

A team approach to recruitment in hospice research: engaging patients, close persons and health professionals.

Campbell, Cathy; Bailey, Cara; Armour, Kathy; Orlando, Rosanna; Kinghorn, Philip; Coast, Joanna

DOI:

[10.12968/ijpn.2016.22.7.324](https://doi.org/10.12968/ijpn.2016.22.7.324)

License:

None: All rights reserved

Document Version

Peer reviewed version

Citation for published version (Harvard):

Campbell, C, Bailey, C, Armour, K, Orlando, R, Kinghorn, P & Coast, J 2016, 'A team approach to recruitment in hospice research: engaging patients, close persons and health professionals.', *International Journal of Palliative Nursing*, vol. 22, no. 7, pp. 324-332. <https://doi.org/10.12968/ijpn.2016.22.7.324>

[Link to publication on Research at Birmingham portal](#)

Publisher Rights Statement:

Eligibility for repository: Checked on 8/3/2017

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

Recruitment in hospice research

Original article

A TEAM APPROACH TO RECRUITMENT IN HOSPICE RESEARCH: ENGAGING PATIENTS, CLOSE PERSONS AND HEALTH PROFESSIONALS

***Cathy L. Campbell, PhD, RN** (Corresponding author)

Associate Professor, University of Virginia, School of Nursing Charlottesville, VA, USA, 22908

Visiting Research Fellow, Institute of Clinical Sciences, University of Birmingham, Birmingham B15 2TT, UK

Cara Bailey, PhD, MN, RGN, PGCert (LTHE)

Senior Lecturer in Nursing, Nursing & Health Economics Unit, Institute of Clinical Sciences, University of Birmingham, Birmingham, B15 2TT,

Kathy Armour, PhD, Research Lead

Marie Curie Hospice, West Midlands, Marsh Lane, Solihull B91 2PQ, UK

Rachel Perry, RGN, Research Nurse and Staff Nurse

Marie Curie Hospice, West Midlands, Marsh Lane, Solihull B91 2PQ, UK

Rosanna Orlando, MSc, RGN

Health Economist Research Fellow, CLAHRC Wessex, Health Science, University of Southampton, Southampton, SO17 1BJ

Phil Kinghorn, PhD, MA, BA

Research Fellow, Health Economics Unit, Institute of Applied Health Sciences, University of Birmingham, Birmingham, B15 2TT,

Louise Jones MB, FRCP

Marie Curie Palliative Care Research Department

Division of Psychiatry

University College London

6th Floor, Wing B, Maple House,

149 Tottenham Court Road,

London W1T 7NF

Joanna Coast, PhD, Msc, BA

Professor in the Economics of Health & Care, School of Social and Community Medicine, University of Bristol, Canynge Hall, 39 Whatley Road, Bristol, BS8 2PS

**Please address correspondence to:*

Cathy L Campbell, PhD, RN

University of Virginia

202 Jeanette Lancaster Way

Charlottesville, VA 22908

Tel: 001-434-923-6789

Email: clc5t@virginia.edu (please publish e-mail address).

Recruitment in hospice research

KEYWORDS: research, end-of-life, hospice, palliative care, recruitment, case study (5-6 words)

FUNDING STATEMENT: This work was funded through a European Research Council Starting Grant (261098 EconEndLife).

ACKNOWLEDGEMENTS: We would like to thank the Advisory Group for EconEndLife and all research participants.

CONFLICT OF INTERESTS DECLARATION: None known.

Introduction

Research is vital to the future of development of hospice care (Payne, et al, 2013; Shelby-James, et al, 2012). It is needed to engage communities in a dialogue about what is important in their care at end of life (Kellehear, 2013), to develop evidence-based practice, to evaluate the effectiveness of interventions on both patients and those close to them (Payne et al, 2013) and to determine the cost-effectiveness of care packages (Gomes, Calanzani, and Higginson, 2014). Traditionally seen as concerned with people with cancer, hospices are increasingly concerned with those with a wide range of advanced and progressive illnesses (Marie Curie, 2015). As people live longer with more complex conditions and attendant needs for health and social care, research evidence is increasingly needed to ensure the best quality of life during this period; the requirement will be to engage in research increasing numbers of participants who can be considered to be at or near the end of life.

Research in the hospice environment is very challenging for a number of reasons. First, people who are receiving end-of-life care are considered a vulnerable population (Florczak, 2014). Physical, cognitive, and emotional symptoms may limit a person's ability to provide consent to research (Kavanaugh and Campbell, 2014; Fischer, et al, 2012). Further, symptom exacerbation or instability can make participation in research difficult and burdensome for patients and those who are close to them, especially if the study is a complex intervention with multiple measures or has a longitudinal design (Shelby-James, et al, 2012). People may have fluctuating capacity to assent to interventions, medication may make them sleepy or cause memory problems, and other symptoms such as a breakthrough pain could limit study participation (Kehl and Kowalkowski, 2013).

Second, the sensitive nature of end-of-life topics could lead to emotional or spiritual distress and/or increase the likelihood of physical symptom exacerbation. Some health care professionals believe

Recruitment in hospice research

that actively recruiting dying people to participate in research that could increase distress is both unethical and philosophically incompatible with the tenets of compassionate care (Payne, et al, 2013; Hanratty et al, 2012), although systematic review evidence suggests that these ethical concerns are often unjustified (Gysels et al, 2013).

Third, hospices may not fit neatly into the established governance procedures for health care research more generally. This is because hospices are often charitable organisations funded outside of the mainstream of health care funding. A lack of clarity over whether hospices are National Health Service (NHS) sites or not often leads to delays and difficulties in obtaining research ethics and governance approvals (Payne et al, 2013) and identifying who is responsible for granting such approvals.

Fourth, recruitment to end-of-life research is very resource intensive. Many hours of staff time can be required to recruit relatively few research participants (Gibbins, Reid et al, 2012; Hanratty et al, 2012) because of the rapidly changing health status of patients. For example, rates of attrition from randomised clinical trials for people with advanced cancer have been noted as ranging from 30- 72% (Campbell and Campbell, 2012). This can be due to failing health or death, and results in the need for larger sample sizes in order to achieve statistical power, increasing the resource requirements.

Fifth, many hospices, certainly in the UK setting in which this research was undertaken, are relatively new to taking part in, or developing ideas for, research. They may not have established governance processes for research or may be newly developing these. Their staff may be 'research naïve', having had little exposure either to the use or the conduct of research. This may hinder the understandings of clinicians, who may then be required to assist with recruitment, and thus reduce their confidence in and willingness to introduce research to their patients. When hospice staff become involved only late in the research design and planning, they may perceive that their patients are merely a recruiting ground for research teams. Therefore there is the potential for very unequal partnerships and miscommunication between hospice staff and the academic research teams who wish to study their patients.

Sixth, recruitment can also be challenging from a staff perspective. Whilst support for the clinical team members involved in palliative and hospice care has previously been identified as an important

Recruitment in hospice research

component of staff resilience (Harris, 2013), the emotional strain that can be experienced by staff who are involved directly in the recruitment of, or data collection from, participants in end-of-life research has only been noted recently (Kavanaugh and Campbell, 2014). Such strain can result from repeated exposure to challenging emotional and spiritual experiences through working with people who are quite unwell, many of whom die during the course of a study. These impacts may be felt even by those who do not have direct contact with research participants, such as those dealing with data entry or transcribing audiotaped interviews (Kavanaugh and Campbell, 2014).

Given these practical difficulties, this paper proposes a team approach to hospice research, akin to the notion of the multi-disciplinary team (MDT) approach to clinical care. A multidisciplinary approach involves drawing on multiple disciplines to redefine problems outside of disciplinary boundaries and reach solutions based on a new understanding of complex situations (Plsek and Greenhalgh, 2001). In health care, this is considered important to the development of patient-centred clinical decision making (NHS National Cancer Action Team, 2010). MDT or Multiagency working (as it is sometimes referred to) involves appropriately utilising knowledge, specialised skills and expert practice from multiple disciplines and across service provider boundaries, e.g. health, social care or voluntary and private sector providers. The members of the MDT are usually nursing and social care staff, who collaborate to make recommendations that can redefine, re-structure and reframe health and social care based on an improved collective understanding of complex patient needs (UK NHS England 2015). Multi-disciplinary clinical working is common in the hospice environment and the benefit for patients is that care recommendations from the MDT consider not only the physical, but also the psychosocial issues that contribute to meaningful care in advanced progressive illness (NHS National Cancer Action Team, 2010).

Promoted in the UK by NHS England (2015), the MDT should have three core development elements to work effectively: continuum (which describes the functioning, and progressive changes of the care team); common principles (for the team to adhere to together); and commissioning (of services for the MDT) (UK NHS England, 2015). One of the positive principles is the shared commitment to the objective of delivering person-centred coordinated care. This encourages leadership within a culture of collaboration, working within and across boundaries and along pathways based upon patient need

Recruitment in hospice research

(UK NHS England, 2015). Empowering all members of the team at every level is also considered vital.

Thus we propose the notion of a multi-disciplinary research team (MDRT) approach for the complex research area of the hospice environment. A cornerstone for the life of the MDRT is the focus on the development of a shared commitment to the research and to ensure that all voices are heard and valued, and each one contributes to research aims.

This paper applies the concept of a MDRT to a case study of recruitment to a research study within a hospice environment, showing how the MDRT worked at several system levels (Ferlie and Shortell, 2001) to overcome recruitment obstacles relating to political and governance factors, organisational factors and personal factors within and across teams. The paper aims to show how a MDRT approach to recruitment of patients in a research study collecting data from hospice patients, family members and health professionals drew on these ideas to successfully recruit the required number of patients. It explains the case study setting and research, and explores the nature of the MDRT, its ways of working and how it resolved recruitment problems within the study. It is hoped that this detailed reporting of such issues will be helpful to other novice collaborators attempting to conduct research in the hospice setting.

THE CASE STUDY

The case study setting. The case study setting was a community-based voluntary-sector hospice in the United Kingdom. This hospice is part of a broader national organisation that has identified research as one of the components of its strategic plan. In 2010, a new post (for a full time research lead) was established within the hospice to support the development of a research-active culture.

The hospice provides care to people living in the community with advanced progressive illnesses, and their families. Care is provided by a community outreach team visiting people in their own homes, through a day-care centre ('day hospice'), or a 24-bed inpatient care unit (IPU). People remaining at home generally have physical and emotional symptoms that can be managed effectively with the support of a clinical nurse specialist, the general practitioner (GP), a district nurse, a community care assistant and volunteers. Day hospice patients may be receiving active treatment or palliative care at home. Day hospice services include clinical evaluation, treatment or therapies such as blood transfusions or intravenous medications and counseling provided by a member of the inter-professional team. People are admitted to the IPU periodically to receive care during a crisis or an uncontrollable deterioration in their symptoms, and for end-of-life care when death is near. People receiving these forms of care (care at home, day hospice or IPU) are at different points along the trajectory of a life-limiting illness, with multiple physical, cognitive and emotional issues. They also have a range of functional statuses from self-care in all activities of daily living (ADLS) to being confined to bed and needing help with all ADLS. Inevitably, this has an impact on the potential for patients to both provide informed consent to participate in research, and undertake tasks associated with the research. This is underlined by UK statistics that indicate that whilst people receive day hospice support for a mean of six months, and community care for a mean of 90 days, their stay in the inpatient unit averages just over 14 days, with 55% dying during their stay (National Council for Palliative Care [NCPC], 2014).

Recruitment in hospice research

To implement the research component of the strategic plan an academically trained non-clinical research lead was hired and had been in place for less than a year at the time that the research began. Key to the award of funding for this research lead was the ability of the hospice to demonstrate fertile early relationships with an interested academic lead within a local university. At this point, staff within the hospice had undertaken some small independent research projects, largely associated with completion of educational qualifications, but no external research teams had recruited from within the hospice. The hospice had not yet undertaken research in full partnership with a research organisation. It is the experience of partnership working within a MDRT, that provides the particular focus for this case study. The university-based research team included a health economist and comprised expert researchers in a variety of academic disciplines (palliative care, nursing, pharmacy, health economics and outcomes research), with varying experience in the conduct of end-of-life research.

A description of the research study

The research study aimed to develop new frameworks for the economic evaluation of end of life care. Funded through the European Research Council, 'EconEndLife' comprises a number of separate work streams aimed at achieving different tasks. The work stream that comprised this element of the research focused on assessing the feasibility of completion of a new instrument for measuring the benefits of end of life care for use in economic evaluation, the ICECAP-SCM (ICE-CAP Supportive Care Measure) (Sutton and Coast, 2014). The measure focuses on the individual's capabilities at the end of life in areas such as choice, love, support and preparation. It is a simple two page measure comprising seven items. Feasibility of completion was assessed for patients receiving care from the hospice and for those who might act as potential proxies (divided into two groups of those close to patients (close persons), and health professionals). Two other measures were assessed alongside: the ICECAP-A, a capability index for use in the entire adult population (Al-Janabi et al, 2013); and the EQ-5D-5L, a health related quality of life instrument for use in developing Quality-Adjusted Life-Years (QALYs) (Euro-QOL, 2014). Feasibility of completion was assessed using a cognitive interview technique known as think-a-loud (Ericsson and Simon 1980; Willis 2005) alongside a semi-structured interview. During the think-aloud part of the interview, participants were asked to verbalise their thoughts whilst completing the written questionnaires; during the semi-structured

Recruitment in hospice research

interview they were asked to discuss aspects of their completion of the measure. The aim of the research was to consider feasibility in patients at different stages in the trajectory towards death (Bailey, Kinghorn et al., 2016), and to that end, the initial recruitment plan included seeking participants from both the day hospice setting and the in-patient unit. (The planned sample size was related to achieving not only sufficient numbers for the analysis of the think-a-loud segments (previous think-a-louds with the ICECAP measures have included 20 (Horwood, Sutton and Coast, 2014) and 50 participants (Al-Janabi et al, 2013), but also for achieving data saturation when the semi-structured interviews related to the feasibility of completion are analysed (Walker, 2012). Given the three groups of interest, it was anticipated that interviews of up to 35 patients, 25 close persons and 25 healthcare professionals would be required.

Human Subjects Protections: The study was given favourable ethical approval from North Wales Research Ethics Committee - West (ref: 12/WA/0076).

Recruitment in hospice research

APPLICATION OF THE MDRT APPROACH TO RECRUITMENT

The structure of the multi-disciplinary research team (MDRT)

The Multi-Disciplinary Research Team (MDRT) for this work stream comprised four elements or sub-teams: the hospice team, the university team, a wider project group and an external advisory group. The core research team comprised the hospice and university sub-teams. The hospice team included the hospice research lead (who facilitated research activities for the organization), the hospice research nurse (who had dedicated funded research time for one day per week during the period of recruitment) and those leading various clinical aspects of care (day hospice, in-patient unit, and community). The hospice nurse interacted with each of these, singularly or in combination. Because of the nature of the research, the university team mainly comprised health services researchers and economists; two had a background in economics and qualitative research, one a background in economics and pharmacy and one a background in nursing and qualitative research. The wider project group met monthly through structured telephone calls; in addition to members of the hospice and university teams, the wider group also included experts in palliative care research, valuation methods and economic evaluation. The external advisory group included all of these and independent experts in economics, statistics, palliative care research and ethics.

The working of the MDRT

Each member of the MDRT took one of five roles in achieving the overall aims of recruiting to, and conducting the research. There was a single ‘leader’ of the research, the PI from the University team, and a single ‘facilitator’ for the research, the hospice research lead. Other members of the research team took on one of three roles: ‘retriever’ (those whose focus was to collect data); ‘enabler’ (those who enabled access to patients); and ‘supporter’ (those who advised on recruitment and other issues based on their previous experience). Among the enablers, there was a mix of skill and experience in relation to research recruitment, ranging from the key enabler who co-ordinated recruitment, through to those who had a less frequent and direct relationship with the research, but whose willingness to engage when necessary was vital in ensuring recruitment. At the start of the research process the key

Recruitment in hospice research

interactions were between the research leader (PI from the University team) and the facilitator (the hospice research lead), with minimal involvement of the supporters. These interactions were critical in setting the tone for the conduct of the research and ensuring key research processes were in place. Subsequently, key interactions were primarily between the retrievers and the enablers, supported by the research leader (PI from the university team), the hospice research lead and supporters, as recruitment procedures moved from the planning stage to the action stage. When the research ran smoothly, interactions were limited to the retrievers and enablers; however, when there was some point of stress that was affecting recruitment, there was greater involvement of all members of the MDRT. The MDRT can thus be seen as being dynamic in nature, with shifting emphases across the life-cycle of the research. A diagrammatic structure for the MDRT is provided in figure 1.

A team approach to recruitment

From the outset, the whole team was involved in recruitment, with extensive discussion between the hospice and university sub-teams about how best to approach patients, their close persons, and health professionals. The researcher team benefitted from working in partnership with clinicians, receiving early feedback on what was feasible and acceptable in practice.

Early drafts of recruitment procedures were circulated and discussed extensively among these two sub-teams and the wider project group. Only then was the final protocol agreed upon and subsequent paperwork for ethics and governance approvals developed and submitted. Advice was also solicited from the external ethics group on the issue of using a proxy to provide consent to participate and complete the forms on behalf of those who were not able to write or had difficulty communicating verbally. This resulted in an amendment to the ethics proposal for the research.

Prior to recruitment the research leader (University PI) and the facilitator (hospice research lead), guided a process to familiarize the hospice's staff and senior management (which supported governance within the hospice) on the underlying rationale for the work, the planned research and the specific recruitment procedures. Meetings were held with the day hospice and inpatient clinical team and the community nurse teams. Each of these meetings aimed to communicate information, and also to increase the interaction between the retrievers and enablers, enhancing trust and rapport. As

Recruitment in hospice research

the research progressed, there was increasing focus on empowering enablers by increasing their understanding of, and engagement in, research.

The recruitment procedures developed in collaboration between the hospice and university team members. The first step in recruiting eligible patients demanded communication between the key enabler, the hospice research nurse, and the hospice clinical leads. This was followed by interaction between the potential patient participant and the hospice research nurse. The hospice research nurse discussed the study with the patient, using an information guide, and asked the patient if they were willing to speak to a (university) researcher about taking part in the study. There was then communication between the hospice research nurse and a retriever from the university research team to let the retriever know that the patient was willing to speak with the university researcher. Finally, the potential participant was approached by the university researcher and, if they consented to participate, the interview was conducted. The interview was generally conducted within the hospice setting, and the research nurse and other hospice staff were on hand if the patient became distressed. Participation of close persons and health professionals was dependent on the patient consenting to their participation, so recruitment of these groups occurred only after patient recruitment. The hospice research nurse, in the role as key enabler, worked with senior staff in hospice teams who could identify potential research participants from the inpatient unit or the community.

Given the challenging and emotive subject matter of the research, both the physical and emotional safety of the research team were integral components of the study protocol. We developed a *lone* researcher protocol to ensure the physical safety of a team member who was doing fieldwork outside the hospice or university setting. This meant the researcher leaving details of locations of interviews in a sealed envelope with a named contact who would be contacted immediately on completion of the interview. If the researcher did not communicate with the contact within a defined period of time there were a series of escalating steps defined, culminating with alerting the police if the researcher did not communicate with the contact. Regular de-briefing was done to provide for the emotional well-being of the researchers involved in data collection.

Recruitment in hospice research

Dealing with the challenges of recruitment: Building confidence and trust

Recruitment to the study took place between October 2012 and February 2014. Figure 2 shows recruitment of all participants (patients, close persons and health professionals) to the study over time. Figure 2 shows that an initially promising start was followed by a period of low recruitment numbers, followed by a strong period of recruitment, another drop and a final strong period of recruitment.

Despite the initial strong communication within the MDRT with regard to recruitment procedures, there were a number of unforeseen difficulties with recruitment which resulted in the first period of poor recruitment, and a single unforeseen difficulty which resulted in the second drop in recruitment.

Identifying reasons for slow recruitment

(i) Cyclical involvement in day hospice

Recruitment began with approaching people attending the day hospice, because this group was anticipated to have relatively stable health, compared to those in the in-patient unit. Nevertheless, as recruitment started, it became clear that, even within this group, the fluctuating nature of the health conditions of potential participants made recruitment more challenging than initially anticipated. This was compounded by the need for a multi-part recruitment process, the relative distance between the hospice and university locations, weekly day hospice attendance, and the competing demands on both the hospice research nurse (who also had clinical duties) and the university researchers (who had additional teaching and research commitments). For this reason, there were delays during the recruitment process and a number of people who had met the study criteria and had agreed to meet the researcher for the informed consent process and data collection, experienced changes in their health before they could be recruited and interviewed; thus being lost to the study.

(ii) Unstable patients in the inpatient unit

Many people in the inpatient unit (IPU) were admitted for pain control or symptom management issues and their symptoms tended to fluctuate frequently. Whilst the researcher had arranged a specific time for interview, it was often not possible to interview the participant due to a sudden onset of pain or breathlessness, or because the person was having treatment or care when the researcher arrived.

Recruitment in hospice research

External factors with unexpected impact

(i) Hospice relocation

When recruitment that had initially looked promising dropped off in month four, the reason was clear: movement of the hospice from its initial location to a new one a short distance away. This shift in location resulted in a period of upheaval as staff had additional work associated with such a move and adjustment to the new environment (Perry, Orlando, Coast and Armour, 2013). Although the hospice move was a clear and unavoidable reason for low recruitment, it also effectively masked underlying problems around delays in recruitment, and resulted in a less speedy response than might otherwise have been the case. Ultimately, the hospice move also enhanced the research, providing much better facilities for the conduct of the research, such as the availability of private rooms in which to conduct interviews.

Whilst this specific occurrence is unlikely to affect other research studies, it illustrates the potential impact of unexpected large and external changes in the research environment.

(ii) Change in research personnel

The second drop in recruitment was primarily related to a single factor: a change in personnel on the university research team. The departure of the first main researcher at the end of month 10 was followed by a short period with no researcher in post and then a delay as the new researcher had to build relationships with the hospice team and become accustomed to the methods of working within the MDRT. The change in personnel also occurred at the time when there was a shift in the focus of recruitment from the day hospice to the in-patient unit.

(iii) Overlapping research study

A less severe impact on recruitment was also experienced when a separate qualitative interview-based research study commenced shortly after this study. Whilst some patients were eligible for both research studies, the hospice research nurse had to ensure that no patient or their family was overwhelmed by approaches for research. On two occasions, eligible potential participants could not be approached due to the conduct of this second study.

Recruitment in hospice research

Difficulty engaging hospice staff in research

The majority of hospice staff had very limited research experience. At the beginning of the data collection, many were unsure of the purpose of the research and its potential value. It took time for staff to feel comfortable with researchers being present in the clinical setting and to understand how the research process worked. This also affected recruitment as not all staff members prioritised the identification of potential research participants. Staff turnover within some areas of the hospice added to the difficulty of achieving patient engagement. Acceptance of the research was particularly challenging amongst those staff whose focus was caring for inpatients. Inpatients tended to be more unstable and unwell than those elsewhere in the hospice, and staff were more likely to take on the role of 'gatekeepers', acting to protect patients from what might be perceived as unnecessary activity.

Difficulty in gaining physical access to parts of the hospice

There were clear differences in the researchers' physical accessibility to certain parts of the hospice. The majority of the hospice was quite accessible with an open floor plan. The hospice had a café, communal seating areas and daily activities that were readily available to all who wanted to participate. The inpatient unit (IPU) was where patients were admitted for intensive supportive care e.g. pain and symptom control, infections or following emergency admissions. Whilst the IPU was in the same hospice building, it was not visible from the main reception area and could only be accessed by authorisation from the hospice staff. The appearance of the IPU was much more clinical, akin to a hospital ward with single bedrooms and designated clinical areas designed to provide quality care for patients (Maben et al, 2015). Given the 'secure' appearance of the unit, it was perceived as less

Recruitment in hospice research

physically accessible. In addition, staff appeared to be very busy, and patients were located in individual rooms, behind doors that were often closed.

Solutions to recruitment challenges

Greater visibility of the researcher – spending more time in the hospice to become ‘part of the furniture’

To reduce the time between initial patient contact and recruitment, and to enhance communication between the hospice and university teams, supporters from the external advisory group advised the university researcher to make specific efforts to be more visible within the hospice. The PI and the hospice research lead agreed, and subsequently the university researcher spent entire days based in the hospice, not in an office, but ‘around and about’, so as to become more familiar to patients, families and hospice staff. These days were co-ordinated with the hospice nurse’s ‘research days’ to enable greater co-ordination in recruitment between retriever and enabler.

Increased communication between the hospice nurse and the researcher

Those on the core research team also generated ideas to reduce delays in recruiting participants, working out an SMS text messaging system between the hospice and university teams. When a potential participant indicated that they were ready to meet with the university researcher, the hospice research nurse texted the researcher to alert her. This text did not contain any patient information but merely an alert to contact the hospice. The researcher then telephoned the hospice research nurse, received the contact information and made contact with the patient within 48 hours.

In the IPU, researchers learnt to be flexible with their time and responsive to the changes the patients were experiencing. Even when people were unwell at the time that the interview had been initially planned, as their condition improved they were often happy to participate later in the day following medication or rest. Again, communication between the researcher, care recipient and clinical staff was vital in ensuring safety, comfort and research integrity.

Recruitment in hospice research

Ongoing dialogue with potential participants as a means of reducing staff 'gatekeeping'

One means of reassuring staff about the participation of their patients in the research was to have researcher team members share de-identified comments that previous participants had made about taking part in the research. This was done through informal feedback from the retrievers, key enabler and the facilitator, but the facilitator also used more formal means, such as including comments from participants on posters that were displayed in the hospice. In general, both staff and patients were more keen to be involved in the research once they had been informed about it and understood its purpose and the value it might have.

*If it helps other people, I'm prepared to do it, it's not going to do-do a lot for me I wouldn't think, well you never know but (laughing) if it can do something to help other people
(Inpatient, pt35)*

Many of those who were initially reluctant about participation agreed to participate once they engaged with the research staff and built a rapport with them, often finding it a positive experience.

It [taking part] doesn't upset me. Oh, no, no I don't mind who knows... It's a pleasure (Day hospice patient, pt26)

I'm only too pleased if one question helps one person, I'll be happy about that (Community patient, pt12)

I can tell everybody now, my brothers and everything [about taking part in university research], when they come up, they won't believe me (Community patient, pt21)

Staff responded well to this positive feedback about the research, which increased their confidence in the research and further assisted in recruitment.

Learning from this case study – opportunities for action of the MDRT

There were some key lessons from the case study that are likely to be helpful in taking forward this notion of the MDRT into other hospice research settings.

Recruitment in hospice research

1. Creating an environment where all team members feel empowered to communicate, to identify problems and work towards solutions.
2. Identifying key members of the MDRT early in the research process.
3. Having a clear and constant communication stream between core research team members and regular, structured meetings for the wider MDRT.

Discussion

This paper has proposed the concept of engaging hospice staff in research through a multidisciplinary research team. Such teams comprise the clinical staff within the hospice alongside the research teams within academic settings. Whilst clinical researchers within hospitals are often familiar with this approach to research, it is much less familiar to nursing staff working in hospice environments. A detailed description of one case study in which the approach was used shows how the initial collaborative approaches were helpful in setting the right tone for the collaboration (particularly given the issues around patient vulnerability, staff concerns about recruitment and lack of research understanding outlined in the introduction), but also how, in any research study, there are unanticipated delays in recruitment. These may arise from the need to build communication, confidence and trust across the different elements of the team, as well as unexpected events in the life of an organization. The positive message is that, with a good initial structure and a willingness amongst all members of the team to learn from those with different expertise, these challenges can be overcome, to enable the conduct of successful research. One of the major recruitment problems experienced in this research related to the need for greater responsiveness in the recruitment of people near the end of life. Other research teams have also noted this need for urgency, with the rapidly deteriorating clinical status of people with end-stage conditions, requiring timely response (Fischer et al, 2012) and another research team noted the value of increasing the hours for which the research team was available (Gibbins, Reid et al, 2012). A system of open discussion and an acceptance that different team members bring different expertise, both clinically and in research terms, can enhance the speed with these changes are made in the research.

Recruitment in hospice research

This study has both strengths and limitations. It draws on a clinical concept (MDTs) but applies this to research, developing the concept of a MDRT. This is largely a conceptual notion, arising from the work that was conducted rather than having been generated a priori and then formally tested. It is not clear whether other groups are pursuing similar strategies even if they are not referred to quite in this way.

The paper rests on a single case study; nevertheless, the detailed descriptions and discussion can provide important insights to others embarking on such research about how to structure their collaborations and deal with emerging problems in an ongoing manner. Inevitably, the success of any MDRT will be dependent on both the general principles of the MDRT in relation to collaboration and openness and the specific individual members who comprise that team. It is our view that even with highly performing individuals, the collaboration, willingness to learn and inclusion of team members with differing skills, including clinical and nursing staff, is integral to research success, and that these MDRT principles are what contributes to a high functioning team.

Further research that more explicitly starts with the notion of a MDRT may be helpful in elaborating this concept. Other case studies that draw on teams made up from different academic disciplines and within different hospice settings may also be helpful. It is worth noting the important role of the hospice facilitator (hospice research lead) in drawing together the hospice and academic team members and engaging with governance issues, and it would be helpful to know whether this role is integral to the development of a successful MDRT in the hospice setting.

Hospice research is an expanding area, although still small in absolute terms. The James Lind Alliance (JLA) aims to raise awareness among health research funders about what matters to both patients and clinicians so that clinical research is relevant and beneficial to the end user. The JLA commissioned a scoping study to identify how clinical research organisations currently set research priorities and how patients and the public are involved (Oliver and Gray, 2006; Staley and Hanley, 2008). Across multiple healthcare setting, the study directors of the scoping study discovered several challenges to identifying research priorities, including a lack of agreement about best practice, resistance to developing a research strategy, and difficulties in managing expectations for the speed with which priorities can be addressed. In light of our study experience, their recommendations are

Recruitment in hospice research

consistent with ours as they promote a more collaborative approach to research from development of 'shared research priorities' to the sharing of information and results.

To further increase research in this important area (Staley and Hanley, 2008), an investment in the skills and expertise both within hospice and academic teams will be required. Means of generating effective collaborations are an important part of this, and a MDRT approach that draws on the expertise of all, enabling vital communication between members of the team, including patients, is one way to increase the likelihood of successful research endeavours.

References

- 1Al-Janabi H, Keeley T, Mitchell P, Coast J (2013) Can capabilities be self-reported? A think-aloud study. *Social Science and Medicine* 87: 116-122
- 2Bailey, C., Kinghorn, P., Orlando, R., Armour, K., Perry, R., Jones, L., & Coast, J. (2016). The ICECAP-SCM tells you more about what I am going through: A think-aloud study measuring quality of life among: patients receiveing supportive and palliative care. *Palliative Medicine*. Published on-line before print (January 27, 2016).
- 3Campbell, C., Campbell, L (2012) A systematic review of cognitive behavioural interventions in advanced cancer. *Patient Counselling and Education* 89(1): 15-24
- 4Ericsson, K A, Simon, HA (1980. Verbal reports as data. *Psychological Review*, 87: 215-250.
- 5Euro-QOL (2014). EQ-5D-5L: Quality of life instrument. Author.
- 6Ferlie E., Shortell, S (2001) Improving the quality of health care in the United Kingdom and the United States: A framework for change. *Milbank Q* 79(2): 281-315
- 7Fischer, D J, Burgener, S C, Kavanaugh, K, Ryan, C, Keenan, G (2012) Conducting research with end-of-life populations: Overcoming recruitment challenges when working with clinical agencies. *Applied Nursing Research*, 25(4): 258-263
- 8Florczak, K (2014) Research at the end of life: A sacred undertaking. *Nurs Sci Q* 27: 12-13, doi:10.1177/0894318413509710
- 9Gibbins, J ,Reid, CM , Bloor, S, Burcombe, M , McCoubrie, R , Forbes, K (2013) Overcoming barriers to recruitment in care of the dying research in hospitals *Journal Of Pain And Symptom Management* 5(5): 859-867
- 10Gomes, B, Calanzani, N, Higginson, IJ (2014) Benefits and costs of home palliative care compared with usual care for patients with advanced illness and their family caregivers. *JAMA* 311(10): 1060
- 11Gysels, M, Evans, C, Lewis, P, Speck, P, Hamid B., Prseston, N., Grande, G., Short V, Owen-Jones, E, Todd,C & Higginson, I et al (2013) MOREcare research methods: Recommendations for ethical issues in palliative and end-of-life care research. *Palliative Medicine*, 27(10): 908-917
- 12Hanratty, B, Lowson, E, Holmes, L, Addington-Hall, J, Arthur, A, Grande, G, Payne, S, Seymour, J (2012) A comparison of strategies to recruit older patients and carers to end-of-life research in primary care *BMC health services research* 12: 342.

Recruitment in hospice research

- 13Harris, L (2013) Caring and coping: Exploring how nurses manage workplace stress. *Journal of Hospice and Palliative Nursing*, 15(8): 446-453
- 14Horwood J, Sutton E, Coast J (2014) Evaluating the face validity of the ICECAP-O capabilities measure: a “think-aloud” study with hip and knee arthroplasty patients. *Applied Research in Quality of Life* 9:667-682
- 15Kavanaugh, K, Campbell, M (2014) Conducting End-of-Life Research: Strategies for Success. *Nurs Sci Q* 27: 14-19
- 16Kellehear, A (2013) Compassionate communities: end of life care is everyone’s responsibility. *QJM: An international journal of medicine* 106(12): 1071-1075
- 17 Kehl , K, Kowalkowski, J (2013) A systematic review of the prevalence of signs of impending death and symptoms in the last 2 weeks of life. *Am J Hosp Palliat Care* 30(6): 601-16
- 18Maben J, Griffiths P, Penfold C, Simon M, Pizzo E, Anderson J, et al (2015) Evaluating a major innovation in hospital design: workforce implications and impact on patient and staff experiences of all single room hospital accommodation. *Health Serv Deliv Res* 3(3)
- 19Marie Curie Cancer Care 2015. Changing the conversation: Care and support for people with a terminal illness now and in the future. Available: <https://www.mariecurie.org.uk/globalassets/media/documents/policy/campaigns/changing-the-conversation-report.pdf>
- 20National Council for Palliative Care (2014) National survey of patient activity data for specialist services. MDS Summary 2013-2014
- 21NHS National Cancer Action Team (2010) The characteristics of an effective multidisciplinary team. National Health Service.
- 22Oliver S, Gray J (2006) A bibliography of research reports about patients', clinicians' and researchers' priorities for new research. London: James Lind Alliance.
- 23Payne, S. Preston, N. Turner, M. Rolls, L. (2013) Research in palliative care: can hospices afford not to be involved? A report for the Commission into the Future of Hospice Care. Help the Hospices, UK.
- 24Perry, R., Orlando, R., Coast, J., Armour, K (2013) P60 The experience of recruiting hospice patients, family members and health care professionals to a qualitative research study. *Supportive and Palliative Care* 10 (3)(Suppl 1):A31-A31
- 25Plsek PE, Greenhalgh T (2001) Complexity science: The challenge of complexity in health care. *BMJ* 323 (7313): 625–8
- 26Shelby-James, TM, Hardy, J, Agar, M.R., Yates, P, Mitchell, GK, Sanderson, CR, et al (2012) Designing and conducting randomised controlled trials in palliative care: a summary of discussions from the 2010 clinical research forum of the Australian Palliative Care Clinical Studies Collaborative (PaCCSC) *Palliative Medicine* 26(8): 1042-1047
- 27Staley, K, Hanley, B (2008) Scoping research priority setting with UK clinical research organizations and funders. London: James Lind Alliance
- 28UK NHS England/Nursing/LTC (2015) Service component handbook-MDT development: Working toward an effective multidisciplinary/multiagency team. (1st edition).
- 29Walker, JL (2012) The use of saturation in qualitative research. *Canadian Journal of Cardiovascular Nursing*, 22(2), 37-46
- 30Willis, GB (2005) Cognitive interviewing. A tool for improving questionnaire design. Thousand Oaks (CA): Sage

Recruitment in hospice research

31 Sutton, E, Coast, J (2014) Development of a supportive care measure for economic evaluation of end-of-life care using qualitative methods *Palliat Med* 28(2): 151-157