North Wales Centre for Primary Care Research  
Bangor University (Wrexham Site)

PhD Studentship

Project Title: Lay referral in the early diagnosis of cancer

Studentship Details

Applications are invited for a full-time PhD studentship, funded as part of the Knowledge Economy Skills Partnership 2 (KESS 2) programme and in partnership with Tenovus Cancer Care. The studentship is based at the North Wales Centre for Primary Care Research (NWCPCR), within the School of Healthcare Sciences, Bangor University (Wrexham site), under the academic supervision of Dr Julia Hiscock, Dr Rebecca-Jane Law and Prof Richard Neal.

The studentship is for three years on a full-time basis and available from 1st March 2017 (applicants are requested to state their earliest possible start date on their application). In addition to having tuition fees paid, the PhD student will receive an annual tax-free stipend of £14,198. The studentship also includes funding for the running costs of the project and training and development.

Background

Early diagnosis of cancer is one of the most important ways to increase survival rates and is the subject a substantial body of research in the UK and worldwide. Research on ‘pathways to treatment’ (Walter et al, 2012) has highlighted patient, healthcare and disease factors which influence detection and diagnosis rates. Factors affecting the patient interval (the time between noticing a symptom and seeking medical advice) include patient behaviour and coping styles (Noonan 2014), previous experience and co-morbidities (Scott et al., 2013, Brouha et al., 2005). However, one area which is poorly understood is the role of friends and family in encouraging (or discouraging) patients to seek medical advice for a potentially cancerous symptom. ‘Lay referral’ is the subject of this study and happens when (lay) members of the public suggest to a friend, relative or social network member that they seek medical advice about a symptom. Lay referral (Schoenberg et al., 2003; Cornford and Cornford, 1999) is part of a medical sociology theory of illness behaviour developed from the work of Freidson (1970) and Zola (1973). There has been limited research from this sociological perspective on the role of social network members in encouraging patients to consult a doctor about a potentially cancerous condition. Therefore, the purpose of the studentship is to contribute to cancer survival rates through improving early diagnosis, with the specific aim of understanding lay referral for potentially cancerous symptoms and to learn whether it can encourage earlier diagnosis of cancer.
Study aim - To understand contemporary lay referral for potentially cancerous symptoms and to learn whether it can encourage earlier diagnosis of cancer.

Research questions
1. What is known about contemporary lay referrals for potentially cancerous symptoms?
2. What is the incidence in Wales of lay referral for potentially cancerous symptoms?
3. What proportion of lay referrals for potentially cancerous symptoms are acted upon?
4. Can lay referrals influence the interval between the date of first being aware of a potentially cancerous symptom, and the date of first presentation of that symptom to a GP?

Methods
Phase 1 – systematic review of lay referral in cancer
A systematic literature review will be conducted on lay referral in cancer, to assess the evidence for ‘the effectiveness of lay referral on cancer help-seeking behaviour’. This will inform the next phase of the study and will develop the themes which will provide the basis for the survey (Phase 2). The search will be conducted using the ‘pearl growing’ approach (Papaioannou at al., 2009; Schlosser et al., 2006), beginning with a narrow focus and working outwards. This has been chosen due to the small volume of literature anticipated. Guided by the research questions, themes will be derived from the review. The findings will be summarised in a narrative synthesis / narrative summary and will be integrated with the survey data. The findings will answer research question 1 and will inform research questions 2-4.

Phase 2 – survey of lay referral
Building on the evidence from the systematic review, Phase 2 will involve developing and conducting a cross-Wales survey of lay referral in consulting and non-consulting patients. The objective is to provide data on the extent of lay referral and its impact on delay in medical help seeking for a potentially cancerous symptom (for example abdominal pain, unexplained lumps or bleeding, unexplained weight loss, tiredness). It will answer research questions 1-4.

The sample will be drawn from both a consulting and a community population:
1. Consulting population sample:
Primary care patients will be surveyed while they are waiting in the waiting room of a GP surgery. This method has been successfully used in two previous studies, PIVOT (Banks et al. 2013, Prof Richard Neal was a co-applicant), and a NWCPMR study that recruited >2000 patients from 6 north Wales practices to an iPad waiting room study about melanoma risk (paper submitted to BMC Cancer). Practices in Wales will be sampled to provide a range of socio-economic deprivation (using the Welsh Index of Multiple Deprivation) and urbanicity/rurality.

2. Community population sample:
The same survey method will be used in community (non-consulting) settings. This could include Tenovus shops and other community organisations. Prof Richard Neal is currently working on a study that is recruiting research participants from community settings across Wales (including sports clubs, the Lifeboat Association, RNIB, People First Network North Wales). We will learn from this process to adopt a strategy for this studentship.
**Conduct of the survey**

The survey will be conducted on an iPad during the time the participants are waiting in the GP waiting room or community setting.

- An iPad app will be designed for this survey by using the software ‘iSURVEY’ (recommended by the team using iPads successfully for similar studies, including the PIVOT trial).
- The app will be preloaded onto iPads for use in practice waiting rooms and community settings
- The iPad survey will be piloted on a small sample and revised if necessary.
- The PhD student will attend the GP surgeries and community settings which have agreed to take part and will approach and assist people with the survey while they are waiting.
- People who agree to take part will be asked to complete the online survey using the iPad which will be completed and returned to the PhD student with their responses. It is envisaged that the survey will take about 5 minutes to complete.

The survey questions will be informed by the systematic review and at this stage it is envisaged they could include: The nature of symptoms (identified or planned to present to a GP); intention to present a potentially cancerous symptom (for example abdominal pain, unexplained lumps or bleeding, unexplained weight loss, tiredness); approximate date when that symptom started; lay conversations leading to recommendations to see the GP (lay referral) about symptoms with friends family, neighbours, colleagues or other lay/social network members; volume of lay referral; from whom; form taken; demographic information (gender, date of birth, postcode for socio-economic status, household composition, employment status, ethnicity); other health conditions.

The main outcome measure is the interval between the date of first being aware of the symptom, and the date of the first presentation of that symptom to the GP (Weller et al., 2012). This interval will be measured by total number of days. The data will enable the student to determine participants’ appraisal intervals (Weller et al., 2012), the influence of lay referral and the extent to which it has made a difference to the appraisal interval. It will therefore be possible to determine the likely impact of lay referral on times to presentation (and by specific types of lay referrer, lay referee and symptom presentation). The (approximate) date at which the participant was first aware of the symptom will be recorded by the participant on the iPad survey. The PhD student will identify to what extent the duration of the interval is influenced (in either direction) by lay referral. The extent the duration of the interval is influenced by lay consulting with a specific type of lay consultant e.g. spouse/partner, other family, friend, neighbour, colleague will also be measured.

Overall, the PhD studentship will answer important questions surrounding the potential impact of lay referral on earlier cancer diagnosis.

**Involvement with Tenovus Cancer Care**

KESS studentships have an industry or charity partner and the partner organisation for this studentship is Tenovus Cancer Care. The aim of Tenovus Cancer Care is to help prevent, treat and find a cure for cancer, by offering support, advice and treatment to cancer patients and their loved ones. Tenovus Cancer Care objectives include working with communities to develop and implement realistic cancer prevention and healthy lifestyle programmes and to
provide cancer patients and their families with support services including by signposting to other service providers. This study will assist with these aims and objectives by contributing understanding of the patient and social network processes involved in the early help seeking and diagnosis of cancer and so contributing to cancer survival rates through improving early diagnosis.

To develop an understanding of partnership working and enhance the association of research with practice, this studentship will also involve close integration of the student with the charity Tenovus Cancer Care. This may involve input into other specific work packages related to the overall project, engagement with Tenovus projects, volunteers and shops and talking to relevant Tenovus groups about project development and findings.

**Supervisory team**

A multidisciplinary supervisory team comprising Dr Julia Hiscock and Dr Rebecca Law from the North Wales Centre for Primary Care Research, Bangor University and Professor Richard Neal from the Faculty of Medicine and Health, University of Leeds will support the student. Tim Banks, Research Manager at Tenovus Cancer Care will also provide input and supervision during research visits to Tenovus Cancer Care.

Dr Julia Hiscock: Julia Hiscock is a medical sociologist and has led many research teams exploring issues at the interface of health and sociology. Julia’s main research interest is social support and the role of family and friends in the management of health. Julia’s own PhD explored informal interactions about health between friends, relatives and social networks. In recent years this interest has been developed through a focus on the early diagnosis of cancer and the role of relatives and friends in encouraging (or hindering) presentation for potential symptoms of cancer. This has included an interest in lay referral and lay consultation. Julia has taught research methods and is currently supervising two PhD students as well as supporting and supervising the work of a number of NWCPGR project research staff.

Professor Richard Neal: Richard Neal is currently supervising three PhD students, two funded by Tenovus Cancer Care and one by Health & Care Research Wales. He has supervised four PhD students through to completion in the past. He has been externally examiner to six students and has been appointed to examine three more in the coming months. He was previously Director of the North Wales Centre for Primary Care Research and is now based at the University of Leeds where he is Professor of Primary Care Oncology. He chairs the Primary Care Clinical Studies Group of the NCRI (National Cancer Research Institute), and is Chief Investigator of the WICKED (Wales Interventions and Cancer Knowledge about Early Diagnosis) programme grant.

Dr Rebecca-Jane Law: Rebecca-Jane Law has teaching and supervisory experience both at Bangor University and the University of Central Lancashire, including leading and developing research methods modules and supervising both quantitative and qualitative research projects. Rebecca’s research experience has involved developing and conducting surveys for clinical populations (for example, the International Cancer Benchmarking Partnership; Module 4) and is currently focussed specifically on early cancer diagnosis as part of the WICKED programme.
Dr Tim Banks: Dr Banks is Research Manager at Tenovus Cancer Care. As part of this role, he has responsibility for the evaluation of the charity’s services as well as organising and contributing to new research projects involving all aspects of cancer research both internally and with external partners. He has recently submitted his PhD in Social Sciences with Cardiff University. Using a mixed methods approach, a large part of the thesis involved the study of the relationship between patients and families/carer interactions in negotiating concepts such as ‘illness’ and ‘wellness’. During his PhD, he also taught ‘Research Methods’ and has lectured on the ‘Sociology of Health and Illness’ modules at Cardiff University.

The North Wales Centre for Primary Care Research (NWCPCR)

The studentship will be based in the North Wales Centre for Primary Care Research (NWCPCR) in Wrexham which is part of the School of Healthcare Sciences of Bangor University. NWCPCR is a lively, close-knit and supportive team of approximately 20 people, who work in dynamic and flexible project team structures. There are currently four PhD students in NWCPCR who are also part of a bigger network of PhD students based in Bangor. We have regular video-conferenced meetings amongst the research groups within the School to share support and expertise. NWCPCR research is primarily focused on cancer topics including a research theme on timely and earlier stage diagnosis and has an strong track record of externally funded and collaboratively conducted research. We have excellent links with other universities both in the UK and internationally, and with Betsi Cadwaladr University Health Board. Further details about the North Wales Centre for Primary Care Research are available at http://www.bangor.ac.uk/nwpcr. Further details about the School of Healthcare Sciences are available at http://www.bangor.ac.uk/healthcaresciences/about/.

The Educational Benefits and Opportunities associated with the Studentship:

The student will be encouraged and supported in a range of ways to acquire the expertise needed to complete this PhD, and prepare for a postdoctoral career. The student will develop expertise from both a sociological and health perspective within the area of lay referral in cancer diagnosis. Methodological skills will involve primarily systematic reviewing, quantitative methods and writing skills. However, as the PhD student will be immersed in a centre which has expertise in a wide range of research methodologies, there is the opportunity for knowledge enhancement in a wide range of areas. The studentship also enables experiences of partnership working research-informed practice through close integration with the charity Tenovus Cancer Care.

Living in North Wales

The Wrexham campus of Bangor University is located in North East Wales, well situated on the Wales-England border for enjoying both bustling cities with culture and heritage, alongside the great outdoors.

North Wales has been named among the top places in the world to visit in 2017 according to Lonely Planet’s annual ‘Best in Travel’ list, with Wrexham conveniently located for access to the beautiful Snowdonia National Park, stunning coastline and the rolling hills of the Welsh borders around Llangollen and the Berwyn mountain range.
For the city experience, there are excellent road and rail links to Chester, Liverpool, Manchester, London and elsewhere.

Application Details:

The closing date for applications is 31/01/2017 and it is anticipated that the interviews will be held in February 2017.

It is important for the candidate to commence their studies as soon as possible and an ideal start date would be 1st March 2017. However, we are keen to recruit the most suitable student and will consider later start dates under exceptional circumstances. Applicants are requested to state their earliest possible start date on their application.

The successful candidate will need to be resident in North Wales on registration, and must have the right to work in the region on qualification. Applicants must have a first class or upper-second-class undergraduate degree and, preferably but not essentially, a Masters in a relevant topic.

Prospective applicants are invited to contact Julia Hiscock by e-mail (j.hiscock@bangor.ac.uk) or telephone +44 (0) 1248 383522 with any questions and are also welcome to arrange to visit the North Wales Centre for Primary Care Research prior to application. Applications should be e-mailed to j.hiscock@bangor.ac.uk and p.j.dowdney@bangor.ac.uk and should include:

1. A full CV

2. A covering letter detailing:
   a. Your interest in this PhD
   b. Your suitability for this studentship
   c. Your expectations for this studentship
   d. What you hope to gain from this studentship

References


