over podiatrists ascribed to the diabetologist the podiatrists may represent an interface or intermediate step within the model.

Services provided (table 8.)

For diabetologists services provided were closely linked to Kanton's stepped care model of provision; responsibility for the care of complex patients residing with the medical doctor specialising in diabetes. A more generalist role for diabetologists was also described, highlighting their input into the broader field of endocrinology and general medicine.

Provision of rapid access, either through manning a telephone help line (nurses and medical doctors) or offering a rapid-access service (podiatrists) was ascribed to all three professions. However services provided by nurses specialising in diabetes were linked to home-care activities, provision of nurse-led clinics and maintenance of a register of patients. Services provided by podiatrists were linked to the risk stratification of patients, where the needs of medium and high risk patients were to be met by podiatrists specialising in diabetes. Preventative measures were also linked to the diabetes podiatrists, specifically callus removal, provision of customised orthoses, adapting footwear or providing special footwear.

Assessment (table 9.)

For diabetologists assessment activity was couched in the broad term of diabetic complications, though peripheral neuropathy was also mentioned specifically. This breadth of approach was also evident in the assessment activities ascribed to nurses and podiatrists, with attention to a wide range of biochemical, vascular and physical parameters. Assessment and classification of ulceration was mentioned specifically for nurses and podiatrists, as was assessment of neuropathy. Access to imaging and advanced vascular assessment was mentioned within the podiatrist's activities. Thus assessment activities show a more comparable pattern across the three professions than other characteristics of practice.

Management (table 10.)

Diabetologists roles are considered to be management of complex patients and those with complications, taking over the care of patients with adverse reactions despite what Kanton et al (2001) describe as level 3 care. For this group of patients the diabetologists' management activities are highlighted as those pertaining to glycaemic control and provision of prescription only medicines related to pain, infection, cardio-vascular and renal function. A role in advising nurses and podiatrists specialising in diabetes regarding their patient management activities is also linked to the diabetologist.

The nurses' activities also strongly feature the management of glycaemic control, specifically commencement of insulin therapy, the use of insulin pumps, dose adjustment of hypoglycaemic agents, medication and dietary advice. Common management activities across nursing and podiatry were ulcer treatment, specifically dressing and debridement. Debridement strategies featured autolytic, dressing mediated measures and "sharp" debridement, though "sharp" debridement was linked more closely to the podiatrists. Management by podiatrists specialising in diabetes was again linked to a risk-stratified patient group with the foot being the focus of their activities. Podiatrist's management strategies in addition to wound management were considered to include provision of specialist footwear, offloading strategies and orthoses. Role sharing in the management of painful neuropathy was considered to exist, involving podiatrists and diabetologists.

Thus once more, while there are some shared management activities, overall control and direction of patient's management is linked to the diabetologist.

Educational output (table 11.)

Practitioners specialising in diabetes from all three professions were considered to have a role in patient education (including foot health education); however while the diabetologist was considered to have an educational role for staff at all levels; the nurses' and podiatrists' educational remit was more defined.

Nurses' educational activities were focussed mainly on patients; preparation and provision of educational material, a wide range of group and individual educational

sessions for adults and children, covering areas such as glycaemic control, home monitoring, self-injection techniques and lifestyle change being part of their role. The podiatrists' role in patient education was also highlighted.

Nurses' and podiatrists' role in educating other health professionals was of a more defined nature than the broad remit ascribed to diabetologists. For nurses this included education of professional and non-professional carers, colleagues, practice nurses, generalist nurses, nursing and medical students and postgraduate nurses. The podiatrists educational output featured provision of staff training events, student teaching and shadowing, presenting and publishing work at local and national levels. The area where nurses were considered to advise the multi-disciplinary team (including the diabetologist) was that of dressings, while podiatrists' activities in training and supervising doctors and nurses in callus debridement ascribed them leadership within this area.

Diabetologists were assigned a broad educational remit for staff at all levels, mainly through meetings - with leadership of such meetings linked to them as medical consultants. The nurses and podiatrists were considered to lead educational provision in a specific defined area – namely for nurses dressings and for podiatrists callus debridement.

Service and policy (table 12.)
Diabetologists were assigned a leadership role in effecting innovation and change at service and policy level, with the direction of shared and integrated care services residing firmly with the consultant diabetologist. In contrast to this nurses' and podiatrists' roles were described in terms of service development, promotion, evaluation and integration. Podiatrists' and nurses' generation and integration of research was highlighted and for the podiatrists the production of formal guidelines was a focus.

1.6.2.3 Outcomes and Consequences of Specialised Practice in Diabetes.
Professional outcomes (table 13.)

While blurring of boundaries and overlapping of roles was considered to occur across the three professions, the consequences of medical specialisation in diabetes mainly focussed on the effects engendered in the wider healthcare team. Specialist practice in diabetes was considered to promote an interest in diabetes within other specialists and hence was linked to expansion beyond the "core" diabetes team. The only intra-professional effect noted for the diabetologists was the generation of sub-speciality. While such sub-specialisation is also noted for diabetes podiatrists and nurses, intra-professional effects highlighted the need for post-graduate training and a framework for career progression. Increased workload for podiatrists and nurses as a consequence of their specialised focus was considered to pose a dilemma for nurses faced with competing demands; for podiatrists this increased workload has been highlighted as a driver for the establishment of assistant posts within the specialty.

Specialisation in diabetes for podiatrists and nurses was considered to improve the profile of both professions. One of the consequences of the podiatrists' specialist activity was also improved awareness of diabetic foot disease. The value of robust administrative, monitoring and clinical audit activity and the need to improve communication with primary care centres were further outcomes linked to the activities of nurses and podiatrists.

Thus while boundary-blurring and initiation of sub-specialisation are noted for all three professions, marked differences in the professional consequences of specialisation in diabetes were evident. For medicine the intra-professional impact appears comparatively small, however for podiatry and nursing, educational and organisational needs and the effects of increasing workloads were highlighted.

Clinical outcomes (table 14.)

Focussing on diabetic foot disease (see section 1.5.3.1), improved outcomes have been reported as a consequence of hospital based diabetic foot clinics, featuring multi-disciplinary teams (Larsson et al 2008, Ronan et al 2008, Krishnan et al 2008, Trautner et al 2007, Anichini et al 2007, Lavery et al 2006, Driver et al 2005, Wraight et al 2005, Van Hotum et al 2004, Holstein et al 2000, Dargis et al 1999, Van Gils et al 1999, Crane and Werber 1999, Thomson et al 1991, Edmonds et al

1986, Society of Chiropodists and Podiatrists 2010). However references to clinical outcomes for each profession individually are sparse. Improved record keeping was linked to both nursing and podiatry. Beneficial effects on glycaemic control have been associated with nursing intervention, as has reduced in-patient stay times and reduced non-attendance rates. Access to podiatry within the diabetic clinic has been linked to increased likelihood of preventative as opposed to reactive care and support of diabetes podiatrists has been associated with improved empowerment for patients in managing their own foot-care.

Outcome evaluation has been undertaken mainly for the multi-disciplinary team, rendering meaningful assessment of each profession's effects in isolation impossible.

1.6.3 Conceptual Maturity of Diabetes Specialist Podiatry

While the concept of "specialisation" and "specialist" (being one who specialises) demonstrates a level of conceptual maturity (see section 1.6), the concept of diabetes specialist podiatry remains immature. It lacks clear pre-conditions, demonstrates variation in characteristics and in a cyclical pattern the intra-professional outcomes highlight the absence of clear, repeatable pre-conditions.

1.7 Specialisation – Overview of Theoretical Frameworks

Weber (1964) described specialisation as a defined sphere of competence, involving the division of labour within a clearly defined hierarchy and a supervisory system based on authority. This "rational bureaucratic theory of complex organisations", may account for the hierarchical nature of the caring professions which is a legacy of the way in which they have developed under the (frequently constraining influence of the dominant profession of medicine). However it offers a poor fit for organisations in which professionals work (Bucher and Stelling 1969) and fails to account for the indefinite structures of role division, equivocal rules and non-specific goals which are a feature of hospitals (Joas 1987).

Contrastingly, Everett Hughes in his studies of occupational sociology, related patterns of activities which are specialised in accordance with a division of labour,

to the impact of divergent interests, relations of forces and processes of negotiations (Joas 1987, discussed further in sections 1.7.1, 1.7.3.2, 1.7.3.3). Focussing upon the graduate professions, he argued that only by examining the action of individuals or occupational groups can the division of labour be understood, and that such professionals were able to a large extent to create their own roles. He examined the ideologies of the different professions as a means of achieving freedom from control and attaining high status.

Abbott (1988, p106) considers that "*specialisation most commonly arises because the skills applicable to a given task area develop beyond the ability of single practitioners*", though, less commonly also through "*differentiation in an exogenous social structure shaping the profession, such as divergence in client groups*". Changing health policy and the advent of what may be termed population focussed services, supported by national frameworks (e.g. the NSF for diabetes) and guidelines specific for the client group such as National Institute for health and Clinical Excellence (NICE) and Scottish Intercollegiate Guidelines network (SIGN) guidelines may represent such exogenous phenomena. Further, Abbott (1988, p77) also states that "*differentiation appears when demand suddenly outstrips available professional numbers*"; within the context of this research, the increasing diabetic population and resultant pressure placed upon diabetes services may be viewed as evidence of such shortages. Parallels with early medical specialisation, in responding to the epidemic of Egyptian Opthalmia (Davidson 1996) and the effects of war (Godber 1978, Stevens 1966) exist.

Hugman (1991, p94) refers to the development of sub-groups by a profession as "*internal closure*", as opposed to "*closure through territorial claims on knowledge*" or "*lateral closure*" (a feature of inter-disciplinary boundary disputes). Hugman's internal closure encompasses the divisions of specialists from generalists within the same profession and the development of assistant grades (assistant grades in podiatry discussed also in sections 1.5.6.1 and 1.7.3.1). Hugman (1991) considers internal closure to be a product of professionalisation, specialisation evolving as professions seek to maintain or increase their status, stressing their more glamorous roles and claiming levels of skills which match the forms of higher knowledge associated with their profession. He refers to these as "*virtuoso roles"* (Hugman

1991, p95) – roles which provide the link between practice and theoretical knowledge and links the pursuit of such roles to the attribution of seniority and to career development. These virtuoso roles are considered by Hugman to be of particular importance where the knowledge base is disputed or not fully regulated, as they lend more weight to the argument that a given profession has the solutions for a specific set of social problems. These facets may be highly relevant in diabetes podiatry with its apparent lack of clearly defined specialist skills and as yet unclear educational credentials. Hugman (1991) also points to the way in which virtuoso roles are those associated with "curing" rather than "tending", the latter lack social status and so have tended to be the roles discarded by professionals, delegated along with menial duties to assistant grades. This phenomenon can be related to the advent of assistant grades in diabetes specialist podiatry, to the shared care model of service provision and the stratification of clients based on the "at risk" system of the NICE guidelines. It could be argued that the high-risk clients confer a high status (possibly heroic) limb and lifesaving role on diabetes specialist podiatrists. That some of the caring roles may be those which formed important elements of the profession's origin is recognised by Hugman (1991), within podiatry the reluctance to accept assistant grades (Lorimer 1995, Webb et al 2004) and the strict limitation of their scope of practice (Society of Chiropodists and Podiatrists 2006a and 2006b) may be manifestations of concerns about delegating roles. Hugman (1991) points to how specialty may be separated by type of practice (e.g. surgery) or, as with diabetes podiatry in terms of service users (Hugman 1991). The hierarchy associated with different client groups is also discussed by Hugman, work with children being comparatively prestigious, while work with the elderly having low status and acute (curable) problems having greater prestige than chronic (care requiring) problems.

1.7.1 Development of Specialised Practice

Abbot (1988) recognises that professional groups are not static. New professions develop, some old professions disappear and, at any point in time, the jurisdiction claimed by existing professions is increasing or diminishing. This is related to the growing complexity of professional tasks which results in the emergence of specialisations within a particular knowledge area. Using the illustration of psychiatry, originating within medicine, Abbott considers that specialisms go on to

become separate units competing independently within the system of professions. For Abbott, acquiring and controlling tasks is the key to advancing a profession. By providing scope for interpretation, the lack of specificity contained within the NSF for diabetes, the foot care focused points of the NICE guidelines for diabetes care and the Scottish Intercollegiate Guidelines Network may present an opportunity for increasing podiatric specialisation in diabetes. Freidson (1988) discusses the important discretionary powers of practitioners over how work is done, the limits to their power being established largely by other professionals serving as administrators within their employing organisations. The impact of other professions on the history of professional development is also acknowledged by Abbott (1988), who considers such development to be driven by "interprofessional competition". The cause of interprofessional conflict is the need to establish effective control over an area of work through the application of specialist abstract knowledge by a professional group; a link which Abbott terms "jurisdiction" (1988). The term "jurisdiction" is used to describe the profession's effective control over a "task area" (Abbott 1988, p112), and a *classified* list of tasks undertaken by a profession at any point in time therefore maps its jurisdiction (Abbott, 1988, p43).

Within the evolution of an occupation, Dingwall (1983) discusses "*occupational coalescence*" - the collecting together of tasks already within the official domain ("*fission*"), which are combined with tasks new to the official domain. Dingwall (1983) relates the formation and subsequent recognition of occupations to material changes, arising from either alteration in the physical or social environment or in technology. Changes in the social environment can be evidenced by a significantly increasing diabetic population and the multi-disciplinary approach to diabetes; and within diabetes foot care assessment and risk stratification techniques, client education, advances in wound care and therapeutic orthoses/shoes and casting techniques may be viewed as technological advances. Dingwall (1983), in considering the advent of specialties within occupations, highlights the work of Bucher and Strauss on segmentalization [sic]; where colleagues within a segment find that their work has become too disparate for a single device to coordinate and so split into distinct specialities. It remains unclear though whether the work of the diabetes specialist podiatrist is disparate from that of core podiatry, for while core

podiatry has been evaluated (Farndon 2006) no such analysis of diabetes podiatry has been undertaken.

1.7.1.1 Theories of Phasic Development

Early theorists, who suggested the phases through which occupations or activities pass en-route to professional status, are highlighted by Johnson (1972). These include Greenwood (1957) and Wilensky (1964). The approaches of these authors are from the "trait" tradition which has been challenged (and largely discredited) by later theorists in terms of its acceptance of professions' own explanations of their activities, the a-historical account of the professions and the relevance of the traits identified (Abbott 1988, Johnson 1972). However the notion of a staged development of specialist practice is also proposed by Zetka (2003) who points to Bucher's (1988) conceptual imagery illustrating the stages involved in this process (table 15.):

Table 15. Bucher's (1988) stages in development of specialist practice.

1) Occupational members initially organise new specialties and advance their claim to a territory.
2) Such claims are accepted by significant sponsors, allies or other publics.
3) Institutionalisation of new work roles for members, within formal organisations are progressed.
4) On-going and standardised training programmes are established.

From: Bucher, R. (1988) On the natural history of health care occupations. *Work and occupations*, 15:131–47.

Zetka (2003) relates Bucher's stages to how occupational members initially organise new specialties and advance their claim to control new technology. Through a process of negotiation with the more powerful occupations with an interest in jurisdiction and the division of labour, the new specialty seeks to legitimate their control of the application of the new technology and the market share which the technology makes available. The degree to which diabetes specialist podiatrists can claim special expertise in the diagnosis, evaluation, and management of persons with diabetic foot disease – their "new technology" is crucial in this negotiation process. Supporting evidence of this special expertise may centre upon unique knowledge (Durkheim 1956, Strong 1984, Abbott 1988, Freidson 1988, Leicht and Fennell 2001), skills and practices (Bucher and Stelling 1969), applied by practitioners who

have undergone recognised and accredited training (Bennett and Grant 2004, Hugman 1991) and underpinned by a research evidence base (Strong 1984, Abbott 1988, Freidson 1988).

1.7.2 Unique Knowledge, Skills and Practices

In examining the expert division of labour and professional work, Leicht and Fennell (2001) consider the status of the expert to be based on the professional's control over formalised knowledge systems, which confer social power to those who produce and use knowledge. Several theorists have considered the impact of knowledge. Durkheim (1956, p117-118) states:

> *"Each occupation indeed, constitutes a milieu sui generis which requires particular aptitudes and specialized knowledge, in which certain ideas, certain practices, certain modes of viewing things, prevail…* [society] *creates for itself, by means of education the specialized workers whom it needs."*

Further, Abbott (1988, p102) highlights the way in which professions:

> "*Expand their cognitive dominion by using abstract knowledge to annex new areas, to define them as their own proper work*"

which he considers to be a feature distinguishing professions from occupations, in contrast the latter "*fight for turf*". Central to Abbott's argument is that a defensible jurisdiction must be based on a coherent set of tasks anchored to a profession's abstract knowledge base. Further, Abbot considers that the level of abstraction is related to the jurisdictional strength, particularly where abstract knowledge is associated with effective treatment. The optimum level of abstraction will vary from case to case, but will be between "*the extremely general and the extremely concrete*"; the public perception of legitimacy and efficacy in each case determines the optimal level of abstraction (Abbott 1988, p105).

Freidson (1988) examined the links between knowledge and power as they relate to the professions. Grounding these relationships in the institutions which support and provide the setting of professional activity, Freidson considered formal knowledge (higher knowledge which has been formalised into theories or other abstractions which attempt to provide systematic, reasoned explanation and justification of the facts and activities believed to constitute the world) to be an "unstable element" in

the exercise of power. Unlike Foucault (O'Farrel 2005), Freidson (1988) does not consider knowledge itself to be a system of domination, but rather that the professions, as agents (creators and users) of knowledge are provided with opportunities to exercise power via the institutions which sustain them (such as professional bodies) and the institutions which offer situations where professionals can exercise their power (usually the professional's employer).

1.7.2.1 Training and Accreditation

Abbott (1988) points to the tendency for specialist groups to develop special education and certification structures within their parent profession. In discussing occupational credentialing of practitioners, Freidson (1988) highlights the monopoly of practice (control over the supply of a service) and the opportunity to limit entry to a profession made possible through licensing, (though for podiatrists in the UK this takes the weaker form of registration and protection of title). Hugman (1991, p97), in discussing internal closure points to the way in which:

> *"…specialisms represent the success of subgroups in marking out an area of practice which attracts enhanced status because additional training is required, and to which access by other members of the wider professional group can be restricted".*

However for Diabetes Specialist Podiatrists there is currently no clear educational route to specialisation, following Hugman's thesis this weakens their claim to specialist status via internal closure.

For health professions state regulation is often bound up with certification (Freidson 1988, p71). Credentialing which is under the direct control of the professions, Freidson refers to as "*private occupational credentialing*" – the official acknowledgement of the candidate's qualifications to perform a particular kind of work competently and reliably. Such certification is particularly well developed in areas of specialisation within medicine, and has as a prerequisite the completion of a formal training programme associated with higher education (Freidson 1988). Inextricably linked to occupational credentialing is the issue of accreditation for the higher education institute at which the certificate was gained; in the UK this is the function of the Quality Assurance Agency for Higher Education.

In contrast to occupational credentialing (certification of practitioners), Freidson (1988) identifies institutional credentialing, the requirement that institutions employ the holders of occupational certificates, as the process by which professions generate and maintain demand for their services. Using an illustration of the requirement for a registered nurse to be on duty at all times in an emergency room, Freidson highlights the sheltered position within the labour-market provided for professionals in specific positions in organisations. Development of the National Minimum Skills Framework for Commissioning of Foot Care Services for People with Diabetes by Foot in Diabetes UK may represent the beginnings of such institutional credentialing in the field of diabetes podiatry.

1.7.2.2 Research

Clinical practice in diabetes foot care is considered by some commentators to be based upon opinion rather than being research led (Jeffcoate and Harding 2003, Young 2003b). In particular, the evidence base underpinning some clinical activities in diabetes foot care has been criticised, notably monofilament testing, palpation of pulses and prescription of footwear (Cavanagh 2004a), debridement and wound management (Jeffcoate and Harding 2003, Young 2003) and therapeutic footwear (Cavanagh 2004b).

Freidson (1988) considers that unlike the crafts, professions have been able to control technological innovation by having their own teacher-researchers to produce and legitimise new knowledge; and that through the continual creation of new esoteric knowledge professions are able to avert routinisation of their expertise. This perspective is supported by Strong (1984), who points to the vastly increased technical power, associated wealth, prestige and influence that the embrace of academy and of medical science has brought to the contemporary medical profession; but also to the way in which the medical profession which has historically derived its power partly from the charismatic role of the healer, has now become a target for other entrepreneurial, academic professions with research interests in healthcare.

1.7.3 Stratification of Roles and Functions

In discussing the dynamic nature of professional boundaries Nancarrow and Borthwick (2005) use the exemplar of orthopaedic surgeons, highlighting the trend for specialised occupations' choice of lucrative, high status work while discarding more mundane duties. The authors relate this phenomenon to Hughes' (1958, p49) division of labour based on "*dirty work*". Further, Zetka (2003) considers that having protected their self-defined "*core*" tasks, powerful and dominant occupational groups are largely indifferent as to who controls or performs related work activities, so long as they get done. However Nancarrow and Borthwick (2005) consider that through the creation of assistant grades, the control of low status work can be retained within a profession. The creation by an occupation of such "*auxiliary*" occupations is considered by Bucher (1988) to be a type of "*occupational expansion*"; itself a feature of occupational consolidation (activities undertaken by an occupation in order to secure its institutional niche). Hugman (1991, p94) refers to the development of sub-groups by a profession as "*internal closure*", as opposed to "*closure through territorial claims on knowledge*" or "*lateral closure*" (closure sought by professions when faced with inter-disciplinary boundary disputes). Assistant grades are a form of subordinate sub-group to whom low status work (Hughes' "*dirty work*") can be delegated, allowing professionals to specialise - developing high status, autonomous 'virtuoso' roles.

1.7.3.1 Implications of Role Stratification

Following the argument of Zetka (2003), in supporting the diabetes specialist podiatrists' claim to specialty, medically trained diabetologists may be improving their own visibility and legitimacy of ownership over the specialty of diabetes care. The diabetes specialist podiatrists present no threat to the diabetologists' dominance and may be available to undertake roles which diabetologists wish to shed. The delegation of roles to diabetes specialist podiatrists (or diabetes specialist nurses) may be driven in part by the working time directive. While, as illustrated by Nancarrow and Borthwick (2005), the model of medical dominance may allow the reclamation of such professional turf by the medical profession, drivers such as the working time directive make this is most unlikely. The intra-professional aspect of this form of labour division, may be that diabetes specialist podiatrists choose roles

with which they identify (what Zetka [2003] would call their self-defined core tasks), while leaving the routine work for the generalist podiatrists and the low status work for podiatry assistant grades. This may be evidenced by the clients who are assessed as being at "low risk" of ulceration using the NICE guidelines, being increasingly cared for by community podiatrists; by the "shared care" model where the diabetes specialist podiatrist undertakes the specialised care, management planning and client education, while the generalist podiatrist continues with follow up, routine care and monitoring roles; and by the establishment of a "diabetes specialist podiatry assistant" grade, considered by Holland et al (2002) to have a pivotal role within secondary care. Hugman (1991, p94) highlights the ambiguous status of assistants, for while they derive their nature from the profession with which they are associated, they are simultaneously excluded from that profession – "*being neither entirely distinct nor entirely integrated*". Claims for effective control over the task area of treating clients with diabetic foot disease represents what Abbott (1998) would call the diabetes specialist podiatrist's "*jurisdiction*"; a classified list of tasks undertaken by a profession at any point in time mapping its jurisdiction (Abbott, 1988, p41-43).

If the diabetes specialist and the generalist podiatrists both consider tasks to be part of their core roles the potential for conflict arises. Indeed Nancarrow and Borthwick (citing Burrage and Torstendahl 1990) point to the intra-professional conflict between "generalists" and "specialists" which is an outcome of the way in which professional organisations operate. Abbott (1988, p106) discusses how specialisation is also a "*strategy for upwardly mobile groups seeking to set themselves above their current peers*" – division may also be vertical rather than horizontal – focussing on differences in status rather than task. Claims to unique skills and practices feature in the negotiations of healthcare professionals in their pursuit of status and power within organisations (Bucher and Stelling 1969).

1.7.3.2 Negotiating Roles

Bucher and Stelling (1969) highlight the variable (almost unique) nature of roles negotiated by individual healthcare professionals, within the context of their specific organisation and or team. Freidson (1988) also highlights the comparative autonomy of professional employees and the impact this allows them to have on

managerial and policy issues. Such influence is constrained by the formal policies of the employing organisation and the allocation of resources (Freidson 1988), professionals are described as being "*technically autonomous but organisationally impotent*" (Freidson 1988, p174)

1.7.3.3 A Note on Negotiated Order Theory

Negotiated order theory is considered to originate from "symbolic interactionism" (Day and Day 1977), a term devised by Herbert Blumer in 1938 (Joas 1987) to describe how, through processes of interaction, meaning is created and maintained in organisations. However it was through subsequent research in the area of professions and occupations undertaken by other sociologists from the "Chicago School" which negotiated order theory was developed (Day and Day 1977).

Work by Anselm Strauss is considered to have laid the foundations of negotiated order approach (Joas 1987), indeed Day and Day (1977) point to the earliest clear, succinct theoretical statement on negotiated order, produced by Strauss et al (1963). This describes a complex mix of goals, the (sometimes informal) division of labour, "*tacit agreements, unofficial arrangements and official decisions"* (Strauss et al 1963, p164), which combine to produce order. Within a complex scenario, featuring professional groups from different personal backgrounds, training, professional socialisation, with varying levels of experience and perhaps most significantly different hierarchical positions, Strauss et al (1963) identify the process of 'negotiation' - a dynamic process, involving continual reconstruction and reproduction - as the mechanism by which order is procured. The authors highlight the small area of action governed directly by clearly enunciated rules and the flexibility in interpreting and applying extant rules, allowing "*a maximum of innovation and improvisation*" (Strauss et al 1963, p153). While in our post-Griffiths era, management may be more inclined to codify and direct clinical activities, and clinicians are faced with norms and targets which direct and constrain their activities (Leicht and Fennell 2001), there is however, frequently a lack of specificity in national guidelines and National Service Frameworks which may allow negotiation over their implementation.

Strauss (1978, p5-6) describes the negotiated order of an organisation as "*the sum total of the organization's rules and policies, along with whatever agreements, understandings, pacts, contracts, and other working arrangements currently obtained*". In this way negotiation is an ongoing process which can result in re-constructions. The context in which negotiations take place including the number of negotiating parties, their relative power and the number and complexity of the issues involved, impact upon outcomes (Strauss, 1978).

1.7.4 Recognition of Specialisation

Abbott (1988, p. 59) acknowledges the need for external (social) recognition of jurisdictional claims: "*In claiming jurisdiction, a profession asks society to recognize its cognitive structure through exclusive rights; jurisdiction has not only a culture, but also a social structure.*" Further, Abbott (1988, p. 81) recognises the reciprocity between a profession and its work and links the macro-level claims of professions to individual professionals in the following manner: "*It is by their claims that groups identify themselves; to claim a jurisdiction is to claim it for someone*."

Dingwall (1983) also appears to imply the need for national recognition in order for a group to gain the status of an occupation. This need for public acceptance is also a theme in Hugman's (1991 p110) work, indeed the issue of "public image" is defined as the "*capacity that an occupation has to ground its claims for professionalism in the public acceptance of its knowledge and skills*". Membership of Foot in Diabetes UK, a national group of (predominantly podiatry) professionals who specialise in management of the diabetic foot, may be one means to gain such national recognition for diabetes specialist podiatrists. Young (2003a) considers that membership of this body will give diabetic foot practitioners a voice in the process of developing a specialist career structure, and that within the UK podiatry has not been afforded the status it deserves (Young 2003b).

1.7.5 The Professional Project

While Abbott (1988) terms the activities of professional groups in their attempts to advance their professional aspirations "professional projects", it was Larson's (1977) in-depth, historical study of professionalisation which gave rise to the concept of the professional project.

A professional project can be defined as an occupation's use of its resources to gain a secure and formalised position within the hierarchy of professions, attain financial rewards and social advancement (Larson 1977). Such activity is undertaken at many levels; collectively via an organisation, for example a professional association and individually through personal negotiation and interaction. Larson (1977) points to the use of material and ideological resources to advance the occupation's claims in their drive to establish a monopoly for their services within the market. Such resources include cognitive exclusiveness, which (echoing Jamous and Peloille 1970), Larson points out, features an element of indeterminate and untestable, tacit knowledge – further reinforcing individual autonomy (see also section 1.7.2 Unique knowledge and skills). Thus trust in individual professionals is solicited, in exchange for their knowledge and internalised ethical norms (Larson 1977). This appeal to ethical standards is necessary because advancing a profession relies upon the establishment of what Larson calls *"social credit",* in this way "*fears of professional abuse had to be overcome. For this, trust in the probity and ethicality of the professional practitioner had to be convincingly established…"* (Larson 1977, p56-57).

Institutionalised training, tested by entry examinations which are administered by peers, links the sale of professional labour to the educational system (Larson 1977) and the production of professional producers – usually within a university. Larson argues that more importantly than income, claims to legitimacy and respect are legitimised through superior education.

1.7.5.1 The professional project, Class and Politics

Larson relates the professions to the more general problems of intellectuals in a class society, asserting that objectively and subjectively professions are outside and above the working class. "*The market of labor* [sic] *and services within which professionals operate is structurally different from the labor* [sic] *market faced by less qualified workers*" (Larson 1977, pxvi). Larson (1977) argues that professionalism can be viewed as an expression of class consciousness where "*Self definition and self esteem has become increasingly based on occupation*" (Larson 1977, p154). As Macdonald (1995) points out, Larson's professional project embodies the Weberian notions of conflict and competition, professions constituting

interest groups vying for both economic advantage and social status, employing a strategy of social closure. Because Larson (1977) writes from a Marxist perspective it is perhaps unsurprising that issues of capitalism and class are also illuminated. Building upon the work of Freidson (1975) who connected the autonomy of a profession to the power of the state and the position of privilege which a profession is able to secure via the influence of the elite which sponsors it; the political nature of an occupation's professional project has been linked by Larson (1977) and MacDonald (1995) to the formation and nurturing of relationships with Freidson's strategic allies. In the case of podiatric diabetology this is manifest in the cultivation of links with medical doctors who have established power and authority in the field of diabetology – the importance of this relationship and influence formed a repeated theme within the accounts of the podiatric-clinician and Faculty of Management respondents.

While Dingwall (1983) acknowledges a possible role for class in the process of segmentalization, Larson (1977, xiii, xiv) highlights that an emphasis on cognitive and normative dimensions of profession

> "*tends to separate these special categories of the social division of labor [sic] from the class structure … emphasis on the professions' cognitive mastery and the implication of class neutrality place them, rather, in the stratum of educated and socially unattached intellectuals…".*

Gramsci does acknowledge the existence of an isolated group of "traditional" intellectuals no longer bound to the ruling class, but his general position is that intellectuals are organically tied to the class whose interests are upheld by their work; and building upon this he identifies a role for intellectuals in challenging the hegemonic power of the ruling class (Larson 1977).

1.8 Medical Dominance

Willis (2006) highlights state patronage and support as the basis for a "golden age" of medical dominance which existed between the 1930s and the 1970s. Western states being willing to leave health matters in the hands of the predominantly male, white, middle class group which formed the medical profession of the time. Indeed state support of medical doctors' dominance afforded them "*autonomy"* - control over the content of their own work, *"sovereignty"* - status as institutionalised

experts on all matters relating to health in the wider social arena and "*authority"* - control over the work of other healthcare professionals (Willis 2006, p422). Medical control over other healthcare professionals and specifically medical authority over the profession of podiatry will be the focus of the following section.

1.8.1 Foundations of Medical Dominance

Abbott (1988, p1) highlighted the importance of the traditional professions in society, they *"... heal our bodies, measure our profits and save our souls"* for which they are afforded high status.

1.8.1.1 Professionalism

Professionalisation – the process through which occupations advance their claims to professional status – has produced an expanded system of professions (Larson 1977). Within the healthcare division of labour, Freidson (1975) points to the control over their own work and control over other professions as illustrations of medical dominance:

> *"...medicine has come to dominate an elaborate division of labor* [sic], *and its jurisdiction is broad and far-ranging ..."* (Freidson 1975, p337).

The pre-eminent position of medicine within the hierarchy of healthcare professions is underpinned by the effects of occupational and institutional credentialing (Freidson 1988), thus a monopoly of practice and guaranteed demand for that practice are extant (see also sections 1.7.2.1 and 1.8.1.3).

1.8.1.2 Blending Knowledge and Mystery

The ability to produce, legitimise and disseminate new knowledge is for Freidson (1988) the means by which routinisation of professional expertise is avoided (see section 1.7.2.2). The knowledge base of a profession constitutes a resource which supports its claim to monopoly jurisdiction (Freidson 1975) and founded upon the acquisition of professional knowledge, educational credentialism is considered to be part of the exclusionary mechanism employed by status groups (Freidson 1988, Murphy 1988, Collins 1971). Thus the well-established, state sanctioned mechanisms for medicine to undertake production, legitimation and dissemination of knowledge serve to reinforce medical dominance. Jamous and Peloille (1970) also highlight the importance of indeterminate knowledge and consider that a

professions' autonomy is determined by the ratio of its indeterminate and technical knowledge.

> *"The I/T ratio expresses the possibility of transmitting, by means of apprenticeship, the mastery of intellectual or material instruments used to achieve a given result … the part played in the production process by "means" that can be mastered and communicated in the form of rules (T), in proportion to the "means" that … are attributed to the virtualities* [sic] *of producers (I)."* (Jamous and Peloille 1970, p112)

Such indeterminate knowledge forms part of medicine's craft mystery which unites the profession and allows it to derive power from the historic, charismatic role of the healer (Strong 1984).

1.8.1.3 Closure Theory

Derived from the Weberian perspective (Murphy 1988, Macdonald 1985), the social closure of professions is the basis for professional closure (Murphy 1988). Stratification by status and subordination of competitors allows dominant groups to close off opportunities to others, establishing and preserving a monopoly for the dominant group (Weber 1978). Larson (1977) stressed the importance of control over the market for professional services, the supply, demand and prices. In the most marked form of closure *"… opportunities for special employment grow into a legal monopoly…"* (Weber 1978, p935). Thus the ability of a professional group to constitute and manage a market for their expertise, the maintenance of which requires continuing dominance over allied and competing professions is central to maintaining closure (Larson 1977). The drive to develop and subsequently maintain such a monopoly in the market place for the skills of a particular profession involves the creation and subsequent defence of professional jurisdictional boundaries (Abbott 1988). The competitive environment is characterised by professions defending and seeking to extend their own boundaries. Subordinate professions seek to usurp or encroach upon the jurisdictions of other professions (Parkin 1979) – most frequently those perceived to be "above" them within the hierarchy, while dominant professions employ an exclusionary model of closure (Parkin 1979).

Larkin (1983) points to how medical dominance became entrenched in the British healthcare system with the inception of the NHS, taking on a formalised, institutionalised character. Health professions such as chiropody which enjoyed a degree of commercial and clinical autonomy were still subjected to the "*occupational imperialism*" of medicine (Larkin 1983, p155), which constrained the development of chiropody on its own terms, imposing tight restrictions and role boundaries in exchange for professional legitimacy and recognition (Larkin 1983).

1.8.1.4 Hegemony

Boothman (2008) points to early use of the word hegemony within the Marxist tradition as a synonym for political leadership. Later Gramsci developed the concept of cultural hegemony, which, writing predominantly in his prison diaries, he distinguishes from political hegemony (Boothman 2008, Anderson 1976). Anderson (1976) highlights the difficulties of censorship and atrocious prison conditions faced by Gramsci, which make his work particularly challenging to interpret with accuracy.

Cultural hegemony emphasises consent rather than coercion (Boothman 2008, Femia 1981, Anderson 1976), the use of force being linked to dictatorship rather than hegemony (Anderson 1976). Femia (1981) explains that while social control can be affected externally through reward and punishment, it can also be achieved internally *"by moulding personal convictions into a replica of prevailing norms"* (Femia 1981, p24). Thus maintenance of the status quo involves the dominant class or group developing a consensus culture (Ives 1988) where those subjected to domination identify their own best interest as being the same as that of the dominant group (Femia 1981). A hegemonic culture exists where a dominant class or group is able to exert social control, maintain social leadership and impose their ideologies (values and world view) (Boothman 2008, Ives 1988), which the dominated class or group accept because it is considered to be legitimate (Femia 1981) natural, normal and to represent common sense (Ives 1988).

1.8.2 Medical Dominance, Declining or Changing?

The dynamic nature of hierarchical relationships between the professions working in

health care is a common theme amongst authors who focus on this area. There is however disagreement regarding the drivers for change and whether medical dominance is a declining or changing phenomenon.

1.8.2.1 The Case for Declining Medical Dominance

Theories of declining medical dominance have been couched in various terms. Haug (1988) considers that deprofessionalisation, characterised by declining professional legitimacy and reduced monopoly over knowledge is the outcome of a more informed and less deferential public. Oppenheimer (1973) and McKinlay and Stoeckle (1988) describe a process of proletarianisation, where partly as a consequence of being employees rather than retaining self-employed status, medical doctors lose control over the location and content of their own work. In contrast to Freidson's (1994) interpretation, Coburn et al (1997) consider restratification as the means by which medical institutions are co-opted and used by external forces to constrain their own members. Under the influence of "*neo-liberalism"* Willis (2006, p424) cites an extension of anti-trade union strategies to the professional labour market - which tip the balance of power from labour towards capital - as the main driver for a general decline in medical dominance.

Coburn et al (1997) and Willis (2003) consider that medicine is a normal occupation, subject to the same processes of industrialization, bureaucratization, corporatization and rationalization as other occupations. The introduction into the NHS of general management in 1984 followed in 1991 by the introduction of the 'internal market' brought with them new organisational structures in which rank-and-file physicians became formally subordinate to managers (Harrison and Dowswell 2002). Indeed since the inception of general management in the NHS, health service managers, acting as agents of the state, have exerted bureaucratic control over medical doctors.

1.8.2.2 The Case for Changing Medical Dominance

Proletarianisation of the healthcare workforce is rejected by Freidson (1988, 1994) and Murphy (1990). Elston (1991) who points to extensive criticisms of a thesis of proletarianisation (poorly defined and supported by weak, ambiguous evidence) as applied to healthcare professions and specifically medicine, concludes that theories

of diminishing medical power are not satisfactorily developed or amenable to rigorous testing.

Though acknowledging that medical governance has changed Allsop (2006), Dent (2006), Sheaff et al (2003) and Freidson (1994) all point to increased diversity and reconfiguration as the means by which the medical profession is retaining authority in the face of significant challenges. Freidson (1994, pp9, 121, 144-6) asserts that medicine is undergoing "*restratification*" to emerge in a more hierarchical form; individual autonomy may be attenuated but the corporate autonomy and dominance of medicine remains intact. Sheaff et al (2003) consider that this restratification constitutes a form of subtle or "soft" governance of the English medical profession where general (lay) managers influence most doctors not directly but by proxy. The proxies are doctors - local professional leaders who act as a 'boundary' stratum, communicating managerial imperatives and priorities from lay managers to their fellow-professionals while attempting to conserve a degree of autonomy for their profession (Sheaff et al 2003), this interface role for a boundary stratum between lay managers and clinicians is widely applied within other health professions. At the national level the governing body for medical doctors - the General Medical Council (GMC) has adopted a more managerial stance in response to reduced patient confidence and state challenges (Allsop 2006, Dent 2006). Indeed the regulatory state in the UK has been a major influence in changing (but not removing) medical dominance (Allsop 2006, Dent 2006). Multiple health policy reforms have constrained medical autonomy; from the application of internal market principles in the early 1990s (Allsop 2006, Dent 2006, Harrison and Dowswell 2002), the drive for a primary-care led service - via the NHS plan 2000 (Allsop 2006) to the emphasis on performance management with its attendant targets, inspections and national clinical standards (Allsop 2006, Dent 2006, Harrison and Dowswell 2002) manifest within diabetology through the National Service Framework for diabetes and NICE guidelines. However a high value is still placed on medical knowledge and skills (Allsop 2006, Dent 2006) and doctors retain a unique bargaining position in matters of remuneration (Allsop 2006).

1.8.3 Podiatry and Medical Authority

The degree to which medical authority exerts a controlling influence over podiatry appears to have changed over time. Medicine's authority over podiatry has been challenged – with significant repercussions.

1.8.3.1 Governance

Securing statutory registration is a major professionalisation strategy employed by emerging occupations, an attempt to secure and maintain social closure (Macdonald 1985) which confers the state-legitimised right to practice in a given field (Willis 2006, Freidson 1994) and forms a representation of power and authority (Bucher and Strauss 1961). Indeed Macdonald (1985, p541) points out that *"Many occupations have seen registration as a keystone which would lock into position, once and for all, their often shaky structure of norms, practices, rights – and privileges."*

Historically the medical profession has exerted dominance in the area of health care by restricting the occupational territory of health professionals through medical membership of their registration bodies (Willis 2006, Freidson 1994). While the Health Professions Council (HPC) - the UK governing body for podiatry - has no medical representative on its council, the Health Professions Order 2001 requires that the HPC's Fitness to Practise Committees (Health, Investigating and Conduct and Competence) have at least one registered medical practitioner on each committee (HPC 2009a). Medical practitioners may also act as HPC "panel members", a panel being convened to decide on how a complaint against an HPC registrant should be dealt with (HPC 2009b). Thus while the authority of medicine over podiatric governance may be reduced, it is still extant.

1.8.3.2 Collaborative Healthcare Teams and Medical Dominance

Collaborative models in which health care is provided by multi-disciplinary teams have become established in Britain. Here podiatric specialisation in diabetes has become inextricably linked to working within an inter-disciplinary team (see 5.3.1 Drivers for specialisation in diabetes podiatry). Bourgeault and Mulvale (2006) highlight that while the boundary blurring effect of overlapping clinical roles in such teams should act as a curb on medical dominance; it is in fact having no effect, such is the "*structural embeddedness"* of medical dominance. Indeed Long et al (2006), point to how enculturated behaviours privilege and perpetuate medical dominance

within the multi-disciplinary team, working to suppress the voices of other specialist clinicians within the team: *"Medical dominance … works against multi-vocality in decision making within multidisciplinary clinical teams."* (Long et al 2006, p506). The comparatively high value placed upon medical doctor's time and the enhanced authority assigned to doctors in such areas as admission and prescribing rights continue to act as barriers to democracy within the multi-disciplinary team (Long et al 2006).

1.8.3.3 Podiatric Challenges to Medical Authority

The potency of medical authority over podiatry has been tested by the podiatric surgeons (see section 5.2 The establishment of podiatric surgery). Following their direct challenge to the sole rights of orthopaedic surgeons to undertake invasive foot surgery in the NHS and against the wishes of medical doctors, the Podiatry Association established podiatric surgery as a safe and effective competitor (Borthwick 1999, 2000). Health policy of the day played an important role. The Conservative government fundamentally opposed to monopolies (Webster 2002) and seeking a solution to long waiting lists was receptive to the arguments of the podiatric surgeons; who in affording accessibility, effectiveness and cost effectiveness in foot surgery met all the criteria set out in the Griffiths report. Such congruence may represent a manifestation of Weber's elective affinity (Howe 1978).

1.8.3.4 The Legacy of Challenging Medical Authority

As Borthwick (1999) pointed out, mounting such a direct challenge to medical authority guaranteed a hostile response (see section 5.2 The establishment of podiatric surgery). Within the UK a state of near enmity between some orthopaedic surgeons and podiatrists is now extant - as evidenced by the recent Times article by one eminent orthopaedic surgeon and the responses to it:

> *"Invariably, the right person* [to treat foot pain] *is an orthopaedic surgeon specialising in foot and ankle surgery, but people tend to think first of podiatrists and chiropodists (two names for the same profession). They don't have a medical background or the experience to look at the complexity of the foot in relationship to the rest of the body. That is fine if you want a corn removed, but they often don't get to the cause of the corn."* (Davies 2009)

This article drew a measured response from the Society of Chiropodists and Podiatrists:

> *"We read with some disappointment the article "Doctor, Doctor: foot pain that won't go away". It is misleading, at best, to suggest that chiropodists / podiatrists are not skilled in considering the cause of corns. Podiatrists (and chiropodists) undergo extensive training in the assessment, diagnosis and management of foot pathology and its relationship to systemic disease."* (Brown 2009).

However on an international podiatry website, the online responses of some podiatrists were more vociferous (though interestingly one podiatrist elects to use a pseudonym):

> *"Podiatric surgeons UK, seems your time is drawing to a close. Game over; they (FRCS) really* ***do*** *want their balls back, and I've no doubt they'll castrate you to get them, shame that we'll all get caught up in the process."* (Spooner 2009).

> *"Heaven forbid we go back to the bad old days of outrageously poor quality orthopaedic foot surgery without any other alternative for patients who require some degree of understanding of foot function to fix their problem...let alone letting the public think we don't understand what causes a corn!"* (Lucky Lisfrank 2009)

> *"Not surprised at all. I work as a Podiatrist in the NHS in the West of Scotland and occasionally* [sic] *have patients come back for replacement orthotics because they have been to see an ortho* [sic] *surgeon who has thrown thier* [sic] *orthotics in the bin because "they are useless".....then paitients* [sic] *pain returns as the don't have their orthotics and frantically call for an urgent appointment to get new ones!!!"* (Barrie 2009).

1.8.4 Conclusion

Medical authority over other health professions is still extant. However such dominance is not a fixed entity; it is open to challenge, subject to political, social and educational influences and appears to be less potent now than during the "*golden age of medical dominance*" described by Willis (2006, p442).

Diabetes podiatrists, unlike podiatric surgeons appear to be utilising the support and patronage of senior and well placed medical practitioners to increase their scope of practice and advance their claim to enhanced status within podiatry and the wider healthcare workforce (see section 4.2, 4.5, 4.7.2 and 4.9). Medical doctors in turn appear to be utilising diabetes podiatrists as a group willing and able to undertake tasks which medicine needs to shed (see sections 1.7.3.1 Implications of role stratification and 4.3 Change over time), but over which it prefers to retain some degree of control. Effectively both groups have a vested interest in the development

and legitimation of diabetes podiatry, guaranteeing the continued support of both parties. Should this convergence be disturbed however – for example through a challenge to the authority of medicine over diabetes podiatry – the situation may yet change.

1.9 Legal Implications of Specialisation

Freidson (1988 p104-105) states that *"the specialist or expert poses a serious problem to the law*" and that such occupations are "*held liable for negligence by a standard more strict than that applied to the actions of other, ordinary people*". However determination of the higher standard required from specialists "*must rely in a large part on testimony from members of that specialized occupation itself*" (Freidson 1988, p 106), a principle applied under British law using the Bolam Test (Montgomery 2003, Jones 2000). Smith (1998) highlights the words of Caroline Elliott (registered nurse and barrister at law) "*if you describe yourself as a specialist, the expectations of employers and patients are higher and the law demands higher standards of care from you*". Further, Elliott advises that the law expects specialists to be up to date and that if a practitioner acts like a doctor, they will be judged like one in law. In discussing malpractice litigation (where a patient alleges that they were improperly treated), Montgomery (2003) highlights the different standards of care considered acceptable for general practitioners as opposed to specialists: failure to make an accurate diagnosis by the former may not be negligent, while the same error by the latter in the same patient would be unacceptable. Members of specialist units will also be expected to display greater skills than someone in an equivalent post in a general setting (Montgomery 2003). The standard of care follows from the category of skills that the practitioner professes and also the position held by the professional (Montgomery 2003). In this way by including "specialist" within their title, by asserting specialty in the area of diabetic foot disease, by accepting a post as a diabetes specialist podiatrist, or a post within a specialist diabetes foot care team, the practitioners' standards of care and level of expertise (within the specialty) considered legally acceptable become higher than those expected of the generalist (or community) podiatrist. Thus, under the law podiatrists can be held to account for their specialist roles, titles and posts.

1.9.1 The Law, Specialist Resources and Commissioning of Specialist Services

Within diabetes foot care the need for urgent intervention and follow-up of high-risk cases is accepted as normal working practice (Larson et al 2008, Bending and Foster 2004, Holstein et al 2000, Mayfield et al 1998, Edmonds et al 1986) with risk assessment and screening to facilitate early identification of problems clearly highlighted in the guidelines (National Institute for Health and Clinical Effectiveness 2004, Scottish Intercollegiate Guidelines Network 2002). However even in locations where a foot service has existed for many years, there can be a lack of formal planning in service growth and development (Burden 1999). It is noted that "high risk" foot care services are resource hungry in terms of human and financial costs (McGill et al 2003), presenting significant challenges to clinicians seeking to provide services. Holland et al (2002) reported that additional resources were not forthcoming to enable practitioners to provide an adequate service, citing reluctance within primary care to cover the cost of the monofilaments required in performing baseline foot assessments. Montgomery (2003) notes that arguments concerning negligence due to inadequate resources may become an increasingly important issue, as NHS purchasers make decisions concerning the levels of resources they are prepared to commit to services, restricting the ability of providers to choose the models of care they wish to offer. The courts have however remained unwilling to become involved in debates over resources in the context of access to care (Montgomery 2003). Commissioning of generalist as opposed to specialist services may offer a provider the opportunity to argue that limited resources lowered the standard of care and made the standards of a specialised unit unattainable (Montgomery 2003), meaning that the terms under which care is commissioned (generalist or specialist) has a significant effect upon fixing the standards of care.

1.9.2 The Law and Community Based Diabetes Specialist Podiatry.

Advanced podiatrists working in the community care for a predominantly medium to high risk diabetic population (Holland et al 2002). The dangers of high-risk diabetic patients being treated in isolation by community podiatrists, who are then frequently blamed for causing amputations, are highlighted by Bending and Foster (2004). These authors consider that additional training in management of the diabetic foot, contact with the local multidisciplinary diabetes foot clinic, identification of at risk patients, improved practitioner–client communication (acknowledging the

"understanding gap" and with verbal communication supplemented by easily understood written information), and improved practitioner–GP communication to be the major ways in which litigation may be reduced. Additionally Bending and Foster (2004) highlight that community podiatrists should not "hold on to" any diabetic patient with a foot ulcer for too long, citing the evidence–based guidelines for management of patients with type 2 diabetes which specify that patients with a new ulcer, discolouration or pain in a foot should be referred to a specialist team within 24 hours. Such guidelines form what is known as quasi-law (Montgomery 2003) and while not strictly legally binding may have some legal force, in practice they determine the way in which people should act. Improved record keeping with use of photographs for medico-legal purposes is also suggested by Bending and Foster (2004).

1.9.3 The Law and Diabetes Specialist Podiatrists Working in Multi-Disciplinary Teams

McInnes (2004) highlights that compliance with the NICE guideline 10 "*care of people with foot ulcers*" section 1.1.6 (which represents a form of quasi-law [Montgomery 2003]) is dependent upon the existence of a recognised multidisciplinary foot care team. As Young (2003) points out [medical] consultants are still considered to be the leaders of these diabetes teams. While consultants take overall responsibility for patients' medical care, their liability under the law extends only to their own roles, actions and mistakes, and for ensuring adequate communication; English courts having rejected the "*captain of the ship*" doctrine (Montgomery 2003). Thus membership of a multi-disciplinary team, even when led by a consultant diabetologist provides no protection for diabetes specialist podiatrists, who remain solely responsible for their own actions. Indeed it could be argued that membership of a mixed profession team increases the responsibility of each team member. Professionals are entitled to rely upon the expertise of their colleagues only where they believe the colleagues' decisions and instructions regarding patient care to be correct (Montgomery 2003), conferring a quasi-monitoring role on team members. Even where professionals have separate, if sometimes overlapping roles, they must challenge the decision of another member of the team if this decision appears to be wrong, and must not follow instructions which are "manifestly wrong" (Montgomery 2003). It is recognised by the courts that

junior staff may meet the standards required of them by acknowledging their inexperience, asking an experienced practitioner to check what they have done, and that inexperienced practitioners may rely upon the clinical judgement of senior colleagues, even where they suspect this to be wrong (Montgomery 2003) – clearly neither scenario would provide protection for a practitioner claiming specialist status.

1.10 Charismatic Authority

Max Weber, one of the founding theorists of the discipline of sociology, devised an explanatory conceptual framework to aid the understanding of social action in individuals and organisations. Within this framework he considered three forms of authority to be extant. The centrality of Weber's concept of charismatic authority to the development and contemporary face of specialist practice is illustrated by the data; illuminating the way in which a defined specialty was created and disseminated, in the absence of codified or credentialed authority. Thus it represents a guiding theoretical concept within the author's thesis.

1.10.1 The Concept of Charisma and its Early Origins

Smith (1998) points to the earliest origins of the notion of charisma, which he asserts began with the apostle Paul who was said to be "*blessed with one of the many gifts of the Holy Spirit, the so-called charismata*". Corinthians 1, chapter 12 lists the number and variety of these spiritual gifts or "charismata", which is a distinctively Pauline term (Warfield 2001). The establishment of the concept of charisma as a form of authority, is attributed to Rudolf Sohm published in his Kirchenrecht of 1892 (Smith 1998, Weber 1978, Weber 1968). For the Lutheran Sohm charisma remained a spiritual fact, literally a "*gift of grace*" charis from the Greek, meaning grace, while the suffix ma meaning given (Smith 1998).

From these early theological roots, Weber (1978) developed the concept of charisma further - though still retaining Sohm's religious language. Weber perceived explanations relying on single, overarching forces such as Adam Smith's laws of the market and Karl Marx's class conflict as the out-dated residue of antiquated world-views, permeated by religious and quasi-religious ideas (Kalberg 2003). For Weber interpretive understanding of the actions and beliefs of people and multicausal

modes of explanation were the key to understanding society (Scaff 2008, Kalberg 2005). For Weber therefore charisma was not a divine God-given gift (Shils 1965), as careful reading of his definition reveals.

1.10.2 Authority

Some confusion exists regarding the Weberian notion "*Herrshcaft*" which has been translated as both "authority" and "domination". This derives from the ambiguous nature of "Herrschaft" – which as Kalberg (2005) notes, implies an element of force and domination, combined with legitimacy, but for which no exact English translation exists. In English texts it has in the main been translated as "authority" and this is the term used by this author.

For Weber authority implies the probability that a defined group of individuals (as a result of a variety of motives) will orientate their social action towards giving directives or commands and that another definable group will orientate their social action towards obedience (Kalberg 2005). Weber developed a tripartite classification of authority (table 16.), the legitimacy of claims to authority based on traditional, rational-legal or charismatic grounds.

Table 16. Weber's three pure types of authority.

Rational grounds – resting on a belief in the legality of enacted rules and the right of those elevated to authority under such rules to issue commands (legal authority).
Traditional grounds – resting on an established belief in the sanctity of immemorial traditions and the legitimacy of those exercising authority under them (traditional authority)
Charismatic grounds – resting on devotion to the exceptional sanctity, heroism or exemplary character of an individual person, and of the normative patterns of order revealed or ordained by him (charismatic authority).

From Weber, M. (1978) *Economy and Society*, Berkeley, University of California Press, p215.

In the absence of any formalised, accredited educational preparation for specialisation in diabetes podiatry or an established career pathway - the authority legitimating specialised podiatry practice in diabetes is unlikely to be either legal or traditional.

1.10.3 Charismatic Authority

Weber defined charisma as:

> *"a certain quality of an individual personality, by virtue of which he is set apart from ordinary men and treated as endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities. These are such as are not accessible to the ordinary person, but are regarded as of divine origin or as exemplary, and on the basis of them the individual concerned is treated as a leader"* (Weber 1968, p46).

Charismatic authority is not bound or supported by legal codes and statutes (Weber 1968). Assertions made by the leader and directions issued by him are accepted and followed, not because they are necessarily perceived as being correct or legal (rational) or adhere to what has always been done (traditional), but because the assertion or direction is made or issued by the leader and is imbued with the leader's authority.

For Weber the charismatic leader represents a revolutionary force (Weber 1968), able to inspire others, lead change and surge through existing rules (Giddens 1971). A reciprocal relationship exists between leader and the led, the former able to motivate and lead - the latter in giving or withholding recognition of the leader able to bestow or withhold legitimacy:

> *"It is recognition on the part of those subject to authority which is decisive for the validity of charisma."* (Weber 1968, p49)

> *"…the basis of every authority, and correspondingly every kind of willingness to obey, is a belief, a belief by virtue of which persons exercising authority are lent prestige"* (Weber 1978, p263).

Indeed Weber (1968) points out that the charismatic's claim breaks down if his mission is not recognised by those to whom he feels he has been sent – he is only their "master" if they recognise him:

> "*The only basis of legitimacy for it* [charismatic authority] *is personal charisma, so long as it is proved …"* (Weber 1968, p52)

For Weber then charisma is a form of authority bestowed upon those who are perceived to have exceptional powers and qualities (Smith 1998, Steyrer 1998, Weber 1968, Shils 1965), a social force (Smith 1998) rather than a divine gift. Weber insists that much more than power ("*the likelihood that one person in a social relationship will be able, even despite resistance, to carry out his own will*")

is involved in establishing legitimate authority, for this relies upon the belief that the authority is justified (Giddens 1971, Kalberg 2005).

For the followers or "disciples" motives for compliance can be diverse, ranging from habit to a purely rational calculation of advantage:

> *"Hence every genuine form of domination implies a minimum of voluntary compliance, that is an interest (based on ulterior motives or genuine acceptance) in obedience."* (Weber 1978, p212).

> *"Under certain circumstances, the charismatic chief can be different from the traditional one."* (Weber 1978, p263)

> *"…entirely pure charismatic authority, including the hereditary charismatic type, etc., is rare"* (Weber 1978, p263)

A reciprocal influence between context and charismatic qualities has been described by scholars who focus on Weber's work. Eisenstadt (1968) stresses that different institutional spheres and social settings require differing charismatic qualities to address problems and situations which arise within them; while Kalberg (2005) considers that even charismatic leaders who move history by the sheer force of their personalities do so in Weber's interpretive sociology only if supported by facilitating contexts. In the development of diabetes podiatry, incorporation into the multi-disciplinary team and medical patronage, combined with current health policy and the aspirations of diabetes podiatrists may represent such facilitating contexts. Howe (1978) also discusses Weber's chosen, elective affinities or "wahlverwandtschaft" where congruence exists in the desired outcomes of different parties or institutions, who in the pursuit of such outcomes form what is essentially a concordance of convenience.

1.10.4 Dissemination and Discipleship

Throughout his discussion of charisma, Weber emphasises the existence of the charismatic group or band (Eisenstadt 1968). In considering these followers of charismatic leaders, Weber continued the use of theological language and imagery:

> "[Following the charismatic leader] *glorified the loyal worker who did not seek acquisition, but lived according to the apostolic model, and was thus endowed with the charisma of the disciple"* (Weber 2001).

Where a corporate group is subject to charismatic authority Weber (1968) highlighted the existence of an underpinning communal relationship ("*Gemeinde*"); members of the corporate group being chosen on the basis of their charismatic qualities. Shils (1965) points to the dispersed (though unequal) nature of charismatic authority throughout the hierarchy of roles within such groups and to the existence of attenuated forms of charisma in a number of individuals.
In discussing charisma in relation to crowd psychology Lindholm (1992) points to the infectious nature of the charismatic's enhanced emotionality and vitality which is communicated to the audience. Professional conferences, teaching opportunities and team meetings may represent such an opportunity for diabetes podiatrists to disseminate ideas and practices and recruit "disciples".

1.10.5 Fragility of Charismatic Forms of Authority

Because charismatic authority rests almost entirely on the leader it is idiosyncratic and often without formal organisation (Weber 1968). The only source of legitimacy for charismatic authority derives from personal strength which is constantly being proved (Weber 1968). This means that the perceived legitimacy upon which charismatic authority rests can be damaged by loss of the leader's charisma, absence of the leader for any reason or weakening of loyalty in the followers. Thus charismatic authority tends to be a particularly unstable form of authority (Weber 1978).

1.10.6 Succession

On departure of the charismatic leader a replacement is required if an organisation based on charismatic authority is to continue (Ritzer and Douglas 2004, Eisenstadt 1968). Giddens (1971) points to how successors can be hereditary or appointed. Successors can be designated by the existing charismatic leader, or appointed by their disciples who share their charisma; or where charisma is viewed to be hereditary an heir will take up leadership (Weber 1968).

1.10.7 Routinisation

Routinisation is required in order to achieve permanence. In order to form any sort of stable community of disciplines or band of followers or any sort of organisation it is necessary for the character of charismatic authority to become radically changed.

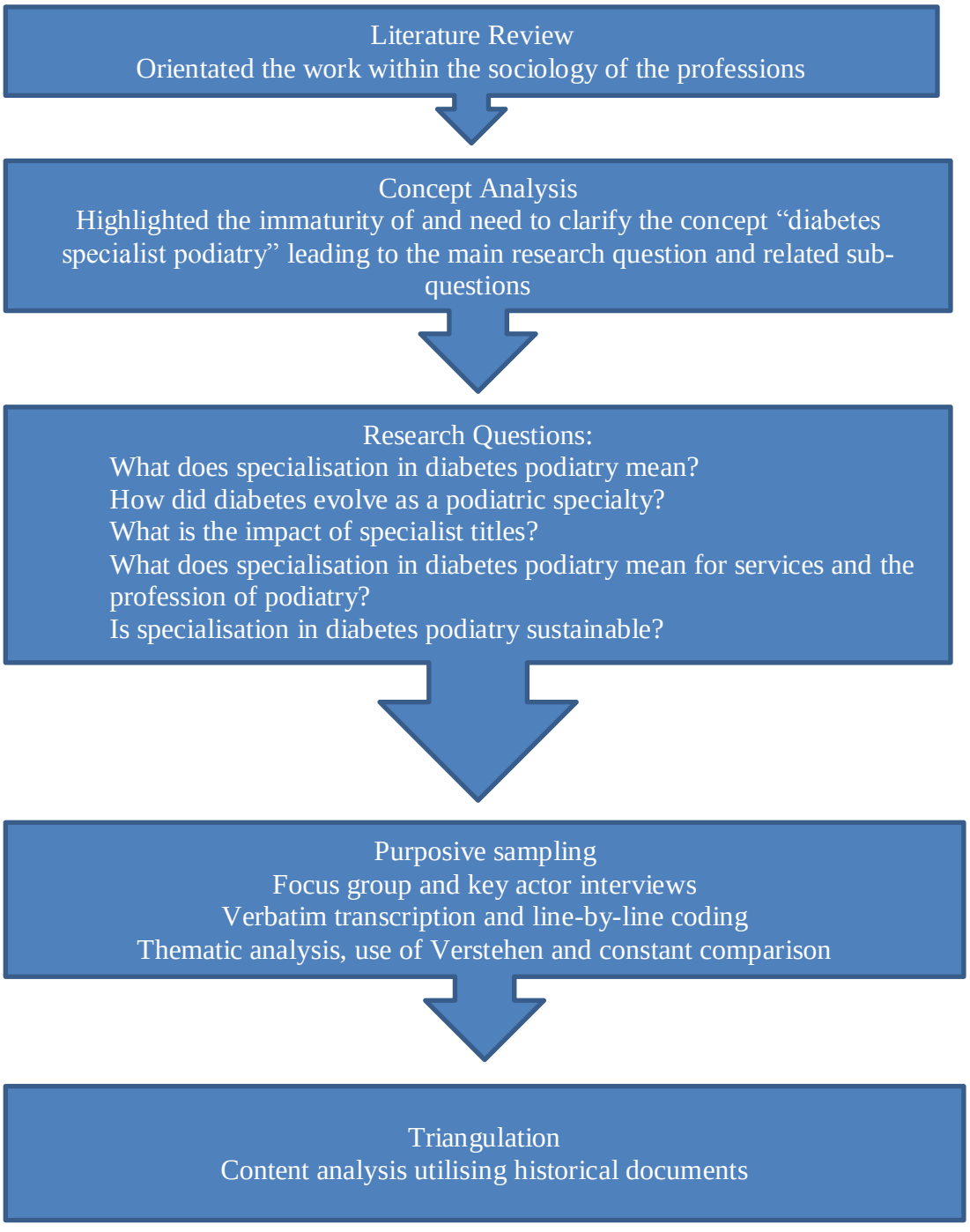
This is achieved through the process of routinisation - becoming either traditionalised or rationalised (Weber 1968). Once routinisation is underway, charismatic authority is en-route to becoming either rational-legal (rationalised) or traditional (traditionalised) (Ritzer and Douglas 2004).

Giddens (1971) points to how routinisation requires that administrative activity be placed on a regular basis; achieved through the formation of either traditional norms or legal rules. The process of routinisation of charisma may differ greatly among different institutional settings (Eisenstadt 1968). The type of authority relationship which emerges during routinisation depends largely on how the problem of succession is resolved (Giddens 1971). If either hereditary or appointed leaders succeed a traditional status group is formed (Weber 1968). Where leadership becomes linked to qualifications, a rational-legal type of authority tends to emerge (Weber 1968), featuring salaried positions as part of the organisational economic arrangements (Giddens 1971). Weber (1968) highlights the economic implications of routinisation, for charisma to be changed into a permanent routine structure it is necessary that its anti-economic character is altered. Indeed, in the long term the majority of "disciples" will make their living out of their calling (Weber 1968). Allied to this disciples may set up norms for recruitment involving training or tests or eligibility. However Weber (1968) maintains that charisma itself cannot be learned or taught, only awakened or tested. It is only where charismatic authority becomes transmuted into routine or traditional authority and is thus no longer a personal force that it can be regarded as something that can be taught, learned and linked to a process of education (Giddens 1971).

Charismatic authority which has evolved in the context of boundaries set by traditional or rational-legal authority tends to challenge the traditional and rational-legal forms of authority. However, the constant challenge that charismatic authority presents to a particular society will eventually subside as it becomes routinised and is incorporated into that society.

2.0 METHODOLOGY

Fig. 1. Methodological Overview



2.1 Philosophy

Philosophical views are inextricably bound to the research process. A basic belief system or worldview known as a paradigm (Patton 2005, Guba and Lincoln 1994),

guides the researcher not only in choices of method, but in ontologically and epistemologically fundamental ways (Guba and Lincoln 1994). Three key, interconnected questions (summarised below) are highlighted by Guba and Lincoln (1994)

1. The ontological question – what is the form and nature of reality and, therefore what can be known about it?
2. The epistemological question – what is the nature of the relationship between the researcher and what can be known?
3. The methodological question – how can the researcher discover what they believe can be known?

2.2 Concepts

Strauss and Corbin (1998, p101) state concisely that concepts are considered to be "*the building blocks of theory*", while Polit and Beck bring to our attention the less formal "*conceptual model*" (framework or scheme) which is a way of organising phenomena (Polit and Beck 2004, p115). A conceptual model is formed by interrelated concepts or abstractions assembled together in a rational scheme by virtue of their relevance to a common theme (Polit and Beck 2004).

2.2.1 Analysing Concepts – the Philosophical Background

Defining concepts as "*labelled phenomena*" Strauss and Corbin assert that "*science could not exist without concepts*" (Strauss and Corbin 1998, p102, 103). In the act of naming phenomena, attention is fixed upon them; and in facilitating the formation of hypotheses and propositions, concepts suggest how phenomena may be related to one another (Strauss and Corbin 1998). This link between science and concepts has been expressed by several philosophers:

Kant asserted that a priori concepts (pure concepts or categories) were the means by which the objects of experience are ordered (Janaway 1989) and a posteriori concepts the product of experience (Janaway 1989). For Kant empirical knowledge requires both intuition and concepts (Janaway 1989).

Mill (1846, p383) pointed to the role of "*general concepts*" (ideas or mental conceptions) in the process of induction in what he called "*operations subsidiary to induction*", stating that "*induction could not go on without general conceptions*" (Mill 1846, p390). Schopenhauer considered reason to be the capacity to operate with concepts (Janaway 1989, p51) which he termed "*abstract representations*" (Janaway 1989, p135).

Many diverse philosophical accounts attempt to explain the nature of concepts. Common to these philosophies is that concepts are bearers of meaning rather than agents of meaning. In this way a concept is independent of language and can be translated. Translation is possible because the words (or agents of meaning) used in other languages express the same concept (for example the concepts "clinician" or "hope" are not unique to English). Rodgers (2000, p11) points to the way in which the philosophical foundations of concept analysis and development can be divided into two broad perspectives, the entity and dispositional theories of concepts. Entity theories of concepts are characterised by a view of concepts as specific things, considering each manifestation of the concept in the same way and thus failing to account for differences within concepts; while dispositional theories present concepts as habits or capabilities for certain behaviours (Rodgers 2000, p11).

2.3 Concept Analysis (clarification, development)

Polit and Beck (2004, p31) point to the inadequacy of dictionary definitions in explaining concepts, which they consider to be "*abstractions of observable phenomena*". They consider that a conceptual definition presents the abstract or theoretical meaning of the concepts being studied. These conceptual definitions are based on theoretical formulations, on a firm understanding of the relevant literature, or on researchers' clinical experience – or a combination of these (Polit and Beck 2004).

Techniques employed in concept analysis have changed over time. There is now considerable variation in methods and rationale; at the time of writing several models of concept analysis and concept development are extant. Beginning with the earliest documented model, the following sections explore the origins, methods, perspectives, emphasis, critiques and use of the different models.

2.3.1 The Origins of Concept Analysis

The practice of concept analysis is widely attributed to John Wilson. However Wilson makes clear reference to the existence of concept analysis before his 1963 text, highlighting that the techniques employed in concept analysis are derived from the "*Linguistic Philosophy*" practiced at Oxford and Cambridge (and other British and American universities) in the thirty or so years preceding his 1963 book. Wilson (1963) describes "*the analysis of concepts*" as a specialised technique designed to handle and clarify concepts. He asserts that conceptual analysis is a specialised subject in its own right, with its own techniques and that questions involving abstract concepts, cannot be tackled without these techniques "*in any but the most feeble and confused manner*". He considers that conceptual questions tend to be about meaning and as such are inextricably linked to context (Wilson 1963). Conceptual analysis involves the significance of words (Wilson 1963,), the richness of use and meaning (Wilson 1963) and is a sophisticated form of communication (Wilson 1963); it is important to distinguish between the primary and central uses of a concept and derived or borderline uses (Wilson 1963). Use and understanding of language act both as guides to forming concepts and as tests of concepts when formed (Wilson 1963), the best possible guide being the logical range of the word with which the concept is normally associated, seeking the justification for the uses of such a word is in fact analysis of the concept to which it pertains. Wilson (1963) highlights the use of model cases in identifying the "essential features" of a concept, the use of contrary cases to evaluate the circumstances which impact upon the concept (Wilson 1963), the use of related cases to identify and illuminate relationships between concepts and the use of borderline cases, which by identifying what is odd about the borderline case clarifies what the central criteria of the case really are (Wilson 1963). Wilson's use of invented cases (Wilson 1963) has however been heavily criticised by Weaver (2005) who points out building knowledge through the use of fabricated cases (particularly where an extensive volume of literature describing a concept is available) may be harmful.

2.3.2 Development, Change Over Time and Models of Concept Analysis

As an analytical method concept analysis has not been static. Differing underpinning philosophical perspectives have prompted a range of techniques. Some techniques

have been criticised for being procedural, lacking engagement with a true analytical process. Morse (2000) acknowledges that systematic approaches to concept analysis do little justice to the depth of inquiry or the cognitive processes involved, instead her model of concept analysis suggests guiding principles, to be used with thoughtfulness and if necessary added to or deviated from. The following section traces the development of concept analysis, exploring the various models.

2.3.2.1 Norris

Norris (1982) developed a model of concept clarification (table 17.) in an attempt to assign meaningful definitions to many of the phenomena occurring in nursing. Norris (1982, p11) considered that concept clarification should be done within the framework of exploratory and descriptive research, which is hypothesis and theory generating, in contrast to deductive research, which tests hypotheses and theories. Defining concepts as "*abstractions of concrete events*" and "*ways of perceiving phenomena*", Norris (like Chinn and Kramer 1995) highlights the different degrees of abstractness presented by different concepts.

Table 17. Norris' (1982) model of concept clarification

1. After identifying the concept of interest, observe and describe the phenomenon repeatedly and if possible, describe the phenomenon from the point of view of other disciplines. 2. Systematise the observations and descriptions. 3. Derive an operational definition of the concept under study. 4. Produce a model of the concept that includes all its component parts. 5. Formulate hypotheses.

Derived from: Norris, C.M. (1982) Concept clarification: an overview. In Norris, C.M. (Ed.) Concept Clarification in Nursing, Aspen, Rockville, pp. 11–19.

2.3.2.2 Chinn and Jacobs

Chinn and Jacobs first described their approach to concept analysis (table 18.) in 1983 (Knafl and Deatrick 2000).

Table 18. Chinn and Jacobs' (1983) model of concept clarification

1. Identify concept 2. Specify aims 3. Examine definitions 4. Construct cases 5. Test cases 6. Formulate criteria

From Knafl, K.A. and Deatrick, J.A. (2000) Knowledge Synthesis and Concept Development in Nursing. In Rodgers, B.L. and Knafl, K.A. (Eds.), Concept Development in Nursing Saunders, Philadelphia, p44.

Based upon Wilson's work, this model – later refined and updated by Chinn and Kramer (1995) – also relies upon the development of cases – model, contrary, related and borderline (Chinn and Kramer 1995). These cases and information from a selective review of the literature are used to identify the "*defining criteria*" of the concept (Chinn and Kramer 1995, p88-90).

2.3.2.3 Chinn and Kramer

Additional sources of information were acknowledged as important and enriching in Chinn and Kramer's fourth (1995) edition, including visual images, popular and classical literature, music and poetry, professional literature and people. This revised model (table 19.) also acknowledged the importance of context and took the perspective that concepts do not exist as an "*out there reality*" but are "*formed from experience*" (Chinn and Kramer 1995, p78).

Table 19. Chinn and Kramer's (1995) model of concept clarification

1. Select concept 2. Clarify purpose 3. Identify sources of evidence 4. Explore contexts and values 5. Formulate criteria

Summarised from Chinn, P.L. and Kramer, M.K. (1995) *Theory and Nursing a systematic approach*, Mosby, St Louis, Missouri, p81-89.

In considering the nature of concepts Chinn and Kramer (1995) argue that all concepts lie along a continuum from the empiric (more directly experienced) to the abstract (more mentally constructed). Defining a concept as "*a complex mental*

formulation of experience" Chinn and Kramer (1995, p58-60) go on to illustrate how directly observable concepts (such as gender, height and weight) can be observed or measured using standardised instruments, but that evaluating any concept becomes more complex as one moves along the continuum towards the relatively abstract. Cardio-vascular fitness is given as an example of a "*mid range*" concept, there being no object such as cardio-vascular fitness, however it is "*indirectly observable*" as several empiric indicators can be used to aid its definition. Understanding highly abstract concepts (sometimes called constructs) such as wellness or self-esteem is in Chinn and Kramer's (1995) view "*inferred from multiple direct and indirect observations*".

2.3.2.4 Walker and Avant

Walker and Avant's (1988) model of concept analysis describes six stages (table 20.)

Table 20. Walker and Avant's (1988) model of concept analysis

1. Identification of how the concept is used
2. Determination of defining attributes
3. Construction of a model case, illustrating all defining attributes
4. Development of additional cases describing the concept in different ways
5. Identification of antecedents and consequences
6. Definition of empirical referents

From Walker, L.O. and Avant, K.C. (1988) *Strategies for Theory Construction in Nursing*, Norwalk, CT. Appleton & Lange.

That concept analysis has been linked only to the Walker and Avant method (Weaver 2005) and overuse of this method in nursing research (Rew 2005) have been highlighted. Rew (2005) considers that this model represents a failure to move beyond the analysis stage to the developing and testing of theory in nursing research, while Weaver (2005) points to "*the threat to study validity and comprehensiveness resulting from using simplified critical inquiry processes and obviously invented cases*". Despite these criticisms and further cautionary arguments offered by Rodgers this model prompted a number of "*conceptual clarifications*" relating to nursing (Paley 1996).

2.3.2.5 Rodgers

Rodger's (1993b) evolutionary model, describes eight stages of investigation in concept analysis (table 21.). The focus of this model is clarification of the current use of a concept, within the context where it is used. The model acknowledges that concepts change (evolve) over time, are not static entities (Rodgers 1993b) and suggests a cyclical pattern to the development of concepts comprising of significance, use and application (Rodgers 1993b). Significance relates to how concepts assist in solving practical problems in the empirical world. Use refers to the attributes of a concept and how concepts are commonly expressed. Application refers to the scope, strengths and limitations of concepts in specific contexts. These phases are not sequential and may overlap. The evolutionary approach focuses upon the use phase of the cycle. Rogers is critical of essentialist approaches to concept analysis, asserting that concepts are dynamic, "*fuzzy*" rather than "*crystal clear*" and possessing "*pragmatic utility*" rather than an inherent "*truth*" (Rodgers 1993, p73). This notion of "*pragmatic utility*" has been developed further by Morse.

Rodgers argues that concepts are formed by the identification of characteristics common to a class of objects or phenomena and the abstraction and clustering of these characteristics, along with some means of expression (usually a word). Extending upon this Rodgers argues that when the attributes which comprise a concept are unclear, the ability to communicate and categorise phenomena are severely limited and that identification of these attributes (thereby defining the concept) will allow more effective use of the concept (Rodgers 1993). By considering the antecedents, attributes and consequences of concepts, as well as changes over time and within context, Rodgers (2000) argues that the non-linear and inductive approach of her method offers greater analytic rigour than sequential methods such as those of Walker and Avant, or Wilson. Further she proposes that attention to context and changes over time facilitates appreciation of the dynamic and changing nature of concepts, where other models are bound to philosophical perspectives which view concepts as static, unchanging entities.

Table 21. Stages in Rogers' (1993) model of conceptual analysis

1. Identify the concept of interest and associated expressions. 2. Identify and select an appropriate realm (setting an example) for data collection 3. Collect data regarding the attributes of the concept, along with surrogate terms, references, antecedents and consequences. 4. Identify concepts related to the concept of interest. 5. Analyse data regarding the above characteristics of the concept. 6. Conduct interdisciplinary or temporal comparisons, or both if desired. 7. Identify a model case of the concept, if appropriate. 8. Identify hypotheses and implications for further development.

From Rodgers B. (1993) Concept analysis: an evolutionary view. In Rodgers, B. and Knafl, K.A. (Eds.), *Concept Development in Nursing*. Saunders, Philadelphia, p78.

Rogers (1993) is prescriptive about how data is collected for the literature review, suggesting that a randomly selected sample of 30 articles or 20% of the total (literature) population are necessary for an adequate review, with a minimum time span of 3 years. Rodgers (1993) asserts that such a sampling strategy shows rigour in its selection, displays a strong rationale for all decisions, obtains effective representation of the literature and diminishes researcher bias. This researcher questions this overtly inflexible and quantitative selection process, which may lead to important data being missed and the selection of less significant literature for review. Regarding literature, Rodgers has also been criticised for not citing her data sources in published papers (Paley 1996). In reviewing the literature Rogers (1993) acknowledges that her approach resembles other models of concept analysis in that the researcher should seek to identify data relevant to the attributes, antecedents, consequences, surrogate terms and related concepts along with the references of the concept.

2.3.2.6 Morse

Morse's model of concept analysis has been used in nursing to develop practice and curriculum maturity matrices to identify strategies for curriculum and/or practice development (Latter et al 2000). Morse (2000) advances an approach which goes beyond the identification of a concept's linguistic characteristics; her method (table 22.) is one of exploring the "*pragmatic utility*" of a concept, thereby contributing to

understanding the function of the concept and its "*applicability*" to the world (Morse 2000, p 333). While determining this pragmatic utility involves critically appraising the literature, Morse points to the way in which the focus of this process is the exploration and development of the concepts and their usefulness to science (Morse 2000). In examining various conceptualisations of the concept (overt or covert) and ways the concept is being used by other researchers in models and theories, examining pragmatic utility provides information about implicit and explicit assumptions and contributes to the evaluation of the logical coherence of the concept. Exploring pragmatic utility thus differs from other forms of literature review in that "*it is a process of active enquiry, using the literature as data*" (Morse 2000, p333).

Table 22. Morse's principles of assessing pragmatic utility

1. **Be clear about the purpose of the enquiry**. Delimit the concept to be explored, identify allied concepts and converse concepts – these are used to guide the literature search.
2. **Ensure validity** by searching all relevant sources of information (e.g. databases) in an attempt to avoid disciplinary bias in the gathering of literature. In reading the literature pay attention to definitions and attributes of the concept, any assumptions made about it and to the research question of studies.
3. **Identify significant analytical questions**. Highlight definitions and variables which are indicators of the concept's attributes or characteristics. Record assumptions made or inferred from the research question, research focus and content of the paper.
   Refine the research question. Consider if consensus about the definition of the concept exists, whether definitions vary or are omitted in the literature, whether the concept is used in the same way and used consistently by different disciplines and studies. The research question may arise from the need to clarify the concept, to compare and contrast disciplinary perspectives, to contrast competing concepts, to identify conceptual gaps or boundaries or to identify conceptual adequacy.
4. **Synthesise results.** Use of a data matrix with analytical questions and dimensions forming the criteria for the axes is suggested as a means to organise the results of the concept analysis and to provide an overview of the concept.

Summarised from Morse, J.M. (2000) Exploring Pragmatic Utility: Concept Analysis by Critically Appraising the Literature. In Rodgers, B.L. and Knafl, K.A. (Eds.), *Concept Development in Nursing*, Saunders, Philadelphia, pp333-352.

In presenting these guidelines Morse (2000) emphasises that systematic approaches to concept analysis do little justice to the depth of inquiry or the cognitive processes involved. She clearly states that what she has set out form guiding principles, to be used with thoughtfulness and if necessary added to or deviated from.

2.3.4 Concept analysis - Summary

In tracing the origins of concept analysis and the changes over time manifest in the different models one can discern the move from Wilson's focus on "*linguistic philosophy*" to acknowledgement of the link between meaning and context, through recognition that concepts are not static, well defined entities and the associated questioning of essentialist perspectives, and thence to the further development of the notion of "*pragmatic utility*". Thus an approach no longer bound completely to linguistic characteristics but more allied to and informed by analytical philosophy has emerged (see also section 3.3).

2.4 Sampling Strategy

Patton (1990) identifies and describes 16 types of purposeful sampling. These include: extreme or deviant case sampling; typical case sampling; maximum variation sampling; snowball or chain sampling; confirming or disconfirming case sampling; politically important case sampling and convenience sampling.

2.4.1 Purposive, Criterion based Sampling

A strategy where members of a sample are chosen with a purpose in relation to key criteria (Patton 1990), because they have particular features or characteristics which facilitate detailed exploration and understanding of the questions and themes of the research (Ritchie et al 2003). The sample should be likely to generate rich information on the type of phenomena which need to be studied (Miles and Huberman 1994, p43) and although selected deliberately, purposive sampling must remain justifiable and amenable to external scrutiny (Ritchie et al 2003).

2.4.1.1 Snowball Sampling

Also called chain sampling is a strategy for identifying information-rich key informants (Miles and Huberman 1994, Patton 1990). By asking a number of people

who else one should speak to the "snowball" becomes increasingly bigger. Those people who are mentioned repeatedly take on a special importance (Patton 1990).

2.4.2 Sample Size

Patton highlights that there are no rules for sample size in qualitative enquiry and that the logic of purposeful sampling is quite different from that of probability sampling, the latter requiring adequate sample size, while the former emphasises information-richness and the analytical capabilities of the researcher (Patton 1990). This is further emphasised by Starks and Trinidad (2007) who highlight that as each interview participant can generate hundreds or thousands of concepts, large samples are not required to generate rich data sets.

2.5 Interviews

Denzin (1978) and Patton (1990) write about types of qualitative interview representing a continuum from unstructured to rigidly structured interview styles. Patton identifies informal, conversational interviews, the general interview guide approach, standardised, open-ended interviews and closed fixed-response interviews At the unstructured end of the continuum flexibility is maximised and data gathered from each respondent may differ (there being no pre-determined questions), while at the rigidly structured end data may be easily analysed but the respondent's meaning may be distorted. A semi-structured approach represents middle ground. In the general guide approach issues to be explored are decided in advance – allowing the same areas to be covered with each respondent and providing a means of ensuring that relevant areas are covered, while allowing flexibility in the wording and sequence of questions asked. The standardised open-ended interview consists of a standardised set of open ended questions, posed to each respondent. This limits flexibility in probing and reduces flexibility and spontaneity but provides systematic and thorough data.

Conducting semi-structured in-depth interviews requires skills and knowledge, including an understanding of the aims of the project, the ability to establish a rapport with the interviewee (Silverman 2006, Patton 1990) an ability to use probing techniques (Silverman 2006, Patton 1990) and the ability to maintain control of the

interview (Patton 1990). The interview guide or "*schedule*" (a list of questions or general topics that the interviewer wants to explore) is prepared to insure that basically the same information is obtained from each person; however there are no predetermined responses and the interviewer is free to probe and explore within these predetermined inquiry areas. Interview guides ensure good use of limited interview time; they make interviewing multiple subjects more systematic and comprehensive and they help to keep interactions focused.

Tuckman (1972) points to the way in which collecting interview data provides us with a chance to access what is 'inside a person's head', rendering accessible what a person knows (knowledge and information), what a person likes or dislikes (values and preferences), and what a person thinks (attitudes and beliefs). This though may represent a limiting factor, respondents will provide their perspectives and perceptions including personal bias or simple lack of awareness (Patton 1990), though such bias or lack of awareness may represent important data in and of themselves.

2.5.1 Focus Group Interview

Focus groups are considered appropriate in securing rich experiential information, insights and interpretations from participants (Carey 1994, Janesick 1994, Fontana and Frey 1994, Polgar and Thomas 2001). Focus group interviews capitalise on group interactions (Morgan1997), members of the group being interactive, dynamic suppliers of information (Schratz 1993, Carey 1994). Though there are no rules for sample size in qualitative enquiry (Patton 1990), recommended optimal focus group size varies from 5 to 12 (Carey 1994). The main problem associated with small group size is not that validity is compromised, the logic of purposeful sampling being quite different from that of probability sampling (Patton 1990), but the difficulty of sustaining the discussion if the group numbers less than six (Morgan 1997). Conducting focus group interviews requires facilitation skills of the researcher, coupled with the ability to stand back from the discussion and allow the group dynamics to emerge (Silverman 2006). The presence of a research assistant who observes the interview and makes field notes enables the researcher to concentrate on the often fast-paced flow of information as it is generated (Carey 1994).

2.5.2 Key Actor Interview

Key informants are people who are particularly knowledgeable and articulate (Patton 1990), termed key actors by Fetterman (1998) to avoid any stigma associated with the word informant. Such individuals can provide:

> *"... detailed historical data, knowledge about contemporary interpersonal relationships (including conflicts), and a wealth of information about the nuances of everyday life*" (Fetterman 1998, p48).

2.5.3 Negative aspects of interview methodology

Interviews capture the perspectives of the interviewee(s) on the subjects discussed and as such should not be regarded as representations of absolute truth (Yin 1994). Bias (Patton 2005, Yin 1994), poor recall and flawed articulation (Yin 1994) may render accounts less than accurate. Respondents' desire to please the interviewer or to adopt the interviewer's theoretical perspectives may also cause distortion within the data (Yin 1994). In a focus group situation the presence of other respondents makes anonymity impossible; the interview is therefore less confidential. Additionally, while group interaction may be a positive effect associated with focus group interview methodology (Morgan 1997, Carey 1994, Schratz 1993), the presence of other participants may exert a censoring or conforming influence (Carey 1994), producing less candid responses. Triangulation strategies have been utilised to address some of the methodological difficulties, which are inherent to interviews (see section 2.7).

2.6 Coding

In initially describing their constant comparative method (discussed in section 2.6.2.1) Glaser and Strauss (2006) considered that while coding may be done more elaborately it need only be a process of noting categories in margins. Strauss and Corbin emphasise the dynamic, fluid nature of coding, but like Strauss (1987) point to three types; open, axial and selective.

2.6.1.1 Open Coding

A process of "*opening up the text to reveal the thoughts, ideas and meanings it contains*" (Strauss and Corbin 1998, p102) refers to the initial detailed examination

of the data (Strauss 1987). Called line-by-line coding by Charmaz (1990, 1994), each line of the interview script is examined to define the actions, events and subjects' meanings within them. The conceptual name or label should be suggested by the context in which the event is located (Strauss and Corbin 1998), where names or labels assigned in coding are the words of respondents, they are often referred to as "*in-vivo codes*" (Glaser and Strauss 2006). While line-by-line analysis is acknowledged to be very time consuming it is also considered to be the most generative (Strauss and Corbin 1998).

2.6.1.2 Axial or Focussed Coding

Strauss (1987) and Strauss and Corbin (1998) describe a second phase of axial coding which is more focussed upon an emerging category and begins the process of re-assembling data that were fractured during open coding (Strauss and Corbin 1998). The term axial refers to the way in which coding happens around the axis of a category, linking categories at the level of properties and dimensions (Strauss and Corbin 1998). For Strauss (1987) and Glaser and Strauss (2006) the process of constant comparison (discussed in section 2.6.2) is the route through which initial concepts (the product of open coding) are converged into categories. This second phase of coding, which Charmaz calls focused (or selective) coding uses the products of the line-by-line coding that reappear frequently to sort large amounts of data. In focused coding activity is more directed and, typically, more conceptual than the initial (line- by- line) coding. Categories represent important analytical ideas which emerge from the data (Strauss and Corbin 1998). From the focused codes in her studies, Charmaz develops the categories for synthesizing and explaining the data, which in turn shape her construction of analytic frameworks. Charmaz' memo writing is "*the intermediate step between coding and the first draft of the complete analysis.*" (Charmaz 2003, p261).

2.6.2 Data Analysis

The philosophical basis of the data analysis is interpretevist in nature, seeking to capture the meanings intended by respondents and to minimise effects of researcher's a-priori knowledge.

2.6.2.1 Constant comparative method

Glaser and Strauss (2006) point to comparative analysis as a widely used and general analytical method for generating theory, applicable for social units of any size (Glaser and Strauss 2006). In developing the constant comparative method Glaser and Strauss sought to aid the analyst in generating theory which is integrated, consistent, plausible and close to the data (Glaser and Strauss 2006). By a process of constant comparison the researcher is forced to consider much diversity in the data as emerging categories synthesised at many levels, are continually developed and checked for relevance (Glaser and Strauss 2006). Each time a researcher codes an incident, a process of comparing this with each incident coded in the same category is undertaken. Thus bird, kite and aeroplane may be coded for their common characteristic of "flight" (Strauss and Corbin 1998). The constant comparison of incidents aids the researcher in considering the full range of types of the category, conditions which accentuate or minimise it, its major consequences, how it is related to other categories and its other properties (Glaser and Strauss 2006). When, inevitably after coding for a category three or four times, the researcher encounters conflicts in which aspects should be emphasised Glaser and Strauss (2006) advocate that coding is halted and a memo of the researchers' ideas recorded; this process is designed to record the researcher's thoughts while they are fresh and allow time for reflection to carry the thought process (grounded in the data, rather than speculative) to its logical conclusion.

Focussing on categories which emerge from the data ensures that the categories are relevant and rich, fitting the data rather than forcing it (Glaser and Strauss 2006). This process is dependent upon the skills and sensitivities of the researcher (Glaser and Strauss 2006); requiring the researcher to initially ignore the literature of theory in the area under research to ensure that emerging categories are not contaminated by extant concepts from different areas. Only once the analytic core of categories has emerged should similarities and convergences with the literature be considered (Glaser and Strauss 2006).

As coding continues, the units of constant comparison change, initially incident is compared with incident; gradually incident is compared with properties of

categories. In this way the theory develops as different categories and their properties become integrated through constant comparisons that force the analyst to make some related theoretical sense of each comparison (Glaser and Strauss 2006). Discussions contained within the memos provide the content behind the categories and categories in turn become the major themes of the theory. In composing the theory memos on each category are collated and the data is used to provide illustrations of the theory or to highlight gaps within the theory (Glaser and Strauss 2006). This inductive method of theory development requires the researcher to make sense of so much diversity within the data that generation of ideas on a higher level of generality which are conceptually more abstract than the ideas contained within the raw data is a necessity (Glaser and Strauss 2006).

2.6.2.2 Verstehen

The Weberian concept of *verstehen* is a method of "*interpretative understanding*" (Charmaz 2003) used "*to grasp or comprehend the meaning intended or expressed by another*" (Elwell 1996). This process of interpreting or understanding (of achieving verstehen) relies to some degree on the researcher having a common frame of reference to the respondent (Parkin 1982). In attempting to "*comprehend social action through a kind of empathic liaison with the actor*" (Parkin 1982, p19) the researcher endeavours to understand the subjective meaning and intent of the actor – "*getting inside their head to understand what he or she is up to in terms of motives, beliefs, desires, thoughts*" (Schwandt 2000, p192). Weber differentiates between two types of verstehen, direct observational understanding "*aktuelles verstehen"* and explanatory understanding *"erklarendes verstehen"* (Parkin 1982, p20). Direct observational understanding is relatively simple and obvious to comprehend form observation, while explanatory understanding is required to grasp motives and subjective meanings, though Parkin (1982) argues that the first kind of verstehen is simple observation with no real understanding attached to it.

Verstehen is considered to be rooted in interpretivism and hermeneutics (Schwandt 2000). The interpretevist view of verstehen has been linked to Husserl's "*intentional object*" – that is the object as meant, as *intended* by the respondent in the acts of thinking, remembering, willing and imagining (Natanson 1963, p283). This contrasts with the Heidigger inspired (Schwandt 1998) perspective of

philosophical hermeneutics where understanding is participative and meaning is negotiated mutually in the act of interpretation, the researcher being unable to remain an uninvolved observer and instead being active in the construction of meaning (Schwandt 2000).

2.6.3 Reduction

Mastering the data forces the analyst to engage in reduction of terminology (Glaser and Strauss 2006). This is achieved through a process of discovering underlying uniformities in concepts (Strauss and Corbin 1998), categories or their properties, facilitating the formulation of theory with a smaller set of higher level concepts (Glaser and Strauss 2006).

2.6.3.1 Data Matrix

While Glaser and Strauss (2006) and Charmaz (2003) make extensive use of memo writing during analysis, Strauss and Corbin (1998) emphasise the early construction of mini-frameworks to record relationships amongst concepts during axial coding.

2.7 Triangulation

In a review of literature on triangulation and multi-method strategies published since 1960 and research books specifically focusing on triangulation, Thurmond (2001) found triangulation to be the combination of at least two or more theoretical perspectives, methodological approaches, data sources, investigators, or data analysis methods. The term is derived from the field of land surveying (Patton 2005). The intent of using triangulation is to decrease, negate, or counterbalance the deficiency of a single strategy, thereby increasing the ability to interpret the findings (Denzin and Lincoln 2005, Patton 2005, Thurmond 2001). Data triangulation is the use of more than one source of data, methodological triangulation the use of more than one method, investigator triangulation the use of two or more researchers with different backgrounds and theoretical triangulation the use of more than one theory during the analysis of the same data set; within a single investigation (Streubert and Carpenter 2006). In facilitating the researcher's evaluation of consistency and inconsistencies elicited, triangulation can provide deeper insight into the relationship between the enquiry approach and the phenomenon studied (Patton 2005), though

triangulation strategies may not be able to address all themes elicited from interview analysis. Areas where documentary analysis as a triangulation strategy has been particularly useful are discussed in sections 2.8.4 and 3.14.

2.8 Documentary Analysis

Documents represent a rich body of descriptive data (Hodson1999) forming a valuable socio-historical record, which may cover long periods of time (Yin 1994, Weber 1990), many events and settings (Yin 1994). Love (2003) points to the proliferation of documents which surround us, their pervasive role in everyday life and how they can provide an important avenue of voice, interpretation and meaning within research. Grounded in the context they represent (Krippendorff 2004, Love 2003, Weber 1990), documents provide the researcher with information about things which cannot be otherwise observed (Patton 2005), indeed not undertaking documentary analysis may leave a gap in the ability to understand the issue or question at hand (Love 2003). Content analysis is considered to be a systematic, reproducible method of analysing text, allowing corroboration of findings from other forms of data collection (Krippendorff 2004, Yin 1994), and is frequently used to enrich other qualitative methods (Love 2003, Hodson 1999).

Historically content analysis procedures have been used to create quantitative indicators which assess the degree of attention or concern devoted to cultural units such as themes, categories or issues (Weber 1990). Initially quantitative evaluation used simple word counting or measurement of column inches in the analysis of newspapers (Krippendorff 2004) such as Tenney's 1912 Scientific Analysis of the Press (Tenney 2009). From 1910, Max Weber used such an approach to newspaper analysis (especially the advertising sections), embedding the process in qualitative, critical and comparative research questions (Krippendorff and Bock 2009). Over time content analysis has changed from an overtly quantitative undertaking, based upon the naive belief that documentary content is an objectively describable entity (Krippendorff and Bock 2009) to one where inferences which can be made from texts to the context of their use is central (Allport 2009, George, 2009, Krippendorff and Bock 2009, Weber, R.P 1990). This said, not all early content analyses relied upon word counting or column-inches as a measure, Matthews' 1910 content analysis Study of a New York Daily (Matthews 2009) utilised categories, however

this analysis has been criticised for failing to provide information on how and why categories were chosen and for its lack of inference (Krippendorff and Bock 2009).

So, while early content analysis rested on the notion that content was an objectively describable entity, making specific inferences from texts to their contexts is now considered to be the defining feature of content analysis (Krippendorff and Bock 2009). Inferences which can be made from documentary sources are about the sender of the message and the audience of the message as well as the message itself (Weber, R.P. 1990), Krippendorff (2004) also emphasises inference from how the audience of the message receives its content, the social situations into which the messages enter and the effects of the message on them.

McCulloch (2004) discusses three broad approaches in the contemporary analysis of documents: positivist, interpretevist and critical. The positivist approach emphasising objective, systematic and quantitative evaluation; the interpretevist emphasising the socially constructed nature of documents; and the critical being theoretical and overtly political in nature (McCulloch 2004). Five types of symbolic units useful in content analysis: physical, syntactical, referential, prepositional and thematic are identified (Krippendorff 2004). Syntactical units may be words, sentences, paragraphs or whole texts. Referential units are instances where a physical or temporal unit is referred to in the text; this may be an individual, event or issue. Referential units can be used to measure the meaning attached to such an event, individual or issue. Prepositional units focus on the constituent parts of communication. Thematic units relate to how concepts of interest in the text which can be used to develop interpretations and explanations of the content, can be identified structurally (Krippendorff 2004, p103). While Holsti (1969, p116) considered a theme to be "*a single assertion about some subject*", Krippendorffs' (2004, p109) framing of a theme is less rigid, recognising that *"…thematic units may have to rely on textual features that are distributed throughout a text…"*

2.8.1 Content analysis – qualitative or quantitative?

That social phenomena are both generated by and represented within texts and images is highlighted by Krippendorff (2004), who considers that reading

documents is a qualitative undertaking – whether or not this is subsequently converted into quantitative information and regardless of the quantitative or qualitative labels attached to content analysis activity. Weber (1990) asserts that "*…the best content-analytic studies use both qualitative and quantitative operations on texts."* Perhaps the clearest discussion of the debate regarding the relative merits and uses of quantitative and qualitative approaches to content analysis is provided by George (2009), who frames this in terms of frequency and non-frequency content indicators. "*We employ the term 'non-frequency' to describe the type of non-quantitative, non-statistical content analysis, which uses the presence or absence of a certain content characteristic or syndrome as a content indicator in an inferential hypothesis. In contrast a 'frequency' content indicator is one in which the number of times one or more content characteristics occur is regarded as relevant for purposes of inference."* (George, 2009, p144-145).

Thus whether qualitative or quantitative approaches are used, inference remains central to content analysis. Justification for inferences within the context of their use employs the notion of "analytical constructs", by which the researcher makes explicit the analytical framework they have used in making inferences (Krippendorff and Bock 2009, Krippendorff 2004).

2.8.2 Problems with Content Analysis

Issues of reliability including truth, bias and the representativeness of documents are discussed by Tosh (2002), who suggests that evaluating the ability of the author to render a faithful account of what is being reported should be the analyst's starting point. Temporal as well as authorial factors are highlighted as sources of potential bias (Hodson 1999). Thus information about documentary accounts such as the identity, role, affiliations and likely perspectives of the author as well as the year of observation should be recorded during data collection, acknowledged and considered during analysis (Hodson 1999). Use of more than one documentary source has also been suggested as a means to reduce the effects of author bias (Tosh 2002).

To make valid inferences from text it is important that the classification procedure is reliable – in the sense of being consistent, with different people coding the same text

in the same way (Weber 1990). Krippendorff (2004) points to several types of logic capable of relating data to their contexts and the need for researchers to render any assumptions, the logic they have used and analytical frameworks they employ explicit.

2.8.3 Content Analysis - Ontology

The utility of content analysis is strongest in addressing linguistically constructed social realities (Krippendorff 2004) – that is where language in the texts being analysed is rooted in the situation or phenomena it describes. Content analysis also presupposes familiarity with the language of analysed texts; awareness of the vocabulary and its subtle discursive conventions increasing the likelihood of successful analysis (Krippendorff 2004).

2.8.4 Content Analysis – Epistemology

Triangulation strategies are discussed in section 2.7, but the author would summarise her epistemological approach to triangulation as a bid to corroborate data and form as comprehensive an account as possible, by capturing different perspectives using different methods and data sources. This led to a problem-driven content analysis (Krippendorff 2004), underpinned by the belief that systematic reading of specific texts can provide corroborating accounts or highlight variations.

Within the context of this research the researcher believes content analysis of job advertisements in historical journals to be a valuable triangulation strategy, particularly in addressing:

- When titles and terminology associated with specialisation entered the professional language of podiatry
- When differentiation and areas of specialised practice became part of podiatry's way of working
- Timelines for the emergence of specialised practice as a reflection of changing social forces
- Grading and banding structures linked to different specialties as a reflection of status and remuneration

- The degree to which professional credentials have been linked to specialised practice

Documentary analysis is based on the assumption that the real world is being reported and recorded (Hodson 1999). Within this research, the assumption has been that historical job advertisements reflected the contemporary requirements of the employer and status of the prospective employee. The author recognises that advertisements may have varied in their accuracy, specificity and detail; issues of space and cost involved in entries in a paper journal may have had an impact, as may have the advertisers' experience in composing advertisements and a possible lack of clarity about what was required.

2.8.5 Content Analysis – Limitations

The author recognises that some job advertisements will not have been included in the historical journals which were searched. Other forms of advertising for example bulletin boards, alternative publications such as newspapers, local magazines and internet advertising may have been utilised. Some posts may never have been formally advertised – being communicated by word of mouth or filled by a previously known individual. Conversely duplication of advertising was also evident. Where the position advertised was clearly the same post included in subsequent advertisements, the duplicates were excluded (though interestingly some posts seemed to be particularly difficult to fill, being advertised for many consecutive months). These inclusions and exclusions are likely to be imperfect, reflecting Hodder's (1998) point that historical documents cannot be checked for the author's original meanings and intent.

Within the context of this research, inter-coder variation was not an issue, there being only one researcher. However Krippendorff (2004) highlights reliability issues involving inconsistencies in coding which may arise from ambiguous coding rules, ambiguities within the text, cognitive changes within the coder or simple errors. Weber (1990) acknowledges that concept analysis is difficult and time consuming to do well, pointing to use of computers in order to reduce the drudgery involved. Given the nature of the documents used in this instance, computer-aided analysis was not possible. While the method used has been clearly stated and

adhered to, the researcher acknowledges the possibility of human error associated with a hand-search of many editions of historical journals.

2.9 Research Governance

In 2005 the Department of Health set out the second edition of its framework for the governance of research in health and social care. Research governance is intended to improve research quality and safeguard the public by enhancing ethical and scientific quality, promote good practice, reduce adverse incidents, ensure lessons are learned and prevent poor performance and misconduct (Department of Health 2005a). The framework is applicable to all research which relates to the responsibilities of the Secretary of State for Health and its terms include clinical and non-clinical research, including that undertaken by universities, within the health and social care systems (Department of Health 2005a).

2.9.1 Confidentiality and Anonymity

The Concise Oxford Dictionary (2008) defines confidentiality as: "*intended to be kept secret or entrusted with private information*" while anonymity is defined as: "*not identified by name; of unknown identity*". Anonymity and confidentiality are closely connected (Wiles et al 2007), yet still distinct concepts (Wiles et al 2006); participant anonymity often being the mechanism through which confidentiality is maintained (Giordano et al 2007). While Giordano et al (2007) and Grinyer (2002) have called into question assumptions that anonymity is desired by all research participants, it is still considered to be a requirement in the ethical conduct of research (Walford 2005, Ryen 2004, British Sociological Association 2002). However the extent to which anonymisation is successful varies according to the research context (Wiles et al 2007, Walford 2005). Data derived from interviews with high-profile participants renders the possibility of identification more likely, as readers may be familiar with respondents' perspectives and expressions. Thus confidentiality cannot be guaranteed. Researchers need to be transparent about this fact, communicating to participants that they will as far as humanly possible protect participants' identities (Wiles et al 2007, Walford 2005).

2.9.2 Data Protection

Legal requirements under the Data Protection Act (Department of Health1998) explicitly state that*:*

> *"…data legitimately processed for research or statistical purposes, as long as such processing neither causes substantial harm or distress to the data subject nor is used to support measures or decisions in relation to individuals, are exempt from certain provisions of the Act. Such data can be kept indefinitely and are exempt from the subject access rights if the results of the work are not made available in a form from which data subjects can be identified. Use of such data for research, although obtained for other purposes will not breach the second principle (use incompatible with the purposes for which it was obtained) and hence will not be unlawful on those grounds. However, this does not absolve the data controller from the obligation, in order to comply with the first principle, to give the data subject general information about intended uses".*

3.0 METHODS

3.1 Ontological and Epistemological Underpinnings

The researcher's work has developed over time, beginning with an initial interest in how specialist podiatrists worked which subsequently evolved to encompass specialisation as a concept; then focussing on podiatrists specialising in diabetes as an exemplar. The ontological stance of this research has been a mix of pragmatic and inductive (Patton 2005). Development and clarification of the research questions flowed from the concept analysis which was used to evaluate the maturity of the concepts of specialisation and diabetes specialist podiatry. One main research question and four related sub-questions were identified. Thus having considered what can be known about the research area (the ontological question) – research methods suited to answering the questions were selected. An inductive methodology was utilised in analysing the interview data, reflecting the researcher's belief that the answers to the research questions lay within the knowledge and experiences of specific individuals. As a podiatrist, the researcher did not come to this research in a naive, "tabula-rasa" form. Therefore, the researcher has utilised verstehen and constant comparison to minimise the effects of her a-priori knowledge – acknowledging her status as a podiatrist with an interest in specialisation. Thus the epistemological stance is interpretevist, allied to Husserl's "*intentional object*" rather than the Heideggerian (Schwandt 1998) perspective of philosophical hermeneutics (see also section 3.12.1 Verstehen).

The following sections, arranged chronologically, document the progress and evolution of the research, its aims, adherence to research governance, present the rationale for methodological decisions and describe the data collection, handling and analysis techniques.

3.1.1 Initial Research Interest

The researcher's initial interest in this area stemmed from her observation of specialist podiatrists working in mixed-profession settings. Variations in the roles of the podiatrists and the ways in which they worked were significant. Discussions with podiatry managers, diabetes, rheumatology and musculo-skeletal specialist podiatrists elicited that within the profession of podiatry, specialisation in diabetes podiatry is viewed as having established a precedent for specialisation and that

diabetes podiatry has been used as a driver, justification and template for developing other specialist podiatry services.

3.2 Literature Review

The literature review began by reading widely in the areas of professional sociology and the philosophy of caring professions, in order to site the study appropriately and ground it in the wider professional literature. This enabled clarification and refinement of the research focus and identification of the research aims.

3.2.1 Research Aims

- To explore the role (or what Zetka [2003] would call the "*task bundle*") of the diabetes podiatrist in order to generate a baseline understanding in a hitherto unresearched area.
- To trace the origins, change over time and current status of diabetes podiatry.

3.3 Concept Analysis

Following the preliminary literature review, concept analysis specifically employing a "Morse" model was selected as a useful way to gain an understanding of specialisation and to evaluate the maturity of diabetes specialist podiatry as a concept. The rationale for using this model was based on its evaluation of "pragmatic utility" as a means of understanding the function of the concept and its applicability to the world. Additionally, the less procedural nature of the Morse model of concept analysis prioritises cognitive processes over rigid, systematic evaluation, allowing the concept analysis to be tailored to the area of interest and permitting greater depth of enquiry. The Morse approach was complamented and extended by the consideration of concepts related to the concept of interest (after Rodgers 1993), namely "diabetology" and "diabetes specialist nursing" to capture the preconditions, characteristics and consequences of other healthcare professions specialisation in diabetes practice.

The ability of concept analysis to encompass the linguistic issues surrounding what this author initially called "diabetes specialist podiatry" (because this is the most commonly used term in the literature) represented a further compelling reason for

choosing this methodology; although the language involved is only one facet amongst many.

The concept analysis highlighted the immaturity of and need to clarify the concept "diabetes specialist podiatry", leading to the main research question:

- What does specialisation in diabetes podiatry mean?

and to related sub-questions:

- How did diabetes evolve as a podiatric specialty?
- What is the impact of specialist titles?
- What does specialisation in diabetes podiatry mean for services and the profession of podiatry?
- Is specialisation in diabetes podiatry sustainable?

3.4 Choice of Data Collection Methods

While some documentary data exists in the form of historical texts, Society of Chiropodists and Podiatrists archives, job advertisements, job descriptions, pay scales, course content in diabetes specialist podiatry education and editorials in professional journals; the answers to the research questions lie within the knowledge and experiences of key actors, managers and individual podiatrists who have held such posts. For these reasons a qualitative methodology, inductive in nature featuring focus group and key actor interviews was selected as appropriate in answering the research questions. This was supplemented by documentary analysis, forming a data triangulation strategy in a bid to corroborate information, minimising the effects of respondent bias and the researcher's a-priori knowledge.

3.5 Recruitment

Initially a purposive, criterion based sampling strategy (Patton 1990, Silverman 2003) led to recruitment from key members of Foot in Diabetes UK and members of the Society of Chiropodists and Podiatrists Faculty of Management (Faculty of Management). For the purposes of this study a key member of Foot in Diabetes UK was defined as a member of the Foot in Diabetes UK executive committee (such individuals having direct input into the actions and policy decisions of the group) or a Foot in Diabetes UK member identified as "key" by one of the Foot in Diabetes

UK executive committee. Inclusion criteria for Faculty of Management members were that participants should be members of the Society of Chiropodists and Podiatrists Faculty of Management with current experience of employing diabetes podiatrists, while those with no such experience were excluded.

3.5.1 Rationale for Sampling Strategy

Selection of these two groups was based upon a-priori knowledge, specifically: Members of the Foot in Diabetes UK executive committee are also senior and key individuals within diabetes podiatry and thus represent a rich source of experiential information. The Foot in Diabetes UK participants included a senior lecturer, a consultant podiatric surgeon, a consultant podiatrist, and a diabetes specialist and research podiatrist. In this way diverse areas of practice in diabetes podiatry also informed these respondents' perspectives.

In the absence of any formalised educational preparation for specialisation in diabetes podiatry or agreed career pathway, Faculty of Management members employing diabetes podiatrists represent the current de-facto controllers of diabetes podiatry; via their control over advertising, recruitment, the selection and appointment of podiatrists and the allocation of podiatry time to diabetes services.

Utilising a snowball sampling strategy these informed respondents were asked to identify other individuals and groups who had insight and knowledge in the area being researched (see on-going recruitment).

3.6 Interview Schedules

Semi structured interview schedules informed by themes elicited from the literature and concept analysis were prepared to guide the interviews. Issues concerning specialisation and specialisation specifically in diabetes podiatry were explored. Continuing the sequential development of this on-going research and informed by the constant comparative approach, data from each interview were used to further refine and inform subsequent interview schedules. Copies of interview schedules can be found at appendix 3.

3.7 Research Governance

While this research was not required to meet the standards set out in the Framework for Governance of Research in Health and Social Care (Department of Health 2005a) the framework's guiding principles have been followed.

3.7.1 Ethical Approval

Ethical approval was gained from the internal ethics committee of the University of Southampton. (Ref. No. PO6/11-01) and the study was sponsored and underwritten by the University of Southampton. The only amendment required by the ethics committee was that snowball sampling be conducted face-to-face, rather than by inclusion in the response pro-forma attached to the research information sheet.

3.7.2 Informed Consent, Confidentiality and Anonymity

Via the use of information sheets, potential participants were informed in writing about the nature of the study and the intended uses for data gathered (meeting one of the key terms of the Data Protection Act 1998). Provision was made for potential participants to ask questions pertaining to the research (by including the researcher's and main supervisor's contact details) and the complaints procedure was clearly stated, thus providing an avenue of recourse for anyone having issues concerning the research. This information was reinforced verbally before each interview when participants had a further opportunity to ask questions of the researcher.

All participants gave their written consent to the audio-taping of the interviews. In adherence to the requirements of the Data Protection Act (1998) all data were anonymised, such that they no longer constitute personal data and are therefore exempt from the terms of the act. Within the interview transcripts and text of the thesis numerical identifiers and pseudonyms have been utilised. The researcher and participants were aware that a small sample of high-profile respondents increases the risk of participants being identified, thus in a bid to protect their identities, details which may make identification of participants more likely (such as locations of interviews) have also been deliberately omitted. Although the Data Protection Act (1998) states that research data are "*exempt from the subject access rights if the results of the work are not made available in a form from which data subjects can be identified*" copies of transcripts were made available to participants who requested

them. Consent forms for focus group interviews included an undertaking to "keep participants' identities and content of the discussion confidential" in a bid to maintain anonymity and thus confidentiality for all respondents. Copies of the information sheets and consent forms can be found at appendices 4 and 5.

3.8 Piloting

Interview schedules were piloted with participants not subsequently included in the study, the data transcribed verbatim and analysed thematically, employing a constant comparative method. The piloting process elicited one question in the Faculty of Management interview schedule which was poorly worded and therefore misunderstood by respondents ["How and by whom are the needs of other service users not encompassed in the diabetes specialist podiatrists remit met?" Wording was changed to "How does your service meet the podiatry needs of clients not seen by the diabetes specialist podiatrist?"]. This re-phrasing was intended to aid clarity. A "mini-pilot" of the amended question with fellow PhD students elicited that it was now readily understandable (even by non-podiatrists). The Foot in Diabetes UK members' pilot interview extended to over two hours. While participants in the pilot were enthusiastic and happy to discuss issues for this length of time, the researcher recognised that some respondents may be unable to set aside this amount of time, this being the case following introductory questions, key issues were located in the central part of the schedule. In the event, all of the research respondents became engrossed in the interviews and were happy to speak with the researcher for protracted periods.

In piloting both schedules some prompts led respondents to cover one or more issues which were the subject of subsequent questions, this represented valuable experience for the researcher in facilitating discussion and guiding interviews. Field notes and reflection following pilots coupled with feedback from the research assistant present for one pilot focus group also assisted the researcher to improve her technique.

3.9 Change of Methodology in Response to Practicalities

Difficulties encountered in trying to organise a focus group interview with Foot in Diabetes UK members illustrates how infrequently members meet, one major form

of communication appears to be an online forum. Though being dispersed across the UK and meeting infrequently, the existence of an executive committee and their development of "*The National Minimum Skills Framework for Commissioning of Foot Care Services for People with Diabetes*" in conjunction with Diabetes UK, the Association of British Clinical Diabetologists (ABCD) and the Society of Chiropodists and Podiatrists - would indicate that there is both formal structure and political will within the group and that they are capable of inter-agency cooperation. As a focus group with Foot in Diabetes UK key members was not possible, a series of key actor interviews were used. The negative aspect of this was that the benefits of focus group activity (discussed in methodology 2.5.1) were lost, however the researcher recognises that respondents may have felt able to express themselves more candidly given the absence of colleagues and the enhanced anonymity afforded by the key actor interview. On reflection, affording these specific Foot in Diabetes UK participants the status of key actors within this research process appears to be more appropriate to their level of involvement in diabetes podiatry and thus their ability to provide information in addressing the research aims and questions.

3.10 Data Gathering

Initially one focus group (Faculty of Management) and five key actor interviews (4 Foot in Diabetes UK, 1 Skills for Health) were conducted. Times and venues of interviews were arranged so as to minimise inconvenience for the participants, involving the researcher travelling to various parts of the country.

The Faculty of Management focus group, arranged to coincide with a scheduled meeting of "Heads of Service", included 8 participants. One participant arrived late to the meeting and despite information about the study, signing the consent paperwork and the attempts of the researcher to include them, elected to contribute minimally. Clearly this was their prerogative which had been made explicit within the focus group information provided to all participants. The researcher respected this individual's right to choose their level of response to the interview process.

Key actors were approached individually to arrange appointments for interview. The venues of these interviews are deliberately withheld so as to protect participant's anonymity.

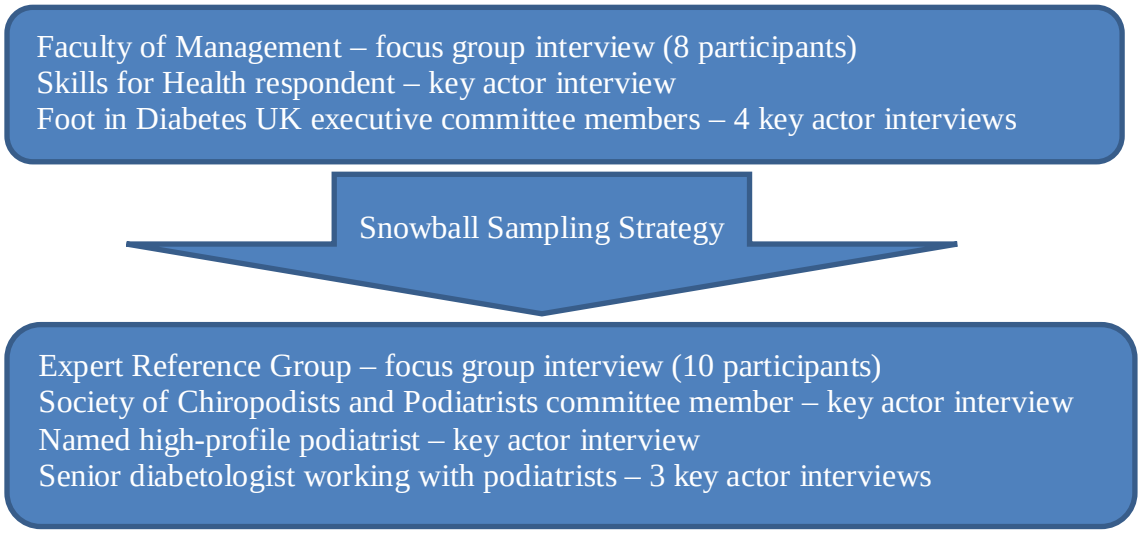
3.10.1 On-going Recruitment

In order to explore and build upon baseline data generated via the initial focus group and key actor interviews further informants were identified via a snowball sampling strategy. In compliance with the terms of the ethical approval for this study the snowball sampling activity was conducted face-to-face, each research participant being asked for suggestions for further participants. These suggestions included:

- Key actors such as specific physicians, surgeons and podiatrists who were mentioned by name.
- Representatives from management, education, practice (including podiatry, medicine and nursing), governmental (Department of Health and Skills for Health) and professional bodies (Society of Chiropodists and Podiatrists, Nursing and Midwifery Council and Foot in Diabetes UK) – referred to in broader terms, rather than named individuals.
- A group of expert patients
- A special interest group for diabetes podiatrists who are all senior diabetes leads the "Expert Reference Group" was mentioned specifically.
- People working in the arena of diabetes in other countries

Guided by the snowball sampling strategy, further interviews were conducted. These included one focus group interview with the "Expert Reference Group" (10 participants) and a key actor interview with a senior and long-serving Society of Chiropodists and Podiatrists council member (who was thus well placed to provide historical and contemporary perspectives from the largest podiatric professional body). Named individuals who were mentioned by many of the respondents were senior diabetologists working closely with podiatrists and one high profile podiatrist specifically named as a key informant by all but one respondent. The researcher was able to secure key actor interviews with three of the six named diabetologists and with the high profile podiatrist (Fig. 2.).

Fig.2. Interviews



3.11 Data Handling

All interviews were transcribed verbatim; including pauses, gestures and laughter as such paralanguage can convey or change meaning (Vicars 2001). Transcripts were rendered anonymous in order to protect the identity of respondents and thus enhance confidentiality. Because all participants within this research are conversant with the areas under enquiry and possess considerable experiential knowledge, data from the two types of interview (focus group and key actor) were judged to have been generated by informed participants and were handled in the same way.

Data were processed by initial line-by-line examination of the transcripts and coding in order to ensure rigorous examination of the data (in an approach informed by Charmaz' [1990, 1994] line-by-line coding). Overt and latent concepts were identified during this finely detailed first phase coding. The second phase of coding (which Charmaz calls focussed or selective coding) involved drawing together these initial concepts, producing focussed codes. These in turn were used to develop categories, from which an analytical framework was produced. The use of coding techniques informed by grounded theory was felt by the researcher to offer a thorough approach, linked to verstehen within a qualitative paradigm. This detailed and rigorous coding process is tabulated and clearly accessible to scrutiny; it is readily auditable and meets requirements of transparency detailed in Yin's chain of

evidence approach (Yin 2003). An example of the researcher's work in this area is appended to this document (Appendix 6).

3.12 Data Analysis, Rationale

Analysis of interview data was thematic, utilising the constant comparative method. This involves the inspection and analysis of all parts of the data (Silverman 2003). By forcing the analyst to consider much diversity in the data the constant comparative method aids the generation of theory which is integrated, consistent, plausible and close to the data (Glaser and Strauss 2006). This inductive approach offers a methodological "good fit" in addressing the research questions and its use reflects the researchers' epistemological stance in her belief that answers to the research questions lay within the knowledge and experiences of key individuals. The researcher acknowledges her a-priori knowledge (Glaser and Strauss 2006) of both the clinical area and the professional-sociological theories which are related to it - clearly meaning that she was unable to come to the research "tabula rasa". During data analysis the researcher sought to minimise the effects of her a priori knowledge by strict adherence to the constant comparative method, which forces the researcher to focus upon the data - and to the use of verstehen.

3.12.1 Verstehen

Within the findings section, data is presented thematically, highlighting those issues which were of particular importance from the perspective of respondents. Presentation of the data utilises the Weberian concept of *verstehen* – a process of "*interpretative understanding*" (Charmaz 2003) used "*to grasp or comprehend the meaning intended or expressed by another*" (Elwell 1996). Verstehen is considered to be rooted in interpretivism and hermeneutics (Schwandt 2000). The process of interpreting or understanding (of achieving verstehen) used by this researcher is that which is allied to the interpretevist tradition rather than philosophical hermeneutics. That is to say that Weber's approach of understanding the subjective meaning and intent of the actor – "*getting inside their head to understand what he or she is up to in terms of motives, beliefs, desires, thoughts*" (Schwandt 2000, p192) has been the researcher's aim. This view of verstehen has been linked to Husserl's "*intentional object*" – that is the object as meant, as *intended* in the acts of thinking,

remembering, willing and imagining (Natanson 1963, p283). This contrasts with the Heidigger inspired (Schwandt 1998) perspective of philosophical hermeneutics where understanding is participative and meaning is negotiated mutually in the act of interpretation, the researcher being unable to remain an uninvolved observer and instead being active in the construction of meaning (Schwandt 2000).

3.13 Presentation of the Data

Verstehen takes the participants' subjective meanings as the starting point for enquiry (Parkin 1982); quotations directly from interview transcripts are central to this approach and are employed to illustrate such meaning.

3.14 Triangulation – Documentary Analysis

As part of the researcher's triangulation strategy, documentary analysis was used to corroborate accounts and highlight differences within the interview data. In this way analysis of documents has been of particular value in evaluating key areas central to the research questions:

- When titles and terminology associated with specialisation entered the professional language of podiatry
- When differentiation and areas of specialised practice became part of podiatry's way of working
- Timelines for the emergence of specialised practice
- Grading and banding structures linked to different specialties as a reflection of status and remuneration
- The degree to which professional credentials have been linked to specialised practice

3.14.1 Documentary Sample

In addressing these particular areas, the "*population of available documents"* (Hodson 1999) includes historical texts, Society of Chiropodists and Podiatrists archives, job advertisements, job descriptions, pay scales, course content in diabetes podiatry education and editorials in professional journals (see section 3.4). In order to address the historical and evolutionary aspects job advertising within historical

journals was selected as an appropriate resource; allowing for the analysis of advertising covering many years.
Each job advertisement may have referred to one or more posts. Where no indication was given an advertisement was coded as a single occurrence. Where job advertising included more than one post indicated by a plural (for example "Lecturers in Podiatry") this was coded as two posts and where numbers of posts were stated each post was counted separately. The numbers of included advertisements, excluded posts and advertisements were not counted. The analysis focussed on clinical and educational posts in the public sector.

The historical journals used included one independent publication and the official journal of the largest chiropody professional organisation:
The British Chiropody Journal 1933 – 1988 (British Association of Chiropodists, Inc.) which became the *British Journal of Chiropody* in 1965 was an independent journal, having no official affiliation to any chiropodial professional organisation. Franklin Charlseworth was editor from 1946 to 1949 and again from 1956 to his death in 1963, the other editor during these years being Frederick. A. Drew (Berry et al 1989). J.C. Dagnall became editor in 1963 and immediately changed the name of the journal to the *British Journal of Chiropody*; He continued as editor for twenty five years until the demise of the journal in December 1988.

The Chiropodist (1924 to 1990) was the "official organ of the Incorporated Society of Chiropodists" up to October 1945, the copyright being then taken over by The Society of Chiropodists when amalgamation with four other professional bodies brought into existence The Society of Chiropodists. In January 1989 *The Chiropodist*'s title was extended to include "incorporating the British Journal of Chiropody, formerly the British Chiropody Journal" and Colin Dagnall became a regular contributor to the journal, having his own page each month. In 1998 the sub-title "*Journal of British Podiatric Medicine"* was added; this was to become the official title of the journal from 1991. Subsequently the coalescence of three bodies (The Association of Chief Chiropody Officers, The Podiatry Association and The Society of Chiropodists and Podiatrists) in 1997 led to a review of their respective journals. In 1998 *The British Journal of Podiatry* was created to disseminate

research and scholarly material while *Podiatry Now* continued the news dissemination and advertising functions for the new professional body.

3.14.2 Documentary Data collection

These journals form a permanent record, representing a significant historical resource. In selecting an independent journal in addition to the "official" journal of the largest professional body in chiropody and podiatry the researcher's aim was to reduce the effects of institutional bias. A hand search of the historical journals was undertaken. Using a thematic approach, announcements of new appointments, appointments available and situations vacant were scrutinised for references to clinical specialisation in diabetes or any other defined "specialised" clinical area. The year of publication for each data entry and information on the identity and role of the advertiser were recorded during data collection. This chronological approach allows presentation of the data illustrative of emergence and changes over time. Going beyond a simple word-frequency count, identified advertisements were read and summarised. This facilitated comparison with data derived from the focus group and key actor interviews, useful in eliciting areas of concordance and difference.

The British Chiropody Journal (later the British Journal of Chiropody) was hand searched throughout its history, covering fifty years (1933-1988), with the exception of the December 1971 edition, which is unfortunately not within the collection. The first mention of specialised activity was the proposed establishment of a research group in 1949. References to specialised clinical activities began to emerge in 1954 and were evident, though sporadic until the demise of the journal in 1988. This guided the time-frame for hand searching The Chiropodist, which began with the journals published in 1944 (the earliest reference to specialisation in the first journal, minus ten years). *The Chiropodist*, followed by *The Journal of British Podiatric Medicine* and currently *Podiatry Now* form a continuation of publications to the present day.

3.14.3 Inferences

The author has used overt and latent references to specialisation within the text as content indicators, inferring the existence of specialisation. The units of analysis

utilised were derived from the researcher's proposed definition of specialisation and recognition of specialist status which were elicited through her concept analysis (see section 1.6). These units are:

Status	Image	Title	Differentiation	Client Groups
Activities	Roles	Functions	Education	Credentials
Knowledge	Skill levels			

Themes which contained any of the above units were elicited by in-depth reading. The analytical constructs which underpin the researcher's inferences are rooted in theories of the sociology of the professions relating to specialised practice (discussed extensively within the literature review); areas pertaining to the professional project, legitimation and drivers for specialisation being particularly pertinent.

3.14.4 Analysis of the Documents

Advertisements were analysed in order to make explicit:

- The chronological advertising of posts, their associated professional titles and required credentials
- The chronological advertising of posts in different specialist areas
- The grading (from 1976) and banding (from 2005) of posts in different specialties

Quantitative analysis, utilising these aspects as frequency content indicators allowed inferences to be drawn regarding the advent, change over time and status of specialist posts.

FINDINGS AND DISCUSSION

Findings from the process of enquiry flowed into three main areas. These are presented and discussed individually, beginning with charismatic authority and medical patronage (4.0), followed by title (5.0) and concluding with specialisation in diabetes podiatry (6.0)

4.0 Charismatic Authority and Medical Patronage.

Themes of charismatic authority and medical patronage featured strongly throughout the data.

4.1 The Role of Charismatic Authority in Developing Specialist Practice

Throughout the accounts of those involved in establishing and developing diabetes podiatry the importance of personal charismatic qualities is repeatedly emphasised. Indeed the integral nature of the practitioners' charisma forms a repeated theme in the accounts of all respondents; participants illustrate how charismatic qualities have been important historically and how they continue to impact at every stage and level of contemporary specialised practice.

4.1.1 The Emergence of Diabetes Podiatry as a Specialty

Although participants indicated that podiatrists had been employed in diabetes units since the 1970s, they considered that these earliest podiatrists working in diabetes could not be viewed as real specialists:

> *"As a real em [sic] entity, I know a few in this trust who have had podiatrists working in the diabetes unit and working at you know as a podiatrist in diabetes but would I call them specialists? I probably wouldn't do. But they've had them working here since the s [breaks off] well, back as far as the seventies. So there've been podiatrists working within the diabetes team, but I wouldn't have called them specialist."* [MP 393-397]

> *"… I don't think by any stretch of the imagination they were specialists, they were just people who dealt with people with diabetes and they worked in a clin [breaks off] they had a lot of people with diabetes so ooh – I must be a specialist."* [CG 640-643]

The initial role for the podiatrist within the diabetic foot team centred on debridement:

> *"They knew how to take the callus off an ulcer and stuff like that, but that's all they tended to do every week, in the early days, because that was the knowledge that was out there."* [MP 399-400]

> *"… the key role at that time was very much debridement to, to a greater or lesser extent at that time wound care wasn't seen to be erm [sic] under the province of podiatrists, it was more nurses were more involved with supervision …"* [JH 114-118]

As one diabetologist recalled, it was their debridement skills which brought podiatrists into contact with medical doctors and thence into the diabetes team; leading eventually to a greater appreciation of their utility:

> *"… the doctors involved don't particularly have the* [debridement] *skills – although when I was starting, I was having to, when I first had the foot clinic in the early 90s I was actually wielding the knife and it was very clear that what we needed was someone who was skilled at that and that's the podiatrists, that's what they were doing to begin with. But now there's such, such a wider field – it's not just the wound management but the offloading and the biomechanics, it's just so much. They're trained, therefore they should be er, er* [sic] *leading the services."* [AT 6-13]

The gradually developing evidence base for those skills podiatrists could bring to the diabetic foot team – specifically offloading, sharp debridement, vascular and neurological assessment; coupled with the commitment, motivation and thirst for knowledge of the podiatrists working in diabetes all played a role in the establishment of diabetes podiatry:

> "*I think erm [sic] the evidence of dealing with, the evidence of dealing with certain complexities of foot ulcers, Charcot joints, infection …but I think the early days what made the podiatrist erm [sic] really part of it is that the beginning of the realisation of what we could bring to the arena of care, offloading primarily, scalpel debridement another one erm [sic] and slowly aspects of vascular assessment, neurological assessment and, and , and by stealth and by time and by doggedness erm [sic] and also by alongside that courses for podiatrists and chiropodists, there were around they weren't necessarily validated or accredited in the universities, but there were a number of post registration courses available, notably the run by the Society which you could drive a horse and cart through academically but it attracted good speakers, people were very thirsty for new knowledge and there was a genuine erm [sic] huge motivation and er [sic] or amongst a lot of podiatrists who really felt they could make a difference in diabetic foot care."* [JH 111-129]

> *"Oh again the results, the published results from centres like Kings, like the Manchester diabetes centre, the Blackburn, the Exeter and old, old Ken at*

London Foot Hospital, you know the work just was assimilated I guess" [PL 231-233]

4.1.1.1 Icons and Role Models

In speaking of the emergence of diabetes podiatry all but two participants highlighted the importance of key individuals who were innovative in practice, establishing specialist skills which differed from those of other podiatrists; and who – via their interactions, publications and presentations raised the profile of diabetes podiatry as a specialised area. Those considered to be early "icons" were mentioned specifically:

> *" You know there were a few icons like Ali* [Foster] *and she knew, well bless her she was, she is, <u>really is</u> iconic and putting us on the map …"* [SS 59-61]

> "… [Althea Foster] *was one of the early pioneers in so far as the techniques for plaster use, use of plaster casting apart from Paul Barnes' work and Hanson's disease and all the rest of it, erm [sic], she, she was quite early on in the UK as far as podiatrists getting their hands onto plaster casts and expanding scope of practice. She was a bit of a pioneer there."* [JH 28-32]

> *"I think that reality, I think the podiatrists play a pivotal role in it and I think if we look back to 1989 paper that Alistair* [McInnes] *was involved in with Mike Edmonds et al, that St Vincent's' paper, if you look back to that paper you'll see that they defined the roles of the podiatrists, doctors, nurses, whatever."* [SS 69-72]

> *"… I think the first real specialist, specialist role in diabetes were the few that gained Chief grades as a specialist. There were a few Senior I specialists, but I think the true specialist post, when most of the folks that you now know as leaders em [sic] gained Chief posts in, generally in hospitals, hospital settings and obviously, one of the most obvious ones is Ali* [Althea Foster]. *Em [sic] interestingly Alistair McInnes was known as a specialist, well he was working in the health service but then went into education…"* [CG 643-648]

Such was the impact of these individuals that the appointment of Althea Foster was highlighted by one Faculty of Management respondent as the start of diabetes specialist podiatry:

> *When I took on Ali Foster in the Kings em [sic], I employed her in the middle 1980s, so that's when her role started off, so I think that's clearly when it kicked off"* [Faculty of Management 334-337]

Those considered to be pioneers in diabetes podiatry showed innovative approaches to skill acquisition, funding and accessing education:

> *"Another key moment was when I had a long chat with Ali Foster and we were talking about how she'd got certain skills and where did she get them and getting bits of money, self-funding, off to America. I remember asking her to talk about where she got her plaster casting techniques from and the skills, and it was when she spent time in the States. I thought we can hardly, we can hardly have that as part of a p [breaks off], an on-going programme."* [JH 11-16]

Thus by importing what they had learned they influenced practice, extending its scope and establishing new, specialised activities which differed from those of other podiatrists. Knowledge was then disseminated through conference presentations and authoring books, sometimes with medical co-authors.

> *"…the fact that there have been a few of us who have been very em [sic] active in research have also allowed <u>us</u> to present at national and international meetings which has <u>then</u> raised the awareness of the skills of podiatry to the point now where I would say that the podiatrist is actually <u>pivotal</u> in all of the diabetic foot clinics."* [CG 125-129]

3: *"Also as 8 was saying there's certain eminent people for diabetes care that you gain confidence off by going to diabetic conferences, people like Mike Edmonds for example, Ali Foster, you know it's reassuring to go to these conferences and find that actually you are on the right track*
6: *Mmm [nodding]*
3: *it gives you confidence and so pioneers like that and some of the books that they produced you know just simple things like that little diabetic book that Mike Edmonds and Ali Foster put out I think that was a big help to me when they produced that to tie in what I already knew and give me the confidence to say well actually I do stage it in that way, and I do have that thought process …"* [Expert Reference Group 771-779]

Against a climate of medical distrust for podiatry engendered by the podiatric surgeons' actions in establishing their rights to undertake foot surgery; the combined effects of key individuals and exposure of British physicians to good practice in diabetes podiatry which existed in America allowed the continued development of diabetes podiatry:

> *"I think er [sic] pioneers like Ali Foster. I think the American influence, when em [sic] Malvern surgical podiatrists were kind of em mmmm [sic] [sighs]. The prevailing [pause] culture at that time was one of, a bit of antipathy towards podiatric surgeons from the medical mafia diabetes arena for a long time, and then when certain key people, Andrew Boulton and*

others went across, formed good relations with people like Larry Harkless from San Antonio and others, they realised that what they were doing was sound and really good practice and that helped podiatry big picture a lot" [JH104-110]

These early "icons" in diabetes podiatry acted as role models, and in a departure from the norm in podiatry, worked in a team setting:

"... some of the drivers were er [sic] people who became sort of erm [sic] role models, er [sic] and, and I think diabetes, the team approach and understanding of the role of the team approach to diabetes care was kind of loud and strong through Harry Keane, concepts of shared care, concepts of diabetes centres and that sort of thing." [JH 155-159]

4.2 Medical Patronage

Working in a multi-disciplinary team (MDT) may have represented the first exposure to podiatry for many physicians. It appears that within diabetes podiatry, medical support for podiatrists began in this multi-disciplinary team environment:

"...the development of the MDTs in em [sic] Kings and Manchester em [sic] particularly, em [sic] in the early eighties er [sic] provided a ripe environment for those who were interested to develop and then for other folks around the country, particularly consultant physicians who are interested in the foot and recognised that there was a problem with the foot, actually allowed people with a real interest in diabetes to gravitate to them. In that environment I think podiatrists <u>then</u> em [sic] were in <u>some</u> instances were able to develop their skills which were <u>slightly</u> outside the normal skills that they were taught at undergraduate level or, or practicing within the community service. I think the recognition of skills, once again by vascular surgeons em [sic] has also <u>pushed</u> some of the boundaries." [CG 119-125]

As CG (above) points out – for podiatrists, working within the multi-disciplinary team not only represented a further opportunity to extend their skill set, it also facilitated medical recognition of their existing skills. JH also highlights the opportunities for informal education which membership of the multi-disciplinary team at this time afforded:

"... probably a lot of skills and knowledge and attitudes that are part of the competence if you like of that role, probably came a lot from working in the hospital team setting erm [sic] to begin with. And that was from <u>informal</u> education from joining in lunchtime chats that the team approach to diabetes care. So the multidisciplinary team approach, the notion of shared care, where podiatry, chiropody was seen as a sort of erm [sic] add on in those days, as opposed to being an integral part these days, was part of my steep learning curve about a broader aspect of diabetes ..." [JH 71-78]

Diabetologists working in the first MDTs recognise their role in the development of diabetes podiatry:

> *"I have facilitated that, em [sic] the progress itself has been made predominantly by the podiatrists, as such, so, but I think one's allowed it to progress as it were in a very sort of warm, warm, supportive environment as such."* [IM235-237]

The multi-disciplinary team approach to diabetic foot disease became enshrined in NICE guidelines, in this way health policy has served to formalise the multi-disciplinary structure of the diabetic foot team:

> *"National policies and NSFs and all the national guidelines that you have to, as a service you have to be responsive to them otherwise you can't be seen to be meeting the NICE guidelines and the multi-disciplinary team that they set out as the ideal em [sic] so because that's you know been developing in the 2000's its changed the way that we work in podiatry, you have to be able to be seen to be working towards something that, that's recognised as standard approach."* [Expert Reference Group 346-350]

Medical acceptance of and support for podiatry within the diabetes team was gained by a few key podiatrists. Though historically podiatry had not been a team orientated profession, these individuals were able to function within the multi-disciplinary team environment. By demonstrating knowledge and confidence coupled with ability in presenting they secured the support and acceptance of diabetologists and then the wider medical team:

> *"The drivers. Erm [sic], key, key people along the way erm [sic] a lot of people were concerned about levels and quality and what made somebody a - and it still is the question today, what makes a specialist podiatrist. I think key players who, who erm [sic], I mean once upon a time Ali Foster, myself and maybe one or two others were the kind of sole representatives, not because we were so wonderful but we were the drivers of things because we could hold our own in that environment I suppose, we could get up and speak and, and slowly, and I like to, I mean I, it's a bit immodest of me but I think particularly that was much more so of Ali Foster, erm [sic] when they were accepted as members of the diabetes team and presented well and knew their stuff they were then accepted by the other members of the medical team and they then helped to support podiatrists …"* [JH 133-142]

Thus specialisation in diabetes podiatry may have been a manifestation of medical influence within the profession of podiatry; or having been exposed to specialist practice, podiatrists may have sought to establish diabetes podiatry as area of specialty. Were podiatrists emulating medical structure in order to extend their scope

of practice and gain status, advancing what Larson (1977) would call their "*professional project*"? Were medical doctors using podiatry to ease their workload and shed their "*dirty work*"? Following the St Vincent Declaration in 1989 and founded on the gradually developing evidence base for key podiatric skills, were both groups focussed on and working to reduce amputation and ulceration rates? It is of course entirely possible that all of the aforementioned are true, in which case both groups would view the advent of specialised diabetes podiatry as a mutually beneficial arrangement, effectively guaranteeing continued support from both parties, a representation of Weber's "elective affinity" (see section 1.8.3.3). At this time the increasing diabetic population and the extension of the diabetes podiatrists' skill set represent further drivers for specialisation, being events which Abbott (1988) has highlighted as key precursors for differentiation.

4.2.1 Combined Effects – Charismatic Authority and Medical Patronage

Within the accounts of those who sought to establish themselves as specialised diabetes podiatrists, charismatic qualities such as confidence and tenacity feature as the means by which medical contacts were established:

> *"… tenacity I think would be the most, em [sic] obviously had an interest in diabetes right from undergraduate level, em [sic] and in the days that I qualified, which is quite a number of years ago now, the specialism in diabetes s actually wasn't formed. The, em [sic] King's was <u>just</u> about coming, em [sic] about three years after I'd qualified, so, so for me em [sic] I had an avid interest in diabetes, so I made sure that I'd got to know, I worked in quite a few hospitals and wherever I worked I went and introduced myself to the endocrinologist and diabetologist and said look, I'm a podiatrist and or chiropodist in those days, em [sic] one of the things we can do is help you with patients who have ulcers for example, because we can make insoles as they were called, or appliances in fact I think we called them. Em [sic] and we are very good with a knife, we can sort of cut away some of this dead skin and things. So that, that's sort of how it all started and I was <u>fortunate enough</u> to be tenacious enough to go up to people like vascular surgeons and say hi,* Colin's[3] *the name, feet's the game [gestures as if shaking hands with someone] what can we work together. Em [sic] and as, as, as then I also formed an interest in vascular surgery or, or peripheral arterial disease and started working alongside the vascular surgeons, who recognised <u>immediately</u> the skills I had with a scalpel and started putting me more and more in to, to their repertoire and that's really how I sort of got into it I guess."* [CG 16-33]

[3] A pseudonym

Diabetologists acknowledge that the drive to establish and develop joint medical/podiatry clinics came from the podiatrists:

> *"… right at the very beginning it was Mary Blundell who sort of said to me in a sort of inspired note … she said you know this is crazy, she said, you know, why don't we see them together in my place? And this is how the foot clinic was born really. Because then I went to see, we, went we started off on Thursday morning there and that's how it started in May 1981."* [IM 538-546]

> *"So I had a number of community podiatrists who came in to work with me and it would be a different one every week and so on, which was not great. And then I, then there was em [sic] the lead podiatrist was, developed an interest and he came along and said well, why don't we get some consistency into the clinic and em [sic] he did quite a lot of work with me and then er [sic] and that produced consistency …"*[OM 27-33]

Excepting the Skills for Health informant, the accounts of all respondents featured key themes around medical patronage and the charismatic qualities of the podiatrist - which they identify as having influenced the establishment and subsequent development of diabetes podiatry as a specialist area of practice. These recurring themes were:

- Medical support and acceptance of what diabetes podiatry could offer
- Networking and educating others about diabetes podiatry
- Forging good working relationships with others
- A proactive approach

> *"… if you work with somebody in secondary care, a consultant and the attitude of the consultant and their willingness in acceptance of us as a profession and what we can provide and having good working relationships with those people and just erm [sic] networking with other professions, professionals to show you, to show them what we can actually do, I think that's had a big influence as the determination of er [sic] individual podiatrists with in an interest to push the boundaries a bit and em [sic] certainly in our Trust we had a group of us that were interested in proving that the diabetic foot clinic could work and we, we gave our service for free for 6, 6 months to show that it could work and it did and convinced people that it worked and so that was a big influencing factor and so I think we underestimate how proactive we are as a profession at times, we're quite good."* [Expert Reference Group 355-364]

4.3 Change Over Time

All respondents agreed that diabetes podiatry has changed over time:

> *"I think we've moved on massively in the last, well sort of look at me, 17 years ago it was, it was you know I was just getting off the starting block and now I think we're no longer the Cinderellas, within that, you know, team."* [SS 88-90]

Clinician respondents highlighted the way in which roles formerly undertaken by medical doctors were now within the remit of the specialist diabetes podiatrist. This may be a manifestation of medical practitioners reducing their workload or represent their shedding of low status "*dirty work*":

> *"I think you could also add in sort of medical proper problems such as painful neuropathy, Charcot - that sort of diagnosis and management of those for the lead specialist podiatrist."* [Expert Reference Group 429-430]

> *"If you look at that from 1989 and look at it now, those boundaries are very, very blurred, for example I prescribe antibiotics, offload the patient, I take their blood pressure, I do cardio-vascular risk factor assessment with them, I look at wound care, I mean sometimes I think our skills as podiatrists have extended to be inclusive, whereas I think, certainly in terms of medics, very few medics have the same varied practical skills that the podiatrist has, but podiatrists I think have gained some of those holistic medical triage skills and assessment skills ..."* [SS 72-78]

This development and extension of diabetes podiatrists' roles requires them in turn to pass on some of their traditional activities to support workers; representing a chain of task shedding:

> *"Em [sic] you're also getting some of the support workers now taking on the role of em [sic] screening. Originally screening in the early days was seen as a very specialist role and now obviously, you know people are accepting that as you develop and move on you've got to leave things behind you, but you've got to make sure that as you're leaving things behind you're passing it on to capable people so, a, again some clambered and clung desperately to everything we could and now they're realising that you've got to let certain things go. And that's about educating other people to take on those roles, so I think that's an important side of it."* [MP 100-107]

The Skills for Health participant accepted in principle, the involvement of appropriately trained assistant grades in treating people with diabetes:

> *"I've actually said that you need to be a podiatrist to deal with diabetes patients, but that's technically not true, cos [sic] if, if you're a, a patient who hasn't got any of the real complications associated with diabetes, but needs*

regular treatment, then why shouldn't that be somebody who's trained up, who'd be an assistant practitioner?" [BL 687-691]

4.3.1 The Impact of Confidence "Pushing the Boundaries"

Confidence - "having the bottle" to direct medical intervention and present at national and international levels is the key attribute identified within those individuals who have "pushed the boundaries" in diabetes podiatry:

"I think it's really by a, a, and it's horrible to say this but I think it's been a few key individuals really pushing away and pushing the boundary, and actually working almost outside our normal scope of practice and actually having the bottle to go up to people and say, you know you're going to take that toe off, I don't want you to impinge on the plantar surface, I want you to do a dorsal incision, go along the top of the metatarsal, take it out and leave the metatarsal exposed, remove the dorsal tensor, I want you to leave the plantar tendon, long flexor tendon attached please at such and such, so we can then rehabilitise [sic]. …Yeah, and I think there again em [sic] as I've said and you'll hear this over and again on the tape, the fact that there have been a few key individuals who stand up at national and international meetings and say, right OK we're not just gonna [sic] say we're good, but actually these are our amputation rates, and I'll talk for us here, having just finished an article with [name of diabetologist] that's going to BMJ, em [sic] we now have 11 years prospective data on our amputation rates, we now can show that since the establishment of an MDT, when I came here, we now have the lowest amputation rates in the world." [CG 169-175, 190-196]

In order to "push the boundaries" though, certain requirements were identified:

"…if you're a consultant in diabetes then you've got to have the clinical expertise, you've got to have the clinical input and you've got to have the clinics to see the patients in, otherwise it's not about pushing the boundaries." [MP 170-172]

Research, publication and presentation activities were highlighted:

"I think you've got things like the Diabetic Foot Journal haven't you so you've got a body of people who've like we've just had the Diabetic Foot Conference so you've got a body of people who've done the research and are going out and doing lectures and the publications." [Expert Reference Group 369-371]

In presenting and publishing their work charismatic leaders acted as role models, imparting confidence and reassurance:

3: *"Also as 8 was saying there's certain eminent people for diabetes care that you gain confidence off by going to diabetic conferences, people like Mike Edmonds for example, Ali Foster, you know it's reassuring to go to these conferences and find that actually you are on the right track*

6: Mmm [nodding]

3: it gives you confidence and so pioneers like that and some of the books that they produced you know just simple things like that little diabetic book that Mike Edmonds and Ali Foster put out I think that was a big help to me when they produced that to tie in what I already knew and give me the confidence to say well actually I do stage it in that way, and I do have that thought process, but never really thought about it in as clear a fashion maybe as they presented it …" [Expert Reference Group 771-779]

> *"I think at Kings it was because they couldn't ignore the work that we were doing, because we were one of the very, very <u>early</u> foot clinics and after a couple of years we had demonstrated a 50% reduction in major amputations and we were all very, very conscious of the need to promote the profession, you know and we had a lot of publications, a lot of presentations at Diabetes UK and so I guess we won the respect of our colleagues and <u>that</u> was how it* [practice] *changed"* [PL 52-58]

4.3.2 Challenging Practice

Respondents linked the ability to challenge the practice of other professionals to professional development within the diabetes team. The implication being that this not only provides a valuable learning environment but in some way also confers legitimacy to the diabetes podiatrist:

> *"I think too one of the big things is those of us who have been fortunate enough to have for whatever reason found ourselves in a dynamic, supportive em [sic] foot team have been able to develop skills of presenting patients to other professionals and actually fighting the cause which is saying to some* [medical] *consultant I do not agree with you, you are <u>wrong</u> [as if speaking to consultant]. Em [sic] that has taken about twenty years I think, really because I think there's only been 2, 3, 4 people within the UK who've had the right sort of environment to develop those skills."* [CG 134-140]

Knowledge, skills and particularly communication skills are considered to be pre-requisites for challenging the practice of others:

> *"And then when you actually come to stand up to people and you <u>challenge</u> them and be that change agent, it's funny to see that years ago we felt we can't say that to the GP, the GP would get upset or the doctor would get upset and now I think there's more parity but I think the parity only comes if you have not just the knowledge but the skills and those communication skills especially."* [SS 83-87]

These accounts provide an illustration of the way in which once established, charismatic authority tends to challenge the traditional or rational-legal authority which facilitated its very evolution. For Weber the resolution of this form of

challenge is achieved through a process of "*routinisation*" (discussed in sections 1.10.7 and 4.8.3).

The need for "vision" in order to challenge practice was highlighted and, echoing the theme of responsibility, it was also pointed out that in making such challenges to practice diabetes podiatrists have to be willing to disturb the status quo and also willing to accept the consequences of having disturbed it:

> *" … I'm interested in, in challenging and being a change agent which doesn't always make you very popular, but you're not here to be popular are you, you're here to actually create change and sometimes contention creates havoc not just change."* [SS 200-203]

> *"I mean you've got to be willing to move things forward, you've got to have vision, you've got to be willing to send up flack, em [sic] you've got to be willing to <u>try</u> new ideas safely er [sic] and incorporate those into your clinical skills."* [MP 516-519]

Some diabetes specialist podiatrists clearly viewed part of their role as changing not only clinical practice but also governance structures:

> "[diabetes podiatrists are] *The clinical champion that crosses boundaries and certainly from my role I, I'm talking about not just what <u>I</u> do and seeing that evidence in practice, but also knowing what my colleagues are doing who work at a similar level. And we do cross boundaries between vascular, neurology, GP, em [sic] district nurses, practice nurses, we really do provide that conduit, which very often the patient <u>fell</u> between two systems of care, now we can pick them up because we've got very tight governance structures in, in place in terms of care pathways and what-have-you, where the patient's picked up in community and I'm seeing them in 24hours if they've got a foot ulcer and if I don't see them I'll raise a critical incident, because we <u>really</u> have to enforce it, I mean it's not about upsetting people, upsetting the apple cart, it's about giving patients the care that they <u>require</u> …"* [SS 97-107]

4.4 The Continued Role of Charisma

Participants illustrated the on-going effects of charismatic authority, beyond the initial establishment of diabetes podiatry, illustrating how it continues to impact at every stage and level of contemporary specialised practice.

4.4.1 Succession

The phenomenon of succession was discernible in the transition from early icons who established diabetes podiatry as a specialist area, to later "key leaders" and "champions" who sought to develop diabetes foot care:

> *"I think the goal posts have changed hugely, in the last ten years, let alone the last twenty years. Twenty years ago diabetes specialists podiatry - yeah you defend it, who, who was it? You know there were a few icons like Ali and she knew, well bless her she was, she is really is iconic and putting us on the map, erm [sic] I still think we've got a long, long way to go, but I think there are quite a few coming up champions there for diabetes that are willing to stick their head above the parapet and be counted and have the actual ability to do that, we've got a long way to go yet though."* [SS 57-64]

Contemporary leaders have challenged the practice and models of the early "iconic" individuals and seek to have a broader, cross-professional influence on standards within the diabetic foot arena:

> *"We are driven. Louise*[Stuart] *and I are, I mean we're nuts both of us, but we are really driven at what we do and, and em [sic] you know it, that's what I'm saying you know Ali* [Foster] *was a, I, I love Ali to bits, I gave a witness in her trial so, I mean she's a real personal friend em [sic] but sadly and this I, I've said this to Ali's face and I've said it to Mikes' face, you've monopolised the diabetic foot, it's either the wak [sic] or the wams [sic] – we at Kings or we at Manchester and that's the model and that's what it should follow, and we said and I said I don't believe that to be true, because there are loads of models out there, just cos [sic] what you're doing you think's right doesn't mean to say it is em [sic] and to have a matriarch of the diabetic foot and Ali has done marvellous things em [sic] I think the time has changed and there are now a couple of key leaders or a few key leaders in, in the diabetic foot who are equally driven as Ali but are more, have a wider view and say actually we're not going to tie ourselves to an institution i.e. Kings or Manchester we're gonna [sic] look at the diabetic foot full stop, whether you're a nurse whether you're a doctor, whether you're a podiatrist and we, we're wanna [sic] look at the whole thing and we create a right environment for people to progress and develop as, as clinicians as researchers as educationalists within that role. And also to set the standards, cos [sic] nobody was setting the standards."* [CG 1042-1058]

While the Society of Chiropodists and Podiatrists' Faculty of Podiatric Medicine and General Practice aims to provide an arena in which the charismatic leaders can be heard and exert influence:

> *"So all the movers and shakers are on the faculty one way or another er [sic] and we try and give them a voice and make their opinion heard."* [JB 55-56]

…the diabetes podiatrists express frustration with the Society of Chiropodists and Podiatrists and ally themselves more closely to the diabetologists and surgeons, who may represent a more powerful sponsoring elite:

> *"the way in which specialists have developed is not through our own profession it's been through medics and surgeons, it's by them recognising our skills it's not been from our Society recognising the skills, it's been as I say from those within secondary care that have actually said – these guys have got skills, let's teach them how to do more, let's give then more responsibility, let's allow them to develop, oh gosh yeah we can leave the foot in their hands, we don't have, you know fine we do, there are some bits they shouldn't be doing or can't do em [sic], but let's leave more and more."* [CG 777-784]

4.5 Continued Medical Patronage

The role of medical patronage in the further development and dissemination of specialised diabetes podiatry was acknowledged. Indeed informants pointed to the dependence of diabetes podiatry upon medical support:

> *"… some of the drivers were key physicians who erm [sic] who appreciated what podiatrists were doing and were very much key guys behind and interested in diabetic foot care, bearing in mind that, you know, diabetic foot care clinic up and down the country, what if you've got a good one, the chances are you've got a consultant who's interested in diabetic foot care, if you've got a poor one the chances are the consultant isn't so the key, pivotal positions in diabetic foot care are interested physicians and key guys along the way, some of the surgeons too, Patrick Weindorf – podiatric surgeon in Liverpool, Mike Edmonds – physician at, at Kings, Andrew Boulton – at Manchester, Matthew Young in Edinburgh, Ewan Masson in Hull, erm [sic] the number of key guys, Bob Young in Salford, key physicians who have helped enable them, so some of the drivers are key physicians …"* [JH 145-155]

…though medical consultants still express ownership over the diabetic foot teams:

> *"And, and I think in a way that, that* [ownership issue] *would have to be Addressed because it's [pause] and the NHS I don't think has addressed this yet. Because if, you know it's very much now the flavour of the multi-disciplinary team and the multi-disciplinary conference as such, but at the end of the day when there's, you know on the name on the bed is the consultant and the name in the clinic is me."* [IM 523-528]

… which may in part be based on their varying activities in raising the required funding to support the team:

> *"… so I raised the funding to, to, to bring Neil Baker from Southampton to Ipswich. Now it was all soft money and it was based on me doing drug*

company studies and various bits and pieces to bring that together. And I also brought in a specialist nurse to work alongside the podiatrist … and again all that money was raised through drug-companies." [OM 48-57]

Once again networking and charismatic authority, promoted and supported through the patronage of key physicians, influenced the dissemination of models of clinical practice which involve podiatrists:

"It's those sorts of things that have actually I think changed the way in which a lot of people now look at podiatrists, because the medics talk to other medics, and surgeons talk to other medics and you know, I've certainly been at places where, George come and meet [says own name], he's our podiatrist, now you've got podiatrists do have a chat with [says own name] about what we do and how we do it, so on and so forth. Em [sic] and that's been very useful, certainly locally now for example the Vascular Surgeons involve the podiatrists in [name of another trust], they didn't do that four years ago, it's only when I met and had a chat and all of a sudden now they're using them all the time. And I think that's true for a number of other folks around the country who've been involved." [CG 179-188]

So fundamental is medical support in this process that lack of it was consistently highlighted as a barrier to development:

I think the barriers we've found over the years are er [sic] you might want to progress something but are stymied by the individual consultant. [Expert Reference Group 383-384]

"I mean you've gotta [sic] consider people like Mike Edmonds and Matthew Young and, and em [sic] Gerry Rayman … and Phil Wiles here, there are a number of consultants who are, who are passionate about the diabetic foot, but equally there are a number that are ambivalent or not even ambivalent, they're completely nah [sic] I don't want to know the diabetic foot. You know in, in the area that I'm working now 10 miles down the road, less than 10 miles down the road there is no clinical champion for diabetes, there's no specialist in, in the community the podiatrists are running round like headless chickens trying to do the best they can without any infrastructure to manage these patients, its criminal, and that's going on across the country, we talk about multi-disciplinary specialist teams, how many are there, you can name them one hand, yeah and they talk about them as if they're the icon, they're 21 years old …" [SS 142-154]

A lack of exposure to and poor knowledge of diabetes podiatry were highlighted as the cause of difficulties with GPs. This lack of exposure would offer an explanation of why GPs appear to have been less susceptible to the effects of diabetes podiatrists' charismatic authority:

3: *In our patch they* [GPs] *really alienated themselves from community services because one of the GPs thought it would be a good idea to send a questionnaire out about em [sic] their knowledge of community services and displayed a distinct lack of knowledge and were actually quite insulting about what we did and, we fared quite well er [sic] compared to others and some of the comments were very disparaging, so yes I think there's education issues there that er [sic] [tails off]*

2: *Well the new GPs are now placed with us as part of their rotational training*

6: *Mmm*

2: *er [sic] its, it tends to be those who are coming up into the times of senior partnership, the old ones have taken early retirement cos [sic] they wanted to escape and they're now into the late 40's early 50's and they, they are of a, of a school of training where anyone who wasn't a doctor has no brain cell to rub next to the other one and unfortunately the, the very young ones who, the new ones who come are very proactive GPs have often had exposure to us professionally and they're a bit more informed so I think there's just this 15, 20 year hiatus that we've gotta [sic] go through until they get to be the senior partners*

Gen: *[laughter]*

2: *which is an awful thought, but the senior partners run the budget, the senior partners*

5: *Yeah*

2: *dictate what is happening*

5: *it'll be alright in 15, 20 years [laughter]."* [Expert Reference Group 1315-1334]

Where diabetes podiatrists work in primary care, communication with GPs tends to remain on a more formal basis:

> *" ... I thought if took up a primary care post that my biggest ally would be the GPs, is it [pauses and indicates suppression of expletive] my biggest ally are the practice nurses, the district nurses the administrators and they're the ones that get something done for me, the GPs inevitably I, I have to write to or phone them up and say as per such clinical guidance I would much appreciate you putting the patient on clindamycin or whatever it is, but the GPs don't normally use those drugs and they're a bit cautious"* [SS 283-289]

Education for GPs about the diabetic foot is undertaken by diabetes podiatrists – possibly in a bid to extend their charismatic authority to this hitherto apparently resistant group. When exposed to the activities of diabetes podiatrists, the GPs reaction is often one of shock:

> *"I think there's a <u>huge</u> amount of ignorance and certainly in primary care, I've seen GPs their, their gobs dropping when I show them some of the patients that we manage. And you can see them thinking bloody hell, you know, you're looking round, you go right [claps hands together] this patient arrives in your practice, what are you gonna [sic] do with it? You can see*

them thinking, don't look at me, don't look at me, don't ask me that question [says own name], I am not interested in answering it, you know you can see them all doing this dead bunny expression." [SS 579-585]

In developing diabetes podiatry in primary care charismatic qualities (such as tenacity) and charismatic authority in the form of professional reputation were highlighted:

"I guess the way people have developed career pathways is to latch on to a [pause], generally it has been a hospital that has a foot clinic and trying to get in there. Or to develop a service structure within primary care, for example in Salford, Tameside you've got the Martin Foxes of this world and so and so forth who've developed a primary care pathway, em [sic] and if you ask Martin, it's tenacity again and working in a secondary care centre, getting known as a bit of an expert in there and then working in primary care and developing care pathways and things within, within that." [CG 368-374]

The devolution of diabetic foot care from secondary to primary centres is viewed as a worrying development by some diabetes podiatrists because it represents a possible loss or dilution of medical patronage:

"…with the devolvement of that to sec [breaks off] to primary care unless you have GP that are a real champion in the diabetic foot I can see that bit just going [blows large raspberry]. And maybe a few odd people who are extremely outspoken, they may be well trained, they may not setting themselves up as the king or queen of the diabetic foot, I don't mean that but you know what I mean, there could be real champions. Em [sic] so I have a few – I'm getting old [smiling] em [sic] I have a few concerns em [sic] now if the teams go out then fine and this is where the evolution of healthcare is quite interesting and how it evolves and em [sic] and I think part of the influencing factors are what happens to amputation rates when services are devolved from these centres of excellence in inverted commas, em [sic] into GP practices. Cos [sic] I've got a horrible feeling amputation rates are gonna [sic] rise and admission rates are gonna [sic] rise, which will be sad." [CG 784-795]

4.6 The Influence of Charisma

Charismatic qualities appear to be important and influential at all stages and in all aspects of diabetes podiatry; from entry into diabetes podiatry to influencing the level of clinical activity, through the impact on interaction with other professions, to the formulation of strategy at local and national levels.

4.6.1 Charismatic Potential and Entry into Diabetes Podiatry

Faculty of Management respondents highlighted key personal qualities which they considered to be essential for a specialist:

> *"If we're looking at the role, I mean the role that we need and it comes into something that's the terminology, the role is very much about the, the, the way in which people will be working, [clears throat], not just their clinical knowledge and skills it, it, what is essential, critically essential is their ability to work in a team, to be able to lead er [sic] the team, to be able to integrate and work with consultants and GPs and a whole range of other people, in a partnership way, that's fundamental, the, the, the key skills and knowledge em [sic] er [sic], they're more than just a bonus but, but, but without the other factors somebody wouldn't be a specialist."* [Faculty of Management 53-61]

Some Faculty of Management respondents incorporate assessment of key personal qualities into the interview process for potential diabetes specialist podiatrists:

> *" … last time we interviewed the, the presentation was actually as a podiatrist presenting to a GP practice er [sic] you know what the diabetic foot clinic was and that side of it to make sure they had that, those skills because they're quite important …"* [Faculty of Management 887-890]

Indeed in appointing diabetes podiatrists, some Faculty of Management respondents stressed their evaluation of charismatic potential, the type of person, the value of motivation, and personal qualities; prioritising these facets over clinical skills – which they considered could be learned later:

7: "Then you might get someone who's coming along who's very sort of motivated, em [sic] hasn't had the necessary experience but you think you've got the potential to take it forward em [sic]

1: Mmm [nodding]

7: just from how they come across from their presentation and their interview and er [sic] you think oh yeah this person would, would in the organisation would move up erm [sic] quite quickly but it would be nice to er [sic] develop them and support them

1: And the consultant, this is a medical team, where I work certainly have said you know we just need to have the right type of person you know we can develop the skills you know in them, it's more about the, you know the personality and the person and er [sic] than the skills cos [sic] a lot of that stuff can be taught

7: Mmm [nods]

1: but the empathy you, is, is you know the ability to enable and empower erm [sic] patients is, is, is such a key result area that, that actually some of the other clinical skills can become you know less important because we don't have to, we have to be realistic about what a, what it is we are able to influence as clinicians.

8: *It's really all around about being a team player isn't it. Just to work in a multi-disciplinary team and you can't actually teach, you can mould people but you can't if they haven't got those core team player type skills, that work. [pause]"* [Faculty of Management 917-939]

The Skills for Health participant also acknowledged that personal qualities are an important aspect of specialisation in diabetes podiatry and that education for role is not the only consideration:

> *"I mean I've worked in a diabetic clinic and you need <u>really</u> to be erm [sic] <u>dedicated</u>, I think, to the role to do it and to take it further. I mean it's not everybody's cup of tea, when you see some of the wounds and things you have to manage. Erm [sic] and therefore I suppose to a certain extent there is, there <u>is</u> a certain degree of calling to it, beyond simply the education."* [BL 609-614]

4.6.2 Influence of Charisma on the level of clinical practice

Clinician respondents highlighted the importance of autonomy and confidence in enabling them to practice effectively:

> *" ... but it is quite often that er [sic] we're the first ones that see these people and you know check that they've got the right foot-wear, that their HBA1c s what they are and you know we just coordinate everything really and I think that's a big role that I've done when I've been doing DFCs* [diabetic foot clinics] *and important to that, you know having the autonomy to do that and em [sic] and the confidence to do it ..."* [Expert Reference Group 1010-1014]

Empathy and insight were also highlighted:

> *"I used to be quite intimidated or challenged by a difficult patient, now I love it, cos [sic] I think you know when you're obviously annoyed because someone's done something to you and you, it just shows the different perspectives that when you approach a patient, walking in their shoes, rarely do they stay angry and cross with you and where they doing that, start to work with you, cos [sic] all they're looking for is someone to be an advocate, and these are <u>really</u> poorly patients, if you think 50% of them are dead within five years of a foot ulcer."* [SS 206-212]

Development of empathy may be linked to the technique of Motivational Interviewing, a tool which many diabetes podiatrists employ. Motivational Interviewing is a strategy in which the clinician takes the patient's perspective and works with the patient to identify strategies to improve health outcomes (Rollnick et al 2008). Concordance is said to be achieved through avoidance of conflict with, or negative responses from the patient. By focussing on the patient's perspective,

insightful and empathic care planning is the focus of motivational interviewing (Rollnick et al 2008).

In the absence of any formal, identified route to specialty in diabetes podiatry and faced with financial and logistical difficulties in accessing courses, the personal qualities of practitioners have been repeatedly highlighted in achieving professional development. In describing these personal qualities, participants used emotive language – tenacity, desire, drive, persistence:

> *" …it's a very difficult situation because there's, as I talked about earlier we haven't, there isn't that formal route through yet, em [sic] but some people through their own finances, through a helpful physician, have gone on various courses, have taken themselves off to Kings, and to the Royal Infirmary at Edinburgh, or to the Manchester Royal em [sic] to gain some courses, they've gone off to the States themselves, em [sic] it, it's terrible that, that it's that, they've hardly been enabled to do it, but those people who have that sort of persistence and, and desire to gain these skills …"* [JH 480-487]

4.6.3 Influence of Charisma on Interaction with Other Professionals

Communication skills, confidence and the ability to challenge the practice of others were themes repeated many times in the accounts of all informants with the exception of the Skills for Health respondent:

> *"Good communication cos [sic] unless you can communicate with other professionals, be it, be they above you because they are you know a medic, or you know a consultant or somebody like that, or be they below you erm [sic], unless you can converse with those people you will lose a lot of your potential benefits of being, of working in a multi-disciplinary team. So if you're a lone worker then forget it, it's not the type of job, so you've got to be able to communicate. And there'll always be challenges to your communication skills and there will always be challenges to that, either on a personal note or on a general note, but I think you need to be able to communicate."* [MP 509-516]

> *But if you talk to any multi-disciplinary team, they, they view the podiatrist now as the key member of that team to bring things together, because they're engaging with the patient face-to-face and they can be crucial in that making the links, so having the communication skills and the, and the confidence to go and talk to em [sic] other health care professionals is key.* [Faculty of Management 347-351]

Within the context of communication, the ability to justify specific approaches and requests was also highlighted:

"… you know the consultant radiologists, if I 'phone them up and say I've got an urgent patient, er [sic] need an MR scan they'll usually get them done within a couple of days. And that's because I'll 'phone them up and tell them what the problem is, em [sic] rather than just sending a card willy-nilly and just waiting for them to see it and decide what they need to do, so you know and he'll challenge me and say, you know you, you, what you're hoping to find out, what information do you need, and you know he can assess that, if I 'phone up and say I really need to know the extent of the osteo-myelitis cos [sic] I'm taking them to theatre, it would give me a <u>good</u> guide to, to advise the patient of what the potential successes are…" [MP 247-254]

4.6.4 Networking

Networking was viewed by the diabetes podiatrist respondents as more than a process of marketing their skills and services or educating other practitioners, some exhibited an almost evangelical drive to attract, enthuse and involve as many healthcare workers as possible:

"… you've got to be an octopus, you've got to be grabbing out in all directions and, and bringing on board <u>everyone</u> you can …" [SS 275-277]

Building and maintaining links was seen as they key to ensuring smooth referrals for patients:

" … as I said here, we, we've got an arrangement because we've developed <u>such</u> links locally with the GPs cos [sic] I've done lots and lots of GP training, I've done lots of nurse training and things within the community, and because <u>this</u> clinic has, is held in such high esteem, em [sic] anybody can refer in as long as the GP, cos [sic] the GPs say ooh yeah fine pshhh [sic]*, send her in, send them up to Colin and the team, great cos [sic] we don't want them."* [CG 688-693]

"… we have links they [vascular surgeons] *come over and do clinics twice a week, so we have links with them er [sic] and again we link with them so if their diabetic surgery that they're needing, if their circulation is poor, then we make a balanced judgement as to whether to go ahead with the surgery or get, if we've got time on our side get bypass done, <u>then</u> do the surgery. So it all varies, so there's a good link, working links…"* [MP 24-28]

…and as a means of ensuring that the diabetes podiatrist did not work in isolation, thus reducing potential liability:

"…<u>network</u> like a drunken spider with everyone around you to make sure that everyone's on board and that you're not working in isolation. Because you know when the big, when the big bad barrister knocks on the door if you've worked in isolation you haven't got, excuse the pun, but you haven't got a leg to stand on, really haven't got a leg to stand on." [SS 653-657]

4.7 Charismatic Authority and Medical Patronage; Tensions, Limitations and Constraints

Diabetologists recognise the potential for conflict with the charismatic leaders in diabetes podiatry:

> *"… theoretically I'm the consultant on the list of the, and so I'm er [sic], I'm, I'm responsible. I mean that is an issue with podiatr [breaks off] that is sort of an issue, because I think some podiatrists will feel uncomfortable with that and would want to be sort of dominant with their name.* [IM 223-226]

While based on the links established between podiatrists and diabetologists, the podiatrist MP perceives a diminution in medical "ownership" of patients:

> *"You know and that's the sort of link, you know that I think doesn't happen overnight it, that's something that you build up and they know where you're at, they know what you can do, but no one's saying it's my patient, the whole idea that it's my patient and I've got the overall say, hopefully in many cases has gone now and people are working far more with the sort of team knowledge behind them."* [MP 218-222]

…IM, a diabetologist perceives the potential for podiatrists to challenge medical ownership of patients:

> *"…our podiatrists could get [pause] stroppy let's say, you know all, all the patients, essentially are under my name and you know, some stroppy podiatrist might say "ahh [sic], I'm doing all this work, you know I ought to have my name on these people"* [IM 518-520]

Given that charismatic leaders in diabetes podiatry now view challenging medical practice as part of their remit (see section 4.3.2) two key factors appear to prevent them from mounting a jurisdictional claim over the treatment of diabetic foot disease; the ability of medical doctors to contain the podiatrists' charismatic authority and the podiatrists' continuing need for a powerful sponsoring elite.

4.7.1 Containing charismatic authority

Two mechanisms which allow medical doctors to contain and constrain the diabetes podiatrists are the podiatrists' lack of formal admission rights and their status as supplementary prescribers.

4.7.1.1 Admission Rights

The inability of diabetes podiatrists to admit patients ensures their continued dependence upon medical colleagues:

> *"At the moment, I don't think they'd have the sort of, the political power to arrange for the admissions. Which, which might get very frustrating."* [IM 187-189]

> *"...you can't do it in isolation, you've gotta [sic] work with a team. You've gotta [sic] be able to admit patients to, to em [sic] the ward if necessary."* [JB 350-352]

Though in extremis community based diabetes podiatrists have found ways to circumvent this:

> *"a few weeks ago when I happened to be doing a home visit to see one of my patients ... she happened to look really worried, I said you know, what's wrong, and she said oh it's my son, he's come to stay for the week and he's not very well, he's a diabetic and he's woken up this morning saying his toe's gone black, could you have a look at it. And so I thought well maybe I would do expecting it to just be a sub-ungual haematoma or a bruise or something and his whole foot was wet gangrene er [sic] he was systemically very unwell and he was a very ill man. And obviously I got him admitted straight away, the GP practice had been called er [sic] but that's where break-down in communication can occur, they said yes the GP will come out maybe tomorrow and see you and that guy wouldn't have survived the day he was so systemically unwell erm [sic] you know he, I got it coordinated and the paramedics came, but I was actually quite surprised er [sic] at having to educate the paramedic, I would have thought that they must have had this sort of experience before. But you don't really need to have too much experience to know that that is pretty wrong, you need to get to hospital pretty quickly em [sic] he said well what do you think I should do, I told him and I said well before I tell you what would you have done if I wasn't here, and he said oh I would have waited for the GP to come, which was a little bit sort of alarming. And so I took the opportunity to sort of educate him and the guy got to hospital and they reckon that he got there just in the nick of time er [sic] he was very poorly well into septicaemia erm [sic] so you know, I wasn't really expecting to have to educate em [sic] paramedics but you know, we shouldn't underestimate how much knowledge we do have*
>
> *2: Mmm [nodding]*
>
> *3: and the quick decisions we have to make at times. It's very easy to pooh, pooh what we do, its only feet, nothing can go wrong with the feet and people sort of laugh at some of the things we have, but we can make some er [sic] very important decisions at times and yeah education of other professions is important as well.*
>
> *8: Did they save his leg?*
>
> *3: No it was quite bizarre cos [sic] I'd only rung up the next day or two days later to see how he was and I've never heard somebody so pleased about somebody that's had an amputation. She was ecstatic that he had an*

> *amputation, but she recognised how serious it was and that he, if he hadn't have gone then to hospital he would have died, they said he was into er [sic] septicaemia and he had horrendous problems but they managed to save him, but obviously you just take one look at it and you knew it was a BKA* [below knee amputation] *and em [sic] you know [tails off]"* [Expert Reference Group 491-523]

Based upon the re-proven abilities of the practitioners involved (a necessity of maintaining their charismatic authority) an approximation to admission rights for one group of diabetes podiatrists had been achieved through the negotiations of one diabetologist:

> *"I negotiated direct referral rights to our emergency medical unit for the podiatrists … they can ring our assessment unit, our medical assessment unit directly and get, and get them admitted and one of the swinging factors was I told them the quality of the referrals you'll get from those podiatrists will exceed most, most GP referrals."*[AT 480-487]

This arrangement is though an unofficial one, relying upon goodwill and remaining within the "gift" of the medical doctors involved.

4.7.1.2 Supplementary Prescribing

The diabetes podiatrists' status as supplementary prescribers; based on patient group directives and within the boundaries of formalised antibiotic protocols permits them a form of prescribing which remains under medical control:

> "[one of the competencies is about] *depending on an enabling physicians in the hospital setting, more so in a primary care setting about changing prescription antibiotics."* [JH 258-260]

Diabetologists acknowledge their role in allowing the diabetes podiatrist to undertake supplementary prescribing:

> *"…sounds slightly pretentious but I, I think of one's, my role as er [sic], has allowed the roles of podiatry to flourish. Er [sic] because they can proceed with all their er [sic] techniques, procedures, assessments emm [sic] and antibiotic cover er [sic] without having to go running here, running there or being rebutted here and rebutted there and taking away all that hassle.* [IM 213-218]

…which they see as a form of boundary blurring or sharing of roles, but importantly one which still requires their endorsement:

> *"And there's the, and there's the interchange of, of roles with, with us as medics, because now we're working with podiatrists who are em [sic]*

prescribers. So em [sic] yes, I'm backing them up but they're actually even taking that role as well." [AT 61-65]

The diabetes podiatrists' lack of independent prescriber status can make working in the community more difficult:

No podiatrists can't be independent prescribers yet ... as yet no it has to be supplementary prescribing, which means that I have to agree the care plan and here I support that em [sic] but in the community erm [sic] it's the GP who has to be the independent prescriber, so they have to agree care plans and that's, that's difficult then, em [sic] because they're not always geographically in the same place and so that, trying to get support and the care plan signed up is more difficult for the podiatrist working in the community." [AT 92-104]

…about which several diabetes podiatrists expressed frustration:

"Give us advanced prescribing rights and it would be a whole lot better if we could go direct to our antibiotic use - that would make a big difference to us." [Expert Reference Group 1068-1069]

"…independent prescribing is in a bit of a mess though at the moment because, I'm certainly involved in a little battle at the moment where they're pushing like mad for us to become supplementary prescribes in the community and the models that they work is not fit for purpose. It works in the hospital, I mean I prescribe in the hospital but in community legally your independent prescriber has to see a patient, well by the time your GP's come out, seen the patient, seen the patient, signed your CMP, he'll be thinking what, well what's the point here, what's going on here…" [SS 369-375]

"…woe betide us, sue the arse off us for getting it wrong, but don't hold us back from doing it [independent prescribing]. *Because the way they're doing it at the moment, people are trying to find short-cuts for supplementary prescribing, and what's gonna [sic] happen is that they're gonna [sic] open themselves up to litigation, you're gonna [sic] get people getting blanket signed care management plans by medics that haven't seen the patient, then the Barrister will get it and say to the medic- did you see the patient on that day- and no [shakes head as if medic is saying "no"], and the podiatrist will get it in the neck because that is illegal, inappropriate prescribing"* [SS 565-571]

4.7.2 Loss of Medical Patronage

Podiatrists employed within the multidisciplinary diabetic foot team under Service-Level-Agreements are vulnerable. Termination of the Service-Level-Agreement results in their return to the employer (usually the Primary Care Trust):

> *"… I worked with a group of podiatrists employed by the community trust, by the PCT, which whom I'd worked some of them for 20 years, em [sic] and at least 10 years and we had huge understanding and they were all specialist podiatrists. As of October 2009 the acute trust decided it would employ its own podiatrists and served, 6 months earlier had served notice on the em [sic] SLA, the Service Level Agreement."* [AT 121-127]

This effectively ends the diabetes podiatrists' practice within the hospital based multidisciplinary diabetic foot team, removing them from the support and patronage of the medical diabetologist. In this situation, their claim to specialist status will rest solely on their charismatic authority, unless they can secure the support of a medical doctor in the community.

4.8 Sustainability of diabetes podiatry

The absence of any agreed and formalised educational preparation or defined career pathway means that diabetes podiatry lacks educational credentialing. The specialty is only loosely underpinned by small sections of health policy, embedded within National Service Frameworks and clinical guidelines. Thus claims to legitimate specialist status have relied upon medical patronage and the charismatic authority of its practitioners.

4.8.1 Lack of Faculty Status

The podiatrists' professional body, the Society of Chiropodists and Podiatrists while granting faculty status to podiatric surgeons and podiatry managers, has so far resisted fragmenting the large faculty of podiatric medicine and general practice (of which the diabetes podiatrists are a part) into smaller, specialised faculties:

> *"…so if you're a surgeon – you're a specialist, you've got your own faculty. If you're a manager – you're a specialist, you've got your own faculty. If you're a generalist you've got your own faculty but there's eight and a half thousand of you in there and the tension in the Society is – does each specialism have its own faculty?[laughs] em [sic] and my answer is absolutely not otherwise you know … once you begin to say no, well diabetes is a faculty, rheumatology is a faculty and so on, then you, you get in danger of just having pockets of people who never talk to each other."* [JB 119-128]

One of the main reasons for not establishing more faculties is financial:

> *"…every time you spawn a different em [sic] group of people, they need supporting. And they almost need an officer of their own, cos [sic] once you start that you, you have to invest more money and I don't think the Society at the moment has got that money to pay for it …"* [JB 156-159]

Practitioner numbers, expertise and evidence base were considered to be the pre-requisites for Society of Chiropodists and Podiatrists faculty status:

> *"But I don't think at the moment we've got critical mass em [sic] of people or expertise that justifies a faculty. So and when I say expertise I would think have you got the research base, have you got a critical mass of people, have you go the clinical evidence that suggests that this is <u>really</u> a specialism on its own?"* [JB 171-175]

4.8.2 Fragility of Charismatic Authority

While those podiatrists who seek the continued development of diabetes podiatry still display and use charismatic authority, there is recognition of the fragility of this form of authority:

> *"I'm involved in pushing the national profile of podiatry which I'm really passionate about em [sic] I think there's too many of us that are a bit shy in podiatry at coming forward professionally and we've got <u>so</u> much to offer, we've got a long way to go but we, we have, we made a difference in diabetes."* [SS 189-193]

> *"… there is not an Ali Foster in every part of the UK. You know there's not a Louise Stuart, there's not a Neil Baker, there's not an Alistair McInnes, there's you know I'm sure you could name the key folks in the country, but em [sic] [sighs] you're not gonna [sic] have those, but there should be the facility and this is what I guess concerns me is that at the moment its only by the tenacity of certain individuals to make sure they get up there, what I'd like to see happen within our profession is a vehicle to allow people to progress there, because when certain folk retire, who's gonna [sic] take their place, who, who's actually gonna [sic] be the ambassador for podiatrists in the diabetic foot?"* [CG765-773]

4.8.3 Routinisation

Routinisation – the replacement of charismatic authority by a more stable form of authority – is evident at many levels. At the direct patient-contact, micro level, the transition from charismatic to rational-legal authority is accomplished via the use of tools such as care pathways:

> *"… it's so simple to put a care pathway and get it through the governance structure, get it into the system, it's so simple to get a care pathway through and then police it and then go out and promote it, sing it from the hilltops, just go out to every group and say this is the care pathway, it's not a painting, stick it up in your clinic, <u>this</u> means when you get a shitty horrible patient with a gammy infected ulcer that you don't know what to do with, you don't know whether to get an ambulance or whatever, call us out, we'll take*

> *it off you. And they're like, whoa [sic] that's, that's fantastic. Such a simple mechanism is effective, yeah, without a care pathway, you might have a passionate individual like you might have a Neil [Baker] or a Louise [Stuart] or an Alistair [McInnes] or whatever, but if someone but if someone yeah, you refer to Alistair or Louise, yeah they're good at it, what happens if I die, what happens if I leave what happens there. You have to have a robust infrastructure of care that those patients can navigate through, cos [sic] without that navigation system the patients get lost. They get lost, you can't possibly speak to every single person and have them all on board, but with your care pathway, we sing it and you actually make sure that every practice has it, the nurse has it they've all had training, they've all had e-mails on it and then you give them updates."* [SS 489-513]

The influence of diabetes podiatrists over the care pathway is accepted and expected by Managers:

> *"For me they work across and influence the whole pathway, from start to, from start to finish …* [Faculty of Management 285-286]

Specific reference to podiatry in the NICE guidelines for diabetes represents evidence of macro-level routinisation which has been achieved:

> *" …but the fact that the NICE guidelines mentioned the role of podiatry was people like Neil Baker and Louise Stuart who got into those committees to influence the reports on podiatry, otherwise it would have been left off."* [JB 215-217]

At the strategic, macro level further routinisation is underway; as evidenced by the creation of "*National Minimum Skills Framework for Commissioning of Foot Care Services for People with Diabetes*". Faced with what they perceive to be an inadequate Diabetes Framework – newly created by Skills for Health, Foot in Diabetes UK developed their own National Minimum Skills Framework:

> *"I don't think it's* [the Skills for Health Diabetes Framework] *much help to us. Em [sic] the whole reason why we did the Minimum Skills Framework was because it was inadequate and I think it was a great shame that they spent so much time and effort, so much money into that …"* [SS 673-676]

Montgomery (2003, p15) points out that such guidelines form what is known as quasi-law and while not strictly legally binding may have some legal force, for in practice they determine the way in which people should act:

> *"… because policy and practice now exists to say if you don't have these skills – the minimum skills framework and you can't see this patient and access these individuals – then pass the patient on to someone who can."* [SS 428-430]

The production of the National Minimum Skills Framework represents the formulation of health policy at national level by Foot in Diabetes UK. This was achieved via the use of inter-agency cooperation and endorsed by Diabetes UK, the Association of British Clinical Diabetologists, The Primary Care Diabetes Society and The Society of Chiropodists and Podiatrists.

> *"…you know the Minimum Skills Framework was a pain in the backside to get it through in a very short space of time, but collaboration is the key to the game get <u>everybody</u> on board, you don't want to really do anything in isolation. Create waves."* [SS 639-642]

Having established the National Minimum Skills Framework, Foot in Diabetes UK is now turning attention to education and assessment of diabetes specialist podiatrists:

> *"the future needs to have, like the podiatric surgeons, needs to have a definite exam system and structure, so that people are then at least potentially entering these posts with a good knowledge and understanding and also a good knowledge that they can er [sic] <u>relate</u> and pass on to other people."* [MP 284-287]

> *"…we're developing a curriculum that's gonna [sic] sit in tangent with, the curriculum's gonna [sic] sit in tangent with the National Minimum Skills Framework."* [SS 617-618]

Diabetologists recognise the need for specialist training and display a certain frustration with the diabetes podiatrists' lack of progress in this area:

> *"… I don't think podiatry has got itself together basically… what needs to happen is podiatrists interested in the diabetic foot needs to, need to bring themselves together, developing, develop the training programme. I mean I think that one of the sad things apart from a few podiatrists a lot of what has happened is actually dependent on diabetologists, which you know is, we can't argue, we've tried our best em [sic] but actually you need to do it within your own organisation [tails off]"* [OM 272-281]

Faced with frustrations in the development of a specialised diabetes podiatry curriculum, diabetes podiatrists seek to formulate a national curriculum to be endorsed by Diabetes UK rather than the Society of Chiropodists and Podiatrists:

> *"Lack of vision, professional vision. Em [sic] this, this is what I've got quite cross with, with the Faculty of Medicine, because there just seemed to be a real lack of grasp of opportunities that we have."* [CG 805-807]

> *"… there needs to be a national curriculum, which, which we're on with at the moment, we're getting Diabetes UK to em [sic] allow us, allow me to lead a task and finish group to write that."* [SS 397-399]

In this way those diabetes podiatrists who see themselves as leaders are utilising a powerful sponsoring elite to support their formulation of health policy and endorse their educational output. Such educational output would in turn represent the educational input for future diabetes podiatrists. If successful these developments would represent significant further routinisation at a strategic, macro level.

4.9 The Importance of Medical Patronage

Within the data there is repeated emphasis upon the importance of medical patronage in secondary care, both historically and in contemporary settings. The potential loss or diminution of such patronage through a move from secondary care settings into primary care is a cause for concern amongst diabetes podiatrists.

Medicine as a profession is still able to exert a controlling influence over the healthcare sector (see section 1.8 Medical dominance). Within the secondary care setting, diabetes podiatrists have detailed how they engaged with medical doctors, gaining the support of diabetologists and then the wider medical team. Diabetologists are considered to be the leaders of diabetes teams and for diabetes podiatrists they act as quasi-employers. In this way the diabetologists provide the link to Freidson's institution for the diabetes podiatrists. Freidson (1988) does not consider knowledge itself to be a system of domination, but rather that the professions, as agents (creators and users) of knowledge are provided with opportunities to exercise power via the institutions which sustain them. Medical diabetology appears to be the institution which sustains diabetes podiatry, indeed within the accounts of some respondents medicine (in secondary care) is identified as the organisation which allowed, encouraged and enabled the development of diabetes podiatry and which is committed to its further development. They contrast this sharply with the role of their professional body, which they consider to have been far from enabling and supportive. The diabetes podiatrists also highlight the difference of their relationship with doctors in primary care, citing GP's lack of awareness of their skills, and potential utility and pointing to communication

difficulties. Thus diabetologists as leaders of the hospital diabetes teams provide the situation and opportunity - the institution - where diabetes podiatrists can exert a degree of power and from which they derive enhanced status. Potential loss or diminution of such legitimating support makes the diabetes podiatrists' concerns over a move into primary care understandable.

4.10 Why has Charisma Been Such an Important Influence?

The first "iconic" diabetes podiatrists established an area of specialist practice based on knowledge, clinical skills and working practices which differed from that of other podiatrists. Their authority was charismatic. Weber (1968) identifies charismatic authority as power legitimised on the basis of exceptional personal qualities or the development of extraordinary insight. Indeed, the accounts of almost all respondents are replete with references to the personal qualities, charisma, innovation and insight of these early icons. Another feature of charismatic authority is the ability to inspire followers – this phenomenon is evident in the way in which dissemination of ideas, treatment modalities and models of practice was achieved via the use of publications and presentations; effectively launching a formalised specialty within podiatry based on charismatic authority. Due to the requirement for diabetes podiatrists not to work in isolation the personal qualities and charisma of the individual podiatrists has represented a key factor in the further, on-going development of this area of specialist practice. Indeed charismatic authority appears to have been the most significant influence in the formation of specialised diabetes podiatry for it was the means by which medical patronage was secured. This patronage and support of key medical individuals has been essential at every stage in the development of diabetes podiatry and continues to exert a major influence over the specialty. Such phenomena were also considered by Weber (1968) who highlighted that charismatic authority almost always evolves in the context of boundaries set by traditional or rational-legal authority. Medical doctors have made use of the charismatic authority of podiatrists working within what they consider to be "their" teams; podiatrists have engaged in wide ranging educational and marketing activities which reinforce the status and importance of the diabetic foot team. While motivation for undertaking such activities may be linked to the professional project of the diabetes podiatrists, their inextricable tie to the multidisciplinary team means that the team is also the beneficiary of their

promotional activities. Though diabetologists recognise the potential for conflict with these charismatic individuals, it seems that while the authority of the podiatrists remains a containable and useful phenomenon medical support is likely to continue. This ability to constrain their charismatic authority, coupled with the podiatrists' need for a powerful sponsoring elite may be what prevents diabetes podiatrists from challenging medical leadership of diabetic foot teams and mounting a jurisdictional claim over the treatment of diabetic foot disease. Thus medical dominance which is entrenched in the structure of the NHS acts as both an enabling and constraining force for diabetes podiatry.

Recognition of the fragility of their charismatic form of authority has led key individuals – notably Foot in Diabetes UK executive members – to seek more stable and formalised legitimation for diabetes podiatry. In the process which Weber calls "*routinisation*" charismatic authority is replaced by a bureaucracy controlled by a rationally established authority or by a combination of traditional and bureaucratic authority. This routinisation is evident at many levels from the use of local health policy in the form of care pathways by individual podiatrists; to the production of national policy by Foot in Diabetes UK. These pathways and policies not only represent what Montgomery (2003) calls "*quasi-law*" which will impact on the clinical activities and caseload of podiatrists, they also form further key legitimising strategies for diabetes podiatry via the establishment of rational-legal authority. Care pathways form a particularly ingenious approach; while to a certain extent they do codify knowledge, more importantly they have been used to shape and direct the clinical activity and referral patterns of other health professionals. In this way care pathways have been used to strengthen the jurisdictional claims of diabetes podiatrists over the control of managing diabetic foot disease.

Respondents' emphasis on the importance of key diabetologists led the researcher to consider whether the diabetologists were in fact the charismatic leaders and the diabetes podiatrists their disciples. Extensive reflection on the nature of charismatic authority, how it manifests and its effects has led the researcher to conclude that while the diabetologists may indeed be charismatic individuals and may use charisma to advance their claims and raise their profiles; diabetologists' roles, titles

and positions are legitimated by rational-legal authority. In contrast to this the diabetes podiatrists, lacking educational credentialing and formal career pathways rely upon a blend of charismatic authority and medical patronage to legitimate their roles, titles and positions. Charismatic authority has been extensively utilised by the diabetes podiatrists to develop, disseminate and defend an area of specialised practice within podiatry. The context in which change over time and contemporary developments have taken place has been shaped by national and local health policy, the influence of medical dominance, the negotiations and the professional project of podiatrists. However charismatic authority has proved to have continuing relevance in shaping the on-going development of the specialty at micro and macro levels; routinisation strategies represent contemporary attempts to secure a legitimate long-term future for diabetes podiatry as an identified specialty.

5.0 Title

The following chapter explores issues surrounding specialist titles, their significance and implications.

5.1 The Variety of Titles in Diabetes Podiatry

While much of the advertising for posts assigns the title "Diabetes Specialist Podiatrist" to podiatrists specialising in diabetes, during data gathering it became apparent that nomenclature associated with specialised podiatry practice in diabetes is highly variable:

> *Well they're still not called Diabetes Specialist posts are they? Sometimes they're diabetes clinical lead, there's no consensus what, what they're actually called is there?* [SS 437-439]

Because the skill-set remains undefined, no official, formal title has been assigned to podiatrists specialising in diabetes:

> *"And we haven't actually defined and said what are the skills that would be needed to become a specialist podiatrist tut [sic], so, so these are still unofficial titles, but I would still tend to use those and when introducing them to, introducing people em [sic], to colleagues or to patients, I would say that's specialist podiatrist…"* [AT 553-558]

Indeed, clinician-participants' titles within this research included:

> Podiatry Pathway Lead for the at-risk foot
> Senior Podiatrist
> Lead Podiatrist
> Chief Podiatrist
> Specialist Lead Podiatrist
> Wound and Diabetes Specialist Podiatrist
> Lead Podiatrist in Diabetes
> Podiatrist
> Podiatry Clinical Service Manager [Also working part-time in diabetes podiatry].
> Diabetes Specialist Podiatrist
> Consultant Podiatrist – Diabetes
> Diabetes Specialist and Research Podiatrist

This plethora of titles associated with practice in diabetes podiatry was singled out as a cause of confusion:

> *2: "I think that the term diabetes lead confuses it as well.*
> *7: Yeah*
> *2: You know are they the expert, are they co-ordinating it or what's their role within this as well."* [Faculty of Management 86-89]

Agenda for Change appears to have compounded the confused nomenclature:

1: *"There is a, there's a, there's a, there's an advanced, there's a specialist profile? Which I don't think necessarily copes at this level, higher than that is advanced practitioner*
4: *practitioner [nods]*
1: *and then there's a principal*
4: *Mmm [nods]*
8: *It's not called advanced practitioner isn't it, what's it called highly specialised I think*
1: *I think that's what it started off being, but it's, isn't it spec [breaks off] I've a feeling its*
8: *Band isn't it band er it's highly specialised and I think it's band 7 isn't it*
3: *Band 7, I'm not sure what it's called*
8: *and then they've raised podiatry principle 8a wasn't it and, but that had a lot of things in it. I don't know it's interesting to see what everyone's em [sic] we've probably all been doing the same things at different bands."* [Faculty of Management 949-963]

Indeed on occasions titles appear to have been assigned without consideration of meaning, purely in a bid to speak the language of modernisation embodied in Agenda for Change:

7: *"… at the conference we were just at, somebody came on who was giving a talk and they were an expert podiatrist – and she said look don't get the wrong idea here I'm not saying I am an expert, its Agenda for Change I have to, I have to put this down …"* [Expert Reference Group 91-93]

9: *"It's interesting in Scotland they've, they've added Highly Specialised Podiatrist*
Many: *Mmm [expression of interest]*
9: *as their title so I was talking to a Scottish colleague, so Highly Specialised, but when you ask them what does highly mean, it's just a title to, to meet the needs of Agenda for Change"* [Expert Reference Group 77-80]

5.2 "Specialist" Titles

Within the confused nomenclature it is the term "specialist" which is most controversial for practitioners. Specialist titles are the subject of on-going reflection and debate. However while practitioners frequently point to their discomfort at being assigned "specialist" titles, there is no move away from them within the profession.

5.2.1 Origins and Meanings of Specialist Titles in Diabetes Podiatry

Respondents considered that the role for podiatrists in diabetes pre-dates any formal title:

> "I *think the role came in before the title came in."* [Faculty of Management 338]

Early practitioners may have been regarded as specialists and indeed styled themselves as such; initially this diabetes focus was expressed in terms of having a special interest:

> "*Er [sic] there have been people who have been regarded as specialists in diabetes and have penned themselves that as opposed to a formal em [sic] route, erm [sic] I know in the early days those who had an interest would call themselves diabetes em [sic] podiatrists or specialist interest in diabetes as opposed to specialist, so with specialist interest to begin with …"* [JH 676-680]

"Specialist" began to be used formally in titles approximately 15 years ago:

> *"there are a couple of us who I, I guess were designated as specialists em [sic] about 15 years ago, 10, 15 years ago. So I'm thinking of folks like Ali Foster, myself in Southampton, I was actually recruited to em [sic] at my interview I was told that it was one of the first Diabetes Specialist em [sic] in fact let me tell you about – I got my Chief III grade as a Diabetes Specialist hmm, mm I think it would be 15 years ago I guess and that was seen as quite new, quite unusual."* [CG 628-638]

A recurring theme throughout this data, JH once again highlighted the impact of key individuals in the development of diabetes podiatry as a specialised area:

> *"… it was just seen as part of the duties as opposed to a specialist requirement, so that's just really evolved from the pioneers of Ali Fosters and Louise Stuarts and Neil Baker and em [sic] tut [sighs] a whole, a whole number of key personnel along the way."* [JH 684-687]

The debate over the meaning of "specialist", how specialist titles are attained, assigned and justified continues:

7: *"There's a debate over whether you call them specialists and what specialist means.*

1: *Yeah cos [sic] that's a big debate, what's, what, what do you link to, why do you call someone a specialist and not somebody else, just a podiatrist, em [sic] and cos [sic] there's all these, there's "diabetes specialist nurse" and now there's "diabetes specialist podiatrist" being bandied around, but how do they prove they're a specialist when people in diabetes, they say "I'm an advanced practitioner", "I'm a podiatrist" or "I'm a diabetes podiatrist",*

> *"I'm a diabetes specialist podiatrist", so if you see that on their application form in their role, what does that actually mean?"* [Faculty of Management 66-77]

This confused situation has not changed over time:

> *"...* [historically] *a lot of people were concerned about levels and quality and what made somebody a - and it still is the question today, what makes a specialist podiatrist."* [JH 122-135]

Once again Agenda for Change appears to have increased confusion, particularly in the assignment of "specialist" titles to practitioners who do not undertake specialised work:

> *3: "I think a lot of people would have preferred us to be called a Diabetes Specialist Lead, but because of the structure of Agenda for Change meant that a specialist role was actually a grade 6, anybody above that on a 7 would be called advanced, so that's lead to some confusion in terms of the title we tend to use, so some of our junior colleagues that don't do specialist work actually have the title specialist podiatrist."* [Expert Reference Group 55-59]

5.2.2 Why are Specialist Titles Problematic?

A possible explanation for the difficulties surrounding specialist titles was elicited through use of Morse's model of concept analysis. During the concept analysis tensions between the everyday and scientific uses of "specialist" were made explicit (section 1.6). It is perhaps these tensions and disparities manifest in the differing meanings, values and expectations assigned that has led professionals to shy away from the title "specialist" and instead adopt terminology such as "competence" and "competences":

> *7: "There is a lot of debate nationally what recognition because of looking from the Diabetic Foot Conference in Glasgow last month, it was this, this debate came up about what people call themselves*
> *1: Yep [nodding]*
> *7: and, w, my, er [sic] a vascular surgeon from [name of trust] was on part of the panel and they were saying, everybody was saying what's a specialist and what should we call ourselves*
> *1: Yeah*
> *7: what grade, and he put his hand up and said why are you focussing on the word specialist, we had specialists in medicine 15 years ago and we shot ourselves in the foot, I say I'm not a specialist in vascular surgery, I'm competent in what I do ..."* [Faculty of Management 789-1000]

9: *I suppose the medical model has taken away from specialism now, they use "competence" cos [sic] you don't go and see a specialist, cos [sic] that got, so now they stand up and say well I'm competent, I can clearly demonstrate my competences*. [Expert Reference Group 115-118]

Podiatrists were not necessarily comfortable at being assigned the title diabetes specialist podiatrist:

> *"… I don't honestly ever know if I, I sort of go along with that description in so far as the things that I've been invited to, the things I've been asked to do and the things I have done along the way. So I sort of slightly squirm in my chair at being described as that …"* [JH 64-67]

Indeed some podiatrists displayed a clear dislike of the term "specialist":

7: *"… from the new entry graduates moving, who are coming up from band 5, 6 and then moving up into a specialist role isn't it, or a, a competent role, let's get rid of that word specialist"* [Faculty of Management 785-787]

Other podiatrists were accepting of the title "specialist", though repeated changes in their titles under Agenda for Change appeared to have been disorientating:

6: *"I don't mind specialist, I'm trying to think now whether I'm an advanced, but my, my title's changed so many times, that I think I might even be Advanced Specialist Podiatrist, now you say cos [sic] I think our job description is advanced if you [interrupted]*
3: *If you're a grade 7 you'd be advanced*
6: *it is advanced specialist yeah …"* [Expert Reference Group 65-69]

5.3 The Effects of Titles

Titles and the sometimes subtle differences in title have significant effects. Nomenclature can impact on access to services, clinical activities and roles and how others perceive the title holder. Within the law, the adoption of specialist titles also has significant ramifications.

5.3.1 The Effects on Clinical Activities and Access to Services

Alluding to the effects of title on access to services, BL questioned the way in which the specialty had been framed:

> "*… do you necessarily want a specialist defined in, in the context of one condition or do you want the specialist defined in the context of treatment of the similar types of conditions that manifest, the symptoms that manifest themselves from many conditions …* " [BL 309-310]

Indeed, all participants agreed that title has an influence on access to services. SS highlighted that while framing the specialty in terms of diabetes focuses attention on diabetes it also restricts access to services, effectively penalising patients without diabetes. She suggests that a "Consultant Podiatrist - High Risk" title and incorporating diabetes into the National Service Framework for Long Term Conditions would secure access to specialised podiatry services for non-diabetic patients:

> *"I actually find my title very limiting, to be a Consultant Podiatrist/Diabetes is very limiting, I'd far more like to be known as Consultant Podiatrist Diabetes, High Risk. Cos [sic] we shouldn't be penalising patients because they don't have diabetes. If patients have a clinical need for good antibiosis, for good systemic, for systems of care, for complex co-morbidities to be managed by best medical therapy, for offloading, for exercise, for smoking cessation, yeah I can appreciate we've only got so much money to go round but I'm far more than I'm paid to be, high risk and not a diabetes specialist podiatrist. I think it's good because it gives diabetes that agenda, there's that agenda of, and I think in fact eventually diabetes will become part of "long term chronic conditions"... Certainly from a patient point of view it will mean that other patients get access to specialist services, cos [sic] at the moment they're ring fenced for patients with diabetes as they are now. It's a rotten shame if they haven't got diabetes and they've got some other high risk lower limb complications isn't it? [Pause]"* [SS 437-454]

8: *It definitely does penalise patients if they haven't got diabetes cos [sic] you are the, if you call yourself a diabetes podiatrist, you, you've then got that let-out that you won't see people that are high-risk that haven't, you could in theory use that as a sort of get-out clause couldn't you.*

5: *Or even if you don't use that, that get-out clause other people will, you know so they* [interrupted]

8: *The system isn't there.*

5: *Yeah, so they might have struc [breaks off] they might have access to very good podiatry but if that patient then needs members of a multi-disciplinary team they're just not going to get it.*

7: *I think that's true.*

5: *Yeah.* [Expert Reference Group 292-300]

A compelling example of the effects of titles on clinical activities and access to services was provided by the "wound and diabetes specialist podiatrist". The effect of including a single extra word - "wound" within this practitioner's title serves to focus and restrict her activities to those involving wounds, effectively narrowing her scope of practice by excluding pre-emptive and preventative work. However the

impact on eligibility for high-risk podiatry services is to permit access for non-diabetic patients:

> *"I would say like with us because we are not just diabetes, our, all our clinics are wounds but actually diabetes is important but cos [sic] we've got wound in our title it sort of covers actually what we do and so it isn't, its rheumatoid, its people with neuropathy who aren't diabetic, its em [sic] you know anything that walks in our clinic that needs to be debrided and dressed."* [Expert Reference Group 60-63]

Organisational changes facilitated one diabetes podiatrist's negotiations with the newly in-house vascular surgeons. Effectively employing further medical patronage, the podiatrist illustrated that by securing support of the vascular surgeons she was able to mitigate the effect of her "diabetes" title and establish informal, unwritten access to her clinic for non-diabetic patients suffering from peripheral vascular disease:

> *"It's something that's really just happened by default because of cl, [breaks off] working relationships with diabetes and then you come across someone with the same problems who hasn't got the diabetes diagnosis erm [sic], you say well look I've got this person are you happy for them to be seen in this centre and get the vascular surgeons involved, yeah that's fine, cos [sic] at the end of the day we're here to see people and patients and you know if in the past if it needed the diabetes consultant to refer to vascular surgeons in a neighbouring hospital then that wasn't possible erm [sic] unless they had diabetes, but now because they are all on site it's not an issue because the communication is there, but in an unwritten, non-formalised way."* [Expert Reference Group 337-344]

5.3.2 Effects of Title on how the Title-Holder is Perceived

Titles are used to convey seniority and the hierarchical position of the title holder. Once again the effect of title changes imparted or influenced by Agenda for Change was criticised. Respondents pointed to the retention of older titles which are technically no longer extant in a bid to express levels of seniority:

4: *"Agenda for Change just sort of lumps it into bands whereas previously with the previous grading there was very much more of a stepping of advancement within the profession which really is being wiped out with Agenda for Change, despite the varying titles that exist. Em [sic] so although technically chief podiatrist doesn't exist in Agenda for Change, it still, you know in the same way as the senior podiatrists, specialist lead podiatrists, none of those per se are in Agenda for Change, but you've gotta [sic] have something that's sort of signifies where you sit in the hierarchy I think."* [Expert Reference Group 70-76]

While, conversely other groups of podiatrists had elected to retain older titles in a bid to reduce the possible divisive effects of hierarchical titles:

2: *"I'm probably the only one who retains the title of purely senior podiatrist, but the circumstances of the area that I work in, there's a very small number of podiatrists and it was considered less divisive if I retained the same title as everybody else ..."* [Expert Reference Group 81-83]

The avoidance of "specialist" titles was justified by some Trusts so as not to imply specialist qualifications and career structure were none exist:

1: *"Our Trust's decided not to use specialist at all in any of our titles throughout the whole of the, the em [sic] pay scale because of the pre-conception that specialist means a specific career structure, a specific extra qualification and there isn't that so they've decided that they wouldn't use specialist at all. So our diabetes team are advanced practitioners in diabetes, they're not specialist podiatrists."* [Expert Reference Group 95-99]

For, beginning to hint at legal implications associated with "holding out", Expert Reference Group respondents highlighted the public perceptions of practitioners with expert and specialist titles:

8: *The public perceive specialist or expert as, as someone who is able to work at a much higher [interrupted]*
6: *Should be more qualified, have more qualifications*
9: *I would say it's that sort of that expectation.* [Expert Reference Group 112-115]

5.3.3 The Legal Implications of Title

The Skills for Health respondent pointed to how the legal protection of title enjoyed by podiatry effectively protected the use of any specialist podiatry titles:

> *"They* [non-podiatrists] *couldn't call themselves podiatry specialists, because they couldn't use the title podiatry."* [BL 482-483]

Some diabetes podiatrists have been the accused party in patients' law suits. In relation to this and echoing Montgomery (2003, p177) who highlights the different standards of care considered acceptable for specialists as opposed to general practitioners, CG speaks of the higher level of responsibility and accountability inherent in specialist practice:

> *"... I've had two lawsuits against me... Em [sic] [sighs] it* [title] *has major, major em [sic] as a specialist you, you, and there again I, I think people like the title em [sic] and like wearing the badge, but may not like some of the horrible things that come with it because responsibility lies with you as a*

> *specialist, if you're directing treatment, if you're initiating treatment you've got to be responsible for that and you've got to be able to justify and that's why the research, critical appraisal, evidence based practice is so important and so you've gotta [sic] be aware that you're likely to be sued during your career – that goes with the job. And I have to say it is increasing in the diabetic foot and it will continue to increase."* [CG 605-617]

Specialist status was highlighted as increasing the clinician's responsibility not just to patients but also other clinicians:

> *"...people need to accept the responsibility they've got and it is different in the sense that you're dealing with more complex patients and if you're there as a specialist then you're also there as a resource to other staff and other, other clinicians ..."* [MP 118-121]

Montgomery (2003) points out that members of specialist units will be expected to display greater skills than someone in an equivalent post in a general setting (p178) - the standard of care following from the category of skills that the practitioner professes *and* the position held by the professional (Montgomery 2003, p177). In this way by including "specialist" within their title, by asserting specialty in the area of diabetic foot disease, by accepting a post as a diabetes specialist podiatrist, or a post within a specialist diabetes foot care team, the podiatrists' standards of care and level of expertise considered legally acceptable become higher than those expected of a generalist or community podiatrist. Thus, under the law diabetes podiatrists can be held to account for their specialist titles and posts. Where litigation should arise, the standard of care against which their practice will be measured using the Bolam test, is that of other practitioners skilled in the particular specialty (Montgomery 2003).

5.3.4 Effects of Title on Other Clinicians' Perceptions

Clinician-participants considered that their titles were often poorly understood by others working in healthcare:

> *"... people think 'what the friggin [sic] hell's a Consultant Podiatrist' and I think well here I am and this is what I can do for you, and I am such a fantastic tool in your tool-box in the community, use me."* [SS 81-83]

One clinician-participant highlighted the hostility of some members of the medical profession, who view the use of "consultant" titles by podiatrists as a mechanism to "fool" patients:

> *"I've er [sic] had em [sic] eminent, I suppose in one sense orthopaedic surgeons saying that er [sic] podiatrists just want to gain the title doctor to fool the patients into believing they are doctors. Er [sic] podiatrists use the word consultant again to convince the patients that they are doctors, em [sic] and I always come back to the example that, I'm sorry the fact that you're a male, lots of patients will assume that you're a doctor and the fact that you're female, lots of patients will assume then that [tails off]."* [MP 354-359]

Despite written information and verbal explanations, patients' misconceptions and assumptions often persist:

> *"I'm always saying to patients, no I'm not a, I'm not a doctor, I'm a podiatric surgeon, oh sorry you're a mister [as if patient is replying], so you know straight away they've got em [sic] an er [sic] in the leaflets it tells them that they're coming to see me and what I am, I'm a podiatric surgeon em [sic] em [sic] a consultant podiatrist, I mean yeah you're not a doctor but you're as good as [as if the patient is stating this], and well, in terms of the foot, yeah I might be, but I'm not here to deal with a medical patient like that, but then it's the same with a diabetes person, he's not gonna [sic] start – I know a bit about orthopaedics let's start dealing with that [as if the diabetes doctor were stating this]. You know, so everyone has their specialty and I think it's about recognising it, so title tends to cause more of a problem in litigation cases, where people believe it may have been misused or abused ..."* [MP 360-370]

5.3.5 The Effects of Title on Patients' Perceptions

Practitioner-respondents discussed how specialist titles are perceived by the public:

4: *It's a double-edged sword in a way*
9: *Yeah*
4: *because sometimes public see the title specialist and they feel more at ease erm [sic] you know*
1: *because you know what you're doing*
4 *because the title, yeah*
1: *that's what they perceive.*
4: *whereas conversely it puts you on a pedestal that some people have a sport of trying to knock you off it.* [Expert Reference Group 119-126]

…also highlighting that any title will impact on public perceptions:

10: *The public also like the title of Senior; she's the senior one you know.*
Gen: *Mmm*

10: you know I have heard that in the past
4: Or even just the title Podiatrist, oh you're a Podiatrist, not a Chiropodist
10: Mmm [sic] even Podiatrist is still, people still like
4: think it's more senior and not
10: Oh a Podiatrist must be more specialist than a Chiropodist [chuckles]
[Expert Reference Group 127-133]

Title though is just one factor which affects the perception of service users. Location, attire and gender also play a role:

> *"I think patients will automatically assume if they, particularly if they are coming into a hospital and they're seeing a male, particularly if they're not in a uniform, they will automatically assume they're a doctor. Em [sic] so there's a lot of assumption by the patient and even though you tell them and correct them some pick up on it, some don't. But they should be given the ch [breaks off], you know they should be given the chance…"* [MP 370-375]

5.3.6 The use of Academic Titles

Perhaps because for the general public, the title "doctor" has become synonymous with medical qualification, use of the academic title "doctor" in clinical situations has become problematic:

> *"… look at your colleagues who are doing PhDs, who have got PhDs, doctor on clinic on a foot clinic, look how uncomfortable it is for them to use that title of doctor, because the patient will assume, inappropriately very often that they can manage all aspects and care, care for all aspects of the care. Well you know if they're with a PhD was on nitric oxide infusion into the vaso novorum then that's not really gonna [sic] make them a medic and I think sometimes that is one of the perceived barriers for us."* [SS 595-601]

Such problems with academic titles in healthcare settings are not unique to podiatry. However as MP intimates an element of discomfort on the part of medically trained individuals who do not hold qualifications at doctoral level, may influence their attitude towards those other health professionals who have worked for and earned doctoral degrees:

> *"I think you have to be careful as well in, inside the medical ho[breaks off], institution how you use titles that you've got, whether it's em [sic], I mean and this goes for medics as well, but if you've got a, an honorary professorship is it right to call yourself a professor within the hospital, or is it not. You have to be careful because again, the assumption there is you are a professor, that means you are very expert and you've proved yourself within your field, but if it's an honorary title awarded by probably a university then that doesn't necessarily mean that, it's often given because of your services to the school or to the university, so I think you know, on and I know that is an issue with, with consultants, I know that's an issue with some*

consultants who've got professional titles such as professor, who purposely will not use them in the NHS, but they will use them for the titles that whatever Dean awarded say, at the universities they'll use them em [sic], so I think you've gotta [sic] be careful, that's, that I think you know taking podiatrists out of it, it goes, it still, but it goes on across the board, you know should you use the title doctor when you're not a medical doctor. Well you know, you've earned it, then these haven't got a PhD, most, a lot do now, a lot of them haven't got a PhD, you know it's a difference, so [tails off]." [MP 375-390]

5.3.7 Alternatives to the Current Variety of Titles

During the second phase of data gathering possible use of alternative titles was explored. Objections to the grammatically correct "podiatric diabetology" and "podiatric diabetologist" were raised by the medical diabetologist respondents:

> *"...if it became official A, there might be confusion and B, you might rub a few diabetologist up the wrong way."* [IM 396-398]

One diabetologist considered "diabetology" to be contrived, choosing not to use the title himself:

> *"...I always describe myself as a diabetes doctor, em [sic] whether that's just inverse snobbery I'm not sure, but I, I don't use the word diabetologist I think it sounds contrived to me [smiling] em [sic] but that, I just like simple terms."* [AT654-657]

Most objections centred on use by non-medical healthcare practitioners of what the diabetologists considered to be a medical title:

> *"Well I, I must admit it* [hearing podiatric diabetologist] *sort of jarred a little bit. Because er [sic] it, well I suppose people are working towards that er [sic] because er [sic] I think the normal connotation in British medicine at the moment is that the diabetologist is a sort of a doctor specialist in looking after diabetic patients."* [IM 361-365]

> *"I think if you call them a podiatric diabetologist then they would be confused and thought to be a diabetologist, which is, but if as em [sic] so, you'd have to be careful about that."* [OM 359-362]

… this may well provoke an adverse reaction from the Association of Clinical Diabetologists:

> *"... you might upset diabetologists so to speak, em [sic] that, you'll get, you'll get shouted at if you start [chuckles] talking about them being*

diabetologists, there will be strong words from places like the Association of Clinical Diabetologists and so on. [OM 375-379]

The grammatical format of podiatric diabetologist also raised objections from the diabetologists:

"Er [sic] so when you think podiatric diabetologist, erm [sic] then you th [breaks off], you th [breaks off], sort of think of the noun diabetologist and then you think of the adjective of podiatric, so you, I think there's a little bit of confusion." [IM 365-368]

"Diabetes podiatrist is different to podiatrists, podiatry diabetologists." [OM 363-364]

Though the difficulty in finding a clear, grammatically correct title was acknowledged:

"…the trouble is that when, when you actually try and get an adjective from diabetes, it immediately sort of says you know they're diabetic, you know like diabetic podiatrist, or a em [sic] a diabetol, diabet [breaks off]."

"Er [sic] it could be misconstrued that it's a podiatric diabetologist, that means it's a diabetologist who's sort of tinkering around with podiatry" [IM 374-375]

Some diabetologists linked the title podiatric diabetology to practice which was extended beyond the currently accepted remit of diabetes podiatrists, encompassing more of the general medicine of diabetes:

"That would imply they were spreading beyond podiatry and that its, and this we were getting to a more generic diabetes specialism, cos [sic] we haven't yet had any dia [breaks off] podiatrists who were adjusting insulin for example or, or suggesting glucose lowering therapy, or hypertensive therapy, or, or lipid therapy, or the – what they've done so far is to say the cholesterol is raised and needs treating, rather actually than prescribing for it. I think if we're going to say its diabetology then it would need to embrace the whole of, of the specialism, and at what, what sort of level and I, sorry and how far within that the podiatrists would want to go." [AT 571-580]

The Society of Chiropodists and Podiatrists respondent linked the title podiatric diabetology to formal recognition of the title and an agreed threshold at which the title came into use:

*"I have no problem with it [*podiatric diabetology*] being rolled out, but I think you need to have a formal recognition somewhere <u>and</u> possibly along with the formal recognition er [sic], who is entitled, what's the threshold to get, to <u>get</u> that <u>recognition</u>"* [JB 685-689]

5.4 So what? What IS in a name?

The data demonstrates that title can have potent effects, impacting on perceptions, clinical activities, scope of practice and access to services. Clinicians experience the effects of their titles and some have strongly held opinions regarding their appropriateness. For clinicians use of specialist titles may be viewed as a step in achieving what Hugman referred to as "internal closure"; allowing diabetes podiatrists to assert their difference from generalist colleagues, point to their ownership over knowledge and the solutions to the problems of diabetic foot disease - and thus cast themselves in the "*virtuoso role"* (see section 1.7). Wilensky (1964) also noted that changing professional titles, discarding those associated with low status and replacing them with alternatives could be seen as a strategy to link new titles with higher status.

Patients also experience the effects of clinicians' titles, most overtly through the accessibility of services. As the data illustrates inclusion of descriptors such as "wound" reduce the access of patients with intact skin, regardless of the severity of their disease, their need for management of non-wound problems and their requirements for proactive, preventative care. Inclusion of a particular disease within the tile can penalise patients who may have similar symptoms, pathological processes and needs – but not the specified disease. While some podiatrists have been able to negotiate access routes for non-diabetic patients, such access remains informal and dependent upon many variable factors – manifestations of Strauss et al's *tacit agreements and unofficial arrangements* within the context of the *professionalized milieu* which characterise the division of labour within the hospital.

The currently confused nomenclature in diabetes podiatry serves to further obscure the often poorly understood roles and functions of podiatrists who specialise in diabetes. While in some areas titles are assigned in a reasoned and purposeful manner, often choice of title represents an attempt to use the parlance of health service modernisation embodied in Agenda for Change – with little or no consideration of the powerful effects of title. Clinicians highlight the use of the word "specialist" as problematic; confusing, divisive and contentious – and the application of the title specialist to relatively junior practitioners undertaking

generalist roles. While specialist registrar and the Certificate of Completion of Specialist Training (CCST) are terms used by medical doctors, use of the word specialist in the titles by which their jobs are labelled is not overt. Instead the term diabetology has been used in a grammatically correct from to indicate a focus upon diabetes, thus simultaneously conveying the concept of specialised practice and identifying its focus. While the general public may refer to them as "specialists" this has become a lay term. This phenomenon has resonance with Macdonald's (1995) assessment of the word "profession" in which he highlights Freidson's (1983) description of it as a "folk concept", a term used by laity. As such "*one does not attempt to determine what a profession is in an absolute sense"* (Freidson 1983, p27) but focuses on how professions are made and accomplished by actions. Building upon Freidson's perspective then, viewing "specialist" as a lay term leads one to a focus on how specialty is achieved by the activities of social actors. Through this author's research, the evolution of podiatric specialisation in diabetes has been linked to charismatic authority, medical patronage and the professional project of a specific group of podiatrists; set against a background of increasing numbers of people with diabetes, in an era characterised by "condition focussed" and "risk stratified" health policy.

The terms "podiatric diabetology" and "podiatric diabetologist" would represent a grammatically correct method of conveying the concept of specialised activity, describing the focus of the activity and clearly identifying the practitioner as a podiatrist, while avoiding inclusion of the problematic word "specialist" within the title. However medical opposition to use of the words diabetology and diabetologist may mean that such titles are not adopted; as lacking rational-legal authority and unable to point to concrete legitimation for their specialty, podiatrists specialising in diabetes still rely upon continued medical patronage (see sections 4.2, 4.5, 4.7.2 and 4.9). If reference to the condition of diabetes is to be retained within the title, then "diabetes podiatrist" may then be the most accurate, grammatically correct title available. However a title which has no overt reference to diabetes, but encompasses the increased risks of ulceration and amputation brought about by peripheral neuropathy, peripheral vascular disease or a combination of the two could improve access to services for high risk patients who do not have diabetes; though

this brings into question the ability of services to meet the likely increased demand this may bring.

Within healthcare formulating, using, and legitimising a clear and consistently applied title constitutes a key step in asserting ownership or jurisdiction over a defined clinical area. As Abbott (see section 1.7.4) points out an effective link between a professional group and its work at both micro and macro levels is a crucial step in gaining external (social) recognition for such jurisdictional claims. Title represents a potent means of creating such a link. For the podiatrists specialising in diabetes naming both specialty and practitioner – thus claiming for their defined group of podiatric clinicians specialty in the field of diabetes – remains a key legitimating activity which has yet to be undertaken.

6.0 Specialisation in Diabetes Podiatry

In addressing the question "what does specialisation in diabetes podiatry mean?" variation and divisions were made explicit. Different levels of practice exist, ranging from complete immersion in the diabetes podiatry role to part-time specialty. Legitimating factors for diabetes podiatry as a defined specialty include charismatic authority, medical patronage and patient risk stratification, embodied within some sections of health policy.

6.1 Variation

All respondents agreed that diabetes podiatry is an area characterised by variation in roles and responsibilities, knowledge and skills, standards and level of practice:

> *"…the standards of [pause] work that each specialist diabetes podiatrist does will vary an awful lot, I think that is governed by their knowledge, [pause] or lack of it…"* [MP 288-290]

> "*…some people …who are in specialist podiatrist's posts may not have anything like the responsibilities and the skills that others may have depending on where they find themselves.*" [JH 589-591]

Even amongst the ten "lead" diabetes podiatrists who form the Expert Reference Group, the opinion was that difference rather than similarity characterised their activities:

> *"We've all got different jobs even round the table haven't we, so it's quite difficult to pick which one to go for cos [sic] we've got within this, this meeting we've got people doing different roles …"* [Expert Reference Group 175-176]

CG considered that the different levels of specialty could be formalised to provide a more structured approach to diabetes foot care:

> *"…you could have a community specialist diabetes podiatrist, you could have a hospital-based specialist and you could have a specialist who actually coordinates the whole of the diabetic foot-care for a locality, an area, a trust, a region …you can have the consultant, whatever he is at* [band] *9, but you could equally have a few consultants within the primary care within that region, that then liaise and coordinate, if you see what I mean, it's like command, a line of command. Em [sic] so I, I think em [sic] it, ideally it's a difficult thing to ask I think because as I said I think that, that there are levels of specialty and therefore specialists…"* [CG 751-754, 760-764]

There is however an acknowledged absence of any standardised preparation or educational credentials for specialisation in diabetes podiatry:

> *"…there's no set em [sic] recommendation for what makes a diabetes specialist. So there's nothing you can hang your hat upon and say that makes you a diabetes specialist, you can fill in your em [sic] job spec [sic] accordingly around the national frameworks and things but still, you know there I don't think there is one yet for a diabetes specialist, is there?"* [MP 547-551]

> *Em [sic] well there is no em [sic] clearly recognised em [sic] training programme and Neil and I have and Louise Stuart have spoken many times about developing a training programme for the diabetic foot. But it's never really come to anything …"* [OM 246-249]

Employment criteria can thus be problematic:

> *"…the employer hasn't really got a clue then as to who is a specialist and who isn't, because if there's no le [breaks off] no standardised level of education and training…"* [BL 578-580]

…which leads some managers to prioritise experience over education:

> *"I'm not satisfied with the level of education as a determining factor of competence; I'm much happier knowing people's experience."* [Faculty of Management 43-45]

…with preparation for post following more of an apprenticeship model:

> *"…unlike medicine there isn't a diabetes em [sic]there isn't a required progress for it to happen … its, it's working with those podiatrists who, working as an assistant if you like in those pod [breaks off], in those clinics where there are podiatrists with those skills and learning from them."*[AT 406-415]

Currently then control over diabetes podiatry rests with the employers who have jurisdiction over the job descriptions, recruitment, selection and appointment of diabetes podiatrists. Diabetologists have a lead role in preparing the job descriptions:

> *"We did set up a job description* [requiring]*…somebody who's worked in a* [diabetic foot] *clinic – who has skills in casting, who understands, who understands the management of wounds and, and the aggressive debridement of wounds, who can prescribe, this is your, this is your wish-list isn't it?* [AT 418-422]

6.2 Stratification

The advent of risk-stratification, which is embodied within the NICE guidelines for diabetes, has impacted on the division of labour in diabetes foot care:

> *"It's assessment of the high risk, I mean years ago we didn't have this whole thing of this is the high-risk patient, it was sort of yes, it was almost if they felt they were diabetic high-risk and everybody has to have their nails cut by a podiatrist, whereas obviously now its assessing has this person got neuropathy, have they got ischaemic problems, I think that's, that's the difference as well."* [Expert Reference Group 423-427]

Subsequent documents and clinical guidelines, perhaps most notably The National Minimum Skills Framework for the Commissioning of Foot Care Services for People with Diabetes (Foot in Diabetes UK et al 2006) have reinforced the approach where increased levels of patient risk and complexity are to be met by practitioners with more advanced knowledge and skills (see also the "stepped care model"). In this way risk-stratification of patients has provided a legitimating factor in the diabetes podiatrists' claim to specialty.

6.2.1 A Divided Specialty

During data gathering and analysis divisions based upon level of practice and practice location became apparent. Podiatrists fully integrated into a diabetes team based in secondary care, with a diabetologist who had an interest in the diabetic foot were able to immerse themselves in the role of diabetes podiatrist. Those podiatrists who had worked in such settings were able to practice in the community at an advanced level, utilising their charismatic authority and the access rights to services, investigations and individuals which they had established while working in secondary care. Podiatrists who had worked solely in community settings are viewed with some caution by the hospital based diabetologists and diabetes podiatrists, who highlight the need for "up-skilling" of such practitioners.

6.3 Immersion in the Specialist Role

In describing their roles and activities, complete immersion in the specialist role was evident in the accounts of the diabetes podiatrists who worked within a diabetic foot team, based in secondary care. Extended scope clinical activity such as prescribing was highlighted, but important emphasis was also placed on research and dissemination, policy writing, influencing practice and how diabetes podiatry is perceived:

Don't sleep, that's the key [laughing]. Em [sic] yes I'm going to do well this year, I think I'm going to have 8, probably 8 publications this year… I mean my research I do in my own time, I'm here at 7 in the morning, I leave at 7 at night, I work at weekends and nights em [sic] to do what I do, em [sic] and I recognise that not everybody's an idiot like me and they do have a life em [sic]" [CG 334-335, 582-585]

"…so I prescribe, the research, publish, er [sic] I'm involved in policy, influencing practice, involved in how other health care professionals see us – which is a long road…" [SS 212-214]

6.3.1 Education

The educational preparation for role was seen in terms of depth (advanced higher degree preparation) versus breadth (more knowledge at the same academic level) by the Skills for Health respondent:

"…some people are gonna [sic] really love to get in there and do the research and therefore should follow that depth of knowledge route whereas others may just actually like the hands-on experience of treatment and the gratification of doing the treatment and therefore would follow the breadth route. [BL 471-475]

This respondent linked immersion in "the diabetic project" to knowledge, full-time working and the need to inform future education and treatment:

"[a] *diabetic specialist <u>real</u> specialist which as I say have got a depth of knowledge, and you're going to require that individual not to simply do treatment, but to start to push the bounds of knowledge, and work with a team of people who may be attached to a university hospital, whatever it was, in order to function, you know erm [sic], as somebody that is going to be informing the education in the future of people, you know, the full informing the treatment of <u>all</u> er [sic] diabetics in this area, then it would make sense that they would spend their entire time on the diabetic you know, erm [sic] project so to speak."* [BL 418-425]

However the Skills for Health respondent also perceived some higher level education, which equips practitioners to research and influence policy as unnecessary for clinicians who focus solely on treatment:

"…and it would be unfortunate if somebody was trained for example in diabetes to become a really good researcher up to masters level education and then ended up just simply doing treatments, dressing treatments on diabetic patients in a diabetic clinic. That could have actually been accomplished by a podiatrist at the same level who had just had extended skills…" [BL385-390]

This was at odds with the perspective of one senior diabetes podiatry clinician and educator, who highlighted the complex judgement skills and higher level clinical reasoning required to manage the multi-factorial needs of patients:

> *" I think the higher level clinical reasoning skills with these very complex, high risk individuals, who have got a tremendous lot of co-morbidities, polypharmacy, erm [sic] there's a danger in making it's, er, er [sic] in breaking them into simple one or two line competencies. Er [sic] making the right call or judgement call can be em [sic], can be quite a sophisticated cognitive process"* [JH 379-384]

> *"I suppose my fear is we're going down the Skills for Health of competency based route, and I can see politically that happening to a greater or lesser extent. I can see people then dong some CPD just for the sake of the set of skills on their own in order to then to, to jump an educational process. I worry that we haven't got the evidence about the appropriateness of education programmes to make sure that the people do develop all the skills and knowledge and attitudes that are really there. It worries me going down this kind of simplistic notion of a particular competency in isolation.* [JH 792-799]

… and would seem to also contradict the perspective expressed within the Expert Reference group who pointed to enhanced reasoning in the interpretation of clinical signs:

> *"The advanced assessments seem to be the biggest thing with the prevention isn't it, cottoning onto a few more of the signals a little earlier than some of perhaps our colleagues."* [Expert Reference Group 420-422]

SS highlighted an on-going learning process for clinicians, articulating the notion of a continuum of progress:

> "*…it's a rolling continuum of progress and that you never actually become at your destination, you never finally become that diabetes specialist podiatrist that doesn't need any more training…"* [SS 353-355]

6.3.2 Clinical Roles and Activities

Clinically activity across the domains of prevention, management and secondary prevention was considered to be part of the remit; with advanced assessment and some roles previously associated with medical doctors considered normal activities for lead diabetes podiatrists:

> *"…it's, it's, it is broad prevention, acute management and then secondary prevention, it's all there."* [AT 53-54]

> *"You possibly could even put under that advanced vascular assessment, you know er [sic] depending what sort of specialist lead you are."* [Expert Reference Group 437-438]

> *"…obtaining, ordering and interpreting x-rays, bloods, interpreting bloods, ordering bloods, knowing what bloods to order in what circumstances. Em [sic] different sorts of imaging MR, CT, ultrasound erm [sic] they're all part and parcel of what I would consider an extended role, anyone can order, it's understanding what you've ordered and interpreting it."* [MP 134-138]

> *"I think you could also add in sort of medical proper problems such as painful neuropathy, Charcot that sort of diagnosis and management of those for the lead specialist podiatrist."* [Expert Reference Group 429-430]

A particularly potent example of this role substitution phenomenon (see also section 2.0) was considered to be the activity of one podiatric surgeon whose working focus has become foot salvage procedures for people with advanced diabetic foot disease:

> *"…and then at the extreme end you've got the podiatric surgeons who are actually on the work that the orthopaedic surgeons were doing before. And that is, now I've reached the stage where my preferred referral is to, it's across the city but it's to a podiatric surgeon rather than to an orthopaedic surgeon to do the structural work – and he was trained as a podiatrist not as a surgeon"* [AT 67-72]

It was in fact a gap in service provision which allowed the podiatric surgeon under discussion to establish a specialised role in diabetic foot-salvage procedures:

> *"…in our group of hospitals we don't actually have an orthopaedic surgeon, or didn't, it's happened in the last year, in last year, we didn't have a surgeon with an interest in the foot"* [AT 80-82]

> "*So I do all the diabetic foot surgery em [sic], which [sighs] er [sic] goes well with the orthopaedics cos [sic] they don't wanna [sic] do it, so that's fine."* [MP 21-22]

Having established jurisdiction within this role, the current podiatric surgeon seems likely to be able to defend it, though this may change if the either the surgeon or diabetologist involved should leave:

> *"…whoever came now would have to be a very good technician surgeon to move me away from em [sic] the service that I'm using because er [sic] the sort of outcomes that we're getting, the sort of opinions, the sensible opinions, yes we should do something or equally good, no this is not something that we need to do anything about. And to have absolute*

confidence, and when you've met someone that you have absolute confidence in you stick with them don't you?" [AT 83-89]

Advanced knowledge of **haematology and pharmacology** were highlighted. Even with status as supplementary prescribers, the podiatrists' knowledge in these areas was considered vital in providing an adequate service to patients:

"Erm [sic] bloods definitely, is something, a big issue cos [sic] you know if you're looking at infection, if you're not monitoring the bloods, how are you knowing whether the infection is regressing, just purely looking on the topical side of it, you know, what are the bloods doing, are the antibiotics interacting with the bloods, you know, you need to be aware of that and you need to monitor them closely…" [MP 138-143]

"I think having an understanding about all the drugs and how they affect and what affects they might have, because many of these patients with type 2 diabetes are polypharmacy, the other various interactions, the other side effects, knowing, knowing the, your, your sort of the, the pharmacology inside out helps ... drugs the side effects, the problems understanding antibiotics, revision of side effect when and where, interpretation of blood tests, interpretation of imaging techniques, erm [sic] these would probably be quite important facets I would think." [JH 280-287]

"... you may not actually be prescribing them, you may be doing them under PGDs, em [sic] but you need to be aware of what your interactions are, what potential complications the patient may have with those drugs, what drugs may interact with other drugs. Em [sic] I think you need to be a resource although you're not ultimately responsible for that then, but you still need to have that knowledge and understanding cos [sic] otherwise the patient is getting an inferior service." [MP144 -149]

In providing **patient education**, advanced level knowledge and practice in **psychosocial medicine** was highlighted:

Erm [sic] there's a sort of twofold thing here about looking after people with diabetes, there's a sort of biomedical approach, clinical approach and then there's a psychology approach which is probably more important than all the biochemistry stuff ... knowing about psychosocial medicine at a higher level [JH 276-278, 283-284]

"And the podiatrists I think are better at the education and therefore there's an educational role that comes with that em [sic], not just education but behaviour change, so actually understanding that is, is, is the important aspect." [AT 36-39]

"...the understanding of how education works, how you facilitate learning, erm [sic] dealing with erm [sic], dealing with various people with diabetes [who] *often have depression and psychological problems, issues, surrounding care for diabetes, having a, an in-depth understanding of the*

psychology, the psychosocial factors involved in diabetes is an extended scope." [JH 271-275]

Within what is termed "**offloading"** the diabetes podiatrists' remit was considered to cover the development of extended skills in plaster techniques, the subjective and objective evaluation of offloading efficacy and liaising with the shoe fitter:

> *"…and possibly the high level of evaluating offloading, you know if you've got any, any kit around, knowing how to use the kit, knowing what, what they're doing and being able to develop both subjective and objective measures of offloading techniques as well…* [JH 287-290]

> *"…but it's the offloading that's important and understanding the biomechanics and actually offloading the fff [sic] the pressure from the feet and to understanding what sort of devices are available and increasingly in, in our clinics they've had to develop the, what would have been plaster-room skills, actually in developing the casting…"* [AT 48-52]

> *"…there are a number of key people involved here and, and the podiatrist is one of the key people, the specialist podiatrist em [sic] so new developments in the em [sic] offloading and bringing in the shoe fitter and relating with the shoe fitter is all Neil's responsibility." [OM 85-88]*

Treatment of ulceration and extended knowledge and skills in **wound management** were highlighted:

> *"…equally extended scope in understanding about wound management, understanding about maybe the chronic biology of wounds and how diabetic wounds often, often develop into chronic wounds and understanding the biochemistry of, surrounding the differences and therefore having some appreciation of which modern dressing might be useful, that sort of stuff."* [JH 271-294]

6: *"I think everyone here probably deals with ulcers though don't they; I know that, I think everyone*
All: *Mmm [nods and agreement]*
6: *so that is definitely part of the job erm [sic] wound management.*
2: *I think we do the bulk of the tissue viability responsibility for our districts*
6: *Mmm [nodding]*
2: *wherever we work."* [Expert Reference Group 187-193]

6.3.3 Case Management Roles and Activities

A key role for the diabetes podiatrist was considered to be coordination, referral and communication activity:

3: "*But then it's what happens afterwards as well, it's coordinating*
4: Yeah, no, it's referring
3: Knowing when to refer on, to who and, and making sure that they get the necessary tests and feeding that back into, feeding that information back to the GPs, feeding that information back to your colleagues and keeping hold of them and you know providing timely interventions and discharging them back to the community colleagues at the right time as well." [Expert Reference Group 439-444]

…and liaison:

8: "There's a lot of liaison isn't there between the Diabetologist, GPs, Practice Nurses, District Nurses, colleagues, Vascular, Orthopaedic people even, it's sort of tying that whole thing in [interrupted]
3: Having that knowledge of who to contact, when.
8: so the patient gets to see the right person." [Expert Reference Group 446-449]

…often directing the multi-disciplinary process and acting as the case manager:

3: "I think quite often we are the ones that actually coordinate the whole care, we are the ones that get them to see the Dieticians, Diabetic Specialist Nurse, that get their footwear sorted out, to get them an appointment to see the Consultant. Initially they'll come in as an emergency because of their ulcer, they've just been sent er [sic] by the GP practice and it's us that actually start the whole flow of the multi-disciplinary process off and I think we provide a very important function in that." [Expert Reference Group 472-477]

Respondents highlighted that this case management activity takes time:

6: "I mean I saw someone in a community hospital the other day and I ended up ringing the Diabetic Nurses, the Diabetic Consultant and the Vascular Consultant and sorted them out 3 different appointments, so that was, that was a 20 minute treatment and I was there an hour-and-a-half …" [Expert Reference Group 479-481]

…and requires insight into the patient's circumstances, on occasions requiring the diabetes podiatrist to act in the capacity of patient advocate:

6: "…this person needed to see all those, unfortunately they kept saying oh she's DNA'd appointments and I said that's because she's been in the St Georges' in London, she been in, she's an ill lady and she's not purposely DNA'd she, you know you sort of think, hang on a minute she, they say she DNA'd even though she was in the hospital where she was supposed to go for outpatients, you know [laughs]." [Expert Reference Group 482-486]

Clinician-respondents expressed concerns about being able to justify this non-clinical case-management activity:

4: *"…one of the big worries that we have is if you come across somebody who needs other input you spend a lot of time that is effectively non-clinical time organising to try and get them the care that they need which can I think potentially in the long term could pose us a problem, even though we're doing the best for the patient, when it comes down to the bean-counters*
6: *Mmm [nodding] we've seen 4 patients*
4: *We've seen 4 patients yeah and you're not cost effective because [interrupted]*
3: *People look at your activity rather than how much you save them in the long run because of what you're coordinating*
4: *And that's very, very hard to quantify*
6: *You do like a District Nurse, you know the amount of times you ring up to arrange the District Nurses to go and visit*
3: *It's very hard to quantify what we do in many ways isn't it. Some of the added value that we have that gets hidden, people don't see what we do*
1: *Yeah*
3: *and*
4: *and it's quite hard to, if you were, if you were forced into a position where you had to justify what you did, it would actually be very hard to sell it to a commissioner …"* [Expert Reference Group 703-720]

The difference between accessing the multi-disciplinary team and working within a consultant-led multi-disciplinary clinic was highlighted by the Expert Reference Group respondents:

4: "*I do a clinic erm [sic] one session fortnightly it is actually a joint clinic with the consultant, so its dedicated consultant time, a consultant led foot clinic. But like everyone else the rest of the time effectively you'd regard it as an open door policy so people have the multi-disciplinary contact on an informal basis on a needs, needs basis, rather than necessarily have a one-stop-shop whether they need it or not which is financially a waste of money"* [Expert Reference Group 699-703]

For podiatrists, integration within or "open door access" to the multi-disciplinary diabetes team facilitates access to hospital-based services, led by medical consultants. This ability to access medically-led services is linked to immersion in the diabetes podiatry role. If podiatrists working in the community are able to establish and maintain the right to refer directly to such services, they are still able to function as specialist practitioners. Those diabetes podiatrists able to practice at advanced levels in the community do so by using their charismatic authority, the

referral routes, access to imaging and investigations which they have established in the secondary care arena:

> *"…for example in Salford, Tameside you've got the Martin Foxes of this world and so and so forth who've developed a primary care pathway, em [sic] and if you ask Martin, it's tenacity again and working in a secondary care centre, getting known as a bit of an expert in there and then working in primary care and developing care pathways and things within, within that."* [CG 370-374]

> "… [a specific diabetes podiatrist who worked extensively in secondary care and is now working in the community has] *direct access to again, to the vascular surgeons and to me* [a diabetologist]. *So if she saw people in the community clinic she could offer an opinion and say no I don't think this needs referral, if it needed referral then she could go straight on into the vascular clinic and, and they would be seen quickly and very often then straight on to invasive investigation if needed. So it took out a step if you like. Or onto the clinic to see me* [a diabetologist]" [AT 366-342]

On a practical level then, the GPs' control over the referral process may be the largest barrier to diabetes podiatry functioning as a specialty in the community. Though future medical support for diabetes services in the community need not necessarily rely upon GPs:

> *"What I don't know is gonna [sic] happen is that there are now four highly sss [sic, breaks off] highly trained, highly specialised diabetes specialist podiatrists in the community … and I see absolutely no reason why they shouldn't set up their own specialist diabetes clinic in the community. Who they would get to provide the medical support I don't know. It could be a specialist GP or they could b [breaks off], I mean in these days of commissioning you can but it from anyone."* [AT 715-723]

6.3.4 Leadership of Services:

Managers considered the ability to work within and lead a team and integration with a range of health professionals to be definitive factors for specialist status:

1. *"…the role is very much about the, the, the way in which people will be working, [clears throat], not just their clinical knowledge and skills it, it, what is essential, <u>critically</u> essential is their ability to work in a team, to be able to <u>lead</u> er [sic] the team, to be able to integrate and work with consultants and GPs and a whole range of other people, in a partnership way, that's fundamental, the, the, the key skills and knowledge em [sic] er [sic], they're more than just a bonus but, but, but without the other factors somebody wouldn't be a specialist."* [Faculty of Management 54-61]

Leadership skills were also valued by diabetologists:

> *"…I was fortunate enough here and I had a podiatrist, more than one podiatrist who was perfectly capable of leading the service. You need it to be in conjunction, it's a partnership, but no em [sic] the podiatrist I had was driving things"* [AT 16-20]

Managers agreed that a specialist role should be dedicated, highlighting a remit to work across organisations and partnerships, influencing practice and change within a specific, unique area:

1. "…for me that, that specialist role has to be dedicated erm [sic], because it has to work across other organisations and partnerships to influence practice and change you know, in, in a specific and unique area." [Faculty of Management 118-120]

6.4 Part-Time Specialisation

Utilising service-level-agreements (SLA) some podiatrists are employed as part-time specialists to work both in the community and within the hospital-based multi-disciplinary-team:

> *"…they were specialist diabetes pod [breaks off], em [sic] podiatrists when they were here, but actually when they were working in the community they would do the general work…still doing general type podiatry, in, in general clinics in the community – and probably two days a week were specialists here.* [AT 223-228]

One of the major problems cited with part-time specialist activity were issues of accessibility and availability to act as a resource for both patients and other staff:

> *"So you've got to be very much accessible, which is one of the reasons why I say I don't believe you can be a diabetes specialist podiatrist 1 or 2 days a week. I believe it should be, you know 7 days a, 7 days, 5 days a week, and you've got, it should involve, if you're not there, there should be other people within the team that can be contacted."* [MP 124-128]

Though the Skills for Health respondent considered that:

> *"…you need to have an understanding that there can be people, who can deal in a specialist diabetic clinic, who are not themselves actually regarded as specialists"* [BL 593-595]

…and that the non-specialist podiatrist may have a comparable clinical impact to a specialist diabetes podiatrist:

> *"I mean at the end of the day, the person who's just a di [sic], just added, just added skills to the same kind of academic level, thinking, erm [sic] and does a Friday afternoon say with a specialist diabetes team, just maintaining the diabetics' foot, may still have the same impact on patient care and you know, and have the same impact on, on erm [sic] success rates in terms of keeping limbs and things, as somebody, as a podiatrist who's part of a team that has been there because they've got additional depth of knowledge and research skills, you know."* [BL 345-353]

6.4.1 Community Podiatrists

Concerns regarding the expertise and practice of community podiatrists were voiced:

> *"Well in my experience* [community podiatrists refer patients in] *later than they should. There are a lot of community podiatrists who have a reluctance to refer the patient on because they quite enjoy treating the ulcers and the challenge of it and sadly some of them will wait too long."* [PL 258-260]

> *"Em [sic] there are a lot of people out there with various degrees of podiatry who are doing things and doing them badly and causing harm, more harm than good and that is, the profession needs to do something about that. And until they do something about that, em [sic] I think that they are doing themselves an injustice, they will not be looking, I mean there's a lot of quibble about podiatry in the community in general because of this sort of thing.* [OM 405-411]

The practice and education of an "intermediate" level of podiatrists was considered to require attention:

> *"At the moment it's, you know, the patient who doesn't need to come to the* [hospital] *clinic but needs podiatry within the community could be seen by anyone and I think that's something that podiatry has, more than sorting out the specialists, they need to sort out that intermediate group"* [OM 400-404]

…this in some areas is addressed by clinical rotations within the diabetic foot clinics for the community podiatrists:

> *"…so there's quite a lot of involvement of the community podiatrists within the* [hospital diabetic foot] *service. Em [sic] so everyone's hopefully up-skilled a bit* [looks directly at researcher]. [OM 72-74]

> *"…from the podiatrists' point of view it's in order to keep the skills up, is, is to allow a broad base of people that are out there in the community that can manage and recognise foot disease but who have the opportunity to come into the specialist entre and keep their skills up."* [AT 820-824]

Dysfunction between community podiatry and secondary provision was cited as a major barrier to providing integrated services:

> *"What we should have is an integrated service across community and secondary care. And with ideally podiatrists who are working across both sectors, allow, which allows the patients to be, what you were saying to be managed closer to home. Em [sic] but that can be brought in, I mean it's horrible that "seamlessly" word, but can be brought into the specialist clinic when they need that."* [AT 808-814]

…with an ethos of competition and divisive funding and governance structures cited as the barriers preventing integration of services:

> *"…I think what we do need is that better integration of the service. Which we know and which we've tried to aspire to, but it's very difficult when someone else is funding the service out in the community…it's not so much separate funding its, its governance I suppose over the structure…"* [OM 498-501, 506-507]

> *"…at the moment it's the, the current organisation of the NHS, it has been divisive, I you, I'm sure you'll detect a hobby-horse coming on now – I, I feel that it has been divisive and retrograde, you know and splitting the PCT between commissioning and providing arms in itself is divisive, but actually making us compete, making secondary care compete with the em [sic] provider arm of the PCT has been divisive".* [AT 871-876]

6.5 Focussed Specialty in Diabetes or Multi-Specialists? Differing Perspectives

While part-time specialty drew criticism in terms of accessibility, the issue of multi-specialty proved to be more contentious:

4: *I would have said that was a retrograde step because if you're a specialist in everything then you're a master of, you know it's that old thing of the GP, general practitioner is a jack of all trades and a master of none. If you're a specialist, you wouldn't have a diabetes consultant who was also a rheumatologist, who was an orthopaedic surgeon etcetera, etcetera and I don't [interrupted]*
8: *Misuse of the term of specialist really isn't it*
4: *Yes*
All *Mmm [nods and agreement]*
4: *What they are asking for is, is a*
2: *General Practitioner really* [Expert Reference Group 216-225]

Faculty of Management respondents reached consensus that specialising in multiple areas limits the role and practice of the specialist, their ability to change and influence practice and what is achievable by the specialist in terms of being able to influence change generally. Further, Faculty of Management respondents agreed that a specialist role should be dedicated, highlighting that the specialist's role is to

work across organisations and partnerships to influence practice and change in a specific, unique area:

1: *But it* [multi-specialty] *<u>has</u> to be limited doesn't it,*
7: *Yeah*
1: *if, you know I mean you're, the ability of that person to influence change you know and practice has to be limited if, if their roles swing across a range of erm [sic] a range of disciplines. I mean I only work in a, you know a largish organisation and, and for me that, that specialist role has to be dedicated erm [sic], because it has to work across other organisations and partnerships to influence practice and change you know, in, in a specific and unique area. [Pause] I don't see how it* [multi-specialty] *can, I don't see how it can be done, I mean I know that in many structures it has to be done* [Faculty of Management 113-122]

Where clinicians are required to cover for others during busy times concerns about governance were voiced:

1: *"Well, well I have some governance concerns about that, you know, really it's, it's you know, how, how can somebody do that, how can you necessarily be able to audit you know the work across those areas, you know keep up to date, you know with, with research, practice you know and all sorts of things, it, it I think that must be you know hugely difficult, for, for anybody to try and achieve*." [Faculty of Management 134-139]

While recognising these major problems, some Faculty of Management respondents pointed to the fact that within some organisations they had no choice but to ask clinicians to act as multi-specialists:

7: *Well it depends on the size of your team, cos [sic] if you've got a small team you're gonna [sic] have people who are gonna [sic] do say one day a week of everything, so you're gonna [sic] cover everything, so I've the experience of working in a small team where you're doing one day of diabetes, one day of musculo-skeletal work, but in a larger team where you, larger department when you split into teams and you've got a set sort of clinical leads, pathways, whatever, and designated area and people sort of stay in that area, em [sic] so there's a real difference between size of the department and the roles that are required for that person and if you've got full-time members of staff, part-time members of staff, what they're gonna [sic] bring to it, job share – if you've got somebody coming in to do a post and you've got 2 people who want to job share, what's, have they got equitable skills?*[Faculty of Management 101-112]

Aspects of workforce flexibility were also cited by the Skills for Health respondent:

> *"…if it's about actually additional skills at the same academic level, say extending your breadth of knowledge, well that's OK as well in many ways, I mean basically you could have the person do diabetics clinics on a Friday*

and rheumatology clinics on a Thursday, you know these sort of things." [BL146-150]

Three of the four Foot in Diabetes UK key actors considered being asked to cover multiple specialist areas to be inappropriate on many levels:

> *"Get stuffed. I think it's a cheek em [sic] a cheek. I can't see how you can expect somebody to em [sic] really, really excel spreading yourself so thinly. I wouldn't dream of calling myself an expert in rheumatology and biomechanics, I know a reasonable amount about them and I can hold my own, but there is no way on earth I could argue with a specialist physio [sic] in rheumatology. I em [sic] you know, maybe I'm missing the point, maybe I could direct what they do or, or facilitate them to do what they do em [sic] but is that what they want? No I don't think that's what they want when they advertise these* [posts to cover multi-specialist areas]*, they're not asking for managers, they are asking for clinicians. If we've got all these problems about what is a specialist in diabetes it's equally true for those other areas and how are, can have got your specialism in, I mean you must be 150 as far as I'm concerned [laughter] to go for one of those posts and have been working for 149 years, em [sic] I think it's a, I think it's a real cheek, I really do em [sic] and I think you're em [sic] watering down skills and specialisms by doing that, personally."* [CG 889-901]

> *One person doing the, crossing over all those skills. Em [sic] I think it's very unfair to the person who em [sic] would apply for such a post. Em [sic] I think that it's possible to, to have spent some time, depending on where you find yourself, but to be a specialist in more than one area is a nonsense. Erm [sic] although in diabetes you would have to have a degree of expertise in biomechanics, infection control etcetera, er [sic] the, there's some generic skills across, they, they go across the boundaries of the specialisms. But I think if you're going to have a specialist post and to be championing the em [sic] education and training for others, championing management planning, being part of the team and organisation, running education programmes, providing all the various levels of support, etcetera in a, it, it would be aye totally unfair on the individual to expect them to, to cover more than one, one area. A jack of all trades at general post level yes, a specialist across areas is, is, is, is farcical and would be an insult to both the patients and to the person that's, I don't, I just don't think you're doing the job really properly in every facet of what that leadership might mean, you couldn't possibly be in more than one specialty.* [JH 602-615]

In justifying specialty focussed on diabetes, the complex nature of the disease and its management was cited:

> *I guess it was about 17 years ago when I first started working here that I really became very passionate and focussed on diabetes research and managing all sorts of diabetes and em [sic]. I just think it's such a complex*

disease and it <u>blows</u> my mind that people can be specialist in more than one area, that they can kind of specialise in musculo-skeletal and diabetes, I think <u>whoa</u> cos [sic] you know I've been specialising in diabetes for 17, 18 years <u>minimum</u> I mean at times I still think I'm on the first rung, you know you learn something and then you take 4 steps back and think <u>whoa</u> well I know nothing and everyone says you know nothing and everyone thinks <u>what</u>, and I say no I don't. [SS 14-22]

The clinician-respondents who had experienced multi-specialist working considered that specialising in more than one area was not feasible:

3: *"… I used to be a rheumatology and a diabetes specialist and I found it impossible to juggle the two to be quite honest*
6: *Yeah I used to have rheumatology in clinic and trying to do the two, although it was interesting you almost have to [interrupted]*
5: *you didn't feel that you were, I didn't feel that I was getting anywhere with it*
6: *because rheumatology almost needs, you've gotta [sic] be, have time to do the insoles and do this and*
3: *It's getting back to CPD as well*
1,4,5,6:Yeah
3: *You know to, to juggle two is going to be very, very difficult nowadays as 4 was saying you, you're gonna [sic] be a master of none if you're gonna [sic] juggle them. I think we're very much should be going down the specialist route and there's just so much learning out there the emphasis on evidence based practice means that a lot of time is having to be put into us actually keeping up with best practice, gold-standard services and I don't think you can know everything."* [Expert Reference Group 231-244]

Medical specialties were cited as models, concerns were voiced about the ability of practitioners to specialise in multiple areas and the service delivered to patients:

I must a complete lunatic, because as far as I'm concerned to take on a speciality <u>other</u> than diabetes and arterial disease and the work that I do now, mmm [sic] *it blows my mind, it would blow my mind. I mean you don't get a rheumatologist / endocrinologist / neurologist. And I just think oh well there are some people that its within their capability to do that, but how much justice can they do to a patient and certainly in my province they give 100% to diabetes or to arterial disease, CV and I'm learning a lot a little bit late. So I, I have concerns about being all things to all men, it's to what degree can you, can you do them. [Pause]* [SS 660-668]

…though one Foot in Diabetes UK key actor acknowledged that some medical practitioners also covered a general caseload:

Take, take the average diabetes physician, endocrinologist, he doesn't spend his full time doing endocrinology, he does some general clinics as well, er [sic] up on the ward, medical wards, so if we're looking at any role models

of people then they don't spend all of their time in that one specialty. [JH 642-646]

The Skills for Health participant expressed concerns over focussed specialties:

"…the mind set at the present moment is that if somebody is regarded as a specialist in, in diabetes then they can't be a specialist at something else. The issue I have with it is that you never have a, s [sic], you should never be considered a specialist in one role without understanding what, you never, you never vacate the baseline education, and that's what some people do. So I know somebody, I did know somebody that actually was em [sic] called themselves a diabetic specialist and wouldn't touch biomechanics with a barge pole and never actually did anything in terms of increasing their understanding of biomechanics. Such that they didn't really understand that really, you know, if you don't mechanically, if you don't pr[breaks off], make the f [breaks off], give the foot the ability to function mechanically soundly, then that may actually have additional stresses that has an implication on diabetes and the complications of diabetes. And that is a danger, where people start specialising without that understanding, you know. Erm [sic] you know, so I'll only treat diabetics, I'm not interested in the rest of things, I'm not interested in d, biomechanics, I'm not interested in rheumatology, I'm a diabetic specialist. [BL 173-189]

This point was echoed by one of the Foot in Diabetes UK key actors, who emphasised that a range of advanced knowledge was required in order not to limit specialist practice:

"… I mean in terms of diabetes you've again got some overlap because you do need an understanding of biomechanics, you do need an understanding of pressure relief, and I think that's where some people are cocking up at the moment, is because they are looking at pressure relief and forgetting mechanics, so I think that's one of the reasons why certain devices fail, because they're forgetting the mechanics of what's going on with the patient. So in essence, my feeling would be that to be a specialist in biomechanics, or diabetes, or rheumatology you need an understanding and a good understanding of all those and I'd say beyond a basic podiatrist, but then you could specialise in one area and take that several stages further, but as a, for arguments sake as a bio-mechanist, you know if you're just gonna [sic] do biomechanics, are you gonna [sic] totally exclude diabetes, are you gonna [sic] totally exclude rheumatology? So I would say there's, there's a place for all of them together but you need to specialise further into one… As a specialist do I think you could exclude yourself from either of those? – No I don't believe you could. And if you are, you are gonna [sic] be very limited, in terms of what you can do, and do I think you're probably really fulfilling a specialist role? I would question it. A lot would hate me for saying it …" [MP 628-639, 643-646]

While some Diabetes Specialist Podiatrists acknowledge a lack of advanced biomechanics knowledge and skills, they also highlight their retention of baseline knowledge in the area and their ability to access colleagues with such advanced knowledge and skills:

> *a lot of us have probably left behind things like er [sic] biomechanics skills, we retain the basics but when you actually see what some of your musculo-skeletal colleagues are doing and specialising, you realise how far they've gone ahead of you now…*[Expert Reference Group 250-252]

One diabetes podiatrist highlighted the difference in biomechanics of the diabetic foot, citing this - along with soft tissue mechanics as one of many special interests:

> *Em [sic] the diabetic foot, full stop, per se. Em [sic] so I'm interested, real specialist, or real, real em [sic] keen interests are soft tissue mechanics, [clears throat] Charcot, em [sic] just got submitted a couple of papers to Diabetes Care on Charcot, with some research I've just done, em [sic] the micro-circulation, ulceration and its management, I think we, just go on and on really footwear, biomechanics and the diabetic foot, they, it's not quite the same as in the normal foot, and peripheral arterial disease.* [CG 37-42]

…while another pointed to the emergence of a sub-specialty to address diabetic foot biomechanics:

> *I think you can even sub-divide specialisms even further. What we're attempting to do at the moment is cross-overs between biomechanics and biomechanical problems in a diabetic er [sic] with musculo-skeletal people we've actually got somebody who's got a foot in both camps that er [sic] doesn't necessarily do loads of diabetic foot clinics er [sic] but is actually specifically looking at those that we recognise as needing a biomechanics specialist to look at, and she will liaise with both us and with the musculo-skeletal guys for best care so, so I think you could even start dividing down specialisms…*[Expert Reference Group 309-315]

So, while all Faculty of Management, Expert Reference Group and three of the four Foot in Diabetes UK participants expressed the view that specialty in diabetes podiatry should ideally be a focussed, sole specialty, concerns were raised by the Skills for Health and one Foot in Diabetes UK participant. These concerns when explored centred on lack of workforce flexibility and limitations to clinical skill and activity imposed by inadequate or incomplete advanced knowledge.

6.6 Implications of Specialisation in Diabetes Podiatry

Focussed activity in one clinical area requires that practitioners reduce or cease activity in other areas:

"…once you start specialising, once you do that, then you're reducing your breadth of knowledge, you're reducing your breadth of practice…" [BL80-82]

3: *"judging by how my departments gone em [sic] you know it is a case of use it or lose it in some ways and a lot of us have probably left behind things like er [sic] biomechanics skills, we retain the basics but when you actually see what some of your musculo-skeletal colleagues are doing and specialising, you realise how far they've gone ahead of you now, and likewise when you talk about diabetes they don't want to know because they realise we've gone far ahead of them so I think specialist route and just go down one route is important and crucial."* [Expert Reference Group 249-255]

…leaving gaps in provision:

"…if you're a podiatry department if you've got some people who are operating in a greater depth and a narrowing base, then you need to replace that person in the other skills that are missing…what you've got to start thinking of then is what other specialists do I need to fulfil the other roles?" [BL 125-130]

In this way establishing one specialty acts as a driver for the establishment of other specialist areas:

1: *"… I know about diabetes and there's someone else that leads rheumatology."* [Expert Reference Group 258-259]

6.7 The Current Status of Diabetes Podiatry

Being primarily driven by different individuals, geographically distant from each other and working for a variety of employers it is unsurprising that there is wide variation in the role and activities undertaken by diabetes podiatrists. The divisions between community and hospital based practice in diabetes podiatry were highlighted by respondents; the keenness with which they assert such differences probably representing one facet of their internal closure strategy. Though some podiatrists already established as diabetes specialists are now functioning in the community, they do so by utilising their charismatic authority and contacts established whilst working in secondary care. The move to community-based services and GP commissioning may prove to be a challenging time for the specialty; diabetes podiatrists cite GP's lack of exposure to and poor knowledge of diabetes podiatry (section 4.5).

There are factors which legitimate the diabetes podiatrists' claims to specialist status and conversely factors which undermine such claims:

The acknowledged lack of accredited, nationally recognised training significantly undermines claims to legitimate specialty. In discussing training for diabetes podiatrists tensions between the Skills for Health competency focussed approach to training and development and the acknowledgement of higher cognitive skills and reasoning were elicited. These tensions embody the difference between the concepts of technicality and indeterminacy discussed by Jamous and Peloille. Understandably clinicians are more likely to highlight the indeterminate, untestable knowledge which reinforces their autonomy, while Skills for Health are more likely to focus on technical skills which can be codified and communicated in the form of rules.

Developing pre-requisite training and a route to career progression is likely to require significant data to inform its contents, including information on the current workforce which is currently lacking. Research to address this deficiency has been commenced; during the course of this researcher's PhD she was contacted by another doctoral student just beginning her studies who wished to conduct a series of diabetes services and workforce surveys. This aim linked closely with that expressed by a particular diabetologist and diabetes podiatrist – so with the permission of all parties this researcher facilitated contact so that these aims could be advanced. A diabetes workforce survey is now underway.

As Andrew Abbot highlighted formal qualifications are only part of legitimacy – evidence of effectiveness is also important. Through on-going clinical audit and publication of data some diabetes centres have evidence of efficacy in reducing ulceration and amputation rates, though this data speaks to the effects of the multi-disciplinary team rather than diabetes podiatry per se. The blend of condition focus and risk stratification which is extant in current health policy provides a further legitimating factor in diabetes podiatrists' assertion to specialty, allowing them to claim a high status, limb and lifesaving role - Hugman's *virtuoso role* (sections 1.5, 1.7, 1.7.3 and 5.4). The successful launch of the *National Minimum Skills Framework for the Commissioning of Foot Care Services for People with Diabetes*

and latterly NICE guideline 119 (2011*) Diabetic foot problems. In-patient Management of people with diabetic foot ulcers and infection* represent further legitimating and exclusionary strategies. In encouraging employers to adopt what Freidson terms institutional credentialing (see section 1.7.2.1), diabetes podiatrists have been able to set a threshold level for diabetes podiatry provision whilst strengthening their jurisdictional claims.

However for diabetes podiatrists a clear and formalised route to progression and pre-requisite training remains elusive, leaving claims to legitimacy relying upon charismatic authority, medical patronage and small sections of health policy. Thus, the specialty remains vulnerable. Set against the current economic climate and under the influence of competing forces the future of diabetes podiatry as a defined specialty is far from certain.

7.0 Results – Documentary Analysis

Between the years 1945 and 2010 within the journals searched, advertising for one thousand, one hundred and three chiropodic and podiatric jobs in clinical and educational practice met the criteria for specialist posts (table 23. Advertising of Specialist Posts 1945-2010).

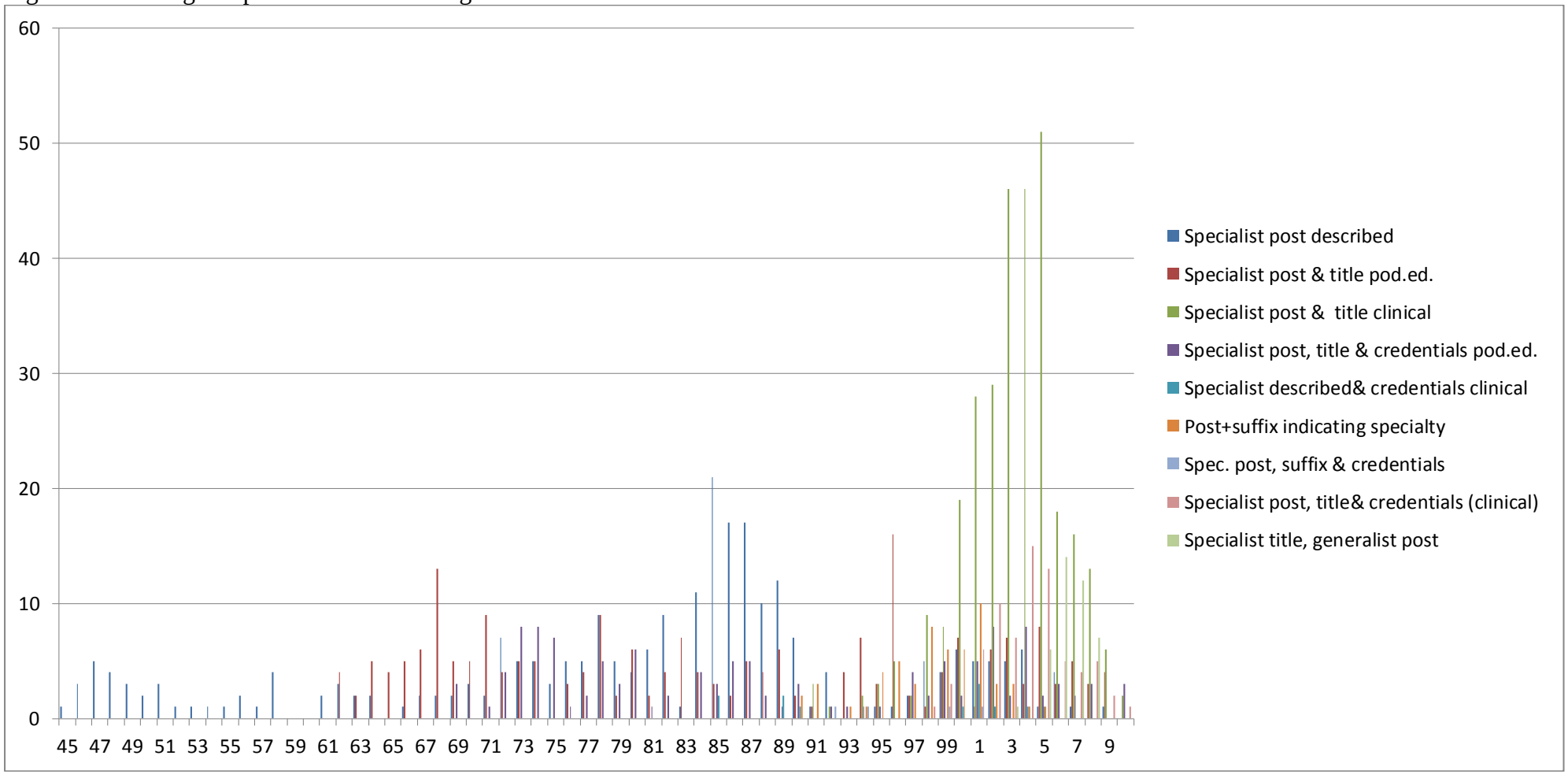
7.1 Descriptors and Titles

Descriptors and wording of advertising show changes over time, exhibiting a move from the generic term "chiropodist" attached to a description of a specialist post; then through the addition of suffixes to indicate an area of specialist focus; onwards to the assignment of specialist titles; and, latterly the use of specialist titles attached to descriptions of generalist posts (table 23. Advertising of Specialist Posts and fig. 3. Advertising of Specialist Posts – changes over time).

Table 23. Advertising of Specialist Posts 1945 to 2010

Year	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62*	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	0	1	2	3	4	5	6	7	8	9	10	Total
Specialist post described	1	3	5	4	3	2	3	1	1	1	1	2	1	4	0	0	2	3	2	2		1	2	2	2	3	2	7	5	5	3	5	5	9	5	4	6	9	1	11	21	17	17	10	12	7	1	4			1	1	2	5	4	6	5	5	5	6	1	4	1		1		264
Specialist post & title (pod.ed.)																		4	2	5	4	5	6	13	5	5	9	4	5	5		3	4	9	2	6	2	4	7	4	3	2	5	4	6	2	1		4	7	3	16	2	1	4	7	1	6	7	3	8	3	5	3	4		220
Specialist post & title clinical																																															3	1		2	3	5	2	9	8	19	28	29	46	46	51	18	16	13	6	2	307
Specialist post, title & credentials (pod.ed.)																									3		1	4	8	8	7	1	2	5	3	6	1	2		4	3	5	5	2	1	3		1	1	1	1		4	2	5	2	5	8	2	8	2	3	2	3		3	127
Specialist described& credentials clinical																																									2				2	1										1	3	1		1	1						12
Post+suffix indicating specialty																																														2	3		1	1	4	5	3	8	6	6	10	3	3	1	1						57
Spec. post, suffix & credentials																																																1		1					1		1										4
Specialist post, title& credentials (clinical)																																																						1	3		6	10	7	15	13	5	4	5	2	1	72
Specialist title but generalist post																																																											1		6	14	12	7			40
Total	1	3	5	4	3	2	3	1	1	1	1	2	1	4	0	0	2	7	4	7	4	6	8	15	10	8	12	15	18	18	10	9	11	23	10	16	9	15	8	19	29	24	27	16	21	15	8	7	6	12	12	27	13	26	31	41	59	62	71	80	83	47	40	31	13	6	1103

Fig. 3. Advertising of Specialist Posts – changes over time



7.2 Specialist Areas

Advertisements were placed for posts within thirty three defined specialist areas across clinical practice and podiatric education (table 24. Advertised Specialist Areas 1945-2010 and fig. 4. Advertised Specialist Areas 1945-2010), of which posts in podiatric education were the most numerous (344 posts). Specialist positions in the clinical areas of diabetes (176 posts), biomechanics (105 posts) and multi-specialist positions (102 posts) were the largest groups; diabetes combined with tissue viability or wound care roles adding to the overall diabetes total (a further 5 posts).

7.3 Grading and Banding

Grades began to be assigned to posts during 1976. Table 25. Advertised Specialist Posts by Grade 1976 onwards, clearly illustrates that senior I was the commonest grade assigned to specialised posts and that diabetes was the commonest graded specialty area. The advent of Agenda for Change brought with it a new banding system which became evident in job advertisements from 2005. Table 26. Advertised Specialist Posts by Band 2005-2010 demonstrates that generalist posts became the most frequently advertised area (included in the data due to the allocation of a specialist title), though only one of the thirty six generalist posts was graded at "band 6 or 7", with the remaining thirty five being at band 6 or below. Within the advertised posts meeting the inclusion criteria, band 7 positions occurred most frequently.

Table 24. Advertised Specialist Areas 1945-2010

Year	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62*	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	0	1	2	3	4	5	6	7	8	9	10	Total
Rheumatology	1		2														1																														1										1		1	2	1									10
Orthopaedics		1	2		2										1					1			1	1	1	1	2				1		1																											1					1	1							18
Pod ed		1										1						5	2	5	4	5	6	13	8	5	10	8	13	13	7	4	5	14	6	10	3	6	7	8	6	7	10	6	7	5	1	1	5	7	2	16	6	3	9	9	2	14	12	11	10	6	7	6	4	3	344
Paediatrics		1		1		1	2	1	1				1				1			1												2	3	3	1			2		3	2	4	2	2	3	1	2	2			1	2		3	2	1	3	1	4		3			1			63
Diabetes			1	3	1					1	1	1		2			1						1			1	2	3	1	3	1	1				1	1				3	1		2	1	1				3	3	2	2	4	7	11	24	17	15	17	17	3	10	6	1		176
Sports						1																																																															1
Multi							1							1				1	1						1	1			3	1	1	2		2	4	1	3	4	5	1	4	4	2	4	1	4	6		2				1	2	6	1	6	3	2	4	5	4	3		2	2	1	102
footwear manf																				1																																																1
Geriatrics																													1	3			1										1										1							2						1		10
Appl. Manf.																																		1	2	1					1	3	4	3	2	1			1									1										20
High Risk																																				1	2	1				2		2													1		3	1		1							14
Biomech.																																							1		1	6	1	3	2	2	1					1	3		1		4	10	15	10	18	18	1	4	2		1	105
Prev/Health ed																																							1		1		2			1	1	1				1	1				1	1	1			2						14
Research																																									1	1	1		1	1		3		1	1	2			2			1	1	2			1	1		1	1	22
Nail surg.																																									2	1	1										1					1	1					1	1		9
Minor surg.																																										1																			1	3						5
Wounds																																											1																			4							5
Longterm cond																																													1										5						3		1				10
Pod. surgery																																																1		1	2	1	2	6	5	7	5	4	11	9	7	3	1	3			68
Clin. Gov.																																																							1		1	2	4	1	1					10
Tissue Viab.																																																							1		1				1					3
Adv. Pract.																																																								2	1	1								4
Vascular																																																								1			2							3
Rehab.																																																								2				1						3
Wound+highri.																																																										1									1
Footwear fittng																																																										1									1
Re-profiling																																																										1									1
MSK																																																										1	7	4	13	2	3	2		32
Diabet+wound																																																												1		1				2
Diabet+TV																																																												2		1				3
Triage																																																												1						1
Technician																																																													1					1
Generalist																																																										1		6	14	12	7	1		41
Total	1	3	5	4	3	2	3	1	1	1	1	2	1	4	0	0	2	7	4	7	4	6	8	15	10	8	12	15	18	18	10	9	11	23	10	16	9	15	8	19	29	24	27	16	21	15	8	7	6	12	12	27	13	26	31	41	59	62	71	80	83	47	40	31	13	6	1103

Fig. 4. Advertised Specialist Areas 1945-2010

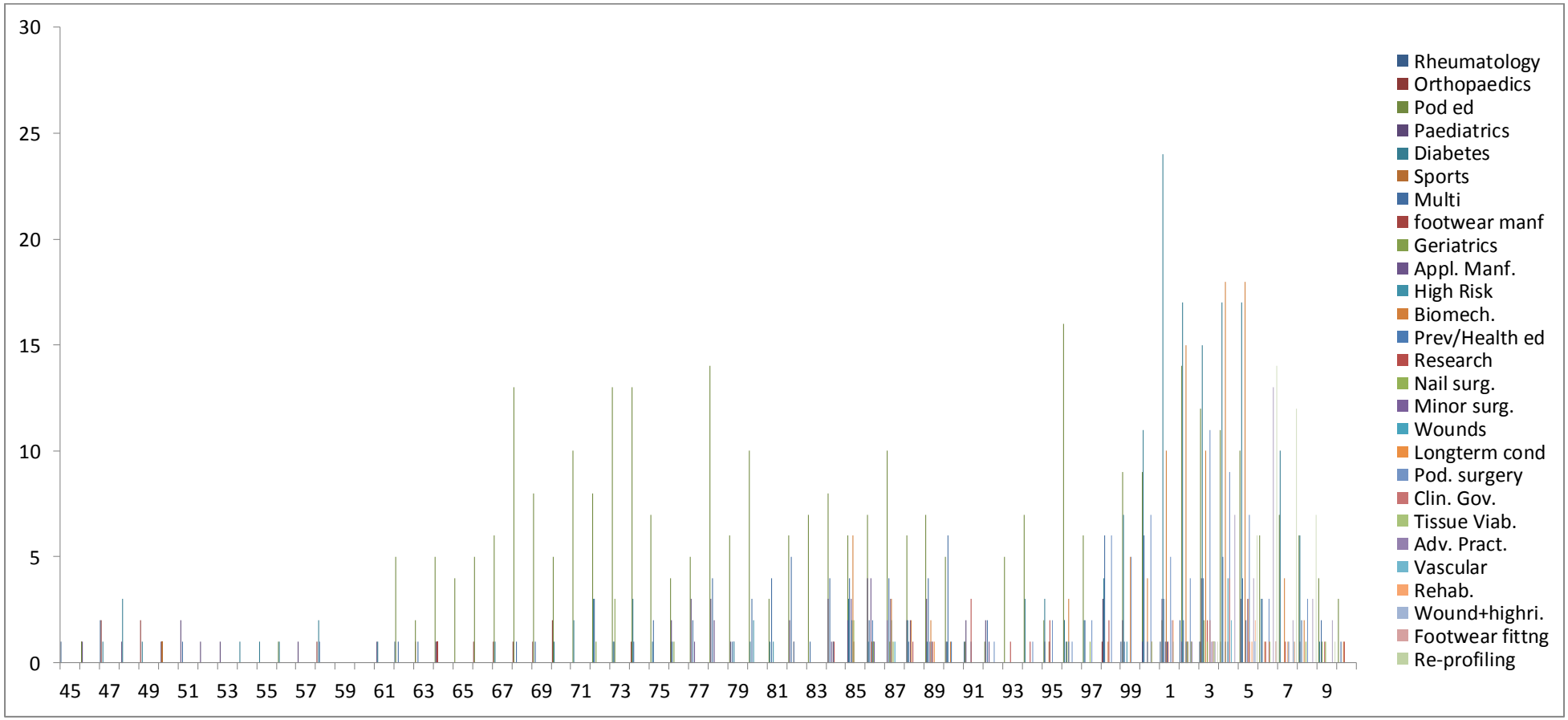


Table 25. Advertised Specialist Posts by Grade 1976 Onwards

1976-	Not stated	Tech.	Assistant	Sen II	Sen I /II	Sen I	S. I/ Ch. IV	Chief IV	Chief III	ChiefIII/II	Chief II	Training Post	House offr.	Registrar	Consultant	MC21	F/G	Total
Rheumatology						7												7
Orthopaedics	1			1		1			1									4
Paediatrics	2			4		37		3	5		1							52
Diabetes	14	1		5	1	82		5	13	1	2				1		1	126
Multi	4			6	1	61		3	5									80
Geriatrics						3		2										5
Appl. Manf.	1					10		3	4									18
High Risk	1					12			4									17
Biomech.	10			5		64		3	13									95
Prev/Health ed	1			1		10		1										13
Research	2		3			5			2		1							13
Nail surg.						4		3										7
Minor surg.	2					1												3
Wounds				1		3												4
Longterm cond	1					2												3
Pod. surgery	15		4			2	1				2	19	4	7	3	1		58
Clin. Gov.						3			4		2							9
Tissue Viab.						2												2
Adv. Pract.	1					3												4
Vascular						2			1									3
Rehab.	2					1												3
Wound+highri.						1												1
Footwear fittng						1												1
Re-profiling						1												1
MSK	2					3	1	1	8									15
Diabet+wound						1												1
Diabet+TV																		0
Triage																		0
Generalist				4					1									5
Total	59	1	7	27	2	322	2	24	61	1	8	19	4	7	4	1	1	550

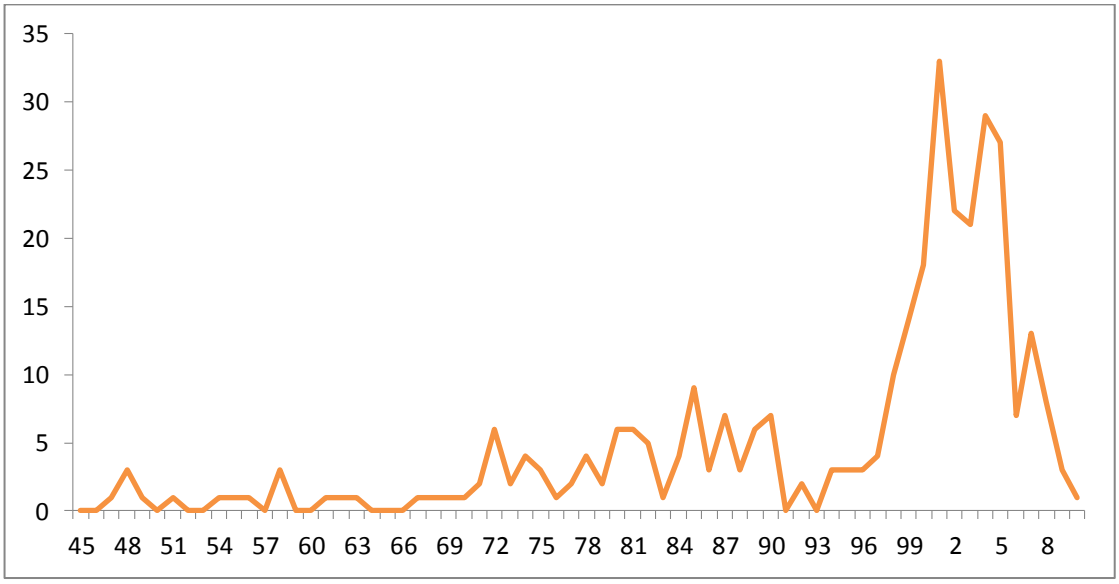
Table 26. Advertised Specialist Posts by Band 2005 to 2010

2005-	Hon. Contract	Not stated	4	5	5 or 6	6	6 or 7	7	7 or 8a	8a	8b	8c	8d	9	AHP Consultant	Total
Rheumatology																0
Orthopaedics																0
Paediatrics								1								1
Diabetes		1				2		16		3		1			1	24
Multi				1		2		5		1	1					10
Geriatrics																0
Appl. Manf.			1													1
High Risk																0
Biomech.		1				1		8	1							11
Prev/Health ed																0
Research		1						1								2
Nail surg.						1		1								2
Minor surg.						1										1
Wounds																0
Longterm cond						1										1
Pod. surgery	2							1				2	2	2		9
Clin. Gov.						1										1
Tissue Viab.								1								1
Adv. Pract.																0
Vascular																0
Rehab.																0
Wound+highri.																0
Footwear fittng																0
Re-profiling																0
MSK		2		1		2		7		7						19
Diabet+wound								1								1
Diabet+TV								2								2
Triage								1								1
Generalist		7		4	2	11	1									36
Total	2	12	1	6	2	35	1	45	1	11	1	3	2	2	1	125

7.4 Specialist posts with diabetes component

Focussing on specialist posts in diabetes, advertising for positions was sporadic up to 1969, with 2, 3, 4 or even 5 years elapsing between advertisements (table 24. Advertised Specialist Areas 1945-2010 and fig. 4. Advertised Specialist Areas 1945-2010). From 1994 posts in diabetes were advertised every year, though until 2000 the annual numbers remained in single figures. Combining the advertising for all specialist posts which may have incorporated diabetes as an element of their clinical workload yields a total of 283 posts over the 65 year period from 1945 to 2010 (fig 5. Advertised Posts with Possible Diabetes Component).

Fig. 5. Advertised Posts with Possible Diabetes Component



7.5 Discussion - Documentary Analysis

The gradual change from describing a specialised post, through addition of a suffix to indicate the focus of specialisation, and then the subsequent attribution of specialist titles (table 24. Advertising of specialist posts 1945-2010) corroborates data derived from the focus group interviews; wherein respondents asserted that specialised posts were extant before specialist titles. Latterly under the Agenda for Change banding system specialist titles have been assigned to generalist posts, again echoing the data from the interview respondents who considered that the term

"specialist" had become devalued and inappropriate because of its application to generalist posts. Assigning these posts to bands 5 and 6 - with one instance of grading at either band 6 or 7, infers status commensurate with more junior practitioners, lending weight to the argument that the phenomenon is likely to represent the employer's bid to speak the language of health service modernisation, rather than evidencing an extension of specialisation.

Within the clinical and specialist groups identified, podiatric education would appear to be the most successful. Advertised posts were the most numerous, specialist titles were assigned early in its evolution and underpinning credentials rapidly became a requirement. This may reflect the pre-existence of an organising structure within education; and particularly the well-defined hierarchy of higher education with its titles, career structure and pre-requisite qualifications. In a similar vein the specialty of podiatric surgery appears to have utilised the titles and model of career progression associated with medical surgeons.

Advertisement of posts focussing on diabetes as a defined clinical area evidences the existence of diabetes podiatry as a specialty – corroborating the assertions of interview participants. Analysis of advertised podiatry posts focussing on diabetes indicates that the specialty evolved gradually and haltingly from 1947 onwards, concurrently with multiple other areas of specialised activity.

Focus group and key actor respondents considered that diabetes became established as a specialist podiatric area towards the end of the 1980s. While advertising data does show some increase at this time, there were only eight posts advertised within this specialty between 1985 and 1990. The most notable increase in the frequency of advertised specialist posts in diabetes being from 1994 onwards, reaching a peak in 2001 when a total of 24 posts were advertised. This may indicate that the small increase in posts during the last five years of the 1980s was considered to be significant by respondents; there may have been further posts which were not advertised – or which were advertised in media not sampled during this research; or the firmer establishment of diabetes as an identified specialist area may have occurred later than respondents recounted – coinciding with the increasing numbers

of advertised posts from 1994. The assertion that diabetes podiatry became established towards the end of the 1980s may however evidence a significant impact perceived from what was actually a small increase in numbers of diabetes podiatrists. This may be a reflection of the charismatic nature of the individuals involved and their application to the professional project - resulting in a perceived impact far greater than that for which the numbers can account.

The decline in advertised specialist posts (and indeed advertising for all podiatry posts) from 2009 is noteworthy, representing an effect of the changing health economy of this time – bringing with it uncertainty for the future of specialist posts.

8.0 Summative Discussion

The questions which prompted the process of enquiry were broad, reflecting the exploratory nature of the research. The questions focussed on the meaning of specialisation in diabetes podiatry, how it evolved as a specialty, the impact of specialist titles, the wider professional impact of specialised practice and the sustainability of diabetes podiatry as a defined specialty. In answering these questions, findings fell into three domains. Each domain has been presented and discussed separately as have the findings from the documentary analysis. Some issues however cross the boundaries between the areas already presented.

Some podiatrists and diabetologists working in secondary care were keen to assert a difference between their practice and that of podiatrists working in the community (see 6.2.1 and 6.4.1). Closer inspection of this area reveals that such differences are far from clear-cut. Advanced podiatrists working in the community care for a predominantly medium to high risk diabetic population Holland et al (2002). While some secondary care practitioners are eager to cite the need for further training of community podiatrists (see 6.2.1 and 6.4.1), the isolated nature of community practice (Bending and Foster 2002) has historically been a clear limiting factor on the level of practice. The lack of independent prescriber status also impacts more markedly on those practitioners working in the community, where supplementary prescribing and preparation of care management plans become more difficult due to decreased access to medical support (see 4.7.1 and 4.7.2). Part-time specialty, utilising service level agreements has long been a feature of diabetes specialist podiatry (see 6.4) and more recently, community based specialist practice in diabetes is becoming more common (see 6.3.3). Thus, the eagerness with which differences are asserted is likely, at least in part to represent one facet of the diabetes specialist podiatrists' internal closure strategy (6.7) and a degree of protectionism.

The increasing number of roles assigned to the diabetes specialist podiatrist appears to have been a driver for the establishment of a "diabetes specialist podiatry assistant" grade (see 4.3, 1.5.6.1 and 1.6.2.3), considered by Holland et al (2002) to have a pivotal role within secondary care. However as Hugman (1991, p94) highlights assistants have ambiguous status, for while they derive their nature from

the profession with which they are associated, they are simultaneously excluded from that profession – "*being neither entirely distinct nor entirely integrated*". The role of the diabetes specialist podiatry assistant (table 5) appears to be more extensive than that with which the Society of Chiropodists and Podiatrists (2006a and 2006b) policy of supervision for assistant grades (appendix 2) can be reconciled. As Nancarrow and Borthwick (2005) point out delegation of roles to assistant grades may well represent a means to maintain control over low status work, whilst also allowing the specialist podiatrist to focus on higher status activities (see 1.7.3). Within this chain of task shedding, there is though a duty to ensure that delegated roles are left with capable individuals (see 4.3).

Agenda for Change has had a major influence on titles and banding within podiatry and the diabetes specialist podiatrists have not been immune from its effects. While cessation of appointment for podiatric surgeons under MC21 contracts may arguably unify the profession (all podiatrists now being graded using the same system), this may be felt by the surgeons to have diminished their status. Motivations for and response to the Agenda for Change process has been variable. Some trusts have retained old titles in a bid to maintain an expression of post seniority and differentiation, whilst other trusts have retained old titles to minimise possible divisive effects of the new titles which they perceive to be hierarchical (see 5.3.2). Where the Agenda for Change nomenclature has been adopted it appears to have added confusion to an already complex area, with many respondents being unsure of the banding structure (see 5.1) and some respondents being unclear regarding their own titles (see 5.2). The data brings into clear focus the implications of titles which can have potent effects on access to services (5.3.1), clinical activities (5.3.1), the ways in which the title-holder is perceived and their status as clinicians (5.3.2, 5.3.4 and 5.3.5). This changed status has legal as well as professional implications (5.3.3), altering the level of practice deemed acceptable and increasing not just the patients' expectations but also the clinicians' accountability under the law. Thus practitioners may be held to account for their specialist titles and posts.

Weber's concept of charismatic authority has formed a guiding theoretical concept within this research, illuminating the way in which a defined specialty was created

and disseminated, in the absence of codified or credentialed authority. The charismatic leaders acquired a following of other podiatrists and cultivated a legitimate place within the larger medical specialty of diabetology. The existence of stratified manifestations of charisma is manifest through the presence of intermediate members of the charismatic band such as the "Expert Reference Group" respondents. These practitioners are not the contemporary "key leaders" or "champions" who succeeded the early "iconic leaders" in diabetes podiatry (see 4.4.1), however they are illustrative of the dispersed (though unequal) nature of charismatic authority throughout the hierarchy of roles within such groups and the existence of attenuated forms of charisma in a number of individuals (see 1.10.4). Charismatic authority offers a compelling explanation not just for the evolution of the specialty, but also for changes over time as routinisation strategies are employed in a bid to secure its long-term future.

8.1 Quality of the Research

Throughout the research process the researcher has sought to maintain quality and transparency, substantially informed by Yin's (2003) perspective. Justification for the methods of enquiry, the rationale for methodological decisions, data handling and analysis approaches have been have been presented. The ontological and epistemological underpinnings of the work have been discussed (section 3.1) and the author's status as a podiatrist with an interest in specialisation has been made transparent.

The initial concept analysis assessed the maturity of the concept of the diabetes specialist podiatrist. It traced the origins, change over time and current status of podiatric specialisation in diabetes as well as the comparable cases of medical and nursing specialisation in diabetes. Literature pertaining to the legal implications of specialist practice, settings and titles was reviewed and a definition of specialisation within the context of healthcare proposed. Flowing from the concept analysis research questions which directed further enquiry were refined.

Because answers to the research questions are within the knowledge and experiences of key actors, managers and individual podiatrists; a qualitative methodology featuring focus group and key actor interviews was utilised. The

meaning of podiatric specialisation in diabetes, how diabetes evolved as a podiatric specialty, the impact of specialist titles and the longer-term, wider implications which accompany specialisation were explored. Verbatim transcription was followed by a detailed and rigorous coding process, this was tabulated and is clearly accessible to scrutiny; thus it is readily auditable and meets requirements of transparency detailed in Yin's chain of evidence approach (Yin 2003). In presenting analysis of the data, the researcher focuses on theory which illuminates the findings. The centrality of Weber's concept of charismatic authority to the development and contemporary face of specialist practice is illustrated by the data; thus it represents a guiding theoretical concept within the author's thesis.

Documentary analysis was used as a triangulation strategy, in a bid to corroborate findings elicited through interview techniques. The documentary data also illustrates both the scale of and the context within which podiatric specialisation in diabetes evolved – not in isolation, but rather as one of many specialist foci.

While the author makes no claims for generalisability, the possible wider applicability of this work cannot be ignored. Podiatry is just one of the fifteen Allied Health Professions regulated by the Health Professions Council. Most have degree level qualification as a minimum entry requirement and are considered to be of similar status. Based upon this and the way in which other Allied Health Professionals have identified with the work, expressing strong resonance with themes of medical patronage and charismatic authority, applicability and explanatory powers for a wider community of professions seem likely. The findings from this work are substantive enough to indicate that there may be commonality across some of the Allied Health Professions and possibly other professions.

9.0 CONCLUSIONS

This research has analysed the concept of specialisation and evaluated the maturity of the concept of diabetes podiatry as a defined specialty. This process allowed the framing of a proposed definition for specialisation within the context of healthcare, elicited difficulties with the term "specialist" and exposed the immaturity of the concept of specialised podiatric practice in diabetes.

The centrality of charismatic authority in the establishment and development of diabetes podiatry has been illustrated, as has its on-going and potent influence in shaping the contemporary face of this podiatric specialty. Illustrations of the effects of charismatic authority at micro and macro levels have been provided. The potential tensions between charismatic leaders in podiatry and medical doctors have been illustrated and discussed, as have the mechanisms which allow the charismatic's authority to be contained. The fragility of charismatic authority has been recognised and contemporary attempts at routinisation which represent a bid to secure a legitimate long-term future for the specialty have been discussed.

The evolution, change over time, meaning and current status of diabetes podiatry has been explored, the forces that have driven and influenced its journey considered and social theories which offer illumination discussed. The impact of and difficulties with specialist titles have been explored and reasons examined. In considering "specialist" a lay term a possible route to reducing difficulties with nomenclature may be available, though this would require amending titles used under Agenda for Change.

The future sustainability of diabetes podiatry as a defined specialist area in the face of further major health service reforms remains an unanswerable question; dependent upon not just the authority, activities, professional project and negotiations of diabetes podiatrists in legitimising and marketing their specialty, but also on the opinions, choices and purchasing power of the new consortia.

9.1 Limitations of the Study and Future Directions

Because the clinician respondents within this research were either Foot in Diabetes UK executive committee members or "lead" diabetes podiatrists their experiences are of complete immersion in the diabetes podiatry role. Their knowledge and

experiences were thus invaluable in building a picture of full-time, focussed practice in diabetes podiatry - with some respondents able to make experiential or insightful comments on part-time specialty and multi-specialty. In order to gain a fuller picture of the roles and activities undertaken by podiatrists practising on a part-time basis within the diabetes specialty, further research will be required. This will in part be addressed by the diabetes podiatry workforce survey however qualitative data from part-time diabetes podiatrists will be required to build a picture of the specialty in its broader form.

This work has explored many aspects of specialisation but has remained within the professional and sociological domains – reflecting the impact of the research questions. The effects of specialisation on practitioners at the personal and emotional level has not been explored or evaluated. While some clinician respondents mentioned emotional highs and lows and the impact of dealing with frequent limb-loss or death amongst their patients, the researcher's opinion was that in order to do justice to this area a dedicated in-depth study would be required. Such a study would be prompted by research questions focussing on the personal and emotional domains, exploring psychological aspects beyond the scope of the work presented within this thesis.

In using diabetes as an exemplar of podiatric specialisation other specialised areas have not been explored. The author makes no claims for generalisability, recognising that in focussing on a specific manifestation of specialisation and group of specialists, the findings remain specific. While the evolution, changes over time and status of podiatric surgery have been comprehensively addressed (Borthwick 1999, 2000) and core podiatry has been defined and evaluated (Farndon 2006) other facets of podiatric practice remain largely unaddressed. Further study of defined specialities within podiatry such as rheumatology and biomechanics would serve to illuminate the origins, evolutionary changes and current status of these areas, serving to build a larger picture of podiatry as a profession. A quantitative study to evaluate the generalisability of the research findings elicited during the author's work presented in this thesis would pave the way to a fuller understanding of specialisation. Such a quantitative work need not be confined to diabetes, or indeed to podiatry. In presenting her work to audiences from the wider allied health professions, the author

has found that the themes of charismatic authority and medical patronage have strong resonance for other health professionals; raising the possibility of their utility as a conceptual framework to illuminate specialisation more widely.

9.2 A personal reflection

In undertaking research training, through the experience of framing, organising and executing this research, in interacting with other researchers and in writing this thesis – endeavouring to illuminate findings with pertinent theory – the author has learned a great deal. This learning has covered philosophical, practical and personal domains.

Within the practical sphere time management and organisational skills have been tested and honed, IT skills developed (accompanied by some frustration and the odd cross word), writing skills improved and presentation skills learned. On a personal level juggling the pressures of competing demands has compelled the author to reflect on her priorities. In considering the ontological and epistemological underpinnings of her work the researcher gained insight into the bond between the research questions, research area and researcher. It is this more than anything which will modify her approach to her future research. Throughout research methods were selected on the basis of utility in answering the research questions with the aim of conducting exploratory research in a hitherto unaddressed area – which would be subsequently amenable to extension and refinement through future work.

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APPENDICES

Appendix 1

Overview of the sample

Pseudonym	Status
SS	Specialist Podiatrist
CG	Specialist Podiatrist
JH	Specialist Podiatrist
MP	Specialist Podiatrist
PL	Specialist Podiatrist
Expert Reference Group 1-10	Specialist Podiatrist
Faculty of Management 1-8	NHS Manager
BL	Skills for Health respondent
JB	Society of Chiropodists and Podiatrists respondent
IM	Diabetologist
OM	Diabetologist
AT	Diabetologist

Appendix 2

Society of Chiropodists and Podiatrists

Guidelines on delegation and supervision of Assistant Practitioners and Footcare Assistants

Delegation

If you elect to delegate a task, or temporarily transfer the care of a client or patient to a footcare assistant or assistant practitioner, you are responsible for the outcome.

You must ensure that you have appropriately assessed the patient and that the person to whom you have delegated:

1. Understands what is expected of them and has a clear written treatment plan with expected outcomes with target dates
2. Has the knowledge, skills and recognised qualification or experience to carry out what you have asked them to do safely and effectively
3. Is appropriately supervised
4. Is aware of when and under what circumstances the patient should be referred back for a reassessment
5. Is able to refer the patient back to you or another Podiatrist without delay, if they are uncertain or concerned in any way as to the patient's changed health status or their response to the treatment being provided

If they tell you that they are unwilling or unable to carry out a particular task or to continue with the care of a particular patient, you must not endanger the patient by forcing them to do so. You should explore the reasons and identify any training issues before making any decisions as to what to do.

Supervision

Delegated work should regularly be reviewed in line with the agreed treatment plan. The appropriate level of supervision can only be defined in terms of the knowledge and skill of the footcare assistant or assistant practitioner, according to the guidance in table 1 overleaf. For assistants operating at level D and above, it will not be necessary for them to work in the same location as the supervising podiatrist.

Table 1: Guidelines on the supervision of Assistant Practitioners and Footcare Assistants

Level	Description of theoretical knowledge	Description of technical and operative skills	Appropriate supervision
A	Having to ask or be told what to do	Podiatrist showing: Assistant helping	Direct Supervision
B	Aware of what to do, but not really knowing what to do	Assistant undertaking the work: with the podiatrist helping	
C	Confident in their underpinning knowledge but not able to demonstrate that knowledge in the clinical setting	Assistant doing the work: with a podiatrist overseeing their work	Indirect Supervision
D	Understands what to do and able to do it	Assistant doing: with Podiatrist available within the clinical environment	
E	Able to develop their knowledge and build on it during practice. Able to research and critique knowledge and use it wisely	Assistant doing: with Podiatrist available for advice	Proximal Supervision

Appendix 3a. Interview schedule for Podiatry Managers (focus group)

Introduce self/ thanks
Outline of the nature of focus groups/ aims of today's focus group
Introductory questions:
Issues around language and terminology in Diabetes Specialist Podiatrist recruitment and job descriptions:

- How do you choose the wording of advertisements for Diabetes Specialist Podiatrist posts and job descriptions? What are your reasons for choosing specific terms?
- Do you draw distinctions between experience and education [specialisation] in job recruitment advertising?
- What is the effect of advertising for multi-specialist skills? (i.e. one post to cover diabetes, rheumatology and biomechanics specialist areas - e.g. advertisement for Plymouth pod dept. Oct 05 Pod Now)

Drivers for Diabetes Specialist Podiatry

- What factors influenced your decision to employ a diabetes **specialist** podiatrist? [*What are podiatry managers responding to with specialist roles? What motivates managers to advertise these jobs? Are National Service Frameworks a driver? Is specialism a means of enhancing Agenda for Change profile of posts? Is specialisation seen as a form of career progression?]*

Role of the Diabetes Specialist Podiatrist

- What roles and functions do you require of your Diabetes Specialist Podiatrist staff?
- Are these roles undertaken by any other professions?
- In what ways do you consider the Diabetes Specialist Podiatrists' role to be different from that of other (generalist) podiatrists? [*are there any facets of Diabetes Specialist Podiatry activity which can be clearly identified as "extended scope practice"? or are the roles extensions and refinements of those taught in the undergraduate syllabus and as such practiced by most podiatrists at some time in their career?]*

Issues around sustainability:

- How long have Diabetes Specialist Podiatrist posts been established within your service? [*Origins of DSP. Can podiatry departments sustain specialist posts?]*
- How are the requirements for Diabetes Specialist Podiatry met? [e.g. 1 day/week from community etc.]
- For how many hours per week are your Diabetes Specialist Podiatrists employed in their **specialist** capacity? [*Mismatch between demand and drive for specialisms? Do services demand specialist roles? Is 5 days a week in specialist diabetes care possible and sustainable?]*

Ways of working

- Do your Diabetes Specialist Podiatrists work with other professions? [*skill mix, isolated or interdisciplinary approach; capture organisational differences between services]*

- How is care planning undertaken for clients with diabetic foot disease? [*Joint planning or co-located but separate professions? If joint is this led by one profession or is it a team process?]*

Accessing Diabetes Specialist Podiatry services

- From whom do your Diabetes Specialist Podiatrists take referrals?
- When do podiatrists within your service refer clients to the Diabetes Specialist Podiatrist? *[How does the process work? use of guidelines or referral pathway; education for "community" podiatrists; is a "shared care" model used?; tensions between generalist and specialist podiatrists ;why should general podiatrists refer to DSPs?]*

How many specialist roles can podiatry support?

- Does your service employ other identified **specialist** podiatrists? – In what areas? For how many hours per week?

Impact on service of specialisation:

- How, and by whom are the needs of the other service users not encompassed in the specialists' remit met? [*reduction in general/core podiatry? re-profiling of caseload? core/generalist podiatrists' role and status?]*
- How does your service meet the podiatry needs of non-diabetic clients?

Education and/or experience [*craft based models/professionalisation… Is there a sheltered position within the podiatry labour market for Diabetes Specialist Podiatrists?]*

- What education do you consider to be an absolute pre-requisite for the post of Diabetes Specialist Podiatrist?
  [*Impact of lack of approved training for "specialists"]*
- What experience do you consider to be a pre-requisite for the post of Diabetes Specialist Podiatrist? *[Impact of lack of formalised career pathway for practitioners to develop specialist skills/status]*

Status/remuneration

- How do you choose the grade and salary of Diabetes Specialist Podiatrist posts?

Vision of ideal Diabetes Specialist Podiatrists' role, ideal educational preparation for Diabetes Specialist Podiatry + barriers

- Having spoken about the current reality, what would the **ideal** Diabetes Specialist Podiatrists' role be like? [*Vision of Diabetes Specialist Podiatrists and Diabetes Specialist Podiatry service in an ideal world – would Diabetes Specialist Podiatrists work in their specialism full time?; aspirations for the future of the service; long-term objectives]*
- …… and the ideal educational preparation for Diabetes Specialist Podiatrists?
- What prevents us from achieving this ideal situation? [*what are the barriers]*

Snowball sampling

- …and finally are there any other people you feel have a contribution to make concerning the themes we have discussed today? *[Who else should I be talking to about these themes? Which other groups or individuals would wish to have*

their voices heard on these matters? Who else may make valuable contributions to this data?]

Anything you wish to add?

Appendix 3b Interview schedule for key "Foot in Diabetes United Kingdom" members

Introductory questions:

- How did you become a Diabetes Specialist Podiatrist?
- What are your particular interests in the field of Diabetes Specialist Podiatry?

Drivers for Diabetes Specialist Podiatry:

- In your opinion, what factors have influenced the development of diabetes **specialist** podiatry? [*Are National Service Frameworks a driver? Is specialism a means of enhancing Agenda for Change profile of posts? Is specialisation seen as a form of career progression?]*

Role of the Diabetes Specialist Podiatrist

- What do you consider to be the roles and functions of a DSP? [*Specialised activities or core podiatry for diabetic clients? Do perspectives differ significantly from the managers'?]*
- In your experience, are these roles undertaken by any other professional groups? (*inter-professional jurisdictional boundary issues?)*
- In what ways do you consider the Diabetes Specialist Podiatrists' role to be different from that of other (generalist) podiatrists? *[are there any facets of Diabetes Specialist Podiatry activity which can be clearly identified as "**extended scope practice**"? or are the roles extensions and refinements of those taught in the undergraduate syllabus and as such practiced by most podiatrists at some time in their carer?]*
- What do you think distinguishes Diabetes Specialist Podiatry from general podiatry? [*is there anything about the organisation, professional orientation or career path which is different for Diabetes Specialist Podiatrists?]*

Ways of working

- In your experience, do Diabetes Specialist Podiatrists work with other professions? [*skill mix, isolated or interdisciplinary approach; capture organisational differences between services]*
- In your experience, how is care planning undertaken for clients with diabetic foot disease? [*Joint planning or co-located but separate professions? If joint is this led by one profession or is it a team process?]*

Education and/or experience [*craft based models/professionalisation… Is there a sheltered position within the podiatry labour market for Diabetes Specialist Podiatrists?]*

- What **education** do you consider to be a pre-requisite for the post of Diabetes Specialist Podiatrist? [*Impact of lack of approved training for "specialists"]*
- Would you envisage additional training if activities such as altering insulin regimes becomes part of the Diabetes Specialist Podiatrists' remit?
  -What form do you consider such training may take?
- What **experience** do you consider to be a pre-requisite for the post of Diabetes Specialist Podiatrist? *[Impact of lack of formalised career pathway for practitioners to develop specialist skills/status]*
- In your opinion what are the legal implications of adopting specialist titles?

Issues around sustainability:

- To your knowledge, how long have Diabetes Specialist Podiatrist posts been established? [*Origins of DSP. Can podiatry sustain specialist posts?]*
- In your experience, for how many hours per week are most Diabetes Specialist Podiatrists employed in their **specialist** capacity? [*Mismatch between demand and drive for specialisms? Do services demand specialist roles? Is 5 days a week in specialist diabetes care possible and sustainable?]*

Accessing DSP services

- To your knowledge, from whom do Diabetes Specialist Podiatrists take referrals?
- In your experience, when do (general) podiatrists refer clients to a service where Diabetes Specialist Podiatry is established? *[How does the process work? use of guidelines or referral pathway; education for "community" podiatrists; is a "shared care" model used?; tensions between generalist and specialist podiatrists ;why should general podiatrists refer to DSPs?]*

Status/remuneration

- In your experience what grade and salary do Diabetes Specialist Podiatrists receive? [*does this reflect the documented reality gained from analysis of Diabetes Specialist Podiatry recruitment]*
- What grade and salary do you consider appropriate for Diabetes Specialist Podiatrists and why?

Vision of ideal Diabetes Specialist Podiatrist role + barriers

- Having spoken about the current reality, what is your vision of the **ideal** Diabetes Specialist Podiatrist role? [*Vision of Diabetes Specialist Podiatry service in an ideal world – would Diabetes Specialist Podiatrists work in their specialism full time?; aspirations for the future of the service; long-term objectives]*
- What do you think prevents us from achieving this ideal situation? [*what are the barriers]*

Issues around language and terminology in Diabetes Specialist Podiatry recruitment and job descriptions: [if there is time]

- In your opinion, how accurate is the wording of advertisements for Diabetes Specialist Podiatry posts/job descriptions in describing the role and activities of Diabetes Specialist Podiatrists? [*FDUK / personal perspectives on the language and terminology used to describe DSP]*
- Which terms do you consider to be the most appropriate?
- What do you consider to be the effect of advertising for multi-specialist skills? (i.e. one post to cover diabetes, rheumatology and biomechanics specialist areas - e.g. advertisement for Plymouth podiatry department October 05 Podiatry Now) *[Does this denigrate the skill level and importance of specialisms?]*

Skills for Health

- What is your opinion of the diabetic foot sections of the Diabetes Framework produced by Skills for Health? *[Competence frameworks "Undertake advanced examination and risk assessment of the feet of an individual with diabetes" (DF01), "specialist foot treatment for an individual with diabetes"*

(DF02) and "provide wound care to treat an ulcerated foot of an individual with diabetes" (DF03)

Snowball sampling

- …my final question, which other people you feel have a contribution to make concerning the themes we have discussed today? *[Who else should I be talking to about these themes? Which other groups or individuals would wish to have their voices heard on these matters? Who else may make valuable contributions to this data?]*

Anything you wish to add …

Appendix 3c. Interview schedule for focus group "Expert Reference Group"

- Thanks, introduction, the reason I am accessing your group: highlighted by other respondents in the research study as a source of important information and insights
- Focus Group Interview- tool to gather info from a group of respondents at one hit. No need for consensus, captures variety in ways of working etc.
- Please would you introduce yourselves, give the title of your post and say a few words about your service

Introductory questions:

- How did you come to specialise in diabetes podiatry?
- What are your particular interests in the field of Diabetes Podiatry?

Issues around language and terminology in Diabetes Specialist Podiatry – titles, legal implications, recruitment, job descriptions and access:

- In describing podiatrists who specialise in diabetes podiatry, I have used the title "Diabetes Specialist Podiatrist" because this is the most commonly used title in the literature, though I am aware that there is debate about its appropriateness. What is your preferred title and why? [prompts can be "variety of different titles "lead" "DP" "DSP" "Cons Pod (diabetes)"]
- In your opinion, what are the legal implications of adopting "specialist" titles?
- In your opinion, how accurate is the wording of advertisements for Diabetes Specialist Podiatry posts/job descriptions in describing the role and activities of Diabetes Specialist Podiatrists?
- Which terms do you consider to be the most appropriate?
- What do you consider to be the effect of advertising for multi-specialist skills? (i.e. one post to cover diabetes, rheumatology and biomechanics specialist areas - e.g. advertisement for Plymouth podiatry department October 05 Podiatry Now)
- Does the title Diabetes Podiatrist/DSP/Consultant Podiatrist (Diabetes) penalise other high risk patients who do not have diabetes by restricting their access to services?

Drivers for Diabetes Specialist Podiatry:

- In your opinion, what factors have influenced the development of diabetes specialist podiatry?

Role of the Diabetes Specialist Podiatrist

- Outline for me the roles and functions you undertake as a Diabetes Specialist Podiatrist.
- In your experience, are these roles undertaken by any other professional groups?
- In what ways do you consider the Diabetes Specialist Podiatrists' role to be different from that of other (generalist) podiatrists?
- What do you think distinguishes Diabetes Specialist Podiatry from general podiatry? – at the organisational and career path level

Issues around sustainability:

- To your knowledge, how long have Diabetes Specialist Podiatrist posts been established?

- For how many hours per week are you employed in your specialist diabetes podiatry capacity?

Ways of working

- In your experience, do Diabetes Specialist Podiatrists work with other professions?
- Tell me about the way you work with other clinicians
  – "team" (who are the team members, who leads)
  – "linking"(which professionals /services do you link with)
- In your experience, how is care planning undertaken for clients with diabetic foot disease?
- Who leads your foot clinic?

Accessing Diabetes Specialist Podiatry services

- From whom do you take referrals?
- In your experience, when do (general) podiatrists refer clients to your diabetes podiatry service?

Education and/or experience

- What specific skills and knowledge do you require in your specialised work?
- How did you gain this knowledge and these skills?
- What education do you consider to be a pre-requisite for the post of Diabetes Specialist Podiatrist?
- What education is available to you?
- Which educational courses and activities have you found the most useful?
- Would you envisage additional training for supplementary prescribing if altering insulin regimes becomes part of the Diabetes Specialist Podiatrists' remit?
  -What form do you consider such training may take?
- What experience do you consider to be a pre-requisite for the post of Diabetes Specialist Podiatrist?

Status/remuneration

- In your experience what grade and salary do Diabetes Specialist Podiatrists receive?
- What grade and salary do you consider appropriate for Diabetes Specialist Podiatrists and why?

Vision of ideal Diabetes Specialist Podiatrist role + barriers

- Having spoken about the current reality, what is your vision of the ideal Diabetes Specialist Podiatrist role?
- … and the ideal educational preparation for Diabetes Specialist Podiatrists?
- What do you think prevents us from achieving this ideal situation?

Snowball sampling

- Which other people you feel have a contribution to make concerning the themes we have discussed today?

Anything else you would like to say or add?

Appendix 3d. Interview schedule for key actor interview Skills for Health representative

Introductory question:

- Could you give me a brief overview of your role within Skills for Health? *[Background, illuminates professional role and perspectives of respondent]*
- How does Skills for Health view specialisms within podiatry? *[Small niche profession, is there scope for specialisms? Can podiatry sustain specialist posts?]*.

Issues around language and terminology in Diabetes Specialist Podiatry recruitment and job descriptions:

- Which terms would you consider to be the most appropriate in advertising a DSP post? *[Skills for Health perspective on the language and terminology used to describe DSP]*
- What do you consider to be the effect of advertising for multi-specialist skills? (i.e. one post to cover diabetes, rheumatology and biomechanics specialist areas - e.g. advertisement for Plymouth podiatry department October 05 Podiatry Now) *[Does this denigrate the skill level and importance of specialisms? **or** do Skills for Health wish to pursue a more "generic" specialist podiatrist?]*

Drivers for Diabetes Specialist Podiatry:

- In your opinion, what factors are influencing the development of diabetes **specialist** podiatry? [*Are National Service Frameworks a driver? Is specialism a means of enhancing Agenda for Change profile of posts? Is specialisation viewed by Skills for Health as a form of career progression? **Or** as a professionalisation strategy initiated by the profession of podiatry?]*

Role of the Diabetes Specialist Podiatrist

- What do you consider to be the roles and functions of a DSP? [*Specialised activities or core podiatry for diabetic clients? Do Skills for health perspectives differ significantly from the managers' and those of FDUK?]*
- In what ways do you consider the Diabetes Specialist Podiatrists' role to be different from that of other (generalist) podiatrists? *[What level of practice do Skills for Health envisage as "specialist activity"?]*
- What do you think distinguishes Diabetes Specialist Podiatry from general podiatry? [*Do Skills for Health consider that there are differences in the organisation, professional orientation or career path which is different for Diabetes Specialist Podiatrists?]*

Issues around sustainability:

- In your opinion, for how many hours per week should a Diabetes Specialist Podiatrists employed in their **specialist** capacity? [*Skills for Health perspectives on possible mismatch between demand and drive for specialisms. Do services demand specialist roles? Is 5 days a week in specialist diabetes care possible and sustainable? Is full time DSP activity desirable? --managers in pilot did not consider it to be so, pilot FDUK respondents highlighted the stressful nature of DSP work]*

Ways of working

- In your opinion, should Diabetes Specialist Podiatrists work with other professions? [*Skills for health perspective on skill mix, isolated or interdisciplinary approach. Is multidisciplinary working considered a pre-requisite for Diabetes Specialist Podiatry?]*
- In your opinion, within this setting, should the same roles be undertaken by more than one professional group? *[Skills for Health perspective on boundary blurring and possible impact on inter-professional jurisdictional boundary issues]*

Education and/or experience [*craft based models/professionalisation… Is there a sheltered position within the podiatry labour market for Diabetes Specialist Podiatrists?]*

- What **education** do you consider to be a pre-requisite for the post of Diabetes Specialist Podiatrist? [*What **level** of training do Skills for Health consider appropriate for **specialist** posts?]*
- What do you consider to be the impact of the current lack of approved training for DSPs?
- What **experience** do you consider to be a pre-requisite for the post of Diabetes Specialist Podiatrist? *[What kind and duration of experience do Skills for Health consider appropriate for **specialist** posts?]*
- What do you consider to be the impact of the current lack of any formalised career pathway for practitioners to develop specialist skills and status?

Status/remuneration

- What grade and salary would Skills for Health consider appropriate for Diabetes Specialist Podiatrists and **why**?
- What do you consider the impact to be of the current variations in grade and salary of Diabetes Specialist Podiatrists?

Vision of ideal Diabetes Specialist Podiatrist role + barriers

- In an **ideal** world, how would Skills for Health envisage the role of Diabetes Specialist Podiatrists? [*Vision of Diabetes Specialist Podiatry service in an ideal world – would Diabetes Specialist Podiatrists work in their specialism full time?; opinions on the future of the service; long-term objectives]*
- What do you think prevents us from achieving this ideal situation? [*what are the barriers]*

Snowball sampling

- …and finally are there any other people you feel have a contribution to make concerning the themes we have discussed today? *[Who else should I be talking to about these themes? Which other groups or individuals would wish to have their voices heard on these matters? Who else may make valuable contributions to this data?]*

Anything you wish to add?

Appendix 3e. Interview schedule for key actor diabetologists

Introductory questions:
Drivers for Diabetes Specialist Podiatry:

- In your opinion, what factors have influenced the development of podiatric diabetology? [*Did the working time directive/new deal for junior doctors play a role – if so how significant was the influence?]*

Role of the podiatric diabetologist

- What do you consider to be the roles and functions of a podiatric diabetologist? [*Specialised activities or core podiatry for diabetic clients? Do perspectives differ significantly from other respondents? Leadership of diabetes teams]*
- In your experience, are these roles undertaken by any other professional groups? (*inter-professional jurisdictional boundary issues? Leadership of diabetes teams)*
- Are the podiatrists you work with all specialists in diabetes or are there some general podiatrists too? *[Differences between podiatric diabetologists and generalist podiatrists? Are there any facets of podiatric diabetology which can be clearly identified as "**extended scope practice**"? or are the roles extensions and refinements of those taught in the undergraduate syllabus and as such practiced by most podiatrists at some time in their carer?]*
- What do you consider to be the effect of advertising for multi-specialist skills? (i.e. one post to cover diabetes, rheumatology and biomechanics specialist areas - e.g. advertisement for Plymouth podiatry department October 05 Podiatry Now) *[Does this denigrate the skill level and importance of specialties?]*

Ways of working

- Do you and the podiatric diabetologists work with other health professionals? [*skill mix, isolated or interdisciplinary approach; capture organisational differences between services]*
- How is care planning undertaken for clients with diabetic foot disease? [*Joint planning or co-located but separate professions? If joint is this led by one profession or is it a team process?]*

Education and/or experience [*craft based models/professionalisation… Is there a sheltered position within the podiatry labour market for* podiatric diabetologists*?]*

- What **education** do you consider to be a pre-requisite for the post of podiatric diabetologist? [*Impact of lack of approved training for "specialists"]*
- Would you envisage additional training if activities such as altering insulin regimes becomes part of the podiatric diabetologists' remit?
  -What form do you consider such training may take?
- What **experience** do you consider to be a pre-requisite for the post of podiatric diabetologist? *[Impact of lack of formalised career pathway for practitioners to develop specialist skills/status]*
- Are personal qualities and personality important in podiatric diabetology? *[If not mentioned with other questions – direct enquiry re the importance of personal qualities/charisma]*

Titles

- In your experience what title has been assigned to podiatrists specialising in diabetes?

- What do you consider the legal implications of adopting specialist titles to be?
- What is your opinion of the title "Podiatric diabetology"*[If no response to repeated use of title in interview process to gauge reaction to title]*
- Have you any knowledge or experience of people who may object to the title "podiatric diabetology"? *[issues with title? Why? Knowledge of any others who may have issues with this title?]*

Issues around <u>sustainability</u>:

- To your knowledge, how long have podiatric diabetologist posts been established? [*Origins of DSP. Can podiatry sustain specialist posts?]*
- In your experience, for how many hours per week are most podiatric diabetologists employed in their **specialist** capacity? [*Mismatch between demand and drive for specialties? Do services demand specialist roles? Is 5 days a week in specialist diabetes care possible and sustainable?]*

Accessing DSP services

- From whom do podiatric diabetologists take referrals?
- In your experience, when do (general) podiatrists refer clients? *[How does the process work? use of guidelines or referral pathway; education for "community" podiatrists; is a "shared care" model used? Tensions between generalist and specialist podiatrists; why should general podiatrists refer to* podiatric diabetologists*?]*

Status/remuneration

- In your experience what grade and salary do podiatric diabetologists receive? [*does this reflect the documented reality gained from analysis of Diabetes Specialist Podiatry recruitment]*
- What grade and salary do you consider appropriate for podiatric diabetologists and why?

Vision of ideal podiatric diabetologist's role + barriers

- Having spoken about the current reality, what is your vision of the **ideal** podiatric diabetologist's role? [*Vision of Diabetes Specialist Podiatry service in an ideal world – would further delegation of tasks and roles be a feature, would* podiatric diabetologist *work in their specialty full time?; aspirations for the future of the service; long-term objectives]*
- What do you think prevents us from achieving this ideal situation? [*what are the barriers?]*

Competency Framework

- What is your opinion of the proposed competency framework for the prevention , treatment and management of diabetic foot disease (2010)?

Snowball sampling

- …my final question, which other people you feel have a contribution to make concerning the themes we have discussed today? *[Who else should I be talking to about these themes? Which other groups or individuals would wish to have their voices heard on these matters? Who else may make valuable contributions to this data?]*

Anything you wish to add …

Appendix 3f. Interview schedule for key actor "iconic" podiatrist (no longer practicing)

Introductory questions:

- How did you become a podiatric diabetologist?
- What are your particular interests in the field of Diabetes Specialist Podiatry?

Drivers for Diabetes Specialist Podiatry:

- In your opinion, what factors have influenced the development of podiatric diabetology? [*Are National Service Frameworks a driver? Is specialism a means of enhancing Agenda for Change profile of posts? Is specialisation seen as a form of career progression?]*

Role of the podiatric diabetologist

- What do you consider to be the roles and functions of a podiatric diabetologist? [*Specialised activities or core podiatry for diabetic clients? Do perspectives differ significantly from the managers' or the FDUK respondents?]*
- In your experience, are these roles undertaken by any other professional groups? (*inter-professional jurisdictional boundary issues?)*
- In what ways do you consider the podiatric diabetologists' role to be different from that of other (generalist) podiatrists? *[are there any facets of podiatric diabetology which can be clearly identified as "**extended scope practice**"? or are the roles extensions and refinements of those taught in the undergraduate syllabus and as such practiced by most podiatrists at some time in their carer?]*
- What do you think distinguishes podiatric diabetology from general podiatry? [*is there anything about the organisation, professional orientation or career path which is different for* podiatric diabetologists*?]*

Ways of working

- In your experience, do podiatric diabetologists work with other professions? [*skill mix, isolated or interdisciplinary approach; capture organisational differences between services]*
- In your experience, how is care planning undertaken for clients with diabetic foot disease? [*Joint planning or co-located but separate professions? If joint is this led by one profession or is it a team process?]*

Education and/or experience [*craft based models/professionalisation… Is there a sheltered position within the podiatry labour market for* podiatric diabetologists*?]*

- What **education** do you consider to be a pre-requisite for the post of podiatric diabetologist? [*Impact of lack of approved training for "specialists"]*
- Would you envisage additional training if activities such as altering insulin regimes becomes part of the podiatric diabetologists' remit?
  -What form do you consider such training may take?
- What **experience** do you consider to be a pre-requisite for the post of podiatric diabetologist? *[Impact of lack of formalised career pathway for practitioners to develop specialist skills/status]*
- Are personal qualities and personality important in podiatric diabetology? *[If not mentioned with other questions – direct enquiry re the importance of personal qualities/charisma]*

Title

- In your experience what titles have been assigned to podiatrists specialising in diabetes?
- In your opinion what are the legal implications of adopting specialist titles?
- "Podiatric diabetology" *[issues with title? Why? Knowledge of any others who may have issues with this title?]*
- Does including "diabetes" in the title restrict access to services for non-diabetic, high-risk patients?

Issues around <u>sustainability</u>:

- To your knowledge, how long have podiatric diabetologist posts been established? [*Origins of DSP. Can podiatry sustain specialist posts?]*
- In your experience, for how many hours per week are most podiatric diabetologists employed in their **specialist** capacity? [*Mismatch between demand and drive for specialties? Do services demand specialist roles? Is 5 days a week in specialist diabetes care possible and sustainable?]*

Accessing DSP services

- To your knowledge, from whom do podiatric diabetologists take referrals?
- In your experience, when do (general) podiatrists refer clients to a service where podiatric diabetology is established? *[How does the process work? use of guidelines or referral pathway; education for "community" podiatrists; is a "shared care" model used? Tensions between generalist and specialist podiatrists; why should general podiatrists refer to* podiatric diabetologists*?]*

Status/remuneration

- In your experience what grade and salary do podiatric diabetologists receive? [*does this reflect the documented reality gained from analysis of Diabetes Specialist Podiatry recruitment]*
- What grade and salary do you consider appropriate for podiatric diabetologists and why?

Vision of ideal Diabetes Specialist Podiatrist role + barriers

- Having spoken about the current reality, what is your vision of the **ideal** podiatric diabetologist's role? [*Vision of Diabetes Specialist Podiatry service in an ideal world – would* podiatric diabetologist *work in their specialism full time?; aspirations for the future of the service; long-term objectives]*
- What do you think prevents us from achieving this ideal situation? [*what are the barriers]*

Issues around <u>language and terminology</u> in podiatric diabetologist recruitment and job descriptions: [if there is time]

- In your opinion, how accurate is the wording of advertisements for Diabetes Specialist Podiatry posts/job descriptions in describing the role and activities of Diabetes Specialist Podiatrists? [*perspectives on the language and terminology used to describe podiatric diabetology]*
- Which terms do you consider to be the most appropriate?
- What do you consider to be the effect of advertising for multi-specialist skills? (i.e. one post to cover diabetes, rheumatology and biomechanics specialist areas

- e.g. advertisement for Plymouth podiatry department October 05 Podiatry Now) *[Does this denigrate the skill level and importance of specialisms?]*

Skills for Health

- What is your opinion of the diabetic foot sections of the Diabetes Framework produced by Skills for Health? *[Competence frameworks "Undertake advanced examination and risk assessment of the feet of an individual with diabetes" (DF01), "specialist foot treatment for an individual with diabetes" (DF02) and "provide wound care to treat an ulcerated foot of an individual with diabetes" (DF03)*

Snowball sampling

- …my final question, which other people you feel have a contribution to make concerning the themes we have discussed today? *[Who else should I be talking to about these themes? Which other groups or individuals would wish to have their voices heard on these matters? Who else may make valuable contributions to this data?]*

Anything you wish to add …

Appendix 3g. Interview schedule for key actor SCP

Introductory questions:

- Could you give me a brief overview of your role within SCP?
  [Background, illuminates professional role and perspectives of respondent]
- How does SCP view specialties within podiatry?
  [Small niche profession, is there scope for specialties? Can podiatry sustain specialist posts? Divisions within an already small profession? Elitism/fragmentation?].

Drivers for Diabetes Specialist Podiatry:

- In your opinion, what factors have influenced the development of podiatric diabetology? [*How large was the role of health policy. How significant was the professional project of podiatrists?]*
- What was the Societies' role in developing the Minimum Skills Framework? *[FDUK led and approved by SCP??]*

Current status of podiatric diabetology

- Why does podiatric diabetology have the status of a special interest group?
- What transitions would podiatric diabetology need to undergo to become a recognised specialty (as opposed to a special interest group within the Faculty of Podiatric Medicine?)
- What prevents podiatric diabetology from progressing into a recognised specialty?
- Could podiatric diabetology achieve faculty status as podiatric surgery has done?

Role of the podiatric diabetologist

- What do you consider to be the roles and functions of a podiatric diabetologist? [*Specialised activities or core podiatry for diabetic clients? Do perspectives differ significantly from other respondents?]*
- Do you consider the roles of the podiatric diabetologist and the generalist podiatrist to differ? If so how are they different? *[Differences between podiatric diabetologists and generalist podiatrists? Are there any facets of podiatric diabetology which can be clearly identified as "**extended scope practice**"? or are the roles extensions and refinements of those taught in the undergraduate syllabus and as such practiced by most podiatrists at some time in their carer?]*
- What do you consider to be the effect of advertising for multi-specialist skills? (i.e. one post to cover diabetes, rheumatology and biomechanics specialist areas - e.g. advertisement for Plymouth podiatry department October 05 Podiatry Now) *[Does this denigrate the skill level and importance of specialties?]*

Ways of working

- What do you consider to be the implications of multi-disciplinary team working for podiatric diabetologists? [*skill mix, isolated or interdisciplinary approach; capture organisational differences between services]*

Education and/or experience [*craft based models/professionalisation… Is there a sheltered position within the podiatry labour market for* podiatric diabetologists*?]*

- What **education** would you consider to be a pre-requisite for the post of podiatric diabetologist? [*Impact of lack of approved training for "specialists". Explore tensions elicited in other key actor interviews re-education specifically for podiatric diabetology/ fellowship in podiatric medicine. What specialist knowledge and skills are required? -- are these new or advancements of basic skills?]*
- Would you envisage additional training if activities such as altering insulin regimes becomes part of the podiatric diabetologists' remit?
  -What form do you consider such training may take?
- What **experience** would you consider to be a pre-requisite for the post of podiatric diabetologist? *[Impact of lack of formalised career pathway for practitioners to develop specialist skills/status]*
- Are personal qualities and personality important in podiatric diabetology? *[If not mentioned with other questions – direct enquiry re the importance of personal qualities/charisma]*

Titles

- In your experience what titles have been assigned to podiatrists specialising in diabetes?
- What do you consider the legal implications of adopting specialist titles to be?
- "Podiatric diabetology" *[issues with title? Why? Knowledge of any others who may have issues with this title?]*

Issues around sustainability:

- To your knowledge, how long have podiatric diabetologist posts been established? [*Origins of DSP. Can podiatry sustain specialist posts?]*
- Do you think that podiatry can sustain specialist posts? [*if not addressed in introductory responses]*
- To your knowledge, for how many hours per week are most podiatric diabetologists employed in their **specialist** capacity? [*Mismatch between demand and drive for specialties? Do services demand specialist roles? Is 5 days a week in specialist diabetes care possible and sustainable?]*

Accessing podiatric diabetology services

- Access to podiatric diabetology services seems to vary, how do you think it should be organised?
- How do you view the referral process between generalist podiatrists and podiatric diabetologists? *[How does the process work? use of guidelines or referral pathway; education for "community" podiatrists; is a "shared care" model used? Tensions between generalist and specialist podiatrists; why should general podiatrists refer to* podiatric diabetologists*?]*

Status/remuneration

- In your experience what grade and salary do podiatric diabetologists receive? [*does this reflect the documented reality gained from analysis of Diabetes Specialist Podiatry recruitment]*

- What grade and salary do you consider appropriate for podiatric diabetologists and why?

Vision of ideal podiatric diabetologist's role + barriers

- Having spoken about the current reality, what is your vision of the **ideal** podiatric diabetologist's role? [*Vision of podiatric diabetology service in an ideal world – would further delegation of tasks and roles from medics be a feature, would* podiatric diabetologist *work in their specialty full time?; aspirations for the future of the service; long-term objectives]*
- What do you think prevents us from achieving this ideal situation? [*what are the barriers?]*

Skills for Health

- What is your opinion of the diabetic foot sections of the Diabetes Framework produced by Skills for Health? *[Competence frameworks "Undertake advanced examination and risk assessment of the feet of an individual with diabetes" (DF01), "specialist foot treatment for an individual with diabetes" (DF02) and "provide wound care to treat an ulcerated foot of an individual with diabetes" (DF03)*

Snowball sampling

- …my final question, which other people you feel have a contribution to make concerning the themes we have discussed today? *[Who else should I be talking to about these themes? Which other groups or individuals would wish to have their voices heard on these matters? Who else may make valuable contributions to this data?]*

Anything you wish to add …

Appendix 4a.

Research Information Sheet
(Expert Reference Group members)

Study Title: Role definition for diabetes specialist podiatrists

My name is Dawn Bacon; I am a podiatrist undertaking research for an MPhil/PhD with the School of Health Professions and Rehabilitation Sciences at The University of Southampton. I would like to invite you take part in a research study.

Before you decide whether or not to take part it is important that you understand why the research is being carried out and what it would involve. Please take time to read the following information. If something is not clear, or you would like further information please do not hesitate to contact me at the address given above.

Thank you for reading this.

Why have I been approached and what is the purpose of this study?

You have been invited to take part in this study because you belong to a group of people identified as having key information. The research focuses on what specialisation in diabetes podiatry means in terms of role, ways of working, scope of practice, accountability, educational preparation, career progression, status and remuneration. Your perspectives on these key issues are extremely valuable.

This study will form part of a larger piece of work, tracing the emergence, shift in practices over time and current status of diabetes specialist podiatry. The specific aims of this study are:

•To generate a baseline understanding of the role of the Diabetes Specialist Podiatrist, working towards a role definition with the potential to inform educational, regulatory and remunerative frameworks.

•To provide (non anecdotal) information with the potential to inform service design, the practice of Diabetes Specialist Podiatrists and other Specialist Podiatrists.

What does this study involve?

You are being invited to take part in a focus group discussion with other members of the Expert Reference Group. There is currently no clear definition of the role of the

Diabetes Specialist Podiatrist; participants should therefore feel free to talk about variations between individuals and services. In choosing a focus group discussion as a research method it is my aim to include the opinions, views and experiences of all those present; however even if you agree to attend, you do not have to make comments on any topics that you do not wish to discuss.

So as to minimise any inconvenience for participants, the focus group would take place after one of the Expert Reference Group meetings. I anticipate that the interview would take approximately one and a half to two hours, depending upon how much participants wish to say. In addition to myself, a research assistant would be present and proceedings would be audio recorded. Information from the focus group will remain confidential; names will not be disclosed by the researcher or research assistant under any circumstances. Participants in the focus group will be asked to maintain this confidentiality and to sign a consent form confirming their willingness to do so.

Audio recordings taken during the course of this research will be stored in a locked cupboard, accessible only to the researcher and her supervisors. Anonymity will be maintained in transcripts of interviews via the use of numerical identifiers or pseudonyms. Participants will not be identifiable in any papers, presentations or publications derived from the study. When the study finishes, audio recordings and focus group transcripts will be retained in a secure place at the University of Southampton for fifteen years.

Do I have to take part?

No, there is no compulsion to take part. If you decide to participate, in addition to this information sheet you will have opportunity to ask questions and clarify details concerning the research. If you do decide to take part, you will be asked to sign a consent form; however you remain free to withdraw at any time, without giving a reason, and without prejudice.

What are the possible benefits of taking part?

There is no personal benefit of taking part in the study. I hope that the information gained will help to form a baseline understanding of the role, ways of working, scope of practice, accountability, educational preparation, career progression, status and remuneration of the Diabetes Specialist Podiatrist, and assist in the process of defining the role of the Diabetes Specialist Podiatrist. Such information, with the potential to inform educational, regulatory and remunerative frameworks at this important time in health service re-design, may have significant implications for service design, our profession and Diabetes Specialist Podiatry in particular.

Whom do I contact if I have any questions about this research?

If you have any questions or comments about this research please do not hesitate to contact me, Dawn Bacon; by telephone 023 8059 8955 (Mondays and Fridays) or e-mail db1502@soton.ac.uk

If you have any concerns about any aspect of the way you have been approached or treated during the course of this study, the normal University complaints mechanisms are available to you. If you wish to make a complaint please contact Dr Alan Borthwick, Lecturer at the School of Health Professions and Rehabilitation Sciences, who is supervising my research; Telephone: 023 8059 5904 (e-mail ab12@soton.ac.uk)

What will happen to the results of the research?

This research forms part of my PhD and will therefore be available from the British Library. Papers derived from the research will also be published in peer reviewed journals of interest to podiatrists and other health professionals. Conference presentations may also be given.

Who has given permission for this research to be undertaken?

The study has been approved by the internal ethics committee of the University of Southampton. (Ref. No. PO6/11-01). The study is sponsored and underwritten by the University of Southampton.

What do I do next?

I would be very grateful if you would complete the reply slip overleaf indicating whether or not you would like to take part in this research. Please return it to me in the stamped addressed envelope enclosed. If you indicate that you are interested in taking part, I will contact you again to arrange a time and venue for the interview.

Whether or not wish to take part, if you think that there is a particular person or group who should be included in this research, please feel free to mention them to me.

Thank you for taking the time to read this letter.

Reply sheet: Role definition for diabetes specialist podiatrists

I am* / am not* interested in taking part in a focus group interview
(*PLEASE DELETE AS APPROPRIATE)

Name:……

Contact Address……..

……

…….....Post code……

Daytime telephone number……

E-mail address…….

Please return this sheet in the envelope provided to:

Dawn Bacon
Postgraduate office
School of Health Professions and Rehabilitation Sciences
University of Southampton
Highfield
Southampton, SO17 1BJ

Appendix 4b.

Research Information Sheet
(Podiatry Managers)

Study Title: Role definition for diabetes specialist podiatrists

My name is Dawn Bacon; I am a podiatrist undertaking research for an MPhil/PhD with the School of Health Professions and Rehabilitation Sciences at The University of Southampton. I would like to invite you take part in a research study.

Before you decide whether or not to take part it is important that you understand why the research is being carried out and what it would involve. Please take time to read the following information. If something is not clear, or you would like further information please do not hesitate to contact me at the address given above.

Thank you for reading this.

Why have I been approached and what is the purpose of this study?

You have been invited to take part in this study because you are a member of the Society of Chiropodists and Podiatrists Faculty of Management with experience of employing Diabetes Specialist Podiatrists. The research focuses on what specialisation in diabetes podiatry means in terms of role, ways of working, scope of practice, accountability, educational preparation, career progression, status and remuneration. Your perspectives on these key issues are extremely valuable.

This study will form part of a larger piece of work, tracing the emergence, shift in practices over time and current status of diabetes specialist podiatry. The specific aims of this study are:

•To generate a baseline understanding of the role of the Diabetes Specialist Podiatrist, working towards a role definition with the potential to inform educational, regulatory and remunerative frameworks.

•To provide (non anecdotal) information with the potential to inform service design, the practice of Diabetes Specialist Podiatrists and other Specialist Podiatrists.

What does this study involve?

You are being invited to take part in a focus group discussion with other managers. There is currently no clear definition of the role of the Diabetes Specialist Podiatrist;

participants should therefore feel free to talk about variations between individuals and services. In choosing a focus group discussion as a research method it is my aim to include the opinions, views and experiences of all those present; however even if you agree to attend, you do not have to make comments on any topics that you do not wish discuss.

So as to minimise any inconvenience for participants, the focus group would take place after one of the managers' meetings held at the Society of Chiropodists and Podiatrists Offices. I anticipate that the interview would take between one and a half and two hours, depending upon how much participants wish to say. In addition to myself, a research assistant would be present and proceedings would be audio recorded. Information from the focus group will remain confidential; names will not be disclosed by the researcher or research assistant under any circumstances. Participants of the focus group will be asked to maintain this confidentiality and to sign a consent form confirming their willingness to do so.

Audio recordings taken during the course of this research will be stored in a locked cupboard, accessible only to the researcher and her supervisors. Anonymity will be maintained in transcripts of interviews via the use of numerical identifiers or pseudonyms. Participants will not be identifiable in any papers, presentations or publications derived from the study. When the study finishes, audio recordings and focus group transcripts will be retained in a secure place at the University of Southampton for fifteen years.

Do I have to take part?

No, there is no compulsion to take part. If you decide to participate, in addition to this information sheet you will have opportunity to ask questions and clarify details concerning the research. If you do decide to take part, you will be asked to sign a consent form; however you remain free to withdraw at any time, without giving a reason, and without prejudice.

What are the possible benefits of taking part?

There is no personal benefit of taking part in the study. I hope that the information gained will help to form a baseline understanding of the role, ways of working, scope of practice, accountability, educational preparation, career progression, status and remuneration of the Diabetes Specialist Podiatrist, and assist in the process of defining the role of the Diabetes Specialist Podiatrist. Such information, with the potential to inform educational, regulatory and remunerative frameworks at this important time in health service re-design, may have significant implications for service design, our profession and Diabetes Specialist Podiatry in particular.

Whom do I contact if I have any questions about this research?

If you have any questions or comments about this research please do not hesitate to contact me, Dawn Bacon; by telephone 023 8059 8955 (Mondays and Fridays) or e-mail db1502@soton.ac.uk

If you have any concerns about any aspect of the way you have been approached or treated during the course of this study, the normal University complaints mechanisms are available to you. If you wish to make a complaint please contact Dr Alan Borthwick, Lecturer at the School of Health Professions and Rehabilitation Sciences, who is supervising my research; Telephone: 023 8059 5904 (e-mail ab12@soton.ac.uk)

What will happen to the results of the research?

This research forms part of my PhD and will therefore be available from the British Library. Papers derived from the research will also be published in peer reviewed journals of interest to podiatrists and other health professionals. Conference presentations may also be given.

Who has given permission for this research to be undertaken?

The study has been approved by the internal ethics committee of the University of Southampton. (Ref. No. P06/11-01). The study is sponsored and underwritten by the University of Southampton.

What do I do next?

I would be very grateful if you would complete the reply slip overleaf indicating whether or not you would like to take part in this research. Please return it to me in the stamped addressed envelope enclosed. If you say that you are interested in taking part I will contact you again to let you know after which Faculty of Management meeting the focus group will take place.

Whether or not wish to take part, if you think that there is a particular person or group who should be included in this research, please feel free to mention them to me.

Thank you for taking the time to read this letter.

Reply sheet: Role definition for diabetes specialist podiatrists

I am* / am not* interested in taking part in the focus group
(*PLEASE DELETE AS APPROPRIATE)

Name:……

Contact Address……..

……

…….....Post code……

Daytime telephone number……

E-mail address…….

Please return this sheet in the envelope provided to:

Dawn Bacon
Postgraduate office
School of Health Professions and Rehabilitation Sciences
University of Southampton
Highfield
Southampton, SO17 1BJ

Appendix 4c

Research Information Sheet
(Key Foot in Diabetes UK members)

Study Title: Role definition for diabetes specialist podiatrists

My name is Dawn Bacon; I am a podiatrist undertaking research for an MPhil/PhD with the School of Health Professions and Rehabilitation Sciences at The University of Southampton. I would like to invite you take part in a research study.

Before you decide whether or not to take part it is important that you understand why the research is being carried out and what it would involve. Please take time to read the following information. If something is not clear, or you would like further information please do not hesitate to contact me at the address given above.

Thank you for reading this.

Why have I been approached and what is the purpose of this study?

You have been invited to take part in this study because you are a key member of the Foot in Diabetes United Kingdom (FDUK) group. The research focuses on what specialisation in diabetes podiatry means in terms of role, ways of working, scope of practice, accountability, educational preparation, career progression, status and remuneration. Your perspectives on these key issues are extremely valuable.

This study will form part of a larger piece of work, tracing the emergence, shift in practices over time and current status of diabetes specialist podiatry. The specific aims of this study are:

•To generate a baseline understanding of the role of the Diabetes Specialist Podiatrist, working towards a role definition with the potential to inform educational, regulatory and remunerative frameworks.

•To provide (non anecdotal) information with the potential to inform service design, the practice of Diabetes Specialist Podiatrists and other Specialist Podiatrists.

What does this study involve?

You are being invited to take part in a focus group discussion with other members of FDUK. There is currently no clear definition of the role of the Diabetes Specialist

Podiatrist; participants should therefore feel free to talk about variations between individuals and services. In choosing a focus group discussion as a research method it is my aim to include the opinions, views and experiences of all those present; however even if you agree to attend, you do not have to make comments on any topics that you do not wish to discuss.

So as to minimise any inconvenience for participants, the focus group would take place after one of the FDUK meetings. I anticipate that the interview would take approximately one and a half to two hours, depending upon how much participants wish to say. In addition to myself, a research assistant would be present and proceedings would be audio recorded. Information from the focus group will remain confidential; names will not be disclosed by the researcher or research assistant under any circumstances. Participants in the focus group will be asked to maintain this confidentiality and to sign a consent form confirming their willingness to do so.

Audio recordings taken during the course of this research will be stored in a locked cupboard, accessible only to the researcher and her supervisors. Anonymity will be maintained in transcripts of interviews via the use of numerical identifiers or pseudonyms. Participants will not be identifiable in any papers, presentations or publications derived from the study. When the study finishes, audio recordings and focus group transcripts will be retained in a secure place at the University of Southampton for fifteen years.

Do I have to take part?

No, there is no compulsion to take part. If you decide to participate, in addition to this information sheet you will have opportunity to ask questions and clarify details concerning the research. If you do decide to take part, you will be asked to sign a consent form; however you remain free to withdraw at any time, without giving a reason, and without prejudice.

What are the possible benefits of taking part?

There is no personal benefit of taking part in the study. I hope that the information gained will help to form a baseline understanding of the role, ways of working, scope of practice, accountability, educational preparation, career progression, status and remuneration of the Diabetes Specialist Podiatrist, and assist in the process of defining the role of the Diabetes Specialist Podiatrist. Such information, with the potential to inform educational, regulatory and remunerative frameworks at this important time in health service re-design, may have significant implications for service design, our profession and Diabetes Specialist Podiatry in particular.

Whom do I contact if I have any questions about this research?

If you have any questions or comments about this research please do not hesitate to contact me, Dawn Bacon; by telephone 023 8059 8955 (Mondays and Fridays) or e-mail db1502@soton.ac.uk

If you have any concerns about any aspect of the way you have been approached or treated during the course of this study, the normal University complaints mechanisms are available to you. If you wish to make a complaint please contact Dr Alan Borthwick, Lecturer at the School of Health Professions and Rehabilitation Sciences, who is supervising my research; Telephone: 023 8059 5904 (e-mail ab12@soton.ac.uk)

What will happen to the results of the research?

This research forms part of my PhD and will therefore be available from the British Library. Papers derived from the research will also be published in peer reviewed journals of interest to podiatrists and other health professionals. Conference presentations may also be given.

Who has given permission for this research to be undertaken?

The study has been approved by the internal ethics committee of the University of Southampton. (Ref. No. PO6/11-01). The study is sponsored and underwritten by the University of Southampton.

What do I do next?

I would be very grateful if you would complete the reply slip overleaf indicating whether or not you would like to take part in this research. Please return it to me in the stamped addressed envelope enclosed. If you indicate that you are interested in taking part, I will contact you again to arrange a time and venue for the interview.

Whether or not wish to take part, if you think that there is a particular person or group who should be included in this research, please feel free to mention them to me.

Thank you for taking the time to read this letter.

Reply sheet: Role definition for diabetes specialist podiatrists

I am* / am not* interested in taking part in a focus group interview
(*PLEASE DELETE AS APPROPRIATE)

Name:……

Contact Address……..

……

…….....Post code……

Daytime telephone number……

E-mail address…….

Please return this sheet in the envelope provided to:

Dawn Bacon
Postgraduate office
School of Health Professions and Rehabilitation Sciences
University of Southampton
Highfield
Southampton, SO17 1BJ

Appendix 4d.

Research Information Sheet
(Key actors)

Study Title: Podiatric diabetology: an exploration of the meaning of specialisation in podiatric practice.

My name is Dawn Bacon; I am a podiatrist undertaking research for a PhD with the School of Health Sciences at The University of Southampton. I would like to invite you take part in a research study.

Before you decide whether or not to take part it is important that you understand why the research is being carried out and what it would involve. Please take time to read the following information. If something is not clear, or you would like further information please do not hesitate to contact me at the address given above.

Thank you for reading this.

Why have I been approached and what is the purpose of this study?

You have been invited to take part in this study because you have been identified as a key actor in podiatric diabetology. The research focuses on what specialisation in podiatric diabetology means; exploring facets such as evolution, role, ways of working, scope of practice, sustainability, accountability, educational preparation, career progression, status and remuneration. Your perspectives on these key issues are extremely valuable.

This study will form part of a larger piece of work, tracing the emergence, shift in practices over time and current status of podiatric diabetology. The specific aims of this study are:

To generate an understanding of podiatric diabetology, with the potential to inform educational, regulatory and remunerative frameworks.

To provide (non anecdotal) information with the potential to inform service design and the practice of podiatric diabetologists.

To explore the impact of specialist titles

What does this study involve?

You are being invited to take part in an interview which will focus on what podiatric specialisation in diabetes means in terms of role, ways of working, scope of practice, accountability, educational preparation, career progression, status and remuneration. In choosing a key actor interview as a research method it is my aim build upon the baseline understanding of the role of the podiatric diabetologist gained from focus group interviews and to explore themes and issues which arose in these interviews.

So as to minimise any inconvenience for participants, the interview would take place at a time and venue to suit you. I anticipate that the interview would take approximately an hour, depending upon how much you wish to say. The interview would be audio recorded. Information from the interview will remain confidential; your name will not be disclosed by the researcher under any circumstances.

Audio recordings taken during the course of this research will be stored in a locked cupboard, accessible only to the researcher and her supervisors. Anonymity will be maintained in transcripts of interviews via the use of numerical identifiers or pseudonyms. Participants will not be identifiable in any papers, presentations or publications derived from the study. When the study finishes, audio recordings and focus group transcripts will be retained in a secure place at the University of Southampton for fifteen years.

Do I have to take part?

No, there is no compulsion to take part. If you decide to participate, in addition to this information sheet you will have opportunity to ask questions and clarify details concerning the research. If you do decide to take part, you will be asked to sign a consent form; however you remain free to withdraw at any time, without giving a reason, and without prejudice.

What are the possible benefits of taking part?

There is no personal benefit of taking part in the study. I hope that the information gained will help me to build upon a baseline understanding of the role, ways of working, scope of practice, accountability, educational preparation, career progression, status and remuneration of the podiatric diabetologist, and assist in the process of defining the role of the podiatric diabetologist. Such information, with the potential to inform educational, regulatory and remunerative frameworks at this important time in health service re-design, may have significant implications for services, the profession of podiatry and podiatric diabetology in particular.

Whom do I contact if I have any questions about this research?

If you have any questions or comments about this research please do not hesitate to contact me, Dawn Bacon; by telephone 023 8059 8955 (Mondays and Fridays) or e-mail db1502@soton.ac.uk

If you have any concerns about any aspect of the way you have been approached or treated during the course of this study, the normal University complaints mechanisms are available to you. If you wish to make a complaint please contact Dr Alan Borthwick, Lecturer at the School of Health Sciences, who is supervising my research; Telephone: 023 8059 5904 (e-mail ab12@soton.ac.uk)

What will happen to the results of the research?

This research forms part of my PhD and will therefore be available from the British Library. Papers derived from the research will also be published in peer reviewed journals of interest to podiatrists and other health professionals. Conference presentations may also be given.

Who has given permission for this research to be undertaken?

The study has been approved by the internal ethics committee of the University of Southampton. (Ref. No. P06/11-01). The study is sponsored and underwritten by the University of Southampton.

What do I do next?

I would be very grateful if you would complete the reply slip overleaf indicating whether or not you would like to take part in this research. Please return it to me in the stamped addressed envelope enclosed. If you indicate that you are interested in taking part, I will contact you again to arrange a time and venue for the interview.

Whether or not wish to take part, if you think that there is a particular person or group who should be included in this research, please feel free to mention them to me.

Thank you for taking the time to read this letter.

Reply sheet: Podiatric diabetology: an exploration of the meaning of specialisation in podiatric practice.

I am* / am not* interested in taking part in a key actor interview
(*PLEASE DELETE AS APPROPRIATE)

Name:……

Contact Address……..

……

…….....Post code……

Daytime telephone number……

E-mail address…….

Please return this sheet in the envelope provided to:

Dawn Bacon
Postgraduate office
Building 45
School of Health Sciences
University of Southampton
Highfield
Southampton, SO17 1BJ

Appendix 5a.

CONSENT FORM

(Focus Group)

Ethics Submission Number P06/11-01 version 3 17.11.06

Title of Project: Role definition for diabetes specialist podiatrists

Name of Researcher: Dawn Bacon

Please initial box

1. I confirm that I have read and understand the information sheet dated 16th October 2006 for the above study and have had the opportunity to ask questions. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time ☐

4. I agree to take part in the above study. ☐

5. I agree to the audio- taping of the interview ☐

6. I agree to keep participants' identities and content of the discussion confidential. ☐

_____	_____	_____
Name of Respondent	Date	Signature
_____	_____	_____
Name of Person taking consent (if different from researcher)	Date	Signature
_____	_____	_____
Researcher	Date	Signature

One copy for Respondent, one for researcher.

Appendix 5b.

CONSENT FORM

(Key actor)

Ethics Submission Number P06/11-01 version 4 26.06.09

Title of Project: Podiatric diabetology: an exploration of the meaning of specialisation in podiatric practice.

Name of Researcher: Dawn Bacon

Please initial box

1. I confirm that I have read and understand the information sheet dated 26th June 2009 for the above study and have had the opportunity to ask questions. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time ☐

4. I agree to take part in the above study. ☐

5. I agree to the audio-taping of the interview. ☐

_____	_____	_____
Name of Respondent	Date	Signature
_____	_____	_____
Name of Person taking consent (if different from researcher)	Date	Signature
_____	_____	_____
Researcher	Date	Signature

One copy for Respondent, one for researcher.

Appendix 6. Example of coding

In what way do you consider DSP's role to differ from				
>that of generalist pods?				
The role is going to be different				
DSPs spend majority of their time, a lot of clinical hours>				
>gaining experience, **hopefully a lot of *really* enhanced** >	Learning enhanced clinical reasoning	Education input - iterative?		
>**clinical reasoning skills**. Making the right call admissions>				
>or tests.				
Hospital based specialist has advantage, having additional skills required				
Requesting blood tests, interpretation, looking for inflammatory markers				
MRIs, x-rays, ultrasound scans, duplex scans – they have a role in that>				
>though their ability varies depending on how >				
>they've used those particular **learning opportunities**>	Education input. Community of practice	Education input	232-237	Being part of the hospital diabetes team practice community affords podiatrists the opportunities to learn and acquire additional skills. Relationship between
>**which occur more in hospital setting than community/primary care**		Practice community		the concepts of eduactional input and practice community
General diabetes advice>				
>*may* be provided in community, however>				
>hospital setting+ diabetes data+ [test] results+ patient notes>				
>privileged to much more information, so>				
> decision making, referral and planning is more informed>				
Holistic management of specialist pod in hospital setting probably more refined>				
>**than in community setting** – not because of differing abilities>				
>because of the environment specialist pod is in – hospital setting.				
Chin-wag with physician and a surgeon in a shared clinic	Informal education	Education input	246	Further overlap with Education input, Practice community and Medical patronage
You glean information about the decisions you are making		Medical patronage		
In a renal unit interpreting BP readings>				
>considering degree of ischaemia, fluctuations, chatting about anti-hypertensives>				
>**there and then you're [developing] more refined/sophisticated reasoning**>	Informal education	Education input		
>**making more refined decisions over diff dx, management skills, management planning**.	Role of DSP	Continuum of specialisation		
These areas make up the >				
>**different skill set [of DSP in hospital setting]**. Possibly community pods >				
>having hospital placements to improve their skills>	Access to practice community	Education input		
>really good idea – part of process enabling others>				
>to upgrade skills and become specialist.				
Specialist skills – what makes them different = key set of competences	Role of DSP	Continuum of specialisation		
On their own they're just competencies, though important ones				
Depending upon enabling physicians in hospital and primary care settings>	Enabling physicians	Medical patronage	259-266	Medical patronage and membership of a community of practice enables DSPs to develop extended scope skills and to assemble a unique skill-set which would be
>changing px antibiotics, depending who's doing the supplementary prescribing				hard to achieve in any other setting.
Setting up Hickman lines, plaster-casting techniques>				
>motivational interviewing – a skill set which is more difficult to acquire>				
>and practice on a regular basis, to develop the expertise				
If majority of time is spent in hospital setting, treating diabetic patients>				
>you have the opportunity [to acquire that skill-set]				
>in community setting you may not have these opportunities				

Appendix 7. Example of Interview Transcript.

D: So in what way do you consider our Diabetes Specialist Podiatrist's role to be *different* from other podiatrists' – I'm thinking more of the generalist podiatrist now?

JH: OK, I think well one, one the role's going to be different in so far as they're going to, if they're going to be spending the majority of their time and a lot of clinical hours they will go, they will *gain* by experience, hopefully, a lot of em [sic] *really* enhanced clinical reasoning skills and making the right call, whether its to admit that patient to hospital or whether its to request for hospital tests for x-rays etcetera. The specialist who's hospital *based* is at an advantage of having additional skills which may be required, for example erm [sic] requesting blood tests, interpretation of looking for inflammatory markers, MRIs, x-rays, ultrasound scanning, duplex scanning, they will have a role in that, with varying degrees of *ability* depending on how they've, em [sic] depending on what they've, *how* they've capitalised and taken advantage of all those particular learning opportunities which probably occur in a hospital setting more often than in a community setting, and in primary care. I think the other aspects would be probably the more general diabetes advice that, that *may* well be provided in the community, but when you're based in a setting in that hospital setting, and you have all the diabetes data and the results and the patient notes in front of you, then you're privileged to, to much more information, there's can make a much more informed decision making, in terms of referral, what to do and, and probably the holistic management of a specialist podiatrist in that setting, will probably be more refined than in a community setting, erm [sic] if not because of any particular difference in abilities, just by sheer dint of the environment thy find themselves in, in a hospital setting. Erm

[sic] you may well have a, a chin-wag with the physician and a surgeon in a multi, in a shared clinic, you will *glean* information about what's the decision you're making. If you're in a renal unit and they're interpreting blood pressure readings and wondering what degree of ischaemia and, and any fluctuations and chatting about anti-hypertensives that people, there, there and then you're making more refined and more sophisticated reasoning and decisions over differential diagnosis, and indeed management skills in terms of management planning as well. So these are some of the areas where I think there, there could be a different skill *set*, erm [sic] now whether a community podiatrist coming through the hospital setting in placement to help to, to improve *their* skills I think is a really good idea, and that maybe is part of that whole process of, of enabling others to, to, to *up*grade all their skills to become specialist. But the specialist skills I think could be, what makes them different, my, it's a key set of some competencies, that on their own are just competencies but never-the-less are quite important ones erm [sic] [sighs] depending on an enabling physicians in the hospital setting, more so in a primary care setting about changing prescription antibiotics, about part, depending who's doing getting into the supplementary prescribing, setting up Hickman lines, the plaster casting techniques, erm [sic] motivational interviewing, so, so there are going to be a, probably a skill set that's more difficult to acquire and practice on a regular basis to develop the, the *expertise* and if you're spending most of your time in a hospital treating diabetic patients you're probably, you have opportunity to do that. If you're in a community setting then the chances are you may not have the same opportunities.