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REPORT OF A STUDY OF

Welsh Language Awareness

in Healthcare Provision in Wales

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Report of a Study of Welsh Language Awareness in Healthcare Provision in Wales

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Glossary of Terms

Term	-	Description
AHP	-	Allied Health Professionals
ANOVA	-	Analysis of variance – a common statistical technique used in the social sciences
Cluster Analysis	-	Cluster analysis is an exploratory data analysis tool for solving classification problems. Its object is to sort cases (people, things, events, etc) into groups, or clusters, so that the degree of association is strong between members of the same cluster and weak between members of different clusters.
EQS Analysis	-	Equation Structural (Modelling) Analysis - EQS provides a method for conducting the full range of structural equation models including multiple regression, multivariate regression, confirmatory factor analysis, structured means analysis, path analysis, and multiple population comparisons.
Expert Panel	-	A review of staff experienced in survey work but who are not directly involved with the current study
Factor Analysis	-	Factor analysis is applied to data in order to (1) reduce the number of variables and (2) detect structure in the relationships between variables, that is to classify variables.
Framework Analysis	-	Analysis of a thematic framework comprising theme groups which are expanded into more focussed sub-themes
GMC	-	General Medical Council
HEFCW	-	Higher Education Funding Council for Wales
HEI	-	Higher Education Institution
HOWIS	-	Health of Wales Information Service
Likert Scale	-	A scale devised by Likert in 1932 for the measurement of the directionality and intensity of individuals' attitudes to a topic
LHB	-	Local Health Board
Meaning unit	-	A concept which is assigned a meaning relevant to the research
Mencap	-	A UK charity that works with people with a learning disability to enable them to lead full lives as respected members of the community.
MIND Cymru	-	National Society for Mental Health in Wales
NHS Trust	-	National Health Service Trust
NMC	-	Nursing & Midwifery Council
NOP	-	National Opinion Poll

NSPCC Cymru	-	National Society for the Prevention of Cruelty to Children in Wales
SPSS	-	Statistical Package for the Social Sciences
UWB	-	University of Wales, Bangor
Varimax	-	Varimax seems to be the most popular orthogonal rotation. It looks to reduce the variances of the projection of the data onto the rotated basis (for the Empirical Orthogonal Function of the Factor Analysis), thereby increasing interpretability.
WAG	-	Welsh Assembly Government
WLB	-	Welsh Language Board
WLPAN	-	The word 'Wlpan' comes from the Hebrew meaning 'studio'. It has been adopted as the name for the most successful intensive Welsh course for over twenty years. Classes meet between two and five times a week so as to enable students to master the basic Welsh as quickly as possible.

Executive Summary

This document outlines the findings of a national study commissioned by the Welsh Assembly Government on Welsh language awareness in healthcare provision in Wales. The purpose of the study is to obtain a sector-wide overview of levels of Welsh language awareness in the public, private and voluntary sectors and the various areas of professional healthcare practice, particularly where language choice is a fundamental consideration. The study was commissioned as part of the programme of the All Wales Task Group for Welsh Language Services in Healthcare, set up by the Minister for Health and Social Services to facilitate improvements in Welsh language services in the NHS and partnership organisations in Wales. Part of this programme by the All Wales Task Group was to commission a sector-wide survey of the language awareness of healthcare professionals across Wales. This study therefore aims to identify the factors that enhance language choice within service delivery, exploring how the attitudes and language proficiency of practitioners facilitate Welsh language provision in healthcare.

The study consists of two phases, as follows:
- Phase 1: Questionnaire Survey
- Phase 2: Qualitative Interviews

Phase 1: Questionnaire Survey

Through the use of a bilingual self-administered postal questionnaire, phase 1 of the study focussed on obtaining information from a range of randomly selected healthcare professionals within acute and community settings across Wales. Adopting a cluster and stratified random sampling approach, 3358 questionnaires were distributed amongst a range of front-line healthcare professionals across Wales and a total of 1968 (59%) were returned for analysis in SPSS Windows Release 11.5.0 (2002). The results are presented in relation to three main professional groups and three distinct language regions across Wales.

The data were explored using descriptive and inferential statistics. Furthermore, the inter-relationships of the variables were examined through Structural Equation Modelling. This reveals the nature and extent of the main influences on practitioners' attitudes to the Welsh language and its use in healthcare.

Phase 2: Qualitative Interviews

Further to the questionnaire survey, phase 2 of the study involved a series of qualitative interviews with a purposive sample of 83 survey respondents across Wales. The aim was to supplement the findings of the first phase of the study by gaining in-depth information from a host of healthcare professionals with a range of attitudes towards the Welsh language in healthcare.

The data were explored using Framework Analysis. This provides further insight and understanding of the Welsh language dimensions of healthcare encounters and the relationships between the key elements therein.

Conclusions

The study concludes that:

1. Language choice in healthcare is influenced by a range of individual and organisational factors within the healthcare setting.

2. Individual factors that affect language choice for patients and clients include the Welsh language proficiency and confidence of healthcare professionals, as well as their attitudes towards the Welsh language.

3. Organisational factors that affect language choice for patients and clients include the availability of procedures to identify and facilitate the language preference of service users.

4. Regardless of Welsh language proficiency, large proportions of practitioners demonstrate positive attitudes towards the Welsh language in healthcare and facilitate language choice for patients and clients.

5. An equally large proportion of healthcare professionals demonstrate neutral attitudes towards the Welsh language in healthcare. This, coupled with a lack of fluent Welsh speakers highlights a need for Welsh language awareness training in healthcare that enhances both the Welsh language sensitivity and proficiency of practitioners.

Recommendations

Recommendation 1
Healthcare organisations to encourage healthcare professionals to enhance their Welsh language awareness in practice.

(i) Healthcare organisations to consider developing their provision of Welsh language awareness programmes for all healthcare professionals.

(ii) Healthcare organisations to consider tailoring their provision of Welsh language courses to maximise their effectiveness for healthcare professionals, thereby enhancing Welsh language choice for patients.

Recommendation 2
Higher education institutions be encouraged to enhance Welsh language awareness amongst healthcare students.

(i) Higher education institutions to consider developing their provision of Welsh language awareness programmes within all pre-qualifying healthcare professional courses.

(ii) Higher education institutions to consider developing aspects of their courses in bilingual format to support healthcare students to use their Welsh in practice.

Recommendation 3
Healthcare organisations be encouraged to consider their future needs for appropriately qualified healthcare professionals with the required levels of Welsh language proficiency.

Recommendation 4
Healthcare organisations be encouraged to develop appropriate measures to facilitate healthcare professionals in demonstrating their Welsh language awareness to patients and clients whose preferred language is Welsh.

(i) Healthcare organisations to consider appropriate measures to enable Welsh speaking healthcare professionals to identify the language preference of patients and clients.

(ii) Healthcare professionals be encouraged to show their Welsh language proficiency to patients and clients.

(iii) Healthcare organisations be encouraged to capitalise on the Welsh language proficiency of their healthcare professionals.

Introduction

Aim of the Study

The aim of the study is to examine levels of Welsh language awareness in the provision of healthcare, across the public, private and voluntary sectors in Wales.

The main objectives of the study are to elicit the level of Welsh language awareness amongst a range of healthcare professionals and their sensitivity towards providing language choice for service users, particularly vulnerable client groups.

Literature Review

The importance of effective communication in healthcare has long been established and lies at the heart of healthcare delivery (Audit Commission 1993). Accurate diagnosis as well as appropriate treatment and care are heavily dependent on effective communication between the patient and practitioner and it is the key to enabling patients to make informed decisions about their care (GMC 1998). Moreover, appropriate and sensitive language use is an integral part of this communication process and an essential consideration for embracing cultural diversity and fostering therapeutic relationships (NMC 2002). In its review of research-based studies examining communication in healthcare, the Audit Commission (1993) confirmed the importance of effective communication in improving patient outcomes, increasing efficiency and enhancing patient satisfaction. However, the importance of language appropriate practice in healthcare is not as well defined and the literature has traditionally given little attention to the role of language in clinical practice. It is not surprising, therefore, that there is a paucity of research directly related to the use of the Welsh language in healthcare in Wales.

According to the 2001 Census, over half a million people in Wales speak Welsh, representing nearly 21% of the total population (National Assembly for Wales 2003). Although most Welsh speakers are bilingual, in situations of stress and vulnerability many feel more comfortable and confident communicating in Welsh with healthcare professionals and more able to express their thoughts and feelings through the medium of Welsh (Roberts 1991). Moreover, even those who are fluent in English may temporarily lose their command of English and revert completely to Welsh when they are tired, ill, or under stress (Thomas 1998).

In light of the Welsh Language Act (1993), there are legal and statutory requirements for healthcare organisations throughout Wales, to provide services through the medium of Welsh as well as English, giving equality to both languages. This is reflected in the Welsh language schemes of NHS Trusts and Local Health Boards across Wales, where there is commitment towards extending bilingual provision and ensuring language choice for patients and clients.

Such assurance is further reflected in the Welsh Language Scheme of the Welsh Assembly Government and in its national action plan for a bilingual Wales (Welsh Assembly Government 2002). Within this strategy the Assembly outlines its commitment to address inequalities in healthcare by embracing diversity and responding sensitively to the needs of Welsh speakers. The need to extend bilingual provision in healthcare services in Wales is therefore apparent; not only on statutory grounds, but also in view of the fact that offering language choice to patients facilitates the communication process and enhances care delivery.

Despite such commitment, the Report of the Welsh Consumer Council on Welsh in the Health Service (Misell 2000, pg 75) claims that “little or no emphasis is placed on

the language needs of patients" and there is a lack of planning for bilingual services in Wales. It confirms that there are fundamental deficiencies in the services provided for Welsh speakers, placing them at a real disadvantage in healthcare. This is particularly true for those patients receiving speech and language therapy and for a number of vulnerable groups, namely, people with mental health problems, people with learning disabilities, older people and young children. The main findings of the report highlight:

- a lack of awareness amongst healthcare professionals and patients of Welsh Language Schemes;
- inadequate systems to identify, record and respond to the patient's language choice in healthcare;
- a lack of recognition of bilingualism as a valuable professional tool;
- a lack of strategic planning for Welsh language provision in healthcare.

Thus, although an individualised approach is central to the philosophy and delivery of healthcare services (Welsh Assembly Government, 2001), the report suggests that language barriers in healthcare may jeopardise the health chances of Welsh speakers as minority language service users in Wales. Arguably, the evidence to support such a claim is largely anecdotal and limited to a modest number of small scale qualitative studies cited in the Welsh Consumer Council report (Misell 2000). However, further research examining the healthcare experiences of non-indigenous minority language speakers across the UK, USA and Australia confirms the detrimental effects of language barriers in healthcare (Murphy and Macleod Clark 1993; Katbamna 2000; Vydelingum 2000; Gerrish 2001; Cioffi 2003; Timmins 2002). Whilst the vast majority of this research also constitutes small-scale qualitative studies, where caution should be taken in the interpretation of findings, the research provides valuable snapshots of the experiences of minority language speakers in healthcare, together with the particular challenges they may encounter in clinical practice. Recurrent themes emerging from this literature are the significance of language and language choice to minority speakers as a means of effective communication in healthcare and the detrimental effects of language barriers in delaying and compromising the quality of care and treatment.

Although indigenous to Wales, Welsh is a minority language, in terms of prestige, power and population (Thomas, 1994) and, as such, its speakers share many of the challenges experienced by other minority language speakers across the world. However, unlike the majority of the patients identified in the above studies, many Welsh speakers are also fluent in English and the language barriers which they encounter in healthcare often appear invisible to service providers (Misell 2000).

In view of the linguistic make up of the population in general, it is inevitable that most healthcare professionals in Wales are non-Welsh speakers (Misell 2000). Nevertheless, between the 1991 and 2001 Census, there was a rise in Welsh language speakers from 508,098 to 582,368 (National Assembly for Wales 2003). This increase was almost entirely among the younger age groups, which provides the potential to increase the proportion of Welsh speaking practitioners and widen the provision of Welsh language services to patients and clients. Nonetheless, Cioffi (2003); Josipovic (2000); Ledger (2002) and Roberts and Paden (2000) suggest there is a need for bilingual practitioners to be appropriately trained for their role in managing clients from their own minority language groups.

Focussing solely on developing the language skills of healthcare professionals is clearly not enough to ensure effective communication, since language appropriate

practice encompasses both language ability and communicative sensitivity (Roberts 1997). Indeed, the literature demonstrates that, despite appropriate provision for interpretation or the availability of bilingual healthcare professionals, communication barriers in healthcare often persist as a result of a lack of culture and language awareness amongst practitioners (Gerrish et al., 1996, Cioffi 2003, Timmins 2002). This often leads to stereotyping and discriminatory practice, reflecting negative attitudes amongst practitioners towards languages other than their own (Bowler 1993, Katbamna 2000, O'Hagan 2001).

Donmall (1985) defines language awareness as:

> *"a person's sensitivity to and conscious awareness of the nature of language and its role in human life". (pg 7)*

It incorporates several dimensions, including language proficiency, confidence, attitude, motivation and actual usage (James and Garret 1991). Arguably, in the healthcare context, Welsh language awareness requires a level of knowledge, attitudes and skills and an appreciation of the crucial role of language in expressing Welsh cultural identity (Davies 1999). Such awareness need not be confined to the personal level of practice, since many organisational elements also influence language sensitivity in healthcare and the literature echoes a plea for developing appropriate strategies for change at policy levels (Gerrish et al. 1996).

In summary, although an individualised and holistic approach is central to the philosophy and delivery of healthcare services, the evidence, albeit limited, suggests a significant shortfall in the Welsh language awareness of practitioners and a lack of commitment within healthcare organisations to plan for Welsh language provision (Misell 2000). Such deficiencies have been shown to compromise the quality of care and treatment of Welsh speakers, particularly amongst vulnerable client groups (Misell 2000). The literature calls for an integrated approach to developing language appropriate healthcare practice, where equal emphasis is placed on nurturing Welsh language sensitivity as well as ensuring appropriate Welsh language skills for practice (Davies 1999).

In order to respond to these demands and determine the most appropriate approach towards integrating bilingual healthcare provision in Wales, there is a need to undertake research related to the awareness and use of the Welsh language in healthcare. This study therefore aims to examine levels of Welsh language awareness and use in the provision of healthcare, across the public, private and voluntary sectors in Wales. This is achieved by identifying the factors that enhance language choice within service delivery and exploring how the attitudes, sensitivity and skills of practitioners may facilitate bilingual provision. To this end, the research design spans a range of professional groups across healthcare sectors throughout Wales as well as focussing on the needs of vulnerable clients. Thus the study aims to provide a clear account of the current situation in order to build policy and practice initiatives which embrace diversity and respond sensitively to the needs of Welsh speakers in healthcare in a bilingual Wales.

Phase 1: Questionnaire Survey

Methodology

Research Design
Phase 1 of the study involved the distribution of a self-completed questionnaire designed to obtain information from the target population of front-line practitioners in the public, private and voluntary sectors across Wales. The purpose of the survey was to gain a profile of Welsh language awareness and use of professional practitioners and elicit their response regarding the importance of providing language choice in patient/client care. The great advantage of a survey approach is the flexibility and broadness of scope, providing an overview of general awareness of the Welsh language in specific professional fields (McColl et al. 2001). However, a limitation of surveys, particularly postal questionnaires, is their lack of depth and their inability to probe into the complexities of cultural and language issues (Bowling 2002). To compensate for this lack of depth, during the second phase of the study, face-to-face qualitative interviews were conducted with a purposive sample of survey respondents, in order to supplement the survey findings.

Ethical Approval
Ethical approval for the study was obtained through the Multi-Centre Research Ethics Committee for Wales.

Questionnaire
A bilingual (Welsh/English) questionnaire was developed (see Appendix 1) which focussed on four main themes, as follows:

- Biographical and demographic data
- Welsh language proficiency
- Welsh language use in healthcare
- Attitudes towards the Welsh language in healthcare

The questionnaire items were established from previous related research (Baker 1992, NOP Social and Political 1995, Welsh Language Board 2000) as well as from recurrent themes in the literature (Misell 2000, Davies 1999). Furthermore, as part of the pre-testing and piloting process, an expert panel was established (McColl et al., 2001) from whom advice was sought on the draft instrument and the questionnaire was amended accordingly. The main focus in this case was on the way in which professionals interpret their practice and the role of language in developing therapeutic relationships as well as the clinical role of language in specific fields. The questionnaire included questions with pre-coded responses and a Likert scale to measure the respondents' Welsh language awareness and sensitivity in clinical practice.

A pilot study of the first draft instrument was conducted on two groups of registered nurses (n=19, n=11) and a sample of multi-disciplinary national conference delegates (n=7). This pilot resulted in minor refinements of the instrument and an 18% reduction in the attitude scale.

Generating the Population and Survey Sample
In order to ensure a widely representative sample for the survey, healthcare professionals were sought from the following healthcare organisations:

- 15 NHS Trusts
- 6 private hospitals
- 39 private nursing homes
- 8 voluntary organisations employing healthcare professionals
- 21 Local Health Boards

A combination of cluster and stratified random sampling methods were adopted in order to extract samples for the study, as outlined in Appendix 2.

Permission to undertake the study was granted from the Chief Executive of each healthcare organisation and, in line with the sampling frame established, the relevant human resource departments were approached and asked to provide names and work addresses of healthcare professionals in their employ. Questionnaires (see Appendix 1) were then distributed directly to these healthcare professionals, according to the schedule outlined below. Those organisations that declined to supply names and work addresses distributed the questionnaires on behalf of the research team.

In line with the strict sampling approach previously outlined, a total of 3358 questionnaires were distributed amongst healthcare professionals across Wales as follows:

- Public sector (96%)
- Private sector (3%)
- Voluntary sector (1%).

Stratification of the sample involved the proportional weighting of participants according to three distinct language regions, of Wales, as described by the 2001 Census figures (National Assembly for Wales, 2003) (see Figure 1). The three language regions are identified according to the percentage of the population who speak Welsh, as follows:

- Language Region 1 - where 40 – 70% of the population speak Welsh
- Language Region 2 - where 20 – 39% of the population speak Welsh
- Language Region 3 - where 0 – 19% of the population speak Welsh

Further details of the sample size and distribution are outlined in Table 1. Stratification of the sample according to organisation and occupation is shown in Table 2.

Questionnaire distribution
Direct distribution of the questionnaire by the research team followed a four-stage process as follows:

- First posting of questionnaire 1 July 2003
- Postcard reminder 15 July 2003
- Second posting of questionnaire 29 July 2003
- Third posting of questionnaire 12 August 2003

(Please note that reminders were not sent to those who had already responded or to those who returned blank questionnaires.)

Figure 1 Map showing the three distinct language regions of Wales

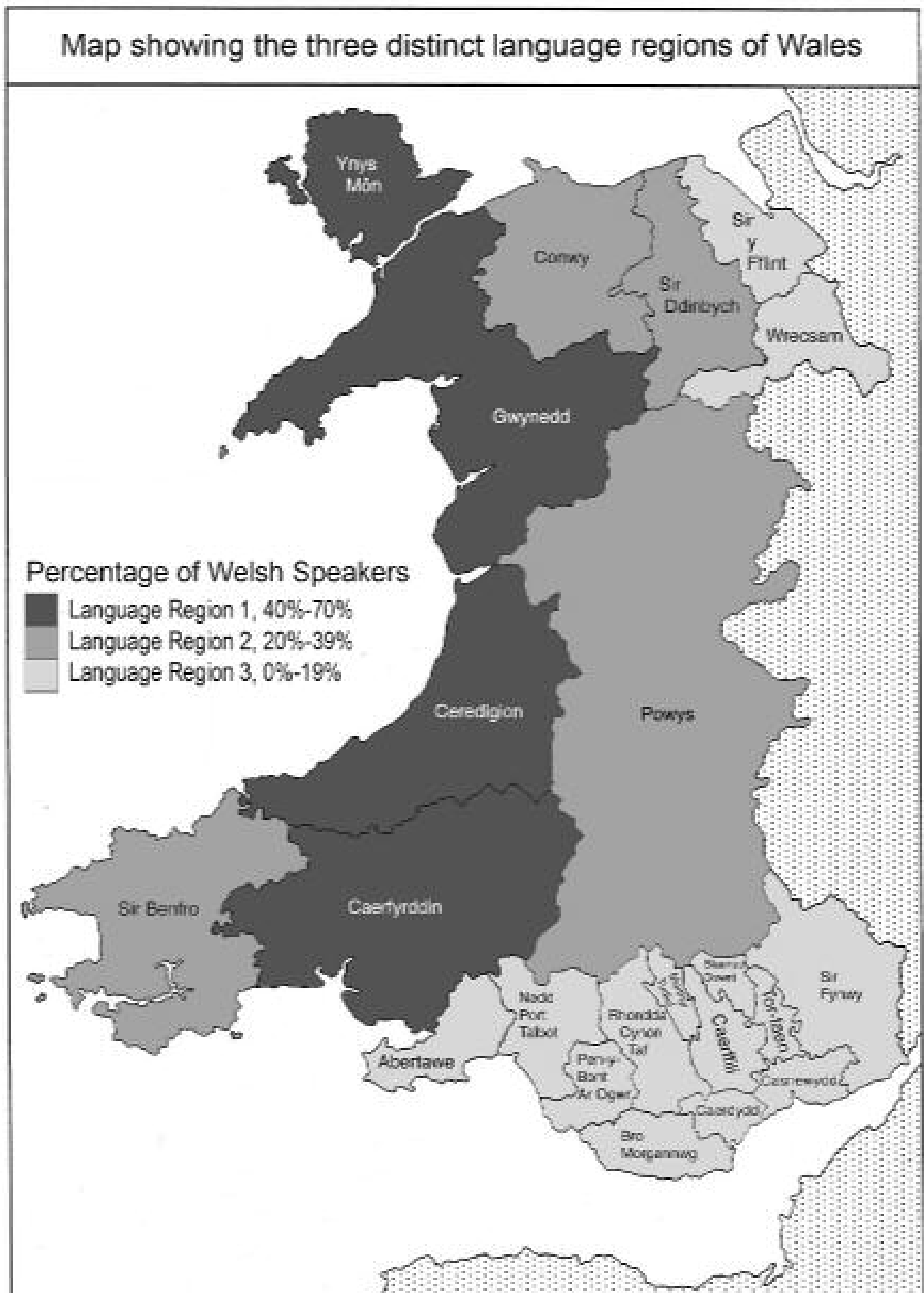


Table 1 Summary of Sample Size and Distribution

Number of Organisations	Types of Organisations	Number of Questionnaires distributed directly	Number of Organisations	Number of Questionnaires distributed by Organisation	Number of Organisations	Total
15*	NHS Trusts	1646	11	1210	4	2856
21	Local Health Boards	364	22	0	0	364
5	Private Hospitals	36	4	23	1	59
39	Private Nursing Homes	38	38	0	0	38
8	Voluntary Organisations	41	8	0	0	41
Total = 89	Total Sent	2125		1233		3358

* Powys LHB was included as an NHS Trust for the purpose of this research

Table 2 Stratification of Sample according to Organisation and Occupation

Organisation	Ambulance Service Officers	Art/ Music/ Drama Therapists	Clinical Psychologists	Dietitians	Dentists	Doctors	Health Visitors	Midwives	Nurses	Practice Nurses	Occupational Therapists	Optometrists	Pharmacists	Physio-therapists	Radio-graphers	Speech & Language Therapists	**Total**
NHS Trusts	105	16	33	38	44	450	42	81	1608	0	97	46	75	98	84	39	**2856**
Local Health Boards	-	-	-	-	49	184	-	-	-	27	-	35	69	-	-	-	**364**
Private Hospitals	0	0	0	1	0	9	0	0	17	0	0	0	3	13	16	0	**59**
Private Nursing Homes	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	**38**
Voluntary	0	1	0	0	0	6	0	0	29	0	0	0	0	4	0	1	**41**
Total	**105**	**17**	**33**	**39**	**93**	**649**	**42**	**81**	**1692**	**27**	**97**	**81**	**147**	**115**	**100**	**40**	**3358**

The distribution of the remaining questionnaires differed slightly as these were distributed by five organisations on behalf of the research team, as follows:

- One organisation distributed the initial questionnaire, the postcard and the second questionnaire
- Two organisations distributed the initial questionnaire and the postcard
- One organisation distributed the first and second questionnaire
- One organisation distributed only the initial questionnaire

Data Coding and Analysis

The descriptive and inferential statistics were computed with the aid of the SPSS Windows Release 11.5.0 (2002) statistical package. The EQS and Clustan Graphics (2003) programmes were also used in order to test out conceptual models and identify clusters in the pattern of respondents. Inferential statistics included ANOVA's, Chi Squares and Correlations. The significance values of $P < .05$ (significant difference), $P < .01$ (very significant difference), and $P < .001$ (very, very significant difference) will be presented where appropriate. $P > .05$ indicates no significant difference.

Results

In the case of inferential statistics, only statistically significant differences are highlighted throughout the report.

Response Rate

Following the distribution of the questionnaire amongst 3358 healthcare professionals across Wales, 2187 (69%) were returned in total. The response rates were as follows:

- 4% of the questionnaires were returned blank, reflecting non-participation
- 4% of the addressees were not known in the workplace
- 1% of the addressees had left the workplace
- 1% of the respondents failed to complete every aspect of the questionnaire.
- 59% of the questionnaires were appropriate for analysis (n = 1968)

The response rates according to professional group, sector and region are presented in Appendix 3.

Survey Error and Confidence Intervals

The confidence interval of the survey is based on the response of public sector healthcare professionals only, since the total population size of the voluntary and private sector is unknown. The confidence interval is calculated as +/- 2.2% at the 95% confidence level, where the population size for public sector health professionals = 49309 (Sources; Welsh Assembly Government Statistical Bulletins and HOWIS website for primary healthcare professionals), and the sample size for returned questionnaires = 1968.

Distribution of Healthcare Professionals to Main Professional Groups

Eighteen subsets of healthcare professionals were identified from the data, and these were categorised into three main healthcare professional groups, namely Nursing, Allied Health Professionals (AHP) and Clinicians, as demonstrated in Table 3:

Table 3 Distribution of Healthcare Professionals to Main Professional Groups

Nursing Group	AHP Group	Clinicians Group
Nurses	Dietitians	General Medical Physicians/Surgeons
Practice Nurses	Physiotherapists	General Medical Practitioners
School Nurses	Radiographers	General Dental Practitioners
Midwives	Art/Music/Drama Therapists	Pharmacists
Health visitors	Occupational Therapists	Clinical Psychologists
	Optometrists	
	Speech/Language Therapists	
	Ambulance Service Officers	

Biographical and Socio-demographic Background of Survey Participants

The following section outlines the biographical and socio-demographic background of the survey respondents, as reported in the questionnaires. Further details are presented in Appendix 4.

- 74% of the respondents are female, whilst 26% are male.
- The average age range of all three professional groups is between 35 and 44 years of age.
- 90% of the respondents are white, 2% Indian and 1% Black African. 4% are from various other ethnic groups and 3% did not note their ethnic group.
- 55% of the respondents were born in Wales, 31% in the rest of the UK and a further 10% outside the UK.
- 13% of the respondents speak a language, other than English or Welsh. Of all the professional groups, the greatest proportion of respondents who speak another language are found amongst the Clinicians group (30%). This compares with 8% within the Nursing group and 10% within the AHP group.
- On average, respondents have lived in Wales between 21 and 30 years. The average length of residence is significantly greatest amongst the Nursing group, $P < .001$, where nearly 80% have lived in Wales for over 21 years.
- There is a significant difference ($P < .001$) between the professional groups in relation to the number of years spent working in healthcare in Wales. The average length of service for the Nursing and Clinicians groups is between 11 and 20 years, whilst the average length of service for the AHP professional group is between six to ten years.
- The greatest proportion of respondents is derived from the Nursing group (53%), with 23% from the AHP group and 24% from the Clinicians group. The distribution of professional groups by region is outlined below in Table 4.

Table 4 Distribution of Professional Groups by Language Region

	Language Region in Wales							
	Language Region 1		Language Region 2		Langauge Region 3		Total	
	Number	%	Number	%	Number	%	Number	%
Nursing	163	8%	205	11%	674	34%	1042	53%
AHP	96	5%	80	4%	262	14%	438	23%
Clinicians	125	7%	97	5%	234	12%	456	24%
Total	384	20%	382	20%	1170	61%	1936*	100%

* The total number of respondents is 1936 as 32 participants did not note their profession on the questionnaire and they could not be directly traced as they were from the organisations that had sent the questionnaires on behalf of the research team.

- Approximately 62% of the respondents are employed within hospital services, whilst 32% represent primary healthcare professionals. The number of practitioners working in rehabilitation services is relatively low, representing only 6% of the total respondents.

- The vast majority of the respondents (95%) are employed within the public sector. The proportion of private sector healthcare professionals within the sample is low (3%), whilst only (2%) are employed by the voluntary sector. This is not surprising since, with the exception of hospices, very few voluntary organisations employ qualified healthcare professionals and this explains their low representation within the sample. For example organisations such as, NSPCC Cymru; MIND Cymru; Mencap; and Alzheimer's Society Wales do not employ healthcare professionals.

- In order to identify those respondents who have the most contact with vulnerable client groups, those whose main clients (>60%) are children, adults, the elderly, people with mental health problems or people with learning disabilities were identified from the data. The elderly are the vulnerable clients with whom all the professional groups have the most contact (32%), whilst people with learning disabilities are the client groups with whom respondents have the least contact (3%)

Main Findings

The following section outlines the main findings of the questionnaire survey, followed by an analysis of the data. The results are presented under the following headings:

- Welsh language proficiency of healthcare professionals
- Welsh language use in healthcare
- Attitudes to the Welsh language in healthcare
- Facilitating bilingual provision in healthcare

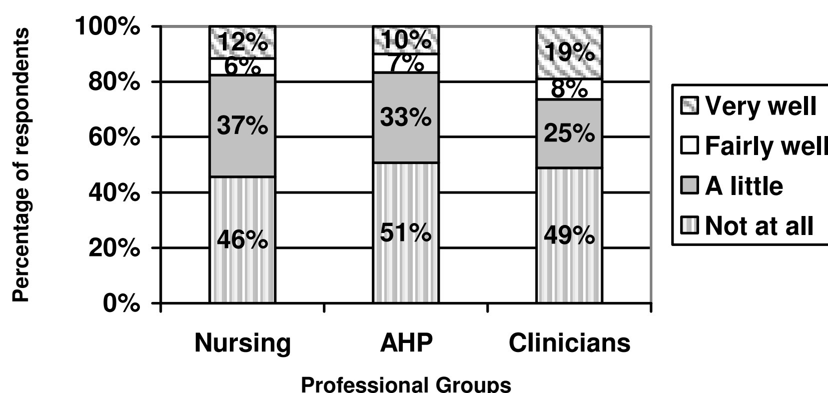
Welsh Language Proficiency of Healthcare Professionals

Speaking Welsh

Approximately half the respondents in each professional group can speak at least some Welsh (55% of the Nursing group, 50% of the AHP group and 52% of the Clinicians group) (see Figure 2 and Appendix 5). This compares with only 21% of the general public across Wales (National Assembly for Wales 2003). However, the overall percentage of fluent Welsh speakers amongst the sample (19%) is

significantly lower than the percentage of non-Welsh speakers (48%), $P < .001$. Nevertheless, in line with the wider distribution of Welsh speakers amongst the general population, as identified in the 2001 Census (National Assembly for Wales 2003), the proportion of fluent practitioners within each region increases significantly from Language Region 3 (10%) to Region 2 (22%) to Region 1 (43%). Of all the professional groups amongst the sample, the greatest level of proficiency is reported amongst the Clinicians group (27%).

Figure 2 Distribution of Respondents who are able to Speak Welsh, by Professional Group



Understanding Welsh

A greater percentage of respondents are able to understand Welsh well (25%) than are able to speak it fluently (19%) (see Appendix 6). Furthermore, over half the respondents in each professional group has some understanding of Welsh (67% of the Nursing group, 61% of the AHP group and 59% of the Clinicians group). As with the distribution of Welsh speakers amongst the sample, the proportion of practitioners who understand Welsh well within each region increases from Language Region 3 (14%) to Region 2 (32%) to Region 1 (52%). Whilst nearly half the healthcare professionals within Region 3 (47%) claim to have no understanding of Welsh, there are relatively few practitioners in Region 1 who do not understand Welsh at all (13%).

Reading Welsh

Nearly half the respondents in each professional group can read Welsh to some degree (46% of the Nursing group, 42% of the AHP group and 47% of the Clinicians group) (see Appendix 7). The greatest levels of reading proficiency are to be found amongst practitioners from Language Region 1 where 40% of respondents claim to read Welsh well. This compares with a figure of 22% in Language Region 2 and 12% in Language Region 3. Of all the professional groups amongst the sample, the greatest level of proficiency is again reported amongst the Clinicians group, where 25% claim to be able to read Welsh well.

Writing Welsh

Of all the Welsh language skills examined, the least proficiency is noted amongst the respondents' writing abilities, where only 38% of the Nursing group, 34% of the AHP group and 42% of the Clinicians group write Welsh to some degree (see Appendix 8). Nevertheless, the levels of proficiency amongst the sample, are again encouraging in certain areas, particularly amongst practitioners from Language Region 1 (34%) and amongst the Clinicians group (21%).

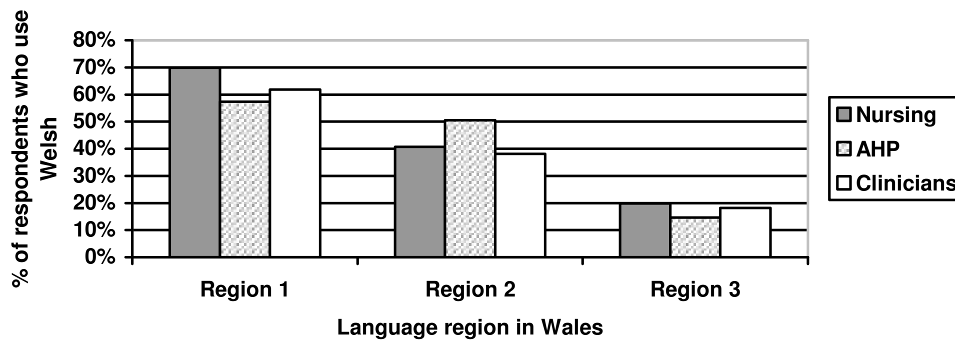
Welsh Language Use in Healthcare

For the purpose of analysis, only those participants who speak at least a little Welsh are included in the data within this section.

Use of Welsh with Welsh speaking Patients/Clients

The respondents' use of Welsh with Welsh speaking patients and clients, according to professional group and language region, is demonstrated in Figure 3.

Figure 3 Respondents' use of Welsh with Welsh speaking Patients/Clients, by Professional Group and Language Region

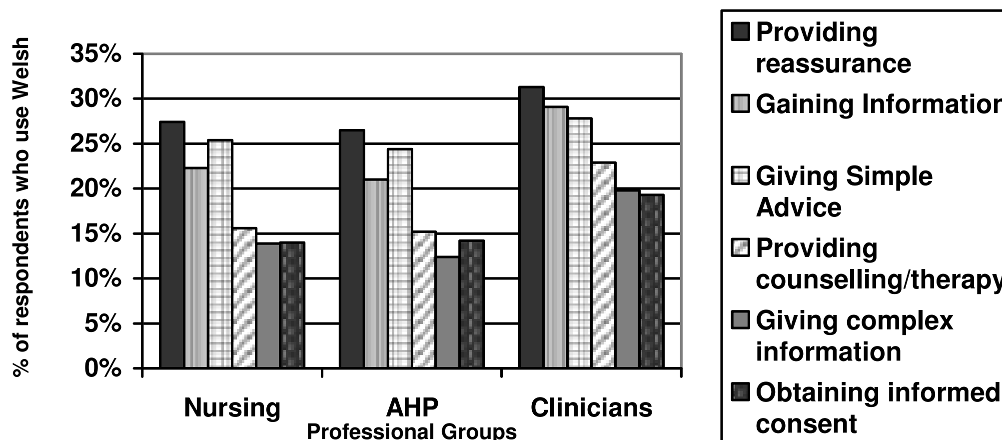


The results show that there is a significant increase in Welsh language use across the regions, from Language Region 3 to Region 2, to Region 1. For example, only 20% of the Nursing group in Region 3 use Welsh with Welsh speaking patients and clients whilst this figure rises significantly to 70% in Region 1 ($P < .001$).

Context of Welsh Language Use with Patients/Clients

The context of Welsh language use by the respondents in their interactions with patients and clients, according to professional group, is outlined in Figure 4.

Figure 4 Context of Welsh language use of Respondents, by Professional Group



The results demonstrate that there are significant differences ($P < .01$) between healthcare professionals' use of Welsh with patients and clients within different care contexts. Practitioners from all professional groups are significantly more likely to use their Welsh in informal patient interactions, such as providing reassurance, rather than formal encounters, such as giving complex information or obtaining consent. The Clinicians group report significantly greater use of Welsh in the delivery of healthcare than the Nursing and AHP groups.

Use of Welsh with Welsh speaking Colleagues
The respondents' use of Welsh with Welsh speaking colleagues, according to professional group and language region is revealed in Appendix 9. The results show that there is a significant ($P < .01$) increase in the Welsh language use of practitioners with Welsh speaking colleagues from Language Region 3 through to Region 1. However no significant differences were found between the professional groups ($P > .05$) regarding the extent of Welsh used with Welsh speaking colleagues.

Use of Written Welsh
The respondents' use of written Welsh in healthcare, according to professional group and language region is demonstrated in Appendix 10. Although there is a significant increase ($P < .01$) in practitioners' use of written Welsh in healthcare, from Language Region 3 through to Region 1, no significant differences were found between the professional groups ($P > .05$).

Attitudes to the Welsh Language in Healthcare
A Principal Axis Factor Analysis (Latent Variable Analysis) was carried out on the thirty-three attitude statements of the questionnaire to determine the underlying patterns of relationships among the questions and to establish commonality among them. Close examination of the results yielded four attitude factors, the structures of which are given in Appendix 11. Examination of the statements within each factor suggests that they may be interpreted as follows:

Factor 1 Perspectives on bilingualism
Factor 2 Addressing clinical needs
Factor 3 Perspectives on Welsh language provision in healthcare
Factor 4 Training implications for bilingual provision

The Varimax factor loadings for the attitude statements are presented in Appendix 12, and the six statements that did not appear within any of the four factors listed above were discarded from the data (see Appendix 13).

Attitude Scores
Following the Factor Analysis and the dismissal of the incongruous attitude statements, individual attitude scores were determined for each respondent by calculating the average score across the remaining 27 statements. This yielded a range of attitude scores, with a value of between one and five, ranging from the most negative through to the most positive attitudes towards the Welsh language in healthcare. For the purpose of analysis, respondents were grouped according to three main attitude scores and according to Language Region, as illustrated in Table 5, where:

- Attitude scores between 1.00 and 2.60 represent negative attitudes
- Attitude scores between 2.61 and 3.39 represent neutral attitudes
- Attitude scores between 3.40 and 5.00 represent positive attitudes

Table 5 Distribution of Attitudes across the Three Language Regions

	Language Region in Wales							
	Language Region 1		**Language Region 2**		**Language Region 3**		**Total**	
Attitudes	Number	%	Number	%	Number	%	Number	%
Negative	39	2%	50	3%	207	11%	296	**15%**
Neutral	137	7%	151	8%	558	28%	846	**43%**
Positive	208	11%	185	9%	433	22%	826	**42%**
Total	**296**	**20%**	**846**	**20%**	**826**	**61%**	**1968**	**100%**

The findings show that 42% of the respondents demonstrate positive attitudes towards the Welsh language in healthcare, whilst 43% reveal neutral attitudes. Only 15% of the respondents across Wales demonstrate negative attitudes. Respondents from Language Region 1 demonstrate significantly ($P < .01$) more positive attitudes towards the Welsh language in healthcare than their colleagues in Regions 2 and 3. Furthermore, respondents from Region 2 demonstrate significantly more positive attitudes than those in Region 3 ($P < .01$).

The distribution of attitudes, according to professional groups, is demonstrated in Appendix 14. The results show that there are significant differences between the professional groups in relation to their attitudes towards the Welsh language in healthcare ($P < .001$). Respondents from the Nursing group demonstrate significantly more positive attitudes than the Clinicians, but there was no difference between the Nursing and AHP group, or between the AHP and the Clinicians group ($P > .05$) (see Appendix 15).

Appendix 16 shows the distribution of attitudes towards Welsh according to Welsh language proficiency. The results show that proficiency in Welsh and attitude towards Welsh are correlated positively and strongly ($P < .01$).

EQS – Structural Analysis

Rationale for Structural Equation Modelling
Six variables have been linked by previous research in Wales to Welsh language attitude formation (Baker 1992, NOP Social and Political 1995, Welsh Language Board 2000). These include age, gender, Welsh language proficiency and language region. In order to examine the factors that affect attitudes towards the Welsh language in healthcare and determine the strength of these variables, a conceptual model is proposed for testing and refinement (see Figure 5).

An EQS model suggests the direction of likely causalities and effects. It is a ‘best guess’ at paths of relationship. Other researchers may choose different variables for the conceptual model. The following variables were entered into the EQS Programme (EQS 5 for the Apple Mac):

1) Language Region 40 – Language Region 1 compared with Regions 2 and 3 combined
2) Language Region 19 – Language Region 3 compared with Regions 1 and 2 combined
3) Q3 - Sector – Public compared with Private and Voluntary Sector healthcare professionals
4) Professional Group – Nursing compared with AHP and Clinicians
5) Professional Group – Clinicians compared with Nursing and AHP
6) Q6 – Worked in Healthcare in Wales
7) Q7 – Length of residence in Wales
8) Q10 – Proficiency in Welsh
9) Q19 – Gender category
10) Q20 – Age range category
11) Factor 1 – Perspectives on bilingualism
12) Factor 2 – Addressing Clinical Needs
13) Factor 3 – Perspectives on Welsh language provision in healthcare
14) Factor 4 – Training implications for bilingual provision

For further details regarding the EQS analysis see Appendix 17.

Figure 5 Conceptual Model of Factors affecting Welsh Language Attitudes and Use of Welsh in Healthcare

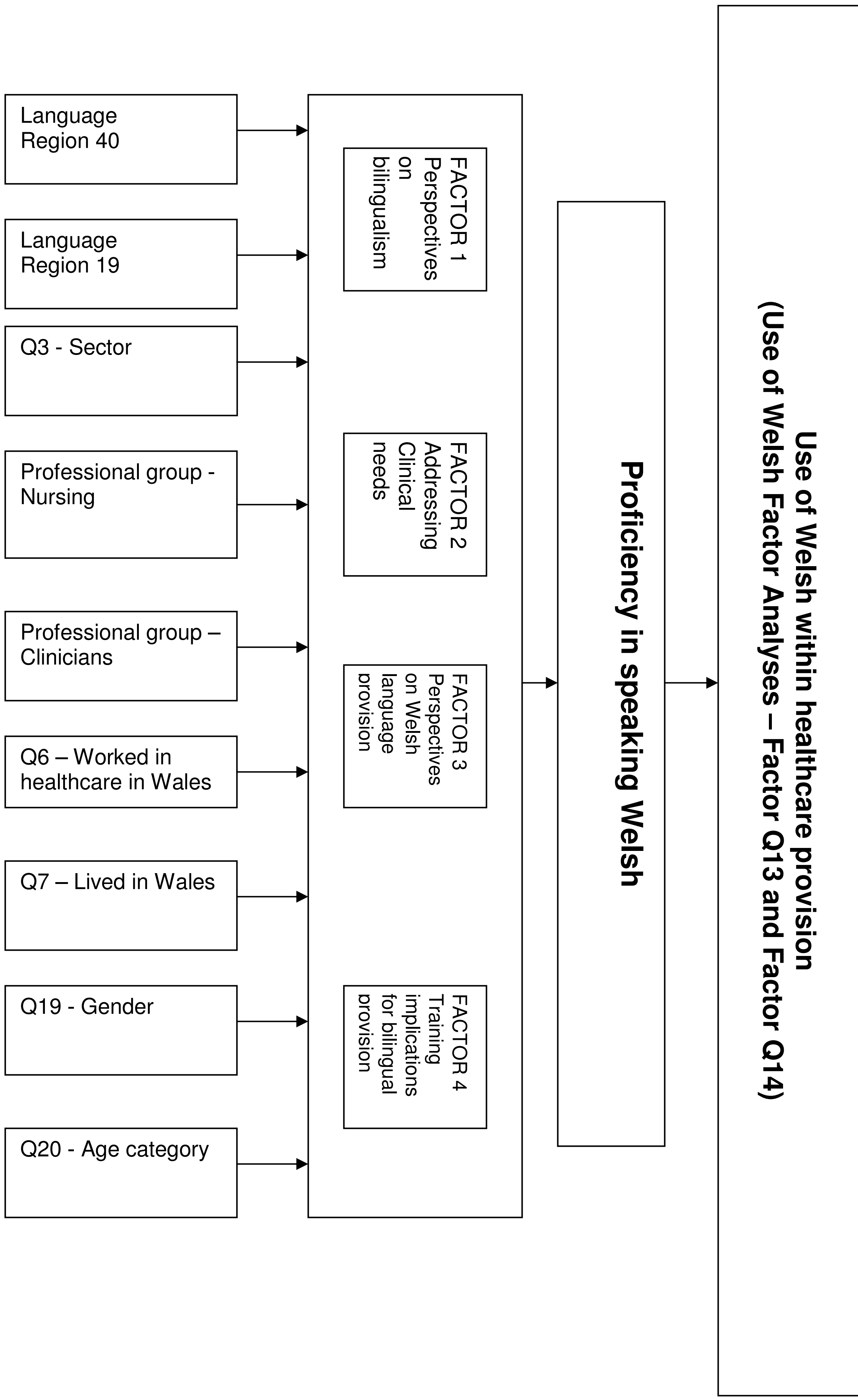
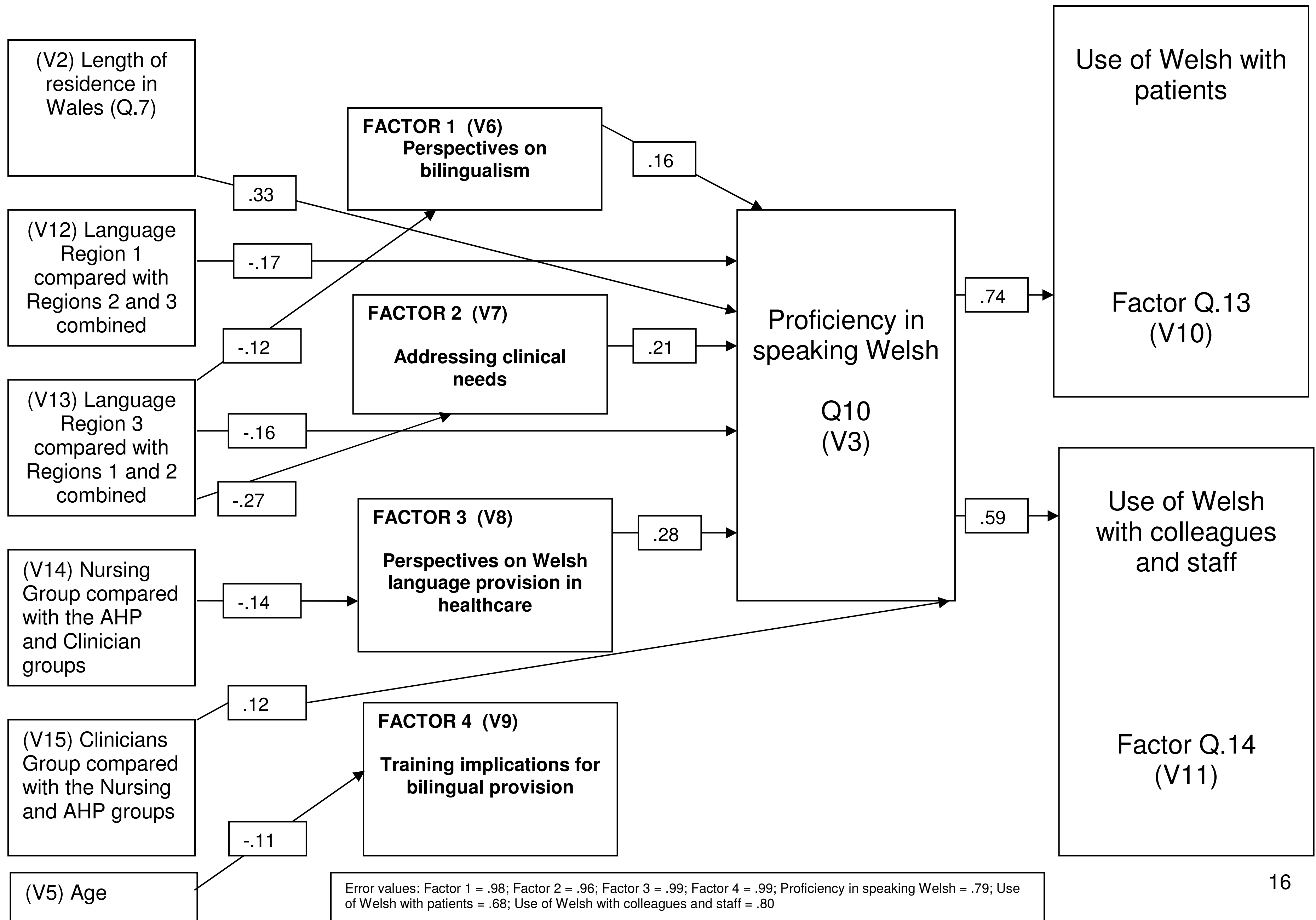


Figure 6 Significant Factors Affecting Welsh Language Attitudes and Use of Welsh in Healthcare



Outcome of EQS Structural Analysis

A flow chart of the estimated relationships in the model was drawn by the EQS program. However, such is the size and complexity, the diagram is difficult to interpret. Therefore the results are summarized in lists. The outcome of the EQS analyses is presented as a Standardised Solution in Appendix 18 and a model of the results is outlined in Figure 6. This four stage model shows that there are several factors which influence attitudes towards Welsh and the use of Welsh in healthcare as follows:

- The use of Welsh with patients and colleagues is strongly influenced by the Welsh language proficiency of practitioners, where use of Welsh with patients/clients = .74 and use of Welsh with colleagues and staff = .59.

- Several variables affect the levels of Welsh language proficiency amongst healthcare professionals, including length of residency in Wales, language region and professional discipline. Further relationships are also demonstrated between levels of proficiency and attitudes towards Welsh in healthcare.

- The strongest factor influencing Welsh language proficiency is the number of years lived in Wales (lived in Wales = .33). This suggests that, the longer practitioners have lived in Wales, the greater the levels of their Welsh language proficiency.

- The model shows a direct relationship between language region and proficiency in speaking Welsh. A statistical test (described in Appendix 19) showed that the greatest levels of Welsh language proficiency amongst healthcare professionals are to be found in Language Region 1, followed by Region 2 then Region 3. This confirms previous findings.

- Another variable which directly influences Welsh language proficiency is the professional discipline of the practitioner. Statistical tests (see Appendix 19) confirm previous findings that members of the Clinicians group have significantly higher levels of proficiency in speaking Welsh than those from the other professional groups.

- The Welsh language proficiency of healthcare professionals is also associated with attitudes towards Welsh. This suggests that the more positive the attitudes of practitioners, the higher their levels of Welsh language proficiency.

- Several features are identified within the model which affect practitioners' attitudes towards the Welsh language in healthcare, including language region, age and professional role.

- A statistical test (described in Appendix 19) showed that practitioners in Language Region 1 and 2 have much more positive perspectives on bilingualism than those in Region 3. Furthermore, practitioners in Language Regions 1 and 2 are more sensitive to the implications of language in addressing clinical needs than those from Region 3.

- In addition, the attitudes of younger practitioners towards Welsh language training are more positive than those of older practitioners.

- Finally, practitioners from the Nursing group are shown to have the most positive attitudes towards Welsh language service provision in healthcare (see Appendix 19).

The model designed in this report was analyzed using Structural Equation Modelling. This technique shows the relative importance of each of the independent variables. It also allows for the testing of the overall fit of the model. As is often the case with this approach (Saris & Stronkhorst 1984; Byrne 1994) the fit of the model is imperfect. The influence of the variables not included in this model may explain the high error values. Thus, this analysis is exploratory and the ensuing qualitative aspect of the study supplement these findings and provide depth to the data.

Cluster Analysis

Cluster analysis (Clustan Graphics, 2003) reveals five distinct groups of respondents across Wales (see Appendix 20). All the clusters differ significantly from each other in terms of the variables that define those clusters. A brief summary of the clusters is shown in Table 6.

Table 6 Summary of Clusters: Main features

	Cluster A N=805	**Cluster B N=157**	**Cluster C N=161**	**Cluster D N=32**	**Cluster E N = 813**
Language Region	3	1	3	3	3
Proficiency in Speaking Welsh	Not at all	Very well	Very well	A little	Not at all
Attitude Category	Neutral	Positive	Positive	Positive	Positive

The largest clusters are Cluster A (n = 805) and Cluster E (n = 813) whilst the smallest cluster is Cluster D (n = 32). Four out of five clusters represent healthcare professionals with positive attitudes towards the Welsh language in healthcare whilst one cluster of respondents hold neutral attitudes. No clusters with negative attitudes were identified. The full profiles of the respondents within each cluster are described in Appendix 21.

Facilitating Bilingual Provision in Healthcare
In order to investigate the respondents' views on ways of facilitating bilingual provision in healthcare, the importance of items to develop an effective bilingual service in healthcare were rank ordered by mean score. The results are shown in Appendix 22.

The results reveal that the respondents ranked translation services, then systems to identify Welsh speaking speakers as most important in order to develop an effective bilingual service in healthcare. Ensuring the visibility of the Welsh language in healthcare, in terms of bilingual signs and leaflets, was also identified amongst the six most valuable items.

Phase 2: Qualitative Interviews

Methodology

In order to supplement the quantitative element of the research, the second phase of the study adopted a qualitative approach to provide in-depth information relating to Welsh language awareness in healthcare. The aim in this case was to capture individual opinions, experiences and feelings of healthcare professionals in order to give a depth of understanding.

For the purpose of the study, semi-structured interviews were conducted by a team of five researchers with a purposive sample of 83 questionnaire survey respondents, in the language of their choice. On selection, practitioners were contacted by letter, which enclosed detailed information about the study, an invitation to participate in an interview and a consent form. One-week later healthcare professionals were contacted by telephone in order to elicit their response and offer further information as indicated. Interviews were conducted in the participant's setting of choice on an agreed date and time between 4 November 2003 and 19 April 2004, with most undertaken between 11 November 2003 and 18 February 2004.

Prior to the commencement of the interview, the written consent of each participant was sought along with permission for audio-taping. Each interview respondent was assigned a code and tapes were labelled accordingly. Confidentiality was maintained throughout.

Generating the Interview Sample

The sampling strategy developed for the interviews was guided by the analysis of the postal questionnaires. In order to ensure a representative approach to the purposive sampling of respondents for the qualitative interviews, the following interview sampling matrix was used for each region, as illustrated in Table 7.

Table 7 Interview Sampling Matrix

Professional Group	Negative Attitudes	Neutral Attitudes	Positive Attitudes
Nursing Group	3	3	3
AHP Group	3	3	3
Clinicians Group	3	3	3

(n=27)

* 2 further respondents from region 2 were later included, representing an AHP group that was previously under-represented. .

Thus 27 respondents were selected from Language Region 1, 29 from Region 2 and 27 from Region 3 providing a total interview sample of 83. In this way, the aim was to gain in-depth information from a wide sample of healthcare professionals with a range of attitudes towards the Welsh language in healthcare. Further details of the interview sampling strategy are outlined in Appendix 23.

Interview Schedule

The interviews involved a series of open-ended and probe questions in order to elicit the way in which healthcare professionals interpret their practice and identify the role of the Welsh language in clinical care. In order to allow for detailed comparisons between the quantitative and qualitative elements of the research, the 16 questions identified within the semi-structured interview schedule (see Appendix 24) were guided by the four factors extracted from the Factor Analysis.

Data Coding and Analysis

In line with the Framework Analysis approach (Ritchie and Spencer 1994) (see Appendix 25), the interviews were examined for content immediately following data collection and key ideas and recurrent themes were noted. In view of the large volume of data generated, each interviewer undertook his/her own tape analysis. This involved replaying the tape recording of an interview and transcribing verbatim aspects of relevant and interesting data, rather than analysing full transcripts. Tape analysis has benefits in terms of cost and time over completely full transcriptions. The reliability issues surrounding tape analysis were addressed at a later stage of the analysis.

Eight pilot interviews were conducted by the five researchers, involving respondents with a range of Welsh language proficiency and attitudes towards the Welsh language in healthcare, as illustrated in Appendix 26. Following the pilot interviews, open coding of the data revealed a series of categories that reflected the four main themes extracted from the factor analysis, as follows:

- Theme 1 Perspectives on bilingualism
- Theme 2 Addressing clinical needs
- Theme 3 Perspectives on Welsh language provision in healthcare
- Theme 4 Training implications for bilingual provision

This thematic framework was adopted for the analysis of the subsequent 83 research interviews, with new categories emerging from the data in turn (see Appendix 27).

The next stage of the analysis involved the refinement of conceptual codes and the reconstruction of categories and sub-categories to create thematic charts. This stage of the analysis was undertaken in collaboration by the three main researchers, thus providing a valuable opportunity to check inter-coder reliability (cf. reliability and validity checks on the qualitative research were conducted, and are presented in Appendix 28). As a result, the final themes were re-defined as a consequence of the new categories that emerged from the analysis. These reflected the following four themes:

- Theme 1 Welsh language awareness
- Theme 2 Care enhancement
- Theme 3 Organisational issues
- Theme 4 Training implications

The following section reports on the final results and discusses each theme in turn.

Results

Theme 1 – Welsh Language Awareness

The respondents expressed some clear views on the Welsh language and these characterised five different categories. These are depicted in a Category Tree (Figure 7).

Status of Welsh language
A diversity of perspectives was expressed about the status of the Welsh language, ranging along a continuum from low to high status. To illustrate, one respondent stated:

> *"I've got enough things to do on my plate without trying to resurrect a dead language."* (Interviewee 9)

whilst another indicated:

> *"I have to give it an important place."…"The language is an important aspect that we must consider."* (Interviewee 18)

Extent of Welsh spoken across Wales
Four sub categories emerged from this category. Respondents discussed the extent of Welsh spoken in terms of geography, chronology, their area and their contact with the English and Welsh. For example, in terms of geography, a number of respondents made comparisons between the extent of Welsh spoken in different regions of Wales. Furthermore some respondents offered observations about the area that they lived or worked in, for example:

> "*It's not really a Welsh area. If we go up to the hill farmers, possibly. They're likely to be a bit more Welsh (speaking)"* (Interviewee 32)

Personal perspectives
As might be expected, this category contained very many meaning units but despite the vast numbers, these were associated with two clear sub categories, namely the attitudes exhibited by the respondents and the issues that had influenced those attitudes. Attitudes ranged across a dimensional continuum from very negative feelings about the Welsh language to very positive feelings, as illustrated in the ensuing quotations:

> *"I think it's (Welsh) becoming a bit too dominating in this area."* (Interviewee 59)
>
> *"*O! Mae'n (sensitifrwydd iaith) bwysig dros ben yn tydi?" (Interviewee 19)
>
> ("Oh! It's (language sensitivity) extremely important isn't it? - Interviewee 19)

The factors that influenced these feelings were identified as the education that the respondent had received, the respondent's background, the respondent's children and the respondent's exposure to the Welsh language

Exhibiting prejudices
Again, this is a category in which some strength of feeling was evident. Respondents talked of prejudice towards both Welsh and English speakers and, not surprisingly, these incidences were mainly conveyed in negative terms, as the ensuing passages illustrate:

> *"Mae nhw (bydwragedd di-Gymraeg) yn galw nhw'n, sort of, 'hicks o'r sticks' felly. A mae nhw'n teimlo fel bod nhw ychydig bach yn araf deg felly." (Interviewee 75)*
>
> (They (non Welsh speaking midwives) sort of call them, "hicks from the sticks" and they feel that they are a little bit backward like - Interviewee 75)

Welsh identity
A number of sub-categories were evident when Welsh identity was considered. Respondents talked of a feeling of being Welsh, as well as feeling unique and belonging to the community, as the following quote describes:

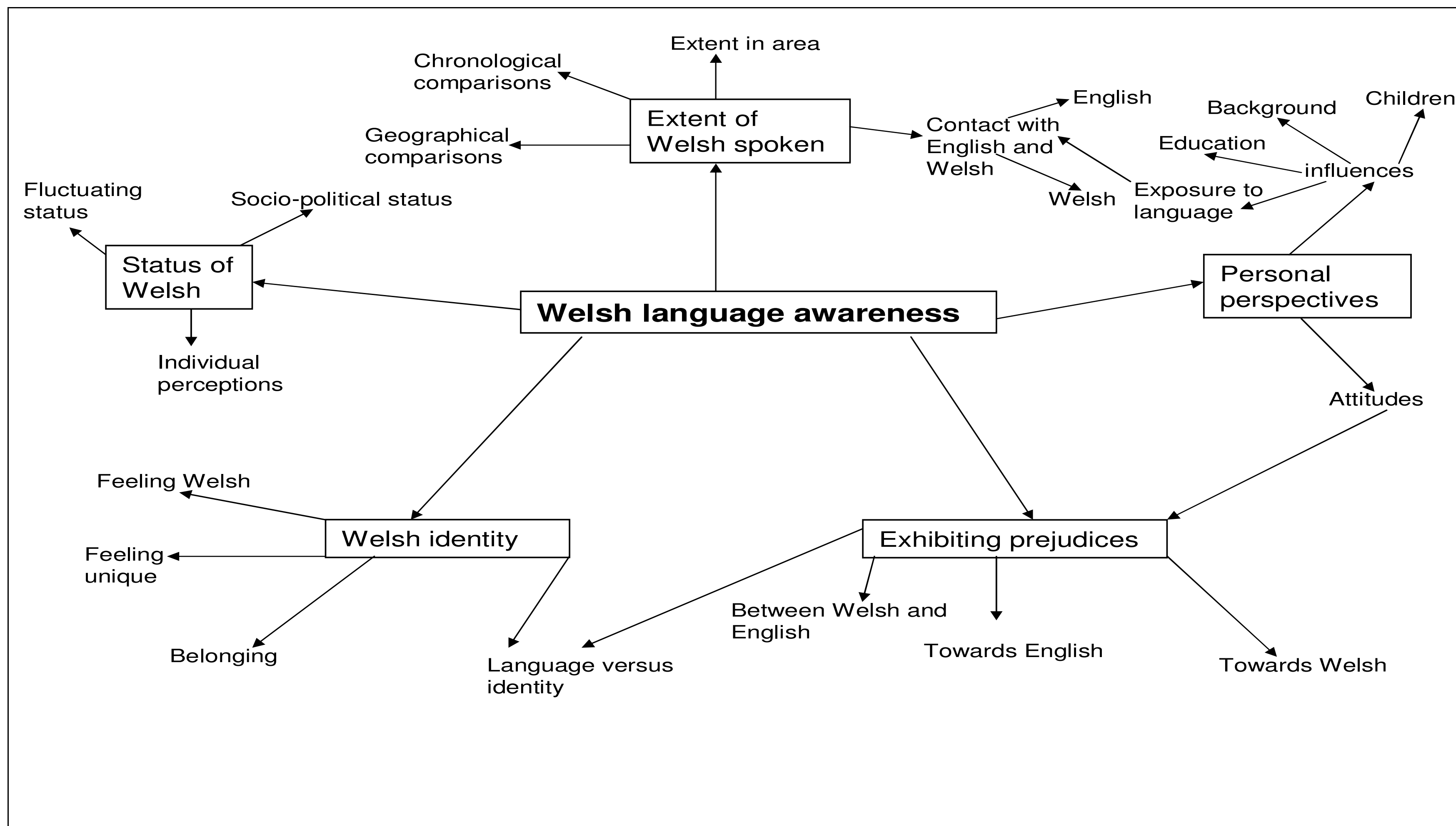
> *"You kind of, you like to belong with them. If you are in a community with you know, with Welsh people, and would like to be one of them." (Interviewee 2)*

Finally, in this category the tension between the issue of language and identity was highlighted. This situation is captured by the words of one respondent who said:

> *"I feel a little aggrieved when people have said to me that I can't be Welsh if I'm not Welsh speaking. I don't rate that, because I must admit that I don't think that's necessarily the case." (Interviewee 7)*

See Appendix 29 for Thematic Chart 1: Welsh Language Awareness.

Figure 7 – Theme 1: Welsh Language Awareness Category Tree



Theme 2: Care Enhancement

This theme reflects the significance of Welsh language sensitivity in healthcare and its effect on the quality of care provision for Welsh speakers. Several features were identified from the data, based on the process and outcome of offering language choice to bilingual patients and clients. These features are represented within a number of defined categories and these are depicted in a Category Tree (Figure 8).

Facilitating language choice

A vast number of meaning units were contained within this category and these were associated with three minor categories, namely, identifying, documenting and responding to language choice. Some individuals claimed that language needs within healthcare are often invisible. As a result, respondents spoke of a variety of measures used to identify the language choice of their patients and clients. These range from direct questioning of the patient to more subtle, intuitive approaches. Although some claimed to establish language preference at the patient's first visit, others suggested that it should be confirmed earlier, at the point of referral.

The data shows that documenting the patient's language choice in the nursing records is a formal requisite in some healthcare organisations, but not within others. Further measures were also demonstrated, where language choice is displayed on the patient's identity band. Many respondents claimed that the way in which healthcare professionals respond to patients' language choice is largely ad hoc, depending on a number of factors, including their Welsh language proficiency and the skill mix of healthcare professionals, as well as the availability of interpreters. This is illustrated in the following quote:

> *"I think the facilities are there but they are not actually - they're not in a structured, formal way. If somebody were to ask, then we would actually make sure that there was someone there who was a Welsh speaker."* (Interviewee 71)

Welsh speakers talked of communicating in Welsh with patients and clients, although they may interject English words where they are unfamiliar with the Welsh terms. On the other hand, those who are not proficient in Welsh described their reliance on Welsh speaking colleagues, relatives or friends to interpret on their behalf. Even those with limited Welsh proficiency demonstrated their efforts to adopt Welsh greetings with patients and clients. However, some respondents were sceptical of the value of such efforts, claiming that it raises the expectations of patients and undermines the confidence of healthcare professionals.

Facilitating expression

This category contained a vast number of meaning units and a diversity of perceptions was identified. The majority of respondents recognised that providing language choice for patients and clients facilitates expression and this was associated with three minor categories. As well as enhancing communication, language choice was also perceived to enhance feelings of comfort amongst patients and clients, particularly amongst vulnerable client groups, such as young children, older people, those with mental health problems and clients with learning disabilities. This is illustrated in the following passage:

> *"Dy' nhw (yr henoed) ddim mor gyfforddus yn y Saesneg. Mae nhw heb gael eu codi lan gyda defnyddio'r Gymraeg a'r Saesneg mor gymaint. So mae gyda ni, wel (rydym) ni wedi gorfod tyfu lan gyda fe, so chi ddim yn meddwl ambiti fe cymaint – chi'n eitha' hapus i siarad*

'da rhywun yn y Gymraeg neu'r Saesneg. Gyda'r henoed, dwi'n credu fod o'n eitha' pwysig bod nhw'n – os oes rhywun i gael, fydda'i lot well 'da nhw i siarad 'da rhywun yn y Gymraeg, just i wneud nhw deimlo'n fwy cyfforddus dwi'n credu i ddechrau efo – yn enwedig os 'ma fe ambiti rhywbeth fel iechyd.". (Interviewee 26)

("They (the elderly) are not as comfortable with using English. They haven't been raised to use Welsh and English as much. So we have, well, we've had to grow up with it, so you don't think about it as much – you are quite happy to speak to somebody in Welsh or in English. With the elderly, I believe that it is quite important that they, if there is someone available, they would much prefer to speak to someone in Welsh – just to make them feel more comfortable to start with – especially if it's about something like health." - Interviewee 26*)*

In contrast to this belief, a few respondents were of the opinion that, since most Welsh speakers also speak English, providing language choice for patients and clients has little or no effect on facilitating expression, as illustrated by the following quotation:

"All Welsh speakers speak very good English and are very capable of taking home the message that we want in English." (Interviewee 62)

Facilitating a holistic approach
This category contained a modest number of meaning units. These included the respondents' claims that identifying with the individual through their preferred language facilitates a holistic and patient-centred approach to care, as illustrated below:

"Sometimes through speaking their own language - recognising, you know, their own language, it means as well that you recognise them as a whole person." (Interviewee 2)

Establishing relationships
A diversity of responses was contained within this category, which demonstrated contrasting perceptions with regard to the way in which using the client's preferred language helps establish relationships in clinical practice. Most Welsh speaking respondents described a shared language as a bond between themselves and the client:

"I'm able to bond with them (the Welsh speaking patients) in a way that the other nurses (non-Welsh speaking) can't bond with them, and I feel that then, that (the) patient, because I've bonded with them, is then more than happy to relax with me and to tell me what the problems are and how I can help. And that gives you a sense of being a little bit more special, because you're a bit more aware – it's just a shame I'm not superb at Welsh". (Interviewee 30)

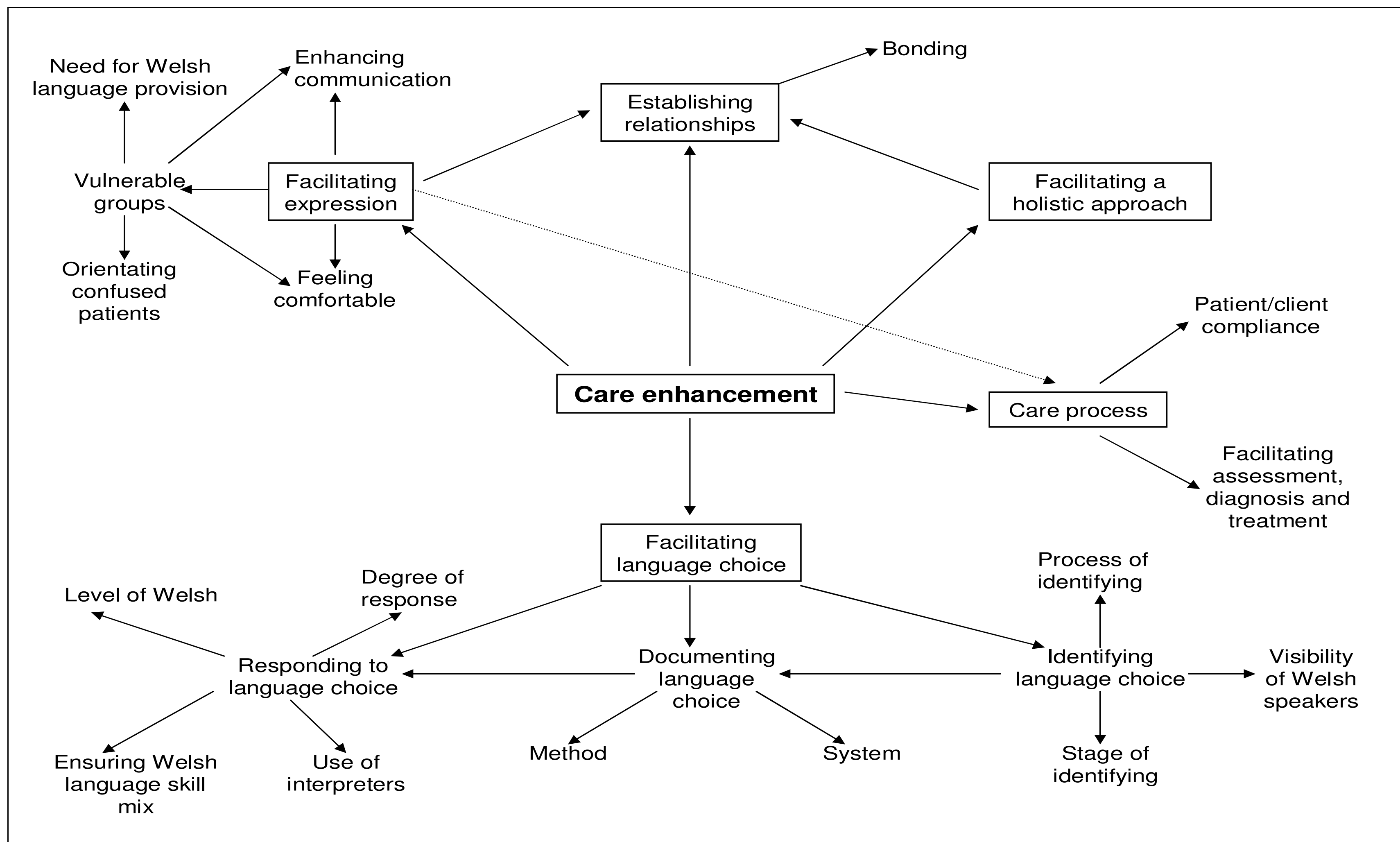
Care process
This category contained a number of meaning units, where the vast majority of respondents agreed that facilitating communication through language choice leads to overall enhancement of healthcare provision. Respondents claimed that assessment is considered to be more effective in the client's preferred language, thus facilitating a more accurate and prompt diagnosis and effective treatment option, leading to improved compliance. For example:

“Os nad oes modd i’r claf esbonio’n glir, yn Saesneg, mae’n gallu cael effaith mawr ar y diagnosis a fel ‘yn ni’n trin nhw”. (Interviewee 29)

(“If the patient can’t explain clearly, in English, this can have a huge effect on the diagnosis and how we treat them” - Interviewee 29)

See Appendix 30 for Thematic Chart 2: Care Enhancement.

Figure 8 - Theme 2: Care Enhancement Category Tree



Theme 3: Organisational Issues

This theme reflects issues related to the infrastructure of service provision and its impact on Welsh language provision. Several features were identified from the data, based on the perceived need for a Welsh language service, the organisation's responsibilities and the application of Welsh in clinical practice. These features are represented within a number of defined categories and these are depicted in a Category Tree (Figure 9).

Organisational Accountability
This major category contained a large number of responses with a total of two minor-categories and seven sub-categories. A range of responses concerned the cost and time implications of investing in a bilingual service for patients. All respondents realised the added costs of providing a Welsh service but many resented this expenditure believing that the money should be spent on other, 'more clinical' resources. For example:

> *"I just feel to a certain extent there's a lot of money being spent (on the Welsh language) that could be spent elsewhere (in the health service)".* (Interviewee 63)

However, other practitioners recognised that the cost of a bilingual service is a legitimate outlay for the organisation.

Related to cost is the issue of time, and the difficulty of meeting client needs, as the following respondent indicates:

> *"Mae dau broblem – un, y problem o dim amser, achos bod y nyrsys a'r doctoriaid yn rhedeg bobman. A hefyd y problem – does dim lot o Gymreictod gyda'r staff".* (Interviewee 29)
>
> (There are two problems – one is the problem of no time, because the nurses and doctors are running everywhere. And also the problem of the staff not being very Welsh – Interviewee 29*)*

An issue of concern to several respondents was the quality of the translation service offered by the organisation. As well as issues of time constraints, the accuracy and appropriateness of translation was a major concern that reflected practitioner accountability as described by the following respondent:

> *"There is a bit of an issue regarding this because what has been happening recently is that the Trust pays to have somebody translate the information, but to be honest, myself and the other Welsh speaker, we do have a sort of veto of the information given, because our feelings are that the information tends to be translated literally so we have been, sort of, editing it a little bit to make it a bit more user friendly".* (Interviewee 51)

A range of responses was observed in relation to the numbers and recruitment of Welsh speaking healthcare professionals by organisations. Numbers of Welsh speaking healthcare professionals varied between areas and departments, but was also related to the low levels of Welsh speakers available within some professions.

Language of Healthcare
This category confirms the perceptions of some respondents that introducing Welsh into healthcare carries an element of risk and misunderstanding. Three minor categories were identified in all, in which strength of feeling was evident. Where two languages co-exist, some respondents were concerned about the risks of misunderstanding and misinformation, both on the part of the practitioner and the patient or client, for example:

> *"There are these subtleties in language which makes the context completely different, just by a single word. Misunderstandings can't happen in medicine – you have to be extremely precise with it."* (Interviewee 36)

A prominent perception articulated by the respondents was the acceptance that English was the universal language of clinical practice and science, as outlined by the following respondent:

> *"We're never going to write medical notes in Welsh, you know, which would be dangerous. Imagine trying to – we're moving aren't we to a an integrated care record system – where people's details will be available to the appropriate person – to any clinician, you know, so if you go on holiday to Scotland your record will be available. Well, it would be idiotic wouldn't it if they were in Welsh? So we can't keep medical records in – other than English."* (Interviewee 34)

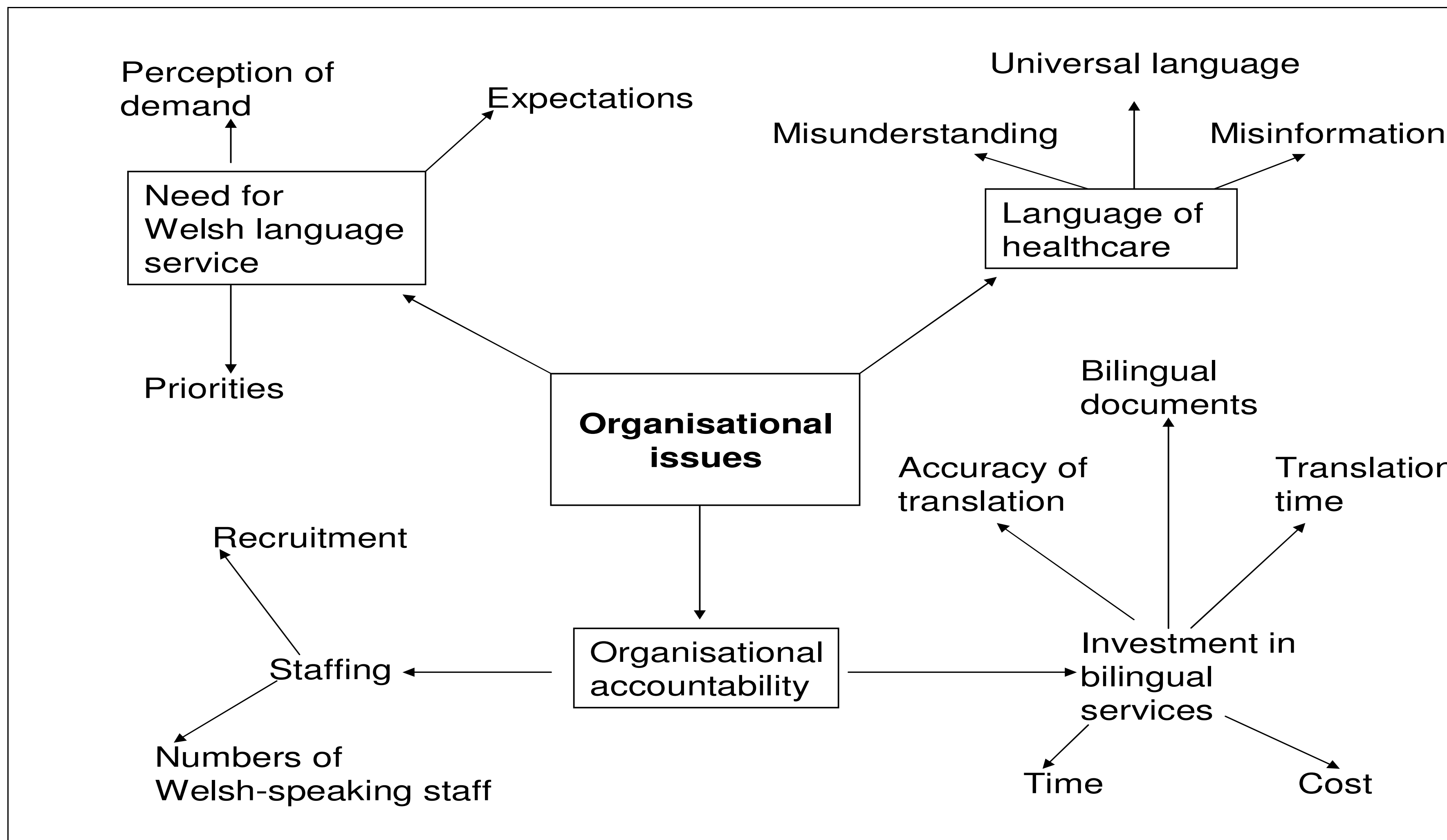
Need for Welsh Language Service
The final category describes the need for a Welsh language service in healthcare, as perceived by the practitioners. Many respondents questioned the demand by patients and clients for a Welsh service. Aligned to this view was the acceptance, by patients, of an English only service when they entered the healthcare arena. This is further strengthened where practitioners perceive Welsh language services as an unnecessary luxury rather than a quality issue, as exemplified by the following quotation:

> *"I think for the patient the priority is their health, it's not the language."* (Interviewee 8)

This highlights the lack of appreciation by some healthcare professionals of the need for a bilingual service for patients.

See Appendix 31 for Thematic Chart 3: Organisational Issues.

Figure 9 – Theme 3: Organisational Issues Category Tree



Theme 4: Training Implications

This theme reflects the education and training implications of Welsh language provision in healthcare. Several features were identified from the data, based on the nature of the education and training implied as well as the process of establishing such training for healthcare professionals. These features are represented within three main categories, and these are depicted in a Category Tree (Figure 10).

Welsh language learning
This category contained a vast number of meaning units, reflecting a diversity of perspectives on Welsh language learning in healthcare. A total of nine minor categories emerged from the data.

A range of responses was observed concerning the need for Welsh language classes in healthcare and the willingness of healthcare professionals to participate. Whilst they were clearly supported by many, particularly for people moving into Wales, others felt that they were not a priority and should not be made compulsory. A range of responses was also noted concerning the level of Welsh language proficiency required for bilingual practice. Some respondents were observed to value the opportunity of developing a social level of Welsh discourse, whilst others stated that anything short of proficiency is ineffective. For example:

> *"To me, I think, if you're going to learn it you need to learn it. I mean, it's all very well being able to say good morning, but if somebody's got pain, or if a relative is worried ...it's no good me just saying good morning and then..you know, ok, I led you in, but now that's a blind alley, now talk to me in something I can und......you know, what's the point?" (Interviewee 76)*

Furthermore, a number of practitioners were concerned that using limited Welsh may give their patients and clients unrealistic expectations regarding the availability of a Welsh language service. However, many questioned the effectiveness of Welsh language classes in achieving proficiency for practice.

A range of responses was observed in relation to releasing healthcare professionals to attend Welsh language classes. These were related to access and flexibility, release from clinical duties and cost. Whilst they were perceived to be well supported by some, others questioned the prioritisation of funding for such initiatives. This is articulated in the following statement:

> *"This comes back to the lack of staff and releasing people. We release people like, say for, physio courses. That would have to be the priority, so it (Welsh classes) would come lower down the scale".* (Interviewee 33)

Even fluent Welsh speakers may shy away from using Welsh in the workplace, as a result of a lack of confidence in their language proficiency. Despite such limitations, respondents demonstrated mixed feelings concerning the need for Welsh language refresher courses in practice, from commitment to indifference.

Some respondents claimed that encouraging practitioners to learn Welsh may dissuade healthcare professionals from working in Wales. This was noted to be particularly evident in circumstances of extreme staff shortages, such as dentistry. In contrast to this stance, others supported the introduction of financial incentives for those with Welsh language proficiency.

The respondents were observed to have mixed feelings about where the responsibility lies for Welsh language learning. Some stated that such training is the responsibility of employing organisations, and as such, should be incorporated into staff induction programmes, whilst others stated that the responsibility lies with individual practitioners.

Welsh language awareness training
Further to learning Welsh, language awareness training was identified by many respondents as a key component in preparation for practice within bilingual healthcare settings. This category contained a number of meaning units and four minor categories emerged from the data.

A range of responses was observed with regard to the need for Welsh language awareness training in healthcare. Whilst some questioned its value, others viewed it as essential preparation for practice in bilingual settings, particularly for people moving in to Wales, as illustrated in the following extract:

> *"You need to make them (people coming into the area) aware of Wales. You know, (tell them) the areas where people do, sort of, speak Welsh are, and everything – and being sensitive towards it. I don't think there's any harm in that at all".* (Interviewee 31)

Of those respondents who were observed to support Welsh language awareness training in healthcare, some stated that such training should be incorporated into formal healthcare education programmes, such as medicine and nursing. Others suggested that such initiatives should be introduced within staff induction programmes.

Welsh medium healthcare education
This category contained a modest number of meaning units, reflecting a diversity of perspectives on Welsh medium healthcare education. Two minor categories emerged from the data.

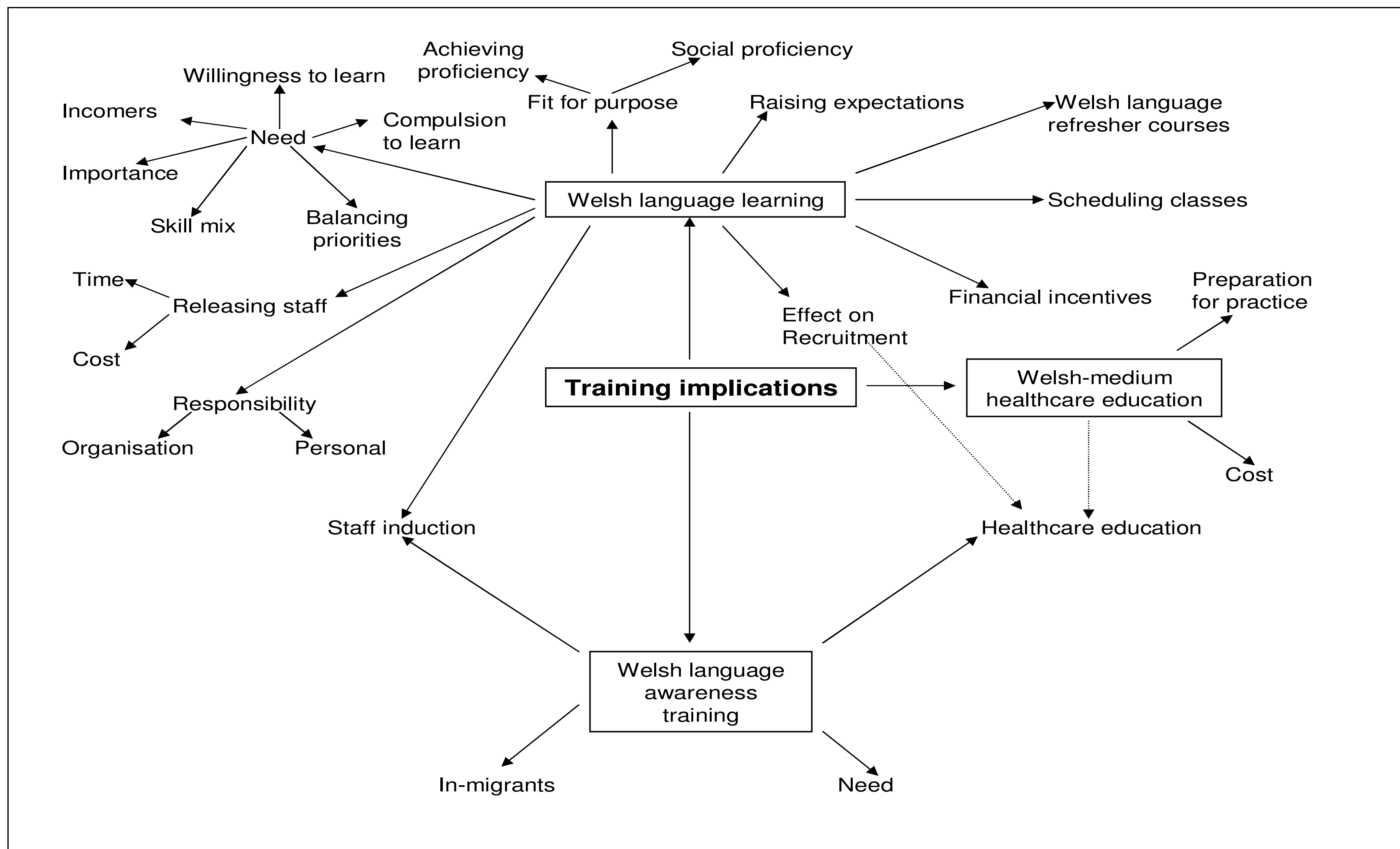
A small number of respondents stated that healthcare education programmes should offer Welsh-medium provision within curriculum delivery, as a way of preparing students for bilingual practice. For example:

> *"Dwi'n meddwl fasa hynna'n helpu dipyn bach (cael sesiynau hyfforddiant bydwreigiaeth drwy'r Gymraeg). I bobl ddeall felly, pwysigrwydd felly, os ydyn nhw yn teimlo'n well felly, cael y sesiynau yma trwy'r iaith Gymraeg felly. Mae nhw'n mynd i ymateb yn well, felly yn eu gofal nhw."* (Interviewee 75)
>
> (I think that would help a little (Welsh medium midwifery training). For people to understand like, the importance like, if they feel better like, having the sessions through the Welsh language like. They are going to respond better therefore in their care - Interviewee 75).

However, support for such developments was not universal and such initiatives were criticised by some on the grounds of costs.

See Appendix 32 for Thematic Chart 4: Training Implications.

Figure 10 – Theme 4: Training Implications Category Tree

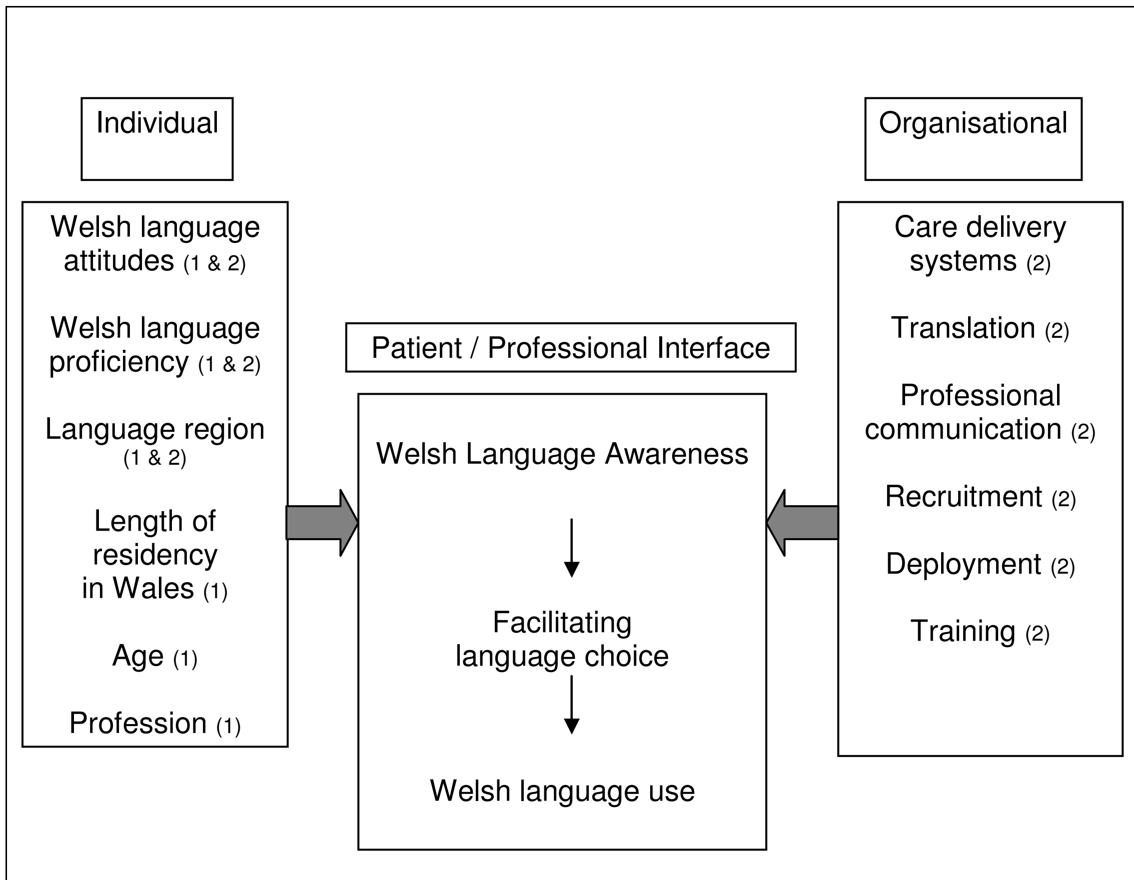


Discussion

The questionnaire survey provides a valuable overview of Welsh language awareness amongst healthcare professionals across Wales and identifies several factors that influence language sensitivity in practice. Further in-depth understanding of these issues is provided from the data arising from the qualitative interviews, which reflect a diverse range of opinions and experiences related to the Welsh language and its use in healthcare.

Drawing together the main elements of the quantitative and qualitative data and mapping and interpreting the data set as a whole, it is clear that facilitating language choice for patients and clients is influenced not only by the Welsh language awareness of individual practitioners, but also by a range of organisational factors within the healthcare setting. A model depicting the factors affecting language choice and Welsh language use in healthcare is illustrated in Figure 11. The model shows how the Welsh language proficiency and attitudes of practitioners, together with their level of exposure to the language and their professional discipline, influence their Welsh language awareness and the way in which they facilitate language choice for patients and clients. Furthermore, the model illustrates how organisational factors, including care delivery systems and recruitment, deployment and training schemes, further influence the level of Welsh language service provision in healthcare.

Figure 11 - Factors affecting Language Choice and Welsh Language Use in Healthcare



1 = evidence from Phase 1 Questionnaire Survey; 2 = evidence from Phase 2 Qualitative Interviews

Focussing initially on the individual factors that affect language choice in practice, the data show that the extent to which practitioners use Welsh in healthcare is strongly influenced by their individual Welsh language proficiency. Such proficiency, in turn, is influenced by their exposure to the Welsh language, by way of residency, and their professional discipline. It is hardly surprising, therefore, that the greater the proportion of Welsh speakers within the language regions, the greater the use of Welsh by healthcare professionals, particularly amongst the Clinicians group.

The overall levels of Welsh language proficiency within the sample appear significantly higher than the levels reported within the census data (National Assembly for Wales 2003). This may be partly explained by the fundamental differences in the two population samples, as well as an inevitable biased response from Welsh speakers. Nevertheless, although there may be an over-estimation of the levels of Welsh language proficiency amongst the sample, there is encouraging potential for enhancing the language proficiency of practitioners across Wales.

Given that most healthcare professionals across Wales have limited proficiency in Welsh, they are more likely to use Welsh in informal rather than formal patient encounters, such as providing reassurance. Indeed, even those who are fluent Welsh speakers often lack confidence in using Welsh within complex medical encounters. Nevertheless, even a limited use of Welsh, in the form of simple greetings, can help establish a bond between the practitioner and patient and there is evidence to support the claim by Misell (2000) that Welsh speaking patients appreciate healthcare professional's efforts to use Welsh in clinical practice, as illustrated below:

> *"Sometimes I'll be (eye) testing, and I'll be asking the child – telling the child what to do in Welsh, but there's no way I'd say I'm fluent – it's just phrases I've picked up that I can use when I'm testing, and I'll say another test – that I really can't get a handle on, what I need to say – I'll say "now Mum, I'm going to need your help on this one – what I want you to say – explains this". And the parents are great! And it's evident – they'll often say 'we appreciate that you're trying'. Now that's really nice, 'cos we are trying."* (Interviewee 6)

The findings demonstrate a strong correlation between Welsh language proficiency and attitudes towards the Welsh language in healthcare. This is illustrated by the fact that practitioners from those language regions with the highest proportion of Welsh speakers are more likely to have positive perspectives on bilingualism and its implications in practice than those from regions with lower proportions of Welsh speakers. Nevertheless, the data reveal that, regardless of proficiency, there is a substantial proportion of healthcare professionals across Wales who demonstrate positive attitudes to the Welsh language in healthcare. Indeed, the cluster analysis confirms the absence of any clusters of respondents with negative attitudes. This is an encouraging finding, since facilitating language choice in practice often hinges on the sensitivity of non-Welsh speakers (Misell 2000).

Although the Clinicians group report the greatest levels of Welsh language proficiency within the sample, the Nursing group reflect the most positive attitudes towards the Welsh language in healthcare. This is not surprising since, of all the professional groups, they are the practitioners who are most likely to develop close therapeutic relationships with patients and clients. Their length of residence in Wales is also noted to be significantly greater than the other professional groups.

The results demonstrate that personal attitudes and perceptions about the Welsh language and its speakers are influenced by a range of factors, including individual experiences, education and exposure to Welsh. These attitudes are often reflected within the interactions of professionals with their patients and clients, as illustrated below:

> *"Da chi'n gallu helpu nhw (y cleifion sy'n siarad Cymraeg fel iaith gyntaf) lot mwy – achos yn aml iawn – mae'n nhw'n mynegi problemau - dydy nhw erioed wedi sôn wrth rhywun Saesneg wyrach - dwi di ffeindio – os da chi'n siarad Cymraeg efo rhywun, mae'r ffordd mae'r teulu yn helpu nhw a'r ffordd mae'r capel - mae eu holl ffordd o fyw – mae'r ...cylch yn wahanol rhywsut." . "Efo'r Saeson, dydi teulu ddim cweit mor bwysig – dydi'r gymuned – di'r capel a'r gymdeithas mewn pentrefi bach, ddim cweit mor bwysig i rhywun sy'n byw yn y dref – felly agweddau yne yn dod i fewn hefyd."* (Interviewee 48)
>
> (You can help them a lot more (the patients who speak Welsh as a first language) because very often – they are conveying problems – they may have never mentioned to an English person perhaps – I have found if you speak Welsh with somebody, the way that their family help them, the chapel – their whole way of life – the circle is different somehow". "With the English, family is not quite as important – the community – the chapel and the community in small villages – are not quite as important for somebody who lives in the town – so those attitudes come into it too - Interviewee 48)

Practitioners who exhibit less favourable attitudes to the Welsh language seldom appreciate the need for Welsh language services in healthcare and reflect their biases and insecurities in their encounters with patients and clients, for example:

> *"If I had a patient who refused to speak to me pre-operatively in Welsh unless I spoke Welsh, … I frankly don't know what I would do. The option is either to .. humour the patient or to walk away – I suppose it depends on what time of the day it was! How rough the previous night was, I can be pleasant, but I can be unpleasant - it's like anybody else".* (Interviewee 9)

Furthermore, where practitioners perceive a low demand for Welsh language services, as is often the case within Language Region 3, bilingual provision is often viewed as unnecessary and irrelevant, for example:

> *"If you're in this sort of area (in Wales) there's not much incentive for me to actually learn Welsh, you know, because none of my patients use Welsh".* (Interviewee 61)

Whilst the language awareness and proficiency of healthcare professionals clearly influence language choice in practice, organisational factors also impact on the experiences of patients and clients and influence their opportunities for language choice in healthcare.

The findings demonstrate that, overall, there is a general lack of consideration of the language needs of Welsh speakers in the delivery of healthcare at the organisational level, with little evidence of planning for Welsh language provision. Whilst practitioners are often aware of these deficits, and rank them as essential elements of an effective bilingual service, the study reveals few examples of formal initiatives

or schemes to enhance language choice in practice. Indeed, these critical shortfalls were raised by Misell in 2000.

The absence of routine systems for documenting language choice in healthcare can lead to a lack of consideration of patients' language needs, where the overall quality of care provision may be compromised, as depicted by the following respondent:

> *"I know I've been working with a man regularly, weekly, for about six months, before I realised that Welsh was his first language (laughs). I thought 'well, hang on, it is obvious really, you know, 'cos he had that kind of – there's something about a /S/ sound – I remember my granny having it."* (Interviewee 49)

Indeed, where there is a lack of formal systems and protocols to identify the language choice of patients and clients, practitioners often have to rely on their own intuition, as articulated by the following respondent:

> *"I can normally gauge who speaks Welsh and who can't"…. "Firstly, I look at their name. If they've got a Welsh name,…also if their cards are written in Welsh – their get well cards – I'll have a quick peek at them, and if they're written in Welsh, again, I know they speak Welsh, and sometimes you can just hear them over, one word might be a Welsh word, because they just tend to mix English and Welsh don't they? So if they do that – that's when I'll know they speak Welsh.".* (Interviewee 30).

Although many healthcare organisations now have access to translation services in order to fulfil the requirements of their Welsh language schemes, many practitioners face practical difficulties in using such services and ensuring an efficient and timely response.

> *"We need to have translations done quickly and efficiently, that is, back on my desk straight away. That would be nice because that is a barrier to doing something, you know. We would do an instruction sheet on something but it's going to be such a fiddle getting the translation that we don't bother to do it at all." (Interviewee 18)*

The limited numbers of Welsh speakers within some professions and within certain areas undoubtedly present a barrier to Welsh language service provision. In an attempt to correct this deficit, there is evidence that some organisations seek to actively recruit Welsh speakers to key posts, particularly those in contact with vulnerable groups. Despite such efforts, the recruitment of Welsh speakers to specialist services remains highly problematic as illustrated below:

> *"The only problem is that we've not got enough (Welsh) Speech Therapists and there's a waiting list, so that's, if you like, not good enough. The fact that we do offer the service, yes, that's good, it's just the waiting list - we need more Speech Therapists who can speak it (Welsh)." (Interviewee 82)*

Even where there are adequate numbers of Welsh speakers amongst practitioners, inappropriate deployment of healthcare professionals can have a detrimental effect on clients, particularly amongst those with the greatest need. This is illustrated by the following account:

“Dy’ nhw (y rheolwyr) ddim yn cymryd o i fewn bod chi’n Gymry Cymraeg felly, ac yn fwy ‘suited’ i fynd i fewn i’r ward (lle mae’r mwyafrif o’r merched Cymraeg eu hiaith)”…“O ran yr ysbyty felly, dy’ nhw ddim yn gwneud dim gwahaniaeth, i trio cael y sort of, bydwraig (Cymraeg) i dudwch, edrych ar ei hôl hi (y ferch).” (Interviewee 75)

(They (the managers) don’t take into account that you are a Welsh speaker like, and more suited to go into the ward (where the majority of Welsh speaking women are admitted)”. “The hospital doesn’t differentiate – to try to, sort of, have the (Welsh speaking) midwife, to say, look after her (the woman) - Interviewee 75)

Many organisations attempt to overcome recruitment problems by offering Welsh language training for healthcare professionals. However, despite such provision, access to classes is often problematic. Furthermore, practitioners tend to criticise traditional teaching styles in favour of training that is fit for purpose. Indeed, the findings suggest that, older practitioners become disillusioned with learning Welsh, a trend previously identified by Misell (2000). This finding has important implications for the effective delivery of Welsh language classes for healthcare in future and improving the language proficiency of healthcare professionals.

Conclusions

The study concludes that:

1. Language choice in healthcare is influenced by a range of individual and organisational factors within the healthcare setting.

2. Individual factors that affect language choice for patients and clients include the Welsh language proficiency and confidence of healthcare professionals, as well as their attitudes towards the Welsh language.

3. Organisational factors that affect language choice for patients and clients include the availability of procedures to identify and facilitate the language preference of service users.

4. Regardless of Welsh language proficiency, large proportions of practitioners demonstrate positive attitudes towards the Welsh language in healthcare and facilitate language choice for patients and clients.

5. An equally large proportion of healthcare professionals demonstrate neutral attitudes towards the Welsh language in healthcare. This, coupled with a lack of fluent Welsh speakers highlights a need for Welsh language awareness training in healthcare that enhances both the Welsh language sensitivity and proficiency of practitioners.

Recommendations

This research gives rise to a number of recommendations that provide a way forward in order to enhance Welsh language awareness amongst healthcare professionals and facilitate language choice for service users across Wales. These focus on enhancing the Welsh language awareness and proficiency of healthcare professionals; developing language awareness initiatives that help prepare healthcare students for practice in bilingual healthcare settings and developing appropriate language awareness measures that may enable healthcare professionals to respond to the language needs of patients and clients.

In view of the range of linguistic diversity across the language regions, it is inevitable that certain regions will be in a stronger position than others to implement the recommendations. Indeed, some of the initiatives outlined have already been developed in some areas and within some healthcare organisations. Healthcare organisations within this context include NHS Trusts, LHB's, private hospitals, private nursing homes, and voluntary healthcare organisations. In view of such diversity, it is envisaged that regional differences may influence the rate of implementation of the proposed recommendations.

In order to facilitate the implementation of the recommendations, examples are provided of how they may be achieved. These represent the ideas of the research team or survey respondents and are distinct from the actual recommendations.

In summary, it is envisaged that these recommendations provide valuable opportunities to enhance Welsh language awareness amongst healthcare professionals and thus facilitate language choice for patients and clients across Wales.

Recommendation 1
Healthcare organisations to encourage healthcare professionals to enhance their Welsh language awareness in practice.

(i) Healthcare organisations to consider developing their provision of Welsh language awareness programmes for all healthcare professionals.
For example, Welsh language awareness programmes might be included within staff induction courses and on-going training across Wales.

Justification

- An analysis of the distribution of attitudes across the language regions confirms that 58% of the survey respondents demonstrate neutral or negative attitudes towards the Welsh language in healthcare (Table 5, page 13; Appendix 14, page 68).
- These attitudes are more likely to be reflected amongst practitioners from those language regions with the lowest proportion of Welsh speakers (Table 5, page 13). This suggests that there is a particular need for Welsh language awareness programmes in these areas.
- EQS structural equation analysis shows that the Welsh language proficiency and attitudes of practitioners influence their Welsh language awareness in healthcare (Figure 6, page 16).
- A number of survey interviewees identified the need for Welsh language awareness training in healthcare, particularly within staff induction programmes (Figure 10, page 33; Code 4.2, pages 122-123).
- An appropriate training pack, 'Iechyd Da' (WAG, 2004) is available for healthcare organisations across Wales.

(ii) Healthcare organisations to consider tailoring their provision of Welsh language courses to maximise their effectiveness for healthcare professionals, thereby enhancing Welsh language choice for patients.
For example, healthcare organisations could target specific healthcare professionals, such as those working with vulnerable patient/client groups.

Justification

- Although only 19% of the survey respondents are fluent Welsh speakers, 52% can speak at least some Welsh (Appendix 5, page 62). This suggests that there is encouraging potential for enhancing the language proficiency of healthcare professionals.
- The lowest proportion of Welsh speaking practitioners is to be found within those language regions with the lowest proportion of Welsh speakers (Appendix 5, page 62). However, in view of their population density, these regions employ the greatest proportions of healthcare practitioners. This suggests that there is a need to tailor the provision of Welsh language courses in these areas.
- EQS structural equation analysis shows that the Welsh language proficiency and attitudes of practitioners influence their Welsh language awareness in healthcare (Figure 6, page 16).
- A number of survey interviewees identified the need for tailor made, fit for purpose, accessible Welsh language courses for healthcare professionals (Figure 10, page 33; Code 4.1, pages 117-122).
- A Welsh language refresher course for healthcare professionals, 'Cyfathrebu'n Hyderus' (UWB, 2003) is available for healthcare organisations across Wales.
- A number of healthcare organisations are committed to providing Welsh language classes for staff as part of their Welsh language schemes.

Recommendation 2
Higher education institutions be encouraged to enhance Welsh language awareness amongst healthcare students.

(i) Higher education institutions to consider developing their provision of Welsh language awareness programmes within all pre-qualifying healthcare professional courses.
For example, course directors might review their curricula in order to include Welsh language awareness programmes.

Justification

- An analysis of the distribution of attitudes across the language regions confirms that 58% of the survey respondents demonstrate neutral or negative attitudes towards the Welsh language in healthcare (Table 5, page 13, Appendix 14, page 68).
- These attitudes are more likely to be reflected amongst practitioners from those language regions with the lowest proportion of Welsh speakers (Table 5, page 13). This suggests that there is a particular need for Welsh language awareness programmes in these areas.
- EQS structural equation analysis shows that the Welsh language proficiency and attitudes of practitioners influence their Welsh language awareness in healthcare (Figure 6, page 16).
- A number of survey interviewees identified the need for Welsh language awareness training in healthcare, particularly within healthcare education courses (Figure 10, page 33; Code 4.2, pages 122-123).
- An appropriate training pack, 'Gair o Gysur/Words of Comfort' (UWB, 2003) is available for higher education institutions across Wales.

(ii) Higher education institutions to consider developing aspects of their courses in bilingual format to support healthcare students to use their Welsh in practice.
For example, higher education institutions could work collaboratively to build on current bilingual provision and consider a shared learning approach between institutions.

Justification

- A number of survey interviewees, regardless of their levels of Welsh language proficiency, identified the advantages of using their Welsh in order to facilitate patient expression, establish therapeutic relationships, facilitate a holistic approach and enhance the healthcare process (Figure 8, page 27; Codes 2.2–2.5, pages 105-110).
- In view of their limited proficiency in Welsh, many healthcare professionals are more likely to use their Welsh in informal rather than formal patient interactions (Figure 4, page 12). This suggests a need to prepare students to use their Welsh language skills in practice.
- A number of Welsh speaking survey interviewees identified the need for bilingual provision in healthcare education, as a way of enhancing their communication with patients and clients (Figure 10, page 33; Code 4.3, pages 123-124).
- The Welsh Medium Teaching Development Unit, University of Wales funds collaborative initiatives that support bilingual provision in higher education institutions.
- An appropriate training pack, 'Dysgu mewn dwy Iaith/Learning in two languages' (UWB, 2003) is available for higher education institutions in Wales.

Recommendation 3

Healthcare organisations be encouraged to consider their future needs for appropriately qualified healthcare professionals with the required levels of Welsh language proficiency.

For example:

(a) Healthcare organisations could inform higher education institutions of their requirements for appropriately qualified Welsh speaking healthcare professionals, particularly in ‘hard to recruit professions’, such as speech and language therapy.

(b) Healthcare organisations could consider establishing annual bursaries to encourage Welsh speaking students to enter ‘hard to recruit professions’, as a way of increasing the numbers of Welsh speakers within these professions.

Justification

- The proportion of fluent Welsh speakers amongst the survey respondents is low at 19% (Appendix 5, page 62).
- A number of survey interviewees explained that, in the absence of Welsh speaking healthcare professionals, a range of informal interpreter services are utilised, from patients’ relatives to ancillary staff (Figure 8, page 27; Code 2.1.3.3, page 105).
- A number of survey interviewees identified a shortage of Welsh speakers in their professions, particularly within specialist services, such as speech and language therapy. They further expressed a need to attract Welsh speakers into the healthcare professions (Figure 9, page 30; Code 3.1.2, page 113).
- An annual bursary has been established by one healthcare organisation to encourage Welsh speaking students to enter the medical profession.

Recommendation 4

Healthcare organisations be encouraged to develop appropriate measures to facilitate healthcare professionals in demonstrating their Welsh language awareness to patients and clients whose preferred language is Welsh.

(i) Healthcare organisations to consider appropriate measures to enable Welsh speaking healthcare professionals to identify the language preference of patients and clients.

For example:

Where Welsh speaking healthcare professionals are available, hospital/GP receptionists might ask patients their language preference.

(ii) Healthcare professionals be encouraged to show their Welsh language proficiency to patients and clients.

For example

All healthcare professionals could be invited to wear badges indicating that they are Welsh speakers or Welsh learners.

(iii) Healthcare organisations be encouraged to capitalise on the Welsh language proficiency of their healthcare professionals.

For example:

Healthcare professionals might volunteer their names onto lists of Welsh speakers readily available to act as interpreters.

Justification

- The provision of systems to identify and record the language choice of patients/clients was ranked by survey respondents as a very important item for developing an effective bilingual service in healthcare (Appendix 22, page 75).
- A number of survey interviewees highlighted the need to identify the language preference of patients and clients. (Figure 8, page 27; Appendix 30, Code 2.1.1, page 102-105).
- Establishing measures, such as the use of badges, to identify Welsh speaking staff was ranked by survey respondents as an important item for developing an effective bilingual service in healthcare (Appendix 22, page 75).
- A number of survey interviewees identified the need to inform patients and clients of the availability of Welsh speaking healthcare professionals within their healthcare setting (Figure 8, page 27; Code 2.1.3, page 104).
- The provision of interpreter services for patients and clients was ranked by survey respondents as the most important item for developing an effective bilingual service in healthcare (Appendix 22, page 75).
- Welsh speaker and Welsh learner badges are available from the Welsh Language Board.

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Appendix 1 Survey Questionnaire

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Appendix 2 – Generating the Survey Sample
Systematic random sampling was used in order to select healthcare professionals from each NHS Trust, private hospital and voluntary organisation. Total numbers of professional staff employed by each NHS Trust were identified from National Assembly for Wales Health Statistical Bulletins sb42-2003, sb43-2003, sb45-2002 and sb46-2002. Respective human resource departments confirmed the total numbers of professional staff employed by the private hospital and voluntary organisations selected. The sample was then calculated as follows:

- 5% of all identified Registered Nurses;
- 10% of all identified Ambulance Service Officers, Art/Music/Drama Therapists, Clinical Psychologists, Dietitians, General Dental Practitioners, General Practitioners, General Medical Physicians, General Medical Surgeons, Health Visitors, Midwives, Occupational Therapists, Optometrists, Pharmacists, Physiotherapists, Radiographers and Speech and Language Therapists.

Cluster sampling was adopted in order to select independent practitioners from the primary healthcare sector as well as practice nurses from GP surgeries and registered general nurses from private nursing homes.

The first step of this process involved categorising each local health board and private nursing home in relation to three distinct language regions of Wales, as described by the 2001 Census figures (National Assembly for Wales, 2003) (see Figure 1). The three language regions are identified according to the percentage of the population who speak Welsh, as follows:

- Language Region 1 - where 40 – 70% of the population speak Welsh
- Language Region 2 - where 20 – 39% of the population speak Welsh
- Language Region 3 - where 0 – 19% of the population speak Welsh

The second stage of the process was the stratified random sampling of each relevant employing organisation, according to region, in order to select the sample. General Medical Practitioner surgeries, General Dental Practitioner surgeries, Pharmacies and Opticians were identified from the Welsh Assembly Government HOWIS web site and private nursing homes from Bettercaring.co.uk. The sample was calculated as follows:

- 5% of all identified General Medical Practitioner surgeries (1 Practice Nurse selected from each)
- 10% of all identified private nursing homes (1 Registered Nurse selected from each)
- 10% of all identified General Dental Practitioner surgeries (1 General Dental Practitioner selected from each)
- 10% of all identified General Medical Practitioner surgeries (1 General Medical Practitioner selected from each)
- 10% of all identified Optometrists (1 Optometrist selected from each)
- 10% all identified Pharmacies (1 Pharmacist selected from each)

Stratification involved the proportional weighting of participants according to the three language regions.

Appendix 3 – Response Rates

Appendix 3a Response Rate according to Professional Group

Professional Post	% Received
Nursing	
Nurses	55%
Health Visitors	64%
Midwives	49%
Practice Nurses	74%
AHP	
Ambulance Services	68%
Therapists	77%
Dietitians	72%
Physiotherapists	69%
Radiographers	82%
Occupational Therapists	79%
Optometrists	67%
Speech and Language Therapists	76%
Clinicians	
Doctors	45%
Dentists	54%
Pharmacists	63%
Clinical Psychologists	51%

Appendix 3b Response Rate according to Sector

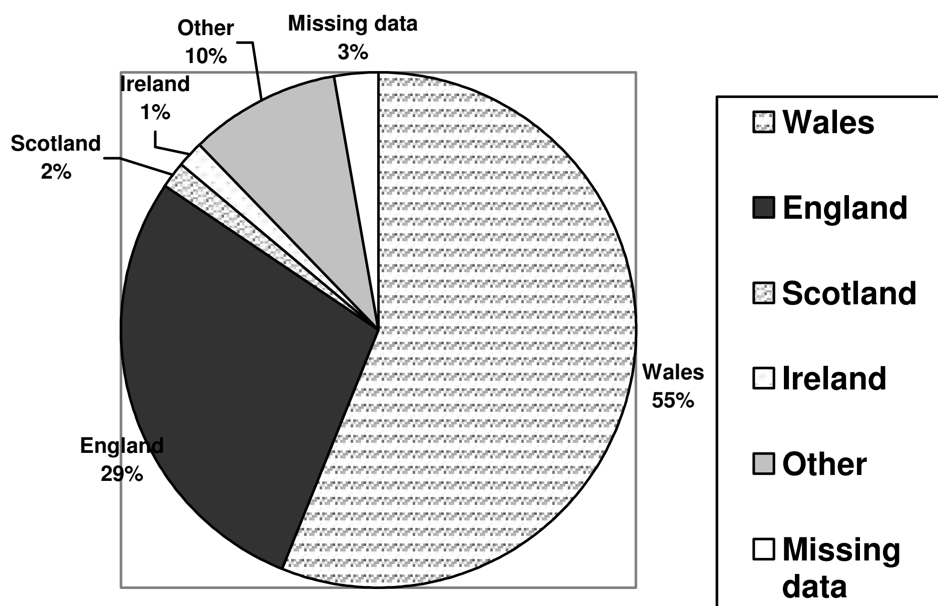
Sector	Sent	Received	Response Rate (%)
Public Sector	3220	1869	58%
Private Sector	97	61	63%
Voluntary Sector	41	38	93%
Overall	**3358**	**1968**	**59%**

Appendix 3c Response Rate according to Language Region

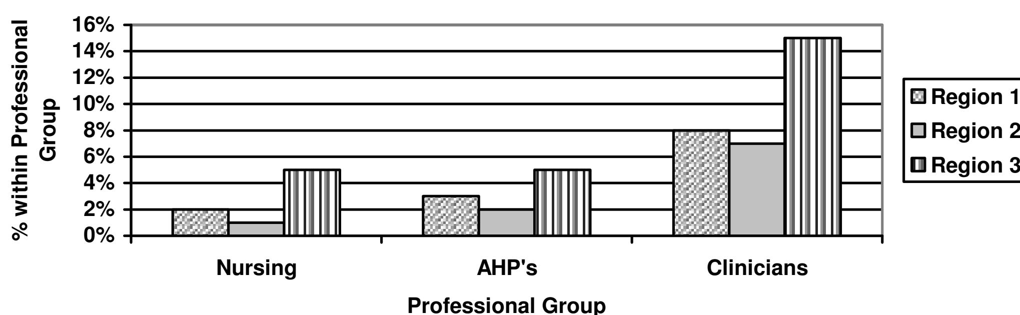
Region	Sent	Received	Response Rate (%)
Language Region 1	530	384	72%
Language Region 2	626	386	62%
Language Region 3	2202	1198	54%
Overall	**3358**	**1968**	**59%**

Appendix 4 Biographical and Socio-demographic Background of Survey Participants

Distribution of Respondents by Country of Birth



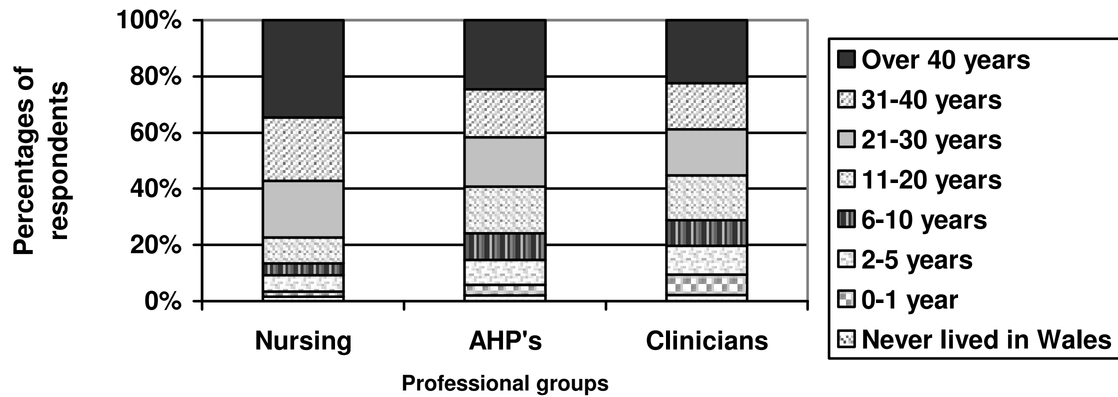
Percentages within Professional Groups able to speak another language other than English or Welsh



Other Languages Spoken (other than English or Welsh)
These are listed in alphabetical order, as follows:

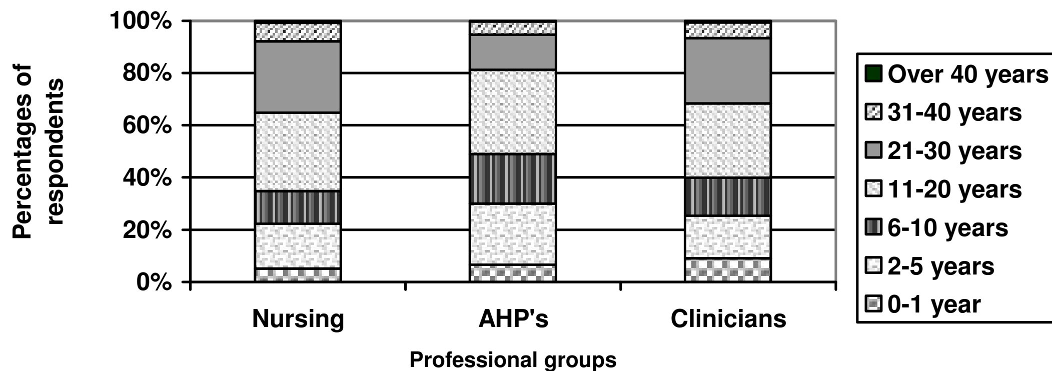
Afrikaans, Akam, Alsace – local language, Arabic, Aramic, Armenian, Basque, Bengali, British Sign Language, Bulgarian, Burmese, Cebuano, Chinese, Czech, Danish, Dutch, Fanti, Filipino, Finnish, French, Ga, Gaelic, German, Greek, Guirati, Gujarati, Hausa, Hindi, Hokkieu, Icurdish, Igbo, Indian, Irish, Italian, Kananese, Kannada, Kanuri, Khasi, Kurdish, Malay, Malayalan, Malayan, Mandarin Chinese, Marathi, Nepalese, Oriya, Polish, Punjabi, Pushto, Russian, Shona, Sinhalese, Slovak, Spanish, Swahili, Swedish, Tagalog, Tamil, Telegu, Thai, Twi, Ukranian, Urdu, Vietnamese, Visayan, Yuruba, Zou, Zulu.

Distribution of Respondents according to Length of Residence in Wales



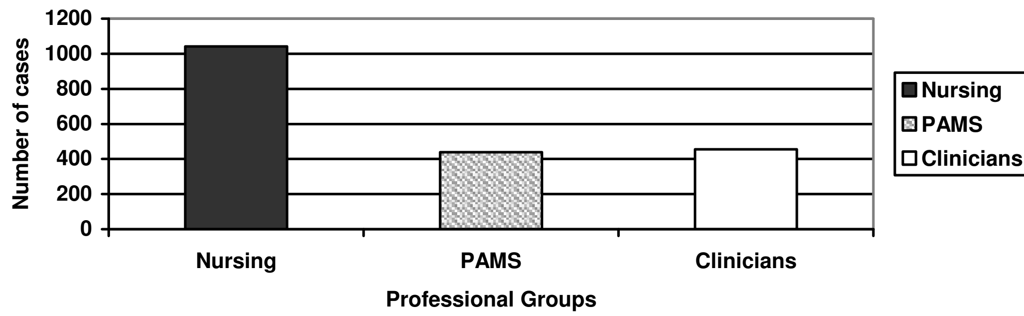
A one-way ANOVA conducted on the length of residence data showed that there was a significant difference between the groups, $F(2, 1928) = 41.25$, $P < .001$. Bonferroni post-hoc tests showed that the Nursing Group had lived in Wales significantly longer than the AHP group and significantly longer than the Clinicians Group. There was no significant difference between the AHP and the Clinicians Group in terms of length of residence in Wales ($p > .05$).

Distribution of Respondents according to Length of Service in Healthcare in Wales

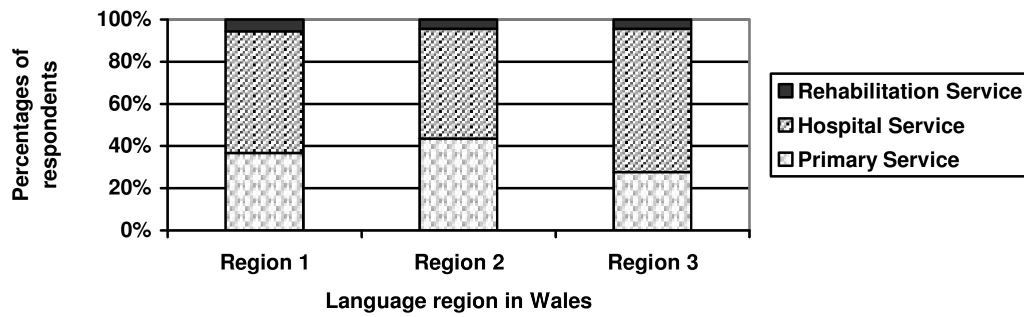


A one-way ANOVA conducted on the length of service in healthcare in Wales data showed that there was a significant difference between the groups, $F(2, 1927) = 15.29$, $P < .001$. Bonferroni post-hoc tests showed that the Nursing Group had worked in healthcare in Wales significantly longer than the AHP group, but not significantly longer than the Clinicians, and that the Clinicians had worked in healthcare significantly longer than the AHP group.

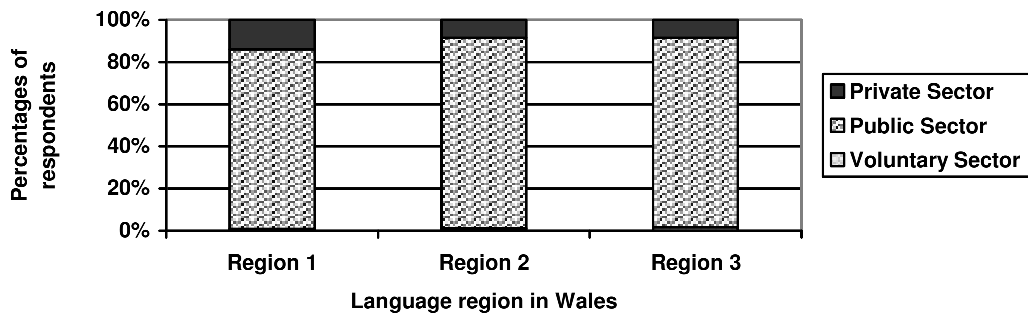
Distribution of Respondents by Professional Group



Distribution of Respondents by Healthcare Service



Distribution of Respondents by Healthcare Sector



Percentages of Respondents with over 60% of their clients representing Vulnerable Groups

	Children	Proportion of whole sample	The Elderly	Proportion of whole sample	Mental Health Problems	Proportion of whole sample	Learning Disabilities	Proportion of whole sample	Total proportions for whole sample
Nursing	12%	6%	42%	22%	14%	7%	3%	2%	37%
AHP	16%	4%	29%	6%	8%	2%	5%	1%	13%
Clinicians	9%	2%	16%	4%	6%	1%	1%	0%	7%
Column Total		**12%**		**32%**		**10%**		**3%**	**57%**

Appendix 5 Distribution of Respondents who are able to speak Welsh by Professional Group and Language Region

Speak Welsh	Total	Nursing	AHP	Clinicians	Language Region 1	Language Region 2	Language Region 3
N =	**(1966)***	(1042)	(436)	(456)	(384)	(385)	(1197)
	%	%	%	%	%	%	%
Very well	**13%**	12%	10%	19%	32%	13%	6%
Fairly well	**6%**	6%	7%	8%	11%	9%	4%
A little	**33%**	37%	33%	25%	34%	38%	31%
Not at all	**48%**	46%	51%	49%	23%	40%	58%

* n = 1966 due to missing data from two respondents

Appendix 6 Distribution of Respondents who are able to understand Welsh by Professional Group and Language Region

Understand Welsh	Total	Nursing	AHP	Clinicians	Language Region 1	Language Region 2	Language Region 3
N =	**(1966)***	(1041)	(437)	(456)	(384)	(385)	(1197)
	%	%	%	%	%	%	%
Very well	**15%**	14%	12%	22%	37%	17%	8%
Fairly well	**10%**	11%	8%	9%	15%	15%	6%
A little	**39%**	42%	41%	28%	36%	42%	38%
Not at all	**37%**	33%	39%	42%	13%	27%	47%

* n = 1966 due to missing data from two respondents

Appendix 7 Distribution of Respondents who are able to read Welsh, by Professional Group and Language Region

Read Welsh	Total	Nursing	AHP	Clinicians	Language Region 1	Language Region 2	Language Region 3
N =	**(1942)***	(1025)	(434)	(451)	(378)	(381)	(1183)
	%	%	%	%	%	%	%
Very well	**11%**	11%	10%	15%	27%	11%	6%
Fairly well	**8%**	7%	8%	10%	13%	11%	6%
A little	**25%**	27%	24%	21%	27%	30%	22%
Not at all	**55%**	54%	58%	53%	33%	47%	65%

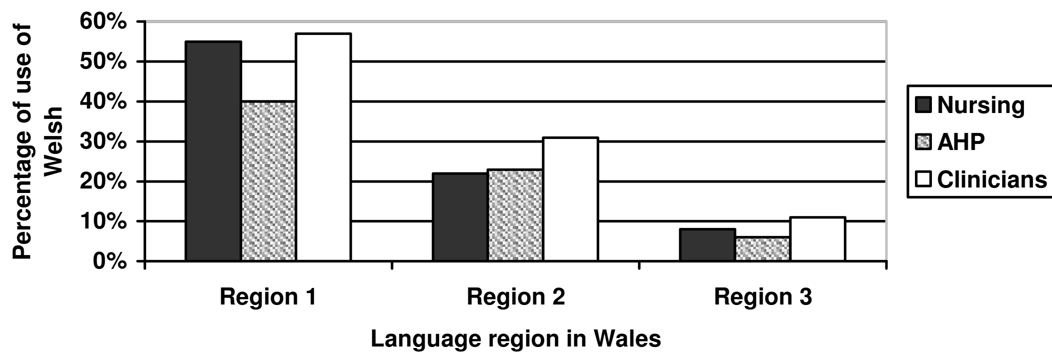
* n = 1942 due to some missing data

Appendix 8 Distribution of Respondents who are able to write Welsh, by Professional Group and Language Region

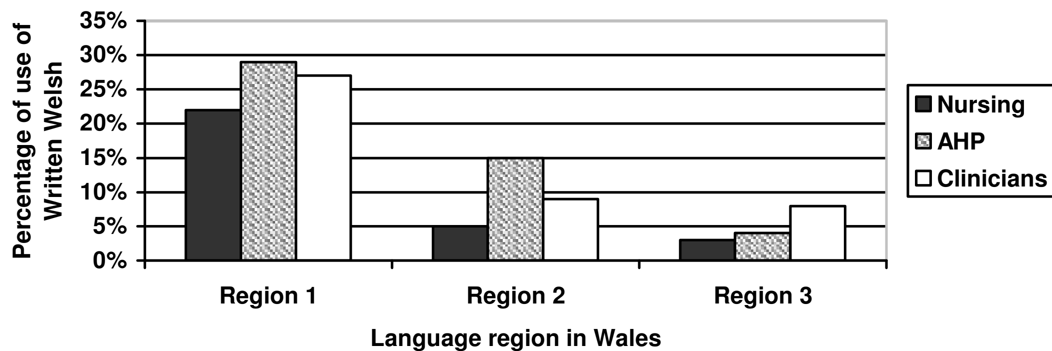
Write Welsh	Total	Nursing	AHP	Clinicians	Language Region 1	Language Region 2	Language Region 3
N =	**(1927)**	(1018)	(434)	(449)	(372)	(378)	(1177)
	%	%	%	%	%	%	%
Very well	**8%**	8%	6%	12%	20%	9%	4%
Fairly well	**7%**	6%	8%	9%	14%	8%	5%
A little	**21%**	23%	18%	19%	22%	26%	18%
Not at all	**62%**	62%	66%	58%	42%	55%	71%

* n = 1927 due to some missing data

Appendix 9 Respondents' use of Welsh with Welsh speaking Colleagues, by Professional group and Language Region



Appendix 10 Respondents' Use of Written Welsh in Healthcare, by Professional group and Language Region



Appendix 11 Attitude Factor Variances

Factor	Factor Name	Variance
Factor 1	Perspectives on bilingualism	15%
Factor 2	Addressing Clinical Needs	14%
Factor 3	Perspectives on Welsh language provision in healthcare	10%
Factor 4	Training implications for bilingual provision	8%

Appendix 12 Varimax Factor Loadings for Attitude Statements

FACTOR 1 – Perspectives on bilingualism		
#	**Statement**	**Factor Loading**
16.3	There is no need to offer a Welsh language service in health care because most Welsh speakers also speak English	.586
16.8	Focussing on Welsh language services in healthcare detracts from the issues that really matter to service users	.646
16.15	Focussing on Welsh language provision draws resources away from genuinely important problems in the NHS	.696
17.3	The Welsh language can be awkward in the healthcare setting	.554
17.4	Only in predominantly Welsh speaking areas should healthcare services be offered in both English and Welsh	.570
17.7	The Welsh language is too old-fashioned for medicine and healthcare	.545
17.13	It would be too expensive for all healthcare services in Wales to use English and Welsh equally	.507
FACTOR 2 – Addressing clinical needs		
#	Statement	Factor Loading
16.4	Welsh speaking patients and clients need fluent Welsh speaking staff	.464
16.5	Welsh language provision in healthcare is particularly important for older people (over 65)	.635
16.6	Offering a Welsh language service to Welsh speaking patients/clients enhances the quality of care provision	.568
16.9	Most Welsh speaking patients/clients feel more comfortable speaking Welsh to healthcare workers	.542
16.12	Welsh language provision in healthcare is particularly important for people with mental health problems	.695
16.14	Most Welsh speaking patients/Clients can express feelings more effectively in Welsh	.570
16.16	Some Welsh speaking patients/clients can only be effectively treated in Welsh	.512
17.14	Welsh language provision in healthcare is particularly important for people with learning disabilities	.615
FACTOR 3 – Perspectives on Welsh language provision in healthcare		
#	Statement	Factor Loading
16.2	There is not enough use of the Welsh language in healthcare in Wales	.475
16.11	Patients/clients should demand their rights and ask for a Welsh language service in healthcare in Wales	.471
17.5	Welsh language provision in healthcare is particularly important for children (between 0-16)	.407
17.6	In order to work in healthcare services in Wales, one should be able to speak Welsh	.586
17.11	More jobs in healthcare services should be filled by Welsh speakers so that services can be delivered in Welsh as well as English	.623
17.17	There is not enough being done to promote healthcare through the medium of Welsh	.524
FACTOR 4 – Training implications for bilingual provision		
#	Statement	Factor Loading
16.7	Healthcare education programmes should provide opportunities to learn Welsh	.457
17.1	Using a patient/client's preferred language facilitates accurate assessment	.416
17.9	Using a patient/client's preferred language can enhance the therapeutic relationship	.527
17.10	Offering bilingual healthcare education programmes prepares workers to practice in bilingual healthcare settings	.534
17.12	Health care education programmes should be available in Welsh as well as English (or bilingually)	.430
17.15	Health care education programmes should include Welsh language awareness training	.501

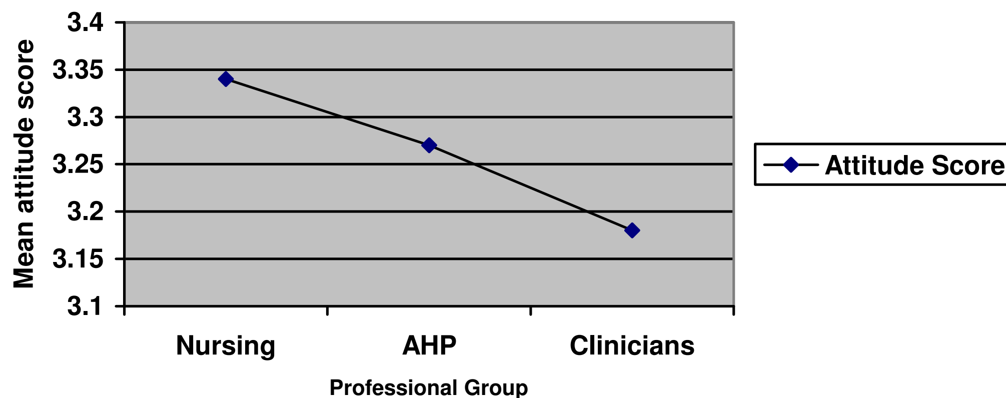
Appendix 13 Statements that did not belong to any of the 4 Factors

#	Statement	Factor 1	Factor 2	Factor 3	Factor 4
16.1	The Welsh language is relevant to healthcare in Wales	.485	.433	.238	.316
16.10	Non-Welsh speaking staff should not be concerned with Welsh language provision in healthcare	.490	.186	.075	.240
16.13	It is rude to speak to patients/clients in front of non Welsh speaking healthcare workers	.431	.183	.031	.108
17.2	The Welsh and English language should have equal status in healthcare in Wales	.454	.282	.371	.331
17.8	Welsh speaking patients/clients are reluctant to ask for a Welsh language service	.053	.096	.350	.171
17.16	Welsh language skills are valued by healthcare service employers in Wales	.135	.258	-.005	.277

Appendix 14 - Distribution of Attitudes by Professional Group

	Professional Group							
	Nursing		**AHP**		**Clinicians**		**Total**	
Attitudes	Number	%	Number	%	Number	%	Number	%
Negative	127	7%	76	4%	88	5%	291	**15%**
Neutral	444	23%	178	9%	207	11%	829	**43%**
Positive	471	24%	184	10%	161	8%	816	**42%**
Total	**1042**	**54%**	**438**	**23%**	**456**	**24%**	**1936**	**100%**

Appendix 15 Line graph showing attitude score means for the three professional healthcare groups



There was a significant negative correlation between professional group and attitude towards the Welsh language in healthcare, $r = -.09$, $P < .01$.

Appendix 16 Line graph showing Welsh speaking proficiency and attitude towards the Welsh language in healthcare

There was a significant positive correlation between Welsh speaking proficiency and attitude towards the Welsh language in healthcare, $r = .42$, $P < .01$.

Appendix 17 – EQS Analysis - Details

As the EQS programme deals best with interval data, two region categories were established. The first language region = Language Region 40 represented regions where over 40% of the population speak Welsh and the second language region (Language Region 19) where under 20% of the population speak Welsh. The second category in each recorded variable was ‘all others’. Similarly healthcare sectors 2 and 3 (private and voluntary) were grouped together as one variable (Sector 2) and compared with the public sector. Finally, two professional group categories were established, the first was Nursing compared with AHP and Clinicians, and the second was a Clinicians professional group compared with Nursing and AHP.

The remaining variables were loaded as follows: Q6 – Number of years working in healthcare in Wales; Q7 – Number of years lived in Wales; Q10 – Welsh language proficiency (self-assessed); Q19 - Sex (gender); and Q20 - Age (in years).

Appendix 18 – Standardized Solution for the EQS Model

STANDARDIZED SOLUTION: EQS Model dated: 26/4/04

```
  Q10   =V3 =   .155*V6   +  .214*V7   +  .284*V8   +  .064*V9
             .327*V2   + -.098*V5   + -.166*V12  + -.159*V13
             .121*V15  +  .011*V16  +  .794 E3
 FACTOR1 =V6  =  -.101*V5   + -.121*V13  + -.104*V14  +  .982 E6
 FACTOR2 =V7  =   .086*V4   + -.272*V13  +  .045*V14  +  .957 E7
 FACTOR3 =V8  =  -.060*V4   + -.139*V14  + -.074*V16  +  .986 E8
 FACTOR4 =V9  =  -.112*V5   +  .994 E9
 FAC1_1  =V10 =   .735*V3   + -.061*V1   + -.008*V2   +  .059*V5
             .021*V15  +  .680 E10
 FAC2_1  =V11 =   .588*V3   + -.068*V1   + -.003*V2   +  .048*V5
             .048*V15  +  .804 E11
```

Key

V1 – Q6 – Worked in Healthcare in Wales
V2 – Q7 – Length of residence in Wales
V3 – Q10 – Proficiency in Welsh
V4 – Sex – Gender category
V5 – Age – Age category in years
V6 – Factor 1 (Factor 1 of the Attitudes Factor Analyses)
V7 – Factor 2 (Factor 2 of the Attitudes Factor Analyses)
V8 – Factor 3 (Factor 3 of the Attitudes Factor Analyses)
V9 – Factor 4 (Factor 4 of the Attitudes Factor Analyses)
V10 – Factor Q13 (Use of Welsh with patients)
V11 – Factor Q14 (use of Welsh with staff)
V12 – Reg40 – Language Region 1 compared with Regions 2 and 3 combined
V13 – Reg19 – Language Region 3 compared with Regions 1 and 2 combined
V14 – Profnurs – Nursing group compared with AHP and Clinicians combined
V15 – Clinic – Clinicians group compared with Nursing and AHP combined
V16 – Sector 2 – Public sector compared with Private and Voluntary sectors combined

Appendix 19 - EQS – Statistical Tests

Language Region and Proficiency in Speaking Welsh
A one-way ANOVA showed that there was a significant difference between the two language region groups with regard to proficiency in Welsh. Those in Language Region1 had a higher mean score (mean = 1.52) than those in Language Regions 2 and 3 combined (mean = .68), $F(1, 1967) = 241.40$, $P < .001$. This suggests that, practitioners in Language Region 1 have higher levels of Welsh language proficiency than those in Regions 2 and 3 combined.

Those in Language Regions 1 and 2 combined had a higher mean score (mean = 1.24) than those in Region 3 (mean = .59), $F (1, 1967) = 213.35$, $P < .001$. This suggests that, practitioners from Language Regions 1 and 2 combined are more proficient in Welsh than those from Region 3. Post hoc tests showed that the greatest levels of Welsh language proficiency amongst healthcare professionals are to be found in Language Region 1, followed by Region 2 then Region 3.

Professional Group and Welsh speaking Proficiency
A one-way ANOVA showed that there was a significant difference between the Clinicians group compared with the Nursing and AHP groups, with regard to Welsh language proficiency, $F(1, 1967) = 5.03$, $P < .05$. The mean score for the Clinicians group (.93) was higher than the mean score for the Nursing and AHP groups combined (.81). This confirms previous findings that members of the Clinicians group have higher levels of proficiency in speaking Welsh than those from the other professional groups.

Language Region and Attitude
A one-way ANOVA showed that there was a very significant difference between Language Region 3 and Regions 1 and 2 with regard to Attitude Factor 1 (Perspectives on bilingualism). Those in Language Region 3 had a much more negative mean attitude score (mean = -.07) than those in Regions 1 and 2 combined (mean = .11). This suggests that, practitioners in Language Region 1 and 2 have much more positive perspectives on bilingualism than those in Region 3.

A further one-way ANOVA showed that there was a very significant difference between Language Region 3 and Regions 1 and 2 with regard to Attitude Factor 2 (Addressing clinical needs). Those in Language Regions 1 and 2 combined had more positive attitudes (mean = .29) than those from Region 3 (mean = -.19), $F (1, 1967) = 152.02$, $P < .001$. This suggests that, practitioners in Language Regions 1 and 2 are more sensitive to the implications of language in addressing clinical needs than those from Region 3.

Professional Group and Attitude
A one-way ANOVA showed that there was a significant difference between the Nursing group and Clinicians and AHP with regard to Attitude Factor 3 (Perspectives on Welsh language provision in healthcare). Those from the Nursing group were more positive (mean = .08) than those from the Clinicians and AHP groups combined (mean = -.10), $F (1, 1967) = 25.00$, $P < .001$. Thus, in accordance with previous findings, of all the professional groups, practitioners from the Nursing group have the most positive attitudes towards Welsh language service provision in healthcare.

Age and Factor 4
A one-way ANOVA showed that there was a significant difference between the respondents of different age categories and their Factor 4 scores (Training implications for bilingual provision), $F(5,1928) = 7.34$, $P < .001$. The data shows that those in the 16-24 category were significantly more positive with regard to training issues (mean score = .30), than those who were in the 55-64 category (mean score = -.15). A means plot showed that there was a steep decrease in scores between 16-24 and 35-44 and another steep decrease between 55-64 to 65 and over.

Appendix 20 Profiles of the 5 Clusters of Respondents

Variable	Cluster A N = 805	Cluster B N = 157	Cluster C N = 161	Cluster D N = 32	Cluster E N = 813	Significance
Language region	Language Region 1 – 14% Language Region 2 – 19% **Language Region 3 – 68%**	**Language Region 1 – 64%** Language Region 2 – 19% Language Region 3 – 17%	Language Region 1 – 31% Language Region 2 – 23% **Language Region 3 – 46%**	Language Region 1 – 28% Language Region 2 - 19% **Language Region 3 - 53%**	Language Region 1 – 14% Language Region 2 – 20% **Language Region 3 – 66%**	Chi Square, P < .001
Q10 – Proficiency in Welsh	**Not at all – 65%** A little – 30% Fairly well – 3% Very well – 1%	Not at all – 1% A little – 2% Fairly well – 9% **Very well – 89%**	Not at all – 1% A little – 13% Fairly well – 30% **Very well – 56%**	Not at all – 25% **A little – 44%** Fairly well – 9% Very well – 22%	**Not at all – 50%** A little – 45% Fairly well – 4% Very well – 1%	One way ANOVA, P < .05.
Q12.1&2 – Use of Welsh with family and friends	**Mean = .09 (1-20%)**	**Mean = 3.95 (61-80%)**	**Mean = 2.44 (21-40%)**	**Mean = 2.90 (41-60%)**	**Mean = .21 (21-40%)**	One Way ANOVA , P < .001
Q12.3 – Use of Welsh with patients	**Mean = .18 (0%)**	**Mean = 3.08 (41-60%)**	**Mean = 1.97 (21-40%)**	**Mean = 2.89 (41-60%)**	**Mean = .30 (0%)**	One Way ANOVA , P < .001
Q12.4&5&6 – Use of Welsh with work colleagues	**Mean = .07 (0%)**	**Mean = 2.91 (41-60%)**	**Mean = 1.24 (1-20%)**	**Mean = 2.79 (41-60%)**	**Mean = .13 (0%)**	One Way ANOVA , P < .001
Country born	**Wales – 51%** England – 34% Scotland – 2% Northern Ireland – 1% Republic of Ireland – 1% Other – 12%	**Wales – 94%** England – 6% Scotland – 0% Northern Ireland – 0% Republic of Ireland – 0% Other – 0%	**Wales – 81%** England – 15% Scotland – 1% Northern Ireland – 0% Republic of Ireland – 0% Other – 3%	**Wales – 58%** England – 32% Scotland – 0% Northern Ireland – 0% Republic of Ireland – 3% Other – 7%	**Wales – 53%** England – 32% Scotland – 2% Northern Ireland – 1% Republic of Ireland – 1% Other – 11%	Chi Square, P < .001
Overall attitude score	Negative – 33% **Neutral – 60%** Positive – 8%	Negative – 1% Neutral – 8% **Positive – 91%**	Negative – 2% Neutral – 21% **Positive – 78%**	Negative – 6% Neutral – 34% **Positive – 59%**	Negative – 3% Neutral – 38% **Positive – 59%**	One way ANOVA, P < .05.
Factor 1 – Perspectives on bilingualism	**Mean = -.45**	**Mean = .48**	**Mean = .31**	**Mean = .15**	**Mean = .28**	One way ANOVA, P < .001.
Factor 2 – Addressing clinical needs	**Mean = .37**	**Mean = .72**	**Mean = .53**	**Mean = .32**	**Mean = .12**	One way ANOVA, P < .001.
Factor 3 – Perspectives on Welsh language provision in healthcare	**Mean = -.31**	**Mean = .98**	**Mean = .51**	**Mean = .36**	**Mean = .01**	One way ANOVA, P < .001.
Factor 4 – Training implications for bilingual provision	**Mean = -.38**	**Mean = .11**	**Mean = .19**	**Mean = .09**	**Mean = .31**	One way ANOVA, P < .001.

Variable	Cluster A N = 805	Cluster B N = 157	Cluster C N = 161	Cluster D N = 32	Cluster E N = 813	Significance
2 main occupational groups	Doctor: - 18% **Nurse- 47%**	Doctor – 19% **Nurse – 39%**	Doctor – 19% **Nurse – 43%**	**Nurse – 56%** Pharmacist – 9%	Doctor – 11% **Nurse – 53%**	Chi Square, P < .001
Professional group	**Nursing – 52%** AHP – 22% Clinicians – 26%	**Nursing – 45%** AHP – 21% Clinicians – 35%	**Nursing – 50%** AHP – 20% Clinicians – 31%	**Nursing – 63%** AHP – 22% Clinicians – 16%	**Nursing – 58%** AHP – 24% Clinicians – 18%	Chi Square, P < .001
Q6 – Number of years worked in healthcare in Wales	Zero – 1 – 6% 2-5 – 17% 6-10 – 13% **11-20 – 32%** 21-30 – 26% 31-40 – 6% Over 40 – 1%	Zero – 1 – 3% 2-5 – 13% 6-10 – 11% 11-20 – 32% **21-30 – 33%** 31-40 – 8% Over 40 – 0%	Zero – 1 – 5% 2-5 – 13% 6-10 – 10% **11-20 – 27%** 21-30 – 27% 31-40 – 17% Over 40 – 1%	Zero – 1 – 3% 2-5 – 19% 6-10 – 16% **11-20 – 41%** 21-30 – 13% 31-40 – 9% Over 40 – 0%	Zero – 1 – 7% 2-5 – 22% 6-10 – 17% **11-20 – 29%** 21-30 – 20% 31-40 – 4% Over 40 – 0%	Chi Square, P < .001
Q7 – Number of years lived in Wales	Never – 3% Zero – 1 – 4% 2-5 – 8% 6-10 – 6% 11-20 – 16% 21-30 – 17% 31-40 – 19% **Over 40 – 28%**	Never – 0% Zero – 1 – 1% 2-5 – 1% 6-10 – 1% 11-20 – 3% 21-30 – 16% 31-40 – 30% **Over 40 – 48.4%**	Never – 0% Zero – 1 – 1% 2-5 – 2% 6-10 – 4% 11-20 – 9% 21-30 – 18% 31-40 – 24% **Over 40 – 43%**	Never – 3% Zero – 1 – 0% 2-5 – 9% 6-10 – 3% 11-20 – 9% 21-30 – 28% 31-40 – 9% **Over 40 – 38%**	Never – 2% Zero – 1 – 5% 2-5 – 10% 6-10 – 9% 11-20 – 12% 21-30 – 21% 31-40 – 18% **Over 40 – 24%**	Chi Square, P < .001
Gender	Males – 28% **Females – 72%**	Males – 34% **Females – 66%**	Males – 28% **Females – 73**	Males – 16 **Females – 84%**	Males – 23% **Females – 77**	Chi Square, P < .05
Age range	16-24 – 2% 25-34 – 16% **35-44 – 38%** 45-54 – 31% 55-64 – 13% 65+ - 1%	16-24 – 3% 25-34 –20% **35-44 – 34%** 45-54 – 30% 55-64 – 13% 65+ - 0%	16-24 – 6% 25-34 –15% **35-44 – 31%** 45-54 – 30% 55-64 – 17% 65+ - 0%	16-24 – 0% 25-34 – 9% 35-44 – 31% **45-54 – 38%** 55-64 – 22% 65+ - 0%	16-24 – 4% 25-34 – 27% **35-44 – 37%** 45-54 – 24% 55-64 – 7% 65+ - 0%	Chi Square, P < .001
3 main ethnic groups	**White – 90%** Indian – 4% Other – 5%	**White – 100%**	**White – 98%** Indian – 1% Other – 1%	**White – 97%** Other – 3%	**White – 92%** Indian – 2% Other – 4%	Chi Square, NS
Other languages spoken	**No – 83%** Yes – 17%	**No – 94%** Yes – 6%	**No – 95%** Yes – 5%	**No – 93%** Yes – 7%	**No – 87%** Yes – 13%	Chi Square, P < .001
Healthcare sector	**Public – 95%** Private – 4% Voluntary – 2%	**Public – 98%** Private – 2 %	**Public – 94%** Private – 4% Voluntary – 1%	**Public – 100%**	**Public – 95%** Private – 3% Voluntary – 3%	Chi Square, NS
Interview – yes/no (Yes = decline)	**No – 90%** Yes – 10%	**No – 98%** Yes – 11%	**No – 93%** Yes – 8%	**No – 91%** Yes – 9%	**No – 94%** Yes – 7%	Chi Square, NS

Appendix 21 – Full Profiles of the 5 Clusters from the Cluster Analysis

Cluster A

This cluster represents respondents mainly from Language Region 3 (68%). They are predominantly non-Welsh speaking (64%), although 30% speak a little Welsh, and they have significantly less Welsh language proficiency than all the other clusters ($P < .05$). Furthermore, they demonstrate the least use of Welsh across social and healthcare settings amongst the total sample. Only half the cluster respondents (50%) were born in Wales. Furthermore, a Chi Square analysis showed that more than expected have never lived in Wales, or have only lived in Wales for between 0 and 1, 2 and 5, and 11 and 20 years. Respondents in Cluster A reflect predominantly neutral attitudes towards the Welsh language (57% of the Cluster A respondents). Indeed, their attitudes are significantly more negative than all the other clusters ($P < .05$). A Chi Square analysis showed that more respondents than expected in this cluster can speak a language other than English or Welsh.

Cluster B

This cluster is made up of respondents predominantly from Language Region 1 (64%). Their levels of Welsh language proficiency are significantly higher than those of all the other clusters ($P < .05$), with 89% speaking Welsh very well. Whilst their use of Welsh with family and friends is significantly greater than all the other cluster respondents ($P < .05$), their use of Welsh with patients and colleagues is also significantly greater than Clusters A, C, and E ($P < .05$), but not significantly different to Cluster D. 94% of respondents within Cluster B were born in Wales. Furthermore, a Chi Square showed that more than expected have lived in Wales for between 31 and 40 years and over 40 years. Respondents in Cluster B reflect predominantly positive attitudes towards the Welsh language in healthcare. Indeed, their attitudes are significantly more positive than those in Clusters A, D, and E ($P < .05$), but not significantly different to Cluster C ($P > .05$). A Chi Square analysis showed that there are more respondents than expected from Cluster B who can not speak a language other than English or Welsh.

Cluster C

This cluster is made up of respondents mainly from Language Region 3 (46%) with 23% from Region 2 and 31% from Region 1. Indeed, in terms of regions, this is the most diverse cluster in the sample. The respondents are predominantly fluent Welsh speakers, with 56% speaking Welsh very well, 30% fairly well, and 13% a little. As a cluster, they are significantly less fluent than respondents in Cluster B ($P < .05$). Their use of Welsh with family and friends is significantly greater than Clusters A, D, and E but significantly less than Cluster B ($P < .05$). Furthermore, their use of Welsh with patients and colleagues is significantly greater than Clusters A and E but significantly less than Clusters B and D ($P <. 05$). 81% of respondents within Cluster C were born in Wales. Furthermore, a Chi Square analysis showed that more than expected who have lived in Wales for between 31 and 40 years and over 40 years. Respondents in Cluster C reflect predominantly positive attitudes towards the Welsh language in healthcare. Indeed, their attitudes are significantly more positive than Cluster A and E ($P < .05$), but not significantly different to Clusters B and D ($P > .05$). A Chi Square showed that there are more respondents than expected from Cluster C who can not speak a language other than English or Welsh.

Cluster D

This cluster is made up of respondents mainly from Language Region 3 (53%) with 19% from Region 2 and 28% from Region 1. The respondents predominantly speak Welsh a little (44%), whilst 25% are non-Welsh speaking, 9% speak Welsh fairly well and 22% very well. Their use of Welsh with family and friends is significantly greater than Clusters A, C, and E, but significantly lower than those in Cluster B ($P < .05$). Furthermore, their use of Welsh with patients and colleagues is significantly greater than Clusters A, C, and E ($P < .05$) but not significantly different to Cluster B ($P > .05$). 58% of Cluster D were born in Wales and a Chi Square showed that more than expected have lived in Wales between 2 and 5 years and between 21 and 30 years. Respondents in Cluster D reflect predominantly positive attitudes towards the Welsh language in healthcare and have similar attitude scores to Clusters C and E. Their attitudes are significantly more positive than Cluster A but more negative than Cluster B ($P < .05$). A Chi Square showed that more respondents than expected from Cluster D can not speak a language other than English or Welsh.

Cluster E

This cluster represents respondents mainly from Language Region 3 (66%). They are predominantly non-Welsh speaking (50%) but 46% speak a little Welsh. This means that their overall levels of Welsh language proficiency are significantly lower than Clusters B, C, and D but higher than Cluster A ($P < .05$). Their use of Welsh with family, friends and patients is significantly greater than Cluster A, but significantly less than Clusters B, C, and D ($P < .05$). However, their use of Welsh with colleagues is significantly less than clusters B, C, and D ($P < .05$) but no different to Cluster A ($P > .05$). Only a little over half of the cluster respondents (53%) were born in Wales. Furthermore, a Chi Square showed that more than expected have lived in Wales between 0 and 10 years and between 21 and 30 years. Respondents in Cluster E reflect predominantly positive attitudes towards the Welsh language in healthcare. Their attitudes are significantly more positive than Cluster A, but significantly more negative than Clusters B and C ($P < .05$). There was no difference in attitude score between Clusters E and D ($P > .05$). A Chi Square showed that there was no difference between the observed and expected frequencies for speaking a language other than English or Welsh in Cluster E.

Appendix 22 Respondents' Rank Ordering of Importance of Items for Developing an Effective Bilingual Service in Healthcare

Rank Order	Mean score	Number of Item	Item
1	2.86	18.10	Interpreter service for patients/clients
2	2.80	18.9	Translation service for healthcare organisations
3	2.77	18.12	Systems to identify and record the language choice of patients/clients
4	2.75	18.5	Bilingual information leaflets
5	2.74	18.6	Bilingual signs
6	2.68	18.11	Systems to identify Welsh speaking staff e.g. badges
7	2.58	18.4	Bilingual forms and letters
8	2.56	18.1	Welsh language classes for healthcare workers
9	2.53	18.2	Welsh language improvement classes for healthcare workers
10	2.47	18.8	Bilingual marketing/advertising
11	2.41	18.13	Welsh speaking receptionists
12	2.40	18.7	Bilingual telephone greetings
13	2.33	18.3	Welsh healthcare terminology

Appendix 23 – Details of the Interview Sampling Strategy

Within this sample, all attempts were made to include the following:

- At least 1 of the 18 healthcare professions per language region.
- At least 2 healthcare professionals from each language region whose majority of clients (>60%) are children
- At least 2 healthcare professionals from each language region whose majority of clients (>60%) are older people
- At least 1 healthcare professional from each language region whose majority of clients (>60%) are people with mental health problems
- At least 1 healthcare professional whose majority (>60%) of clients are people with learning disabilities
- At least 3 respondents from the voluntary sector
- At least 2 respondents from each language region from the private sector.
- 25% of respondents who speak Welsh very or fairly well, 25% who speak a little Welsh; and 50% non-Welsh speakers

Following the criterion set out above, the researchers developed an interview sample strategy which took into account the respondents' occupational group, competence in Welsh, attitude category, and language region. Those who had indicated on the questionnaire that they would not be willing to take part in an interview, were discarded from the pool of potential interviewees. Adopting a purposive sampling approach, potential interviewees were selected and their identification numbers inserted into a grid – or interview matrix. The first interview matrix (Matrix 1) contained potential interviewees fitting the criterion set out above. However, as it was envisaged that not all respondents would agree to a tape recorded interview, three other full matrices were developed at the same time. Matrices 2, 3, and 4 were therefore developed based on the characteristics of the first matrix. There was also a Matrix of pilot interviewees (Matrix 5). As the qualitative phase progressed, it became evident that the Clinician group were difficult to contact, and therefore three further matrices were developed (Matrices 6, 7, and 8) containing potential Clinician interviewees only.

The first interview matrix (Matrix 1), can be seen in Table 1 of the current appendix and the breakdown for Matrix 1, according to professional group and Welsh language proficiency, can be seen in Table 2 of the current appendix. Potential interviewees from Matrix 1 were contacted first, and if they declined an interview, respondents from Matrix 2 were contacted and so forth. The Final Matrix (i.e., those respondents actually interviewed) contained individuals from Matrices 1-7 (none of the final 81 interviewees were from Matrix 8 – although some were contacted and declined). The Final Interview Matrix can be seen in Table 3 of the current appendix, and the breakdown of the Final Matrix according to professional group and Welsh language proficiency can be seen in Table 4 of the current appendix.

<u>Key to Tables 1, 2, 3, and 4 in the current appendix</u>
(w1) = Can speak Welsh a little (w = Welsh)
(wf) = Can speak Welsh fluently
(nw) = Cannot speak Welsh (n = non Welsh)
Number after letter refers to profession e.g., (9) is a Midwife (see Appendix 1 for a list of profession number and letter codes)
(pr) – Private Sector
(v) – Voluntary Sector
a – work with adults over 60% of the time
c – work with children over 60% of the time
e – work with elderly over 60% of the time
m – work with clients with mental health problems over 60% of the time
ld – work with clients with learning disabilities over 60% of the time
(s.1) – Interviewee from the first interview matrix
(s.2) – Interviewee from the second interview matrix
(s.3) – Interviewee from the third interview matrix
(s.4) – Interviewee from the fourth interview matrix
(s.5) – Interviewee from the fifth interview matrix
(s.6) – Interviewee from the sixth interview matrix
(s.7) – Interviewee from the seventh interview matrix

Table 1 First Interviewee Matrix

Set 1 Interviewees Matrix

	Language Region 1						Language Region 2						Language Region 3					
	Negative		**Neutral**		**Positive**		**Negative**		**Neutral**		**Positive**		**Negative**		**Neutral**		**Positive**	
Nurse																		
	1	1547 (pr) nw-11-e	**10**	1573 (v) nw-11-a	**19**	1082 wf-12	**28**	3285 nw-11-e	**37**	369 nw-8	**46**	1539 (pr) nw-11-e	**55**	1134 nw-9-c	**64**	1799 (v) nw-11	**73**	1648 nw-11-a-m
	2	2711 w1-11-a-e	**11**	1529 (pr) nw-11-e	**20**	272 nw-11-a	**29**	3347 w1-8	**38**	1103 w1-12-a	**47**	3283 nw-8-c	**56**	2208 nw-13-c	**65**	1139 w1-8-c	**74**	1358 w1-9-a
	3	2705 wf-11-e	**12**	2685 w1-11-a-e	**21**	609 wf-8-c	**30**	332 wf-11-e	**39**	60 nw-9-a	**48**	1559 (v) wf-11-a	**57**	3006 w1-13-c	**66**	1610 wf-9-a	**75**	1498 (pr) wf-9-a
AHP																		
	4	720 nw-2	**13**	148 w1-1-e	**22**	698 nw-4	**31**	198 nw-1-a-e	**40**	1515 (pr) nw-18	**49**	100 w1-2-a-m	**58**	2439 w1-17-e	**67**	2801 wf-2-a	**76**	199 wf-1-a-e-m
	5	1810 (pr) wf-18	**14**	617 nw-18	**23**	581 w1-15	**32**	987 nw-15-a	**41**	1562 (v) nw-17-a	**50**	44 wf-4-a	**59**	1499 (pr) nw-18	**68**	1398 w1-4-a-m	**77**	1286 w1-18
	6	288 nw-14-e	**15**	583 w1-14-a-ld	**24**	691 wf-17-a-ld	**33**	65 nw-17	**42**	337 wf-14-e	**51**	408 wf-19-c	**60**	1570 (v) nw-14-a	**69**	1003 nw-15	**78**	1685 nw-19-c-ld
Clinicians																		
	7	2638 w1-5-c	**16**	649 wf-6-HD	**25**	922 wf-6-GP-a-e	**34**	860 wf-6-GP-e	**43**	878 w1-6-GP-a	**52**	12 wf-3-c	**61**	2588 w1-6-HD	**70**	1104 w1-3-c-m	**79**	1853 w1-GP-a
	8	906 nw-6-GP	**17**	297 wf-5-c	**26**	1075 wf-16-e	**35**	1029 w1-16-e	**44**	308 nw-6-HD	**53**	419 w1-6-HD-a	**62**	798 nw-6-GP	**71**	2888 wf-6-HD	**80**	1822 nw-5-c
	9	2722 nw-6-HD	**18**	247 nw-5-c	**27**	1027 nw-16	**36**	310 nw-6-HD-e	**45**	745 nw-5	**54**	434 nw-16	**63**	2820 nw-5-c	**72**	819 nw-6-GP	**81**	1819 nw-3-e-m

Table 2 Interview Matrix Set 1: Breakdown of potential interviewees by profession and proficiency in Welsh

Profession (and professional group number code)	Professional Group	Fluent Welsh Speaker	Speaks Welsh a little	Does not Speak Welsh	Total
Nurses (11)	Nursing	3	2	8	13
Practice nurses (12)	Nursing	1	1	0	2
School nurses (13)	Nursing	0	1	1	2
Midwives (9)	Nursing	2	1	2	5
Health Visitors (8)	Nursing	1	2	2	5
Ambulance service (1)	AHP	1	1	1	3
Therapists (2)	AHP	1	1	1	3
Dietitians (4)	AHP	1	1	1	3
Physiotherapists (17)	AHP	1	1	2	4
Radiographers (18)	AHP	1	1	3	5
Occupational Therapists (14)	AHP	1	1	2	4
Optometrists (15)	AHP	0	1	2	3
Speech and Language Therapists (19)	AHP	1	0	1	2
General Medical Physicians/Surgeons (6)	Clinicians	2	2	3	7
GP's (6)	Clinicians	2	2	3	7
Dentists (5)	Clinicians	1	1	4	6
Pharmacists (16)	Clinicians	1	1	2	4
Clinical Psychologists (3)	Clinicians	1	1	1	3
Total		**21**	**21**	**39**	**81**

Table 3 The Final Matrix

	Language Region 1						Language Region 2						Language Region 3					
	Negative		Neutral		Positive		Negative		Neutral		Positive		Negative		Neutral		Positive	
Nurse																		
	1	279 w1-11-e (S.2)	**10**	601 w1-11-a-e (S.3)	**19**	1082 wf-12 (S.1)	**28**	1547 (pr) nw-11-e (S.1)	**37**	369 nw-8 (S.1)	**46**	1539 (pr) nw-11-e (S.1)	**55**	1665 w1-11-a-ld (S.3)	**64**	1572 (v) nw-11 (S.2)	**73**	1544 wf-11-e (pilot)
	2	2711 w1-11-a-e (S.1)	**11**	1529 (pr) nw-11-e (S.1)	**20**	272 nw-11-a (S.1)	**29**	861 w1-11-e (S.3)	**38**	372 nw-8-c-a (S.2)	**47**	421 w1-8-c (S.2)	**56**	2208 nw-13-c (S.1)	**65**	2763 (v) nw-11 (S.3)	**74**	1358 w1-9-a (S.1)
	3	2705 wf-11-e (S.1)	**12**	643 nw-11-ld (S.4)	**21**	609 wf-8-c (S.1)	**30**	332 wf-11-e (S.1)	**39**	60 nw-9-a (S.1)	**48**	1559 (v) wf-11-a (S.1)	**57**	3006 w1-13-c (S.1)	**66**	1306 w1-9-a (S.4)	**75**	1498 (pr) wf-9-a (S.1)
AHP																		
	4	728 nw-4-a (S.2)	**13**	715 nw-4-a-e (S.3)	**22**	698 nw-4 (S.1)	**31**	202 nw-1-e (S.3)	**40**	1515 (pr) nw-18 (S.1)	**49**	100 w1-2-a-m (S.1)	**58**	2439 w1-17-e (S.1)	**67**	2801 wf-2-a (S.1)	**76**	181 nw-1-a-e (S.3)
	5	730 nw-18-a (S.4)	**14**	617 nw-18 (S.1)	**23**	729 nw-17 (S.2)	**32**	232 w1-1 (S.4)	**41**	1562 (v) nw-17-a (S.1)	**50**	169 wf-1-e (S.1)	**59**	1570 (v) nw-14-a (S.1)	**68**	1000 nw-15-a (S.4)	**77**	1286 w1-18 (S.1)
	6	2730 nw-18 (S.3)	**15**	700 w1-17-e (S.1)	**24**	676 wf-17 (S.2)	**33**	65 nw-17 (S.1)	**42**	337 wf-14-e (S.1)	**51**	44 wf-4-a (S.2)	**60**	1635 w1-17 (S.2)	**69**	1492 nw-15 (S.2)	**78**	2783 wf-18-a (S.2)
Clinicians																		
	7	2638 w1-5-c (S.1)	**16**	260 nw-5 (S.3)	**25**	922 wf-6-GP- a-e (S.1)	**34**	865 w1-6-GP (S.4)	**43**	878 w1-6-GP-a (S.1)	**52**	12 wf-3-c (S.1)	**61**	787 nw-5 (S.2)	**70**	313 w1-3-c-m (S.6)	**79**	1566 (v) w1-6-HD (S.7)
	8	626 nw-6-HD (S.2)	**17**	595 wf-6-HD (S.3)	**26**	1075 wf-16-e (S.1)	**35**	1029 w1-16-e (S.1)	**44**	429 w1-16 (S.7)	**53**	305 nw-3-c-ld (S.1)	**62**	2772 w1-6-HD (S.2)	**71**	2888 wf-6-HD (S.1)	**80**	1449 nw-6-HD (S.4)
	9	2722 nw-6-HD (S.1)	**18**	247 nw-5-c (S.1)	**27**	1027 nw-16 (S.1)	**36**	310 nw-6-HD-e (S.1)	**45**	768 nw-5-a (S.4)	**54**	434 nw-16 (S.2)	**63**	2820 nw-5-c (S.1)	**72**	819 nw-6-GP (S.1)	**81**	1485 wf-6-HD-a (S.7)

NOTE: Interviewees 82 and 83 were Speech and Language Therapists from Region 2. Interviewee 82, nw: Interviewee 83, wf.

Key to Positions

Code Number	Position
11	Nurses
12	Practice Nurses
13	School Nurses
9	Midwives
8	Health Visitors
4	Dietitians
17	Physiotherapists
18	Radiographers
2	Art/Music/Drama Therapists
14	Occupational Therapists
15	Optometrists
19	Speech/Language Therapists
1	Ambulance Officers
6-HD	General Medical Physicians/Surgeons
6-GP	General Medical Practitioners
5	General Dental Practitioners
16	Pharmacists
3	Clinical Psychologists

Table 4 Final Matrix: Breakdown of interviewees by profession and proficiency in Welsh

Profession (and professional group number code)	Professional Group	Fluent Welsh Speaker	Speaks Welsh a little	Does not Speak Welsh	Total
Nurses (11)	Nursing	4	5	7	16
Practice nurses (12)	Nursing	1	0	0	1
School nurses (13)	Nursing	0	1	1	2
Midwives (9)	Nursing	1	2	1	4
Health Visitors (8)	Nursing	1	1	2	4
Ambulance service (1)	AHP	1	1	2	4
Therapists (2)	AHP	1	1	0	2
Dietitians (4)	AHP	1	0	3	4
Physiotherapists (17)	AHP	1	3	3	7
Radiographers (18)	AHP	1	1	4	6
Occupational Therapists (14)	AHP	1	0	1	2
Optometrists (15)	AHP	0	0	2	2
Speech and Language Therapists (19)	AHP	1	0	1	2
General Medical Physicians/Surgeons (6)	Clinicians	3	2	4	9
GP's (6)	Clinicians	1	2	1	4
Dentists (5)	Clinicians	0	1	5	6
Pharmacists (16)	Clinicians	1	2	2	5
Clinical Psychologists (3)	Clinicians	1	1	1	3
Total		**20**	**23**	**40**	**83**

Number of interviewees from each of the Interview Matrices

Interview Matrix	Number	Percent	Cumulative Percent
1	43	53%	53%
2	15	19%	72%
3	10	12%	84%
4	8	10%	94%
5	1	1%	95%
6	1	1%	96%
7	3	4%	100%
8	0	0%	100%
Total	**81***	**100%**	**100%**

* Two more interviewees were subsequently added to make a final total of 83 interviewees

Appendix 24 - Interview Schedule

1. Please could you tell me what are the main aspects of your professional role?
2. In your opinion, what is the meaning of the term 'language sensitivity' in your work with patients and clients?
3. Can you give any examples of Welsh language sensitivity in your field of work?
4. Can you give any examples of Welsh language insensitivity in your field of work?
5. In your opinion, how relevant is Welsh language sensitivity in healthcare in Wales?
6. What do you think has influenced your feelings about Welsh language provision in healthcare?
7. Do you feel a responsibility for ensuring that there is adequate Welsh language provision in your unit or department?
8. Could you tell me what involvement you personally have in providing care through the medium of Welsh?
9. Do you think that you have the necessary competencies to communicate effectively with patients whose language preference is Welsh?
10. In your opinion, what steps can (your professional discipline) take to demonstrate Welsh language sensitivity in healthcare?
11. In your opinion, what are the barriers to Welsh-medium provision in healthcare?
12. And, what opportunities do you believe exist for the provision of a bilingual healthcare service?
13. In your place of work, what measures are in place to ensure that language choice is considered during patient care?
14. If you were able to make up to three changes to the way in which Welsh language provision is addressed in your organisation, what changes would you recommend?
15. Thinking about staff training, what do you believe would be the best approach to prepare practitioners to work with Welsh speaking patients and clients?
16. Is there anything else that you would like to say about the Welsh language in healthcare?

Prompt Questions: Can you give an example…….?
Can you elaborate ……………?
Can you explain………………?
What makes you think that…...?

Appendix 25 Framework Analysis

An increasingly popular approach to qualitative analysis in health-related research is Framework or Thematic Analysis (Ritchie and Spencer 1994). The approach involves a systematic process of sifting, charting and sorting data according to key issues and themes. The method involves the following key stages:

- Familiarization - immersion in the data, listening to audiotapes, whole or partial transcription.
- Identifying a thematic framework - the establishment of the provisional coding framework developed from a priori issues and emerging issues from the pilot interviews. This framework is developed and refined as the research proceeds.
- Indexing or coding - the process of applying the thematic framework to the data using codes.
- Charting – rearranging the coded data to the appropriate thematic reference to create thematic or case charts
- Mapping and interpretation – drawing together key characteristics of the data and mapping and interpreting the data set as a whole.

Appendix 26 Characteristics of Pilot Interviewees

Researcher	Interviewee Occupation	Language Region	Attitude	Competence in Speaking Welsh
Researcher 1	Nurse	2	Positive	Not at all
Researcher 1	Nurse	2	Negative	Very well
Researcher 2	Nurse	2	Positive	Not at all
Researcher 2	Nurse	2	Unknown	A little
Researcher 3	GP	3	Negative	Not at all
Researcher 3	Nurse	3	Positive	A little
Researcher 4	Radiographer	2	Neutral	Not at all
Researcher 5	GP	2	Neutral	A little

Appendix 27 Thematic Framework

Code	Category	Status	Code	Category
Theme 1	**1 - Perspectives on bilingualism**			
1.1	Status of the Welsh language	Original	1.1	Status of the Welsh language
1.2	Extent of Welsh spoken across Wales.	Original	1.2	Extent of Welsh spoken across Wales.
1.3	If you don't use Welsh you lose it.	Original	1.3	If you don't use Welsh you lose it.
1.4	English ability of Welsh speakers	Original	1.4	English ability of Welsh speakers
1.5	Welsh ability of Welsh speakers	Original	1.5	Welsh ability of Welsh speakers
1.6	Learning Welsh	Original	1.6	Learning Welsh
1.7	Speaking Welsh in front of people who don't understand Welsh	Original	1.7	Speaking Welsh in front of people who don't understand Welsh
1.8	Establishing a relationship through a specific language	Original	1.8	Establishing a relationship through a specific language
1.9	Language as a means of expression	Original	1.9	Language as a means of expression
		New	1.10	The Welsh ability of English speakers
		New	1.11	Personal perspectives on bilingualism
		New	1.12	Language as a means of identity
		New	1.13	Stigmatization of Welsh speakers
		New	1.14	Animosity towards the Welsh language
		New	1.15	Bilingual voice mail
	2 - Addressing clinical needs			
2.1	Elderly	Original	2.1	Elderly
2.2	Children	Original	2.2	Children
2.3	People with mental health problems	Original	2.3	People with mental health problems
2.4	People with learning disabilities	Original	2.4	People with learning disabilities
2.5	Identifying patients' language choice	Original	2.5	Identifying patients' language choice
2.6	Documenting patients' language choice	Original	2.6	Documenting patients' language choice
2.7	Responding to patients' language choice	Original	2.7	Responding to patients' language choice
2.8	Ensuring language skills mix of staff	Original	2.8	Ensuring language skills mix of staff
2.9	Use of interpreters	Original	2.9	Use of interpreters
2.10	Risk assessment	Original	2.10	Risk assessment
2.11	Facilitating patient/client expression	Original	2.11	Facilitating patient/client expression
2.12	Establishing therapeutic relationships	Original	2.12	Establishing therapeutic relationships
2.13	Ensuring that the client's language is the priority	Original	2.13	Ensuring that the client's language is the priority
		New	2.14	Facilitating patient/client identity
		New	2.15	Level of Welsh use with patients/clients
		New	2.16	Care enhancement
	3 - Perspectives on Welsh language provision in healthcare			
3.1	Cost	Original	3.1	Cost
3.2	Time	Original	3.2	Time
3.3	Bilingual documents	Original	3.3	Bilingual documents
3.4	Bilingual signs	Original	3.4	Bilingual signs
3.5	Professional accountability	Original	3.5	Professional accountability
3.6	Organisational responsibility	Original	3.6	Organisational responsibility
3.7	Numbers of Welsh speaking staff	Original	3.7	Numbers of Welsh speaking staff
3.8	Recruitment of Welsh speaking staff	Original	3.8	Recruitment of Welsh speaking staff
3.9	Multilingualism	Original	3.9	Multilingualism
3.10	Translators	Original	3.10	Translators
3.11	Formal language of healthcare	Original	3.11	Formal language of healthcare
3.12	People don't ask for a Welsh service	Changed	3.12	Demand for Welsh service
3.13	Welsh language resource and advice centre	Original	3.13	Welsh language resource and advice centre
3.14	Too much effort for little gains	Original	3.14	Too much effort for little gains
		New	3.15	Secretarial support
		New	3.16	Enforcing Welsh language provision
		New	3.17	Staff recruitment
	4 - Training implications for bilingual provision			
4.1	Welsh language classes	Original	4.1	Welsh language classes
4.2	Fit for purpose Welsh language classes	Original	4.2	Fit for purpose Welsh language classes
4.3	Communication skills training	Original	4.3	Communication skills training
4.4	Language awareness training	Original	4.4	Language awareness training
4.5	Welsh medium education and training	Original	4.5	Welsh medium education and training
4.6	Accountability for training	Original	4.6	Accountability for training
4.7	Willingness to learn Welsh	Original	4.7	Willingness to learn Welsh
4.8	Welsh language refresher classes for Welsh speakers	Original	4.8	Welsh language refresher classes for Welsh speakers
4.9	Staff induction	Original	4.9	Staff induction
4.10	Releasing staff for training	Original	4.10	Releasing staff for training

Appendix 28a

Reliability and Validity Checks on the Qualitative Research

Rodgers and Cowles (1993) emphasized the importance of maintaining notes for every stage of a research project and offered strategies for keeping effective records to demonstrate the project's rigour. Morse (1994) also noted that:

> *'Careful documentation of the conceptual development of the project should leave an adequate amount of evidence that interested parties can reconstruct the process by which the investigators reached their conclusion.' (p.230).*

According to Halpern (1983) (in Lincoln & Guba, 1985) an audit trail consists of six types of documentation; these are, raw data, data reduction products, data reconstruction products, process notes, materials relating to intentions, and instrument development information.

For the purpose of the qualitative phase of the current study, semi-structured interviews were conducted by a team of five researchers with a purposive sample of 83 questionnaire survey respondents. Each interview was tape recorded and tapes were labelled accordingly thus yielding the raw data. The interviews were then coded by the individual researchers and aspects of verbatim transcripts were documented alongside the appropriate codes on the Case Charts, labelled by Halpern (1983) as the data reduction product. The Case Charts were then all entered onto an Interview Spreadsheet, known by Halpern (1983) (in Lincoln & Guba, 1985) an as the synthesis product. This process enabled the grouping of categories according to themes.

The themes were then further examined in detail by three of the five main researchers, thus providing an opportunity for checking inter-coder reliability, as well as the refinement of conceptual codes and the reconstruction of categories and sub-categories. It was decided that in the event of disagreement, the interviewers' perspective would take precedence because of his/her in-depth familiarity with the data and the participant. In controversial circumstances, the ultimate decision was made by the project leader. When all the codes had been re-distributed accordingly, the researcher responsible for that theme created a Thematic Chart (the process notes) detailing the way in which the interviewee transcripts are structured around a central theme, within major, minor, and sub-categories.

Finally, each Thematic Chart was presented to the research team and discussed in detail. This was an interactive process whereby discussions proceeded until all three researchers were satisfied with the distribution of the categories and sub-categories within the themes. The final Thematic Charts contained slightly different categories to the originals; some were allocated new – more meaningful - names whilst others were re-defined as a result of the amalgamation of previous categories.

Reliability and Validity Checks
Two main approaches were adopted, as outlined below:

Check 1
The data reduction (Case Charts) and data reconstruction documents (Interview Spreadsheet) were checked for compatibility. For example, Code 1.1 for Interviewee 21 on the Case Chart was checked to ensure it corresponded to Code 1.1 for Interviewee 21 on the Interview Spreadsheet. Appendix 28b shows the random codes that were checked against the first 81* Interviewees. All these random checks had satisfactory outcomes. In Appendix 28b, the word 'corresponds' was used to signify the same code on the Case Chart as on the Interview Spreadsheet, and the words 'no data' were used to signify that no quotation had been allocated to this code.

Check 2
The interviewee quotations cited in the final results and discussion (the synthesis product) were systematically traced back through the stages of the qualitative analysis, via the Interview Spreadsheet and Case Charts in order to ensure accuracy of reporting (see Appendix 28c). All these checks had satisfactory outcomes. In other words, it was possible to trace each quotation from the final discussion to the individual interviewee Case Charts.

In summary, the reliability and validity checks have demonstrated that there is rigour in the methodology, and therefore it can be concluded that an independent auditor in an inquiry audit of qualitative data would draw similar conclusions about the data.

* The reliability and validity checks on the qualitative research were completed before the case charts for the extra two interviewees were collated into the main interview spreadsheet. All 83 interviewees are now included in the synthesis product

Appendix 28b Random Codes checked against 81 Interviewees

Key:
Corresponds: Same code on the Case Chart as on the Interview Spreadsheet
No data: No quotation allocated to this code

Code	Interviewee	Checked ✓	Comment
1.1	1.	✓	Corresponds
1.2	2.	✓	Corresponds
1.3	3.	✓	Corresponds
1.4	4.	✓	Corresponds
1.5	5.	✓	No data
1.6	6.	✓	Corresponds
1.7	7.	✓	Corresponds
1.8	8.	✓	Corresponds
1.9	9.	✓	No data
1.10	10.	✓	Corresponds
1.11	11.	✓	No data
1.12	12.	✓	No data
1.13	13.	✓	No data
1.14	14.	✓	No data
1.15	15.	✓	No data
2.1	16.	✓	Corresponds
2.2	17.	✓	Corresponds
2.3	18.	✓	No data
2.4	19.	✓	No data
2.5	20.	✓	No data
2.6	21.	✓	No data
2.7	22.	✓	Corresponds
2.8	23.	✓	No data
2.9	24.	✓	No data
2.10	25.	✓	No data
2.11	26.	✓	Corresponds
2.12	27.	✓	No data
2.13	28.	✓	Corresponds
2.14	29.	✓	Corresponds
2.15	30.	✓	Corresponds
2.16	31.	✓	No data
3.1	32.	✓	No data
3.2	33.	✓	Corresponds
3.3	34.	✓	Corresponds
3.4	35.	✓	No data
3.5	36.	✓	Corresponds
3.6	37.	✓	No data
3.7	38.	✓	Corresponds
3.8	39.	✓	No data
3.9	40.	✓	No data
3.10	41.	✓	Corresponds
3.11	42.	✓	No data
3.12	43.	✓	Corresponds
3.13	44.	✓	No data
3.14	45.	✓	No data
3.15	46.	✓	No data
3.16	47.	✓	No data
3.17	48.	✓	No data
4.1	49.	✓	Corresponds
4.2	50.	✓	Corresponds
4.3	51.	✓	No data
4.4	52.	✓	No data
4.5	53.	✓	No data
4.6	54.	✓	No data
4.7	55.	✓	No data
4.8	56.	✓	No data
4.9	57.	✓	No data
4.10	58.	✓	No data
1.1	59.	✓	Corresponds
1.2	60.	✓	Corresponds
1.3	61.	✓	No data
1.4	62.	✓	Corresponds
1.5	63.	✓	No data
1.6	64.	✓	No data
1.7	65.	✓	No data
1.8	66.	✓	No data
1.9	67.	✓	No data
1.10	68.	✓	No data
1.11	69.	✓	Corresponds
1.12	70.	✓	Corresponds
1.13	71.	✓	No data
1.14	72.	✓	No data
1.15	73.	✓	No data
3.1	74.	✓	No data
3.2	75.	✓	No data
3.3	76.	✓	Corresponds
3.4	77.	✓	Corresponds
3.5	78.	✓	No data
3.6	79.	✓	No data
3.7	80.	✓	Corresponds
3.8	81.	✓	No data

Appendix 28c Audit trail from the final results and discussion (data synthesis) to the original codes and interviewee transcripts (raw data)

Interviewee Number	Quotation	Re-constructed Category	Original Code
Theme 1	**Welsh Language Awareness**		
9	I've got enough things to do on my plate without trying to resurrect a dead language	Status of the Welsh language	1.1 Status of the Welsh Language
18	I have to give it an important place. The language is an important aspect that we must consider	Status of the Welsh language	1.1 Status of the Welsh Language
32	It's not really a Welsh area. If we go up to the hill farmers, possibly. They're likely to be a bit more Welsh (speaking)	Extent of Welsh spoken across Wales	1.2 Extent of Welsh Spoken across Wales
59	I think it's (Welsh) becoming a bit too dominating in this area	Personal perspectives	1.11 Personal perspectives on bilingualism
19	O! Mae'n (sensitifrwydd iaith) bwysig dros ben yn tydi? (Oh! It's (language sensitivity) extremely important isn't it?)	Personal Perspectives	1.11 Personal perspectives on bilingualism
75	Mae nhw (bydwragedd di-Gymraeg) yn galw nhw'n, sort of, 'hicks o'r sticks' felly. A mae nhw'n teimlo fel bod nhw ychydig bach yn araf deg felly. (They (non Welsh speaking midwives) sort of call them, "hicks from the sticks" and they feel that they are a little bit backward like)	Exhibiting prejudices	1.4 English ability of Welsh speakers
2	You kind of, you like to belong with them. If you are in a community with you know, with Welsh people, and would like to be one of them	Welsh identity	1.12 Language as a means of identity
7	I feel a little aggrieved when people have said to me that I can't be Welsh if I'm not Welsh speaking. I don't rate that, because I must admit that I don't think that's necessarily the case	Welsh identity	1.12 Language as a means of identity
Theme 2	**Care Enhancement**		
71	I think the facilities are there but they are not actually - they're not in a structured, formal way. If somebody were to ask, then we would actually make sure that there was someone there who was a Welsh speaker	Facilitating language choice	2.7 Responding to patient's language choice
26	Dy' nhw (yr henoed) ddim mor gyfforddus yn y Saesneg. Mae nhw heb gael eu codi lan gyda defnyddio'r Gymraeg a'r Saesneg mor gymaint. So mae gyda ni, wel (rydym) ni wedi gorfod tyfu lan gyda fe, so chi ddim yn meddwl ambiti fe cymaint – chi'n eitha' hapus i siarad 'da rhywun yn y Gymraeg neu'r Saesneg. Gyda'r henoed, dwi'n credu fod	Facilitating Expression	2.1. Elderly

Interviewee Number	Quotation	Re-constructed Category	Original Code
	o'n eitha' pwysig bod nhw'n – os oes rhywun i gael, fydda'i lot well 'da nhw i siarad 'da rhywun yn y Gymraeg, just i wneud nhw deimlo'n fwy cyfforddus dwi'n credu i ddechrau efo – yn enwedig os 'ma fe ambiti rhywbeth fel iechyd. (They (the elderly) are not as comfortable with using English. They haven't been raised to use Welsh and English as much. So we have, well, we've had to grow up with it, so you don't think about it as much – you are quite happy to speak to somebody in Welsh or in English. With the elderly, I believe that it is quite important that they – if there is someone available they would much prefer to speak to somebody in Welsh – just to make them feel more comfortable to start with – especially if it's about something like health)		
62	All Welsh speakers speak very good English and are very capable of taking home the message that we want in English	Facilitating Expression	1.14. Animosity towards the Welsh language
2	Sometimes through speaking their own language - recognising, you know, their own language, it means as well that you recognise them as a whole person	Facilitating a holistic approach	2.14 Facilitating patient /client identity
30	I'm able to bond with them (the Welsh speaking patients) in a way that the other nurses (non-Welsh speaking) can't bond with them, and I feel that then, that (the) patient, because I've bonded with them, is then more than happy to relax with me and to tell me what the problems are and how I can help. And that gives you a sense of being a little bit more special, because you're a bit more aware – it's just a shame I'm not superb at Welsh	Establishing relationships	2.12 Establishing therapeutic relationships
29	Os nad oes modd i'r claf esbonio'n glir yn Saesneg, mae'n gallu cael effaith mawr ar y diagnosis a fel 'yn ni'n trin nhw (If the patient can't explain clearly, in English, this can have a huge effect on the diagnosis and how we treat them)	Care process	2.16 Care enhancement
Theme 3	**Organisational Issues**		
63	I just feel to a certain extent there's a lot of money being spent (on the Welsh language) that could be spent elsewhere (in the health service)	Organisational Accountability	3.1 Cost
29	Mae dau broblem – un, y problem o dim amser, achos bod y nyrsys a'r doctoriaid yn rhedeg bobman. A hefyd y problem – does dim lot o Gymreictod gyda'r staff. (There are two problems – one is the problem of no time, because the nurses and doctors are running everywhere. And also the problem of the staff not being very Welsh)	Organisational Accountability	3.2 Time

Interviewee Number	Quotation	Re-constructed Category	Original Code
51	There is a bit of an issue regarding this because what has been happening recently is that the Trust pays to have somebody translate the information, but to be honest, myself and the other Welsh speaker, we do have a sort of veto of the information given, because our feelings are that the information tends to be translated literally so we have been, sort of, editing it a little bit to make it a bit more user friendly	Organisational Accountability	3.10 Translators
36	There are these subtleties in language which makes the context completely different, just by a single word. Misunderstandings can't happen in medicine – you have to be extremely precise with it	Language of Healthcare	1.10 Welsh ability of English speakers
34	We're never going to write medical notes in Welsh, you know, which would be dangerous. Imagine trying to – we're moving aren't we to a an integrated care record system – where people's details will be available to the appropriate person – to any clinician, you know, so if you go on holiday to Scotland your record will be available. Well, it would be idiotic wouldn't it if they were in Welsh? So we can't keep medical records in – other than English	Language of Healthcare	3.11 Formal language of healthcare
8	I think for the patient the priority is their health, it's not the language	Need for Welsh language service	3.12 People don't ask for a Welsh service
Theme 4	**Training Implications**		
76	To me, I think, if you're going to learn it you need to learn it. I mean, it's all very well being able to say good morning, but if somebody's got pain, or if a relative is worried ...it's no good me just saying good morning and then.you know, ok, I led you in, but now that's a blind alley, now talk to me in something I can und......you know, what's the point?	Welsh language learning	4.2 Fit for purpose Welsh language classes
33	This comes back to the lack of staff and releasing people. We release people like, say for, physio courses. That would have to be the priority, so it (Welsh classes) would come lower down the scale	Welsh language learning	4.10 Releasing staff for training
31	You need to make them (people coming into the area) aware of Wales. You know, (tell them) the areas where people do, sort of, speak Welsh are, and everything – and being sensitive towards it. I don't think there's any harm in that at all	Welsh Language awareness training	4.4 Language awareness training
75	Dwi'n meddwl fasa hynna'n helpu dipyn bach (cael sesiynau hyfforddiant bydwreigiaeth drwy'r Gymraeg). I bobl ddeall felly, pwysigrwydd felly, os ydyn nhw yn teimlo'n well felly, cael y sesiynau yma trwy'r iaith Gymraeg felly. Mae nhw'n mynd i ymateb yn well, felly yn eu gofal nhw (I think that would help a little (Welsh medium midwifery training). For	Welsh medium healthcare education	4.5 Welsh medium education and training

Interviewee Number	Quotation	Re-constructed Category	Original Code
	people to understand like, the importance like, if they feel better like, having the sessions through the Welsh language like. They are going to respond better therefore in their care)		
Discussion			
6	Sometimes I'll be (eye) testing, and I'll be asking the child – telling the child what to do in Welsh, but there's no way I'd say I'm fluent – it's just phrases I've picked up that I can use when I'm testing, and I'll say another test – that I really can't get a handle on, what I need to say – I'll say "now Mum, I'm going to need your help on this one – what I want you to say – explains this". And the parents are great! And it's evident – they'll often say 'we appreciate that you're trying'. Now that's really nice, 'cos we are trying	Establishing relationships	2.12 Establishing therapeutic relationships
48	Da chi'n gallu helpu nhw (y cleifion sy'n siarad Cymraeg fel iaith gyntaf) lot mwy – achos yn aml iawn – mae'n nhw'n mynegi problemau - dydy nhw erioed wedi sôn wrth rhywun Saesneg wyrach - dwi di ffeindio – os da chi'n siarad Cymraeg efo rhywun, mae'r ffordd mae'r teulu yn helpu nhw a'r ffordd mae'r capel - mae eu holl ffordd o fyw – mae'r ...cylch yn wahanol rhywsut…..Efo'r Saeson, dydi teulu ddim cweit mor bwysig – dydi'r gymuned – di'r capel a'r gymdeithas mewn pentrefi bach, ddim cweit mor bwysig i rhywun sy'n byw yn y dref – felly agweddau yne yn dod i fewn hefyd. (You can help them a lot more (the patients who speak Welsh as a first language) because very often – they are conveying problems – they may have never mentioned to an English person perhaps – I have found if you speak Welsh with somebody, the way that their family help them, the chapel – their whole way of life – the circle is different somehow". "With the English, family is not quite as important – the community – the chapel and the community in small villages – are not quite as important for somebody who lives in the town – so those attitudes come into it too)	Facilitating Expression	2.1 Elderly
9	If I had a patient who refused to speak to me pre-operatively in Welsh unless I spoke Welsh, … I frankly don't know what I would do. The option is either to .. humour the patient or to walk away – I suppose it depends on what time of the day it was! How rough the previous night was, I can be pleasant, but I can be unpleasant - it's like anybody else	Facilitating language choice	2.7 Responding to patients' language choice
61	If you're in this sort of area (in Wales) there's not much incentive for me to actually learn Welsh, you know, because none of my patients use Welsh	Need for Welsh language Service	3.12 People don't ask for a Welsh service

Interviewee Number	**Quotation**	**Re-constructed Category**	**Original Code**
49	I know I've been working with a man regularly, weekly, for about six months, before I realised that Welsh was his first language (laughs). I thought 'well, hang on, it is obvious really, you know, 'cos he had that kind of – there's something about a /S/ sound – I remember my granny having it	Facilitating language choice	2.5 Identifying patients' language choice
30	I can normally gauge who speaks Welsh and who can't….Firstly, I look at their name. If they've got a Welsh name,…also if their cards are written in Welsh – their get well cards – I'll have a quick peek at them, and if they're written in Welsh, again, I know they speak Welsh, and sometimes you can just hear them over, one word might be a Welsh word, because they just tend to mix English and Welsh don't they? So if they do that – that's when I'll know they speak Welsh	Facilitating language choice	2.5 Identifying patients' language choice
18	We need to have translations done quickly and efficiently, that is, back on my desk straight away. That would be nice because that is a barrier to doing something, you know. We would do an instruction sheet on something but it's going to be such a fiddle getting the translation that we don't bother to do it at all	Organisational accountability	3.10 Translators
82	The only problem is that we've not got enough (Welsh) Speech Therapists and there's a waiting list, so that's, if you like, not good enough. The fact that we do offer the service, yes, that's good, it's just the waiting list - we need more Speech Therapists who can speak it (Welsh)	Need for Welsh language Service	3.12 People don't ask for a Welsh service
75	Dy' nhw (y rheolwyr) ddim yn cymryd o i fewn bod chi'n Gymry Cymraeg felly, ac yn fwy 'suited' i fynd i fewn i'r ward (lle mae'r mwyafrif o'r merched Cymraeg eu hiaith)…O ran yr ysbyty felly, dy' nhw ddim yn gwneud dim gwahaniaeth, i trio cael y sort of, bydwraig (Cymraeg) i dudwch, edrych ar ei hôl hi (y ferch) (They (the managers) don't take into account that you are a Welsh speaker like, and more suited to go into the ward (where the majority of Welsh speaking women are admitted)". "The hospital doesn't differentiate – to try to, sort of, have the (Welsh speaking) midwife, to say, look after her (the woman)	Organisational Responsibility	3.6 Organisational Responsibility

Appendix 29 – Thematic Chart 1: Welsh Language Awareness

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
1.1	Status of Welsh Language					
1.1.1		Individual perceptions		I have to give it an important place. The language is an important aspect that we must consider (Interviewee 18)	So I think it's important but I don't think it's essential because at the end of the day we've never really had a major complaint. We do what we can. (Interviewee 6)	I've got enough things to do on my plate without trying to resurrect a dead language (Interviewee 9)
1.1.2		Fluctuating status		I think it's flourishing. It's coming back. People have realised that we can't afford to loose it. (Interviewee 3)	Mae statws y Gymraeg wedi newid yn ddiweddar - y ffasiwn wedi troi nôl i'r Gymraeg. Yr hen arfer o droi i'r Saesneg wrth i rywun di-Gymraeg gerdded i mewn i'r stafell wedi diflannu. Mwy o barch at yr iaith rwan. (Interviewee 21) *The status of Welsh has changed recently – the fashion has turned back to Welsh. The old way of turning to*	Feels it is wrong that the Welsh language is declining (Interviewee 74)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
					English when somebody who can't speak Welsh comes into the room has disappeared. There is more respect for the language now. (Interviewee 21)	
1.1.3		Socio-political Status		English is the language of function. Welsh is always the social language amongst consenting adults, particularly older people. We use it to jolly each other along. (Interviewee 9)	…interpreters in for um for other ethnic groups… not other ethnic groups is it because Welsh isn't ethnic is it (Interviewee 76)	I think its a shame that it's become such a political issue (Interviewee 6)
1.2	Extent of Welsh spoken					
1.2.1		Geographical comparisons		It's fascinating the geography of it that there are some villages that are almost pockets of Welsh language and around them there may not be much Welsh spoken but you go into this village and	I think it varies across Wales. I know the emphasis is that it should be important wherever you are but I think there is a difference in certain parts of Wales. (Interviewee 39)	Ddim mor bwysig ar ffin Cymru ond mae o yn bwysig iawn yn Sir Fôn a Gwynedd (Interviewee 25) *Not as important on the Welsh border, but it is very important in Anglesey and*

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				everybody speaks it (Interviewee 79)		*Gwynedd (Interviewee 25)*
1.2.2		Chronological comparisons		Canran bach o bobl sydd ddim yn deall Saesneg. Deg mlynedd yn ôl byddai llawer o bobl ddim yn deall Saesneg, yn enwedig ymysg yr henoed. (Interviewee 26) *Only a small percentage of people don't understand Welsh. Ten years ago many people would not understand English – especially among the elderly (Interviewee 26)*	Less Welsh speakers now in this area than years ago (Interviewee 34)	Hears less Welsh today than 20 years ago. (Interviewee 17)
1.2.3		Extent in area		Llawer yn siarad Cymraeg yn yr ardal hon (Interviewee 26) *Many people speak Welsh in this area (Interviewee 26)*	Local farming community tend to be Welsh speakers (Interviewee 38)	Anaml dwi'n cael y cyfle i ddefnyddio'r Gymraeg hefo'r merched oherwydd nad oes llawer yn siarad Cymraeg yn yr ardal hon (Interviewee 75) *I rarely have the*

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
						opportunity to use Welsh with the women…because not many speak Welsh in this area (Interviewee 75)
1.2.4		Contact with English and Welsh	English		Even though people are bilingual, English seems to be the main language (Interviewee 22)	I come across more English speakers than Welsh in the hospital (Interviewee 40)
			Welsh	I come across Welsh speaking patients on a daily basis (Interviewee 16)	I have few Welsh families. I could count on the fingers of one hand how many I have had over the past 16-17 years (Interviewee 37)	I've hardly ever come into contact with someone speaking Welsh (Interviewee 32)
1.3	Personal perspectives					
1.3.1		Influences	Education	I liked my Welsh teacher (in school) and I still keep in touch with her (Interviewee 10)	At the English grammar school I dropped Welsh for Biology at an early stage (Interviewee 9)	I am English and when I was at primary school the headmaster was a Welsh nationalist and was not very nice to be honest to children who were English really (Interviewee 67)
			Background	Mae fy nghefndir Cymraeg yn fwy, a dwi wedi byw yn yr ardal ar hyd fy oes	I don't speak Welsh, and my mother is from England and doesn't speak	I was brought up in an area where I heard a lot of Welsh, that's how

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				ac mae'r gwraidd yn gryf iawn o gadw yr iaith Gymraeg yn gryf yn yr ardal (Interviewee 50) *My Welsh background is stronger, and I have lived in this area all my life, and the roots are very strong for keeping the Welsh language strong in the area (Interviewee 50)*	Welsh and my father was from Monmouthshire and again was not Welsh speaking. So I was brought up by parents who neither spoke nor understood Welsh (Interviewee 33)	people in the area communicated. I was very aware that it was not my first language. Perhaps you are aware when there are differences. But nonetheless I was brought up speaking English (Interviewee 33)
			Children	My children speak Welsh. They go to a Welsh school. I like the idea they can speak Welsh (Interviewee 20)	It's good to encourage it and both my children did it at school and my youngest one still is and is good at it (Interviewee 39)	Our family is the only one to send our daughter to an English school – most go to the local school, which is bilingual. My daughter's school was chosen because of the reputation of the school which is single sex (Interviewee 36)
			Exposure to language	Being brought up in a Welsh environment with exposure to Welsh	Mae gofynion y cleifion mewn ardal Gymraeg yn gwneud fi'n fwy	Working here, you're immersed in it – working in the field, policies, etc.

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				language leads to positive attitudes to Welsh language (Interviewee 3)	ymwybodol ynglŷn â phwysigrwydd y Gymraeg yn yn gwasanaeth iechyd. (Interviewee 26) *The needs of patients in Welsh speaking areas has made me aware of the importance of Welsh in the health service. Some are extreme – anti English.(Interviewee 26)*	(Interviewee 12)
1.3.2		Attitudes		O! Mae'n (sensitifrwydd iaith) bwysig dros ben yn tydi? Oh! It's extremely important isn't it? (Interviewee 19)	Never really think about it no (Interviewee 66)	Can you tell me why it's so important why we need a bilingual medical system? I can't work out why it's so important. (Interviewee 36)
1.4	Exhibiting Prejudice					
1.4.1		Towards Welsh		Chinese whispers went around about that (raising the issue of bilingual signs). I am regarded as someone who has a bee in her bonnet. I am not popular. It is not pleasant but I	Mae nhw (bydwragedd di-Gymraeg) yn galw nhw'n, sort of, 'hicks o'r sticks' felly. A mae nhw'n teimlo fel bod nhw ychydig bach yn araf deg felly.	There was quite a lot of antagonism to Welsh amongst some of the consultants really 'oh do we have to be bothered'…so there was quite an element of militancy amongst the Welsh

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				don't care (Interviewee 52)	*They (non Welsh speaking midwives) sort of call them, "hicks from the sticks" and they feel that they are a little bit backward like (Interviewee 75)*	speakers which you could understand because they were not all appreciated (Interviewee 72)
1.4.2		Towards English		Mae gofynion y cleifion mewn ardal Gymraeg yn gwneud fi'n fwy ymwybodol ynglŷn â phwysigrwydd y Gymraeg yn y gwasanaeth iechyd. Rhai'n eithafol – anti-English (Interviewee 26) *Some of the client requirements in a Welsh area has made me aware of the importance of Welsh in the health service. Some are extreme – anti English" – Interviewee 26*	I've only run into 2 people in 22 years who have been obstinate because I am not a Welsh speaker. In the professional sense, 2 particular teachers. But they are the exception (Interviewee 18)	Having been on the receiving end of (hostile) comments, I'd like to see a bit of 2-wayness from some people that don't always do me down. Because I think that's the way its looked for an English person (Interviewee 6)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
1.4.3		Between Welsh and English		In the village that I was born there is the divide between Welsh and English and that would concern me because we've got to work together. We've got to live together in the areas (Interviewee 33)	Dim ond pump allan o chwechdeg o fydwragedd yn yr ymddiriedolaeth s'yn siarad Cymraeg. Os ydi'r Cymry Cymraeg yn cael paned hefo'u gilydd ac yn dechrau siarad Cymraeg mae rhai yn dweud, "Oh! How rude to speak Welsh." neu "Why are you talking about us?" (Interviewee 75) *Only five out of sixty midwives in the Trust can speak Welsh. If the Welsh speakers have a cuppa together and they start to speak Welsh some say "Oh! How rude to speak Welsh." Or "why are you talking about us." (Interviewee 75)*	There is no divisiveness in the Trust now but I've seen it happen, you hear it happens and I don't doubt that it would happen and that would be a tragedy (Interviewee 33)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
1.5	Welsh Identity					
1.5.1		Feeling Welsh		It doesn't put me off (hearing Welsh) It's nice actually to hear it, it makes you feel like you're in Wales (Interviewee 32)	I sing the national anthem at rugby games as loudly as anybody (Interviewee 9)	I almost consider myself Welsh. 'cos I went to Uni in Cardiff and my first job was in Abergavenny and then I worked for ten years near Newport and I've been almost ten years up here (Interviewee 14)
1.5.2		Feeling unique		If I find somebody when I don't know them but they speak my language, I go immediately to them. I chat with them. Always people are nostalgic with their own language and they like it and they think they have a special identity (Interviewee 8)	It's always nice when you speak with your language. You have some special feeling that you are something different from other people (Interviewee 8)	British or English people often fall into trap of referring to Britain and England as synonymous. Must be really irritating if you're Welsh (Interviewee 34)
1.5.3		Belonging		Keen for family to be integrated into local community – sent children to local Welsh schools. Proud example of daughter, who is	You kind of, you like to belong with them. If you are in a community with you know, with Welsh people, and would like to be one of	When I was 18 I remember getting books and finding "My God, I'm Welsh!" and then there was a desperate need to

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				now a medic, being identified by locals as Welsh and of her supporting a local Welsh speaker in hospital by speaking Welsh to him (Interviewee 34)	them (Interviewee 2)	find a heritage (Interviewee 49)
1.5.4		Language versus identity		Some people confuse a national identity with a language perception. I think everyone likes an identity but language to come over when people are feeling particularly concerned over their identity and not their communication skills (Interviewee 5)	Whatever happens it should bring people together, Welsh or English. I think the danger is there could be that divide. Cos you're Welsh or 'cos your Welsh speaking. I consider myself Welsh. I am British but I am Welsh. That's what I put myself down as, my nationality. And I'm very proud of it. But some people, because I don't speak Welsh, would not consider me to be Welsh (Interviewee 33)	I feel a little aggrieved when people have said to me that I can't be Welsh if I'm not Welsh speaking. I don't rate that, because I must admit that I don't think that's necessarily the case (Interviewee 7)

Appendix 30 – Thematic Chart 2: Care Enhancement

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
2.1	Facilitating language choice					
2.1.1		Identifying language choice				
2.1.1.1			Visibility of Welsh speakers	It's hard to say with English speaking Welsh speakers, if you see what I mean – they're not immediately obvious. (Interviewee 80)	I assume the patients speak English (Interviewee 40)	I know I've been working with a man regularly, weekly, for about six months, before I realised that Welsh was his first language (laughs). I thought 'well, hang on, it is obvious really, you know, 'cos he had that kind of – there's something about a /S/ sound – I remember my granny having it (Interviewee 49)
2.1.1.2			Stage of identifying language choice	Language choice can be identified at point of contact, i.e. initial appointment (Interviewee 68)	Ask at first visit (Interviewee 38)	Choice of preferred language should be made at point of referral - this sometimes happens (Interviewee 53)
2.1.1.3			Process of identifying language choice	Gofyn i rywun pa iaith mae nhw eisiau siarad - os ydy nhw'n gyfforddus yn y Saesneg neu fod eisiau newid i'r Gymraeg.	I can normally gauge who speaks Welsh and who can't.…Firstly, I look at their name. If they've got a Welsh name,…also if their	We don't ask them. We don't have to ask them that – you can twig it. They (the Welsh staff) have the very happy knack of being able to

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				Ask someone which language they want to speak – if they're comfortable in English or they want to switch to Welsh (Interviewee 81)	cards are written in Welsh – their get well cards – I'll have a quick peek at them, and if they're written in Welsh, again, I know they speak Welsh, and sometimes you can just hear them over, one word might be a Welsh word, because they just tend to mix English and Welsh don't they? So if they do that – that's when I'll know they speak Welsh (Interviewee 30)	twig. (Interviewee 18)
2.1.2.		Documenting language choice				
2.1.2.1			System of documentation	Our ante-natal form has a question about language(s) spoken (Interviewee 47)	Not formally documented as part of assessment procedure (Interviewee 60)	No routine system for documenting language choice (Interviewee 71)
2.1.2.2			Method of documentation	Mae nhw'n iwsio arm bands coch i chi wybod pwy sy'n siarad Cymraeg - gwybod pa iaith i gychwyn *They use red arm bands so that you know who speaks Welsh and you know which language to start (Interviewee 24)*	Language choice documented in nursing notes (Interviewee 17)	

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
2.1.3		Responding to language choice	Degree of response	We would tell people that we have Welsh speakers on the ward if they want to speak Welsh (Interviewee 20)	I think the facilities are there but they are not actually - they're not in a structured, formal way. If somebody were to ask, then we would actually make sure that there was someone there who was a Welsh speaker (Interviewee 71)	If I had a patient who refused to speak to me pre-operatively in Welsh unless I spoke Welsh, … I frankly don't know what I would do. The option is either to .. humour the patient or to walk away – I suppose it depends on what time of the day it was! How rough the previous night was, I can be pleasant, but I can be unpleasant - it's like anybody else (Interviewee 9)
2.1.3.1			Ensuring Welsh language skill mix	We always try to make sure that we keep a high proportion of Welsh speakers amongst the staff that we've got (Interviewee 18)	Often there's no one at all on a shift that can speak Welsh and on another there might be 3 fluent speakers (Interviewee 39)	Only 3 or 4 staff speak Welsh out of a compliment of over seventy (Interviewee 77)
2.1.3.2			Level of Welsh	Ar lafar dwi'n defnyddio llawer o eiriau Saesneg gyda chleifion . Fel arfer, does dim gwahaniaeth gan bobl ond bod mwyafrif y sgwrs yn Gymraeg, er enghraifft, geiriau fel 'medication', 'treatment' ac 'instructions' *In conversation, I would*	Using Welsh with patients but interjecting English words if term not known , e.g clinical term or procedure (Interviewee 30)	I would use my minimal Welsh , e.g. 'diolch', with patients – words I am comfortable with – to make patients feel comfortable (Interviewee 60)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				use a lot of English words with patients. Usually people don't mind just so long as the bulk of the conversation is in Welsh, for example, words such as 'medication', 'treatment' and 'instructions' (Interviewee 26)		
2.1.3.3			Use of interpreters	When the consultant talks to some of our patients, they never grasp everything so we explain to them. Sometimes we have to explain in Welsh and it makes sense then. (Interviewee 3)	Parents may be called on to interpret for Welsh speaking children e.g. in developmental tests but it's more difficult if you're not able to speak directly to the child. (Interviewee 17)	If a resident is having difficulty expressing themselves in English, Welsh staff called, e.g. carer, receptionist, kitchen staff. (Interviewee 46)
2.2	Facilitating expression					
2.2.1		Enhancing communication		For dying patients, providing opportunities to talk about affairs of the heart and sympathise in their preferred language is very important indeed (Interviewee 17)	Wrth sylweddoli fy mod yn siarad Cymraeg, mae rhai cleifion yn dweud 'O jiw jiw, dwi di bod yn gwastraffu fy Saesneg - h.y. mae'n ymdrech arbennig i rai i siarad Saesneg. *When they realise that I speak Welsh, some patients say, 'O dear, I've been wasting my*	Of the patients I see, where English is their 2nd language, they have the ability to describe everything in English, although some children and elderly find it easier in Welsh (Interviewee 7)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
					English' - i.e.it's a special effort for some to speak English (Interviewee 26)	
2.2.2		Feeling comfortable		Mae cleifion sy'n siarad Cymraeg yn teimlo'n fwy cartrefol a chyfforddus yn siarad Cymraeg - yn enwedig yr henoed yn yr ysbyty (Interviewee 29) *Welsh speaking patients feel more comfortable and at home speaking Welsh – especially the elderly in hospital (Interviewee 29)*	Some Welsh speakers, eg farmers, are able to express themselves better in Welsh. Showing sensitivity to their language needs puts them at ease and relaxes them. (Interviewee 30)	Efallai fod rhai'n fwy cyfforddus weithiau (yn y Gymraeg) ond yn teimlo fod ddim hawl ganddyn nhw i wneud ffws *Perhaps some are sometimes more comfortable (in Welsh) but feel that they don't have any right to make a fuss (Interviewee 19)*
2.2.3.1		Vulnerable groups	Need for Welsh language provision	Mae'r iaith Gymraeg yn hanfodol i bawb sy'n gweithio hefo plant yng Nghymru *The Welsh language is essential for everyone who works with children in Wales (Interviewee 21)*	I imagine that if you are working in a predominantly Welsh speaking area, there's a need to care in Welsh, especially amongst the older population who are less used to using both languages (Interviewee 37)	It is mostly older people who would want to speak Welsh. Need to give people the option to speak Welsh and have a Welsh speaker around (Interviewee 40)
2.2.3.2			Enhancing communication	Some pre-school children don't speak English so we need to speak to them in Welsh. Older children may also need to use Welsh if they are ill or upset.	Mae'r henoed yn methu esbonio yn Saesneg beth sy'n bod hefo nhw. Dwi aml yn gweld nhw'n trio eu Saesneg hefo'r arbenigwyr ac yna yn troi atai a dweud 'Fel	Children who access this service all speak English so we don't have a problem with language sensitivity. (Interviewee 63)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				(Interviewee 17)	wyt ti'n gweud hyn?' *The elderly can't explain in English what's wrong with them. I often see them trying their English with the specialist then turning to me and saying 'How do you say this' (Interviewee 29)*	
2.2.3.3			Feeling comfortable	"Dy' nhw (yr henoed) ddim mor gyfforddus yn y Saesneg. Mae nhw heb gael eu codi lan gyda defnyddio'r Gymraeg a'r Saesneg mor gymaint. So mae gyda ni, wel (rydym) ni wedi gorfod tyfu lan gyda fe, so chi ddim yn meddwl ambiti fe cymaint – chi'n eitha' hapus i siarad 'da rhywun yn y Gymraeg neu'r Saesneg. Gyda'r henoed, dwi'n credu fod o'n eitha' pwysig bod nhw'n – os oes rhywun i gael, fydda'i lot well 'da nhw i siarad 'da rhywun yn y Gymraeg, just i wneud nhw deimlo'n fwy cyfforddus dwi'n credu i ddechrau efo – yn enwedig os 'ma fe ambiti rhywbeth fel iechyd.".	Using Welsh helps build a rapport with children and their parents. It helps put children at ease, especially if it is the language in which they are most comfortable. (Interviewee 17)	There are very few patients who are not comfortable to speak it (English), even elderly patients, cos that's usually the argument that's put forward. (Interviewee 5)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				(“They (the elderly) are not as comfortable with using English. They haven’t been raised to speak Welsh and English as much. We’ve had to grow up with it, so you don’t think about it as much – you are quite happy to speak to somebody in Welsh or in English. With the elderly, I believe that it is quite important that they can speak to somebody in Welsh – just to make them feel more comfortable to start with – especially if it’s about something like health.” (Interviewee 26)		
2.2.3.4			Orientating confused patients	Some people appear confused but when you talk Welsh they make sense and they’re more amenable and calm down if you speak Welsh to them (Interviewee 3)	Using Welsh helps orientate elderly confused Welsh speaking patients (Interviewee 46)	
2.3	Facilitating a holistic approach			Recognising a patient through their own language means that you recognise them as a whole person (Interviewee 2)	Mae na well cyfle i adnabod y ferch drwy ei dewis iaith *Chance of getting to know the woman*	Occupational therapy adopts a holistic approach to care. Meeting patient’s needs through the medium of Welsh is a very

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
					through her preferred language (Interviewee 75)	important part of this holistic approach (Interviewee 43)
2.4	Establishing relationships					
2.4.1		Bonding		I'm able to bond with them (the Welsh speaking patients) in a way that the other nurses (non-Welsh speaking) can't bond with them, and I feel that then, that (the) patient, because I've bonded with them, is then more than happy to relax with me and to tell me what the problems are and how I can help. And that gives you a sense of being a little bit more special, because you're a bit more aware – it's just a shame I'm not superb at Welsh. (Interviewee 30)	If you give them time and explain you don't actually speak it (Welsh) but you understand it, they seem fine - and you tend to get on with them and most of them adapt to you anyway. I've not really had a problem (Interviewee 10)	Your relationship with the patient is far more important than the language (Interviewee 38)
2.5	Care process					
2.5.1		Facilitating assessment, diagnosis and treatment		Facilitating patients to express themselves in their mother tongue enables their therapist to find out what's wrong with them in order to	Os nad oes modd i'r claf esbonio 'n glir, yn Saesneg, mae'n gallu cael effaith mawr ar y diagnosis a fel 'yn ni'n trin nhw (Interviewee 29)	Offering opportunities to speak Welsh demonstrates sensitivity to patients' needs but has no effect on care or management

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				treat their illness better. (Interviewee 60)	*If the patient can't explain clearly this can have a huge effect on the diagnosis and how we treat them) (Interviewee 29)*	(Interviewee 69)
2.5.2		Facilitating patient/client compliance		Using Welsh with Welsh speaking patients can increase their understanding, retention of information and compliance with treatment (Interviewee 71)	I've got a gentleman here who was not very well. He would not eat or drink. I was the only Welsh speaking nurse and I went in there and started speaking Welsh to him, saying, 'tyrd o'na rwan, mae'n rhaid cael ychydig i yfad ac i fwyta' and he started straight away. (Interviewee 73) *I've got a gentleman here who was not very well. He would not eat or drink. I was the only Welsh speaking nurse and I went in there and started speaking Welsh to him, saying, 'come on – you have to have a little to eat and drink' and he started straight away. (Interviewee 73)*	Enhanced understanding can improve patient compliance (Interviewee 35)

Appendix 31 – Thematic Chart 3: Organisational Issues

Theme 3: Organisational Issues

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
3.1	Organisational Accountability					
3.1.1		Investment in Bilingual Services				
3.1.1.1			Cost	Some colleagues may argue that there are better ways to spend money but we live in Wales and Welsh is the language (Interviewee 57)	Arian ydy'r broblem fel pob peth arall (Interviewee 62) *Money is the problem like everything else (Interviewee 62)*	I just feel to a certain extent there's a lot of money being spent (on the Welsh language) that could be spent elsewhere (in the health service) (Interviewee 63)
3.1.1.2			Time	Need extra time to explain procedures in Welsh (Interviewee 30)	NHS Direct yn cynnig gwasanaeth Cymraeg ond mae'n rhaid aros ar y ffôn am hir i'w dderbyn (Interviewee 26) *NHS Direct offers a Welsh language service – but you have to stay on the line for a long time to receive it (Interviewee 26)*	Mae dau broblem – un, y problem o dim amser, achos bod y nyrsys a'r doctoriaid yn rhedeg bobman. A hefyd y problem – does dim lot o Gymreictod gyda'r staff. (Interviewee 29) *There are two problems – one is the problem of no time, because the nurses and doctors are running everywhere. And also the problem of the staff not being very Welsh (Interviewee 29)*

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
3.1.1.3			Accuracy of Translation	There is a bit of an issue regarding this because what has been happening recently is that the Trust pays to have somebody translate the information, but to be honest, myself and the other Welsh speaker, we do have a sort of veto of the information given, because our feelings are that the information tends to be translated literally so we have been, sort of, editing it a little bit to make it a bit more user friendly (Interviewee 51)	Only be happy to put my name to a report I could read (Interviewee 53)	When we have things translated they are translated by academics and even my staff who call themselves Welsh speakers they look at the English version – so these classical translations that we do are not understood by Welsh speakers. It doesn't work well (Interviewee 18)
3.1.1.4			Translation Time	We send our stuff to the translator there is no problem there (Interviewee 70)	Translation is slow (Interviewee 22)	We need to have translations done quickly and efficiently, that is, back on my desk straight away. That would be nice because that is a barrier to doing something, you know. We would do an instruction sheet on something but it's going to be such a fiddle getting the translation that we don't bother to do it at all (Interviewee 18)
3.1.1.5			Bilingual Documents	Patient information from WAG and the health authority are in Welsh and English but company	Trust leaflets are bilingual (Interviewee 54)	Most documents are in English would like to see Welsh Assembly take responsibility for bilingual

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				documents and patient information are in English only (Interviewee 35)		provision of documents (Interviewee 45)
3.1.2		Staffing				
3.1.2.1			Numbers of Welsh Speaking Staff	The only problem is that we've not got enough (Welsh) Speech Therapists and there's a waiting list, so that's, if you like, not good enough. The fact that we do offer the service, yes, that's good, it's just the waiting list - we need more Speech Therapists who can speak it (Welsh). (Interviewee 82)	Lack of Welsh speaking staff is a barrier to Welsh medium provision in healthcare (Interviewee 47)	Ychydig iawn o Gymraeg sydd yn fy profeswn i…dau ddeg y cant sy'n siarad Cymraeg (Interviewee 24) *Only a few Welsh in my profession….twenty percent can speak Welsh (Interviewee 24)*
3.1.2.2			Recruitment	All other things being equal preference should be to Welsh speakers (Interviewee 53)	Hoffi gweld rhoi fwy o blaenoriaeth i'r iaith pan mae nhw yn apwyntio staff newydd…fwy amlwg fod o yn beth da i gael yr iaith (Interviewee 19) *I would like to see more priority given to the language when they are appointing new staff… more obvious that it is a good thing to have the language (Interviewee 19)*	By having a policy of recruiting Welsh speaking people they are limiting the recruitment of valuable people and this will lead to a poorer health service (Interviewee 59)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
3.2	Language of healthcare					
3.2.1			Universal language	Iaith technegol Cymraeg mae pobol yn cael trafferth efo (Interviewee 81) *It's the Welsh technical language that people have difficulty with (Interviewee 81)*	We're never going to write medical notes in Welsh, you know, which would be dangerous. Imagine trying to – we're moving aren't we to a an integrated care record system – where people's details will be available to the appropriate person – to any clinician, you know, so if you go on holiday to Scotland your record will be available. Well, it would be idiotic wouldn't it if they were in Welsh? So we can't keep medical records in – other than English (Interviewee 34)	Perceived barrier to Welsh language provision you have to speak the common language that everyone understands (Interviewee 2)
3.2.2			Misunderstanding	One of the central tenets of healthcare has got to be that patients are giving consent to procedures are informed and they have information given to them that is understandable and are able to make rational judgements on the information that they are given and come to choices on their treatment and they can only do that if the information that is given is understood (Interviewee	There are these subtleties in language which makes the context completely different, just by a single word. Misunderstandings can't happen in medicine – you have to be extremely precise with it (Interviewee 36)	I may ask the patient to speak English in order to ensure I understand correctly (Interviewee 1)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				79)		
3.2.3			Misinformation	I'd be worried that I'd say something that wasn't quite right (in Welsh) (Interviewee 6)	Need to make sure exact dosages are communicated, e.g. don't want to mix 0.1 ml with 1ml as the consequences could be serious. Therefore we need to speak the same language (Interviewee 54)	Misinformation can cause problems. If the forcing of the Welsh language goes even a minor part down that road I have to face it with some hostility or certainly with suspicion. Removal (of Welsh) would be safer. (Interviewee 9)
3.4	Need for Welsh Language Service					
3.4.1		Perception of Demand		Llawer fwy na oeddwn yn disgwl (cleifon Cymraeg) (Interviewee 19) *There are many more (Welsh patients) than I had expected (Interviewee 19)*	People from a stronger Welsh community would ask for a Welsh speaker (Interviewee 38)	Nobody has asked me in Welsh anything (Interviewee 80)
3.4.2		Expectations		People do not expect a Welsh service (Interviewee 35)	Perception by some that as long as you have a service this is more important than language provision (Interviewee 77)	Patients expect to receive an English service (Interviewee 71)
3.4.3		Priorities		I think for the patient the priority is their health, it's not the language (Interviewee 8)	I'm giving a giggle because I think that the situation in dentistry right now is such that I think for a lot of people I don't think they'd mind what language a dentist spoke as long as they could get to see a	We feel we're offering a good service. We've all got a lot of experience and a lot of additional qualifications and that, at the end of the day, it's more important, that we're quality professionals offering a

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					dentist (laughs) so language and the needs for speaking Welsh becomes variable with the degree of pain that is being experienced at the time (laughs) (Interviewee 7)	quality service than the fact that we happen to be fluent Welsh speakers (Interviewee 6)

Appendix 32 – Thematic Chart 4: Training Issues

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
4.1	Welsh language learning					
4.1.1		Need for Welsh language learning	Importance	I think everybody should be given the opportunity – non-Welsh speakers to learn Welsh if they want because I think healthcare is a traumatic experience (Interviewee 76)	It takes a long time to for one to realise its (Welsh language classes) importance (Interviewee 34)	There's no point learning Welsh for work (Interviewee 31)
			Skill mix		5-6 members of staff already speak Welsh. Therefore there's no justification to send others to Welsh classes (Interviewee 60)	We already have Welsh speakers in the trust – let's use them. Let them tell us what we should be saying. We don't need to pay for classes which are expensive (Interviewee 14)
			Incomers	It's important for people moving in to the area (Interviewee 1)	There's a need to offer basic language training, especially for those new to hospitals in Wales (Interviewee 40)	
			Balancing priorities	Would be well supported by managers to attend Welsh classes. Perceived as valuable for clinical work (Interviewee 69)	It competes with other aspects of continuing professional development (Interviewee 35)	There's no scope for Welsh language training – we have much more things we need to prioritise because we live in a very English area (Interviewee 65)
			Compulsion to learn Welsh	I suppose you could have Welsh lessons for people who wanted to	It would be a good idea as long as it was not made compulsory as it	Pushing people to learn Welsh doesn't work (Interviewee 43)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
				learn Welsh but I don't believe in anything that should be forced. (Interviewee 58)	was for teachers (Interviewee 56)	
			Willingness to learn Welsh	People who are born and bred in Wales are less likely to want to learn Welsh than people who have moved in from outside Wales. They feel more of a need to fit in to a new community. Therefore they are more likely to learn Welsh and send their children to Welsh school. (Interviewee 42)	Some staff are willing to learn, others have no enthusiasm (Interviewee 30)	Offering people to learn the Welsh language you might get a certain amount of takers in that I suppose (Interviewee 55)
4.1.2		Fit for purpose	Social proficiency	A few polite pleasantries would smooth things along – some phrases are quick to pick up (Interviewee 60).	You need everyday conversational Welsh that you're going to use (Interviewee 1)	As with learning any language, you need to ensure that learning is fit for purpose and appropriate (Interviewee 34)
			Achieving proficiency	The amount of Welsh I could learn in a short space of time is not going to be sufficient to actually conduct professional business (Interviewee 15)	To me, I think, if you're going to learn it you need to learn it. I mean, it's all very well being able to say good morning, but if somebody's got pain, or if a relative is worried ...it's no good me just saying good morning and then..you know, ok, I led you in, but now	The person that was here, she'd had 3 years of Welsh tuition and, to be honest, she was still functioning at the same level that I was managing and that was one day a week for 3 years. And that's a lot of time out of clinic (Interviewee 6)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
					that's a blind alley, now talk to me in something I can und......you know, what's the point? (Interviewee 76)	
			Raising expectations	You have to make it very clear that it's one or two words that you've got or they get all excited and then you've got to say 'Oh sorry' You know (Interviewee 76)	I try to (use Welsh) – the obvious thing like you always answer the phone in Welsh but you think 'O God I hope you're not going to expect me to speak Welsh' (Interviewee 49)	I can say 'Good Morning' – very very basic but the problem with it is you see is that when you say 'Good Morning' – 'Oh! You speak Welsh' (they take off). You allow them to approach you and you respond then you have to make it clear you are not a fluent Welsh speaker because you can give the wrong impression by doing it. (Interviewee 76)
4.1.3		Scheduling classes		Difficulties of access – not available on the internet (eg can learn French on the internet) (Interviewee 22)	What would be useful would be more flexible Welsh classes. A lot of our radiographers work shifts of on call, which means that from one week to the next they couldn't sign up for a regular commitment (Interviewee 5)	Once a week is insufficient to learn Welsh (Interviewee 77)
4.1.4		Effect on recruitment		If Welsh classes were included in basic training, the numbers of British students coming to Cardiff would drop significantly. It's OK if	Putting more pressure on dentists to learn Welsh will put people off working in Wales (Interviewee 63)	When we go out to attract people, with the difficulty we're already experiencing in asking them to accept the same money for more work under slightly more difficult

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				you're going to work in a Welsh speaking area but not needed for , e.g. Cardiff. Not many graduates from Cardiff go to West or North Wales (Interviewee 63)		circumstances, if we also told them that they would have to learn a foreign language as well, I don't think it would help (Interviewee 9)
4.1.5		Financial incentives		We should reward people financially as an incentive to acquire language skills (Interviewee 77)	Dylid cynnig bonws ariannol (Interviewee 21) *A financial bonus should be offered (Interviewee 21)*	What everyone's after now is being paid to do it (learn Welsh) – financial encouragement (Interviewee 61)
4.1.6		Welsh language refresher courses		I've not come across gloywi iaith classes. It would work, especially if someone came round and tailored it individually, because obviously my needs are different to someone else's needs (Interviewee 3)	Mae na lle i gael cyfle i bolisio iaith. I ni does na ddim byd am dermau gan y Trust. (Interviewee 50) *There is room for the opportunity to polish language. For us, there is nothing about terms from the Trust (Interviewee 50)*	Does dim angen gwella'ch Cymraeg llafar – dydi o ddim yn helpu. Mae dipyn o Wenglish yn iawn - pigo lan yr idioms wrth weithio yn y gymuned sy'n bwysig - dysgu fel i chi'n mynd ymlaen (Interviewee 29) *You don't need to improve your spoken Welsh – it doesn't help. A bit of Wenglish is fine – what's important is picking up the idioms as you work in the community – learning as you go along (Interviewee 29)*

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
4.1.7		Releasing staff	Cost of releasing staff	If there was no cost implication or time implications, it would be nice to say to everybody who doesn't speak Welsh 'Yes, there's a course available and you can go on it' (Interviewee 5)	Many people outside the NHS may be unwilling for money to be spent on learning Welsh. It's not seen as a priority (Interviewee 57)	It's up to the managers. If you're coming in and you've got to wait 3 months because the money's gone to Welsh language education so we can all speak very sweetly to each other or it's gone on an extra ITU nurse, what would you prefer? It's prioritisation of very scarce funding (Interviewee 9)
			Time for releasing staff	I think it's good that it's there and if in a department you can afford to lose a whole member of staff for an ongoing number of years then that's fine (Interviewee 6)	I've only got so much clinical time and I can't steal it from patients. Here's an issue of how much of a priority it is for me. I don't think I can take it from the patient's time (Interviewee 49)	Time is scarce. Everyone is very busy. You need time to be taken out of the working day but the work load is heavy. Release for Welsh classes is not perceived favourably by members of the team (Interviewee 57)
4.1.8		Responsibility	Personal	It's your personal responsibility to undertake a Welsh course (Interviewee 69)	If you're interested to learn it's up to you (Interviewee 2)	I did think about having private lessons but nobody was prepared to fund it and I did think, 'Well, OK I'm motivated to do this but why should I pay for it because to do it privately was going to cost a lot of money (Interviewee 6)

Code	Major Category	Minor Category	Sub-category	Episode 1	Episode 2	Episode 3
			Organisational	The responsibility for Welsh language training lies within the Trust. They need to offer it in work time and provide easy access. (Interviewee 38)	It should be part of the Trust's policy (Interviewee 77)	The Trust needs to support staff to learn Welsh (Interviewee 17)
4.1.9		Welsh language learning in Staff induction		There is a need for the Trust to put on fit for purpose Welsh language classes for staff as part of the induction programme (Interviewee 60)	Probably during induction it would be nice if they got some basic Welsh language training (Interviewee 52)	There was no Welsh or reference to Welsh included in my induction programme. It was left to my colleagues to explain the significance of Welsh pronunciations of the alphabet for assessments (Interviewee 69)
4.2	Welsh language awareness training					
4.2.1		Need for Welsh language awareness training		You need to make them (people coming into the area) aware of Wales. You know, (tell them) the areas where people do, sort of, speak Welsh are, and everything – and being sensitive towards it. I don't think there's any harm in that at all, no (Interviewee 31)	If you work with 'nice' Welsh speakers you will become sensitised to language issues (Interviewee 43)	I would not agree with a compulsory or statutory language awareness course (Interviewee 43)
4.2.2		In-migrants		You need language awareness training – make them sensitive to the Welsh language, particularly those	People need reminding that we live in a bilingual country. It's a matter of politeness and rapport (Interviewee 17)	

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				coming in to the area (Interviewee 31)		
4.2.3		Welsh language awareness training in Staff induction		Policies and bilingualism were discussed in the induction (Interviewee 22)	Need to introduce language awareness training here to prepare practitioners to work in the bilingual environment (Interviewee 17)	I suppose the fact that we live in Wales and Welsh is the first language we could have a lecture in induction to highlight the issue. Thereafter it would have to be up to the individual (Interviewee 33)
4.2.4		Healthcare education		They (language awareness sessions) need to be included as part of medicine training in Wales (Interviewee 34)	We need to be teaching nurses in their training (Welsh language awareness) (Interviewee 28)	There would be support for sessions on Welsh language awareness in training. However the H/V course is already crammed – but it needs to be considered (Interviewee 47)
4.3	Welsh medium healthcare education					
4.3.1		Preparation for practice		Dwi'n meddwl fasa hynna'n helpu dipyn bach (cael sesiynau hyfforddiant bydwreigiaeth drwy'r Gymraeg). I bobl ddeall felly, pwysigrwydd felly, os ydyn nhw yn teimlo'n well felly, cael y sesiynau yma trwy'r iaith Gymraeg felly. Mae nhw'n mynd i ymateb yn well, felly yn eu gofal nhw (Interviewee 75)	Mae angen mwy drwy'r Gymraeg i roi hyder i staff hefo cleifion Cymraeg, defnyddio'r geirfa, ac yn y blaen. (Interviewee 48) *Need more through the medium of Welsh to give staff confidence with Welsh patients, using the vocabulary, and so on (Interviewee 48)*	

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				I think that would help a little (Welsh medium midwifery training). For people to understand like, the importance like, if they feel better like, having the sessions through the Welsh language like. They are going to respond better therefore in their care (Interviewee 75).		
4.3.2		Cost				It (Welsh medium healthcare education) would not be financially viable and there would be no public support (Interviewee 57)