SMARTER HOMES FOR THE FUTURE STOCKTON ON TEES

EVALUATION REPORT



KD Consultation Solutions

MARCH 2012







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1 Acknowledgements

1.1 Delivering an innovative and challenging project can only be a success with good will, commitment and enthusiasm. All the people involved in this project were doing this project in addition to their daily roles. Sincere thanks goes to the whole project team for their input, in particular:

Keith Hobbs – Care Call and Telecare Promotions Coordinator, Stockton on Tees Borough Council

Natalie Hanchard – Commissioning Manager – Mental Health, Stockton on Tees Borough Council

Peter Smith - Reablement Services Manager, Stockton on Tees Borough Council

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Project Evaluation

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EXECUTIVE SUMMARY

2 Executive Summary

2.1 Making simple but effective changes to the design of living space and using Assistive Technology has been found to significantly improve the mental well-being and quality of life for people with dementia within hospital and care home settings. However, these principles have not been tested within the home environment. The innovative Smarter Homes for the Future Project trained care staff in these principles and piloted these changes with dementia clients and their carers within their homes.

The Designs for Living Principles

2.2 A safe and well-designed living space is a key part of providing the best care for people with dementia. Everyday items designed to make life easier for people with dementia really do make a difference. Good design for dementia is based upon contrast, colour and clarity. From alarms to sensors, from cutlery to beds, a wide variety of items can improve life for people with dementia.

Evaluation Methodology

2.3 To measure the success of the project a detailed evaluation study was conducted, looking at both impact and process. The methodology used for this evaluation ensured that all consultees were included in a manner appropriate to their needs and experiences. The information used was a mix of both quantitative and qualitative data and involved face to face interviews and questionnaires.

Key Findings

- 2.4 The Smarter Homes for the Future project has had a positive impact on the clients and carers involved within the study. However it is important to note that the number of case studies was small; so caution needs to be made about assumptions used.
- 2.5 The impact has been on clients, carers, care staff and associated agencies and practitioners. For clients there have been early indications that their mental well-being has improved. For carers there is a greater feeling of safety, security and support. Care staff have a greater appreciation of dementia as a condition and an enhanced awareness of the actions and interventions clients can take to slow down the progression of dementia; allowing them to remain in their homes longer. For the associated agencies and services and other practitioners involved, the impact

has been a greater appreciation of how physical, environmental and technological interventions can make a difference.

- 2.6 In the study clients were eligible to participate if they had a diagnosis of dementia. This proved problematic when recruiting clients, as many did not have this diagnosis. There were many potential clients on care agencies books; they could not be approached to participate in the study as they did not have a medical diagnosis of dementia.
- 2.7 This timing of the interventions is vital. Very early on in the project it was accepted by the project team that the impact of the interventions would be strongest with those at very early stages of dementia (most likely still only being diagnosed with memory loss instead of dementia).

"I personally feel that although the input has been a little later in people's lives than I would now like to see, I have seen an improvement in the clients involved and this has given me the insight that an earlier intervention/supply of information would be more beneficial".(Professional)

"I would like to be able to intervene at a much earlier stage to give carers and their partner/family members the relevant information to make their homes "Dementia Friendly" and make them aware of the array of technology that is available to help maintain a sense of independence for people within their home environment and lessen the "responsibility" of carers". (Professional)

"Any interventions to support dementia need to be done at the earlier stages. As the dementia moves into the later stages, the impact would actually become detrimental". (Professional)

2.8 Consideration also needs to be given to the reasons why potential 'case study clients' chose not to take part in the study. Although evidence may suggest the combination of Assistive Technology and Designs for Living principles have a positive impact, other factors have a stronger influence; particularly resistance to change or a belief that change would make the condition worse. It is by understanding these

strong influences, that the full impact of this combination of principles and interventions can be truly effective.

"We have found that some family members declined the project as they believed that it may affect the health and wellbeing of their loved one". (Professional)

- 2.9 It is possible that a lack of awareness, understanding and 'proof' that these interventions are worth the changes and effort could overcome some of this resistance. There is a general public preconception about dementia that change is a bad idea and may cause additional and increased problems for the carer or client; these views would need to be considered in future implementation.
- 2.10 When looking at the process element of the study there were a number of key factors to consider:
- Multi-agency working
- Participation
- Timing
- Staff retention and training
- Project Management

Recommendations

- 2.11 The following recommendations would ensure the aims of the study were fully achieved:
- Follow up study run a second pilot study with more clients. These clients would need to be at an earlier stage of memory impairment/dementia with no restriction on having a diagnosis. The study would need to take into account issues raised regarding the processes used in the project delivery and the impact of the interventions.
- Information and publicity produce a multi-agency booklet which would be circulated widely. This should contain information on the Designs for Living principles and Assistive Technology, support, dementia pathways and advice for people with memory loss or dementia.

3. Training – Develop a local training course based on the course delivered by Stirling University, to enable more people to be trained. The focus of training should be on home care staff, managers and carers.

3 Introduction

- 3.1 Making simple but effective changes to the design of living space and using Assistive Technology have been proven to significantly improve the mental well-being and quality of life for people with dementia within hospital and care home settings. However, this principle has not been tested within the home environment. The innovative Smarter Homes for the Future Project has piloted these changes with dementia clients and their carers within their own homes.
- 3.2 This report details the findings of the evaluation to see if positive improvements have been made to both the clients and carers mental well-being and quality of life.

4 Background

- 4.1 Stockton on Tees Borough Council received funding via the North East Improvement and Efficiency Partnership (NIEIP) for a year-long project to support implementation of objective 6 of the National Dementia Strategy (2009). Objective 6 aims to improve community personal support services for people with dementia and their carers. The project was named "Smarter Homes for the Future"; and involved the following organisations and teams:
- Stockton on Tees Borough Council
 - Commissioning for Mental Health, Personalisation, Independent Living and Social Care
 - Housing Service
 - Community Protection Care Call (Telecare)
- Probation Service Community Payback
- Home Care Agencies
 - Brookleigh Caring Services Ltd.
 - Direct Health Homecare
- North Tees & Hartlepool NHS Foundation Trust Speech and Language Therapy Services
- University of Stirling

5 Aims of the Project

- 5.1 The project aimed to improve the quality of life for people with dementia and their carers by identifying individual needs, and providing specialist services within general home care services. The project set out to achieve this by:
- providing home care staff and other professionals with specialist dementia training sessions run by the University of Stirling (details of which can be found at appendix one);
- asking these staff to share their learning with other staff, people with dementia and their carers and other professionals involved in their care;
- using this learning to make recommendations to people with dementia living at home, and their carers, about how their homes could be adapted to make them more "dementia friendly", (using the Designs for Living principles see page 12) including focus of colour, contrast and clarity; this could mean changing wooden cupboard doors with glass/clear doors or by labelling them so that people can make sense of identical looking cupboards; or changing the colour of toilet seats, handrails and towels in the bathroom so that they are easily identifiable; and the use of Assistive Technology.

6 The University of Stirling – Designs for Living Principles

6.1 The University of Stirling's, Dementia Service Development Centre have undertaken research into what constitutes good dementia design; the 'Designs for Living' principles. These focus on the principles of contrast, colour and clarity. These have proven to be extremely effective for people with dementia in hospital and care home settings. These have not as yet been explored within people's own homes. The Smarter Homes for the Future project aimed to explore this innovative approach.

The principles of the Designs for Living:

6.2 A safe and well-designed living space is a key part of providing the best care for people with dementia. Everyday items designed to make life easier for people with dementia really do make a difference. Good design for dementia is based upon contrast, colour and clarity. From alarms to sensors, from cutlery to beds, a wide variety of items and changes to the environment can improve life for people with dementia.

Bathroom design for people with dementia



6.3 The bathroom can be a potentially dangerous place. Hot water, taps left running and slippery surfaces are all hazards. Contrasting colours will improve bathroom facilities. Toilet seats, handrails and towels should all be easily identifiable. Even something as simple as soap should be a different colour from the sink it sits on.

Kitchen design for people with dementia





6.4 Making things clear often helps a person with dementia. Glass jars for tea and coffee, clear-fronted cookers and even fridges with glass doors can make a difference. By installing glass doors on units, people with dementia can make sense of what would have been identical looking cupboards.

Bedroom design for people with dementia





6.5 Helping a person with dementia get a good night's sleep is vital. Finding their bed may be confusing, so use contrasting bed linen and sheets to clearly define their sleeping area. Raised edges not only help prevent people falling out of bed but provide psychological support for those who had shared a bed with a partner for many years. People with dementia can be confused when they see their reflection in a mirror as they may not recognise the person who is looking back at them. The use of mirrors which can be covered or easily removed can help prevent such distress.

Living room design for people with dementia







6.6 Technology has revolutionised living room design for people with dementia. Seats fitted with pressure pads can turn on lights as you get up or sit down. Fireplaces with flame effect fires can be made from wipe-clean materials and programmed to operate at specific temperatures.

Dining room design for people with dementia



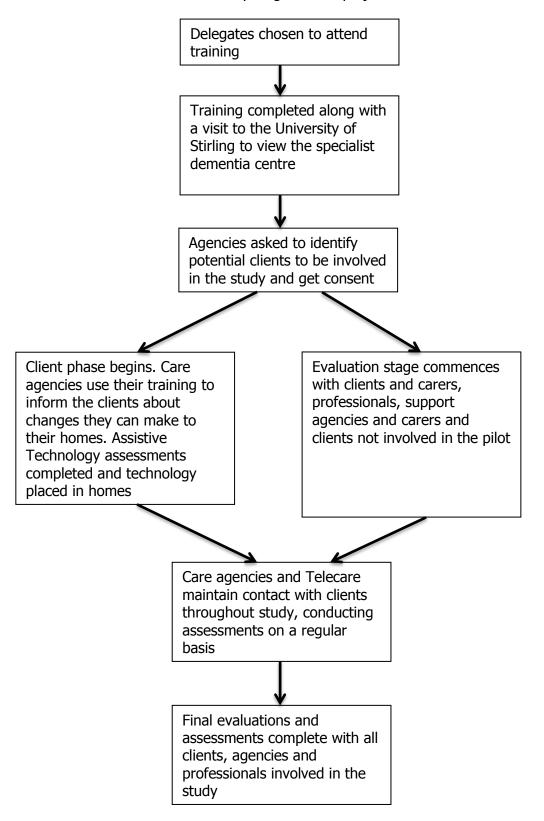
6.7 Even the way in which you set a table can improve the life of someone with dementia. Use contrasting colours for cutlery, crockery and table cloths. Heavier plates with lips are less likely to slip or spill. Ceramic or porcelain mugs and cups make drinking more pleasurable than from plastic. People with dementia need quality eating and drinking time to live a healthy lifestyle.

Further details of the University of Stirling's Research and the Designs for Living principles can be found at:

http://dementia.stir.ac.uk

7 Project Overview

The flow chart below details the key stages of the project:



8 Project Management

- 8.1 The project was delivered by a number of agencies. To ensure the project maintained focus and momentum a series of project management tools were put into place. These included:
- Individual work packages which were developed by the project team and once agreed were signed off by each person responsible for delivering them
- A high level timeline which identified key milestones to be achieved throughout the project
- A Gannt chart which set out clearly the timescales and required actions both overall and of individuals within the project. This was reviewed at each project meeting throughout the project
- Monthly agency highlight/ update reports were produced and fed back to the project team. These recorded progress and issues and risks. Where required the project team discussed these issues and risks and identified remedial action
- Issues and Risk Logs to record and monitor factors affecting delivery of the project
- 8.2 Midway through the project it became clear to the project team and project lead that there were some issues of confusion around project delivery and roles and responsibilities which were threatening to hold back the project. To address this an audit was completed and each agency was visited to ensure roles and responsibilities were clear and that the data required was being collected.

9 Project Evaluation

9.1 Throughout the project an independent evaluation has been conducted looking at both process and impact. This report presents the findings of this independent evaluation.

10 Methodology

- 10.1 The methodology used ensured that all relevant consultees were included in the evaluation in a manner appropriate to their needs and experiences. Listed below are those included in the evaluation (full details of the agencies involved can be found at appendix 2):
- People with dementia and their carers (included in the study)
- People with dementia and their carers (not included in the study)
- Service providers and involved professionals
- Project management and delivery team
- Specialist officers and professional support agencies
- 10.2 The information used was a mix of both quantitative and qualitative data; face to face interviews, case studies of the clients involved in the study and questionnaires covering:
- Pre and post intervention experiences
- Adapting to the interventions
- Lessons learnt
- Impact of the interventions
- 10.3 To assess the impact of the interventions, the Warwick-Edinburgh Mental Well-Being scale (WEMWBS) was used. The scale comprises 14 items that relate to an individual's state of mental well-being (thoughts and feelings) in the previous two weeks. Responses are made on a 5-point likert scale ranging from 'none of the time' to 'all of the time'. Each item is worded positively and together they cover most, but not all, attributes of mental well-being including both hedonic and eudaimonic perspectives. (Further details of the scale can be found at appendix 3).

CASE STUDIES

11 Case Studies

- 11.1 At the start of the project seven volunteers consented to take part in the study. They all had a diagnosis of dementia and were being cared for by either Brookleigh Caring Services of Direct Health. Through the period of the study two dropped out the project due to ill health and bereavement and one additional person joined the study in November 2011. To protect confidentiality no names have been used within the case study reports.
- 11.2 Assessments were made of the clients within the study by both the designated care agency and the Telecare Team. The care agencies made initial assessments of the homes, and where appropriate, made recommendations using the 'Designs for Living' principles. The Telecare Team also made initial visits and made assessments of what technology could be effective. Where the client /carer agreed, the Assistive Technology was then put into the homes. Details of the technology used are at appendix 5.
- 11.3 The care agencies subsequently made regular visits and using the Warwick-Edinburgh Mental Well-being scale (see appendix 3), along with informal discussions with the client and carers, monitored the impact of the interventions.
- 11.4 The Telecare Team also made further visits and assessments to review the Assistive Technology and make additional recommendations and adjustments where appropriate.

Client One Mr A Born 1936 (aged 75) Married

- 11.5 Mr A lived with his wife (who died January 2012). Mr A has a diagnosis of dementia, along with Parkinson's disease and bowel cancer. Mr A is prone to night time wandering. Mr A remained in the study until his wife died, he then went into day care three times per week.
- 11.6 From discussion with his wife, it was established that Mr A often wakes in the night and leaves their shared bedroom, due to him requiring the bathroom. The upstairs lights are left on throughout the night to enable Mr A to get to the bathroom easily.
- 11.7 Suggestions were made to fit a lamp module which would turn the lights on but Mrs A stated that she leaves the light on and prefers to do this. Mrs A was struggling with the night times as she was awake worrying that she would not know when Mr A was out of bed. A bed sensor was fitted to Mr A bed, which alerts Mrs A (via a vibration under her pillow), when he leaves the bed.
- 11.8 The following additional Assistive Technology has been installed::
- Smoke detectors in the lounge and on the landing
- Carbon monoxide sensor on the boiler
- Temperature extreme sensor in the kitchen
- Care Assist and Minuet Watch for Mrs A (see appendix 5 for full details of the Assistive Technology)
- 11.9 The care providers conducted assessments and recommendations using the 'Designs for Living' principles, the findings of these follow:

Lounge / Living area: This room has a lot of natural light, neutral wall colourings, neutral carpets with no patterns. There are displays of family photographs. No changes or recommendations were needed.

Kitchen: The kitchen is light and airy with a good floor covering and good colour contrasts. Mrs A does all the food and drink preparations so no adaptations were recommended. Bedroom: The assessment identified the client was often up and around during the night. The bedroom is large with plenty of room to manoeuvre, with good lighting. The bathroom is in eye sight of the bedroom and there are no large mirrors. Suggestions were made to change the bedding to contrasting colours.

Bathroom/toilet: This room is well lit with a toilet and bidet in situ. The towels are a contrasting colour. No recommendations were made.

Entrance / exit: There were issues relating to Mr A often leaving the home unobserved. This was fed to the Assistive Technology team, but no additional interventions were made.

Impact of interventions

11.10 Using the Warwick-Edinburgh Mental Well-being scale¹ the maximum score a client could achieve is 70. On Mr A's initial assessment he scored 30. This rose to 39 on the second assessment and to 43 by the third; indicating that overall the interventions have started to have a positive impact on his mental well-being (see appendix four for individual client scores). The assessments were made monthly.

11.11 The areas showing the biggest improvements moving two points on the scale from 'none of the time' to 'some of the time' were:

- I have been feeling interested in other people
- I've had energy to spare
- I've been dealing with problems well
- I've been feeling good about myself
- I've been able to make up my own mind about things

11.12 This can be substantiated further using the informal assessments. The first post intervention assessment indicated that Mr A sleep had improved slightly and that although Mr A was continuing to wake in the night, this was becoming less frequent. The change in bedding had also helped Mr A to find and settle back to bed more effectively.

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¹ Scale used for the Warwick-Edinburgh Mental Well-being scale None of the time (1), Rarely (2), Some of the time (3), Often (4), All of the time (5)

- 11.13 By the final assessment, Mr A appeared to be 'more alert', talking and listening to conversations. Mr A was regularly out of his chair and also eating regularly, all positive changes; prior to this Mr A would remain quiet and sit in his chair all day. Mr A wife continued to feel that Mr A sleep pattern was improving.
- 11.14 Although the focus of the study was the client, the impact on the carer cannot be underestimated. Before any interventions, Mrs A did not sleep, as she was worried about her husband, and felt lonely and isolated as she had little or no interaction from her husband. These small but simple interventions have significantly changed both Mr and Mrs A's life and their mental well-being.
- 11.15 The study of Mr A ended with his assessment in December 2011, as his wife died in early January 2012.

Client Two Mrs B Born 1934 (aged 77) Lives alone

- 11.16 Mrs B lives alone but attends a Day Centre five days per week. Mrs B is supported by her daughters, but wishes to remain in her own home. Mrs B has Alzheimer's disease and there are no other reported medical conditions; her daughter states that she is 'fit as a fiddle'.
- 11.17 The assessment by the Telecare team identified the following:
- 11.18 There is a steel shutter to the rear bedroom window which is permanently locked in place; the rear bedroom is not in use as Mrs B sleeps in the front bedroom.
- 11.19 A recent problem with the automatic washer resulted in a flood in the kitchen; a flood detector beneath the kitchen base next to the washing machine has been installed. A second flood detector has been installed behind the pedestal in the bathroom.
- 11.20 Property exit sensors were fitted to monitor when people enter or leave the property; these are monitored by the Telecare centre.
- 11.21 The following additional Assistive Technology has been installed:
- Smoke detectors in the hall, lounge and bedroom
- Carbon monoxide sensor
- Temperature extreme sensor in the kitchen
- 11.22 The care providers conducted assessments and recommendations using the 'Designs for Living' principles, the findings of these follow:

Lounge / Living area: This room has neutral wall coverings (with a very light pattern), a single coloured carpet and lots of natural light. The lounge chair is by the window and there are lots of family photos. No recommendations were made.

Kitchen: The kitchen is spacious with solid fixed cupboards. All essential items are in clear boxes to allow for easy identification. Mrs B does not make her own meals (these are made by the carer). No changes were recommended.

Bedroom: The bedding is in contrast to the neutral wall covering and flooring and there is good natural light. The bathroom is not in clear view of the bedroom, so a recommendation was made to leave the bathroom light on during the night.

Bathroom: The bathroom has already had some adaptations, with a walk in shower, toilet frame and a black contrast toilet seat. Recommendations were made to change the towels to a contrasting colour.

Entrance / exit: The client occasionally leaves the property. Assistive Technology recommended putting door sensors on the front door (these were fitted).

Impact of interventions

11.23 Using the Warwick-Edinburgh Mental Well-being scale² the maximum score a client could achieve is 70. On Mrs B's initial assessment she scored 35. This rose to 45 on the second assessment; 48 on the third and 50 by the final assessment; indicating that overall the interventions have started to have a positive impact on his mental well-being (assessments were made monthly).

11.24 The areas showing the biggest improvements moving at least two points on the scale:

- I've been feeling optimistic about the future (rarely to often)
- I've been feeling useful (rarely to often)
- I've had energy to spare (this moved from rarely to often, but then went back to some of the time)
- I've been dealing with problems well (none of the time to some of the time)
- I've been feeling confident (none of the time to some of the time)
- I've been able to make up my own mind about things (this moved from none
 of the time to some of the time, but then back to rarely)

11.25 This can be substantiated further using the informal assessments. Although there were few issues of concern with Mrs B; as she sleeps well and although she knows she forgets things, she is not distressed by this (Contented Dementia); the fact that she has maintained her positive outlook and happiness indicates that her

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² Scale used for the Warwick-Edinburgh Mental Well-being scale None of the time (1), Rarely (2), Some of the time (3), Often (4), All of the time (5)

dementia has not shown any signs of advancing. The daily carer stated "She continues to be her usual happy self".

11.26 The interventions put into Mrs B house were predominantly for safety, as she lives alone. Whilst there have been many activations to the sensors, these have all been due to scheduled visits. The impact however, has been on Mrs B's family, who now have peace of mind that should the door be opened, or any of the other sensors activated, the sensor will alert the monitoring centre immediately and contact will be made to ensure everything is alright.

Client Three Mr C Born 1936 (aged 75) Married

- 11.27 Mr C lives with his wife. Mr C has a Parkinson's disease related diagnosis of dementia. Mr C is prone to severe memory loss and wandering.
- 11.28 The assessment by the Telecare team identified that Mr C often wakes in the night and leaves his bedroom. This is due to Mr C requiring the bathroom or being disorientated. In an attempt to safeguard Mr C a Care Assist pendant was provided. The Care Assist has been programmed to receive all activations from all sensors within the property, giving the location visually and a vibrating alert. In a unique installation a pair of bed sensors has been programmed to activate on the Care Assist between the hours of 10pm and 5.20am, should Mr C leave his bed. (Full definitions of the Assistive Technology can be found at appendix 5).

11.29 The following additional Assistive Technology has been installed:

- Smoke detectors in the dining room and loft space (as there is evidence of combustible sources). Advice was given to remove the polystyrene / foam tiles that were fitted on the dining room ceiling
- Carbon monoxide sensor on the boiler and the gas fire
- Temperature extreme sensor in the kitchen
- Fall sensors
- 11.30 Mr C has had three falls. In each case the senor triggered a response from the Telecare ranging from assistance to help Mr C from the floor, to an ambulance being requested. However, the sensor had also been triggered for a number of false alarms. Upon review with the client and carer the fall sensor was removed and the Care Assist pendant used in its place.
- 11.31 The care providers conducted assessments and recommendations using the 'Designs for Living' principles, the findings of these follow:

Lounge / Living area: This is a small room, with good natural light and lots of family photographs. The carpet has a pattern and recommendations were made to change to plain carpet.

Kitchen: Mrs C does all the food and drink preparations so no adaptations were recommended.

Bedroom: The carpet and bedding are patterned. Mr C is prone to waking and getting up in the night, so recommendations were made to get plain contrasting bedding.

Bathroom/ toilet: There are grab rails, contrasting colours and an elevated toilet seat with frame. No recommendations were made.

Entrance / exit: Mr C occasionally leaves the property without Mrs C knowledge and is prone to falls. This has been picked up by the Telecare Team.

Impact of interventions

11.32 Using the Warwick-Edinburgh Mental Well-being scale³ the maximum score a client could achieve is 70. On Mr C's initial assessment he scored 33. This rose to 36 on the second assessment and 38 on his final assessment (assessments made monthly); indicating that overall the interventions had started to have a positive impact on his mental well-being. Although no areas showed a substantial improvement (moving two points on the scale), many moved one place. (These can be seen at appendix 4)

11.33 Client feedback indicated that the presence of the bed sensors started to improve the sleep patterns and Mr C's mood. The presence of the Assistive Technology is making them feel much safer, secure and supported in their home environment.

11.34 In January 2012 Mr C had a fall and has now been hospitalised. Mrs C has indicated that since being admitted to hospital Mr C has been 'quite confused'.

11.35 This deterioration outside of the home environment supports the case that any change in environment can quickly have a negative impact on mental well-being.

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³ Scale used for the Warwick-Edinburgh Mental Well-being scale None of the time (1), Rarely (2), Some of the time (3), Often (4), All of the time (5)

Client Four Mr D Born 1940 (aged 71) Lives with partner

- 11.36 Mr D lives with his partner (who has a Parkinson's disease). Mr D has Alzheimer's disease. Mr D and his partner have daily personal care support. The home is currently undergoing substantial renovations to accommodate their deteriorating health.
- 11.37 The Telecare assessment identified that Mr D is prone to falls whilst going to the toilet on a night. A bed sensor was installed on Mr D's bed with a lamp module in his room which switches the lamp on. It was agreed that the lamp module would be moved into his partner's room so that the lamp will notify his partner that he is out of bed.
- 11.38 Property exit sensors were fitted (virtual sensor), and frequent calls are received by the Telecare Team.
- 11.39 The following additional Assistive Technology has been installed:
- Smoke detectors in the hall, landing, conservatory and dining room
- Property exit sensors
- Carbon monoxide sensor
- Safe socket (bedroom)
- Temperature extreme sensor in the kitchen
- 11.40 A review of the clients' situation in November meant some alterations to the technology in place:

"Mr D has recently had a blood clot and is receiving treatment for this. The couple have made a decision to amalgamate their bedrooms downstairs; however this will not be until early January as it involves some structural work being carried out knocking through a wall in the dining room and the installation of a wet room.

They are also having the main bathroom floor levelled so that there are no steps down into the room; they believe that this will help them at a later date should the property be put up for sale.

The bed sensor has been removed as there were instances where a false alarm was generated; it appears that the problem is with the weight of the mattress, the clients have asked that we do nothing until the bedroom is relocated".(Assistive Technology provider)

11.41 The care providers conducted assessments and recommendations using the 'Designs for Living' principles, the findings of these follow:

Lounge / Living area: The rooms are all very large and have neutral flooring. There is good natural light. Information was given about the impact of neutral colour schemes, contrasting colours and the client intends to use this information once the renovation work is complete.

Kitchen: There is a WC off the kitchen. The kitchen will be affected by the renovations.

Bedroom: The bedroom is to be relocated downstairs with an en suite wet room.

Bathroom / toilet: This room is a cause for concern at present but is being relocated downstairs and will be made fit for purpose based on the 'Designs for Living' principles.

Entrance / exit: There are lots of uneven steps outside the front entrance and a fish pond. Advice was given to make these areas safer.

11.42 In this case many plans are being made to make the house safe for both Mr D and his partner, they need adaptations to make the home a safe environment for both of them. The information given has been well received and the clients are keen to use the information when designing their renovated home.

Impact of interventions

11.43 Using the Warwick-Edinburgh Mental Well-being scale⁴ the maximum score a client could achieve is 70. On Mr D's initial assessment he scored 30. This rose to 37 on the second assessment and 38 on his final assessment; indicating that overall the interventions had started to have a positive impact on his mental well-being. Although many areas have started to show slight improvements, moving a point up the scale (see appendix 4), Mr D has shown an improvement in his interest in new things moving from 'none of the time' to 'some of the time'. (Assessments made monthly)

11.44 Client feedback has been positive and there is a distinct optimism about the future both in terms of how they can adapt their home environment to minimise the impact of their deteriorating medical conditions, whilst maintaining their independence, but also in terms of Assistive Technology support maintaining their safety. Already the client has indicated how impressed they have been by the response from the Telecare Team. When Mr D has attempted to leave the property the Telecare alerts have worked well.

⁴ Scale used for the Warwick-Edinburgh Mental Well-being scale None of the time (1), Rarely (2), Some of the time (3), Often (4), All of the time (5)

Client Five Mrs E Born 1934 (aged 77) Lives alone

11.45 Mrs E lives alone in a large three bedroom bungalow and was diagnosed with early stages of dementia in October 2011. Mrs E's husband is in a Care Home, with advanced stages of Alzheimer's disease. Mrs E also has bowel problems; having had part of her bowel removed and also has low blood pressure, which is controlled with medication. Mrs E has struggled to come to terms with this and has frequent mood swings, has anxiety attacks and palpitations; which is affecting her relationships with family and friends. Mrs E is also very resistant to change.

11.46 The Telecare assessment identified the family would like door sensors to be installed as there had been instances of Mrs E wandering. Door sensors have been installed to both front and rear doors and automatically 'arm' themselves providing a notification of someone either entering or exiting the property.

11.47 The following additional Assistive Technology has been installed:

- Smoke detectors in the hall and landing
- Flood detectors (kitchen and bathroom)
- Property exit sensors
- Carbon monoxide sensor
- Fall detectors
- Temperature extreme sensor in the kitchen
- Care Assist

11.48 The care providers conducted assessments and recommendations using the 'Designs for Living' principles, the findings of these follow:

Lounge / Living area: This room has plenty of space and has good lighting. No recommendations were made.

Kitchen: A small room with limited unit space. Recommendations made to label plugs to indicate their purpose.

Bedroom: A small room, which Mrs E struggles to manoeuvre around. Suggestions made to change to a 34 bed or a single.

Bathroom / toilet: The bathroom and toilet are in the same room. Mrs E has had a hip replacement so is unable to access the bath. Recommendations were made to fit a walk in shower and to fit plugs that prevent the sink from overfilling.

Entrance / exit: Recommended an alarm be fitted to indicate when people arrive and leave the property

11.49 Other issues:

- Problems losing keys suggestion to put them on the lounge table and on an ID holder, so they are easier to find
- Issues forgetting to take medication or taking too much suggestion to use
 Assistive Technology to support. In addition a medi-safe has been fitted to
 ensure medication is only taken when the carer is there.

Impact of interventions

11.50 Using the Warwick-Edinburgh Mental Well-being scale⁵ the maximum score a client could achieve is 70. On Mrs E's initial assessment she scored 38. This dipped to 33 and steadily rose to a final score of 37. The initial score of 38 was high as Mrs E scored 'I've been interested in other people' as a five (all of the time). In subsequent visits this then dropped to 'rarely' and 'some of the time'. Mrs E has only been in the study since November, and not all the recommendations have been implemented as yet; however, based on the results from those who have been in the study longer, it is likely that these mental well-being scores will continue to improve. The assessments for Mrs E were made every two to three weeks.

11.51 Client feedback from the daughter and paid carer has indicated that small changes have been implemented such as:

- Client now wearing her keys around her neck on a 'safe chain'
- Plugs have been labelled in the kitchen
- Tea and coffee and other regular use items have been left out on the worktops
- The family are buying a smaller bed

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⁵ Scale used for the Warwick-Edinburgh Mental Well-being scale None of the time (1), Rarely (2), Some of the time (3), Often (4), All of the time (5)

11.52 The professional carer also suggested that the family now felt more at ease, as their mother is now 'safer' and they have peace of mind that the Telecare Team are there. The family have been open to the changes suggested and are keen to continue to implement suitable adaptations as and when they feel they are appropriate.

Client Six Mrs F Born 1927 (aged 84) Lives alone

- 11.53 Mrs F lives alone and is supported by her daughter. Mrs F has a diagnosis of dementia. Mrs F did not take part in the study as she already had 'Designs for Living' interventions in place, but has been included as an example of good practice.
- 11.54 Mrs F's daughter, upon concerns for her mother's health, researched the condition on the internet and via local support groups and charities and identified some best practice ideas. Mrs F is keen to stay in her own home, so the family sought to find ways to make this both safe and supportive of her condition.
- 11.55 The care providers conducted an assessment using the 'Designs for Living' principles to identify the interventions the family had made.

Lounge / living area: Mrs F has a good source of natural light and has lots of family photographs. The carpet is plain and the walls a neutral colour. There are excellent memory items available to hand e.g. picture books, albums

Kitchen: Grab rails have been fitted from the lounge to the kitchen. The cupboards have been clearly labelled and those items used frequently are on the work surface (labelled).

Bathroom: Good light, contrasting suite and towels

Entrance / exit: The door locks via a knob so the key cannot be left in. Messages are left on the door for safety.

11.56 Although the family felt they had done all they could to support their mother to stay in the home, there may well have been some potential additional support that could have been given via the Telecare service. However the family were resistant to any outside support, feeling they had done everything possible.

Potential Clients

11.57 A number of potential volunteers were approached to take part in the study, but for various reasons chose not to. Brief details of these follow:

Case 1 – initial agreement for inclusion, then general health deteriorated and was admitted for 24 hour care.

Case 2 – Initial agreement for inclusion, unfortunately ** died.

Case 3 – initial agreement and consent given, family left the services of the care provider for personal reasons.

Case 4 – gave information to the family for inclusion, after reading information and discussion with care provider the family declined as they felt that ** has now settled with his current regime and they felt further changes may have a detrimental effect on his general condition.

Case 5 – gave information to family, although the family took the principles on board they felt that they did not want to be part of the project at this point in time. The potential client is now in 24 hour care.

Case 6 – gave information to family, although they felt that inclusion could be beneficial, they took on board the principles but felt that ** is a very strong character and may not comply with carer involvement.

Case 7 – the family felt that the 'project' would do more harm than good and that any changes implemented would affect their mother's health and state of mind.

Case 8 – family were not keen as the client had other health issues, so felt was too much to take on.

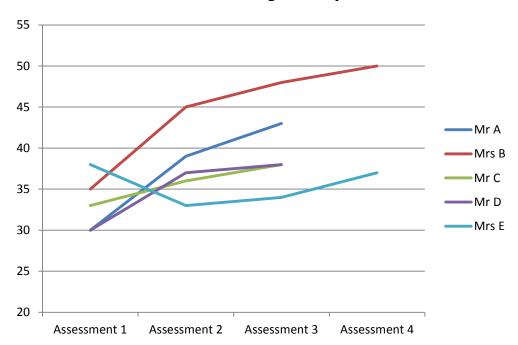
Case 9 – initially agreed but there was a problem with the phone line so the Telecare equipment could not be installed and they pulled out of the study.

Case 10 – Initially interested but then health declined and went into residential care.

Case study summary

11.58 In the cases where both 'Designs for Living' principles and Assistive Technology were taken into the home environment, there are early indications that they have had a positive impact on the mental well-being of the clients (using the Warwick Edinburgh Mental Well-Being scale), as can be seen in the graph below. The interventions have also provided reassurance of safety for the carers and family.

Summary of changes in assessment scores using the Warwick Edinburgh Mental Well-Being Scale by each client



11.59 However, it is important to consider that the sample size was small and other factors have to be taken into consideration e.g. home renovations, hospitalisation and bereavement. It is also important to remember that dementia is not the only condition a client may have. In most cases the clients had additional medical conditions.

11.60 The impact of the innovations and alterations do not stop at the client. In many cases the client lives with their carer, and their quality of life needs to be taken into consideration too. For example a client who wakes in the night and wanders can cause great distress for the carer; in one example the carer hardly slept until the Assistive Technology (bed sensors) was put into support her. It is not

just the client who is affected by 'dementia' and needs help but also the carer who needs support. We found that many interventions are actually more supportive to the carer than the client.

11.61 It is perhaps the case that a careful balance of both 'Designs for Living' principles to help the client and slow down the progression of dementia and the Assistive Technology to support the carer (whether living with that person or not) to know the client is safe are needed to enable clients to remain living in their homes.

11.62 The project allowed for clients and their carers to receive a great deal of additional support and attention; perhaps more than they may previously have received e.g. visits from the Telecare Team and regular assessments by the care agencies. This attention may in itself have had a positive impact on both the carer and the client. The sense of feeling valued, having a purpose and being part of something 'special' are all issues that need to be taken into account.

11.63 Consideration also needs to be given to the reasons why potential case study clients chose not to take part in the study, as although evidence may suggest the combination of Assistive Technology and 'Designs for Living' principles have a positive impact, other factors have a stronger influence; particularly resistance to change or a belief that change would make the condition worse. It is by understanding these stronger influences, that the full effectiveness of this combination of principles and interventions can be truly effective.

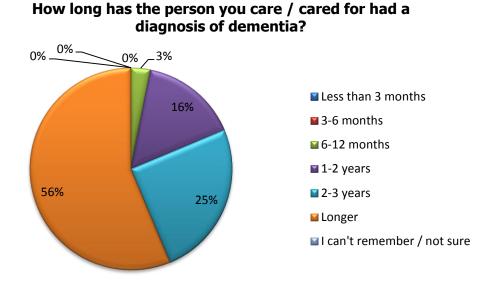
'the family felt that the project would do more harm than good. They believed any changes implemented would affect their mother's health and state of mind' (Care provider)

CARER AND CLIENT SURVEY

12 Carer and client survey

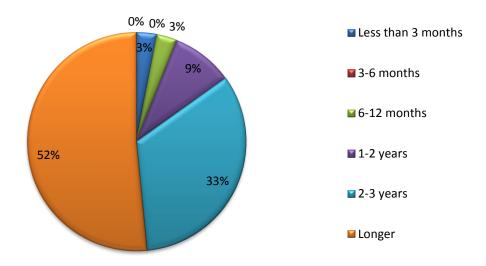
- 12.1 Gathering the views of clients and carers living in Stockton on Tees outside the study provided an opportunity to gain a better understanding of:
- their experiences of living at home with dementia
- their views on the 'Designs for Living' principles
- their potential use of Assistive Technology.
- 12.2 To do this a questionnaire was distributed to 200 people. In total 34 questionnaires were returned (32 from carers and 2 from clients) giving an overall response rate of 17%. The responses to the questionnaire follow:

58% of carers were currently caring for someone with dementia, with 40% having done so in the past.



12.3 Although the majority of clients have had dementia for longer than three years (56%), the chart below shows the length of care has a slightly shorter time profile; maybe indicating that care doesn't start immediately after a diagnosis but as the condition begins to deteriorate.

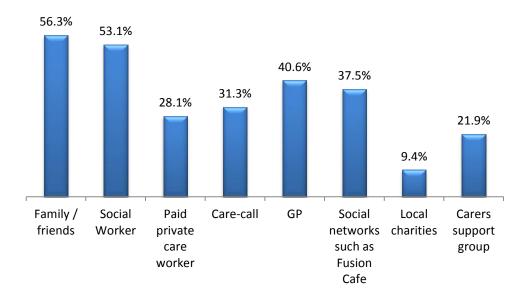
How long have you cared/did you care for the client?



12.4 The two responses from clients stated one had had a diagnosis for longer than three years and had been receiving care for this amount of time and the other 2-3 years and again they had been receiving care throughout; both were receiving care from their partner/ spouse.

12.5 77% of carers were caring for their partner/spouse with the remaining 23% caring for their parents. The chart below illustrates other help / support that carers received:

What external help/ support did you / do you have to help you care for the client in the home?



12.6 Other support included:

- Avalon sitting service
- Molly Maid cleaners / other cleaners
- Young Onset dementia team
- Fusion café
- Butterwick / Macmillan nurses

12.7 The two clients received support from:

- Family/friends (Both)
- GP (Both)
- Social networks
- Carers support group
- 12.8 When asked if there was other support they would like to receive. 17% of carers answered 'yes'. When probed further responses included:
- Support on an ad hoc basis. Which could be called on when things are difficult (I
 have Parkinson's and therefore some mobility problems)
- Due to financial reasons I am restricted to the support I receive
- Medical advice as the dementia illness progressively got worse; and when my wife should become a full time resident in a Stockton Care Home
- Home Care awareness would be advantageous and psychological therapy.
 Talking Therapy and more GP involvement would help. More support from Care Coordinator more support from Carer Support Workers.
- Home help
- 12.9 The second part of the questionnaire looked at carers' experiences; looking at both challenges for supporting someone with dementia to stay in their home along with potential solutions.

12.10 Below is a summary of the responses carers gave when asked what they felt were the biggest challenges / problems when dealing with someone living at home with dementia:

- Accessing specialist care
- Financial implications of care
- The 24/7 nature of care relentless / no time for themselves
- Emotional demanding frustrating and repetitive
- Other medical conditions of client and carer
- Accessing advice, support guidance and information

12.11 Listed below are the full responses given to the same question:

- Adequate care from agencies; with staff that are trained fully with the needs of people
 with dementia, I also think the financial side of care should be addressed, it is very poorly
 paid and yet costs clients all of their DLA or AA and more!
- The very fact that it was 24/7 and having to do everything myself
- The repetitiveness of questions. The person with dementia watching over everything you do. Not having any time to yourself. Items put constantly in the wrong place
- Making sure they are safe. Trying to keep them occupied and stimulated. Trying to keep your feelings of frustration under control. Stressful
- Dealing with my Fathers concerns about my Mother's dementia is hard. I try to ensure that things are as simple as possible and as organised for their convenience as I can make it, but my Dad finds her actions frustrating. She moves things and obviously denies it since she doesn't remember doing it. We are concerned when we take her out that she could get lost but she is not aware of the progression of her memory problems and does not understand or accept that she needs supervision. As far as she is concerned she forgets things and would be horrified if she knew the extent of her dementia. Since there is no point telling her what is wrong it can be frustrating acting as if everything is ok and remaining patient.
- The unpredictability of the disease and the varied emotions / actions that can take place during one day
- Doing everything in the house whilst coping with Parkinson's myself Loneliness - ** losing ability to talk as well as he did Getting to my own passion and playing in amateur orchestra
- My husband has had a partial lower limb amputation and has a heart condition which

makes things a lot harder when coping with dementia

- Having to repeat over and over again
- 1 Receiving professional advice at what stage dementia is at and when to make changes
 - 2 Receiving a list of recommended dementia Care Homes; and when they can be visited to assess them
- Ring at early hours and get day and night mixed up. Forget how to use things and rung us to come round. Put things away couldn't remember where he put it and blames others
- To make sure that they do not harm themselves
- Need to be present

Trying hard to understand what they want

Giving them leadership

Sharing household tasks i.e. work together

- No sleep, violence, aggression. Fathers safety
- Lack of information

When help is needed no-one at the end of the phone or put on hold or 'not my field', but I will find something out and then they don't!

Short of money all the time

- The very fact that it was 24/7 myself doing everything
- Coping with general tasks to aid patients and not receiving supportive elements
 In my case financial problems to support needs of patient and self (a disabled person) and
 I am very stressed out
- Trying to run my own home and their home and work at the same time. Not being recognised by my mother. Thought to be interfering
- Coping 24 hours
- Coping
- Together with existing medical condition extreme difficulty in holding attention / interest and overcoming boredom
- Taking too much on
- No social time
- Isolation, loneliness and facing one's own physical and mental abilities
- Fitting in care needs alongside a full time job and not living close by.
 Wrestling with the same memory/capability problems over and over again.
 Giving some home truths and explaining where help/support was needed.

- 12.12 Below is a summary of the responses carers gave when asked how these problems/ challenges could be solved:
- Better trained specialist staff
- More accessible day care for clients / respite care to give carers a break
- More education and information available about dementia
- Financial support

12.13 The full responses are given below:

- Extensive training, it's no good to the client or the full time carer at home if they cannot trust or feel safe leaving their loved ones with other carers when they have no specialist training.
- Making arrangements for day care to give me a rest and enable me to be refreshed enough to cope
- Can't be. Must take care of them until they reach a stage where it becomes impossible
- Hard to think of any way to solve these difficulties
- More group sessions, places of interest
 Topics of interest to occupy their time, but not feel judged or under any pressure to perform.
 - With other sufferers at a similar stage / development of the disease
- I think the solution is people but that is expensive and I feel I have to be careful with our savings so that I have enough when things get really difficult
- I have had to do changes to house to take into account all his medical needs as we don't qualify for direct payments
- In my case by keeping my cool or sometimes just by going into another room and counting to 10 (seems silly but it works)
- Yes, because medical and nursing staff who are trained in looking after residents will know from nursing patients suffering from Alzheimer's disease what stage they are at
- Find a cure
- Put them in somewhere there has 24 hours care. More sheltered homes around Stockton area and more right places.
- We have appreciated visits from Lustrum Vale staff and NHS support
- Home visits from carers, education on dementia and how to spot the early signs. We could have done more if we had recognised the illness

- 24hr helpline with people who know it all
 Extra weekly payment for travel and food as lots food made and wasted or left to go
 cold so have to make it again
 More money for washing powder as have to do more washing
 Help with heating
- A better appraisal financially to support needs required and more visits by appropriate services to support needs for patients at home and carers relief of burden
- Carers allowance should be paid to carers despite age also despite how much you earn
- Dependent on funds
- Help from others
- Patience
- By delegating
- Education people being made aware of all types of dementia

12.14 One of the clients also responded to this set of questions, saying that they found maintaining the home, washing, cleaning, making meals and generally running it as their biggest challenge. Their solution was to ask for support from family and outside agencies.

Remaining in the home

12.15 When the clients were asked if they felt efforts should be made to help clients with dementia stay in their homes as long as possible, one responded yes and one no. The reason given for no was:

"From experience, carers have no idea what they are taking on in terms of their relatives' illness, accidents and emergencies, hygiene and washing of the relative as the patient condition deteriorates. You soon find out who will help you!" (Client)

When carers were asked the same question, 75% cent said yes, 15% no and 10% were not sure.

12.16 The table below summarises the main reasons for supporting and opposing staying at home:

	Supporting		Opposing
•	Client would feel safer, happier and	•	Support from family and friends not
	more comfortable		always possible
•	Familiarity	•	Impact on carer – physically and
			mentally
•	Emotional impact on carers and		
	family		

12.17 The full reasons **supporting** staying at home were:

- Because they feel safer and well in their own environment. Unfortunately in the
 later stages of dementia it is not always possible to keep relatives at home
 especially if they need one to one care i.e. every part of their personal hygiene
 and movements
- It is their home and he is more comfortable at home than anywhere else.
 Alternative arrangements can also be very costly
- My parents have been together for so long and even despite the difficulties he
 would feel awful to not have her around. He would feel he was letting her down.
 She would not understand why she couldn't be at home and would be upset and

distressed.

- Because the person with dementia must be happier and comfortable in familiar surroundings. Also in our experience the care received in Care Homes is very inferior to care at home.
- To allow independence for as long as possible, from the sufferers point of view, safety in familiar surroundings
- Familiarity is comforting
 - Family and friends can come and feel happier Allows likes / dislikes are known and cared for More continuity / check on care given
- My husband *** is more placid in his comfort zone (i.e. own home) he is more confused around a lot of people
- Because its familiar to that person
- Mainly because they know the home care and won't feel lost in space
- They are still our loved ones on the outside. The dementia is affecting the brain so it's hard to give them up to strangers for their care. For the carers best to care at home as long as possible. The pain of the guilt never leaves you when we hand over
- Patient more contented and partner / family more relaxed, but having chosen this option must stress the lack of support for the carer and help to alleviate stress levels obviously very high coping with patient pressures.
- People thrive in own environment with family who love them. More person centred
- Better care in an environment that the person knows about
- To stop more confusion
- Because social services are very supportive
- Everyone should be enabled to stay in their own homes for as long as is safely possible
- More comforting environment

12.18 The reasons given **against** remaining in the home or by those who were not sure were:

- It is just so very hard physically and mentally
- No it is just too hard
- This is dependent on how many family & friends are available as a support network. Where this is limited, as in my case Mum became more withdrawn and effectively sat at home all day. However, when she was finally placed in residential care, she became visibly happier with an overall brighter outlook and personality. With all the activity in the home (care staff, kitchen staff, other residents, visitors etc.) she was no longer sat on her own and was actually enjoying herself. Residential care also removed a lot of the caring burden/pressure from me and I was no longer a passing stressed carer on my way to/from work. I finally became Mum's son again and enjoying our time together.
- Only where this makes sense for the individual concerned. One size does not fit all.
- After it was confirmed my wife had Alzheimer's; it was decided she would be looked after at home. I did not know what I was taking on and later obtained a list of Stockton Care Homes. All of which were visited. How some of these were on the list; is unbelievable
- Depends on the carer

Smarter Homes for the Future

12.19 When carers were asked their views on the smarter homes initiate and the principles for Designs for Living' and Assistive Technology the responses varied; some were positive, however others were less so. A summary table of these follows:

Positive	Mixed	Negative
Anything that can help	• Conflicts of research	• Concerns re
is a good thing	and current practice	practicalities and costs
	• Some aspects may	
	work but others may	
	not	

12.20 Mixed views

- I personally think it makes very little difference; changing things can often cause more confusion. Signage is of no use if the client has lost their ability to read; sometimes colours can help i.e. changing the toilet seat or removing mirrors as they don't recognise themselves and can get very upset
- My experience shows me that dementia clients are oblivious to their surroundings
- If research shows it has a positive outcome it can only be for the good. However, I was led to believe that change IS NOT good as it could mean the sufferer was not familiar with the surroundings and feel fearful in a strange room
- We would need expert help to do this. We don't actually know what would work and what wouldn't
- Depends on needs and services. Our carers services let us down they did not have enough experience and time
- It may reduce agitation but nothing else. I think the patient needs familiar things around them
- Don't think anything can slow down the advance of dementia. Only make things easier for the care giver
- Fixed signage may work. My laminated signs were often taken down or ignored.
 Re-decorating may work, but in my Mum's case there would have been resistance to this I'm sure. Mum had a care-call button, but I now think these are of little use to those with dementia. She hardly wore it and didn't know what

it was for. I can see their value for general elderly and disabled people who would understand their need and function. The gas shut-off system is a good system.

12.21 Positive

- I wasn't aware of these things but feel that anything that can help is of value
- We have not as yet put a lot of decorating etc. into our care plan. However I can see that such things can bring a new dimension to home delivery
- I found it all a big help at the early stages but not helpful later on as the dementia was taking firm hold
- Total agreement. Toilet colours, cutlery with coloured handles and dishes coloured make a big difference
- Anything that helps is a good thing
- As much aid as possible must be given to dementia sufferers, to not take away their self-esteem and confidence. Anything that slows down the progression of dementia is only a good thing

12.22 Negative

- I think it is impractical it would be an expensive and disruptive exercise
- Think this should not be done. Speaking personally the slightest change in home surroundings or change to routine and my husband is totally confused. You can teach a dementia patient something, then, half an hour later they have forgotten.
- It all seems a bit silly to me but I personally think a calm and quiet environment is more important
- Absolute drivel!
- My experience shows me that dementia clients are oblivious to their surroundings
- Don't agree. Treating the person as normally as possible and listening are far more important
- I have tried yellow sticker notes but not very useful

12.23 Respondents were then given the opportunity to give any other views or suggestions for how people could be supported to stay in their homes longer:

- More respite for the full time carer; it is the hardest job I have ever done and it really
 wears you down. But as a full time carer there is nothing more satisfying especially if it's
 your spouse because nobody knows you better
- Give the carer more support
- Need better facilities and training in hospitals, dentists, opticians, Care Homes etc.
- More technology readily available to single people living alone to allow family carers to feel their loved one is safe, surveillance equipment etc.
- Take them walking and do interesting things
- Assistive Technology would have helped my grandparents no amount of reminding or writing down things helped. Also assistance reminding of medication would have helped
- Home comforts familiarity with the home content equally important to changes
- Educate the carer
- If more time out for the carers was given then I think the time the person with dementia would stay at home longer as the carer would have chance to recharge their batteries and not be so tied down and close to a breakdown
- Give the carer more support
- Further support to carers and family members paramount and talk therapy as well as physiological therapy would be of great importance to support understanding and coping with dilemmas
- Must remember that all actions of the client are not really theirs
- More general support given to carers via home nursing / carers. General support groups
- A blanket approach across social care is wrong and doesn't pick up on those in my Mum's position, or others no doubt. The support mechanisms e.g. Dementia Café,, etc. appear to be geared towards retired couples, where one has dementia. I am sure loneliness is one of the main enemies of those living alone with dementia. Telecare can mitigate some of the physical dangers, but the company of others covers both these physical and emotional needs. There is a genuine need for quality residential care. Don't let budget pressures sway decisions too far the other way.

Conclusions

12.24 Although not unanimous, overall there is support for clients with dementia to stay in their homes as long as possible. To achieve this we need to address the challenges of:

- carer isolation and 'stress' coping 24/7
- carer and client vulnerability
- carer support family, friends and professionals
- safety for both the carer and client
- information about the condition, both medical and social
- awareness of what help and support is available
- financial constraints.

"Patient more contented and partner / family more relaxed, but having chosen this option I must stress the lack of support for the carer. Carers need help to alleviate their stress levels; these are obviously very high coping with patient pressures" (Carer)

"My parents have been together for so long and even despite the difficulties he would feel awful to not have her around. He would feel he was letting her down. She would not understand why she couldn't be at home and would be upset and distressed". (Carer)

12.25 Although awareness of the 'Design for Living' principles and the Assistive Technology are not widespread, overall respondents could see the potential benefits

"As much aid as possible must be given to dementia sufferers, to not take away their self-esteem and confidence. Anything that slows down the progression of dementia is only a good thing". (Carer)

However, there is some resistance to the concepts with some carers feeling that any changes may be detrimental to the client.

"I think it is impractical - it would be an expensive and disruptive exercise" (Carer

"Think this should not be done. Speaking personally the slightest change in home surroundings or change to routine and my husband is totally confused. You can teach a dementia patient something, then, half an hour later they have forgotten". (Carer)

There are also those who have mixed feelings about the concepts:

"If research shows it has a positive outcome it can only be for the good. However, I was led to believe that change IS NOT good as it could mean the sufferer was not familiar with the surroundings and feel fearful in a strange room". (Carer)

12.26 It is possible that a lack of awareness, understanding and 'proof' that these interventions are worth the changes and effort could overcome some of this resistance. There is a preconception that any change is a bad idea and may cause more problems for the carer or client and this would need to be challenged to make these principles the potential success they could be.

12.27 Many respondents also raised concerns regarding financial constraints. Although the impact of changes to the environment and use of Assistive Technology may be proven to be beneficial, these would cost money and for many therefore may not be a viable option.

PRACTITIONERS

13 Practitioners

- 13.1 To add another dimension to the data, the views of practitioners with expertise and working experience of dealing with clients with dementia were collected.
- 13.2 A series of in-depth interviews were conducted to understand their views of the project and also, where appropriate about the issues they felt needed to be considered when trying to support clients staying in their homes longer. Some of these practitioners were part of the project team and were actively involved, others were not.

Interview One

Peter Smith (Project Lead) - Reablement Services Manager, Stockton on Tees Borough Council Conducted August 2011

Why was the project established and what were you hoping to achieve?

- 13.3 There was already an established Operational Group in place to look at and implement the National Dementia Strategy. An opportunity came along to develop an innovative project and bid for funding and all the agencies in the group were keen to be involved.
- 13.4 The difficulty was trying to work out what had not already been done. Brookleigh brought to the groups' attention the work Stirling University had been doing around the 'Designs for Living' concept. The group considered this work and developed a project, which along with the addition of Assistive Technology would be innovative and challenging.
- 13.5 The aim of the project was to see if the concepts that were proven to be beneficial within formal Care Home settings for clients with dementia, could be applied to individual home settings; improving their mental well-being and quality of life.

"We wanted to move from medical interventions to social and environmental ones"

How the project worked

13.6 Staff from the care agencies and some of the project team were trained in issues around dementia, challenging their preconceptions, attitudes and understanding. This provided each agency with a team of specialist carers who would then roll out their training and understanding to the clients as well as their colleagues.

13.7 The training also raised some potential issues:

- Care staff need to be understanding of the fear and isolation for both the carers and the clients
- In the end, the project may not be purely about the interventions, but the impact of more attention and support

What are the motivations for being involved?

- 13.8 For the clients in the homes, the intention was to see them having a positive experience and to see how technology and changing ideas and concepts can help the client and their family understand dementia and the associated issues.
- 13.9 For the Council, the motivation is to provide a good quality of service to the clients and support people staying in their homes and out of Care Homes and formal care provisions as long as possible.
- 13.10 For the Care Agencies involved there is an expanding and specialist 'dementia market' within the Borough and further afield as we have an ageing population. Care Agencies will be keen to have as much training and learning in this area to improve their service offer to clients.

Potential problems and barriers

13.11 Initially the momentum was fast and all agencies were keen and active. Throughout the project this may change.

There may be issues around recruiting clients to take part in the study; or indeed to remain in the study throughout the project.

Would you do anything differently?

13.12 A key group missing from the project group were GP's. A representative from the GP Forum would have been beneficial, both in terms of what they could have 'brought to the table' but also in terms of support of any outcomes from the project.

Expectations of the project

- 13.13 People may be willing to take part in this scheme as they would get the opportunity to do things to their homes and try equipment that they may not necessarily be able to afford without the project.
- 13.14 There needs to be a better way of sharing information about support, medical pathways and advice for people with memory loss and dementia. This could take the form of a multi-agency information leaflet / booklet.
- 13.15 This project will be good for Stockton on Tees and for the Council, putting us on the map for being challenging and innovative. This may attract additional funding, which could then be used to support future projects.

The multi-agency approach

13.16 Using a multi-agency approach is fundamental to delivering such an ambitious project but may have some challenges. Agencies have different aims, objectives, priorities and motivations. This may cause some conflicts during the project and will need to be carefully managed.

Sandra Williams - Brookleigh Caring Services Interview conducted August 2011

How did your agency get involved in the project and what were your motivations?

13.17 The Stirling Model had been working in Scotland and had gone into hospital and Care Home environments. The evidence suggested that the ideas could really make a difference to clients and carers lives. We wanted the opportunity to try this, get better trained staff and potentially provide a specialist dementia service.

13.18 By achieving this, our Care Agency would be able to help maintain clients in their homes with a good standard of living. We want to be able to reach families at an early stage; before they become desperate and tailor their care needs appropriately; using both our agency and other supporting agencies such as Telecare.

13.19 Potential problems and barriers

- Already it is proving harder to get individuals involved in the project. Families are concerned about the potential disruption and impact of change
- There is an issue of staff moving on, so the training has been lost
- Clarity of roles as some delay already been due to a misunderstanding as to who
 is doing what in terms of getting consent.

Would you do anything differently?

13.20 Had a clearer understanding of what everyone was doing and when and what was expected.

Expectations of the project

- 13.21 I hope that the project has a positive impact on everyone involved and we achieve the mutual aims and objectives.
- 13.22 The interventions may be more beneficial to those with earlier stages of dementia, as those in the middle stages and beyond may be knocked back by the 'changes' and in some cases not have enough time to recover and reap the benefits.

The multi-agency approach

13.23 I think this can work if we all know what we are doing and how we fit together in the jigsaw. If people are not pulling their weight, or are indeed being perceived to not be pulling it, the impact on the rest of the team and agencies is negative and the project momentum will be lost.

Zoe Newberry – Branch Manager DH Homecare Interview conducted August 2011

How did your agency get involved in the project and what were your motivations?

13.24 We were approached by Stockton on Tees Borough Council and it sounded interesting. We could see the potential for Stockton on Tees and also for our other DH agencies.

13.25 We could see the potential benefits for clients could be amazing and could improve their quality of life and give them a longer time at home; which is mutually beneficial.

Potential problems and barriers

13.26 There is a potential for so many agencies being involved in a home setting to be detrimental to a client and 'do more harm than good'. The flow of strangers can be unsettling.

13.27 The communication has been poor and no-one is clear what they are doing. This has already led to a loss of time and the project stalling.

Would you do anything differently?

13.28 Had a clearer understanding of what everyone was doing and when and what was expected, clearer roles and responsibilities, with set timelines and tasks.

Expectations of the project

13.29 I hope that the project has a 100% positive impact on individuals.

The multi-agency approach

13.30 I think the project could have done with a direct dedicated project manager. There were too many people playing and second guessing at the start.

Corrine Walsh – Service Development Worker – Older People's Mental Health (Stockton on Tees Borough Council)

Views of the project / principles

- 13.31 Key to this project is an understanding of who this is really trying to help and who is it most beneficial to. The value of intervention at later stages needs to be questioned. In the early stages the family and supporters (e.g. friends), as well as the client are open to change and for looking for support and solutions and to be 'doing something to help'. As the dementia moves into later stages this 'energy' diminishes.
- 13.32 The new technologies that are out there are exciting and can certainly add support to those with a single carer (i.e. spouse), or those who live alone; but again questions need to be asked as to the long term viability when costs are considered. In the study these interventions are being put in for free, but would people be so keen or able to take them up if they have to pay?
- 13.33 If interventions and information do not go into a home until a diagnosis of dementia has been given, the opportunity for maximum impact and effectiveness could well be passed. If information is to be produced from this project, it needs to be distributed to people who first start to show signs or any concerns of memory loss. This may be via a GP, a charity, social workers, and voluntary agencies or via the Internet.

Ingrid Brough – Williams – Manager of George Hardwick Foundation, Stockton on Tees

Views of the project / principles

- 13.34 Any interventions to support dementia need to be done at the earlier stages. As the dementia moves into the later stages, the impact would actually become detrimental. However, the presence of Assistive Technology to maintain safety and reassurance would always have a place.
- 13.35 Making changes based on the 'Designs for Living' principles, may be beneficial but in elderly couples any disruption may have quite a physical impact on them e.g. drilling, mess, noise, may cause significant upset (to the client and potentially their carer).
- 13.36 The issue of family and client denial needs to be considered. Advice at early stages may not be considered as they may for many reasons be choosing not to accept the diagnosis or potential diagnosis. People only come for help and advice when they need it, denying a problem would mean they do not ask for or seek information.
- 13.37 There would certainly be benefit to specially trained carers or experts, who would be a one stop shop for all areas relating to dementia; who could signpost and open access to all the support available. At present the services and support are disjointed and are often come across by chance.
- 13.38 Future generations of people (and potential clients or carers) are now much more likely to seek information themselves. We are in an information hungry world. Siblings of clients who have concerns now are now much more likely to seek information as soon as possible, via the Internet, GPs etc. than in previous generations.
- 13.39 Education and information for future clients and carers, as well as raising awareness when it is not a current issue, may have a significant impact on the way dementia is addressed in the future. Removing the taboo and fear and making people see there are things that can be done is vital. If this can be done at a stage

when it is just 'if you ever needed to know this', then people may be more receptive and understanding of its potential impact. As soon as it becomes reality, emotional factors come into play and people respond differently.' Forewarned is forearmed'

PROJECT TEAM REFLECTIONS

PRE AND POST PROJECT

14 Project Team – pre and post project feedback

14.1 At the start of the pilot study the project team were asked a range of questions to understand their motivations for being involved, their understanding of the project and their individual aims and expectations. Detailed responses follow:

14.2 Why did your agency choose to be part of the Smarter Home for the Future project?

SaLT (Speech and	SaLT currently provide mainly dysphagia services to individuals
Language Therapy) ⁶	with Dementia. This project was seen as a good opportunity to
	develop provision with regard to communication and to trial
	possible therapy pathways.
Brookleigh	Brookleigh was part of the original team who were working with
	SBC in the commissioning process
SBC (project lead)	I work for SBC and as such through discussion, the commissioner
	for Mental Health prepared and submitted a bid to the Dementia
	Innovation Fund, hopeful that we could use this funding to
	develop some local expertise in recent and innovative practises
	within the traditional Home Care Services; to raise the
	understanding and quality of services and allow people to stay at
	home longer and in a much safer way
Housing Options	The Housing Options Service and the Commissioning Managers for
Service ⁷	Mental Health Services had previously worked together on
	developing projects to meet the housing needs of customers with
	Mental Health issues, the Smarter Homes for the Future project
	followed on from this and as there were aspects in relation to
	Housing to be considered, we were invited to attend this meeting

⁶ SaLT were fully supportive of the project. Interventions from SaLT did not occur until late into the fieldwork period. These interventions included client visits, support developing life story books and advice regarding speech and language therapy. Unfortunately the impact of these cannot be measured as no evaluations relating to impact have been completed.

⁷ The Housing Options Service was fully supportive of the project. As the project began to evolve, it became clear that there would be no need for their involvement in the implementation of the project.

SBC – Commissioning	I am responsible for commissioning Mental Health Services. I
Mental	supported the initial bid as it supported the agenda of keeping
Health Services	people in the care setting of their choice for as long as possible.
Telecare	We currently provide a full range of services which have a proven
	track record for this client group. It has enabled us to look into
	more advanced methods of technology.
Probation service –	We were approached by the team to assist with the project
Community	
Payback ⁸	

14.3 What do you hope to get out of the Smarter Homes for the Future project for yourself/your agency?

SALT (Speech and	Evidence to support different service delivery / pathway for	
Language Therapy)	this population.	
Brookleigh	A much better informed workforce and a greater, more	
Diookieigii	effective support plan for our clients	
SBC (project lead)	To raise the understanding and quality of services and allow	
SDC (project lead)	people to say at home longer and in a much safer way	
Housing Options Service	Ensure aspects of housing to be included	
SBC – Commissioning Mental	A model of service delivery that can be adopted across	
Health Services	agencies and potentially adapted for other client groups.	
Telecare	It's all about ensuring that the client(s) can live	
	independently at home for as long as possible knowing that	
	there are 'procedures' in place to keep them safe and	
	secure. It does not matter to our service if the client only	
	gets an extra week or two remaining at home, what works	
	for one person might not work for another.	
Probation service – Community We hope to give offenders a better understanding of the		
Payback	varied needs of other community groups which will increase	
	their empathy towards others. We also hope offenders will	
	gain suitable qualifications which will increase their	
	employability while on the project.	

⁸ The Community Payback Team were the agency who were going to deliver any physical interventions in homes, e.g. decorating. As none of the clients' houses needed any physical changes, the service was not used.

66

14.4 What do you hope to get out of the Smarter Homes for the Future project (in relation to your agency) for the clients?

SALT (Speech and	The development of SaLT service provision to meet the	
Language Therapy)	communication needs of this client group.	
Brookleigh	More effective support for Clients with Dementia to maintain	
	their level of independence and choice	
SBC (project lead)	See previous response	
Housing Options Service	Ensure the customers housing issues are addressed	
SBC – Commissioning Mental	To enable effective communication with clients to support	
Health Services	personalised care.	
Telecare	We hope to build a client base which promotes wellbeing	
	within the area in this way it's a 'win/win' situation for all	
	agencies.	
Probation service – Community Involvement with a new community group		
Payback		

14.5 What do you expect / anticipate the positive outcomes of the Smarter Homes for the Future to be?

SALT (Speech and	Carers and clients benefit from SaLT input to improve
Language Therapy)	communication
Brookleigh	Clients remaining in their homes for a much longer period of
brookicigri	time, whilst maintaining their independence and quality of life
	Well informed staff and customers. Well informed relatives.
SBC (project lead)	Changes in the model and style of assessment and delivery of
SDC (project lead)	traditional services. The possibility of rolling our training and
	model across the borough in the future
Housing Options Service	Customers are assisted to live in their own home
riousing options service	independently with the correct support
SBC – Commissioning Mental	To alleviate client anxiety through effective communication
Health Services	and awareness of their specific needs
Telecare	Closer working partnerships, quality not quantity
Probation service – Community	We are pleased to be associated with a project that will
Payback	increase the quality of life for the participants

14.6 What do you expect / anticipate the negative outcomes of the Smarter Homes for the Future project to be?

SALT (Speech and	Carers will find it difficult to implement a plan due to the lack of
Language Therapy)	time they have with the client. Family will allow SaLT to
	implement programme but may not follow it through
	themselves in the home environment. Family / Carers may not
	be available at times of SaLT intervention.
Brookleigh	Few if any:- potentially negative response to intervention as this
	may initially disrupt the clients daily routine
SBC (project lead)	Customers and families may be reluctant to participate or to get
	involved or make some of the environmental changes required
Housing Options Service	Not enough funding to meet the real demand
SBC – Commissioning	I don't anticipate any negative outcomes.
Mental	
Health Services	
Telecare	That family members may take a back seat approach knowing
	that a safety net is in place

14.7 Do you have any initial concerns about the interventions / overall project for the clients?

Brookleigh	Care will need to be taken to decide which intervention
	will need to be addressed first to improve the quality of
	care/lifestyle for the client
SBC – Commissioning Mental	No I believe if they don't work they can be removed or
Health Services	changed quite quickly. If they do it will be positive
	experience for all concerned and there will be a lot to
	learn from the project and peoples experiences
Probation service – Community	A lack of understanding from the public about what we
Payback	are trying to achieve. There are concerns about using
	offenders to carry out works in the clients premises while
	the client is in residence

14.8 Views on involvement and any other comments:

SALT (Speech and	I think the SaLT aspect of the project has been left to the
Language Therapy)	SaLT department to arrange and this is very appropriate.
SBC (project lead)	Key role is the Support Project Officer - supporting the
	project and working with colleagues who have lead roles.
	Also with agencies in terms of the project and on-going
	support and advice as I have commissioning and contract
	responsibilities for both Home Care Agencies
Housing Options Service	Identified that the housing needs are not significant for this
	client group who will be assisted through this scheme
SBC – Commissioning Mental	It is taking it's time to commence
Health Services	
Probation service – Community	The initial consultation process with Community Payback
Payback	was flawed and while we are fully committed to assisting
	with the project we would have appreciated more
	consultation before the bid was submitted

The project team were also given the opportunity to reflect at the end of the project. This was left much more open. The feedback given, by agency follows:

Telecare – Keith Hobbs Care Call and Telecare Communications Manager – Stockton on Tees Borough Council

Do you think the project has a made a difference to the lives of clients and carers?

14.9 Yes, whilst clients are not aware of most of the equipment it certainly helps them to be kept safe, should a client wander, fall or have an accident we will respond.

What do you think worked well for the project?

14.10 Teamwork and an understanding of other agencies.

What do you think could have gone better (and how would you do things differently if they were to be done again)

14.11 Definitely a bit of background on each case, so that we know what has or had happened previously, a pre and post joint meeting would have also been useful, with the care provider.

Did the project meet your expectations?

14.12 Unfortunately not, I was expecting to have a full client base of 10 with 1 or 2 dropping out...in some ways it has got our service ready, up and running to meet most complex situations, but I think that the services should have gone in sooner.

Sandra Williams Manager of Brookleigh Caring Services

- 14.13 I personally feel that although the input has been a little later in people's lives than I would now like to see, I have seen an improvement in the clients involved (this has given me the insight that an earlier intervention/supply of information would be more beneficial). The carers involved have reported that the use of Assistive Technology has given them a greater "sense of ease".
- 14.14 I think the project worked well once it got going!! The delays we encountered caused a loss of eligible participants. Also the need to have a diagnosis for Dementia excluded a lot of people who I feel would have benefitted from support.
- 14.15 I would like to be able to intervene at a much earlier stage to give carers and their partner/family members the relevant information to make their homes "Dementia Friendly" and make them aware of the array of technology that is available to help maintain a sense of independence for people within their home environment and lessen the "responsibility" of carers.
- 14.16 I would have liked to been more pre-prepared for assessment etc of homes and identification of clients, as the time it took to agree participants took valuable time from the project itself. I would like to see a greater sharing of information to allow early identification of client who would benefit from the information while managing at home even prior to requiring formalised support.
- 14.17 The project did surprisingly meet my expectations. It has proved that these relatively small changes can make a big difference to someone's peace of mind and independence, as well as alleviating some of the pressures on family members.

Zoe Newberry – Branch Manager Direct Health Homes

- 14.18 The project has given me and our staff a more in-depth look into dementia on a whole, the equipment which is available to enable someone with dementia to remain a lot safer and independent at home for a lot longer.
- 14.9 We have found that some family members declined the project as they believed that it may affect the health and wellbeing of their loved one.
- 14.20 I think the training and the equipment which is available for the customers and staff delivering care is second to none I believe all staff should be able to carry out this training to give them a deeper insight into dementia and the affects it has on not only the individual but also the family.
- 14.21 At the start of the project I think the referrals should have come from a qualified cpn rather than from the provider. We found it difficult to diagnose dementia and were not always made aware if an individual had dementia on paper work. A lot of the time it states short term memory loss or another phrase. I believe at the start that this did indeed hold the process up. Also all the relevant personnel were not involved from the beginning such as social workers, doctors, district nurses, etc.
- 14.22 At times during the meetings individuals were present and this was not made clear why and what their involvement was in the project.
- 14.23 Although the Stirling visit was exceptional I think a local training programme would benefit a lot more people and be a lot less expensive to the Local Authority. As a result of this Telecare has been involved in our induction and showing our staff the wonderful world of Telecare and they have found it both interesting and an eye opener and our local trainer and Telecare are willing to put together a training programme to roll out locally.
- 14.24 I think if lessons learned from this are taken forward and then piloted correctly then this will be a fantastic venture for individuals and their families and a great contract for a provider to work with.

Rose Hammond – Commissioning Manager - Home Care Stockton on Tees Borough Council

Do you think the project has a made a difference to the lives of clients and carers?

14.25 Yes it has provided advice education and guidance and opportunities to benefit from the various options at a nil cost and in a supportive way. It also provided professional development for paid carers from agencies who participated at various levels within the project

What do you think worked well for the project?

14.26 It raised the profile of specialist dementia training, Assistive Technology, home adaptations and strategies, illustrated how these all link together and how we as professionals can work with customers to utilise them within the community setting; to maintain independence and link into preventative programmes

What do you think could have gone better (and how would you do things differently if they were to be done again)

14.27 I think we could have broadened /opened up the criteria a little, as we struggled to meet the quota of customers with the criteria we had set. Customers needed to be able to be reached earlier when they and their family/relatives were open and they still had enough cognitive abilities to understand and benefit from the project. There seems to be a very narrow window of opportunity to work effectively with customers to enable them to achieve the maximum benefit

Did the project meet your expectations?

Yes

Other comments

14.28 The knowledge gained from participating in the project will be used by the Council to review the revised specification for home care contract tender for 2012, also to be taken through other funding streams to reach the Commissioning and training department to influence and drive up the quality of services we provide; through the Commissioning and provision of services through contracted agencies to people at all stages of Dementia.

Peter Smith - Project Lead and Reablement Manager Stockton on Tees Borough Council

Do you think the project has a made a difference to the lives of clients and carers?

14.29 Yes I think it has based on the comments during the project meetings from colleagues who have been directly involved. Even small changes have an impact and if this can lead to a change of behaviour or additional support for a carer then that has to be positive. It would have been good to have more people as part of the project but the additional money and extension to the project will help in taking the work further.

What do you think worked well for the project?

14.30 The support provided by Stirling University in training the home care staff (this needs to be expanded to ensure all staff get similar training especially in home care, intermediate care and reablement work both for the Council services and those in the independent sector).

What do you think could have gone better (and how would you do things differently if they were to be done again)

14.31 The home care services retaining staff as staff leaving seems like a waste of valuable resources. The input for some services was limited (i.e. SaLT/Community Payback service) and this led to confusion as to what they were meant to be doing. With hindsight I think the project aims were to wide and we should have focused in on the environmental changes that could be achieved. This seems to have had the biggest impact.

Did the project meet your expectations?

14.32 Yes – and beyond in terms of some of the minor changes which had the most impact. In talking to other people it would seem that the focus on dementia will continue as the numbers affected by this disease increase (linked to demographic increase of older people).

Other comments

14.33 The project group had a varied membership from different organisations and all participants understood what was trying to be achieved. Project management was well organised and helped keep the project on track. It is important that managers support that part of the process as good project working drives the success of the project. It would have been helpful to have the evaluation involvement right at the beginning of the project but I know we have had very good support and help in thinking through the project ideas from the time of the evaluators involvement.

CONCLUSIONS

15 Conclusions

15.1 The original scope of the evaluation was to assess the Smarter Homes for the Future project using two criteria, impact and process. By doing so it is possible to reflect on the original aims of the project:

'to improve the quality of life for people with dementia and their carers by identifying needs and providing specialist services within the general home care services',

and assess whether the project has achieved this.

Impact

Impact on the carer

"Although the focus of the study was the client, the impact on the carer cannot be underestimated. Before any interventions, Mrs A did not sleep, as she was worried about her husband, and felt lonely and isolated as she had little or no interaction from her husband. These small but simple interventions, have significantly changed both Mr and Mrs A;'s life and their mental well-being". (Care provider)

15.2 The impact of the innovations and alterations do not stop at the client. In many cases the client lives with their carer, and their quality of life needs to be taken into consideration too. For example a client who wakes in the night and wanders can cause great distress for the carer; in one example the carer hardly slept until the Assistive Technology was put into support her (bed sensors). It is not just the client who has 'dementia;' but also the carer and many interventions are actually as supportive to the carer as they are to the client.

15.3 The project has proved that these relatively small changes can make a big difference to someone's peace of mind and independence, as well as alleviating some of the pressures on family members.

Designs for Living and Assistive Technology

15.4 In the cases where both 'Designs for Living' principles and Assistive Technology were taken into the home environments, there are early indications that they have had a positive impact on the mental well-being of the clients (and carers), on their safety and provided reassurance for the carers and family members.

15.5 The carers involved have reported that the use of Assistive Technology has given them a greater "sense of ease".

15.6 However, it is important to consider that although making changes based on the 'Designs for Living' principles may be beneficial, in elderly couples any disruption may have quite a physical impact on them e.g. drilling, mess, noise, may cause significant upset (to the client and potentially their carer).

Financial considerations

15.7 The financial implications of the interventions and Assistive Technology need to be considered when looking at the long term sustainability of such an initiative. In the study these interventions are being put in for free, but would people be so keen or able to take them up if they have to pay?

"Due to my financial position I am restricted what support I can buy" (Carer)

Timing

15.8 In the study, the client was required to have a diagnosis of dementia before being considered eligible for the project. Feedback has indicated that having to have this diagnosis has had implications for recruitment. The impact of this was that the full quota for clients in the study was not met.

15.9 The number of potential clients for the study was greatly reduced, as although the care agencies had many clients on their books with long term memory loss, who they suspected to have dementia, very few actually had a medical diagnosis. 15.10 Feedback also highlighted that the interventions needed to go into homes much earlier; in order to have maximum impact. It was commonly accepted that the interventions may be more beneficial to those with earlier stages of dementia, as those in the middle stages and beyond may be knocked back by the 'changes' and in some cases not have enough time to recover and reap the benefits.

"Any interventions to support dementia need to be done at the earlier stages. As the dementia moves into the later stages, the impact would actually become detrimental". (Practitioner)

"I personally feel that although the input has been a little later in people's lives than I would now like to see, I have seen an improvement in the clients involved (this has given me the insight that an earlier intervention/supply of information would be more beneficial)". (Care provider)

"I would like to be able to intervene at a much earlier stage to give carers and their partner/family members the relevant information to make their homes "Dementia Friendly" and make them aware of the array of technology that is available to help maintain a sense of independence for people within their home environment and lessen the "responsibility" of carers". (Care provider)

Training and staff development

15.11 The project provided care staff with a more in-depth understanding of dementia as well as an active appreciation of the equipment which is available to enable someone with dementia to remain a lot safer and independent at home for a lot longer. The Care Agencies have used this to improve their care offer to clients with dementia.

This professional development has increased the skills of carers and has raised the profile of specialist dementia training.

Extra attention

15.12 The project allowed for clients and their carers to receive a great deal of additional support and attention; perhaps more than they may previously have received e.g. visits from the Telecare Team and regular assessments by care agencies. This attention may in itself have had a positive impact on both the carer and the client. The sense of feeling valued, having a purpose and being part of something 'special'.

"In the end, the project may not be purely about the interventions, but the impact of more attention and support" (Practitioner)

Non-participation

15.13 Consideration also needs to be given to the reasons why potential 'case study clients' choose not to take part in the study, as although evidence may suggest the combination of Assistive Technology and the Designs for Living' principles have a positive impact, other factors have a stronger influence; particularly resistance to change or a belief that change would make the condition worse. It is by understanding these stronger influences, that the full effectiveness of this combination of principles and interventions may be truly effective.

"We have found that some family members declined the project as they believed that it may affect the health and wellbeing of their loved one". (Care provider)

15.14 It is possible that a lack of awareness, understanding and 'proof' that these interventions are worth the changes and effort could overcome some of this resistance. There is a preconception that any change is a bad idea and may cause more problems for the carer or client and this would need to be challenged to make these principles the potential success they could be.

More harm than good

15.15 There is a potential that with so many agencies being involved in an individual home setting that this could be detrimental to a client and 'do more harm than good'. The flow of strangers can be unsettling.

Family denial

15.16 Advice at early stages may not be considered as they may for many reasons be choosing not to accept the diagnosis or potential diagnosis. People only come for help and advice when they need it, denying a problem would mean they do not ask for or seek information.

Process

15.17 The process element of the study focussed on the project delivery, including the scope and multi-agency approach.

Multi-agency working

15.18 Using a multi-agency approach was fundamental to delivering such an ambitious project but did present some challenges. Agencies had different aims, objectives, priorities and motivations. In some cases this posed challenges for the project management as focus was not always entirely on the project.

15.19 The use of multi-agencies in the clients' home was also challenged early in the project as there were concerns that too many different visitors may do more harm than good:

"There is a potential for so many agencies being involved in a home setting to be detrimental to a client and 'do more harm than good'. The flow of strangers can be unsettling". (Practitioner)

15.20 As a reaction to this some alterations were made during the project. The original evaluation proposed visits from the evaluator to the clients' homes. This was then revised and the feedback was gathered by the carers on behalf of the evaluation team. This face to face contact could be further streamlined for future studies.

15.21 A key stakeholder was not part of the project group, GP's (or a representative of the GP Forum). The impact of this may not have been detrimental to the actual project delivery, but may have an impact on the roll out of subsequent actions. It is also not clear what support they could have had around the issue of diagnosis.

Participation

15.22 Encouraging clients to take part in the study proved harder than anticipated. Upon reflection this has been attributed to two key factors;

- The first being that families were concerned about the potential disruption and impact of change
- The second was the restriction of having to have a diagnosis of dementia.

Timing

15.23 Key to this project is an understanding of who this is really trying to help and who is it most beneficial to. The value of intervention at later stages needs to be questioned. In the early stages the family and supporters (e.g. friends), as well as the client, are open to change and for looking for support and solutions and to be 'doing something to help'. As the dementia moves into later stages this 'energy' diminishes.

"Customers needed to be able to be reached earlier when they and their family/relatives were open and they still had enough cognitive abilities to understand and benefit from the project. There seems to be a very narrow window of opportunity to work effectively with customers to enable them to achieve the maximum benefit".(Practitioner)

Staff retention and training

15.24 The training course delivered was received well by all who attended and there was consensus that the staff who attended had a much deeper insight into dementia and its effects; as well as being equipped with tools to support and educate carers and clients in their homes.

15.25 Although twelve staff were originally trained, by the end of the project five of these (mostly from one agency) had left the Care Agencies employment. This meant that the investment in the staff, a core element of the project was actually wasted, and the knowledge lost.

Project Management

15.26 There were several logistical issues relating to the day to day delivery of the project which reflect some of key challenges of multi-agency working:

 There needed to be a clearer and accepted understanding of each individual role by the project officers responsible for delivering the project and how their specific parts fitted in to the wider project

"I think this can work if we all know what we are doing and how we fit together in the jigsaw. If people are not pulling their weight, or are indeed being perceived to not be pulling it, the impact on the rest of the team and agencies is negative and the project momentum will be lost". (Care provider)

 The project changed leadership once and project team representatives from agencies a number of times. This led to some confusion and assumptions; which did not come to light until later stages in this project. This led to subsequent delays in the project

Client backgrounds

15.27 Several team members felt that there would have been benefit in having a shared knowledge of each client prior to any visits or interventions. This would have avoided duplication of questioning on site and would have saved valuable time.

RECOMMENDATIONS AND NEXT STEPS

16 Recommendations and next steps

16.1 Having completed the evaluation of the project, it is possible to make a number of recommendations and suggestions for next steps.

Follow up study

16.2 To be able to draw stronger conclusions and be more confident in the impact and value of the interventions a further study of a different set of clients could be conducted. This study could take into account the following factors:

- Remove the restrictions on having to have a medical diagnosis of dementia; this
 would both widen the field of clients and enable interventions to be trialled with
 people with earlier stages of potential dementia (pre diagnosis)
- Ensure the second study has a minimum of twenty clients at the start (maximum 30).
- Streamline the amount of agency contact; using just two people, the designated carer and the Telecare officer. These officers could then be used to deliver any other elements of the project should they be required e.g. data collection for evaluation purposes
- Designate a project manager and ensure all officers involved in the project are clear of their roles, the timescales and expectations and implement monitoring of these roles throughout the study
- Prepare assessment materials prior to the project starting e.g. Warwick-Edinburgh Well-Being Scale, informal assessments grids and ensure these are fit for purpose

Information and publicity

"There needs to be a better way of sharing information about support, medical pathways and advice for people with memory loss and dementia. This could take the form of a multi-agency booklet" (Practitioner)

16.3 A key finding particularly for carers and potential carers is education and information. It is recommended that an information booklet be produced and circulated widely in places such as:

- GP's and hospitals
- Dental surgeries

- Public reception points e.g. contact centres and day care centres and facilities
- Libraries
- Care Home agencies
- To related charities and voluntary agencies e.g. George Hardwick Foundation,
 Fusion Café
- Events and Forums e.g. Are you Being Served Event (Stockton on Tees Borough Council)
- Council, NHS and other appropriate websites websites and
- Council publications (e.g. Stockton News)

16.4 Although there are many leaflets available, none of these present the whole package. The information leaflet would need to cover a wide range of information including;

- Information about dementia and what the condition is
- Early Signs of dementia
- What to do if you think you or someone you know may be showing signs of dementia
- Details of the Designs for Living principles and what changes can be made
- Details of the Assistive Technology available
- Details of Care Agencies and other support agencies who can provide advice and support
- A flow chart illustrating the pathway of care and support

16.5 As well as producing and information leaflet, it is important to publicise the findings so far. This could be done via an event which could be attended by practitioners and clients. This would ensure buy in to further stages or studies, maintain interest and momentum as well as potentially generating new groups of clients for a second study.

Training and staff retention

16.6 The training provided by Stirling University has shown how vital a skilled specialist workforce is when dealing with clients with dementia. At present only a few officers have been trained, and some of these are no longer working in the care environment. It would be a valuable investment to roll out a local training programme both to care providers and Council employees.

Appendices

Appendix 1	University of Stirling Training
Appendix 2	Agency profiles
Appendix 3	Warwick Edinburgh Mental Well-Being scale
Appendix 4	Warwick Edinburgh Mental Well-Being – individual client feedback
Appendix 5	Assistive Technology definitions

Appendix 1 University of Stirling Training Details

The training course was delivered to twelve staff. Ten helpful hints were used throughout these sessions ' to encourage the staff to use this in practice. The learning outcomes are detailed below:

Understanding dementia and developing awareness and skills to provide high quality care and support to people with dementia and their families.

What is dementia?

What isn't dementia?

Types and most common forms of dementia

Delirium and depression

Understanding and assessing the home environment and providing advice to people with dementia and their families to make changes to the environment.

Understanding the impact of the social and built environment and safety and security on behaviour and communications.

The 'Designs for Living' principles

Understanding of technology and being able to assess which technology would suit any given situation.

Telecare - focus on how Telecare can enable some individuals to remain at home longer. It also considers the importance of Telecare in providing support and reassurance to carers.

The importance of building therapeutic relationships with clients and their families by understanding the role of the carer, staff will be able to think about the needs of carers and consider ways in which they can be helped and supported.

Appendix 2 Agency profiles

The Care Call Community Alarm Service / Telecare — Stockton on Tees Borough Council

The Care Call Community Alarm Service was established in 1983 as part of the Council's Housing Service. The Service currently operates from the Security and Surveillance Centre Control Room, 24 hours per day 7 days per week.

Combining many years of providing 'round the clock' reassurance to vulnerable people and the people that care for them, Care Call and Telecare services are a leading provider of Telecare based support services.

From our monitoring and response centre we support over 6,700 vulnerable people who are linked to the centre through their scheme emergency call system or individual lifeline telephones which can be installed in any home with a telephone line or GSM connectivity.

Our key activities are:

- * 24 hour Telecare and monitoring and response service co-ordinated through the Care Call centre.
- * Installation and maintenance of community alarms and advanced Telecare devices such as smoke/fall/flood detectors.

Care Call provides other valued community services including:

- * Visiting and check calls for sheltered housing residents
- * Outreach and floating support
- * Out-of-hours contact centre for Registered Social Landlords, Private Landlords and Local Authorities.

The Care Call & Telecare Service has a team of 20 Officers who monitor and respond to activations from the Community Alarm Systems & devices installed and maintained by the team.

In addition to the alarm monitoring and response, the Care Call service provides flexible personal 'domiciliary' care and is registered with Care Quality Commission Inspectorate (CQC) . The service respects and values people, helping them to maximise their own potential and independence. Increasingly people express the preference to remain within their own home and stay independent. Domiciliary care encourages them to do as much as possible for themselves in order to maintain their independence and physical ability. All domiciliary clients receive a care plan, which is reviewed on a quarterly basis via a service review, however depending on the clients needs the reviews can be more regular.

Our aim is to provide an exceptional service to all our clients, both now and in the future. In order to achieve this we have been looking critically at all aspects of our business and to expand our range of expertise and services.

Brookleigh Caring Services – Stockton on Tees

Brookleigh is a Domiciliary Care agency that works in Stockton-on-Tees and Billingham offering support with Personal Care, Medication, Domestic and Laundry support, Shopping and socialisation. We have just won a contract in Thornaby; this is for Sheltered Housing catering for a variety of needs.

All carers who work for Brookleigh Caring Services receive Dementia Awareness training prior to going "out in the field". Also there is the opportunity for Carers to advance to level 3 with Dementia being identified as Priority training at their request.

Recently Brookleigh Caring Services became involved with Stockton Borough Council and the Smarter Holmes for The Future Project and 6 members of staff attended the "Stirling University Training", this knowledge is to be rolled out over the care staff by means of small training/information sessions.

Brookleigh organisation also have a Residential Home that caters for residential clients and those affected by Dementia.

Direct Health Homecare

Extract taken from promotions brochure

Your wellbeing is at the very heart of our company ethos, which is why Direct Health has earned its reputation as one of the UK's leading Home Care providers. For over 15 years we have provided uniquely tailored, cost-effective care and support to a diverse community with a wide range of needs - from those simply needing daily or weekly assistance with domestic tasks to those requiring complex 24 hour personal care.

We understand that it can be very difficult to allow someone new into your home, yet even a few hours of help from the right person can make all the difference to your daily life. Allowing you to remain independent in your own home can go a long way to relieving your fears and stress and can dramatically improve your emotional wellbeing.

Our aim is to provide a professional, friendly service to aid independence and improve quality of life to those who require care and support in their own home.

Our Mission Statement

Direct Health is dedicated to providing the highest quality social and personal care services. Our aim is to enable our customers to live independently at home by delivering personalised care and support tailored specifically to their individual needs.

www.directhealthgroup.co.uk

Appendix 3 Warwick Edinburgh Mental Well-Being Scale (WEMWBS)

The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) is a fourteen point scale covering subjective well-being and psychological functions. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) comprises 14 items that relate to an individual's state of mental well-being (thoughts and feelings) in the previous two weeks. Responses are made on a 5-point scale ranging from 'none of the time' to 'all of the time'. Each item is worded positively and together they cover most, but not all, attributes of mental well-being including both hedonic and eudaimonic perspectives. Areas not covered include spirituality or purpose in life. These were deemed to extend beyond the general population's current understanding of mental well-being and their inclusion was thought likely to increase non-response.

WEMWBS aims to measure mental well-being itself and not the determinants of mental well-being, which include resilience, skills in relationship, conflict management and problem solving, as well as socioeconomic factors such as poverty, domestic violence, bullying, unemployment, stigma, racism and other forms of social exclusion.

Further details on the WEMWBS can be found at the Health Scotland website:

www.healthscotland.com

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS)

Below are some statements about feelings and thoughts.

Please tick the box that best describes your experience of each over the last 2 weeks

STATEMENTS	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	67	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	T	2	60	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	T	2	er)	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)
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Appendix Four

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) Client Feedback

Mr A – Assessment 1 (09/11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	67)	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	60	❖	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	65)	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Mr A – Assessment 2 (10/11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	T	2	67)	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score 39

Mr A – Assessment 3 (20/12/11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	¥	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	65	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score 43

Mrs B - Assessment 1 (Sep 11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	83	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	65)	¥	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	T	2	3	¥	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	65	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 35

Mrs B - Assessment 2 (October 11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	65)	¥	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	❖	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 45

Mrs B - Assessment 3 (December 11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	63	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	**	2	67	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 48

Mrs B - Assessment 4 (January 12)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	٣	2	67	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 50

Mr C - Assessment 1 (September 11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	67)	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	63	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	8	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 33

Mr C – Assessment 2 (October 11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	67)	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	Υ.	2	3	❖	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	63	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 36

Mr C – Assessment 3 (December 11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	83	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	67)	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Mr D – Assessment 1 (September 11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	60	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Mr D - Assessment 2 (October 11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	67)	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 37

Mr D – Assessment 3 (December 11)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	83	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	❖	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	83	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Mrs E – Assessment 1 (22 nd November 2011)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	65)	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	Υ.	2	3	❖	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	٢	2	3	V	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Mrs E – Assessment 2 (6 th December 2011)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	\display	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	67)	❖	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 33

Mrs E – Assessment 3 (20 th December 2011)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	67)	\display	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	❖	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	83	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 34

Mrs E – Assessment 4 (2 nd January 2012)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	67)	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	Ţ	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Total score = 35

Mrs E – Assessment 5 (17 th January 2012)	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	Ţ	2	60	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Appendix 5 – Definitions of Telecare equipment

Care Assist – is a portable alarm that can receive radio signal alerts and display not only the type of sensor activated but also either the location of the sensor or the name of the person the sensor has been assigned to. This means that on site carers can be made quickly aware of any incidents allowing them to provide an instant response.

Minuet Watch – has been developed to help encourage users to wear their personal triggers throughout the day. By combining an alarm button with a high quality watch, users are more likely to wear it and as a result will be provided with additional protection, as their ability to raise an alarm is increased. Often male clients refuse to wear a pendant alarm trigger due to the stigma associated with the use of community alarm systems; this alleviates this problem

Safe socket – ensures alarm calls are raised even though the telephone line is in use. It allows the 'hub' unit to seize the phone line from the other connected devices on the same line e.g. extension phones, computers, satellite receivers. Without this device most homes would need the telephone rewiring to ensure 100% connectivity, which would be costly and awkward

Temperature extremes – monitors for low and high temperature extremes and the rate in rise of temperature. Helps minimise the risks associated with changes in temperature including the build-up of heat in the kitchen and the risks sustained during periods of cold weather.