LLAIS: Gwasanaeth Cefnogi Isadeiledd Ymwybyddiaeth o Iaith

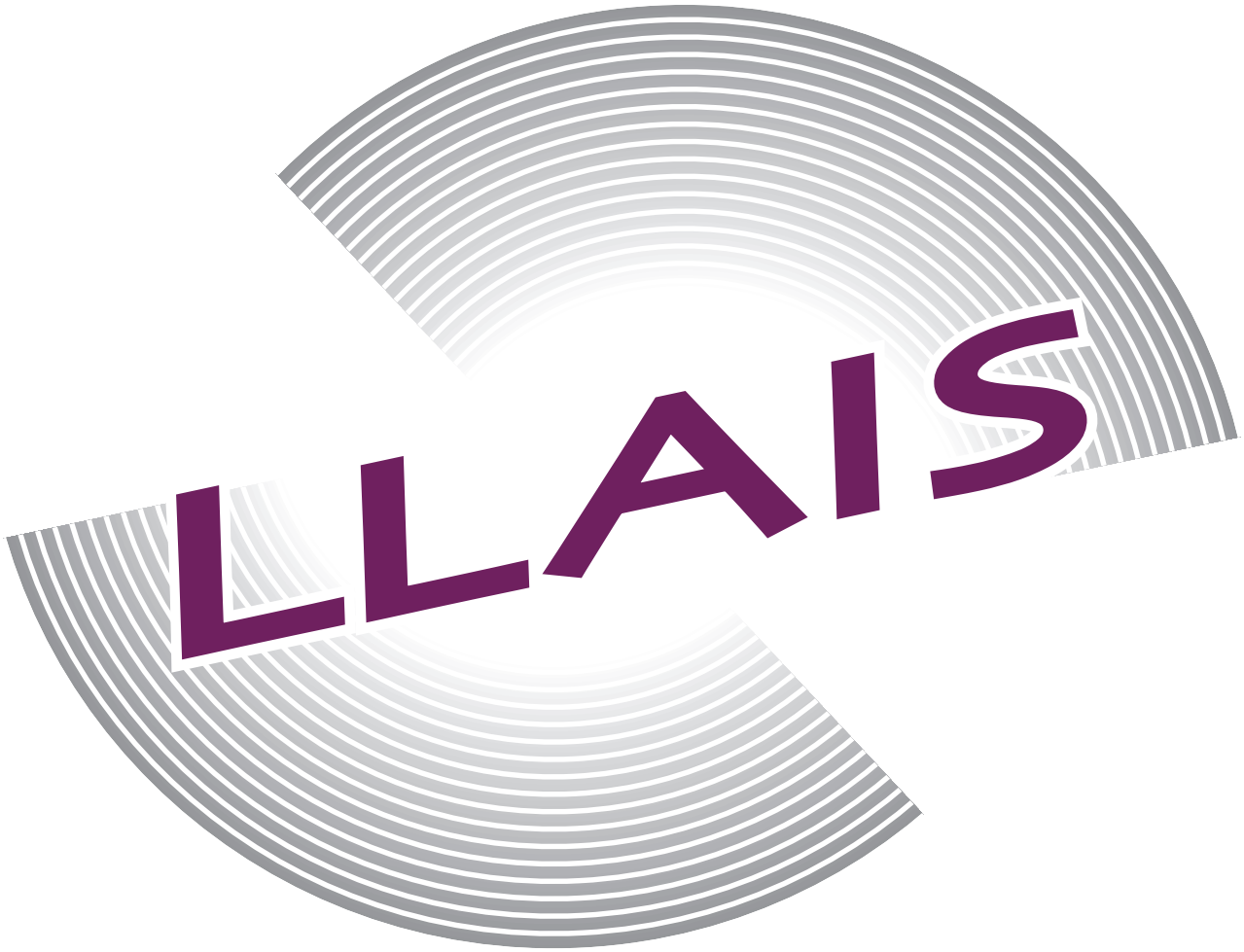
Ymwybyddiaeth o Iaith wrth Lywodraethu Ymchwil Iechyd a Gofal Cymdeithasol

Papur Briffio 2 : Gorffennaf 2007

LLAIS: Language Awareness Infrastructure Support Service

Language Awareness in Health and Social Care Research Governance

Briefing Paper 2 : July 2007



Am ragor o fanylion am LLAIS cysylltwch â'r cydgyfarwyddwyr

Yr Athro Fiona Irvine
Athro mewn Ymchwil Nyrsio
Uned Nyrsio ac Ymarfer Cychwynol
79 Stryd Tithebarn
Prifysgol John Moores Lerpwl
Lerpwl L2 2ER

✆ 01512 312121
email *f.irvine@ljmu.ac.uk*

Gwerfyl Roberts
Darlithydd
Canolfan Ymchwil Gysylltiedig ag Iechyd
Ysgol Gwyddorau Gofal Iechyd
Prifysgol Cymru Bangor
Gwynedd LL57 2EF

✆ 01248 383165
e-bost *gwerfyl.w.roberts@bangor.ac.uk*

For further details of LLAIS contact co-directors

Professor Fiona Irvine
Professor of Nursing Research
Nursing & Primary Practice Unit
79 Tithebarn Street
Liverpool John Moores University
Liverpool L2 2ER

✆ 01512 312121
email *f.irvine@ljmu.ac.uk*

Gwerfyl Roberts
Lecturer
Centre for Health-Related Research
School of Healthcare Sciences
University of Wales Bangor
Gwynedd LL57 2EF

✆ 01248 383165
email *gwerfyl.w.roberts@bangor.ac.uk*

ISBN 1–842201–00–X

Ariennir LLAIS gan Swyddfa Cymru ar gyfer Ymchwil a Datblygu Iechyd a Gofal Cymdeithasol, LLYWODRAETH CYNULLIAD CYMRU.

LLAIS is funded by the Wales Office of Research & Development for Health & Social Care (WORD), WELSH ASSEMBLY GOVERNMENT.

Ymwybyddiaeth o Iaith wrth Lywodraethu Ymchwil Iechyd a Gofal Cymdeithasol

Gwerfyl Roberts, Fiona Irvine

Cyflwyniad

Yr ail yw'r papur briffio hwn, Ymwybyddiaeth o Iaith wrth Lywodraethu Ymchwil Iechyd a Gofal Cymdeithasol, mewn cyfres a gyhoeddir gan LLAIS yn ei rôl yn cefnogi isadeiledd er mwyn sicrhau bod ymchwil iechyd a gofal cymdeithasol yng Nghymru yn cymryd natur ddwyieithog Cymru a'i siaradwyr i ystyriaeth yn llawn.

Mae'r papur yn amlinellu pwysigrwydd bod yn ymwybodol o iaith wrth gynnal ymchwil iechyd a gofal cymdeithasol fel cyfrwng i rymuso siaradwyr iaith leiafrifol; gwella dilysrwydd casgliadau ymchwil; a chyfyngu ar yr anghyfartaleddau wrth ddatblygu polisïau a darparu gwasanaethau. Mae'r papur wedi ei anelu at ymchwilwyr, darparwyr gwasanaeth; addysgwyr; comisiynwyr; llunwyr polisïau a defnyddwyr gwasanaethau ac mae'n ceisio codi ymwybyddiaeth ynghylch goblygiadau ymwybyddiaeth o iaith mewn ymchwil a thynnu sylw at y sylfaen o dystiolaeth sydd ar gael i gefnogi arfer orau wrth gynnal ymchwil mewn sefyllfa ddwyieithog.

Language Awareness in Health and Social Care Research Governance

Gwerfyl Roberts, Fiona Irvine

Introduction

This briefing paper, Language Awareness in Health and Social Care Research Governance, is the second in a series published by LLAIS in its infrastructure support role to ensure that health and social care research in Wales takes full account of the bilingual nature of Wales and its speakers.

The paper outlines the importance of language awareness in the conduct of health and social care research as a means of empowering minority language speakers; enhancing the validity of research findings; and limiting disparities in policy development and service delivery. The paper is aimed at researchers; service providers; educationalists; commissioners; policy-makers and service-users and seeks to raise awareness about the implications of language awareness in research and highlight the evidence base to support best practice in conducting research in a bilingual setting.

Cefndir

Yng ngoleuni'r amrywiaeth byd-eang cynyddol a statws uwch llawer o ieithoedd lleiafrifol ar draws y byd, mae yna ymrwymiad cynyddol tuag at wella ymarfer ieithyddol addas mewn iechyd a gofal cymdeithasol (DoHHS 2001). Yn wir, dros y blynyddoedd diwethaf, nodwyd bod ymwybyddiaeth o iaith yn ffactor pwysig mewn gwella iechyd a gostwng yr anghyfartaleddau ac mae galw cynyddol am wella'r sylfaen o dystiolaeth sy'n siapio polisi ac ymarfer (Jacobs et al 2006).

Yng nghyd-destun dwyieithog Cymru, lle mae 21% o'r boblogaeth yn siarad Cymraeg (Cynulliad Cenedlaethol Cymru 2003) ac mae gan y Saesneg a'r Gymraeg statws cyfartal wrth gynnal busnes cyhoeddus (Deddf yr Iaith Gymraeg 1993), mae'r ymwybyddiaeth o iaith yn taro nodyn neilltuol yn narpariaeth iechyd a gofal cymdeithasol. Adlewyrchir hyn yn y Cynllun Iaith Cenedlaethol, 'Iaith Pawb' (LlCC 2003a) sy'n amlinellu pwysigrwydd gallu cynnig dewis iaith wrth ddarparu gwasanaeth. Ymhellach, cedwir y safiad hwn yng nghyd-destun ymchwil a datblygiad, lle mae'r Fframwaith Llywodraeth Ymchwil Cenedlaethol ar gyfer Iechyd a Gofal Cymdeithasol (LlCC 2001) yn gosod cyfrifoldeb ar ymchwilwyr i gymryd amrywiaeth ieithyddol y boblogaeth i ystyriaeth yn llawn a pharchu dewisiadau iaith cyfranogwyr wrth ddylunio a chynnal eu hastudiaethau ac wrth adrodd amdanynt.

Er gwaethaf ymrwymiad o'r fath ar lefel strategol, mae sefydlu'r sylfaen o dystiolaeth i hysbysu ymarfer ieithyddol addas yn aml yn cael ei lesteirio gan ddiffyg ymwybyddiaeth o iaith yn y broses ymchwil. Adlewyrchir hyn yn y llenyddiaeth ehangach drwy'r diffygion canlynol:

- Tangynrychiolaeth siaradwyr ieithoedd lleiafrifol mewn astudiaethau ymchwil (Sheldon et al 2007).
- Cynlluniau a dulliau ymchwil anaddas (Mill ac Ogilvie 2003).
- Technegau casglu data dideimlad (Esposito 2001).
- Dulliau mesur annigonol (Ramirez et al 2005).
- Diffygion mewn dulliau dadansoddi ansoddol (Tsai et al 2004).

Mae'r diffygion hyn yn cynyddu'r posibilrwydd o duedd o fewn ymchwil sydd, yn ôl Villarruel (1999), yn peryglu dilysrwydd casgliadau ac yn llesteirio datblygiad tystiolaeth newydd sy'n adlewyrchu'n fanwl gywir brofiadau, gwerthoedd a daliadau cymunedau amrywiol o ran iaith. Pryder pellach a godir gan Bjornsdottir (2001) yw y gall tuedd arwain at bolisi wedi ei gamhysbysu ac at ymyriadau gwasanaeth a all fod yn gostus ac yn wastraffus. Yng nghyd-destun dwyieithog Cymru, gall tuedd ymchwil ddod i mewn drwy ddiffyg gwerthfawrogiad o arwyddocâd y Gymraeg i siaradwyr dwyieithog a methiant i gymryd hyn i ystyriaeth ar adegau allweddol yn y broses ymchwil. Am hynny mae goresgyn tuedd yn gydran graidd mewn ymchwil ieithyddol sensitif ac yn agwedd sylfaenol ar lywodraethu ymchwil yng Nghymru.

Fel rhan o'i gynllun gweithredu cenedlaethol ar gyfer Cymru ddwyieithog (LlCC 2003a), mae Llywodraeth y Cynulliad wedi ymrwymo i ddwyn y Gymraeg i mewn i brif lif datblygiad polisi iechyd a gofal cymdeithasol. LLAIS (Gwasanaeth Cefnogi Isadeiledd Ymwybyddiaeth o Iaith ar gyfer CRC Cymru) sydd wedi cael y cyfrifoldeb o lywio'r gymuned ymchwil tuag at sicrhau bod yr ymchwil sylfaenol yn cymryd natur ddwyieithog Cymru a'i siaradwyr i ystyriaeth yn llawn. Bydd y papur hwn yn archwilio'r broses ymchwil yn systematig mewn manylder ac yn tynnu allan brif elfennau trylwyredd y dylid eu hystyried mewn perthynas â'r ymwybyddiaeth o iaith. Yn Ffigur 1 ceir siart llif ar gyfer gwella'r ymwybyddiaeth o iaith mewn ymchwil a dyma sail y trafodaethau dilynol. Gan dynnu ar dystiolaeth o amrywiaeth eang o lenyddiaeth, cyflwynir enghreifftiau o arfer dda a thynnir sylw at yr adnoddau i gefnogi ymchwilwyr yng Nghymru, lle bo hynny'n briodol.

Background

In view of increasing global diversity and the enhanced status of many minority languages world-wide, there is a growing commitment towards enhancing language appropriate practice in health and social care (DoHHS 2001). Indeed, over recent years, language awareness has been identified as an important factor in improving health and reducing inequalities and there are growing demands to enhance the evidence base that shapes policy and practice (Jacobs et al 2006).

In the bilingual context of Wales, where 21% of the population are Welsh-speaking (National Assembly for Wales 2003) and the English and Welsh language are afforded equal status in the conduct of public business (Welsh Language Act 1993), language awareness has particular resonance in the provision of health and social care. This is reflected in the National Language Plan, 'Iaith Pawb' (WAG 2003a) that outlines the importance of being able to offer language choice in service provision. Moreover, this stance is upheld in the context of research and development, where the National Research Governance Framework for Health and Social Care (WAG 2001) charges researchers to take full account of the linguistic diversity of the population and respect the language preferences of participants in the design, undertaking and reporting of studies.

Despite such commitment at a strategic level, establishing the evidence base to inform linguistically appropriate practice is often hindered by a lack of language awareness in the research process. This is reflected in the wider literature through the following deficits:

- Under-representation of minority language speakers in research studies (Sheldon et al 2007).
- Inappropriate research designs and methods (Mill and Ogilvie 2003).
- Insensitive data collection techniques (Esposito 2001).
- Inadequate measurement procedures (Ramirez et al 2005).
- Deficiencies in qualitative analytical approaches (Tsai et al 2004).

These deficits increase the potential for bias within research that, according to Villarruel (1999), compromises the validity of findings and hampers the development of new evidence that accurately reflects the experiences, values and beliefs of diverse language communities. A further concern raised by Bjornsdottir (2001) is that bias can lead to mis-informed policy and service interventions that may be costly and wasteful. In the bilingual context of Wales, research bias may be introduced through a lack of appreciation of the significance of the Welsh language for bilingual speakers and a failure to take this into account at key stages of the research process. Overcoming bias is thus a core component of language sensitive research and a fundamental aspect of research governance in Wales.

As part of its national action plan for a bilingual Wales (WAG 2003a), the Assembly Government is committed to mainstreaming the Welsh language into health and social care policy development. LLAIS (the Language Awareness Infrastructure Support Service for CRC Cymru) has been charged with steering the research community towards ensuring that the underpinning research takes full account of the bilingual nature of Wales and its speakers. This paper will systematically examine the research process in detail and elicit the main items of rigour that should be considered in relation to language awareness. A flow chart for enhancing language awareness in research is provided in Figure 1 and this forms the basis of the ensuing discussions. Drawing on evidence from a wide range of literature, examples of good practice will be presented and resources to support researchers in Wales will be highlighted, where appropriate.

FFIGUR 1

Siart Llif ar gyfer Gwella'r Ymwybyddiaeth o Iaith mewn Ymchwil

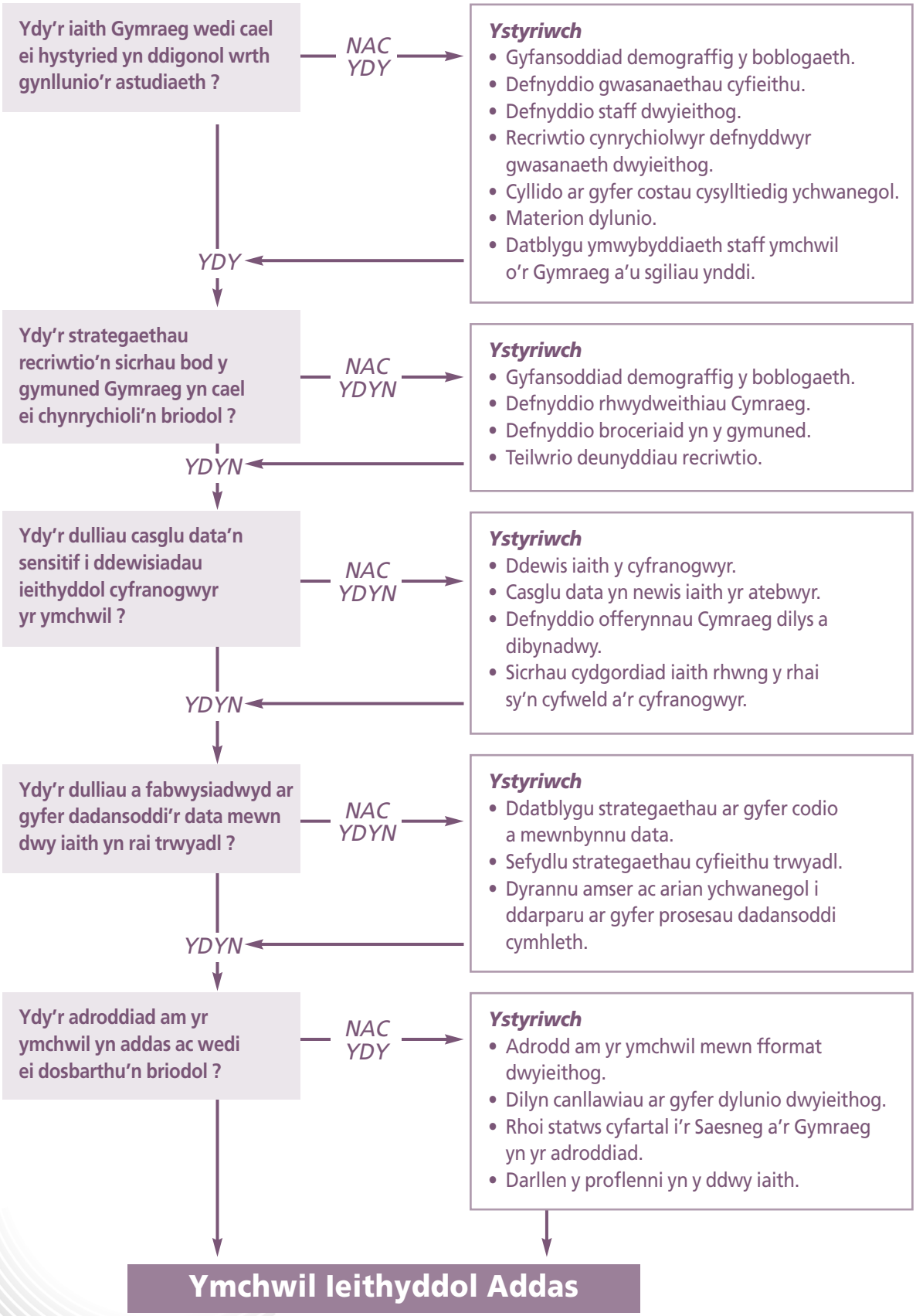
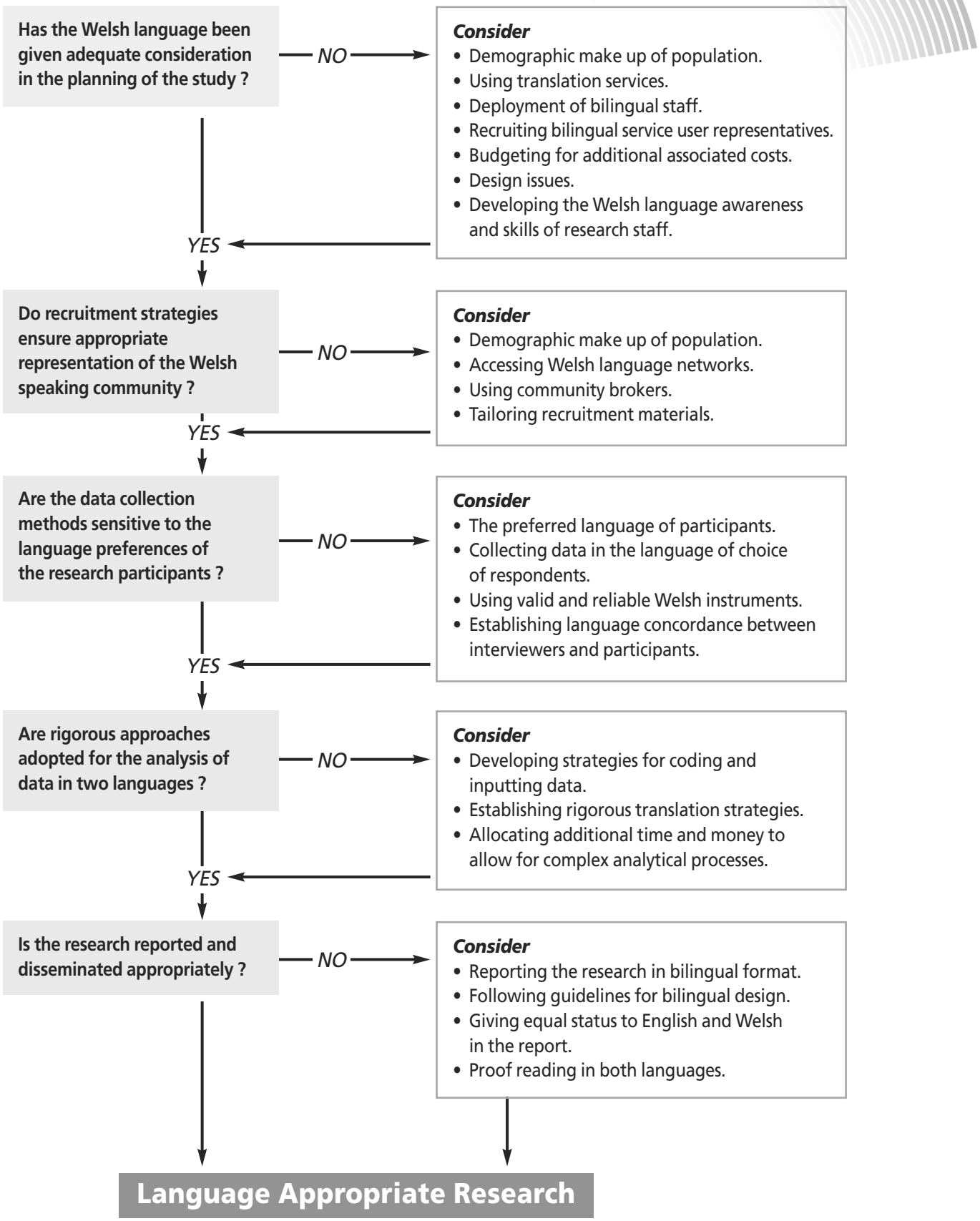


FIGURE 1
Flow Chart for Enhancing Language Awareness in Research



Y Broses Ymchwil

Mae'r dull gwyddonol yn cynnwys system o reolau a phrosesau y mae ymchwil yn seiliedig arnynt ac y gellir ei gwerthuso yn eu herbyn (Bowling 2002). Er bod ffyrdd meintiol ac ansoddol yn seiliedig ar bersbectifau gwahanol ar y byd cymdeithasol ac yn mabwysiadau dulliau gwahanol, mae yna broses ymchwil waelodol sy'n cynnwys nifer o gamau gwahanol. I ddibenion y papur hwn crynhoir y camau hyn fel a ganlyn:

- Cynllunio
- Recriwtio cyfranogwyr
- Casglu data
- Dadansoddi data
- Adrodd a lledaenu

Gan dynnu ar y sylfaen o dystiolaeth, bydd y papur hwn yn ystyried pum prif gam y broses ymchwil fesul un a'r potensial ar gyfer gwella'r ymwybyddiaeth o iaith ym mhob cam o'r cylch ymchwil.

CAM 1 Cynllunio

Y cam cyntaf yn unrhyw astudiaeth ymchwil yw cynhyrchu'r cwestiwn ymchwil. Awgryma Bowling (2002) fod hwn yn gam hollbwysig sydd yn gofyn am ystyriaeth ofalus o ddimensiynau sylweddol; methodolegol; ymarferol; a moesegol yr astudiaeth. Yn hyn o beth, mae Im et al (2004) yn cynnig bod rhaid rhoi ystyriaeth hefyd i berthnasedd diwylliannol a ieithyddol y cwestiwn ymchwil i'r boblogaeth sy'n cael ei hastudio a'r graddau y mae'n fuddiol iddynt hwy.

Ar sail eu hadolygiad llenyddiaeth systematig, maent yn dadlau bod yna duedd i ymchwilwyr ddatblygu cwestiynau ymchwil ar sail eu safbwyntiau a'u diddordebau hwy eu hunain yn hytrach nag eiddo'u cyfranogwyr. Cefnogir y ddadl hon ymhellach gan astudiaethau a gynhaliwyd yn y DU gan Temple (2002), Bradby (2001) a Papadopoulos a Lees (2002); yng Ngogledd Iwerddon gan O'Hagan (2001); ac yn UDA gan Palafox et al (2002) a Wilson (2004). Maent i gyd yn dangos bod safbwynt uniaith, ethnoganolog yn gyffredin yn aml mewn ymchwil iechyd a gofal cymdeithasol a'i fod yn methu â chymryd gwahaniaethau trawsddiwylliannol a thrawsieithyddol i ystyriaeth wrth ddehongli cysyniadau. Mae a wnelo hyn wedyn â digonolrwydd casgliadau ymchwil a'r graddau y gellir eu cyffredinoli.

Er enghraifft, gall methiant i gymryd amrywiaeth iaith i ystyriaeth wrth lunio cysyniad a chynllunio'r ymchwil, ac anallu i ymateb i'r iaith gyfathrebu sydd orau gan y cyfranogwyr wrth gasglu data ac wrth ddefnyddio graddfeydd mesur, arwain at wyriadau systematig o fewn casgliadau'r astudiaeth. Mae'n dilyn, gan hynny, bod yr ymwybyddiaeth o iaith yn ystyriaeth bwysig wrth gynllunio astudiaethau ymchwil fel cyfrwng i wella trylwyredd a dileu tuedd. Amlinella Tabl 1 y prif ffynonellau tuedd yn y cyd-destun hwn ac mae'n cynnig atebion posibl i leihau'r diffygion hyn.

TABL 1
Ffynonellau Tuedd Posibl Cysylltiedig â Diffyg Sensitifrwydd Ieithyddol mewn Ymchwil

FFYNHONNELL TUEDD	PROBLEMAU	*ATEBION*
Sampl	Mae tangynrychiolaeth siaradwyr Cymraeg mewn astudiaethau ymchwil yn golygu na fydd modd efallai cyffredinoli'r casgliadau i'r boblogaeth ehangach	*Sicrhau bod poblogaeth yr astudiaeth yn adlewyrchu gwir amrywiaeth ieithyddol Cymru*
Camgymeriadau mesur	Efallai nad yw'r dulliau mesur yn sensitif i anghenion cyfathrebu atebwyr Cymraeg eu hiaith	*Sicrhau bod y dulliau mesur yn ymateb yn fanwl gywir ac addas i amrywiaeth ieithyddol y cyfranogwyr*
Casglu data	Gellir camddehongli ystyr ar draws rhwystrau iaith	*Cynnig dewis iaith i gyfranogwyr yn ystod y broses o gasglu data*
Cyfieithu data	Gall camgymeriadau godi wrth gyfieithu'r data o'r iaith wreiddiol i'r iaith darged	*Mabwysiadau dulliau gweithredu safonol ar gyfer sicrhau trylwyredd wrth gyfieithu*
Dadansoddi data	Gall data wedi ei gyfieithu beryglu dyfnder y dadansoddiad	*Sefydlu cymysgedd sgiliau o fewn y tîm ymchwil sy'n ei gwneud yn bosibl dadansoddi'r data yn ei ffurf wreiddiol*

The Research Process

The scientific method consists of a system of rules and processes on which research is based and against which it can be evaluated (Bowling 2002). Although quantitative and qualitative approaches are based on different perspectives of the social world and adopt different methods, there is an underlying research process that is made up of a number of discreet stages. For the purpose of this paper, these stages are summarised as follows:

- Planning
- Recruitment of participants
- Data collection
- Data analysis
- Reporting and dissemination

Drawing on the evidence base, this paper will consider the five main stages of the research process in turn and the potential for enhancing language awareness at each phase of the research cycle.

STAGE 1 Planning

The first step in any research study is to generate a research question. Bowling (2002) suggests that this is a crucial phase that requires careful consideration of the substantive; methodological; practical; and ethical dimensions of the study. In this respect, Im et al (2004) propose that consideration must also be given to the cultural and linguistic relevance of the research question to the population under study and the extent to which it serves their interests. On the basis of their systematic literature review, they argue that there is a tendency for researchers to develop research questions based on their own perspectives and interests rather than those of their participants. This argument is further substantiated by studies undertaken in the UK by Temple (2002), Bradby (2001) and Papadopoulos and Lees (2002); in Northern Ireland by O'Hagan (2001); and in the US by Palafox et al (2002) and Wilson (2004). All demonstrate that an ethnocentric, monolingual perspective often prevails in health and social care research that fails to take account of cross-cultural and cross-language differences in the interpretation of concepts and has a bearing on the adequacy and generalizability of research findings.

For example, failure to take account of language diversity in the conceptualisation of the research idea and design and an inability to respond to the participants' preferred language of communication in the collection of data and use of measurement scales can lead to systematic deviations within the study findings. It follows therefore, that language awareness is an important consideration in the planning of research studies as a means of enhancing rigour and eliminating bias. Table 1 outlines the main potential sources of bias in this context and offers possible solutions to reduce these deficits.

TABLE 1
Potential Sources of Bias Relating to Language Insensitivity in Research

SOURCE OF BIAS	PROBLEMS	*SOLUTIONS*
Sample	Under-representation of Welsh speakers in research studies means that findings may not be generalizable to the wider population	*Ensure that the study population reflects the true linguistic diversity of Wales*
Measurement errors	Measurement procedures may not be sensitive to the communication needs of Welsh speaking respondents	*Ensure that measurement procedures are accurately responsive and appropriate to the linguistic diversity of participants*
Data collection	Meaning may be misinterpreted across language barriers	*Offer language choice to participants during the data collection process*
Data translation	Errors may arise in the translation of data from source to target language	*Adopt standard procedures for ensuring rigour in translation*
Data analysis	Translated data may compromise the depth of analysis	*Establish skill mix within research team that enables the analysis of data in its original form*

Mae goresgyn tuedd yn ystyriaeth bwysig ym maes ymchwil drawsddiwylliannol, lle y cynigiwyd meini prawf gwerthuso i wella trylwyredd astudiaethau trawsddiwylliannol a hysbysu darpariaeth gofal sy'n sensitif ac addas yn ddiwylliannol (Meleis 1996; Papadopoulos a Lees 2002; ac Im et al 2004). Nodwyd bod iaith yn arwydd o ddiwylliant sy'n wahanol, a thrwyddi hi yn aml y caiff profiadau unigolion eu siapio a'u mynegi (Safran 2004). Yn wir, dadleua O'Hagan (2001) gan fod iaith yn offeryn cymunedol, sy'n adlewyrchu datblygiad pobl a'u teimlad o gymuned, mai hi yw prif ffynhonnell diwylliant. Felly, yng ngoleuni'r berthynas agos rhwng iaith a diwylliant, nid yw'n rhyfedd fod ymwybyddiaeth o iaith yn ymddangos yn gyffredin fel rhan greiddiol o ymchwil sy'n ddiwylliannol gymwys. Er enghraifft, mae defnyddio arddulliau cyfathrebu, syniadolaeth a phrosesau cyfieithu priodol yn gysyniadau sydd wedi eu gwreiddio'n gadarn ymhlith y meini prawf a argymhellir ar gyfer trylwyredd mewn ymchwil drawsddiwylliannol a ddisgrifiwyd gan Meleis (1996); Papadopoulos a Lees (2002); ac Im et al (2004).

Cysyniad pellach i'w ystyried yn y cyd-destun Cymreig yw'r berthynas gymhleth rhwng y Gymraeg a'r Saesneg sy'n adlewyrchu'r gwahaniaethau yn eu grym a'u statws cymharol. Gall y gwahaniaethau hyn arwain at agweddau dilornus sy'n dylanwadu ar farn a theimladau pobl ynghylch eu hiaith a'u parodrwydd i'w defnyddio. Er enghraifft, dadleua Davies (1999), o ganlyniad i arferiad personol, confensiwn cymdeithasol neu anghydraddoldeb traddodiadol y Gymraeg, fod pwysau ar siaradwyr Cymraeg i newid o ddefnyddio'r Gymraeg i ddefnyddio'r Saesneg yn eu trafodaethau o dydd i ddydd. Fodd bynnag, efallai nad yw llawer yn teimlo mor gyfforddus yn siarad Saesneg neu yn gallu ei siarad mor rhwydd ym mhob maes. Er hynny, fel cyfranogwyr ymchwil, dylid amddiffyn eu diddordebau gorau bob amser. Felly doeth o beth fyddai i ymchwilwyr yng Nghymru fabwysiadu cyngor Meleis (1996) drwy wella eu hymwybyddiaeth o hunaniaeth a gwahaniaethau grym mewn ymchwil a grymuso siaradwyr Cymraeg i wneud dewisiadau iaith gwirioneddol.

Gan ganolbwyntio ar gyd-destun Cymru, mae Misell (2000) a Madoc-Jones a Dubberley (2005) yn dadlau bod rhagfarn yn parhau yn erbyn y Gymraeg yng nghyd-destun gofal iechyd yng Nghymru a bod a wnelo hyn â'r lefel isel bresennol o ddarpariaeth gwasanaeth ar gyfer siaradwyr Cymraeg. Ymhellach, mae'r prinder llenyddiaeth sy'n archwilio natur ac effaith darpariaeth ddwyieithog ar ymarfer ac ar y gwasanaeth a ddarperir yng Nghymru yn dystiolaeth i'r sylw gwael y mae'n ei dderbyn fel canolbwynt ymchwil. Er hynny, a derbyn mor ganolog yw iaith yn adeiladwaith hunaniaeth ddiwylliannol; ei rôl yn fframio profiadau cyfranogwyr ymchwil; a'i photensial i gynnal perthnasau grym anghyfartal (Bjornsdottir 2001), mae'n rhesymol awgrymu y dylai ymchwilwyr ddangos ymwybyddiaeth o iaith wrth lunio eu cwestiynau ymchwil a chynllunio eu dull. At hynny, a derbyn statws uwch y Gymraeg yn ddiweddar a'r polisïau sy'n cefnogi ei defnyddio mewn gwasanaethau cyhoeddus, anogir ymchwilwyr yng Nghymru i gofleidio dwyieithrwydd fel y norm a datblygu a chynllunio eu hastudiaethau yn unol â hynny.

BLWCH 1
Ymwybyddiaeth o Iaith wrth Ddylunio Rhaglen

Small R, Yelland J, Lumley J a Rice P (1999) Cross-cultural research: trying to do it better. 1. Issues in study design. *Australian and New Zealand Journal of Public Health* 23, 385–389.

Mae'r astudiaeth hon yn ystyried ystod o strategaethau a fabwysiadwyd i fynd i'r afael â'r heriau methodolegol ac ymarferol wrth ddylunio ymchwil iechyd cyhoeddus drawsddiwylliannol, drawsieithyddol. Cynhaliwyd yr astudiaeth ym Melbourne, Awstralia rhwng 1994 a 1997. Roedd hi'n cynnwys astudio cyfweliadau gyda 318 o famau o Fietnam, Twrci a'r Philipinas ac yn edrych ar eu barn hwy am ofal mamolaeth yn ystod y misoedd cyntaf o fod yn fam. Gan nad oes dichon samplu ar hap wrth astudio grwpiau o fewnfudwyr, defnyddiwyd dull systematig o samplu a recriwtio, er mwyn sicrhau sampl o faint digonol a sampl astudio oedd yn gynrychioliadol i raddau helaeth. Penderfynwyd ar faint y sampl ar sail arolwg blaenorol seiliedig ar boblogaeth, tra roedd y strategaeth samplu yn dibynnu ar ddata o gyfnod y geni a gyflenwyd gan yr uned epidemioleg leol. Mabwysiadwyd protocol astudio hyblyg a sensitif ynghyd â dull cynhwysfawr o ddethol, hyfforddi a chefnogi'r holwyr dwyieithog a deuddiwylliannol a ddefnyddiwyd ar yr astudiaeth. Awgryma'r awduron fod hyn wedi cyfrannu'n fawr tuag at gwblhau'r astudiaeth yn llwyddiannus ac wedi cynyddu'r hyder yng nghasgliadau'r astudiaeth. Daw'r awduron i'r casgliad fod yna lawer o faterion methodolegol ac ymarferol ymhlyg mewn cynllunio astudiaethau iechyd cyhoeddus trawsieithyddol a thrawsddiwylliannol cadarn. Er y bydd goblygiadau neilltuol o bosibl i'r rhain, o ran ymestyn y terfynau amser a chynyddu costau, bydd y manteision yn gorbwyso'r diffygion hyn drwy ddatblygiad didrafferth yr astudiaethau a chasglu tystiolaeth newydd sy'n adlewyrchu gwerthoedd a dyheadau cymunedau amrywiol eu hiaith.

Overcoming bias is an important consideration in the field of cross-cultural research, where evaluation criteria have been proposed to enhance the rigour of cross-cultural studies and inform the delivery of culturally sensitive and appropriate care (Meleis 1996; Papadopoulos and Lees 2002; and Im et al 2004). Language has been identified as a distinct marker of culture, through which individual experiences are often shaped and expressed (Safran 2004). Indeed, O'Hagan (2001) argues that since language is a communal tool, reflecting a people's development and their sense of community, it is the mainspring of culture. Thus, in view of the close relationship between language and culture, it is not surprising that language awareness features widely as an integral aspect of culturally competent research. For example, the use of appropriate communication styles, conceptualizations and translation processes are concepts that are firmly embedded amongst the proposed evaluation criteria for rigour in cross-cultural research described by Meleis (1996); Papadopoulos and Lees (2002); and Im et al (2004).

A further concept for consideration in the Welsh context is the complex relationship between the Welsh and English language that reflects differences in their relative power and status. These differences can lead to disparaging attitudes that influence the opinions and feelings of people about their language and their readiness to use it. For example, Davies (1999) argues that, as a result of personal habit, social convention or the traditional inequality of the Welsh language, there are pressures on Welsh speakers to switch from using Welsh to English in their daily deliberations. However, many may not feel as comfortable or adept to use English in every domain. Nevertheless, as research participants, their best interests should be protected at all times. Thus researchers in Wales are well heeded to adopt Meleis' (1996) advice in enhancing their awareness of identity and power differentials in research and empowering Welsh speakers to make real language choices.

Focussing on the Welsh context, Misell (2000) and Madoc-Jones and Dubberley (2005) argue that there is continuing prejudice against the Welsh language in the context of healthcare in Wales and this has a bearing on the current low level of service provision for Welsh speakers. Furthermore, the dearth of literature exploring the nature and impact of bilingual provision on practice and service delivery in Wales is testimony to the poor attention it receives as a research focus. Nevertheless, given the centrality of language in the construct of cultural identity; its role in framing the experiences of research participants; and its potential for maintaining uneven relations of power (Bjornsdottir 2001), it is reasonable to suggest that researchers should demonstrate language awareness in formulating their research questions and planning their approach. Moreover, given the recently enhanced status of the Welsh language and the policies that support its use in public services, researchers in Wales are encouraged to embrace bilingualism as a norm and develop and design their studies accordingly.

BOX 1

Language Awareness in Programme Design

Small R, Yelland J, Lumley J & Rice P (1999) Cross-cultural research: trying to do it better. 1. Issues in study design. *Australian and New Zealand Journal of Public Health* 23, 385-389.

This study considers a range of strategies adopted to address the methodological and practical challenges in designing cross-cultural, cross-language, public health research. The study was conducted in Melbourne, Australia between 1994 and 1997. It comprised of an interview study of 318 Vietnamese, Turkish and Filipino mothers and explored their views of maternity care and the early months of motherhood. Since random sampling is not feasible in studies of immigrant groups, a systematic approach to sampling and recruitment was employed in order to ensure an adequate sample size and a largely representative study sample. The sample size was determined on the basis of a previous population-based survey whilst the sampling strategy relied on perinatal data supplied by the local epidemiological unit. A flexible and sensitive study protocol was adopted together with a comprehensive approach towards the selection, training and support of the bicultural, bilingual interviewers employed on the study. The authors suggest that this contributed greatly to the successful completion of the study and enhanced confidence in the study findings. The authors conclude that there are many methodological and practical issues involved in designing sound cross-cultural, cross-language, public health studies. Whilst these may have particular implications in terms of extending timeframes and increasing costs, these deficits may be outweighed by the benefits in terms of the smooth progress of studies and the acquisition of new evidence that reflects the values and aspirations of diverse language communities.

Darlunnir y dull hwn yn dda mewn astudiaeth a gynhaliwyd gan Small et al (1999a) oedd yn edrych ar ganfyddiadau merched o Fietnam, Twrci a'r Philipinas ynghylch eu profiadau o ofal mamolaeth ym Melbourne, Awstralia. Gan gofleidio amrywiaeth ieithyddol y boblogaeth dan sylw a chydnabod perthnasedd y cwestiwn ymchwil i'w bywydau bob dydd, mae'r astudiaeth yn amlinellu'r heriau mewn sefydlu ymwybyddiaeth o ddiwylliant ac iaith yn nyluniad y rhaglen. *(◄ Gweler Blwch 1)*

Ar sail y drafodaeth hon, cynigir meini prawf gwerthuso ar gyfer dod ag ymwybyddiaeth o iaith i mewn i gynllunio ymchwil iechyd a gofal cymdeithasol yng nghyd-destun dwyieithog Cymru a thynnir sylw at adnoddau cefnogi perthnasol. *(Gweler Tabl 2)*

CAM 2 Recriwtio Cyfranogwyr

Er gwaethaf y pwyslais presennol ar fynd i'r afael ag anghyfartaleddau mewn gofal iechyd, mae tystiolaeth gynyddol o UDA (Frayne et al 1996; Li et al 2001; Murthy et al 2004) ac o'r DU (Hussain-Gambles et al 2004; Sheldon et al 2007) i awgrymu bod poblogaethau lleiafrifol yn cael eu tangynrychioli mewn ymchwil iechyd. Mae Hussain-Gambles et al (2004) yn dadlau bod hyn nid yn unig yn adlewyrchu diffyg trylwyredd gwyddonol, ond hefyd yn bwrw amheuaeth ar y graddau y gellir cyffredinoli casgliadau'r ymchwil ac yn codi pryderon ynghylch tegwch y ddarpariaeth gofal iechyd.

Gan y dangoswyd bod rhwystrau iaith yn peryglu mynediad at ofal iechyd i siaradwyr ieithoedd lleiafrifol (Jacobs et al 2006), prin ei fod yn syndod bod y rhwystrau hyn hefyd yn cyfrannu at gadw'r bobl yma allan o astudiaethau ymchwil, fel y dangoswyd gan Frayne et al (1996); Li et al (2001); ac yn fwy diweddar gan Sheldon et al (2007). Mae Frayne et al (1996) yn tynnu ar dystiolaeth sy'n codi o adolygiad llenyddiaeth systematig ar astudiaethau o berthnasau darparwr-claf a gyhoeddwyd mewn cylchgronau pwysig yn UDA rhwng 1989 a 1991 ac arolwg dilynol o awduron cyfatebol (n = 172). Mae Sheldon et al (2007) ar y llaw arall yn canolbwyntio'u hadolygiad ar astudiaethau sy'n archwilio materion perthnasol i raddau ymateb i arolygon ymhlith pobl dduon a phobl o darddiad

TABL 2
Meini prawf gwerthuso ar gyfer Cynllunio Ymchwil

Meini prawf gwerthuso ar gyfer cynllunio ymchwil	***Adnoddau Perthnasol***
Beth yw demograffeg y Gymraeg yn y boblogaeth a astudir?	*Gweler Cynulliad Cenedlaethol Cymru (2003)*
Pa mor ymatebol yw dyluniad yr astudiaeth i nodweddion ieithyddol y cyfranogwyr?	*Gweler yn nes ymlaen am ddetholiad o offer casglu data; dadansoddi; a dehongli casgliadau*
Oes digon o amser a chostau wedi eu dyrannu i'r broses o gyfieithu?	*Gweler Cymdeithas Cyfieithwyr Cymru yn www.cyfieithwyrcymru.org.uk a Bwrdd yr Iaith Gymraeg yn: www.bwrdd-yr-iaith.org.uk*
Pa lefelau o ymwybyddiaeth o'r Gymraeg a chymhwysedd ynddi sydd eu hangen ar ymchwilwyr i ymgymryd â'r astudiaeth?	*Gweler Cynllun Iaith Gymraeg Prifysgol Cymru Bangor (2006), Atodiad A yn: www.bangor.ac.uk*
Oes ar y staff ymchwil angen hyfforddiant mewn ymwybyddiaeth o iaith neu sgiliau iaith?	*Gweler Roberts et al (2004) LICC (2003b) Roberts a Williams (2003)*
Ydy'r tîm cynllunio yn cynnwys defnyddiwr gwasanaeth a all gynrychioli diddordebau siaradwyr Cymraeg?	*Gweler Cynnwys Pobl yn: www.crc-cymru.wales.nhs.uk*

This approach is well illustrated in a study conducted by Small et al (1999a) that explored the perceptions of Vietnamese, Turkish and Filipino women of their experiences of maternity care in Melbourne, Australia. Embracing the linguistic diversity of the population under study and acknowledging the relevance of the research question to their everyday lives, the study outlines the challenges in establishing culture and language awareness in programme design. *(◄See Box 1)*

On the basis of this discussion, evaluation criteria are proposed for introducing language awareness in the planning of health and social care research in the bilingual context of Wales and relevant support resources are highlighted. *(See Table 2)*

STAGE 2 Recruitment of Participants

Despite the current emphasis on tackling inequalities in healthcare, there is growing evidence from the US (Frayne et al 1996; Li et al 2001; Murthy et al 2004) and the UK (Hussain-Gambles et al 2004; Sheldon et al 2007) to suggest that minority populations are under-represented in health research. Hussain-Gambles et al (2004) argue that this not only reflects a lack of scientific rigour, but also calls into question the generalizability of research findings and raises concerns about the equity of healthcare provision.

Since language barriers have been shown to jeopardise access to healthcare for minority language speakers (Jacobs et al 2006), it is hardly surprising that these barriers also contribute towards their exclusion from research studies, as demonstrated by Frayne et al (1996); Li et al (2001); and more recently by Sheldon et al (2007). Frayne et al (1996) draw on evidence arising from a systematic literature review of studies on provider-patient relations published in major US journals between 1989 and 1991 and a subsequent survey of corresponding authors (n = 172). In contrast, Sheldon et al (2007) focus their review on studies examining issues relevant to survey response rates amongst Black and minority ethnic and seldom heard groups in the UK. Both studies give credence to the findings of Hussain-Gambles et al (2004), demonstrating significant levels of exclusion of

TABLE 2
Evaluation Criteria for Planning Research

Evaluation Criteria for Planning Research	***Relevant resources***
What is the demography of the Welsh language in the population under study?	*See National Assembly for Wales (2003)*
How responsive is the study design to the linguistic characteristics of participants?	*See later for selection of data collection instruments; analysis; and interpretation of findings.*
Has sufficient time and costs been allocated to the translation process?	*See Association of Welsh Translators and Interpreters at: www.welshtranslators.org.uk and Welsh Language Board at: www.welsh-language-board.org.uk*
What levels of Welsh language awareness and competency are required by researchers to undertake the study?	*See University of Wales Bangor (2006) Welsh Language Scheme, Appendix A at: www.bangor.ac.uk*
Do the research staff require language awareness or language skills training?	*See Roberts et al (2004) WAG (2003b) Roberts & Williams (2003)*
Does the planning team include a service user who can represent the interests of Welsh speakers?	*See Involving People at: www.crc-cymru.wales.nhs.uk*

ethnig lleiafrifol a grwpiau na chlywyd llawer amdanynt yn y DU. Mae'r ddwy astudiaeth yn rhoi hygrededd i gasgliadau Hussain-Gambles et al (2004), gan ddangos lefelau arwyddocaol o gau siaradwyr ieithoedd lleiafrifol allan o astudiaethau ymchwil oherwydd diffyg ymwybyddiaeth o iaith ymhlith yr ymchwilwyr; prinder staff dwyieithog; cyfyngiadau o ran yr arian a'r amser sy'n gysylltiedig â chyfieithu; ac anallu i gefnogi ystod o ieithoedd lleiafrifol. *(Gweler Blwch 2)*

BLWCH 2

Tangynrychiolaeth Poblogaethau Lleiafrifol mewn Ymchwil Iechyd

Hussain-Gambles M, Leese B, Atkin K, Brown J, Mason S a Tovey P (2004) Involving South Asian patients in clinical trials. *Health Technology Assessment* 8, 42, 1–109.

Comisiynwyd Hussain-Gambles et al (2004) gan Raglen Asesu Technoleg Iechyd i archwilio faint o ran yr oedd cleifion o Dde Asia yn ei chwarae mewn treialon clinigol yn y Deyrnas Unedig. Gwnaed hyn drwy gynnal adolygiad systematig o'r llenyddiaeth ar gyfranogaeth lleiafrifoedd ethnig mewn treialon clinigol gyda thair astudiaeth ar sail cyfweliadau ansoddol yn dilyn, gyda gweithwyr iechyd proffesiynol, cyfranogwyr mewn treialon o Dde Asia, a rhai heb gyfranogi. Yng ngoleuni eu casgliadau, gwelodd yr awduron fod tangynrychiolaeth y grŵp ethnig hwn mewn treialon clinigol yn codi'n bennaf mewn ymateb i'r cynnydd yn y gost a'r amser y byddai eu cynnwys yn ei achosi, yn arbennig mewn perthynas â rhwystrau iaith; ac hefyd o gau allan goddefol, sy'n gysylltiedig â stereoteipio diwylliannol.

Mae'r rhwystrau iaith sy'n llesteirio mynediad siaradwyr Cymraeg yng Nghymru at ofal iechyd hefyd yn debygol o gyfyngu ar y rhan y maent yn ei chwarae mewn ymchwil. Er hynny, drwy gymharu profiadau siaradwyr Cymraeg gyda phoblogaethau ieithoedd lleiafrifol eraill a nodi'r ffactorau sy'n gymorth i oresgyn rhwystrau iaith mewn ymchwil, efallai y gellir bwrw golau ar faterion cyffredin a chasglu gwybodaeth werthfawr i wella recriwtio siaradwyr Cymraeg ar gyfer astudiaethau ymchwil yng Nghymru.

Mae Li et al (2001) yn dadlau:

"*In view of strong national commitments to (1) improving the inclusion of minorities in clinical trials; (2) reducing health disparities among subpopulations; and (3) developing cultural competence in health service delivery; researchers and policy makers should give added attention to language as a potential barrier excluding people from national surveys, as well as from access to health and social services.*" (tud. 1).

Er gwaethaf y ffaith fod gan y Gymraeg statws unigryw yng Nghymru, mae siaradwyr Cymraeg yn adrodd am rwystrau iaith wrth ddefnyddio'r gwasanaethau iechyd a gofal cymdeithasol (Misell 2000) ac yng ngoleuni'r drafodaeth flaenorol, rhesymol yw tybio y gall y rhwystrau hyn hefyd effeithio ar eu cyfranogaeth mewn ymchwil.

Mae'r llenyddiaeth yn adrodd am amrywiaeth o ddulliau i oresgyn y rhwystrau ar ffordd cynnwys siaradwyr ieithoedd lleiafrifol mewn astudiaethau ymchwil a rhoddir enghreifftiau o'r rhain fel a ganlyn:

- Casglu gwybodaeth benodol ynghylch poblogaethau targed drwy gael aelodau o'r cymunedau lleiafrifol i gymryd rhan mewn cynllunio'r ymchwil a sefydlu nodau recriwtio eglur (Sterling a Peterson 1999; Yancey et al 2006).
- Mabwysiadau dulliau samplu arloesol, megis defnyddio rhestrau blaenorol, yn hytrach na sgrinio'r boblogaeth gyffredinol (Li et al 2001).
- Codi lefelau'r ymwybyddiaeth o iaith ymhlith ymchwilwyr (Papadopoulos a Lees 2002).
- Defnyddio eiriolwyr iechyd dwyieithog (Layzell ac England 1999) i sicrhau bod cydgordiad iaith rhwng cyfranogwyr (Sterling a Peterson 1999) a sefydlu ymddiriedaeth rhwng ymchwilwyr a chyfranogwyr posibl (Culley et al 2007).
- Mireinio prosesau cyfieithu a mabwysiadu technoleg beiriannol (Li et al 2001).
- Teilwrio gwybodaeth ar gyfer grwpiau targed yn eu dewis iaith (McCabe et al 2005; Barata et al 2006).

Gyda golwg ar eu hastudiaeth sylweddol i gefnogaeth gymdeithasol ac iechyd teuluol, a gynhaliwyd mewn ardal ddinesig ddifreintiedig yn y Deyrnas Unedig, honna Oakely et al (2003) bod dulliau recriwtio cynhwysol, megis y rhai a amlinellwyd uchod, wedi bod o gymorth i sefydlu sampl cymysgryw o recriwtiaid lle roedd ar 14% o'r cyfranogwyr angen cyfieithydd; roedd Saesneg yn ail iaith i 30% arall; a lle roedd 45 o ieithoedd ar wahân i Saesneg yn cael eu siarad. Deil yr awduron fod hyn yn cynyddu dilysrwydd allanol y casgliadau yn ogystal â pharchu ymreolaeth yr unigolyn.

Ar sail eu hastudiaeth o ofalwyr o blith grwpiau ethnig lleiafrifol yn Boston, UDA, mae Levkoff et al (2000) yn cynnig model lle mae recriwtio cyfranogwyr lleiafrifol

minority language speakers in research studies due to a lack of language awareness amongst researchers; a lack of bilingual staff; financial and time constraints associated with translation; and an inability to support a range of minority languages. *(See Box 2)*

BOX 2

Under-representation of Minority Populations in Health Research

Hussain-Gambles M, Leese B, Atkin K, Brown J, Mason S & Tovey P (2004) Involving South Asian patients in clinical trials. *Health Technology Assessment* 8, 42, 1–109.

Hussain-Gambles et al (2004) were commissioned by the Health Technology Assessment Programme to examine the involvement of South Asian patients in clinical trials in the UK. This was achieved by conducting a systematic review of the literature on minority ethnic participation in clinical trials followed by three qualitative interview studies with health professionals, South Asian trial participants, and non-participants. In light of their findings, the authors concluded that the under-representation of this ethnic group within trials arises mainly in response to the increased cost and time associated with their inclusion, particularly in relation to language barriers; and passive exclusion associated with cultural stereotyping.

The language barriers that impede the access of Welsh speakers to healthcare in Wales are also likely to limit their involvement in research. Nevertheless, by comparing the experiences of Welsh speakers with other language minority populations and identifying the factors that help overcome language barriers in research, light may be shed on common issues and valuable information gleaned to enhance the recruitment of Welsh speakers to research studies in Wales.

Li et al (2001) argue that:

"In view of strong national commitments to (1) improving the inclusion of minorities in clinical trials; (2) reducing health disparities among subpopulations; and (3) developing cultural competence in health service delivery; researchers and policy makers should give added attention to language as a potential barrier excluding people from national surveys, as well as from access to health and social services." (page 1).

Despite the fact that the Welsh language has a unique status in Wales, Welsh speakers report language barriers when accessing health and social care (Misell 2000) and, in light of the previous discussion, it is reasonable to assume that these barriers may also affect their participation in research.

The literature reports a range of approaches to overcome barriers to the inclusion of minority language speakers in research studies and these are exemplified as follows:

- Acquiring specific knowledge about target populations through engaging members of the minority communities in the research planning and establishing explicit recruitment goals (Sterling and Peterson 1999; Yancey et al 2006).
- Adopting innovative sampling approaches, such as accessing pre-existing lists, rather than screening the general population (Li et al 2001).
- Enhancing levels of language awareness amongst researchers (Papadopoulos and Lees 2002).
- Employing bilingual health advocates (Layzell and England 1999) to establish language concordance with participants (Sterling and Peterson 1999) and establish trust between researchers and potential subjects (Culley et al 2007).
- Refining translation processes and adopting machine technology (Li et al 2001).
- Tailoring information for target groups in their preferred language (McCabe et al 2005; Barata et al 2006).

Reflecting on their substantial study of social support and family health carried out in a disadvantaged urban area of the UK, Oakely et al (2003) claim that inclusive recruitment procedures, such as those outlined above, helped to establish a heterogeneous sample of recruits where 14% of participants needed an interpreter; a further 30% had English as a second language; and 45 different languages other than English were spoken. The authors maintain that this increased the external validity of the findings as well as respecting individual autonomy.

Based on their research study of caregivers from ethnic minority groups in Boston, US, Levkoff et al (2000) propose a model where the successful recruitment of minority participants is dependent on establishing a match between the research and minority communities' perspectives, mediated at the macro, mediator and individual level *(see Table 3)*. The model gives credence to the wider research findings and offers a valuable guide for the recruitment of Welsh speakers to health and social care studies in Wales.

yn llwyddiannus yn dibynnu ar sefydlu cydweddiad rhwng yr ymchwil a phersbectifau cymunedau lleiafrifol, fel y'u cyfryngir ar lefel facro, y cyfryngwr a'r unigolyn *(gweler Tabl 3)*. Rhydd y model hygrededd i'r casgliadau ymchwil ehangach ac mae'n cynnig arweiniad gwerthfawr ar gyfer recriwtio siaradwyr Cymraeg i astudiaethau iechyd a gofal cymdeithasol yng Nghymru.

Yng ngoleuni'r drafodaeth hon, mae angen gwneud ymdrechion i gynyddu nifer y siaradwyr Cymraeg a recriwtir i astudiaethau a sicrhau bod eu llais yn cael ei glywed. Awgrymir felly feini prawf ar gyfer cyflwyno'r ymwybyddiaeth o iaith i mewn i'r broses o recriwtio cyfranogwyr i astudiaethau iechyd a gofal cymdeithasol yng Nghymru a thynnir sylw at yr adnoddau cefnogi perthnasol. *(Gweler Tabl 4)*

TABL 3
Trosolwg ar y Model Recriwtio Cydweddol (Addaswyd o Levkoff et al 2000)

LEFELAU		**RHWYSTRAU**	***DULLIAU GALLUOGI***
Macro	**Asiantaethau Cymunedol**	e.e. galwadau'r baich gwaith yn llethol	*e.e. ymrwymiad i adlewyrchu Cynlluniau Iaith Gymraeg yr asiantaethau*
	Sefydliadau Academaidd	e.e. hanes gwael am gysylltiadau rhwng y sefydliadau academaidd ac asiantaethau cymunedol	*e.e. ymrwymiad i ymwybyddiaeth o iaith mewn ymchwil, fel yr amlinellwyd yn y Fframwaith Llywodraethu Ymchwil Cenedlaethol ar gyfer Iechyd a Gofal Cymdeithasol (LICC 2001)*
Cyfryngwr	**Ceidwaid y Pyrth / Darparwyr Iechyd a Gofal Cymdeithasol**	e.e. amddiffyn y darpar gyfranogwyr yn ormodol	*e.e. eu trwytho yn y gymuned Gymraeg*
	Y Tîm Ymchwil	e.e. dewis anaddas o ddulliau ymchwil	*e.e. recriwtio a defnyddio staff ymchwil Cymraeg yn briodol*
Unigolyn	**Cyfranogwyr / Gofalwyr Unigol**	e.e. hunan-barch isel ymhlith siaradwyr Cymraeg	*e.e. cymhellion allgarol dros gyfranogi*
	Holwyr	e.e. diffyg sensitifrwydd tuag at siaradwyr Cymraeg	*e.e. ymwybyddiaeth o'r Gymraeg*

TABL 4
Meini Prawf Gwerthuso ar gyfer Ymwybyddiaeth o Iaith wrth Recriwtio Cyfranogwyr

Meini Prawf Pwerthuso ar gyfer Recriwtio Cyfranogwyr	***Adnoddau Perthnasol***
Ydy'r strategaeth recriwtio yn cymryd demograffeg siaradwyr Cymraeg i ystyriaeth?	*Gweler Cynulliad Cenedlaethol Cymru (2003) Roberts et al (2006)*
Ydy rhwydweithiau Cymraeg yn cael eu targedu'n briodol?	*Gweler Cyfeiriadur y Lolfa o sefydliadau yng Nghymru www.ylolfa.com/cyfeiriadur.php*
Oes gan y tîm cynllunio gyswllt uniongyrchol gyda broceriaid yn y gymuned?	*Gweler Cynnwys Pobl, CRC Cymru www.crc-cymru.wales.nhs.uk*
Ydy'r deunyddiau recriwtio ar gael yn ddwyieithog?	*Gweler Cymdeithas Cyfieithwyr Cymru www.cyfieithwyrcymru.org.uk*
Ydy'r deunyddiau recriwtio'n rhoi'r sylw dyledus i faterion cyfieithu ac arddull yr iaith?	*Gweler Bwrdd yr Iaith Gymraeg: www.bwrdd-yr-iaith.org.uk*

In light of this discussion, efforts are required to maximise the recruitment of Welsh speakers to studies and enable their voice to be heard. Thus evaluation criteria are proposed for introducing language awareness in the recruitment of participants to health and social care studies in Wales and relevant support resources are highlighted. *(See Table 4)*

TABLE 3
Overview of the Matching Model of Recruitment (Adapted from Levkoff et al 2000)

LEVELS		**BARRIERS**	***ENABLERS***
Macro	**Community Agencies**	e.g. workload demands overwhelming	*e.g. commitment to reflect agencies' Welsh Language Schemes*
	Academic Institutions	e.g. poor history of academic affiliations with community agencies	*e.g. commitment towards language awareness in research, as outlined in the National Research Governance Framework for Health and Social Care (WAG 2001)*
Mediator	**Gatekeepers / Health and Social Care Providers**	e.g. over-protection of potential participants	*e.g. immersed in Welsh speaking community*
	Research Team	e.g. inappropriate choice of research methods	*e.g. appropriate recruitment and deployment of Welsh speaking research staff*
Individual	**Individual Participants / Caregivers**	e.g. low self-esteem as Welsh speakers	*e.g. altruistic motives for participation*
	Interviewers	e.g. Insensitivity towards Welsh speakers	*e.g. Welsh language awareness*

TABLE 4
Evaluation Criteria for Language Awareness in the Recruitment of Participants

Evaluation Criteria for the Recruitment of Participants	***Relevant Resources***
Does the recruitment strategy take account of the demography of Welsh speakers?	*See National Assembly for Wales (2003) Roberts et al (2006)*
Are Welsh language networks appropriately targeted?	*See the Lolfa Directory of Organisations in Wales www.ylolfa.com/cyfeiriadur.php*
Does the planning team have direct contact with community brokers?	*See Involving People, CRC Cymru www.crc-cymru.wales.nhs.uk*
Are the recruitment materials available in bilingual format?	*See Association of Welsh Translators and Interpreters at: www.welshtranslators.org.uk*
Do the recruitment materials give due consideration to issues of translation and language style?	*See Welsh Language Board at: www.welsh-language-board.org.uk*

CAM 3 Casglu Data

Mae Im et al (2004) yn cynnig bod angen i ymchwil iechyd gyda phoblogaethau amrywiol gael ei gwerthuso yn nhermau pa mor briodol ydyw i arddulliau cyfathrebu, cysyniadu a'r broses gyfieithu. Mae hyn yn neilltuol o amlwg yn ystod y broses o gasglu data ac mae'r un mor berthnasol ar gyfer ymchwilwyr sy'n mabwysiadu dulliau meintiol a'r rhai sy'n defnyddio ddulliau ansoddol. A derbyn amrywiaeth y siaradwyr Cymraeg ar draws Cymru a'r angen i barchu eu dewis iaith mewn astudiaethau ymchwil, mae'n fater o raid i ymchwilwyr gymryd yr heriau o weithio ar draws rhwystrau iaith i ystyriaeth arbennig wrth gasglu data ymchwil.

Dulliau Meintiol

Dros yr ychydig ddegawdau diwethaf gwelwyd cynnydd yn yr ymwybyddiaeth o effaith iechyd a gofal cymdeithasol ar ansawdd bywyd dynol (Streiner a Norman 2003). Canlyniad hyn fu lluosogrwydd o raddfeydd mesur iechyd a ddyfeisiwyd i fesur nifer o nodweddion sydd o ddiddordeb i ymchwilwyr yn y gwyddorau iechyd, megis poen, lles seicolegol a statws iechyd meddwl (McDowell a Newell 1996). Yng ngoleuni arglwyddiaeth gyffredinol y Saesneg mewn gwyddoniaeth a meddygaeth, drwy gyfrwng y Saesneg yn wreiddiol y dyfeisiwyd llawer o'r offer sydd wedi ei ddilysu. Fodd bynnag, a derbyn y cynnydd byd-eang mewn amrywiaeth ieithyddol, nid Saesneg yw dewis iaith cyfran sylweddol o ddefnyddwyr gwasanaeth nac atebwyr ymchwil (Dunckley et al 2003). At hynny, mae tystiolaeth gadarn i awgrymu y gall rhwystrau iaith beryglu dilysrwydd a dibynadwyedd mesurau o'r fath (Fitzpatrick et al 1998). Felly, er mwyn cael darlun cywir wrth gymharu deilliannau iechyd poblogaethau amrywiol, gwnaed ymdrechion i gyfieithu offer mesur iechyd o'r iaith wreiddiol i'r ieithoedd targed a ddefnyddir yn fwyaf cyffredin o fewn lleoliadau astudio. Mabwysiadwyd y dull hwn yn ddiweddar yng Nghymru, lle mae nifer fechan o offerynnau mesur wedi eu cyfieithu i'r Gymraeg; er enghraifft, yr EQ–5D Health-Related Quality of Life Measure gan Muntz et al (2005). Serch hynny, mae llawer o'r offerynnau ar wahanol gamau datblygiad ac ychydig sydd wedi eu profi'n drwyadl ar gyfer dibynadwyedd a dilysrwydd (Roberts 2007). Felly erys llawer o waith i'w wneud yn y maes hwn.

Mae sicrhau cywerthedd rhwng y fersiwn wreiddiol a'r cyfieithiad o offeryn yn gosod heriau sylweddol i ymchwilwyr gan y gall cyfieithiad plaen fethu â dal realiti profiad yr atebwyr sy'n dod o gefndiroedd diwylliannol ac ieithyddol gwahanol iawn (Fitzpatrick et al 1998). Er enghraifft, yn ystod y broses o gyfieithu, gall camgymeriadau ddigwydd yn y mesur o ganlyniad i wahaniaethau yn y dehongliadau o'r cysyniadau a'r eitemau a ddefnyddir i fesur lluniadau. Ymhellach, mae offeryn sydd heb ei ddilysu i'w ddefnyddio gyda grŵp neilltuol yn debygol o feddu ar nodweddion seicometrig gwahanol i'r un gwreiddiol (Ramirez et al 2005). Felly, mae'n rhaid i fesurau iechyd fod yn addas o ran cysyniad ac o ran gweithrediad yn iaith cyfranogwyr yr ymchwil, lle mae ystyr yr hyn a fesurir yr un fath ar draws grwpiau a lle mae cymariaethau grŵp o amcangyfrifon sampl yn adlewyrchu gwahaniaethau gwirioneddol rhwng grwpiau ac nid anghysondebau ieithyddol neu agweddau ar duedd ddiwylliannol wrth gyfieithu (Wang et al 2006).

STAGE 3 **Data Collection**

Im et al (2004) propose that health research with diverse language populations needs to be evaluated in terms of its appropriateness to communication styles, conceptualisation and the translation process. This is particularly evident during the process of data collection and is equally pertinent for researchers adopting either quantitative or qualitative methods. Given the diversity of Welsh speakers across Wales and the need to respect their language preference in research studies, it is imperative that researchers take particular account of the challenges of working across language barriers when collecting research data.

Quantitative Approaches

Over the past few decades, there has been a growing awareness of the impact of health and social care on the quality of human life (Streiner and Norman 2003). This has resulted in a proliferation of health measurement scales designed to measure a number of characteristics of interest to researchers in the health sciences, such as pain, psychological well-being and mental health status (McDowell and Newell 1996). In view of the universal dominance of the English language in science and medicine, many validated clinical tools were devised initially through the medium of English. However, given the global increase in linguistic diversity, English is not the preferred language of a significant proportion of service users or research respondents (Dunckley et al 2003). Moreover, there is sound evidence to suggest that language barriers may compromise the validity and reliability of such measures (Fitzpatrick et al 1998). Thus, in order to accurately capture and compare the health outcomes of diverse populations, attempts have been made to translate health measures from the source language into the target languages most commonly used within study locations. This approach has recently been adopted in Wales, where a small number of measures have been translated into the Welsh language; for example, the EQ–5D Health-Related Quality of Life Measure by Muntz et al (2005). Nevertheless, many of the tools are at various stages of development and few have been rigorously tested for their reliability and validity (Roberts 2007). Thus much work remains in this area.

Establishing equivalence between the original and translated version of an instrument poses significant challenges for researchers since direct translation alone may fail to capture the reality of the experience for respondents who have very different cultural and language orientations (Fitzpatrick et al 1998). For example, during the translation process, measurement errors can occur as a result of differences in the interpretation of concepts and of the items used to measure constructs. Furthermore, an instrument that is not validated for use with a particular group is likely to possess different psychometric properties than the original (Ramirez et al 2005). Thus, it is imperative that health measures are conceptually and functionally appropriate in the language of the research participants, where measured constructs have the same meaning across groups and group comparisons of sample estimates reflect true group differences and not linguistic discrepancies or aspects of cultural bias in translation (Wang et al 2006).

Er gwaethaf y corff cynyddol o lenyddiaeth, daeth adolygiad diweddar o 47 o bapurau, oedd yn disgrifio offerynnau oedd wedi eu cyfieithu fel rhan o astudiaeth gychwynnol, i'r casgliad bod *'the quality of processes used for instrument translation varies widely'* (Maneesriwongul a Dixon 2004, tud.184).

Mae hyn yn anochel yn bygwth dilysrwydd a dibynadwyedd offerynnau mesur sydd wedi eu cyfieithu ac mae'n codi cwestiwn ynghylch y mathau gwahanol o gywerthedd y mae angen eu sefydlu. Y consensws cyffredinol ymhlith awduron yw y dylai hyn gynnwys cywerthedd o ran y cysyniad, yr eitem, y semanteg a'r gweithrediad (Streiner a Norman 2003). Er mwyn sicrhau'r cywerthedd hwn, mae adolygiadau diweddar o broses cyfieithu offerynnau yn argymell y dylai'r safonau gofynnol lleiafsymiol gynnwys cyfieithu ymlaen; ôl-gyfieithu; adolygiad annibynnol o'r cyfieithiad; a chael pwyllgor i gytuno ar fersiwn derfynol yr offeryn (Streiner a Norman 2003; Maneesriwongul a Dixon 2004). Y dulliau hyn yn awr yw sail canllawiau yn UDA (Weidmer 2005) ac yn Ewrop (Tafforeau et al 2005) ar gyfer datblygu offerynnau arolygu iechyd. Er bod rhai awduron (Streiner a Norman 2003; Maneesriwongul a Dixon 2004) yn awgrymu cyfieithu'n ôl, ond dangosodd profiad blaenorol fod ôl-gyfieithu'n gallu symud y ffocws i ffwrdd oddi wrth gywerthedd cysyniadol at gyfieithu llythrennol (Tafforeau et al 2005).

Mae ymateb yn sensitif i ddewis arddulliau cyfathrebu atebwyr yr astudiaeth o'r pwys mwyaf, nid yn unig er mwyn gweinyddu offerynnau mesur iechyd priodol, ond hefyd ar gyfer ffyrdd eraill o gasglu data a fabwysiedir gan ymchwilwyr meintiol. Er enghraifft, mae priodoldeb a chywirdeb cyfieithiadau o holiaduron a chyfweliadau a'r ffordd y cânt eu gweinyddu yn chwarae rhan sylfaenol wrth sicrhau trylwyredd yr ymchwil. Archwilir y materion hyn ymhellach yn nes ymlaen.

Dulliau Ansoddol

Mae dealltwriaeth feirniadol o'r arddulliau cyfathrebu sydd orau gan atebwyr yn agwedd allweddol ar feini prawf gwerthuso Im et al (2004) ar gyfer trylwyredd mewn ymchwil gyda phoblogaethau amrywiol eu hiaith. Er bod y llenyddiaeth yn talu sylw helaeth i briodoldeb ieithyddol dulliau mesur deilliannau iechyd, mae cynnal ymwybyddiaeth o iaith o fewn fframwaith ansoddol yn derbyn llawer llai o ystyriaeth, ac mae hyn wedi ei gyfyngu'n bennaf i faterion cysylltiedig â chyfieithu a dehongli a'u heffaith ar ddibynadwyedd a dilysrwydd data ansoddol.

Ychydig o amheuaeth sydd bod natur bwysig y Saesneg wedi dylanwadu ar ei safle drechol mewn iechyd ac ymchwil iechyd (Bradby 2001). Felly mae hi'n anochel, lle mae Saesneg yn ail iaith i gyfranogwyr ymchwil a lle nad oes cydgordiad iaith rhwng yr ymchwilwyr a'r cyfranogwyr, yr edrychir ar eu cynnwys mewn astudiaethau ansoddol yn aml fel rhywbeth trafferthus (Marshall a While 1994). Fodd bynnag, dangoswyd bod hyrwyddo dewis iaith mewn gofal iechyd ar gyfer siaradwyr ieithoedd lleiafrifol yn eu galluogi i deimlo'n fwy cyfforddus a hyderus yn eu hymwneud â staff gofal iechyd a bod ansawdd y cyfnewid gwybodaeth yn well. (Roberts 1991; Murray a Wynne 2001). Mae allosod y casgliadau hyn yng nghyd-destun ymchwil iechyd yn rhoi nerth i ddadl Twinn (1997) bod dulliau ansoddol sy'n galluogi cyfranogwyr i ddefnyddio'u hiaith eu hunain yn hanfodol er mwyn cael mewnwelediad a dealltwriaeth o brofiadau byw poblogaethau amrywiol eu hiaith. Serch hynny, lle y ceir diffyg cydgordiad iaith rhwng ymchwilwyr ac atebwyr a phrinder ymchwilwyr dwyieithog, dibynnir yn drwm yn aml ar gyfieithwyr mewn astudiaethau ymchwil ac mae i hyn oblygiadau pwysig o safbwynt cynnal trylwyredd methodolegol (Twinn 1997).

Yng Nghymru, ac eithrio'r rhai ifanc iawn a'r rhai hen iawn a'r rhai sy'n neilltuol o agored i niwed, mae'r rhan fwyaf o siaradwyr Cymraeg yn gallu trafod eu materion, i raddau amrywiol, drwy gyfrwng y Saesneg ac fe all llawer ymddangos yn ddidaro i raddau ynghylch cael dewis iaith mewn darpariaeth gwasanaeth (Madoc-Jones a Dubberley 2005). Felly, efallai na fydd rhwystrau iaith posibl yn arbennig o amlwg i ymchwilwyr ar y dechrau ac anaml yr edrychir am bersonél dwyieithog neu ddehonglwyr ffurfiol. Er hynny, i atebwyr, y mae'n well ganddynt siarad Cymraeg ac sy'n mynegi eu hunain yn gliriach yn Gymraeg nag yn Saesneg, efallai y bydd llawer dan anfantais wrth gymryd rhan mewn ymchwil drwy eu hail iaith neu efallai y byddant yn dewis peidio â chymryd rhan o gwbl ac awgryma Twinn (1997) fod perygl i'r data o ganlyniad.

Despite the increasing body of literature, a recent review of 47 papers describing instruments that were translated as part of the primary study concluded that 'the quality of processes used for instrument translation varies widely' (Maneesriwongul and Dixon 2004, page 184). This inevitably threatens the validity and reliability of translated measures and calls into question the different types of equivalencies that need to be established. The general consensus amongst authors is that this should include conceptual, item, semantic, and operational equivalence (Streiner and Norman 2003). In order to achieve this equivalence, recent reviews of the instrument translation process recommend that minimum standards of application should include forward translation; back translation; independent review of the initial translation product; and committee adjudication to agree a final version of the instrument (Streiner a Norman 2003; Maneesriwongul a Dixon 2004). These standards now form the basis of US (Weidmer 2005) and European (Tafforeau et al 2005) guidelines for the development of health survey instruments. Although back translation is recommended by some authors (Streiner and Norman 2003; Maneesriwongul and Dixon 2004), previous experience has demonstrated that back translation may shift the focus away from conceptual equivalence to literal translation (Tafforeau et al 2005).

Responding sensitively to the preferred communication styles of study respondents is crucial, not only for the administration of appropriate health measures, but also for other modes of data collection adopted by quantitative researchers. For example, the appropriateness and accuracy of translation of questionnaires and interviews and their mode of administration play a fundamental role in ensuring the rigour of the research. These issues are further explored later.

Qualitative approaches

A critical understanding of the preferred communication styles of respondents is a key aspect of Im et al's (2004) evaluation criteria for rigour in research with linguistically diverse populations. Whilst the literature gives prolific attention to the linguistic appropriateness of health outcome measures, maintaining language awareness within a qualitative framework receives far less consideration, and this is mainly confined to issues relating to translation and interpretation and their effect on the reliability and validity of qualitative data.

There is little doubt that the prestigious nature of the English language has influenced its position as the dominant language of health and health research (Bradby 2001). Thus it is inevitable that, where research participants have English as a second language and there is a lack of language concordance between researchers and participants, their involvement in qualitative studies is often viewed as problematic (Marshall and While 1994). However, it has been shown that facilitating language choice in healthcare for minority speakers enables them to feel more comfortable and confident in their dealings with healthcare staff and the quality of information exchange is enhanced (Roberts 1991; Murray and Wynne 2001). Extrapolating these findings to the health research context gives weight to Twinn's (1997) argument that qualitative methods that enable participants to use their own language are vital in order to gain insight and understanding of the lived experiences of linguistically diverse populations. Nevertheless, where there is a lack of language concordance between researchers and respondents and a shortage of bilingual researchers, there is often a heavy reliance on translators and interpreters within research studies and this has important implications for maintaining methodological rigour (Twinn 1997).

In Wales, with the exception of the very old or very young and those who are particularly vulnerable, most Welsh speakers are able to discuss their affairs, to varying degrees, through the medium of English and many may demonstrate a level of indifference towards language choice in service provision (Madoc-Jones and Dubberley 2005). Thus, potential language barriers may not be particularly evident to researchers at the outset and bilingual personnel or formal interpreters rarely sought. Nevertheless, for respondents whose preferred language is Welsh and whose articulation is clearer in Welsh than in English, many may be disadvantaged in participating in research through their second language or choose not to at all and Twinn (1997) suggests that the data may be compromised as a result.

Mae nifer o astudiaethau ansoddol yr adroddir amdanynt yn y llenyddiaeth yn amlinellu mesurau i wella'r ymwybyddiaeth o iaith wrth gynnal ymchwil ymhlith aelodau o gymunedau ieithyddol amrywiol, fel cyfrwng i wella trylwyredd. Er enghraifft, yn eu hadroddiadau manwl am y defnydd o grwpiau ffocws mewn ymchwil drawsieithyddol, mae Esposito (2001) a Culley et al (2007) yn argymell cynnal y cyfweliadau yn newis iaith y cyfranogwyr a hwyluswyr dwyieithog yn eu harwain. Caiff y dull hwn ei gefnogi'n helaeth gan Small et al (1999b) a Tsai et al (2004) wrth gynnal cyfweliadau unigol wyneb yn wyneb a lle nad oes ymchwilwyr dwyieithog i'w cael, defnyddir cyfieithwyr yn aml er mwyn sicrhau bod y cyfranogwyr yn cael dewis eu hiaith (Temple ac Edwards 2002). Mae'r awduron yn dadlau bod cynnig dewis iaith i gyfranogwyr yn lleihau'r perygl o gamddehongli ac yn rhoi cyfleoedd gwerthfawr i egluro, chwilio'n fanwl a gwella dealltwriaeth sydd, yn ôl Marshall a While (1994), yn hyrwyddo dilysrwydd mewnol y casgliadau.

Mae dulliau eraill o gynyddu trylwyredd mewn dulliau ansoddol yn cynnwys sefydlu cyfieithiadau wedi eu dilysu o ganllawiau testunau grwpiau ffocws (Culley et al 2007); a threfn cyfweliadau (Esposito 2001); lle y sicrheir cywirdeb yn y cyfieithiad drwy werthuso cywerthedd ar draws fersiynau ieithyddol (Streiner a Norman 2003); a mabwysiadau adolygiad consensws (Maneesriwongul a Dixon 2004). Honna Bradby (2002) y gellir gwella cyfieithu offerynnau ymchwil ymhellach drwy drafodaethau cydweithredol rhwng ymchwilwyr, cyfieithwyr proffesiynol a broceriaid cymunedol er mwyn cytuno ar y dechnoleg briodol, cyweiriau iaith a chymysgu codau fel dull o hyrwyddo cyfathrebu yn ystod y broses gyfweld.

Yng Nghymru, mae hyn yn galw am ystyriaeth ofalus o'r prif dafodieithoedd rhanbarthol, ymgyfarwyddo â therminoleg Gymraeg safonol a gwerthfawrogiad o ddynameg cymysgu codau yn y gymdeithas gyfoes.

Yng ngoleuni'r drafodaeth hon, cynigir dulliau arfer orau i wella'r ymwybyddiaeth o'r Gymraeg wrth gasglu data ansoddol fel a ganlyn:

- Sefydlu cyfieithiadau Cymraeg, sydd wedi eu dilysu, o drefn cyfweliadau a chanllawiau testunau grwpiau ffocws.
- Sicrhau cywirdeb ac addasrwydd cyfieithiadau drwy werthuso cywerthedd dogfennau ar draws fersiynau iaith a mabwysiadu'r cywair a'r arddull iaith briodol.
- Cynnal cyfweliadau a grwpiau ffocws yn newis iaith y cyfranogwyr, lle bo hynny'n bosibl.
- Sicrhau cydgordiad iaith rhwng holwyr a chyfranogwyr.
- Cynnig hyfforddiant ymwybyddiaeth o'r Gymraeg a hyddorddiant sgiliau Cymraeg i staff ymchwil.

Mae un ar hugain y cant o ddefnyddwyr gwasanaeth yng Nghymru'n dangos bod yn well ganddynt ddefnyddio'r Gymraeg wrth ymwneud â'r gwasanaethau cyhoeddus (NOP Social and Political 1995). Yng ngoleuni'r drafodaeth flaenorol a'r ymrwymiad i ymwybyddiaeth o iaith a adlewyrchir yn fframwaith llywodraethu ymchwil Cymru (LICC 2001), mae'n rhaid i gyfranogwyr yr astudiaeth gael digon o gyfleoedd i ddefnyddio'u dewis iaith. Mae Tabl 5 yn amlinellu'r meini prawf ar gyfer cyflwyno ymwybyddiaeth o iaith i mewn i'r broses o gasglu data a thynnir sylw at yr adnoddau sydd ar gael i gefnogi.

TABL 5
Meini Prawf Gwerthuso ar gyfer Ymwybyddiaeth o Iaith wrth Gasglu Data

Meini Prawf ar gyfer Casglu Data	***Adnoddau Perthnasol***
Ydy'r prosesau casglu data'n cymryd dewis iaith y cyfranogwyr i ystyriaeth?	*Gweler Cynulliad Cenedlaethol Cymru (2003)*
Ydy'r holl offerynnau casglu data ar gael drwy gyfrwng y Gymraeg?	*Gweler Roberts (2007)*
Oes prosesau gwerthuso wedi eu sefydlu i asesu cywirdeb ac addasrwydd offerynnau casglu data sydd wedi eu cyfieithu?	*Gweler Streiner a Norman (2003)* *Esposito (2001)*
Oes yna brofion dibynadwyedd a dilysrwydd wedi eu cynnal ar y dulliau mesur deilliannau iechyd Cymraeg?	*Gweler Roberts (2007)*
Oes yna gydgordiad iaith rhwng yr holwyr a'r cyfranogwyr?	*Gweler Esposito (2001)* *Culley et al (2007)*

A number of qualitative studies reported in the literature outline measures to enhance language awareness in the conduct of research amongst members of diverse language communities, as a means of enhancing rigour. For example, in their detailed reports of the use of focus groups in cross-language research, Esposito (2001) and Culley et al (2007) recommend that interviews are conducted in the participants' preferred language and conducted by bilingual facilitators. This approach is also widely supported by Small et al (1999b) and Tsai et al (2004) in the conduct of individual face to face interviews and, where bilingual researches are not available, interpreters are often employed in order to ensure language choice for participants (Temple and Edwards 2002). The authors argue that offering language choice to participants minimises the risk of misinterpretation and provides valuable opportunities for clarification, probing and enhanced understanding that, according to Marshall and While (1994), facilitate the internal validity of the findings.

Other modes of enhancing rigour in qualitative approaches include establishing validated translations of focus group topic guides (Culley et al 2007); and interview schedules (Esposito 2001); where accuracy of translation is established through evaluating equivalence across language versions (Streiner and Norman 2003); and adopting a consensus review (Maneesriwongul and Dixon 2004). Bradby (2002) claims that the translation of research instruments may be further enhanced through collaborative discussions between researchers, professional translators and community brokers in order to negotiate appropriate terminology, language registers and code mixing as a way of facilitating communication during the interview process. In Wales, this calls for careful consideration of the main regional dialects; familiarisation with standardised Welsh terminology; and an appreciation of the dynamics of code mixing within contemporary society.

In light of this discussion, best practice approaches to enhancing Welsh language awareness in qualitative data collection are proposed as follows:

- Establish validated Welsh translations of interview schedules and focus group topic guides.
- Ensure accuracy and appropriateness of translations through evaluating equivalence across language versions of documents and adopting appropriate language register and style.
- Conduct interviews and focus groups in the preferred language of the participants, where possible.
- Ensure language concordance between interviewers and participants.
- Offer Welsh language awareness training and Welsh language skills training to research staff.

Twenty one percent of service users speak Welsh in Wales and many show a preference to use Welsh in their dealings with public services (NOP Social & Political 1995). In light of the previous discussion and the commitment towards language awareness reflected in the research governance framework for Wales (WAG 2001), it is imperative that study participants are given ample opportunities to use their preferred language. Table 5 outlines evaluation criteria for introducing language awareness in the data collection process and relevant support resources are highlighted.

TABLE 5
Evaluation Criteria for Language Awareness in Data Collection

Evaluation Criteria for Data Collection	***Relevant Resources***
Do the data collection processes take into account the preferred language of respondents?	*See National Assembly for Wales (2003)*
Are all the data collection instruments available through the medium of Welsh?	*See Roberts (2007)*
Are evaluation processes in place to assess the accuracy and appropriateness of translated data collection instruments?	*See Streiner & Norman (2003)* *Esposito (2001)*
Have reliability and validity tests been conducted on the Welsh language health outcome measures?	*See Roberts (2007)*
Is there language concordance between interviewers and participants?	*See Esposito (2001)* *Culley et al (2007)*

CAM 4 Dadansoddi Data

Mae dangos dilysrwydd neu hygrededd casgliadau yn hollbwysig i ymchwilwyr ansoddol ac mae hyn yn gosod heriau arbennig wrth ddadansoddi data ar draws ieithoedd. Er bod yna gyfoeth o lenyddiaeth yn amlinellu strategaethau ar gyfer sefydlu cywerthedd graddfeydd mesur iechyd ar draws fersiynau iaith (Streiner a Norman 2003), cymharol ychydig o drafodaeth sydd ynghylch mesurau dilysrwydd mewn ymchwil ansoddol drawsieithyddol. Serch hynny, mae angen i ymchwilwyr fod yn glir wrth sefydlu ansawdd neu hygrededd casgliadau sy'n codi o setiau data amrywiol eu hiaith. Mae Lincoln a Guba (1985) yn awgrymu pedwar maen prawf ar gyfer asesu data ansoddol ac mae'r rhain yn darparu fframwaith ar gyfer cynnal a chadw trylwyredd mewn ymchwil drawsieithyddol, fel y darlunnir yn Nhabl 6.

Mae Tsai et al (2004), wrth adfyfyrio ar eu profiadau o astudiaeth ansoddol, i gasglu gwybodaeth ynghylch sgrinio am ganser colorefrol gan 30 o gyfranogwyr oedd yn siarad Mandarin a Chantoneg oedd yn byw yn Washington, UDA, yn nodi nifer o heriau o ran sicrhau dilysrwydd eu casgliadau. Mae'r rhain yn cynnwys defnyddio data wedi ei gyfieithu ar gyfer ei ddadansoddi; dulliau ansoddol priodol; a chymhwysedd codwyr data.

Mae Tsai et al (2004) yn lleisio pryderon, lle nad yw ymchwilwyr yn rhugl yn yr iaith darged a lle nad yw trwytho yn y data gwreiddiol yn bosibl, y gall defnyddio data wedi ei gyfieithu beryglu dyfnder y dadansoddiad a hygrededd y casgliadau. Awgryma Temple ac Edwards (2002) fod hyn oherwydd:

"*Language is an important part of conceptualization … it speaks of a particular social reality that may not necessarily have a conceptual equivalence in the language into which it is to be translated.*" (tud. 5)

Mewn ymdrech gynnar i archwilio'r materion hyn, ymgymerodd Twinn (1997) ag astudiaeth archwilio fechan gyda siaradwyr Cantoneg i archwilio dylanwad cyfieithu ar ddibynadwyedd a dilysrwydd data ansoddol. Cynhaliwyd cyfweliad dwfn, lled-strwythuredig, oedd yn cael ei recordio ar dâp sain, gyda chwech o ferched mewn Cantoneg er mwyn cael gwybod am eu canfyddiadau hwy ynghylch ffactorau oedd yn dylanwadu ar y graddau yr oeddent yn derbyn profion PAP. Gan fabwysiadu dull tri cham o ddadansoddi'r data, cymharodd yr awdur y categorïau a'r themâu a gynhyrchwyd o drawsgrifiadau'r data yn y Tsieinëeg a'r cyfieithiadau Saesneg. Er nad adroddwyd am wahaniaethau arwyddocaol rhwng y prif gategorïau a gynhyrchwyd sylwyd ar rai gwahaniaethau bychain rhwng y themâu. Awgryma'r awdur mai amhendant yw'r casgliad hwn, a derbyn bod y fframwaith codio wedi ei ddatblygu o brif eitemau y cyfweliad lled strwythuredig a derbyn hefyd natur archwiliadol yr astudiaeth hon. Serch hynny, mae'r adroddiad yn tynnu sylw at rai materion pwysig i'w hystyried wrth ddefnyddio data wedi ei gyfieithu ar gyfer dadansoddi.

TABL 6
Cynnal Trylwyredd mewn Ymchwil Ansoddol ar draws Ieithoedd (addaswyd o Lincoln a Guba 1985)

Maen prawf	Diffiniad	Profion Trylwyredd ar gyfer Ymwybyddiaeth o Iaith
Hygrededd (Dilysrwydd mewnol)	Hyder yng ngwirionedd y data	Mae'r prosesau casglu data'n cymryd dewis iaith yr atebwyr i ystyriaeth. Cydgordiad iaith rhwng ymchwilwyr a chyfranogwyr. Ymwybyddiaeth yr ymchwilwyr o iaith. Trawsgrifio'r data yn yr iaith wreiddiol. Dadansoddi'r data yn yr iaith wreiddiol. Dulliau cyfieithu safonol.
Trosglwyddadwy (Dilysrwydd allanol)	Y graddau y gellir tros-glwyddo'r casgliadau o'r data i leoliadau neu grwpiau eraill	Manylion proffil iaith y cyfranogwyr / y gymuned / lleoliad yr ymchwil
Dibynadwyedd	Sefydlogrwydd y data dros amser a thros amodau	Dadansoddiad annibynnol o setiau data mewn iaith benodol gyda chymhariaeth yn dilyn o'r casgliadau ar draws y setiau data
Modd cadarnhau (Gwrthrychedd)	Gwrthrychedd y data neu'r ffaith ei fod yn niwtral	Llwybr archwilio setiau data gan adolygwyr dwyieithog annibynnol

STAGE 4 Data Analysis

Demonstrating the validity or trustworthiness of findings is crucial for qualitative researchers and this presents particular challenges when analysing cross-language data. Whilst there is a wealth of literature outlining strategies for establishing equivalence across language versions of health measurement scales (Streiner and Norman 2003), there is comparatively little discussion concerning validity measures in cross-language qualitative research. Nevertheless, researchers need to be explicit in establishing the quality or trustworthiness of findings arising from linguistically diverse data sets. Lincoln and Guba (1985) propose four criteria for the assessment of qualitative data and these provide a framework for maintaining rigour in cross-language research, as illustrated in Table 6.

Reflecting on their experiences of a qualitative study to elicit information about colorectal cancer screening from 30 Mandarin and Cantonese speaking participants residing in Washington, US, Tsai et al (2004) identify several challenges for establishing the validity of their findings. These include the use of translated data for analysis; appropriate analytical approaches; and the competence of data coders.

Tsai et al (2004) voice concerns that, where researchers are not fluent in the target language and when immersion in the original data is not possible, the use of translated data may compromise the depth of analysis and the credibility of findings. Temple and Edwards (2002) suggest that this is because:

"Language is an important part of conceptualization … it speaks of a particular social reality that may not necessarily have a conceptual equivalence in the language into which it is to be translated." (page 5)

In an early attempt to explore these issues, Twinn (1997) undertook a small exploratory study with Cantonese speakers to examine the influence of translation on the reliability and validity of qualitative data. A semi-structured in-depth taped interview was carried out with six women in Cantonese in order to elicit their perceptions of factors influencing their uptake of PAP smears. Adopting a three-staged approach to data analysis, the author compared categories and themes generated from the Chinese and English translations of the data transcripts. Although no significant differences were reported between the major categories generated, some minor differences were noted amongst the themes. The author suggests that this finding is inconclusive, given that the coding framework was developed from the main items of the semi-structured interview and given the exploratory nature of this study. Nevertheless, the report highlights some important issues for consideration when using translated data for analysis.

TABLE 6
Maintaining Rigour in Qualitative Cross-language Research (adapted from (Lincoln & Guba 1985)

Criterion	Definition	Rigour Checks for Language Awareness
Credibility (Internal validity)	Confidence in the truth of the data	Data collection processes take into account the preferred language of respondents. Language concordance between researchers and participants. Language awareness of researchers. Transcription of data in source language. Analysis of data in source language. Standard translation procedures.
Transferability (External validity)	The extent to which the findings from the data can be transferred to other settings or groups	Details of the language profile of participants / community / research setting
Dependability (Reliability)	The stability of the data over time and over conditions	Independent analysis of language specific data sets followed by comparison of findings generated across data sets
Confirmability (Objectivity)	The objectivity or neutrality of the data	Audit trail of data sets by independent bilingual reviewers

Mae'r rhain yn cynnwys:

- Heriau cynnal cywerthedd wrth gyfieithu a'r effaith ar y dadansoddiad.
- Priodoldeb y dull methodolegol i reoli cymhlethdodau cyfieithu.
- Gwerth defnyddio un cyfieithydd yn unig er mwyn gwella dibynadwyedd.

Mae'n amlwg fod mynediad at ffynonellau data sylfaenol wrth ddadansoddi o gymorth i oresgyn llawer o'r heriau sy'n gysylltiedig â chyfieithu ac yn galluogi ymchwilwyr i'w trwytho eu hunain yn y data gwreiddiol. Wrth reswm, gall ymchwilwyr sy'n dangos cymhwysedd dwyieithog symud yn ôl ac ymlaen rhwng setiau data ieithyddol amrywiol a gall hyn roi mewnwelediad ac eglurder ychwanegol i'r broses o ddehongli. Mae Baker (2006) yn dadlau bod ymwybyddiaeth meta-ieithyddol siaradwyr dwyieithog yn golygu eu bod yn fwy sensitif i iaith yn gyffredinol a bod ganddynt fwy o ymwybyddiaeth o ystyr a strwythur mewn iaith. Gall hyn fod o gymorth i ymchwilwyr wrth ddenu allan naws lleferydd cyfranogwyr ac alinio'r cysyniadau a gynhyrchwyd o'r data. A derbyn cyd-destun dwyieithog Cymru, mae cyfleoedd gwerthfawr i ymchwilwyr archwilio'r heriau o weithio mewn dwy iaith a sefydlu sylfaen o dystiolaeth ar gyfer arfer orau wrth ddadansoddi data ansoddol a gynhyrchwyd o ffynonellau dwyieithog.

Er gwaethaf y pryderon a godwyd ynghylch dylanwad cyfieithu ar ddilysrwydd casgliadau, mae'n anochel na fydd staff dwyieithog ar gael bob amser ac yn aml bydd ymchwilwyr ar draws ieithoedd yn gorfod dibynnu ar gyfieithwyr a dehonglwyr proffesiynol yn eu gwaith. Er hynny, mae Esposito (2001) a Temple (2002) yn dadlau mai yn anaml y rhoddir hysbysrwydd i'w rôl hwy a bod cyfieithwyr yn aros yn bobl y cysgodion (*'shadowy figures'*) na sonnir am eu presenoldeb ond yn anaml. Gan adeiladu ar waith Twinn (1997), mae Esposito (2001) yn archwilio cyfres o dechnegau cyfieithu i wella dilysrwydd, gan gynnwys:

- Defnyddio dau gyfieithydd gwahanol.
- Grwpiau ffocws lluosog.
- Triongli cyfranogwyr, dulliau ac ymchwilwyr, gan gynnwys adolygwyr dwyieithog allanol.

Ar sail yr astudiaeth hon, cynigir tri phrif argymhelliad ar gyfer ymgorffori cyfieithiadau manwl gywir mewn ymchwil drawsieithyddol, fel a ganlyn:

- Mabwysiadu dull cadarn, credadwy o gyfieithu.
- Adeiladu costau cyfieithu i mewn i'r cynigion.
- Disgrifio'r dulliau o gyfieithu yn y cyhoeddiadau.

BLWCH 3

Materion Dadansoddi Data mewn ymchwil Ansoddol ar draws Ieithoedd

Tsai J, Choe J, Lim J, Acorda E, Chan N, Taylor V a Tu S (2004) Developing culturally competent health knowledge: issues of data analysis of cross-cultural, cross-language qualitative research. *International Journal of Qualitative Methods* 3, 4, 1–14

Mae'r papur hwn yn tynnu ar y profiadau a gafwyd drwy astudiaeth ansoddol i gasglu gwybodaeth ynghylch daliadau ynglŷn â sgrinio ymhlith 30 o Americanwyr Tsieineaidd oedd yn byw yn Seattle, Washington a'u hymddygiad mewn perthynas â sgrinio. Roedd y cyfranogwyr yn cynnwys siaradwyr Cantoneg, Mandarin a Saesneg a chawsant eu cyfweld gan staff amlieithog a deuddiwylliannol yn eu dewis iaith. Cyfieithwyd a thrawsgrifiwyd y cyfweliadau i gyd i'r Saesneg ac adolygwyd y trawsgrifiadau gan chwech o godwyr oedd yn amrywio o ran eu hyfforddiant proffesiynol a'u hethnigrwydd yn ogystal â'u hyfedredd mewn Tsieinëeg. Ar ôl sefydlu fframwaith codio cychwynnol, cyfarfu'r codwyr bob yn ail fis i ehangu'r codau a myfyrio uwchben y themâu oedd yn dod i'r amlwg. Cododd y broses hon dair prif ystyriaeth ar gyfer ymchwil ansoddol ar draws ieithoedd gan gynnwys:

- Manteision ac anfanteision defnyddio codwyr o'r grŵp diwylliannol oedd yn cael ei astudio.
- Yr heriau oedd yn deillio o ddefnyddio data wedi ei gyfieithu ar gyfer dadansoddi.
- Defnyddio dulliau dadansoddi priodol sy'n osgoi canolbwyntio'n uniongyrchol ar semanteg, union ddefnydd geiriau neu strwythurau hanesion.

Tra yr oedd hi'n haws i'r 'rhai ar y tu mewn' ddeall daliadau'r cyfweleion a dal yr ystyron cynnil, mae'r awduron yn nodi bod y 'rhai ar y tu allan' yn fwy parod i gwestiynu ystyr geiriau a ddefnyddiwyd. Daethant i'r casgliad er mwyn sicrhau'r maen prawf confensiynol sef bod modd cadarnhau dadansoddiad data, a lleihau'r bygythiadau i gywirdeb a dibynadwyedd y casgliadau, oedd yn deillio o ddefnyddio data wedi ei gyfieithu wrth ddadansoddi, y dylai'r tîm codio delfrydol gynnwys rhai oedd yn cynrychioli'r safbwyntiau 'emig' ac 'etig' (Hammersley ac Atkinson 1995).

Cynghorir grwpiau ymchwil ledled Cymru felly i ystyried eu cymysgedd sgiliau iaith Gymraeg a nodi eu gofynion o ran recriwtio a defnyddio siaradwyr Cymraeg a hyfforddiant staff mewn ymgais i wella'r ymwybyddiaeth o'r Gymraeg yn y broses ymchwil.

These include:

- The challenges of maintaining equivalence in translation and the impact on analysis.
- The appropriateness of the methodological approach in managing the complexities of translation.
- The value of involving only one translator in order to enhance reliability.

Evidently, access to primary data sources during analysis helps to overcome many of the challenges associated with translation and enables researchers to immerse themselves in the original data. Clearly, researchers who demonstrate bilingual competence can mediate between linguistically diverse data sets and this may provide added insight and clarity to the interpretative process. Baker (2006) argues that the metalinguistic awareness of bilingual speakers means that they have a greater sensitivity to language in general and a greater awareness of meaning and structure in language. This can help researchers to tease out the nuances of participants' speech and align the concepts generated from the data. Given the bilingual context of Wales, valuable opportunities exist for researchers to explore the challenges of working in two languages and establish the evidence base for best practice in the analysis of qualitative data generated from bilingual sources.

Despite the concerns raised about the influence of translation on the validity of findings, it is inevitable that bilingual staff may not always be available and cross-language researchers may often be forced to rely on professional translators and interpreters in their work. Nevertheless, Esposito (2001) and Temple (2002) argue that their role is rarely publicised and translators remain 'shadowy figures' whose presence is seldom mentioned. Building on the work of Twinn (1997), Esposito (2001) explores a series of translation techniques to enhance validity, including:

- The use of two different translators.
- Multiple focus groups.
- The triangulation of participants, methods and investigators, including outside bilingual reviewers.

On the basis of this study, three key recommendations are proposed for incorporating accurate translations into cross-language research, as follows:

- Adopt a credible, sound approach to translation.
- Build translation costs into proposals.
- Describe language translation methods in publications.

BOX 3

Issues of Data Analysis in Cross-language Qualitative Research

Tsai J, Choe J, Lim J, Acorda E, Chan N, Taylor V & Tu S (2004) Developing culturally competent health knowledge: issues of data analysis of cross-cultural , cross-language qualitative research. *International Journal of Qualitative Methods* 3, 4, 1–14

This paper draws on experiences gained from a qualitative study to elicit information about screening beliefs and behaviour amongst 30 Chinese Americans residing in Seattle, Washington. The participants were made up of Cantonese, Mandarin and English speakers and interviewed by multilingual and bicultural staff in their preferred language. All the interviews were translated and transcribed into English and the transcripts were reviewed by six coders, with various professional training, ethnicity and Chinese language competence. After establishing an initial coding frame, the coders met on a bimonthly basis to expand the codes and reflect the emerging themes. This process raised three main considerations for cross-language qualitative research including:

- The benefits and drawbacks of the use of coders from the studied cultural group.
- The challenges posed by using translated data for analysis.
- The use of appropriate analytical approaches that avoid a direct focus on semantics, exact word usage or structures of narratives.

Whilst it was often easier for 'insiders' to comprehend interviewees' beliefs and capture subtle meanings, the authors note that 'outsiders' were more prepared to question the meaning of words used. They concluded that in order to establish the conventional criterion of confirmability of data analysis, and minimise threats to the accuracy and trustworthiness of the findings posed by using translated data for analysis, the ideal coding team should be made up of those representing both an 'emic' and 'etic' stance (Hammersley and Atkinson 1995).

Research groups across Wales are thus advised to consider their Welsh language skill mix and identify their requirements relating to the recruitment and deployment of Welsh speakers and staff training in an attempt to enhance Welsh language awareness in the research process.

Mae apêl Esposito (2001) am i ymchwilwyr nodi eu dulliau cyfieithu mewn dadansoddiad ymchwil ansoddol yn cael ei hadleisio gan Temple ac Edwards (2002) a Wallin ac Ahlstrom (2006) sy'n ychwanegu y gellir gwella cywirdeb wrth gyfieithu drwy annog deialog agored rhwng ymchwilwyr a chyfieithwyr. Mae diogelu'r sianelau cyfathrebu hyn, yn enwedig yn ystod y cyfnod o ddadansoddi data, hefyd yn un o'r prif argymhellion sy'n codi o astudiaeth atal canser colorefrol Tsai et al (2004) oedd yn cynnwys cyfranogwyr oedd yn siarad Mandarin a Chantoneg. *(◂ Gweler Blwch 3)*

Ar sail y drafodaeth hon, ymddengys er bod dulliau ymchwil ansoddol yn cynnig ffyrdd gwerthfawr o gael persbectifau lleisiau amrywiol a chasglu data cyfoethog, mae yna heriau penodol sy'n gysylltiedig â'r prosesau dadansoddi. O fewn cyd-destun uniaith, mae'r heriau hyn yn galw am ymlyniad caeth wrth y meini prawf gwerthuso penodol cysylltiedig ag ymchwiliad ansoddol (Lincoln a Guba 1985). Ymhellach, yng nghyd-destun dwyieithog Cymru, mae angen i ymchwilwyr ddefnyddio llu o ddulliau i sicrhau dilysrwydd eu setiau data dwyieithog drwy fabwysiadu dull credadwy a chadarn wrth fynd i'r afael â materion cyfieithu, dehongli a chodio data.

Er bod y drafodaeth hon wedi ei gosod yng nghyd-destun fframwaith ymchwil ansoddol, mae'r materion hyn yr un mor berthnasol ar gyfer dadansoddi ymchwil feintiol yn y cyd-destun dwyieithog, lle y dylid rhoi'r sylw dyledus i gynnal cywerthedd wrth gyfieithu; a chywirdeb wrth godio a mewnbynnu data ar draws setiau data amrywiol eu hiaith.

Yng ngoleuni'r sylfaen o dystiolaeth a amlinellwyd uchod, rhydd Tabl 7 y meini prawf ar gyfer gwella'r ymwybyddiaeth o iaith yn y broses o ddadansoddi data a thynnir sylw at yr adnoddau perthnasol lle bo'n briodol (Tabl 7).

CAM 5 Adrodd a Lledaenu

Mae cyfrifoldeb ar ymchwilwyr i sicrhau bod casgliadau eu hastudiaethau ymchwil yn cael eu lledaenu'n briodol a chyda hyn mewn golwg, mae'r llenyddiaeth yn cynnig peth wmbredd o ganllawiau cyffredinol i gynorthwyo ymchwilwyr i gyfleu eu canlyniadau (Bowling 2002). Yng nghyd destun dwyieithog Cymru, mae gofyn ychwanegol yn aml i gydymffurfio â Chynlluniau Iaith Gymraeg cyrff cyllido a chyrff gwasanaeth drwy beri bod cyflwyniadau a chyhoeddiadau ar gael mewn fformat dwyieithog. Mae hyn yn galw am "… gynllunio gofalus, agwedd strwythuredig, perthynas glir rhwng y cleient a'r dylunydd, a llawer o greadigrwydd a dychymyg" (Bwrdd yr Iaith Gymraeg 2001). Er y dyfynnir y gost yn aml fel rheswm dros y methiant i ddarparu dogfennau dwyieithog, drwy gynllunio gofalus gellir cadw costau uniongyrchol ychwanegol i lawr i'r eithaf.

Mae adran olaf y papur briffio hwn felly'n canolbwyntio ar gynllunio ar gyfer dyluniad dwyieithog ac mae'n tynnu tystiolaeth o ddau ganllaw cynhwysfawr a gyhoeddwyd gan Fwrdd yr Iaith Gymraeg (2001; 2007). Mae Blwch 4 yn dangos y prif eitemau ar gyfer sicrhau arfer dda mewn dylunio dwyieithog.

TABL 7
Meini Prawf Gwerthuso ar gyfer Dadansoddi Data mewn Ymchwil Iechyd a Gofal Cymdeithasol yn Nghymru

Meini Prawf Gwerthuso ar gyfer Dadansoddi Data	***Adnoddau Perthnasol***
Ydy'r dadansoddiad data yn cymryd iaith darged yr atebwyr i ystyriaeth?	*Gweler Cynulliad Cenedlaethol Cymru (2003)*
Ydy cyfieithiad y data wedi ei gomisiynu?	*Gweler Bwrdd yr Iaith Gymraeg yn: www.bwrdd-yr-iaith.org.uk*
Ydy'r strategaeth ar gyfer cyfieithu'r data wedi ei chytuno?	*Gweler Esposito (2001)*
A roddwyd y sylw dyledus i godio a mewnbynnu data ar draws setiau data sy'n amrywio o ran iaith?	*Gweler Bowling (2002)*
Oes digon o amser a chostau wedi eu dyrannu i'r broses gyfieithu yn ystod dadansoddiad y data?	*Gweler Cymdeithas Cyfieithwyr Cymru: www.cyfieithwyrcymru.org.uk*

Esposito's (2001) appeal for researchers to specify their translation methods in the analysis of qualitative research is echoed by Temple and Edwards (2002) and Wallin and Ahlstrom (2006) who add that accuracy in translation may be enhanced through encouraging open dialogue between researchers and translators. Maintaining these channels of communication, particularly during the data analysis period, is also one of the main recommendations arising from Tsai et al's (2004) colorectal prevention study involving Mandarin and Cantonese speaking participants. *(◄ See Box 3)*

On the basis of this discussion, it appears that although qualitative research methods offer valuable ways of capturing the perspectives of diverse voices and eliciting rich data, there are specific challenges associated with the analytical processes. Within a monolingual context, these challenges call for strict adherence to the specific evaluation criteria relating to qualitative enquiry (Lincoln and Guba 1985). Moreover, in the bilingual context of Wales researchers need to apply multiple means of assuring the validity of their bilingual data sets through adopting a credible and sound approach to the issues of translation, interpretation and data coding.

Although this discussion is set within the context of a qualitative framework of enquiry, these issues are equally relevant for the analysis of quantitative research within the bilingual setting, where due consideration should be given to maintaining equivalence in translation; and accuracy in coding and inputting data across linguistically diverse data sets.

In light of the evidence base outlined above, Table 7 outlines evaluation criteria for enhancing language awareness in the process of data analysis and relevant resources are highlighted where appropriate (Table 7).

STAGE 5 Report and Dissemination

Investigators have a responsibility to ensure that the findings of their research studies are appropriately disseminated and, with this in mind, the literature offers a plethora of general guidelines for helping researchers to communicate their results (Bowling 2002). In the bilingual context of Wales, there is often an added requirement to comply with the Welsh Language Schemes of funding bodies and service organisations through making presentations and publications available in bilingual format. This calls for "… careful planning, a structured approach, a well-defined relationship between client and designer and a high degree of creativity and imagination" (Welsh Language Board 2001). Although cost is often cited as a reason for failing to prepare bilingual documents, through careful planning, additional direct costs can be kept to a minimum.

The final section of this briefing paper thus focuses on planning for bilingual design and draws evidence from two comprehensive guides published by the Welsh Language Board (2001; 2007). Box 4 illustrates the main items for ensuring good practice in bilingual design.

TABLE 7
Evaluation Criteria for Data Analysis in Health and Social Care Research in Wales

Evaluation Criteria for Data Analysis	***Relevant Resources***
Does the data analysis take into account the target language of respondents?	*See National Assembly for Wales (2003)*
Has the data translation been commissioned?	*See Welsh Language Board at: www.welsh-language-board.org.uk*
Has the strategy for data translation been agreed?	*See Esposito (2001)*
Has due consideration been given to the coding and inputting of data across linguistically diverse data sets?	*See Bowling (2002)*
Have sufficient time and costs been allocated to the translation process during the analysis of data?	*See Association of Welsh Translators and Interpreters at: www.welshtranslators.org.uk*

BLWCH 4 Arfer dda mewn Dylunio Dwyieithog

Bwrdd yr Iaith Gymraeg (2007) *Llyfryn Gwobrau Dylunio Dwyieithog.* Bwrdd yr Iaith Gymraeg, Caerdydd.

Yn ôl Bwrdd yr Iaith Gymraeg, dylai arfer dda mewn dylunio dwyieithog gynnwys:

- Cynllunio ymlaen llaw.
- Gwasanaeth cyfieithydd proffesiynol (gweler www.cyfieithwyrcymru.org.uk).
- Gwasanaeth dylunydd gyda phrofiad mewn dylunio dwyieithog (gweler www.designwales.org).
- Gosodiad priodol ar gyfer cyflwyno testun dwyieithog.
- Darllen proflenni'n drwyadl.
- Symleiddio negeseuon a chrynhoi testun dianghenraid.

Mae Bwrdd yr Iaith Gymraeg yn gwobrwyo'r gorau mewn dylunio dwyieithog bob blwyddyn mewn 11 maes gwahanol. Am ffurflen gais gweler: www.bwrdd-yr-iaith.org.uk

Yng ngoleuni'r drafodaeth flaenorol, mae Tabl 8 yn amlinellu meini prawf gwerthuso ar gyfer gwella'r ymwybyddiaeth o iaith wrth adrodd am gasgliadau ymchwil a'u lledaenu yng Nghymru a chyfeirir darllenwyr at ddogfennau Bwrdd yr Iaith Gymraeg am arweiniad a chefnogaeth bellach.

Diweddglo

Dengys y llenyddiaeth oni fydd ymchwilwyr yn cymryd amrywiaeth ieithyddol eu poblogaethau sampl i ystyriaeth yn llawn ac yn ymateb yn gadarnhaol i ddewis ieithyddol eu cyfranogwyr, y bydd posibilrwydd o duedd o fewn yr ymchwil a all beryglu dilysrwydd y casgliadau a llesteirio datblygu tystiolaeth newydd ar gyfer polisi ac ymarfer.

A derbyn demograffeg yr iaith Gymraeg yng Nghymru a'r ymdrech strategol bresennol i hybu dwyieithrwydd a darpariaeth iaith deg ar draws iechyd a gofal cymdeithasol, mae'n rhaid i ymwybyddiaeth o iaith gael gwreiddio fel rhan annatod o lywodraethu ymchwil. Mae'r papur hwn yn amlinellu ffordd ymlaen ar gyfer y gymuned ymchwil drwy roi'r ystyriaeth ddyledus i'r Gymraeg ar gamau allweddol yn y broses ymchwil, drwy sicrhau dulliau samplu priodol; dulliau mesur manwl gywir; mesurau casglu data effeithiol; cyfieithiadau o ansawdd; a dulliau dadansoddi sy'n ddigonol. Yn y ffordd hon, dylai ymchwil iechyd a gofal cymdeithasol yng Nghymru adlewyrchu'n iawn amrywiaeth ddwyieithog y boblogaeth a darparu sylfaen o dystiolaeth ar gyfer arfer orau a pholisïau sy'n ateb anghenion defnyddwyr y gwasanaeth.

TABL 8
Meini Prawf Gwerthuso ar Gyfer Adrodd am Gasgliadau Ymchwil Iechyd a Gofal Cymdeithasol a'u Lledaenu yng Nghymru

Meini Prawf Gwerthuso ar Gyfer Adrodd a Lledaenu	***Adnoddau Perthnasol***
Oes yna gynlluniau tryloyw ar gyfer adroddiad dwyieithog?	*Gweler www.bwrdd-yr-iaith.org.uk*
Ydy'r adroddiad yn cydymffurfio â'r canllawiau cyfredol ar gyfer dylunio dwyieithog?	*Gweler Bwrdd yr Iaith Gymraeg (2001) Canllawiau Dylunio Dwyieithog, a Bwrdd yr Iaith Gymraeg (2007) Llyfryn Gwobrau Dylunio Dwyieithog www.bwrdd-yr-iaith.org.uk*
Oes cyfieithydd proffesiynol cymwys a dyluniwr â phrofiad o ddylunio dwyieithog wedi eu nodi?	*Gweler Cymdeithas Cyfieithwyr Cymru yn: www.cyfieithwyrcymru.org.uk Gweler Ddylunio Cymru yn: www.designwales.org*
Ydy'r argraffwaith a'r gosodiad yn briodol fel bod y ddwy iaith yr un mor hawdd i'w darllen?	*Gweler www.bwrdd-yr-iaith.org.uk*
Ydy'r ddwy iaith wedi eu gwahanu'n briodol yn yr adroddiad mewn ffordd sy'n parchu egwyddor cydraddoldeb?	*Gweler www.bwrdd-yr-iaith.org.uk*
Ydy proflenni'r adroddiad wedi eu darllen yn drwyadl gan ymchwilwyr a chyfieithwyr?	*Gweler www.bwrdd-yr-iaith.org.uk*

BOX 4 Good Practice in Bilingual Design

Welsh Language Board (2007) *Bilingual Design Awards Booklet.* Welsh Language Board, Cardiff.

According to the Welsh Language Board, good practice in bilingual design should include:

- Planning in advance.
- The services of a professional translator (see www.welshtranslators.org.uk).
- The services of a designer with experience in bilingual design (see www.designwales.org).
- Appropriate layout for presenting bilingual text.
- Thorough proof reading.
- Simplifying messages and summarising unnecessary text.

The Welsh Language Board rewards the best in bilingual design on an annual basis in 11 different fields. For application form see: www.welsh-language-board.org.uk

In light of the previous discussion, Table 8 outlines evaluation criteria for enhancing language awareness in the reporting and dissemination of research findings in Wales and readers are referred to the Welsh Language Board documents for further guidance and support.

Conclusions

The literature demonstrates that unless researchers take full account of the linguistic diversity of their sample populations and respond positively to the language preferences of their participants, there is potential for bias within research that may compromise the validity of findings and impede the development of new evidence for policy and practice.

Given the demography of the Welsh language in Wales and the current strategic drive to promote bilingualism and equity of language provision across health and social care, it is imperative that language awareness is embedded as an integral aspect of research governance. This paper outlines a way forward for the research community by giving due consideration to the Welsh language at key stages of the research process, through ensuring appropriate sampling approaches; accurate measurement procedures; effective data collection measures; quality translations; and adequate analytical approaches. In this way, health and social care research in Wales should truly reflect the bilingual diversity of the population and provide the evidence base for best practice and policy that meet the needs of service users.

TABLE 8
Evaluation Criteria for the Report and Dissemination of Health and Social Care Research in Wales

Evaluation Criteria for Report and Dissemination	***Relevant Resources***
Are there transparent plans for a bilingual report?	*See www.welsh-language-board.org.uk*
Does the report comply with current guidelines for bilingual design?	*See Welsh Language Board (2001) A Guide to Bilingual Design, and Welsh Language Board (2007) Bilingual Design Awards Booklet at: www.welsh-language-board.org.uk*
Has a competent professional translator and designer with experience of bilingual design been identified?	*See Association of Welsh Translators and Interpreters at: www.welshtranslators.org.uk* *See Design Wales at: www.designwales.org*
Is the typography and layout appropriate so that both languages are equally easy to read?	*See www.welsh-language-board.org.uk*
Are both languages appropriately separated in the report in a way that respects the principle of equality?	*See www.welsh-language-board.org.uk*
Has the report been thoroughly proof-read by researchers and translators?	*See www.welsh-language-board.org.uk*

Cyfeiriadau

Baker C (2006) *Foundations of Bilingualism and Bilingual Education* (4ydd argraffiad) Multilingual Matters, Clevedon.

Barata P, Gucciardi E, Ahmad F a Stewart D (2006) Cross-cultural perspectives on research participation and informed consent. *Social Science and Medicine* 62, 479–490.

Bjornsdottir K (2001) Language, Research and Nursing Practice *Journal of Advanced Nursing* 33, 2, 159–166.

Bowling A (2002) *Research Methods in Health: Investigating Health and Health Services* (2il argraffiad). Gwasg y Brifysgol Agored, Maidenhead.

Bradby H (2001) Communication, Interpretation and Translation yn Culley L a Dyson S (2001) *Ethnicity and Nursing Practice*. Tud. 129–148. Palgrave, Hampshire.

Bradby H (2002) Translating culture and language: a research note on multilingual settings. *Sociology of Health and Illness* 24, 6, 842–855.

Bwrdd yr Iaith Gymraeg (2001) *Canllawiau Dylunio Dwyieithog*. Bwrdd yr Iaith Gymraeg, Caerdydd

Bwrdd yr Iaith Gymraeg (2007) *Llyfryn Gwobrau Dylunio Dwyieithog*. Bwrdd yr Iaith Gymraeg, Caerdydd

Culley L, Hudson N a Rapport F (2007) Using Focus Groups With Minority Ethnic Communities: Researching Infertility in British South Asian Communities. *Qualitative Health Research* 17, 1, 102–112.

Cynulliad Cenedlaethol Cymru (2003) *Ystadegau Cenedlaethol.* Cynulliad Cenedlaethol Cymru, Caerdydd.

Davies E (1999) *Iaith mewn Gwasanaeth Gofalgar.* Bwrdd yr Iaith Gymraeg, Caerdydd

Department of Health and Human Services (2001) *National Standards for Culturally and Linguistically Appropriate Services in Health Care.* US Department of Health and Human Services Office of Minority Health, Washington.

Dunckley M, Hughes R, Addington-Hall a Higginson I (2003) Translating clinical tools in nursing practice. *Journal of Advanced Nursing* 44, 4, 420–426.

Esposito N (2001) From meaning to meaning: the influence of translation techniques on non-English focus group research. *Qualitative Health Research* 11, 4, 568–579.

Fitzpatrick R, Davey C, Buxton M a Jones D (1998) Evaluating patient-based outcome measures for use in clinical trials. *Health Technology Assessment* 2, 14.

Frayne S, Burns R, Hardt E, Rosen A a Moskowitz M (1996) The exclusion of non-English speaking persons from research. *Journal of General Internal Medicine* 11, 39–43.

Hammersley M a Atkinson P (1995) *Ethnography: Principles in Practice* (2il argraffiad) Routledge, Efrog Newydd.

Hussain-Gambles M, Leese B, Atkin K, Brown J, Mason S a Tovey P (2004) Involving South Asian patients in clinical trials. *Health Technology Assessment* 8, 42, 1–109.

Im E, Page R, Lin L, Tsai H a Cheng C (2004) Rigor in cross-cultural nursing research. *International Journal of Nursing Studies* 41, 891–899.

Jacobs E, Chen A, Karliner L, Agger-Gupta N a Mutha S (2006) The need for more research on language barriers in health care: a proposed research agenda. *The Milbank Quarterly* 84, 1, 111–133.

Layzell S ac England R (1999) What do Turkish-speaking women want to know about sexual health? A study to inform the production of Turkish language information leaflets. *Health Education Journal* 58, 130–138.

Levkoff S, Levy B a Weitzman P (2000) The Matching Model of Recruitment. *Journal of Mental Health and Aging* 6, 29–38.

Li R, McCardle, P, Clark R, Kinsella R a Berch D (2001) *Diverse Voices: The Inclusion of Language-minority Populations in National Studies: Challenges and Opportunities.* National Institute on Aging and National Institute of Child Health and Human Development, Bethesda, MD.

Lincoln Y a Guba E (1985) *Naturalistic Inquiry.* Sage, Thousand Oaks, CA.

Llywodraeth Cynulliad Cymru (2001) *National Research Governance Framework for Health and Social Care.* Llywodraeth Cynulliad Cymru, Caerdydd.

Llywodraeth Cynulliad Cymru (2003a) *Iaith Pawb: Cynllun Gweithredu Cenedlaethol ar gyfer Cymru Ddwyieithog.* Llywodraeth Cynulliad Cymru, Caerdydd

Llywodraeth Cynulliad Cymru (2003b) *Iechyd Da!: Cyflwyniad i Ymwybyddiaeth o Iaith.* Llywodraeth Cynulliad Cymru, Caerdydd.

Madoc-Jones I a Dubberley S (2005) Language and the provision of health and social care in Wales. *Diversity in Health and Social Care* 2, 127–134.

Maneesriwongul W a Dixon J (2004) Instrument translation process: a methods review. *Journal of Advanced Nursing* 48, 175–186.

Marshall S a While A (1994) Interviewing respondents who have English as a second language; challenges encountered and suggestions for other researchers. Journal of Advanced Nursing 19, 566–571.

McCabe M, Morgan F, Curley H, Begay R a Gohdes D (2005) The informed consent process in a cross-cultural setting: is the process achieving the intended result? *Ethnicity and Disease* 15, 2, 300–304.

McDowell I a Newell C (1996) *Measuring Health* (2il argraffiad). Gwasg Prifysgol Rhydychen, Rhydychen.

Meleis A (1996) Culturally competent scholarship: substance and rigor. *Advances in Nursing Science* 19, 2, 1–16.

Mill J ac Ogilvie L (2003) Establishing methodological rigour in international qualitative nursing research: a case study from Ghana. *Journal of Advanced Nursing* 41, 1, 80–87.

Misell A (2000) *Y Gymraeg yn y Gwasanaeth Iechyd: Ehangder, Natur a Digonolrwydd Darpariaeth Gymraeg yn y Gwasanaeth Iechyd Gwladol yng Nghymru.* Cyngor Defnyddwyr Cymru, Caerdydd

References

Baker C (2006) *Foundations of Bilingualism and Bilingual Education* (4th edition) Multilingual Matters, Clevedon.

Barata P, Gucciardi E, Ahmad F & Stewart D (2006) Cross-cultural perspectives on research participation and informed consent. *Social Science and Medicine* 62, 479-490.

Bjornsdottir K (2001) Language, Research and Nursing Practice *Journal of Advanced Nursing* 33, 2, 159-166.

Bowling A (2002) *Research Methods in Health: Investigating Health and Health Services* (2nd edition). Open University Press, Maidenhead.

Bradby H (2001) Communication, Interpretation and Translation in Culley L & Dyson S (2001) Ethnicity and Nursing Practice. P 129-148. Palgrave, Hampshire.

Bradby H (2002) Translating culture and language: a research note on multilingual settings. *Sociology of Health and Illness* 24, 6, 842-855.

Culley L, Hudson N & Rapport F (2007) Using Focus Groups With Minority Ethnic Communities: Researching Infertility in British South Asian Communities. *Qualitative Health Research* 17, 1, 102-112.

Davies E (1999) *The Language of a Caring Service.* Welsh Language Board, Cardiff.

Department of Health and Human Services (2001) *National Standards for Culturally and Linguistically Appropriate Services in Health Care.* US Department of Health and Human Services Office of Minority Health, Washington.

Dunckley M, Hughes R, Addington-Hall & Higginson I (2003) Translating clinical tools in nursing practice. *Journal of Advanced Nursing* 44, 4, 420-426.

Esposito N (2001) From meaning to meaning: the influence of translation techniques on non-English focus group research. *Qualitative Health Research* 11, 4, 568-579.

Fitzpatrick R, Davey C, Buxton M & Jones D (1998) Evaluating patient-based outcome measures for use in clinical trials. *Health Technology Assessment* 2, 14.

Frayne S, Burns R, Hardt E, Rosen A & Moskowitz M (1996) The exclusion of non-English speaking persons from research. *Journal of General Internal Medicine* 11, 39-43.

Hammersley M & Atkinson P (1995) *Ethnography: Principles in Practice* (2nd edition) Routledge, New York.

Hussain-Gambles M, Leese B, Atkin K, Brown J, Mason S & Tovey P (2004) Involving South Asian patients in clinical trials. *Health Technology Assessment* 8, 42, 1-109.

Im E, Page R, Lin L, Tsai H & Cheng C (2004) Rigor in cross-cultural nursing research. *International Journal of Nursing Studies* 41, 891-899.

Jacobs E, Chen A, Karliner L, Agger-Gupta N & Mutha S (2006) The need for more research on language barriers in health care: a proposed research agenda. *The Milbank Quarterly* 84, 1, 111-133.

Layzell S & England R (1999) What do Turkish-speaking women want to know about sexual health? A study to inform the production of Turkish language information leaflets. *Health Education Journal* 58, 130-138.

Levkoff S, Levy B & Weitzman P (2000) The Matching Model of Recruitment. *Journal of Mental Health and Aging* 6, 29-38.

Li R, McCardle, P, Clark R, Kinsella R & Berch D (2001) *Diverse Voices: The Inclusion of Language-minority Populations in National Studies: Challenges and Opportunities.* National Institute on Aging and National Institute of Child Health and Human Development, Bethesda, MD.

Lincoln Y & Guba E (1985) *Naturalistic Inquiry.* Sage, Thousand Oaks, CA.

Madoc-Jones I & Dubberley S (2005) Language and the provision of health and social care in Wales. *Diversity in Health and Social Care* 2, 127-134.

Maneesriwongul W & Dixon J (2004) Instrument translation process: a methods review. *Journal of Advanced Nursing* 48, 175-186.

Marshall S & While A (1994) Interviewing respondents who have English as a second language; challenges encountered and suggestions for other researchers. Journal of Advanced Nursing 19, 566-571.

McCabe M, Morgan F, Curley H, Begay R & Gohdes D (2005) The informed consent process in a cross-cultural setting: is the process achieving the intended result? *Ethnicity and Disease* 15, 2, 300-304.

McDowell I & Newell C (1996) *Measuring Health* (2nd edition). Oxford University Press, Oxford.

Meleis A (1996) Culturally competent scholarship: substance and rigor. *Advances in Nursing Science* 19, 2, 1-16.

Mill J & Ogilvie L (2003) Establishing methodological rigour in international qualitative nursing research: a case study from Ghana. *Journal of Advanced Nursing* 41, 1, 80-87.

Misell A (2000) *Welsh in the Health Service: The Scope, Nature and Adequacy of Welsh Language Provision in the National Health Service in Wales.* Welsh Consumer Council, Cardiff.

Murray C & Wynne J (2001) Researching community, work and family with an interpreter. *Community, Work and Family* 4, 2, 151-171.

Murthy V, Krumholz H & Gross P (2004) Participation in cancer clinical trials: race-, sex, and age-based disparities. *Journal of the American Medical Association* 291, 2720-2726.

Muntz R, Tudor Edwards R, Tunnage B, Prys C, Roberts G (2005) Development of a Welsh language version of the EQ-5D health-related quality of life measure: stage one: translation. *The Psychologist in Wales* 18, 22-25.

National Assembly for Wales (2003) *National Statistics.* National Assembly for Wales, Cardiff.

NOP Social and Political (1995) *Public Attitudes to the Welsh Language*. NOP Social and Political, London.

Murray C a Wynne J (2001) Researching community, work and family with an interpreter. *Community, Work and Family* 4, 2, 151–171.

Murthy V, Krumholz H a Gross P (2004) Participation in cancer clinical trials: race-, sex, and age-based disparities. *Journal of the American Medical Association* 291, 2720–2726.

Muntz R, Tudor Edwards R, Tunnage B, Prys C a Roberts G (2005) Development of a Welsh language version of the EQ–5D health-related quality of life measure: stage one: translation. *The Psychologist in Wales* 18, 22–25.

NOP Social and Political (1995) *Public Attitudes to the Welsh Language*. NOP Social and Political, Llundain.

Oakley A, Wiggins M, Turner H, Rajan L a Barker M (2003) Including culturally diverse samples in health research: a case study of an urban trial of social support. *Ethnicity and Health* 8, 1, 29–39.

O'Hagan K (2001) *Cultural competence in the caring professions.* Cyhoeddwyr Jessica Kingsley, Llundain.

Palafox N, Buenconsejo L, Riklon S a Waitzfelder B (2002) Improving health outcomes in diverse populations: competency in cross-cultural research with indigenous Pacific islander populations. *Ethnicity and Health* 7, 4, 279–285.

Papadopoulos I a Lees S (2002) Developing culturally competent researchers. *Journal of Advanced Nursing* 37, 3, 258–264.

Prifysgol Cymru, Bangor (2006) Cynllun Iaith Gymraeg. Prifysgol Cymru, Bangor. www.bangor.ac.uk

Ramirez M, Ford M, Stewart A a Tersi J (2005) Measurement issues in health disparities research. *Health Services Research* 40, 5, Rhan II, 1640–1657.

Roberts G (1991) *Y defnydd o'r Gymraeg mewn Cyfathrebu Nyrs-Claf o fewn Lleoliad Gofal Iechyd Dwyieithog.* Traethawd MN, Prifysgol Cymru.

Roberts G a Williams C (2003) *Gair o Gysur: Hybu Ymarfer Ieithyddol Addas mewn Gofal Iechyd.* Prifysgol Cymru, Bangor.

Roberts G, Irvine F, Jones P, Spencer L, Baker C a Williams C (2004) *Adroddiad am Astudiaeth o Ymwybyddiaeth o'r Gymraeg yn y Ddarpariaeth Gofal Iechyd yng Nghymru.* Llywodraeth Cynulliad Cymru, Caerdydd. http://www.wales.nhs.uk/sites3/documents/415/ACF3394.pdf

Roberts G, Irvine F, Jones P, Spencer L, Baker C a Williams C (2006) Language awareness in the bilingual healthcare setting: a national survey. *International Journal of Nursing Studies* yn y wasg.

Roberts G (2007) *Arolwg o Raddfeydd Mesur Iechyd ar gyfer y Gymraeg,* LLAIS, Bangor. www.llais.org

Safran W (2004) The political aspects of language. *Nationalism and Ethnic Politics* 10, 1. 1–14.

Sheldon H, Graham C, Pothecary N a Rasul F (2007) *Increasing Response Rates amongst Black and Minority Ethnic and Seldom Heard Groups: A Review of the Literature relevant to the National Acute Patients' Survey.* The Acute Co-ordination Centre for the NHS Patient Survey Programme, Rhydychen.

Small R, Yelland J, Lumley J a Rice P (1999a) Cross-cultural research: trying to do it better. 1. Issues in study design. *Australian and New Zealand Journal of Public Health* 23, 4, 385–389.

Small R, Yelland J s Lumley J a Rice P (1999b) Cross-cultural research: trying to do it better 2. Enhancing data quality. *Australian and New Zealand Journal of Public Health* 23, 4, 390–395.

Sterling Y a Peterson J (1999) Challenges of recruiting minority populations for research. *Journal for Specialists in Pediatric Nursing* 4, 4, 172–174.

Streiner D a Norman G (2003) *Health Measurement Scales.* (3ydd argraffiad) Gwasg Prifysgol Rhydychen, Rhydychen.

Tafforeau J, Cobo M, Tolonen H, Scheidt-Nave C a Tinto A (2005) *Guidelines for the Development and Criteria for the Adoption of Health Survey Instruments.* Office for Official Publications of the European Communities, Luxembourg.

Temple B (2002) Crossed wires; interpreters, translators, and bilingual workers in cross-language research. *Qualitative Health Research* 12, 6, 844–854.

Temple B a Edwards R (2002) Interpreters / translators and cross-language research: reflexivity and border crossings. International Journal of Qualitative Methods 1, 2, 1. Adalwyd 20/03/07 o http://www.ualberta.ca/~ijqm/

Tsai J, Choe J, Lim J, Acorda E, Chan N, Taylor V a Tu S (2004) Developing culturally competent health knowledge; issues of data analysis of cross-cultural, cross-language qualitative research. *International Journal of Qualitative Methods* 3, 4, 1–14.

Twinn S (1997) An exploratory study examining the influence of translation on the validity and reliability of qualitative data in nursing research. *Journal of Advanced Nursing* 26, 2, 418–423.

Villarruel A (1999) Culturally competent nursing research: are we there yet? *Journal of Child and Family Nursing* 2, 2, 82–91.

Wallin A a Ahlstrom G (2006) Cross-cultural interview studies using interpreters: systematic literature review. *Journal of Advanced Nursing* 55, 6, 723–735.

Wang W, Lee H a Fetzer S (2006) Challenges and strategies of instrument translation. *Western Journal of Nursing Research* 28, 3, 310–321.

Weidmer B, Hurtado M, Weech-Maldonado R, Ngo-Metzger Q a Bogen K (2005) *Guidelines for Translating CAHPS Surveys.* US Department of Health and Human Services Office of Minority Health, Washington.

Wilson D (2004) Cultural diversity: what do we fear? *Diversity in Health and Social Care* 1, 145–150.

Yancey A, Ortega A a Kumanyika S (2006) Effective recruitment and retention of minority research participants. *Annual Review of Public Health* 27, 1–28.

Oakley A, Wiggins M, Turner H, Rajan L & Barker M (2003) Including culturally diverse samples in health research: a case study of an urban trial of social support. *Ethnicity and Health* 8, 1, 29-39.

O'Hagan K (2001) *Cultural competence in the caring professions.* Jessica Kingsley Publishers, London.

Palafox N, Buenconsejo L, Riklon S & Waitzfelder B (2002) Improving health outcomes in diverse populations: competency in cross-cultural research with indigenous Pacific islander populations. *Ethnicity and Health* 7, 4, 279-285.

Papadopoulos I & Lees S (2002) Developing culturally competent researchers. *Journal of Advanced Nursing* 37, 3, 258-264.

Ramirez M, Ford M, Stewart A & Tersi J (2005) Measurement issues in health disparities research. *Health Services Research* 40, 5, Part II, 1640-1657.

Roberts G (1991) *The use of the Welsh language in Nurse-Patient Communication within a Bilingual Healthcare Setting.* MN Thesis, University of Wales.

Roberts G & Williams C (2003) *Words of Comfort: Promoting Language Appropriate Practice in Health Care.* University of Wales Bangor.

Roberts G, Irvine F, Jones P, Spencer L, Baker C & Williams C (2004) *Report of a Study of Welsh Language Awareness in Healthcare Provision in Wales.* Welsh Assembly Government, Cardiff. http://www.wales.nhs.uk/sites3/documents/415/ACF3394.pdf

Roberts G, Irvine F, Jones P, Spencer L, Baker C, & Williams C (2006) Language awareness in the bilingual healthcare setting: a national survey. *International Journal of Nursing Studies* in press.

Roberts G (2007) *Review of Health Measurement Scales for the Welsh Language.* LLAIS, Bangor. www.lllais.org

Safran W (2004) The political aspects of language. *Nationalism and Ethnic Politics* 10, 1. 1-14.

Sheldon H, Graham C, Pothecary N & Rasul F (2007) *Increasing Response Rates amongst Black and Minority Ethnic and Seldom Heard Groups: A Review of the Literature relevant to the National Acute Patients' Survey.* The Acute Co-ordination Centre for the NHS Patient Survey Programme, Oxford.

Small R, Yelland J, Lumley J & Rice P (1999a) Cross-cultural research: trying to do it better. 1. Issues in study design. *Australian and New Zealand Journal of Public Health* 23, 4, 385-389.

Small R, Yelland J & Lumley J (1999b) Cross-cultural research: trying to do it better 2. Enhancing data quality. *Australian and New Zealand Journal of Public Health* 23, 4, 390-395.

Sterling Y & Peterson J (1999) Challenges of recruiting minority populations for research. *Journal for Specialists in Pediatric Nursing* 4, 4, 172-174.

Streiner D & Norman G (2003) *Health Measurement Scales.* (3rd edition) Oxford University Press, Oxford.

Tafforeau J, Cobo M, Tolonen H, Scheidt-Nave C & Tinto A (2005) *Guidelines for the Development and Criteria for the Adoption of Health Survey Instruments.* Office for Official Publications of the European Communities, Luxembourg.

Temple B (2002) Crossed wires; interpreters, translators, and bilingual workers in cross-language research. *Qualitative Health Research* 12, 6, 844-854.

Temple B & Edwards R (2002) Interpreters / translators and cross-language research: reflexivity and border crossings. International Journal of Qualitative Methods 1, 2, 1. Retrieved 20/03/07 from http://www.ualberta.ca/~ijqm/

Tsai J, Choe J, Lim J, Acorda E, Chan N, Taylor V & Tu S (2004) Developing culturally competent health knowledge; issues of data analysis of cross-cultural, cross-language qualitative research. *International Journal of Qualitative Methods* 3, 4, 1-14.

Twinn S (1997) An exploratory study examining the influence of translation on the validity and reliability of qualitative data in nursing research. *Journal of Advanced Nursing* 26, 2, 418-423.

University of Wales Bangor (2006) Welsh Language Scheme. University of Wales Bangor. www.bangor.ac.uk

Villarruel A (1999) Culturally competent nursing research: are we there yet? *Journal of Child and Family Nursing* 2, 2, 82-91.

Wallin A & Ahlstrom G (2006) Cross-cultural interview studies using interpreters: systematic literature review. *Journal of Advanced Nursing* 55, 6, 723-735.

Wang W, Lee H & Fetzer S (2006) Challenges and strategies of instrument translation. *Western Journal of Nursing Research* 28, 3, 310-321.

Weidmer B, Hurtado M, Weech-Maldonado R, Ngo-Metzger Q & Bogen K (2005) *Guidelines for Translating CAHPS Surveys.* US Department of Health and Human Services Office of Minority Health, Washington.

Welsh Assembly Government (2001) *National Research Governance Framework for Health and Social Care.* Welsh Assembly Government, Cardiff.

Welsh Assembly Government (2003a) *Iaith Pawb: A National Action Plan for a Bilingual Wales.* Welsh Assembly Government, Cardiff.

Welsh Assembly Government (2003b) *Iechyd Da!: An Introduction to Language Awareness.* Welsh Assembly Government, Cardiff.

Welsh Language Board (2001) *A Guide to Bilingual Design*. Welsh Language Board, Cardiff.

Welsh Language Board (2007) *Bilingual Design Awards Booklet.* Welsh Language Board, Cardiff.

Wilson D (2004) Cultural diversity: what do we fear? *Diversity in Health and Social Care* 1, 145-150.

Yancey A, Ortega A & Kumanyika S (2006) Effective recruitment and retention of minority research participants. *Annual Review of Public Health* 27, 1-28.

ISBN 1–842201–00–X

Llywodraeth Cynulliad Cymru
Welsh Assembly Government

CRC CYMRU
cydweithrediad ymchwil clinigol cymru
clinical research collaboration cymru

MAGMA