

# Providing Telecare for Older Adults: Understanding the Care Navigators' Experience

## Abstract

**Purpose** Care navigators in the non-statutory sector in England increasingly facilitate the provision of telecare for older adults. The purpose of this paper is to explore the experiences of care navigators when assessing older adults for telecare and understand what contextual and organisational factors impact on their practice. **Design/methodology/approach** A purposeful sample of care navigators and telecare installers were selected. Care navigators were recruited from five non-statutory organisations. In order to provide an insight into telecare provision from this sector, telecare installers were also recruited. Semi-structured interviews were conducted with eleven participants covering: role; training; assessment; reviews; installation; suitability; impact; aims; outcomes and organisational structure. Interview data were analysed using the framework approach. **Findings** Five main themes emerged from the analysis: responsiveness; autonomy; knowledge exchange; evolving practice and sustaining performance. **Research limitations/implications** This study included a small sample, and based in one local authority, focusing on the experience of care navigators in only one sector. **Practical Implications** The findings suggest that strategic placement of care navigators could support the locality demand for telecare assessment to facilitate discharges from hospital. This study highlights the perception of home assessment as a gold standard of practice for care navigators. In order to develop a more sustainable model for care navigators' capacity to work within hospital teams and provide home assessments needs further consideration. **Originality/value** This study is one of the first to explore the role of the care navigator and their involvement in the provision of telecare for older adults.

**Key Words:** Care Navigator, Telecare, Older Adults, Carers, Framework Approach

**Paper Type:** Research Paper

## **Introduction**

It was estimated in 2015 that there were 11.6 million people aged 65 or over living in the UK, (ONS, 2016). The changing health of an ageing population along with an increasing rate of long-term conditions will have a considerable bearing on health and social care funding for the future and may require £5 billion additional expenditure by 2018. (ONS, 2012).

Assistive technology is one area where there is increasing interest as a potential solution for some of the social care challenges of the future. Across Europe there has been exploration of the benefits of technology, for example measuring the benefit of tele-monitoring in addition to the use of telecare with patients with complex chronic conditions in Spain (Asensio et al, 2015). The implementation of telecare enhanced collaborative working between health care services in Denmark (Christensen, 2016) and exploring co-operation between different technology provider partnerships involved in a telecare project in Norway (Berge, 2016). Previous evidence about telecare published in the UK in the past decade has mainly focused on the impact of telecare as preventative and enabling measures and cost effectiveness (Bligh, 2016). Ethical Frameworks for Telecare Technologies for older people at home (EFORTT) is concerned with the social implications of telecare and how telecare will meet the needs of a growing elderly population (Mort, Roberts and Callen (2013). Assistive Technologies for Healthy Living in Elders: Needs Assessment by Ethnography (ATHENE) explored the effectiveness of telecare services in addressing the need for comprehensive assessment of the individual and their care networks (Greenhalgh et al 2015). The AKTIVE project investigates the role of telecare in meeting the needs of older people and barriers to telecare provision (Roulstone et al 2013). Other research has considered the effect of telecare on independence, quality of life, and care and support needs in relation to both recipients and their carers (Hughes, 2013; Hirani et al, 2014). However, research evidence remains inconclusive regarding the effectiveness of telecare (Bligh, 2016), though there has been an indication of slight benefits to health related quality of life.

In the UK, government directives lead on change to reduce the pressure on overburdened health and

social care systems (DoH, 2012). Adults and their carers now only have access to social care through a national minimum threshold (Care Act, 2014). This new criteria aims to reflect the 'substantial' threshold previously used by most local authorities (DoH, 2016). As a result, some local authorities have made the decision that in order for the person to receive technology to support their needs they have to meet two or more of the eligibility criteria. Therefore, adults and their carers have to negotiate various services in order to access this provision (Gibson et al. 2016).

Local authorities are required to consider services and resources available in their area to improve people's independence and wellbeing, and work with local partners to prevent people developing care and support needs (DoH, 2017). In an attempt to address this, local authorities are connecting with non-statutory organisations to prevent or reduce the need for health and social care services. They have started to shape an effective and economical move away from traditional solutions provided by local authorities towards different ways of organisations working together (Jasper et al, 2016; DoH, 2017). Given the rapidly ageing population and altered future landscape of social care, the contribution made by the non-statutory sector is a vital resource to local authorities.

This paper reports on a small-scale research project conducted over an eight month period exploring the current practice of care navigators in the non-statutory sector in the UK. The study took place in one local authority area in England, where a local initiative had been piloted between 2006 and 2009 through the Government funded Partnerships for Older People's Project (POPP). The non-statutory sector was commissioned by the local authority to provide care navigators. This role reached out to people and link them to local services; delivering preventative outcomes in partnership with local statutory services (Windle et al, 2009, Miller et al, 2013). The care navigators' role aimed to provide an early and timely response to people in the community to help access information about different services, with the aim of reducing future dependence on social and health care. The local authority continued to commission care navigators in the private and non-statutory sector organisations after the pilot ended. More recently, care navigators in the study locality have become trained as telecare

assessors to meet the growing need for assessment and review of an increasing elderly and frail population. Their role is to provide telecare on behalf of the local authority to reduce the pressure on adult social services. Care navigators also exist in areas such as the North East and North West, South East England and in some London boroughs. However, the role differs according to the commissioning body and not all care navigators are involved in assessments for telecare.

The simplest forms of telecare are first-generation technology products, which include a user-triggered alarm button and relies on the user wearing a portable device such as a pendant or a pull cord in their home. Second-generation telecare systems utilise a broader range of sensors that detect specific hazards and do not require the user to trigger the sensors (Stowe and Harding, 2010). For this study, the definition of telecare 'is a package of sensors including personal alerts and environmental sensors, which provide 24-hour monitoring and enables carers or services to give an immediate and appropriate response when an event or incident occurs' ([www.tsa-voice.org.uk](http://www.tsa-voice.org.uk)).

The aims of this research were to explore contextual factors that influence care navigator's practices and how they affect the delivery of telecare. Although this study draws from a small sample, it provided an opportunity to examine current care navigator practice.

## **Methods**

### *Participants*

The author selected a purposive sample of care navigators and telecare installers. Twenty-one care navigators and managers from voluntary organisations, charities and a housing association were approached. Nine declined to take part and two managers originally recruited decided not to participate due to having limited experience of telecare. Eight care navigators and two managers of a non-statutory organisation took part. One care navigator had 9 years' experience as an assessor for telecare; the other participants had approximately 3 years' experience. Most had worked in the social

care sector before their current role. One had experience of brokerage and IT before becoming a care navigator.

Three telecare installers were recruited to participate in interviews, in order to provide insight into care navigator experience and the current telecare service provision. One installer had 6 months' experience in the role and the other two participants had 6 and 12 years' experience. The more experienced installers had worked for the original local authority telecare equipment provider and transferred to the current provider when they were awarded the contract.

### *Data Collection*

All relevant people, groups and authorities were consulted for access. Ethical approval was obtained from the University of Kent Social Research Ethics Committee. Written consent was gained from all participants. The interviews were approximately 30 to 45 minutes and conducted by the author at the participants' place of work. All interviews took place during January and February 2017.

The author developed semi-structured interview schedules. The care navigator schedules included twenty-four questions, which covered: experience of the role; training; telecare assessment; provision of telecare; organisational structure; thoughts on client and carer outcomes. The installer interviews included nine questions covering: their perception of assessments; the personal impact of telecare for telecare users; and outcomes and benefits of telecare. The interviews were audio recorded and transcribed with permission.

### **Analysis**

The framework approach was chosen to underpin analysis, as it was a small sample and to help in the development of a robust qualitative method of data analysis (Firth and Smith, 2011; Ritchie et al, 2003). The software package NVivo version 11 was used as a tool to assist organisation of data.

There are five stages with the framework approach (see Table 1): familiarisation; identification of a

thematic framework; indexing; charting; mapping and interpretation (Heath et al 2012).

### **Table. 1**

[Insert Table 1 here]

The first stage of analysis as depicted in Table 1 involves familiarisation with the interview data (Ritchie et al, 2003). An initial coding framework was used to identify and refine the codes (Firth and Smith, 2011). To manage the data NVivo version 11 was used to assign codes into categories. A matrix was created for each theme and as set out in Table 1; with data charted within that theme. For the final stage in Table 1, thematic analysis was applied to the data and recurrent and important final themes were identified (Heath et al, 2012). To assist in establishing the integrity and trustworthiness of the data a discussion took place with other researchers in the department about the initial codes and final themes.

### **Findings**

Five main themes emerged from the analysis: responsiveness; autonomy; knowledge exchange; evolving practice and sustaining performance.

#### *Responsiveness*

Within the theme of responsiveness, it identified that care navigators had the expertise to give control to telecare users and support their carers. Care navigators felt they had the knowledge to provide multifaceted equipment packages:

*The lady has quite severe dementia and her husband's got COPD and he's really struggling. So I actually went in for her, the telecare equipment I've ordered also takes him into account (care navigator).*

Interviewees felt the role of the care navigator had extended to give older adults and their carers control over how they chose to use the product:

*It's a lifeline for her.... I think she was fearful then, she had to be with him constantly (care navigator).*

Knowing that there would be an immediate response to support the adult and their carer provided reassurance. Importantly, care navigators recognised people need to feel connected to an immediate and reliable response; there were frequent references to telecare provision promoting 'peace of mind' for older adults, carers and their families:

*They [telecare users] feel reassured that they're not isolated and there's help at the end of a button (care navigator).*

Interviews with managers found that it is vital staff are recruited and developed within the service for their values and their ability to connect to others through their assessment. As part of the care navigators' practice they consider the longer-term needs of the older adult during assessment to identify the right equipment:

*We can explain about some of the add-on equipment that might prove beneficial in the future (care navigator).*

Care navigators based in the community are regularly involved in the review of telecare users' changing needs. From interviews it explores how part of the role of the care navigator is to respond to the changing needs of individuals. Assessments set out to understand the person's routine and think about how the person interacts with their home environment when selecting equipment:

*You can upgrade it, if somebody has already got telecare and then they come in [referred], further down the line and they need falls detectors or door sensors, yes it's possible (care navigator).*

### *Autonomy*

It was identified that the care navigator's ability to build a connection with the older person was an important factor. Care navigators have the capacity to reach out to people with low-level needs, as

they are not part of a statutory service. The use of a befriending service can also help to introduce the idea of telecare as support leading to a timely assessment, described as follows:

*If somebody has befriended them, introduce the [telecare] referral that way (manager).*

Interviewees felt that care navigators can offer unique support, as they have the capacity to provide home visits to assess for telecare:

*People from the smaller organisations do tend to go and visit their clients (installer).*

Having the ability to offer a timely approach, the assessment style of care navigators differs from statutory services, enabling them to develop relationships with people. There was recognition of the uniqueness of the care navigator role and that home visits are beneficial for the provision of telecare. From the interviews it appears that working arm's length from the local authority can sometimes lead to assumptions about work capacity and roles. Installers perceived care navigators as working differently from practitioners in the local authority, as non-statutory organisations have the advantage of reaching out to people not known to social services:

*They [care navigators] seem to have more time to go and visit people in their home. Maybe the volume of their work isn't quite as much as the council work (installer).*

Care navigators shared their thoughts on their interaction with other services:

*For the social services one [referral] you don't have to go into as much detail because the people that come round and install it will run through it again with them (care navigator).*

There appears to be the assumption that the care navigators' role is for assessment only and that the installers will provide information about telecare. A better understanding of roles is required to ensure that care navigators also see their role as ensuring the telecare user receives information from the most appropriate person.

Care navigators are a limited resource as demonstrated through their short-term work, they recognise

that they do not have the ability to hold large caseloads, but they still have the autonomy to review the telecare provision:

*Once we have reviewed and covered all their support need we close their case (care navigator).*

Another commented:

*I always phone back once Telecare been installed just to see if it's fit for purpose, if it's meeting their requirement and that they've got it (care navigator).*

However, pressures on services can have an impact on practice and may appear to shorten the assessment process:

*[local authority name] are obviously under pressure to meet targets so maybe corners get cut, I don't know (installer).*

The installer then prompts a review of the original assessment and of the equipment in the home. This results in another assessment taking place.

### *Knowledge exchange*

Identified within the theme of knowledge exchange was the importance of giving the right information to people in a timely manner. From interviews, it was clear that gaps in information affected performance and ultimately the provision of telecare.

The care navigator provides advice and information when assessing people who will go onto receive telecare. People are often overwhelmed with leaflets during their first contact with services, giving information at the right time is fundamental, as it can be difficult to get the right message across:

*Simple easy to understand information about what it [telecare] can do is really hard for people. People have to have time to think and they take longer but people understand it (manager).*

Giving people time to make decisions was considered important as it provides people with an effective service that works for them and their needs.

However, lack of information affects the installation of telecare, which can lead to aborted visits and results in no equipment being provided:

*It's hard for us because we are the first person that they see....'oh no we can't do it because previous role has not been done properly (installer).*

Another commented:

*I have had clients in the past that haven't actually got a telephone line.....the assessment hasn't been done properly (installer).*

This was mainly attributed to pressure on assessments that would take place without a home visit to establish if the home environment was suitable for telecare. Successful knowledge exchange relies on key people getting the right information. One interviewee commented:

*If you give them [installers] the wrong information.... that's a complete waste of everybody's time (care navigator).*

Both care navigators and installers agreed that having the wrong information has an impact on people receiving support through telecare in a timely manner.

With the availability of training apparently decreasing this has led to some care navigators feeling a lack of support to develop skills. Access to training was problematic for non-statutory organisations as they have to find the financial means to attend training:

*As charities, we haven't got a lot of money to pay for things like that [training] (manager).*

This has a negative impact on knowledge exchange for the non-statutory sector when looking to maintain valuable levels of expertise. Care navigators value access to training as this is fundamental for increasing skills to maintain the level of expertise within their service. Reliance on a key person from the local authority was developed, but if this link is lost then care navigators have to find new ways of gaining information. They found alternative routes to gain updates, for example through

telecare champions in the local authority who give guidance on practice and changes within the service, as currently no formal information exchange process exists.

### *Evolving Practice*

Care navigators practice is evolving due to the changes in the eligibility criteria, placing greater limitations on their practice and confusion over changes:

*People used to put through telecare for anybody, now they are putting in restrictions (care navigator).*

Another commented:

*All of a sudden, we've got to put a bit of criteria in and I think one of the criteria once was that this person needs to have a carer coming in (care navigator).*

Some care navigators find it difficult to discuss these changes with people referred to their service.

*Social services only accept those that have extra equipment.....we find it difficult....to have that discussion with some people (care navigator).*

Care navigators are accustomed to working a particular way and embracing change to their practice is taking time to embed. More recently, telephone assessments have become widespread practice:

*We often find assessments are done either over the phone or in hospital, with no idea how clients are actually living (installer).*

Ultimately, this is having an impact on the installers who have to address any problems or concerns during their visit. Additional demand for assessments has also placed additional strain on non-statutory organisations. Care navigators report that referrals to their organisation are not always accepted, as caseloads were reaching full capacity:

*I think it was almost like, we'll try the care navigators but it wasn't always working out that successfully*

*because we can't come this week (care navigator).*

There is a noticeable change to the work capacity of the care navigator and closing of cases once they have covered all the support needs identified for the older adult and their carer. This is due to the rising demand from other organisations to use the care navigator for telecare assessments. There is additional pressure from hospital teams for care navigators to assess for telecare. This evolving practice means that this pressure sometimes comes from social care colleagues and crossover occurs between services:

*Social services kept asking me to install telecare to allow someone to be discharged home, [name] put a stop to it and she said if they're open to social services they should be doing that assessment (care navigator).*

To alleviate the care navigator caseload, assessment and reviews are now taking place over the phone. This is in contrast to when care navigators first started assessing for telecare and is not congruent with how some care navigators view their practice:

*I know a lot of care navigators do a lot of their job over the phone, which since day one has been wrong. The whole point of this service was a home visit. (care navigator).*

This approach adjusts the assessment process and installers have the impression that there are gaps in the assessment and information that is provided:

*No one's been out, they've done it over the phone.....that's disheartening for us because we're the first person if there's any problems (installer).*

This is leaving the installer having to bridge any gaps and explain how the telecare works or deals with carers' and families concerns.

### *Sustaining Performance*

Despite, some care navigators changing from community based roles to working in hospitals; they still

maintained the same current levels of assessment and telecare provision. However, the community care navigators' ability to offer home visits is seen as the most effective way of providing telecare:

*The best way forward for them and us is for them [care navigators] to actually visit the client in their own home (installer).*

Another interviewee commented:

*You can just pick up so much more, being in someone's home (care navigator).*

It was recognised that home visits provided a more accurate assessment and this ultimately benefitted the delivery of telecare. However, the capacity of the care navigators based in the community is often over estimated by other organisations. Some care navigators are part of a team of navigators in their organisation and able to join up skills with other colleagues when they work together and share caseloads. Pressures on resources and the capacity of care navigators has to be taken into consideration:

*For us its capacity because we can't always react quickly, we're covering a huge area (care navigator).*

*Another commented:*

*The community person was here and two were in the hospital, but it didn't work as well as it could so joined them all together, works a lot better cause you skill share (manager).*

Care navigators are often involved in supporting discharge planning through the provision of telecare. Despite this variation to working environment, care navigators were able to adjust to this change and maintain current levels in the provision of telecare.

According to installers, it is important for care navigators to be confident about telecare to inform their product choice:

*They [care navigators] probably don't understand the products and how they work.....so a floor mat is used instead of a sensor.....it's a classic example of the prescriber not understanding what was going*

on (installer).

Another interviewee commented:

*I think there's probably a lot more than we even understand that it can do to be fair. I think you just need to keep on top of what's being developed (care navigator).*

With technology changing, keeping expertise within the organisation becomes important to sustain it and it is also vital to be up to date on developments with equipment.

## **Discussion**

This would appear to be the first study that has directly addressed the care navigator experience of assessing older adults for telecare. The author acknowledges that this study was only based in one local authority area and focuses on the experience of care navigators providing telecare in this locality. Therefore, the findings of this study cannot be generalised as shared experience in the non-statutory sector due to service delivery differences across geographical locations. Despite its limited size and geographical limits, it provides valuable insight into this growing aspect of social care. Although telecare installers are included in this study to provide an insight into the care navigator role, the research was unable to ascertain if managerial perspectives on telecare provision impacted on practice due to only one manager participating in the interviews. Further research in other regions is required to examine the different experiences of care navigators and non-statutory service involvement in telecare. Nevertheless, this work identified themes and highlighted a number of findings based on the experiences of care navigators and other people working with care navigators, providing a first step in exploring this aspect of social care.

The introduction of a national minimum threshold for receiving social care service means that the local authority eligibility criteria has required a change in practice for care navigators when assessing older adults and their carers for telecare (Care Act, 2014; DoH, 2016). A stand-alone lifeline pendant is no

longer seen as part of the local authority telecare provision. The local authority has made a significant investment in telecare, so this provision is actively encouraged (Steventon et al, 2013). Non-statutory organisations previously had a green light to assess people for telecare. This change to eligibility criteria for telecare is taking time to embed amongst practitioners.

Care navigators also identified that their practice is evolving, as more people want alternatives that enable people to 'live' and have their social and health care needs met in their own home (ADASS, 2015). Telecare has the potential to support people to maintain their independence; continue their involvement in community life; remain in their own home, and maintain their safety. In addition, to supporting carers by enabling them to continue to maintain productive roles in the home, social networks and their relationships in the family (Bowes and McColgan, 2013; Peek et al, 2014). However, it relies on the practitioner's assessment skills and knowledge of telecare to provide an effective service (Faife, 2007). The findings from this study suggest that improvement is required in sharing information about the older adult and the home environment, which needs to start at the point of the original assessment. Roulstone et al (2013) identified that misunderstandings between assessors and installers can cause barriers to telecare provision. Installers commented that assessments sometimes missed crucial information, which affected communication with older adults, carers and their families during installation of equipment. This led to installers bridging the gaps in information in order to meet telecare users' needs, provide solutions and ensure the provision is appropriate.

Participants mainly attributed gaps in information to the increasing role that care navigators have in hospital discharges, which relies on assessments made on the ward or with other family members over the phone. Installers felt that the changes in how assessments are completed means information is inconsistent, which increases pressures on installers when they visit the person's home. Experienced care navigators and installers viewed home visits as necessary to ensure accuracy with the assessment resulting in an appropriate provision of telecare. The findings point to a need to review the capacity of the care navigators that are holding higher caseloads in localities with hospitals. Joining up skills

and keeping expertise within organisations are methods employed by non-statutory organisations to sustain current levels of performance.

Installers alluded to the care navigators' autonomy, as they have a unique role when engaging with older adults and carers that are not known to social services. As care navigators are employed in organisations that are independent from the local authority, services still need to work together to provide a seamless experience to access effective and efficient support through telecare. (ADASS, 2017). Interviews uncovered that this level of independence has led to installers and care navigators making assumptions about each other's roles in the provision of telecare. Both felt that each other had the means and capacity to provide information to the person and their carer about telecare. Installers view care navigators as having more flexibility in their role than they actually have in reality. One finding suggests that there is a lack of collaborative communication, which could be a result of the involvement of different organisations in the provision of telecare. Care navigators identified the need for an improved mechanism for relevant information exchange to take place between them, the local authority and installers. Keeping knowledge updated proved difficult when communication links were lost. When commissioning services from the other sectors, communication between services is vital. It is essential that there is partnership working between different providers and organisations, and that social care becomes a 'connector' between statutory and non-statutory services (ADASS, 2015).

## **Conclusion**

The original purpose of the short-term involvement of the care navigator assessing people in their own home has changed with growing demand and an increase in number of referrals to the service. The move from the traditional approach of home based assessment for care and support has resulted in assessments and reviews for telecare taking place in hospitals or over the telephone.

While it is important for care navigators to work proactively with the provision of telecare to meet the increasing need for assessment, it is equally imperative that non-statutory organisations have realistic workloads to continue to function and remain resilient in times of austerity. Strategic placement of care navigators could support locality demand for telecare assessment to facilitate discharges from hospital. Older adults have increasingly more complex needs and want to continue to live at home. This study highlights the perception of home assessment as a gold standard of practice for care navigators, to help reduce pressures on the social care system using telecare as an early and preventative measure. In order to develop a more sustainable model for care navigators' to continue to provide telecare, their capacity to provide home assessments needs further consideration.

## References

Asensio, J.G., Ruiz, A.G., Abos, G., Nuño-Solinís, R., Alday, A., Gutiérrez, E., Becerril, A., Zapata, R. and Moran, E.A. (2015), "Evaluation of an integrated telecare/telehealth pilot for complex chronic patients: the TELBIL+ T study", *International Journal of Integrated Care*, Supp, Vol. 15 No 5, pp. 1 - 2

Association of Directors of Adult Social Services (ADASS) (2015), "Distinctive, valued, personal: why social care matters: the next 5 years", ADASS, London. Available at:

<https://www.adass.org.uk/media/4475/distinctive-valued-personal-adass-march-2015-1.pdf>

(accessed 4 April 2017)

Association of Directors of Adult Social Services (ADASS) (2017), "Distinctive, Valued, Personal...Why social care matters even more in 2017", ADASS, London. Available at:

<https://www.adass.org.uk/distinctive-valued-personalwhy-social-care-matters-even-more-in-2017>

(accessed 4 April 2017)

Berge, M.S. (2016), "How Do We Understand Partnership Working? Experiences from a Telecare Project". *Social Policy & Administration*. Available at:

<http://onlinelibrary.wiley.com/wol1/doi/10.1111/spol.12273/full> (accessed 2 May 2017)

Bligh, J. (2016), "A mainstream social housing response to dementia", *Working with Older People*, Vol 20 No. 3, pp.144-150

Bowes, A. and McColgan, G. (2013), "Telecare for Older People: Promoting Independence, Participation and Identity", *Research on Ageing*, Vol. 35 No. 1, pp. 32-49

Christensen, J. K. B. (2016), "Does Telecare Improve Interorganisational Collaboration?" *International Journal of Integrated Care*, Vol. 16 No. 4, pp. 1–10

Department of Health (2016), "Care Act (2014) Part 1: Factsheets", available at:

<https://www.gov.uk/government/publications/care-act-2014-part-1-factsheets/care-act-factsheets>  
(accessed 2 May 2017)

Department of Health (2017), "Care and Support Statutory Guidance", available at:

<https://www.gov.uk/government/publications/care-act-statutory-guidance/care-and-support-statutory-guidance> (accessed on 2 May 2017)

Department of Health (2012), "Caring for our future: reforming care and support – White Paper", available at: <https://www.gov.uk/government/publications/caring-for-our-future-reforming-care-and-support> (accessed 3 May 2017)

Department of Health (2017), "2017-19 Integration and Better Care Fund", available at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/607754/Integration and BCF policy framework 2017-19.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/607754/Integration_and_BCF_policy_framework_2017-19.pdf) (accessed 4 May 2017)

Faife, D. (2007), "The role of assistive technology in achieving dignity, equality and respect", *Working with Older People* Vol. 11 No.2, pp. 20-24.

Firth, J. and Smith, J. (2011), "Qualitative data analysis: the framework approach", *Nurse Researcher* Vol. 18 No.2, pp.52 -62.

Gibson, G., Newton, L., Pritchard, G., Finch, T., Brittain, K., Robinson, L., (2016), "The provision of assistive technology products and services for people with Dementia in the United Kingdom", *Dementia*, Vol. 15 No. 4, pp. 681 -701.

Greenhalgh T, Proctor R, Wherton J, Sugarhood P, Hinder S, Rouncefield M. (2015) What is quality in assisted living technology? The ARCHIE framework for effective telehealth and telecare services. *BMC Medicine*, Vol 13 No 91, doi: 10.1186/s12916-015-0279-6

Hamblin, K. (2016), "Telecare, obtrusiveness, acceptance and use: An empirical exploration", *British Journal of Occupational Therapy*, Vol. 80 No 2, pp. 1 -7.

Hirani, S.P., Beynon, M., Cartwright, M., Rixon, L., Doll, H., Henderson, C., Bardsley, M., Steventon, A., Knapp, M., Rogers, A., Bower, P., Sanders, C., Fitzpatrick, R., Hendy, J., Newman, P. (2014), "The Effect of Telecare on the Quality of Life and Psychological Well-being of Elderly Recipients of Social Care over a 12- month period: the Whole Systems Demonstrator cluster randomised trial", *Age and Ageing*, Vol 43, pp. 334-341.

Heath, G., Cameron, E., Greenfield, S., Pattison, H., Kelly, D., Redwood, S., (2012), "Paediatric 'care closer to home': Stake-holder views and barriers to implementation", *Health and Place*, Vol. 18, pp. 1068 – 1073.

Hughes, R. (2013), "Wander-walking and the use of telecare: key principles to uphold", *Nursing and Residential Care*, Vol. 15 No 11, pp.734-737.

Jasper, R., Hughes, J., Sutcliffe, C., Abendstern, M., Loynes, N., Challis, D. (2016) "Accessing care coordination information: the non-statutory sector contribution", *Quality in Ageing and Older Adults*, Vol. 17 No 4, pp.263 -271.

Miller, R., Allen, K., Mangan, C., Glasby, J. (2013), "Singing from the same hymn sheet? Commissioning of preventative services from the third sector", *Journal of Integrated Care*, Vol. 21 No. 5, pp.288-299.

Mort, M., Roberts, C., Callen, B. (2013) "Ageing with telecare: care or coercion in austerity?", *Sociology of health & illness* Vol. 35 No 6, doi/10.1111/j.1467-9566.2012.01530

Office for National Statistics, (2012), "Health expectancy at birth and at age 65 in the United Kingdom, 2008-10", *Statistical Bulletin*, available at:

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/healthexpectanciesatbirthandatage65intheunitedkingdom/2012-08-29> (accessed on 3 April 2017)

Office for National Statistics (2015), "National population projections for the UK, 2014-based", *Statistical Bulletin*, Available at:

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2015-10-29> (accessed on 3 April 2017)

Office for National Statistics (2016) "Population Estimates for UK, England and Wales, Scotland and Northern Ireland: Mid-2015", available at:

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/latest> (accessed on 4 April 2017)

Peek, S.T.M., Wouters, E.J.M., Van Hoof, J., Luijckx, K.G., Boeije, H.R., Vrijhoef, H.J.M., (2014), "Factors Influencing Acceptance of Technology for Aging in Place: A Systematic Review", *International Journal of Medical Informatics*, Vol. 83, pp. 235 -248.

Ritchie, J., Spencer, L. and O'Connor, W. (2003), "Carrying out Qualitative Analysis", in Ritchie, J. and Lewis, J. (eds), *Qualitative Research Practice, A guide for social science students and researchers*, London: Sage Publications, pp. 219 – 262.

Roulstone, A., Harrington, B., Buse, C., Fry, G. (2013) "The Role of Telecare in Meeting the Needs of Older People, themes debates and perspectives in the literature on ageing and technology", Available at: <http://www.aktive.org.uk/publications.html> (accessed 11 January 2018)

Steventon, A., Bardsley, M., Billings, J., Dixon, J., Doll, H., Beynon, M., Hirani, S., Cartwright, M., Rixon, L., Knapp, M., Henderson, C., Rogers, A., Hendy, J., Fitzpatrick, R., Newman, S., (2013), "Effect of telecare on the use of the Health and Social Care Services: Findings from the Whole Systems Demonstrator Cluster randomised trial", *Age and Ageing*, Vol. 42, pp. 501 – 508.

Stowe, S. and Harding, S. (2010), "Telecare, telehealth and telemedicine", *European Geriatric Medicine*, Vol. 1, pp. 193 - 197

Windle, K., Wagland, R., Forder, J., D'Amico, F., Janssen, J., Wistow, G. (2009), "The National Evaluation of Partnerships for Older People Projects: Executive Summary", Available at: <http://www.pssru.ac.uk/pdf/rs053.pdf> (accessed 03 April 2017)

<https://www.tsa-voice.org.uk/health-social-care/general-faqs>

**Table 1. Framework Approach**

Data Analysis

Familiarisation	Reading transcripts and listening to audio recordings on numerous occasions
Identification	Constructing an initial coding framework, revise and refine and repeat process until no new themes are generated
Indexing	Use of NVivo version 11 to organise codes into categories
Charting	A matrix was created for each theme by abstracting, summarising and charting data for each case and each code within that theme
Mapping and Interpretation	Thematic analysis was carried out on the managed data set by reviewing the matrices and making connections between codes and cases

(Heath et al 2012)