



An evaluation of 'HENPOWER:' Improving Wellbeing & Social Capital in Care Settings.

FINAL REPORT

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CONTENTS

Summary

- 1. Background**
- 2. HENPOWER programme**
- 3. Evaluation Methods**
- 4. Findings: HENPOWER volunteers' views, experiences and reflections on HENPOWER**
- 5. Findings: HENPOWER recipients' views, experiences and reflections on HENPOWER**
- 6. Findings: Staff views of the HENPOWER programme**
- 7. Discussion and Conclusion**

References

Appendices

Tables:

P. 26: Table 1: Warwick-Edinburgh Mental Well-being scale total scores for the participating volunteers

P. 26: Table 2: Geriatric Depression scale scores for the participating volunteers

P. 27: Table 3: De Jong Gierveld Loneliness Scale scores for the participating volunteers

P. 28: Table 4: Pre and post intervention volunteer survey data

P. 49: Table 5: Service user scores of the Edinburgh Mental Well-being scale at the commencement of the HENPOWER programme

P. 50: Table 6: Total GDS scores for HENPOWER service user group

P. 51: Table 7:DJ total scores for HENPOWER service user group

P. 52: Table 8: Summary of the HENPOWER service users data at baseline and follow up

P. 52: Table 9: Summary of the male service users data at baseline and follow up

P. 53: Table 10: Summary of the female service users data at baseline and follow up

Figures:

P. 33: Figure 1: Summary of survey results from commencement of the programme to month 6: Case study 1.

P. 37: Figure 2: Summary of survey results from commencement of the programme to month 6: Case study 2.

P. 40: Figure 3: Summary of survey results from commencement of the programme to month 6: Case study 3.

P. 42: Figure 4: Summary of survey results from commencement of the programme to month 6: Case study 4.

P. 45: Figure 5: Summary of survey results from commencement of the programme to month 6: Case study 5.

P. 50: Figure 6: Box plot comparison of men's and women's wellbeing scores (WEMWBS) in the service user group.

P. 51: Figure 7:Box plot comparison of men's and women's loneliness scores (DJ tot) in the service user group.

P. 53: Figure 8: Difference in GDS score (time 2 minus time 1) against the average score for each individual in the HENPOWER service user group

P. 54: Figure 9: Difference in WEMWBS score (time 2 minus time 1) against the average score for each individual in the service user group

P. 54: Figure 10: Difference in DJ total score (time 2 minus time 1) against the average score for each individual in the HENPOWER service user group

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Section 1: Background

1.1 Evolution of the HENPOWER programme

The inspiration for the HENPOWER programme rested in the experiences of staff and service users of a residential care home with hen-keeping and its associated activities. Residents found that interacting with the hens was enjoyable and was a stimulus for social interaction with others involved in this activity. The male residents reported that they had kept hens when they were younger, thus this form of human – animal interaction was something that was familiar and an inherent part of their personal history. It was notable that the male residents were drawn to the hens and got involved in looking after the hens. The staff noted that the majority of the resident population was female and many of the activities that were arranged in the home tended to be activities that were popular amongst the female residents. Rarely had the men engaged with the crafts, music and dance activities. These observations led the programme developers to reflect on the relevance of hen-keeping in care settings beyond this situation to older men living in other settings such as sheltered housing or alone in their own home.

Addressing the needs of an ageing male population is becoming increasingly important. Most Western societies are experiencing ageing of the population. Eurostats' latest set of population projections (EUROPOP2011) cover the period from 2011 to 2060. These statistics indicate that population ageing is likely to affect all EU Member States over this period. There will also be progressive ageing of the older population, as the proportion of those over eighty is growing at a faster pace than any other age segment of the EU's population. Women continue to have a longer life expectancy than men, but male life expectancy is increasing at a faster rate leading to an ever increasing older male population (Association of Public Health Observations, 2011).

Services need to respond to changes in the population, and there is a need to test out what services could meet the needs, in this case, of the ageing male population. Relating to others, making a contribution to society and engaging in meaningful activity are essential to experiencing optimal health and well-being (Morrow-Howell et al , 2003; Sherman and Shavit, 2012). Yet the circumstances of old age can have a negative impact on what an individual is able to do both physically, cognitively and emotionally. The consequence could be less engagement in physical activities, social isolation, and becoming unfulfilled.

The HENPOWER programme was established to address these concerns through:

- active older people keeping hens in communal outdoor areas in their locality
- older men taking a lead role in improving the use of outdoor spaces and establishing hen houses in care settings
- older men taking a leading role in devising activities in care settings
- older men being involved in intergenerational programmes whereby hen-keeping will be introduced in schools and public events such as science festivals

- older volunteers developing strategies for sustainability of hen-keeping programmes.

There is an inherent assumption in the HENPOWER programme that human – animal interaction can bring positive benefit to participants. It could then be argued that hen-keeping is being implemented for specific purposes: to enhance social interaction, enjoyment of life, wellbeing, and quality of life. There are similarities between these outcomes and that of animal assisted therapy (AAT). AAT draws on the bond between animals and humans in order to help improve and maintain an individual's function and optimise quality of life. To provide context for the evaluation a brief overview of AAT will be presented. This will be followed by a description of the evaluation methodology and findings.

1.2 Animal Assisted Therapy

Human - animal interaction can be observed in many situations, from the human being an interested observer of animals in their native habitat to pets co-habiting the same residence of their owner. When the interaction has specific goals and function it can be defined as AAT, this may include animal assisted activities and interventions designed to have a therapeutic effect.

The goals of using animals as a treatment option can be broadly expressed as improving the person's social, emotional, and cognitive functioning and reducing passivity. Berget and Braastad (2011) refer to evidence which flags up three benefits of AAT: animals can have a positive effect on lowering a person's stress and anxiety: secondly animals can facilitate and enhance social interaction, acting as a focus and providing a 'stress buffer:' and lastly, AAT can help a person develop or improve their coping mechanisms and self-efficacy. The problems addressed by AAT are broad, including animals providing assistance to humans (such as guide dogs for those with visual problems; seizure assistance dogs), helping allergy desensitisation and providing early warning for some disorders (Wells 2009) as well as addressing social and emotional problems. Various types of animals have been used in AAT, such as domesticated pets (cats), marine animals (dolphins) and non-domestic animals (camels). The most popular forms of AAT are Canine therapy, Dolphin therapy, and Equine therapy.

This evidence points to animals having a positive effect on health when humans are actively engaged with them. Wells (2009), for example, cites several studies that demonstrate a causal link between merely being in the presence of an animal, and/ or physically interacting with animals. Benefits include a reduction in blood pressure, heart rate, serum triglycerides (high levels are linked with increased risks of myocardial infarction) and increase in neuro-chemicals that contribute to relaxation, Walsh (2009) includes a reduction in cholesterol levels (associated with risk of stroke and heart attack) in her list of benefits associated with pet ownership. Wells (2009) comments that animals serve as moderators of stress' (pg525) whilst Walsh (2009) highlights links between companion animals and our (human) 'well-being, connectedness and resilience'.

The techniques of AAT vary, and this depends on the needs of the user of AAT and their condition. Merely being in the presence of an animal can have an impact on the individual (Friedmann and Son, 2009). Stroking a dog and watching the movements of fish in an aquarium, for example, can be pleasurable for its esoteric value. In contrast individuals can fear an encounter with a dog. This points to the importance of knowing the preferences, interests and fears of the AAT participant and tailoring the therapeutic encounter to the individual.

1.2.1 Animal Assisted therapy in health and social care settings

AAT has been used across health settings such as nursing homes, rehabilitation centres and hospices, and interventions including psychotherapy, counselling and palliative care (Fine, 2010; Higgins, 2010). The evidence of the effectiveness of AAT has been criticised on the basis that some reports are anecdotal, outcome measures are not always specified and methodological variability makes it difficult to draw conclusions across the body of knowledge (Perkins et al, 2008). Yet there is consistent reporting of health benefits of AAT. Supporters of AAT suggest that animals can be helpful in motivating the patient to be mentally and physically active, thus keeping the mind sharp and body healthy. A meta-analysis of 250 AAT studies by Nimer and Lundahl (2007) led to 49 papers being selected as meeting the inclusion criteria. They concluded that AAT was associated with moderate effectiveness in improving outcomes in four areas: Autism-spectrum symptoms, medical difficulties, behavioral problems, and emotional well-being. Furthermore they identified that AAT had additive effects when used alongside established interventions.

Filan and Llewellyn-Jones (2006) identified three themes arising from literature that explored the effects of AAT on people with dementia; six studies demonstrated a reduction in anxiety and aggression during and after AAT episodes; 4 studies highlighted increases in social interaction especially during periods of reminiscence among and between residents, and one study identified a significant increase in food intake in a group that had a fish tank introduced to the dining room. All 13 papers included in the review demonstrated links between AAT and positive outcome measures. Filan and Llewellyn-Jones (2006) flag up the role that the animal handler may play in the interactions and the contribution this may make to the beneficial effects of AAT.

Perkins et al (2008) reviewed literature concerning dog therapy for older people with dementia living in residential aged care facilities concluding that there was an increase in social behaviour and a decrease in agitated behaviour during dog contact. Improvement in social behaviour was found to be unrelated to the severity of dementia. This reflects the popularity and increase in dog-related activities in dementia care settings. The impact on the dog needs to be taken into consideration in these situations. Many people are introduced to the dog and spend time in the encounter petting, having close physical contact (such as cuddling) observing, grooming and walking the animal. Excess levels of interaction can be stressful for the dog therefore in some settings consideration is given to 'time-off' to maintain its health.

Berget and Grepperud (2011) examined AAT from the perspective of mental health and learning disability practitioners. A postal questionnaire was distributed among 1100 practitioners to examine their opinions about the degree of usefulness of AAT for treatment and treatment effects for mental disorders and learning disabilities. The degree of belief in treatment effects to some or a high degree varied between 55.7% and 87.4% depending on type of disorder and category of treatment effect (pets and farm animals). The strongest degree of usefulness was reported for those with learning disabilities whilst the least significant one was for schizophrenia disorders. The belief in treatment effects was highest for improved physical capacity and lowest for improved ability to communicate with other people and increased attention to others. Belief in treatment effects from pets were slightly higher than those for farm animals. Though these findings reflect wide variation in practitioners' beliefs about the usefulness and effects of AAT they also indicate that there is strong support from professionals with regard to AAT even when treatment effect is limited.

The use of AAT has been widely supported in long term care of older people, including nursing homes and long term services for people with dementia (Banks and Banks, 2001; Richeson, 2003). This is underpinned by a number of beliefs. Firstly, activity is essential to human existence, health and well-being. Second, AAT is an activity that is relevant, appropriate and can be effective in addressing some problems experienced by older residents. Third, in care homes engaging in meaningful activity can be challenging as a result of characteristics and conditions of the resident population. Fourth that there is a significant body of evidence which highlight older residents being deprived of purposeful and meaningful activity contributing to their experience of long and empty days (Nolan, Grant and Nolan, 1995; Mozley, 2001; Harper Ice; 2002; Cook 2007). One consequence of these beliefs has been recognition by policy makers and service providers of the importance of supporting older people, in particular those living in long term care to engage in activities. Policy (Care Standards Act, 2000; Department of Health, 2006a; SCIE, 2006, 2010) and practice guides (Perrin, 2005; Knocker and Gaspar, 2007) promote activity and participation. Specifically, the Dementia and Mental Health Issues of Older People Expert Working Committee, stated in the 'Living Fuller Lives' (2006b, p. 106) report that care homes should provide 'a positive and enjoyable quality of life, including appropriate activities, enjoyable and appropriate food and promotion of independence'.

Wells (2009) discusses evidence which highlights the enhancing effects of AAT on psychological health, suggesting enhancement of autonomy, competence and self-esteem and furthermore a reduction in feelings of loneliness and isolation, a point also supported by Woods (2007) who also cites evidence which links AAT with improvements in general health resulting in less visits to the doctors, and goes further to suggest the presence of animals in a community extends beyond the benefits to individuals, acting as a catalyst for social interactions and sense of community in neighbourhoods. Much evidence points to the significant emotional work made by ATT. Brooks et al's (2012) study explores the contribution pet ownership made to participants of the study and found the majority cited emotional support as the main benefit followed by social then physical benefits of pet ownership. Brooks et al's findings are worthy of further exploration; they found the concept of emotional support included several subtexts including enhancement of; a positive self-image; a sense of purpose; companionship which was 'guilt-free' in

comparison to seeking companionship from relatives or friends, chance communication with strangers or passing acquaintances.

Brooks et al (2012) suggest that ATT should be considered by policy makers as an adjunctive therapy alongside the usual support currently offered. Activity provision and supporting participation is endorsed within the care standards framework and inspection processes across each of the four countries in the UK. In England the standards relevant to activity provision is specifically addressed in 'Standard 7 – Service user plan' and 'Standard 12 – Social contact and activities' of the Care Standards Act 2000. This regulatory framework not only draws attention to the requirement for care homes to be creative stimulating environments, but also to be settings where staff assess the needs and aspirations of residents and provide support for them to engage in a range of meaningful activities in their daily life. Though there are not explicit recommendations for the provision of AAT in long term care settings, many service providers have initiated AAT as part of their portfolio in an attempt to enhance the environment for those living in these settings. It is against the backdrop of this evidence-base, policy and regulatory framework that the HENPOWER project was implemented.

Section 2: HENPOWER programme

2.1 Background

HENPOWER was developed by Equal Arts as a pilot project that was funded by the Big Lottery Silver Dreams programme. This call expressly sought ideas for projects that enabled older people to help themselves; facilitated older people to work with community development team, agencies and other professionals; and created opportunities for volunteering. The funding for the pilot projects supported start-up costs, early implementation and evaluation that examined what was achieved through new ways of working in older peoples' communities.



Introducing the hens into the care home setting, getting to know each other

In keeping with the ethos of the Silver Dreams programme the defining features of HENPOWER were active older people taking a lead role in introducing hens in older people's communities; and developing activities that improve the outdoor areas of older people care settings. The intended outcomes and activities of the proposed HENPOWER project that were submitted to the funding call were:

1. To reduce isolation and improve the health and wellbeing of 30 older people, specifically older men through helping them establish hen houses in care settings and improve their skills and confidence in delivering activities with less able older people, friends/relatives, care staff/managers and school children.
2. Assist 30 older people/men to make significant changes in the types of care activities provided in 8 care settings in order to improve the culture of care provision aiming to help older people to 'live with care', have 'active choice and use of space' and 'engage in meaningful activity'.
3. To improve the confidence of 30 older people/men by helping them set up 'Friends' groups to increase their involvement in care settings and improve the understanding of the transition process from independent living to 'living with care'.

4. To demonstrate the benefits of keeping hens in care homes and encourage active older people to influence the type of activities available in care homes.
5. With the support of activity facilitators the older volunteers will introduce other groups (such as school children) to keeping hens and taking part in hen-related activities.

These outcomes and activities were assessed through the evaluation that is reported here. The HENPOWER project outcomes that were addressed in the evaluation were:

- Changes in the wellbeing of the active older volunteers through their role and responsibility in keeping hens and improving the use of outdoor spaces in care settings.
- Changes in self-reported isolation and depression of the older volunteers through involvement in hen-keeping activities.
- Type and range of opportunities for older people to take a leading role in devising activities in care settings.
- Support provided to the older volunteers to develop skills that enabled them to take lead roles in HENPOWER.
- Impact of HENPOWER on self-report of mental wellbeing, loneliness and depression of the HENPOWER service users.

2.2 Development of the HENPOWER programme

A HENPOWER management group was established within Equal Arts that was comprised of a project manager and project/community development workers. This group recruited 30 active older people (with a specific focus on recruiting men) to fulfil the role of a HENPOWER volunteer. The intention was for these volunteers to use their existing knowledge and interests in the programme and to develop expertise in henkeeping. An essential attribute that was required for all the volunteers was that they had an interest and desire to help other older people who were less able than themselves.



A Hensioner introducing one of their hens to a Bangladesh Elder during their visit.

The volunteers were recruited to work in small groups with a community development worker. Eight of the volunteers formed a HENPOWER steering group that oversaw the implementation and governance of the project. Steering group members' involvement in decision making processes ensured that the views and concerns of older people shaped the project. Hence HENPOWER evolved as a project that was developed 'with' older people and not just a programme delivered 'for' older people.

The HENPOWER volunteers brought a range of expertise and experience to the role. Some had kept hens, others had had no previous involvement with henkeeping. Learning opportunities were provided for these volunteers to review and enhance their knowledge and skills. They learnt about animal welfare, henkeeping, designing hen houses and health & safety. The approach to education and training included facilitated discussion, role modelling, visits to henkeeping facilities and auctions, and reflection on and in their practice as hen keepers.

With the support of the community workers the volunteers introduced henkeeping within their communities. They designed the hen house and hen run, and following the introduction of the hens they provided day to day care for these animals. There was much interest by other people in the hens. Hence shortly after the introduction of the hens they spent much time talking with members of their community about the hens and providing opportunities for others to assist in henkeeping. This led to the development of hen-related activities within communities that included competitions to name each hen, making cards, and breeding hens to name a few activities.



Enjoying a hen related activity.

There was also much interest by the wider community in the emerging HENPOWER programme. The volunteers were invited to take the hens to local schools and to give talks about henkeeping. Some school children also visited the henkeeping sites and took part in hen-related activities that were created by the volunteers. These events

were so successful in generating interest in the hens that 3 schools now keep hens with support from the 'Hensioners'. This activity enables inter-generational exchange of life skills and knowledge, thereby the older generation actively contributing to the younger which breaks down barriers and fosters positive communities.



Hens at the centre of inter-generational exchange of life skills, knowledge and positive interactions.

The 'Henologists,' a name adopted by the volunteers, also participated in community events such as summer fayres and Science festivals. They acquired skills in talking to the public about their role; and in engaging and encouraging others to become involved with HENPOWER. They also became adept at talking with the press who elicited reports for their papers and radio shows. The role of the volunteer varied – some were more involved in day-to-day care of the hens whereas others directed their efforts to hen-related activities and events.

2.2.1 Establishing HENPOWER in care settings

From the beginning of the HENPOWER programme it was intended that henkeeping would be established in care home settings. The volunteers and project workers visited care homes in small groups. They met with the manager, care staff and residents to discuss the possibility of introducing hens to the care home. As a consequence of this activity they recruited 8 care homes to the project. In each site an action plan was developed for the introduction of henkeeping within the care home. Care staff working in the home were encouraged to take part in HENPOWER activities. These include Summer Fair, 'Best Hen' Awards and arts/crafts activities. Some of these events are open to family and friends and others attract residents from other care homes to join in activities. Also 'Friends of' groups were also established in the care homes to help sustain the hen-related activities. These 'Friends of' Groups delivered events as a way of involving the wider community and contributing to sustainability through fundraising. This activity assists in reinvigorating Resident & Relative committees with a focus on volunteering, henkeeping, opening

up and using the outdoor space in the home, and involving the wider community in the care home.



Volunteers getting the hen house ready.

The use of 'Pets' as therapy is well developed with a tradition of care farms engaging participants with learning disabilities and more recently using pets in older peoples care settings including petting dogs, miniature ponies and even llamas as well as hens and pot-bellied pigs. HENPOWER is innovative in its aim and delivery. Other pet therapy activities focus on the benefit of animals offering empathy, rapport and sense of connectivity. Most petting animal activities, however are quite brief with limited human-animal interaction. In contrast HENPOWER encourages participants to get involved and take responsibility for looking after the hens. These roles are tailored to the abilities and interests of the individual. It is therefore possible for all individuals to be involved with HENPOWER. Everyone can contribute to the effort of the HENPOWER community where they can foster new relationships and engage in new activities.

2.3 Initial year of the HENPOWER project

During the first year, under the auspices of HENPOWER North East Hub & Spoke partnerships were established. These were a vehicle to share HENPOWER ideas and activities that were developed in the pilot site with other older people's communities across North East England. The 'Hub & Spoke' model also provided support for these partners to establish henkeeping in other communities.

As the project evolved in the first year agencies across the UK and abroad contacted Equal Arts and the model of distance learning partners emerged. The local HENPOWER communities, Hub and Spoke partners and distance learning partners collectively came to together by the end of the first year as a membership



Is this a good place to roost?

community. This 'HENPOWER user-led Membership network' ensured that the benefits of HENPOWER were accessible to older people's communities across the nation. These delivery models existed at the time of reporting and included the following organisations: Housing 21, Akari Care, and North Tyneside Homes. There are a further eight North East care settings which are keen to start as well as over 20 requests from care providers Notting Hill Housing Association, Lewisham Homes in London, and care settings in Kent, West Midlands, Anglesey, Yorkshire and Cumbria that intend to commence henkeeping within their organisation.

There has been interest in all the HENPOWER groups to develop ways to share learning. These included:

- Face-to-face meetings
- 'Hen' Road shows
- Presentations at events and conferences: Silver Dreams conference Birmingham, Baring Foundation Coming of Age conference in Manchester, International Arts & Health conference in Sydney Australia, Newcastle Science City Festival and Gateshead Volunteering Events
- Lectures in professional education programmes
- Learning programme in schools led by the 'Hensioners'
- Radio discussions
- Newspaper items
- Development of e-learning resources.

The sharing of best practice included ideas and approaches for the implementation of HENPOWER – what worked well in what circumstances. The Hen Roadshow was successful at events such as Gateshead Volunteer Day and Newcastle Science Festival where they were the most popular stall. This activity provided opportunities

for in excess of 500 members of the public to handle hens and gain knowledge of the programme. The 'Hensioners' have also given presentations at the Baring Foundations Coming of Age Conference. When the Hensioners met with the Newcastle Bangladesh Elders they were HENPOWERed: they shared hen stories such as threats of 'sea eagles not foxes' and exchanged egg recipes as part of World Egg Day. The interaction between these communities of older people was filmed and broadcast on Channel Eye, a Bangladesh speaking TV channel broadcast throughout Europe (SKY 633) with a global audience. International visitors to the North East such as delegates from Komatsu, Japan, which is a city twinned with Gateshead met with the Hensioners as part of a 'HenExpress' exchange. These learning opportunities adopt typical and novel approaches to learning and teaching.

There has also been a focus on developing and sharing ideas for sustaining HENPOWER within communities.

- The Hen Roadshow generated an income from visits and participation in events
- 'Hensioners' developed a 'school egg incubation' programme - this is a growth market for income generation
- Summer Fairs with Hen Awards involving families and wider community
- 'Sponsor-a-Hen' encourages public sign up to individual and corporate giving
- Selling Hen products - 10p per/dozen eggs
- HENPOWER merchandise, designed by participants includes mugs/tea towels/aprons/bags/cards/wrapping paper/calendars. 30% of income returns to HENPOWER has generated £2,500 to January 2014
- Resident and relative committees submit applications to funding bodies to support activities 6 groups have raised £18,000
- HENPOWER franchise to international partners.

Everyone involved in HENPOWER recognised the importance of developing models to fund HENPOWER initiatives beyond the initial core funding. This is critical to the success of sustaining henkeeping within older communities.

2.4 Older people ageing well and helping themselves

A key theme of the Silver Dreams pilot projects was to develop and test out approaches that enabled older people to contribute to their communities and to help less able older people. The media and publicity strand of HENPOWER aimed to present older people making a positive contribution to society. Hence considerable attention was given to developing multi media publicity concerning HENPOWER. This included a blog and Facebook page in addition to information loaded on the Equal Arts web pages (<https://www.facebook.com/josthehenologist>; <http://www.equalarts.org.uk/>) In addition to these sites providing information about HENPOWER, events and activities, there is guidance about how families and organisations can get involved. The Facebook pages have been extremely successful in both sharing what the 'Hensioners' are up to as well as engaging other individuals and organisations. Staff from older peoples care settings from across the UK are requesting information as well as a range of other older people's organisations about HENPOWER through Facebook. The families of participants

regularly 'comment' and relatives of older people nationally expressing a keen interest; with 1000 'likes' demonstrating regular traffic and with peaks of over 7,000 views a day.

TV coverage including The Paul O'Grady Show with 3.9m viewers and Channel 4 are broadcasting a 6 minute Hen Men documentary as part the documentary Shooting Gallery series with Producer Susie Wright saying 'We love the Hen Men and want it as part of our mini-series on ageing'. These shows portray the Henmen with images of older people making a positive contribution to society and suggest that they have been instrumental in making improvements in care settings to populist and diverse audiences.

HENPOWER has also attracted significant press coverage from regional daily newspapers as well as ageing and hen-keeping sector periodicals. BBC's 5 Live got in touch via Facebook and broadcast a live interview on a Saturday morning and the USA Franchise negotiations also came through this social media.



A place to meet chat and get involved



The outdoors has something of interest

Section 3: The Evaluation

3.1 Methodology

The evaluation of HENPOWER adopted a realistic evaluation approach. Realistic evaluation aims to capture the outcomes of interventions that are likely to be influenced by a range of external variables which are not possible to control. Realistic evaluation places emphasis on the mechanisms through which initiatives achieve outcomes in a specific context described by Pawson and Tilley, (1997) as 'context, mechanism and outcome configurations' in order to generate higher level theoretical knowledge and evidence. This was particularly appropriate in an evaluation where these factors influenced the implementation and delivery of the HENPOWER programme.

One of the key factors that was addressed in the realistic evaluation was the context in which change occurred. HENPOWER was introduced in complex older people's housing and care settings where there were many, sometimes incompatible priorities, which did not necessarily include engagement in social activities. Understanding this context was important to the development of understanding of the mechanisms for sustaining HENPOWER activities.

The broad framework of realistic evaluation allowed us to capture outcomes derived through the HENPOWER programme. In the HENPOWER evaluation 'context, mechanism and outcome configurations' were interpreted and applied as follows:

- External contexts – socio-demographic characteristics of the HENPOWER volunteers, support and empowerment of the volunteers
- Internal contexts – infrastructures and wider organizational processes in the care settings for planning and delivering social activities
- Mechanisms – programmes of work, volunteer training, volunteer support, partnership working between volunteers resident/Friend committees
- HENPOWER project outcomes that were determined by the funding body and the national evaluation team for the Silver Dreams programme:
 - Improvement of the wellbeing of 30 volunteers through roles and responsibilities in keeping hens and improving the use of outdoor spaces in care settings
 - Decrease social isolation and depression through volunteers involvement in HENPOWER activities
 - Support volunteers to develop existing and new skills
 - Volunteers devise activities in care settings which involve schoolchildren, residents families and the community
 - Volunteers work with existing residents committees to sustain HENPOWER activities
 - Recipients participate in HENPOWER activities.

This framework provided a way of identifying and integrating the qualitative and quantitative data that was derived from the participating volunteers and HENPOWER recipients (care setting residents).

3.2 Aim and approach of the evaluation

The overarching aim of the evaluation was to examine the multiple perspectives of those who participate in the project concerning how involvement in HENPOWER changed their lives. A secondary aim was to explore how the project could be rolled out and disseminated nationally.

3.2.1 HENPOWER project outcomes that were addressed in the evaluation

- Changes in the wellbeing of the active older volunteers through their role and responsibility in keeping hens and improving the use of outdoor spaces in care settings.
- Changes in self-reported isolation and depression of the older volunteers through involvement in hen-keeping activities.
- Type and range of opportunities for older people to take a leading role in devising activities in care settings.
- Support provided to the older volunteers to develop skills that enabled them to take lead roles in HENPOWER.
- Impact of HENPOWER on self-report of mental wellbeing, loneliness and depression of the HENPOWER service users.

3.3 Methods

In order to achieve breadth and depth in the evaluation, the design had two parallel strands. Strand one was a qualitative exploration of the views and experiences of the HENPOWER participants. Strand two was a longitudinal case study investigation of 5 people who were recruited as active older volunteers for delivery of the project.

3.3.1 Strand one was comprised of three parts – service data, a pre and post survey of 1) volunteers and 2) recipients, and focus group interviews.

Service data

Equal Arts routinely collected data concerning delivery of the HENPOWER programme. This data included:

- number of volunteers and demographic information
- activities: number of activities, type of activities, number of participants
- details of beneficiaries: care setting residents, residents families, school children, and community residents

HENPOWER questionnaire

The questionnaire elicited demographic data including age, gender, self-perceived health, satisfaction with life, use of health services and informal care. It also included validated scales that assessed volunteer and recipient outcomes as identified in 3.2.1. These were:

- Warwick-Edinburgh Mental Well-being scale (WEMWBS) full version. The WEMWBS was developed by © NHS Health Scotland, University of Warwick and University of Edinburgh (2006). The Likert scale consists of 14 statements about a person's feelings and thoughts. The scale represents a score for each item

from 1 to 5 respectively, that can result in a minimum score of 14 and maximum score of 70. The overall score for the WEMWBS is calculated by totalling the scores for each item, with a higher WEMWBS score indicating higher level of mental well-being. This tool has good content validity, construct validity, internal consistency, and moderate criterion validity (Tennant et al 2007; Bartram et al, 2011)

- De Jong Gierveld Loneliness Scale (DJ): this scale distinguishes emotional loneliness and social loneliness (De Jong Gierveld, 2006, 2010). Loneliness is an indicator of social well-being and pertains to the feeling of missing an intimate relationship (emotional loneliness) or missing a wider social network (social loneliness). The 11-item De Jong Gierveld Loneliness Scale is a valid and reliable measurement instrument for overall, emotional and social loneliness. The scale consists of 11 statements and respondents are requested to indicate the extent to which they feel now represented by a score for each item from 1 to 5. Six of the items are formulated negatively and five are formulated positively. The total score ranges from 0 (absence of loneliness) to 11 (extreme loneliness). A Loneliness Scale score of 3 or higher is considered as the presence of loneliness with scores of 3 – 8 indicating moderate loneliness; scores of 9 or 10 severe loneliness and score of 11 indicting extreme loneliness.
- Geriatric Depression Scale (GDS): this scale can be used with (amongst others) mild to moderately cognitively impaired adults, in community, acute and long care settings (Kurlowicz, 2002). The original Geriatric Depression Scale (GDS) was a 30-item self-report assessment used to identify depression in older people. The scale was first developed in 1982 by Yesavage, Brink, Rose et al. (1982). The GDS-15 used in this study asks 15 questions and prompts the respondent to give answers (Yes or No) which they feel is the best answer for how they felt in the past week. The total score ranges from zero (no depression) and maximum total score of 15 (depression): a score of 5+ indicates depression with a score of ≥ 10 points is almost always indicative of depression: A score > 5 points should warrant a follow-up comprehensive assessment.

The survey was administered to:

- All volunteers (n=30) at baseline (Nov 2012 - Jan 2013) and 9 months follow up
- All recipients (n=50) at baseline (March 2013) and 6 months follow up

Volunteers

One focus group interview was undertaken with HENPOWER volunteers (n=11) during the first 3 months of the HENPOWER programme. This method generated data by interaction between group members (Morgan and Kreuger 1993). This also enabled exploration of the degree of consensus concerning the role and responsibilities of HENPOWER volunteers. Topics explored during the focus group interview included motivation for volunteering, aspirations from participation, confidence to fulfil their role and the support they anticipated that they would require for their involvement.

Nine months later the same volunteers who participated in the initial focus group interview were invited to a second focus group interview to explore their experiences of involvement and decision making, what they had achieved, barriers and facilitating factors to these outcomes.

Recipients

Six months after the HENPOWER activities had commenced in the care settings individual and focus group interviews were undertaken in each of the participating site (n=6). Focus group interviews were undertaken with 18 older residents in 3 different care homes (1 group interview included 8 residents and 1 daughter; the other group interviews included 6 and 4 residents), and 3 individual interviews were undertaken with residents in 3 care homes. A total of 21 residents and 1 relative participated in interviews. Individual interviews were also undertaken with 5 care homes staff (including managers) and 17 staff participated in 6 focus group interviews (a total of 22 staff taking part in interviews).

Only those residents who had capacity to consent took part in the group interviews. This was assessed by the care staff who had detailed knowledge of the cognitive abilities of the residents. Those residents who had taken part in HENPOWER but were deemed to lack capacity to consent were excluded from the evaluation. The reason for the exclusion of focus group participants was the requirement for them to have the cognitive ability to recall, reflect on, and appraise their experiences. Both groups of participants were asked about their views of HENPOWER services/activities that had been developed, how these services/activities had changed the experience of life in the care setting for the resident, their views of their interaction with the 'volunteers' the barriers and facilitators to adopting the recommendations of the 'volunteers,' and how the services/activities could be sustained.

In addition the care and management staff were asked about what changes had taken place in the care setting during the project or are planned as future developments in their service.

Analysis

Quantitative data: The data from each questionnaire was coded and entered into the Statistical Package for the Social Sciences (SPSS) to signify related data (repeat measure of the HENPOWER survey). The data from the survey was regarded as ordinal data as there is no guarantee that the numbers assigned between ratings account for an equal distance e.g. a rating of disagree (2) is not twice as much as a rating of strongly disagree (1) (Streiner and Norman, 2008). To analyze differences between the 2 related groups (repeated measures) of the survey a Wilcoxon signed rank test for paired data was used for the statistical analysis.

Qualitative data: Audio recordings were transcribed verbatim. A thematic analysis (Mathews and Ross, 2009) process was used. This is the process of segmenting, categorising and forming links between aspects of data in order to interpret meaning from them (Grbich, 2007).

3.3.2 Strand two was a case study investigation that allowed us to capture depth and complexity of a case (Yin, 2009), through the use of multiple sources of data, enabling triangulation of data. Five cases were recruited from the 'volunteers' and selected on the basis of their responses to the baseline survey to optimise diversity in this sample. Hence this sample included individuals with low and high GDS scores, varied degrees of self-reported wellbeing and those with differing DJ scores.

Data collection replicated the baseline survey data that included Geriatric Depression Scale (to assess depression), Warwick-Edinburgh Mental Well-being scale (to assess well-being), and De Jong Gierveld Loneliness Scale (to assess emotional loneliness and social loneliness). Data collection commenced in November 2012 and continued for a period of five months resulting in six time points of data collection (baseline survey and five times monthly case study data collection). In addition to completion of the survey each month the participant was invited to take part in a short interview of approximately 20 minutes. The purpose of the interview was to explore daily life occurrences to insight to any changes that were observed in the quantitative data generated through the survey (Crawford and Garthwaite, 2007). These interviews were audio recorded and fully transcribed for the purposes of analysis.

Analysis

Quantitative data analysis: A Bayesian approach was undertaken to compare the individual case scores during the single case studies with the summary statistics of the control population of 30 volunteers. The advantage of this approach is that it gives a point estimate of the percentage of the control population that would obtain a lower score and a 95% credible interval for this quantity (Crawford and Garthwaite, 2007). The programme SingleBayes.exe was used to undertake the analysis (Crawford and Garthwaite, 2007).

In this study the individual case study scores were viewed and compared to the volunteer population. The GDS scores and the DJ short scales for emotional and social loneliness (DJ tot) scores both increase with increasing levels of depression and loneliness, whereas for the WEMWBS, high scores represent better wellbeing, hence in the presentation of the results the WEMWBS scores were subtracted from 100% to ensure a similar direction on all the scales (i.e. 0% represents as good as can be, 100% represents as poor as can be on each scale).

The control population consisted of 30 volunteers from the same living conditions as the cases who were studied in the series of single cases. The mean age of the volunteers was 73.89 ± 13.95 . Fourteen of the volunteers were men and 16 women. Their scores on the scales were: GDS 7.28 ± 2.41 ; WEM 42.47 ± 10.64 ; and DJ tot ± 3.24 (all values expressed as mean \pm standard deviation)(further details see chapter 4; 4.1). SPSS (v19) was used to calculate the descriptive statistics and Normal P-P Plots where the cumulative proportion of a single numeric variable against the cumulative proportion expected if the sample were from a normal distribution were used to assess normality of the data. For the GDS, WEMWBS and DJ tot data the points clustered around a straight line supporting the approximation of normality for this data.

Qualitative data analysis: Audio recordings were transcribed verbatim. Open coding was undertaken to identify changes in the individual's circumstances. The codes were compared with the outcomes of the quantitative analysis to provide insight to the circumstances that influenced the participants' reports.

3.4 Ethical considerations

There were a range of participants involved in this evaluation. Their rights to informed consent, to have freedom to withdraw without impact on care, employment or voluntary status, and confidentiality was maintained throughout the evaluation. There were particular concerns about the ethics of engaging older people who may have undiagnosed dementia in the evaluation; the main concern is to what extent did this (or not) affect their capacity to consent. To address this care staff were asked to indicate if the individual had the ability to understand information about the evaluation, and if they could retain this information to make an informed decision. Informed consent in the evaluation was regarded as a process that was continually negotiated and supplemented the more conventional formal consenting process. This enabled continuous monitoring of participants capacity.

All data collected via the questionnaire was assigned an ID number making it anonymous. The ID number ensured that the evaluation team could follow up the baseline questionnaire and pair with the follow-up questionnaire responses.

Section 4: Findings: HENPOWER volunteers' views, experiences and reflections on HENPOWER

4.1 HENPOWER volunteers

Thirty individuals agreed to become HENPOWER volunteer at the commencement of the programme. There were 14 men and 16 females of white British ethnicity, aged between 25-92 with a mean of 73.89 years of age. They all lived in North East England, the majority living in sheltered housing accommodation.

Eighteen individuals reported that they received 'help' or other forms of social care to enable them to continue to live in their own home. This support was from a range of agencies and services including meals on wheels, visits from carers (paid and unpaid), befriender visits, cleaning services, assistance with shopping, handyman services, visual and hearing services.

Twenty one individuals indicated that they experienced long standing illness. Fifteen reported that they had spoken to a GP during the previous two weeks of completing the survey and of those 6 had spoken to the GP more than once. Their encounter had resulted in the issue of a prescription for 14 individuals. Eight people reported that they had had an appointment with a nurse during the same period. Fewer people (n=2) had attended accident and emergency services; n=16 out-patient for appointments with health specialist and n=4 people had received in-patient hospital treatment during the previous three months.

When asked how satisfied they were with their life today 66.7% scored 5 or less on a scale of 0 (not at all satisfied) -10 (completely satisfied); and 26.6% between 6-10 on the same scale (2 non responders). Very few people reported that they were able to do all of the things that made them feel valued (n=5); the same number were able to do many things (n=5); 17 able to few things and one person indicated that they were unable to do things that make them feel valued. They were also asked if they were able to do things that they considered enjoyable; 1 person reported that they were able to experience all the enjoyment and pleasure that they wanted; 7 reported a '*lot*' of enjoyment and pleasure; 19 '*little*' enjoyment and pleasure; and one person reported a lack of enjoyment and pleasure in their life. The total scores for the Warwick-Edinburgh Mental Well-being scale indicated that the volunteers experienced a range of self-reported mental well-being from low scores (18) to high scores(70); with a mean of 42.63 (see table 1).

WEM_TOT					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	1	3.3	3.6	3.6
	22	1	3.3	3.6	7.1
	34	1	3.3	3.6	10.7
	36	2	6.7	7.1	17.9
	37	3	10.0	10.7	28.6
	38	3	10.0	10.7	39.3
	41	2	6.7	7.1	46.4
	42	3	10.0	10.7	57.1
	44	1	3.3	3.6	60.7
	45	1	3.3	3.6	64.3
	46	2	6.7	7.1	71.4
	48	1	3.3	3.6	75.0
	50	2	6.7	7.1	82.1
	53	1	3.3	3.6	85.7
	54	1	3.3	3.6	89.3
	59	1	3.3	3.6	92.9
	61	1	3.3	3.6	96.4
	70	1	3.3	3.6	100.0
	Total	28	93.3	100.0	
Missing	System	2	6.7		
Total		30	100.0		

Table 1 : Warwick-Edinburgh Mental Well-being scale total scores for the participating volunteers

Within the volunteer population 17/30 scored between 5 - 14 on the Geriatric Depression Scale. This is suggestive that some of these individuals required a comprehensive assessment for the presence of depression (see table 2).

Total GDS score						
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	0	1	3.3	3.6	3.6	
	1	1	3.3	3.6	7.1	
	2	3	10.0	10.7	17.9	
	3	1	3.3	3.6	21.4	
	4	4	13.3	14.3	35.7	
	5	2	6.7	7.1	42.9	
	6	5	16.7	17.9	60.7	
	8	2	6.7	7.1	67.9	
	9	2	6.7	7.1	75.0	
	10	3	10.0	10.7	85.7	
	13	2	6.7	7.1	92.9	
	14	1	3.3	3.6	96.4	
	999	1	3.3	3.6	100.0	
		Total	28	93.3	100.0	
	Missing	System	2	6.7		
Total		30	100.0			

Table 2 : Geriatric Depression scale scores for the participating volunteers

The project team aimed to recruit older volunteers who experienced social and emotional loneliness with the aim of improving their life circumstances through involvement in the HENPOWER project. It was not considered appropriate to express this in recruitment documents therefore co-ordinators sought other means such as targeting those living alone to volunteer. A score of 3 or higher on the De Jong Gierveld Loneliness Scale is considered as the presence of loneliness with scores of 3 – 8 indicating moderate loneliness; scores of 9 or 10 severe loneliness and score of 11 indicating extreme loneliness. It is clear from the following table that many of the volunteers did experience loneliness, and some extreme loneliness at commencement of their volunteering activities (see Table 3).

Total De Jong score					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	6.7	6.7	6.7
	1	2	6.7	6.7	13.3
	2	4	13.3	13.3	26.7
	3	3	10.0	10.0	36.7
	4	4	13.3	13.3	50.0
	5	4	13.3	13.3	63.3
	6	5	16.7	16.7	80.0
	8	1	3.3	3.3	83.3
	10	1	3.3	3.3	86.7
	11	2	6.7	6.7	93.3
	999	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Table 3: De Jong Gierveld Loneliness Scale scores for the participating volunteers

The volunteer data showed no clear relationship between age and each of the scales or between the scales when explored by correlation analysis using Spearman's Rank Correlation.

4.1.1 Pre and post intervention outcomes

Data was available for 24 of the original 30 volunteers at the follow-up stage. It was tested using related samples Wilcoxon's signed rank test. A significant decrease in GDS ($p < 0.001$) scores were observed. The GDS was developed to give a simple, easy to use approach to screening for depression in older adults, with higher scores reflecting presence of depression. The presence of significantly lower scores at follow-up is indicative of decrease of depression in the study population.

The analysis of WEMWBS baseline and follow-up scores for the volunteers indicated that there was a significant increase in the scores ($p < 0.000$) suggesting that there were improvements in mental well-being in the study population. Analysis of the total scores for De Jong Gierveld Loneliness Scale indicated that there was no significant difference between scores attained at baseline and follow up ($p < 0.281$). Table 4 gives a summary of baseline and follow up data for all scales for the HENPOWER volunteers.

Statistics

		GDS score 1	GDS score 2	WEMWBS score 1	WEMWBS score 2	Total De Jong score 1	Total De Jong score 2
N	Valid	24	24	23	23	24	24
	Missing	0	0	1	1	0	0
Percentiles	25	5.750	2.000	37.000	46.000	2.250	3.000
	Median	7.750	3.000	41.000	53.000	5.000	4.000
	75	9.000	5.000	48.000	61.000	6.750	7.750

Table 4: Pre and post intervention volunteer survey data

4.1.2 Motivation for volunteering

The majority of volunteers on the HENPOWER project had not engaged in volunteer activities before. They highlighted several factors that led them to become involved with HENPOWER. These included:

- Altruistic quest to help others
- To take part in a team of volunteers
- Being able to use existing and develop new skills and knowledge
- To share ideas within their own community about henkeeping and related activities
- To learn about hens and henkeeping
- A vehicle that enabled them to meet others from their own community
- An opportunity to develop a new interest
- To feel useful
- To experience a new challenge
- The importance of having meaningful activities in care settings (33.3% felt that this was important and 23.3% felt that this was very important)
- To participate in an outdoor activity
- To visit care settings.

Many perceived that there were benefits to themselves and to others, which would result from their volunteering activity. In the following extract this volunteer spoke of his positive interaction with residents in a care home:

“Yeah, that’s right – we met two guys; one guy who’d been a poultry farmer and another guy who’d been a lecturer in poultry at the university ... and they lived in the care home, didn’t they. They were very keen for us to come back, because it was following up their desire and interest from something that they knew about in the past.”

They indicated that they would be involved in a meaningful activity that would provide a *'legitimate reason for them to get out and about.'* This was so important at a time in life when social networks and range of activities were contracting through deterioration in their, and others, physical condition. They anticipated that

henkeeping would be a shared responsibility and they would be members of a volunteer team. Being able to share responsibility with others was particularly important for those living with chronic conditions that impeded their ability to consistently fulfil activities due to exacerbation in their condition.

They suggested that henkeeping was a novel, yet familiar, activity. It had the possibility to bring people together in new and unexpected ways. Hen related activities had the potential to stimulate conversations and thereby social interaction within their community.

“It gets people talking to each other that’s never spoken to each other for years.”

4.1.3 Factors influencing involvement in HENPOWER

Ease of access to the various Hen keeping activities was highlighted as an important issue. If the volunteering opportunity was within an accessible distance from their home the individual was more likely to take part in HENPOWER activities. Many of the volunteers experienced mobility problems and this had led them to limit their involvement in many community-based interest groups.

Volunteers enjoyed learning and sharing their knowledge about the hens and hen keeping. They also enjoyed contributing to the care of the hens at a level appropriate to them. Hen keeping, however was of secondary importance to having an outdoor interest that motivated them to ‘keep going.’

“They keep me out of the house ... stops me sitting or just lying down, falling asleep and watching the telly.”

Volunteers emphasised that they could decide the type and level of involvement in HENPOWER through discussion with the project co-ordinator. This was important and ensured that they had opportunities to use existing and develop new skills. They could take part in deciding how the hens were to be housed and in developing the hen houses; or caring for the hens through feeding and cleaning the hen runs. Others were keen to be involved with outreach activities such as taking the hens to schools and providing children with the opportunity to handle hens and learn more about these animals. Indeed 70% of the volunteers stated that they felt that older and younger people should have opportunities to mix together in order to share knowledge and experiences. HENPOWER provided one way of achieving this.

Some volunteers were really concerned about the needs of older people living in care setting. They wanted to take the hens into these care settings and assist residents to make decisions about henkeeping within the care home, and to work with them to care for the hens. They emphasised that there was no pressure to get involved in the volunteering aspect of the HENPOWER project, or to remain involved.

4.1.4 Views on hen keeping

A few volunteers initially had reservations about the logistics of hen keeping. One source of concern was that having hens in the environment might attract vermin; there was also a worry that foxes might kill the hens. Another reservation expressed by the volunteers about the project was related to the cost of setting up the hen run and subsequent cost of keeping the hens. Following the initial implementation of the project the volunteers were less concerned about these issues. They were keen to stress the positive effects of the HENPOWER project.

The hens have become an integral and important feature of the volunteers lives, the volunteers refer to the hens as their '*pets*', their '*companions*'. Now that the HENPOWER project is up and running, the volunteers suggested that their aim is to keep hens on a long-term basis, they are proud of their achievements especially when other people stop to talk about the hens and the project. The hens add to the variety of conversations and activities that the volunteers take part in:

"... it's going to get more enjoyable. Hope it is going to be long term' well, just all the experience – its very good. I just hope it goes on a bit more you know. I hope it continues, I would miss them if they went."

The volunteers consider the hens and HENPOWER activities to be a key to engaging with each other and the wider community. One man spoke of his sense of isolation in the community where he lived and how this changed through his involvement in the project:

"I mean, I used to see him (a member of the same bungalow community) to say good morning to and now I class him as a personal friend. I've made a lot of friends through HENPOWER. Not just in this scheme, but in other places. I've made a lot of friends and it gets us out the house."

Volunteers suggested the hens '*add a new dimension to your life*' and that of the community where they lived:

"I just think it's brought us all together."

"Aha, I've never had any trouble talking to others, but it just that we seem to be getting to know each other better round here, because there's people I hardly ever saw that live here, like (points to another volunteer) and now I see him all the time."

Other volunteers recognised the positive spin offs of the HENPOWER project in the form of other activities associated with the hens, this includes, taking the hens to other care environments to engage with residents, drawing the hens, collecting their eggs, photography:

P5: "Some of the merchandise and stuff has been designed, using these guys' ideas (the volunteers)."

P2: "We're designing things with the chickens; we're making flags at the moment."

P5: *“Bunting, yeah.”*

P2: *“Bunting, like flag. We’ve got people on sewing machines and we’ve got the arts and crafts and design thing.”*

One volunteer emphasized how the hens gave him a reason for getting out of the house and providing an outside interest. He commented:

“there’s so many goes on from the beginning of the... getting introduced to Henpower... I mean, you think it’s not just keeping hens; I mean, there’s so much that goes on after that, because we bred the chickens and put them in incubators... And it’s kept going; it’s not something you get bored with; there’s always something in the offing, coming up, like auctions; going to these places and helping old people in these homes and schools – seeing children that’s never seen hens.”

The majority of volunteers articulated that hen keeping was a new hobby, a new interest and a different focus. There is a sense of pride that other people are attracted into the community and want to look at and talk about the hens; people such as bin men and other work men now stop and talk about the hens instead of just going about their business, children of all ages come to look and talk about the hens:

“I mean things have changed a lot you know.”

“it’s a combination of everything ... When you’ve got a group like this ... not everybody is of the same ...mind. But when it comes to the chickens, they’re all of the same opinion. To look at the hens ... one lady likes to draw, one gentleman might not; he might write stories. Everybody ... it’s all based around the hens, so it’s a good project to be involved with.”

4.2 Introduction to the volunteer case studies

To obtain an in-depth understanding of the HENPOWER volunteer experience 5 individuals were invited to take part in monthly data collection for 5 months. This involved completion of the survey and a short interview concerning their daily experiences and involvement in HENPOWER related activities. The findings are presented in the form of 5 case studies that give both a description of the individual and their life circumstances, and analysis of data that was derived from the survey. Figures 1-5 within the case studies present the Bayesian analysis of scores for Geriatric Depression Scale (GDS), De Jong Gierveld short scales for emotional and social loneliness (DJ tot) and Warwick Edinburgh Mental Wellbeing scale (WEMWBS). The Bayesian analysis places the case’s score as a point estimate of the percentage of the control population falling below the score, the bars represent the 95% upper and lower credible limits for the estimate. The WEMWBS score is subtracted from 100% to ensure that the direction of improvement is the same for all scales, i.e. 0% represents as good as can be, 100% represents as poor as can be on each scale.

4.2.1 Case study one

Alfred is an 87 year old man who lives alone in a bungalow that is supported by warden services. He moved to this accommodation with his second wife 14 years ago and remained there following her death (9 years ago). He has lived a very active life fulfilling several careers. He was a skilled welder and worked in the shipyards in North East England. Following closure of the shipyards he relocated to Norfolk to seek employment in the housing industry. His Norfolk home provided a base for the development of his cottage farming business. This business had 2 aspects: 1) rearing goats which enabled him to sell milk and cheese; 2) breeding and selling chickens and their eggs. At the peak of this business he had a stock of 56 free range chickens and a good reputation in the area for the quality of his produce.

Following retirement his family encouraged him to return to the North East. As a couple they developed a full social life becoming members of local clubs and interest groups. He has maintained a range of interests. He participates in a computer club and a pensioner group. Baking is a particular interest and he is pleased that he is able to continue to bake. Daily life is now dominated by routines, visitors, interests and HENPOWER associated activities. His routines have to accommodate his multiple physical problems. Getting up in the morning is a slow process and he takes time to prepare for the day. He requires support from the warden to put on stockings but apart from that he is highly independent. His grand-daughter visits regularly and she is a 'joy' to him. They exchange views about local and national events and he enjoys this dialogue. His sister visits on a Saturday and she provides support by doing his ironing. His De Jong Geirveld loneliness scores ranged from 6 – 11, this indicated that he experienced loneliness and at times extreme loneliness. It can be seen from figure 1 that his score on this scale was relatively stable over the period of data collection.

He has multiple physical health problems. Whilst he had visited his GP and attended outpatient appointments during the previous 12 months prior to commencement with HENPOWER he had not required accident and emergency, or in-patient treatment. He had a right knee replacement, yet his mobility continues to be limited to walking short distances. Getting out and about is facilitated through the use of a scooter that is easily taken out of his car with the use of a hydraulic mechanism. He has experienced falls resulting in bruising and a reduction in confidence.

At the commencement of the programme his responses to the GDS scale (score of 9) indicated that he experienced moderate to severe levels of depression this had changed to scores within the normal range (3) following 9 months of participating in the HENPOWER project. Figure 1 presents the GDS scores over 5 months and it is clear that from month 1 there is a consistent improvement in his mood. This was most marked between month 1 and 2. During this time he became actively involved in HENPOWER. His involvement enabled him to use the skills and knowledge that he had of henkeeping in his advanced years. Scores from the WEMWBS suggested that subjective wellbeing and psychological functioning also consistently improved over the period of involvement (initial responses – 22; latter responses 52-59) (see figure 1). It is noteworthy that there is a marked improvement during month 1-2.

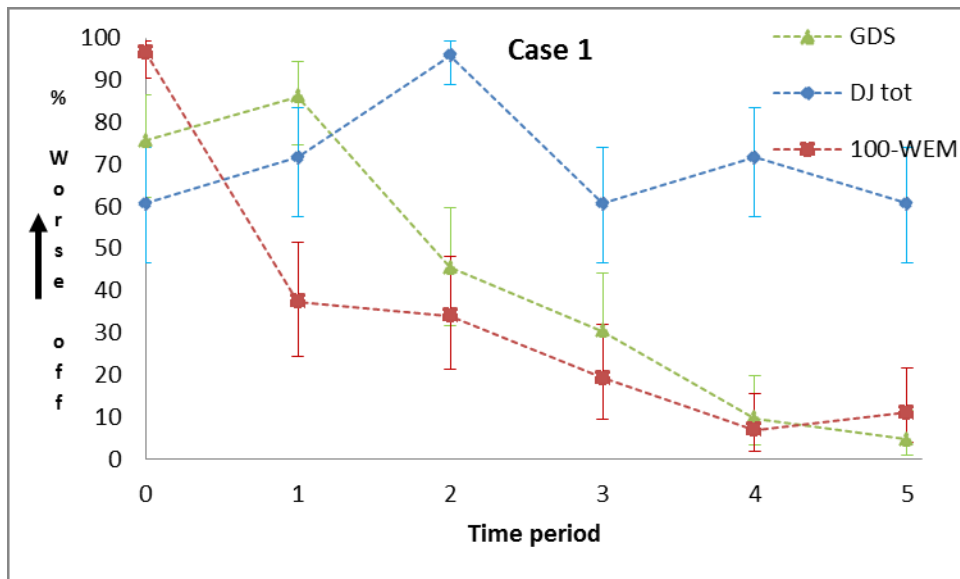


Figure 1: Summary of survey results from commencement of the programme to month 6: Case study 1.

4.2.1.1 Views and experience of HENPOWER

Alfred has had a lifelong passion for animal husbandry. His expertise and skills about caring for animals has accrued throughout his life. Yet when he was informed about HENPOWER he thought that the concept was a ‘*little bit silly.*’ He did not like the notion of hens being treated as pets and certainly did not like the idea of ‘nursing hens’ or referring to hens ‘as if they were a pet – they are livestock.’ He set these views aside and decided to take part in HENPOWER activities. His views changed over time and he now has very positive views of HENPOWER:

“It gets me and others out of our homes. This is really important when you live on your own.”
‘It is another interest in my life. Everyone (other residents within the bungalow community) wants to know about the progress of the hens. It is a good topic of conversation.’

He has clear views on the difference between hen-keeping as it is conceptualized in the HENPOWER project and farm settings. Within his home setting the hens are pets – they have names and they are handled. The residents are keen observers of the hens. They watch the development of the chicks, from hatching to maturity. They develop understanding of the breeds, qualities of different breeds, pecking order within the brood and recognition of the dominant hens. These observations form part of everyday conversation within the resident community.

Alfred suggests that there is a conflict between the notion of ‘*hens as pets*’ and ‘*hens as a commodity.*’ As commodity hens have value in their egg laying and when they are sold at auction. The former is a source of delight in the resident community. The eggs are sold to visitors to support the needs of the hens and are used to provide communal lunches. The latter can be upsetting for those who develop attachment to particular hens.

In addition to HENPOWER being a source of interaction in the resident community, the project provides opportunities for residents to fulfill roles and responsibilities in relation to hen-keeping. Some residents participate in the selection of hen houses and development of the runs. Others feed the hens and make routine checks on the hens to ensure that they are not injured or have other health problems. Care of broody hens and chicks demands specialist knowledge and fastidious attention. Alfred felt limited in his ability to contribute to the daily care of the hens as a consequence of his mobility problems; however he was able to draw on his specialist knowledge to inform the care required:

“It is approximately 19 days when the eggs will start to hatch.”

“You have to lift the broody hen off the clutch to ensure that the hen drinks and eats.”

“We will need to sell the cockerels at 18 weeks otherwise when they get their voice we will have complaints about the noise.”

HENPOWER provided an opportunity for Alfred to make a contribution to his community. The data derived from the survey indicated that on commencement of his involvement with HENPOWER he indicated that he was unable to do things that made him feel valued, yet over the course of the period for data collection he consistently reported that he was able to do things that made him feel valued. Yet he consistently reported that he could have little enjoyment and pleasure that he wants to experience, prior and after involvement with HENPOWER. This suggests that HENPOWER provided opportunities for him to make a contribution within various communities and being able to derive pleasure associated with his activities and achievements, whilst continuing to experience the limitations associated with his disabilities and health problems. In essence his aspirations continued to exceed what he could attain.

He has also made a contribution to society through his participation in activities such as visits to schools and care homes. In a school setting he shared with the children his knowledge of hens, hen-keeping in a range of settings, and aspects of hen related business such as producing eggs for the mass market and poultry production. He felt that these were the broader social benefits that were derived through HENPOWER whereby older volunteers transmitted their life skills, culture and history to younger generations. In care homes he felt that he had the opportunity to enhance the quality of life of other older people through supporting HENPOWER related activities:

“HENPOWER touched people’s heart. It can touch people with dementia as well as those who are lonely.”

He observed the facial expressions of those with dementia clearly indicating that interacting with the hens was a pleasurable experience. The visits also provided an opportunity for those living in care homes to meet and interact with community-dwelling older people. Alfred felt that this was important to those who could feel ‘trapped’ away from the world.

His involvement in HENPOWER also provided opportunities to develop new skills. Participation in events such as ‘Science Festival’ held in Newcastle brought him into

a position as a key member of the HENPOWER team with the responsibility of informing members of the public of the project and its outcomes. His involvement in workshops and conferences required development of presentation skills and the confidence to address large audiences. This was '*something that I never thought I would have had the ability to achieve.*'

In summary Alfred was positive about his participation in HENPOWER. He had opportunities to use existing, and develop new skills and knowledge. He did challenge the type and level of interaction between humans and hens providing critical insights to those developing the programme. Most importantly HENPOWER added something new to his life at an advanced age. He had opportunities to be with people and something meaningful to do every day that he valued.

4.2.2 Case study 2

Brenda is a 62 year old woman who lives in a warden controlled bungalow with her brother-in-law. He provides companionship, and continual care and support for her. Following her divorce, 22 years ago, she maintained close contact with her 2 sons and daughter. She has endeavoured to support her children throughout the difficult circumstances that they have faced in their adult lives. Relationship, finance and work-related difficulties and health problems have dominated their lives. In response Brenda's coping mechanisms were '*tested*' on more than one occasion and she has found life to '*be difficult*' although she indicated that she tried '*to put a brave face on things.*' She indicated that her overall satisfaction with life was low, 2 on a scale of 0-10, with 0 indicating not at all satisfied. Her low satisfaction with life did vary according to the level of difficulty that she and her family experienced. For example when one son was being considered for an interview she was more positive with her circumstances.

Brenda states that she has a good relationship with her neighbours. She is interested in those living in the group dwelling and knows their interests and circumstances. From her lounge she can observe their comings and goings. This is a positive contribution to her life. She has participated in community trips, enjoying the company of others. Where she lives is an older community with the consequence that individuals experience problems associated with later life. During the data collection period one of her younger neighbours died following a prolonged battle with cancer. Everyone was aware of this woman's illness yet the community was '*hard hit*' by her death. Such challenges contributed to Brenda's experience of '*loneliness*' in this community. There might be many people living in the group dwellings yet illness limited interaction, and the regular occurrence of death was associated with loss and grief. Her intense sense of isolation and loneliness was reflected in a low score (11) on the De Jong Geirveld loneliness scale during the early stages of data collection. Her sense of isolation and loneliness improved over the 5 months of data collection as presented in figure 2. Of particular note is the positive change that occurred at month 3, which coincided with the time that she was engaged in HENPOWER activities and planning/taking short UK holidays.

A significant loss that had a major influence on her negative mood during this year had been the death of her pet cat. She had been her companion for 12 years and the

unexpected death had been devastating and overwhelming for Brenda. Following the death of her beloved pet, along with other difficult family events, her mood declined rapidly leading to clinical depression (this was reflected in GDS scores of 9-13). She had experienced anxiety and depression throughout her life and the cumulative effects of current stressors led to a relapse. She lost interest in knitting, jig-saws and decorating her home. She preferred to stay in her home and avoid the company of others. She even struggled to do the mundane everyday activities of personal care and household chores.

Her brother-in-law and carer encouraged her to contact community mental health services and engage in self-help activities. Whilst she received weekly support from a community mental health worker he developed future-orientated goals such as planning a short coach trip. Even the ‘packing of the case’ in preparation for the journey was taxing yet became a source of pleasure when the task was satisfactorily completed. The trip provided a break from the routines of everyday activities that served as a reminder of her difficulties. The success of this trip and the positive impact on her mood encouraged them to plan another short holiday. He also encouraged her to engage in activities and kept a jig-saw on the go to provide a distraction. When she had more energy he encouraged her to continue to knit for her charity. These activities were a distraction but more importantly they enabled her to do ‘something worthwhile’ and ‘*experience fulfilment.*’ He also encouraged and supported Brenda to take part in HENPOWER and related activities.

Brenda’s mood improved over the period of data collection (reflected in GDS score of 3-5) and she reported that her anxiety had lessened. The scores from the WEMWBS suggested that subjective wellbeing and psychological functioning had consistently improved over the period of data collection (initial responses – 18; latter responses 48-56). In contrast her physical health deteriorated. She suffered from long-term chronic conditions including asthma and epilepsy. During the evaluation study she was diagnosed with atrial fibrillation and in the latter part of the project she had a myocardial infarction. She survived this life threatening cardiac episode and this impressed upon her the ‘*importance of making the most of everyday.*’ This positive outlook was reflected in the GDS and WEMWBS scores of month 5 in the following figure.

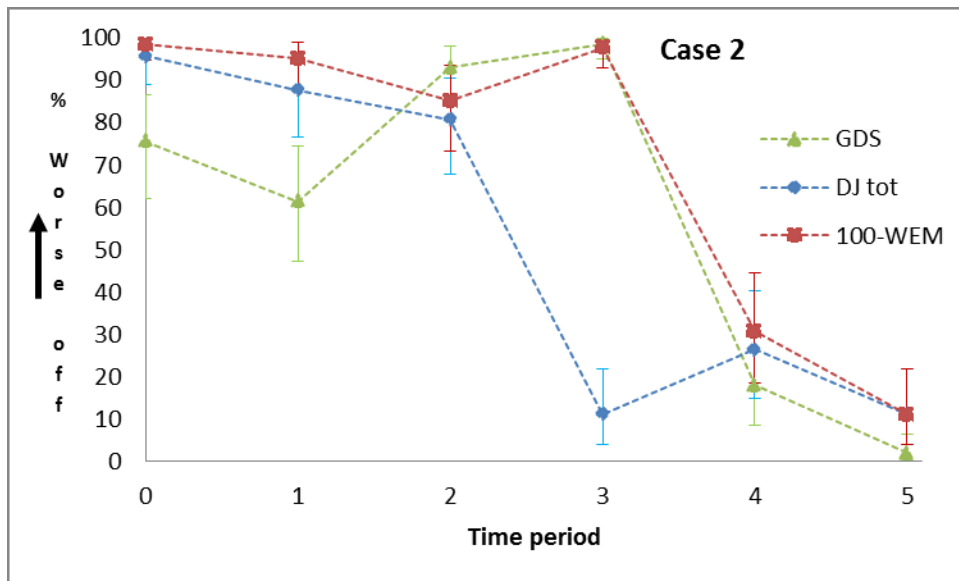


Figure 2: Summary of survey results from commencement of the programme to month 6: Case study 2.

4.2.2.1 Views and experience of HENPOWER

Brenda has had a life-long love of her pets. In recent years this bond with animals was most evident in the form of her cat. Following the death of her cat she decided that she was no longer able to provide the daily care and attention that is required by a pet. She was saddened by her decision as she acknowledged the loss that she would experience. The impact of this decision, however, was reduced through her involvement with HENPOWER. When the hens were introduced to the group dwellings she had taken interest in what was happening. Indeed one of the first hens was named after her. She had developed a routine of visiting the hens everyday and was quick to notice that the hens recognized and responded when their names were called. These daily visiting routines became more important following the death of her cat. She was now able to share the responsibilities of caring for these animals with others. The burden that she had occasionally experienced in looking after her cat was reduced, and replaced with an opportunity to contribute to her community through hen-keeping activities. An inevitable aspect of keeping any animal is grief when it dies. In the case of her cat, the loss was extremely painful and she felt that this was a solitary experience. In contrast when the hens died she was saddened, yet she was able to grieve with others who shared this experience.

Brenda gave vivid descriptions of recent events relating to the hens at the group dwellings. She described their daily routines and the care that the hens required on a daily basis such as feeding. An incubator was purchased. She enjoyed the community conversations that occurred whilst all the tenants were eagerly awaiting the chicks to hatch. Though she did not have direct involvement in the care of the brooding hen, she learnt of its protective response of the clutch and the care required for maintaining its health. Though her mood was low and her desire to be with other people was minimal her brother-in-law encouraged her to join with others and to engage with the long periods of observation of the eggs and brooding hen.

When the chicks arrived this was greeted with excitement by the tenant community. Brenda declared:

“It is the little things that can bring you pleasure when you are facing grief, illness and worry.”

She became involved in preparations for a visit by school children to interact with the chicks. She contributed ideas for the activities the children could get involved in during their visit. For example she suggested that photos could be taken of the children with the chicks, which could be developed into a calendar. The sales of calendars would generate funds for the school. Being involved with the planning for this event was viewed as a positive experience:

“I feel that I was really listened to and that I was able to make a contribution. It might not have been much but for me it was really important.”

Brenda also participated in visits that were related to HENPOWER. Some visits were really positive experiences. For example, attending the auction was a new and novel experience for her. Also during the visit to Beamish she was able to observe the hens in the pit village. She took delight in making comparisons between the quality of the hens of Beamish and that of her community. She was able to identify the breeds of the hens that she saw at Beamish – a skill that she acquired through her involvement in HENPOWER. This provided a basis for conversation with other visitors to Beamish and added to her enjoyment of the day. In contrast a visit to a battery farm was described as unpleasant. She was appalled by the treatment of the hens. She felt that the hens were kept in crowded conditions and many of the hens appeared to be ‘bedraggled.’

In summary Brenda’s involvement with HENPOWER was primarily related to regular observing and feeding of the hens. This was an interesting and novel development in her life. The experience was pleasurable and required minimal responsibility for the welfare of the hens. This was important because her life had been so overwhelmed by the burden of responsibility for others and her pets. She enjoyed the community events that occurred as a result of HENPOWER and was an active participant in the planning and organization of these events. Though HENPOWER did not alter the significant personal worries and health problems that she experienced, it did offer a positive release and an alternative way of being with others in her community.

4.2.3 Case study three

Tommy is an 83 year old man who resides in a bungalow with his wife who has mobility and health problems. He is his wife’s main carer and receives some assistance on an ‘as and when’ basis by the housing officer whom he holds in high regard. They have resided in this accommodation for eight years although he has lived in the area his entire life. His main interest is in playing outdoor bowls at least once a week.

Tommy’s believes that his general health is ‘reasonable’ and he reported that he is ‘*active and mobile.*’ He has a history of skin cancer and dizziness. He had had

surgery for his skin cancer, and received ongoing treatment from a specialist. His behaviour had changed in response to his diagnosis of skin cancer for example he was careful in sunlight and always wore a hat to limit exposure. His base-line GDS score was 8, indicative of the need for a comprehensive assessment for depression and his WEMWBS score was 42, mid range score for mental wellbeing.

During month 1-2 of data collection he had a skin biopsy. He was worried about the result and the possibility of recurrence of skin cancer. The adverse effect on his wellbeing was reflected in his WEMWBS score at month 2 in figure 3. When he received the result it indicated that the lesion was not a reoccurrence of skin cancer. This information was accompanied by great relief.

At the start of data collection for the case study Tommy had approached his GP to discuss the occasional 'dizziness' that he experienced. He was referred to a specialist for further investigations in order to attain a diagnosis. He was anxious about his health, particularly the continuing episodes of dizziness, during the three months as he waited to see the specialist. His anxiety was compounded by the emotional support he was giving to his wife. They had recently attended two funerals in one week – one for a family member and the other a close friend of the couple. This situation coincided with month 3 data collection where his GDS score had increased suggesting that his mood was adversely affected at this point in his life. In contrast the WEMWBS score had improved indicating that his sense of wellbeing had improved.

His situation affected all aspects of his life. He was unable to play bowls, an activity that had been a source of great pleasure for him. He countered this by planning a weeks holiday for the following month to celebrate his wife's birthday. Unfortunately this holiday was interrupted with Tommy being ill. He experienced severe dizziness and had to visit a doctor. He was advised to '*take it easy*' and this limited what they could do for the remainder of the week. He was sad that his wife's birthday did not go according to plan.

Following his appointment with the specialist his health improved and the '*dizzy spells*' ceased. He resumed playing bowls and reported that he felt as if he was '*back to his old self*' again. The improvement in his health and life circumstances is reflected in the GDS and WEMWBS scores at month 5. Though his mood and sense of well-being had been negatively affected by life events it is noteworthy that his scores on the De Jong Gierveld Loneliness Scale had remained relatively stable over the period of data collection (see figure 3).

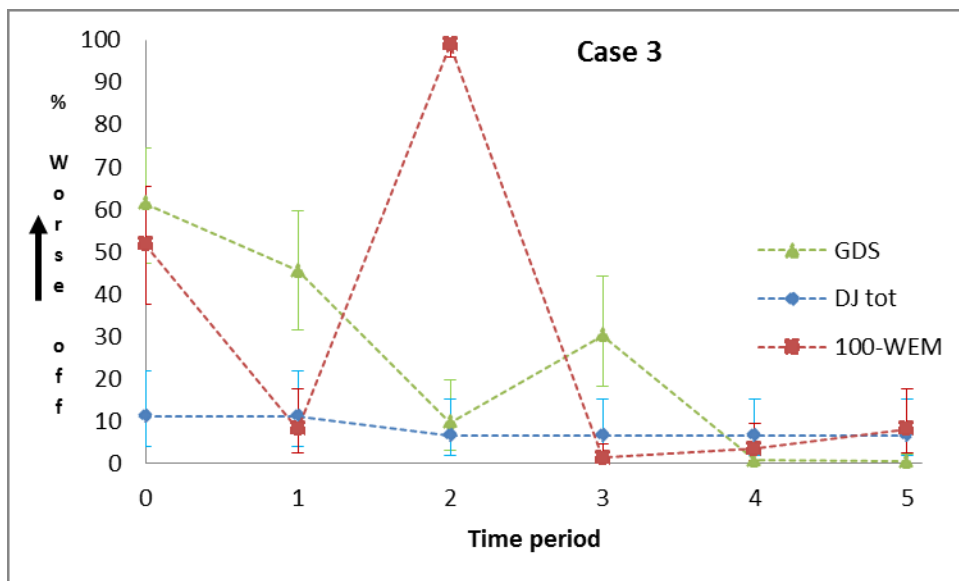


Figure 3: Summary of survey results from commencement of the programme to month 6: Case study 3.

4.2.3.1 Views and experience of HENPOWER

Tommy stated that he is a very quiet man and preferred to get involved in the practical side of the HENPOWER programme rather than engaging in the associated 'publicity.' He was very active in the care of the hens, which was an inherent and dominant part of his daily life. He fed the hens, cleaned the run and hen house, maintained the garden and fencing, changed the chick's feeders three times per day, checked the 'dirt' in the hen's 'dirt bath' in order to keep everything clean and reduce the likelihood of mites, and put the hens to roost at night to ensure their safety. Whilst henkeeping was time consuming, he thoroughly enjoyed being part of the programme and gained immense satisfaction through his involvement. He did, however, have some concerns about his garden that had become somewhat neglected as a consequence of the time that he committed to HENPOWER. Tommy did not mind spending his time on the care of the hens. Initially this responsibility had been shared with another man. As the project evolved this man had become more involved in implementing HENPOWER in a care setting, the consequence being that he was less able to work with Tommy. The reduction in this man's contribution, and the increasing numbers of hens kept at this site (an additional 17 chicks housed in a second enclosure) added to Tommy's workload.

Tommy and other tenants attended a bird show/auction to purchase 12 eggs. They returned with 10 hens and 36 eggs. Three of the hens were kept and the others were sold. The eggs were from different breeds including blue sussex, welsh summers and winedots. Some eggs were kept in an incubator within the communal facility, which both Tommy and the housing officer oversaw. It was placed in this position to enable all the tenants to observe the process of incubation and hatching. The other 12 eggs were placed in the coup with a brooding hen. Tommy was involved in the care of brooding hen. This involved encouraging her to eat and drink regularly.

Following hatching of the chicks, at approximately 20 days the busy henkeeping schedule increased. Tommy recalled a period of heavy rain which resulted in the hen house getting very wet and cold. Two chicks suffered from hypothermia. They were placed in the incubator to dry and warm. He and other tenants were surprised and delighted that the chicks responded positively to this intervention and survived. This added to his daily henkeeping roles and extended the usual first aid that he applied to injured hens.

Tommy was also involved in other HENPOWER activities such as visits to Beamish, farms and auctions. He helped in taking the hens to care settings:

"I helped one lady who was very nervous of the hens but by the end of the session she was holding one of the hens".

and schools:

"It has been really great as I have taken the hens into schools to show the children".

He explained how the hens had 'made a little boys day.'

"this small boy was withdrawn following the death of his mother but through the interaction with the hens this boy found some enjoyment which his family said was the first time he had smiled and relaxed since his mother's death."

He also felt that the hens had stimulated interest in the local community and this had increased visitors to his community:

"having the chicks has resulted in lots of the local community children have been coming in to see them."

In summary Tommy is very active in the care of the hens and is extremely positive about the project and his participation in HENPOWER and its associated activities. The only time that he 'slowed down' his involvement was when his health and the needs of his wife had to take priority. Even then he was keen to make sure that another resident has taken over some of his responsibilities for the hens. Whilst he is actively involved in the care of the hens he noted that his wife did not get as involved, yet it has gave them something else to 'chat' about when they were alone. His interest in the hens had provided a needed distraction when he had to cope with difficult life circumstances. Tommy stated that the involvement with the hens has been 'all good fun and very entertaining'.

4.2.4 Case study four

Ann is a 68 year old woman who lives alone in sheltered accommodation. She has two daughters, one lives close by and visits her regularly. She talks about her daughters a lot and is interested in their lives. Her youngest daughter has lived in Australia for a number of years and has now decided to come back to England. She plans to live in the South and Ann has been considering relocating from the North

East in order to be near to her. The other factor that is influencing this decision is the temperate climate of the South in comparison to the North East. She believes that the change in climate will be beneficial. She is looking forward to this change; however her decision to move to the South has caused unrest between her daughters.

Ann has experienced multiple, long term health problems. She has macular degeneration in both eyes which has led to severe visual problems. Her mobility is limited due to arthritis. This causes her difficulty in walking long distances thus restricting what she can do throughout the day. Her mobility is particularly difficult in the morning and she has to *'take time'* when getting ready for the day. She has fallen twice in the months prior to the commencement of the HENPOWER project. Whilst the injuries were minimal - bruising of her knees and back – she has experienced a significant loss of confidence. Her health problems have contributed to a decline in her mental health. She has been depressed and at the beginning of the project and was being treated for this condition. Ann's daily life was dominated by regular GP and out-patient appointments. This has had an adverse effect on her life as she has had to prioritise these appointments over taking part in outings and activities that were occurring in the sheltered housing scheme. She receives support from the housing officer on an *'as and when'* basis for which she is very grateful for and thinks highly of the housing officer. She also has a cleaner for one hour per week.

Ann's life is restricted by back pain which has limited her walking and caused a substantial reduction in her ability to *'get out and about.'* The constant pain causes her to be constantly awake during the night. Following a difficult night she finds that getting up in the morning is a slow and painful process.

To address her mobility problems Anne purchased a scooter. When it arrived she was initially invigorated, then she found that it was difficult for her to steer. Now she

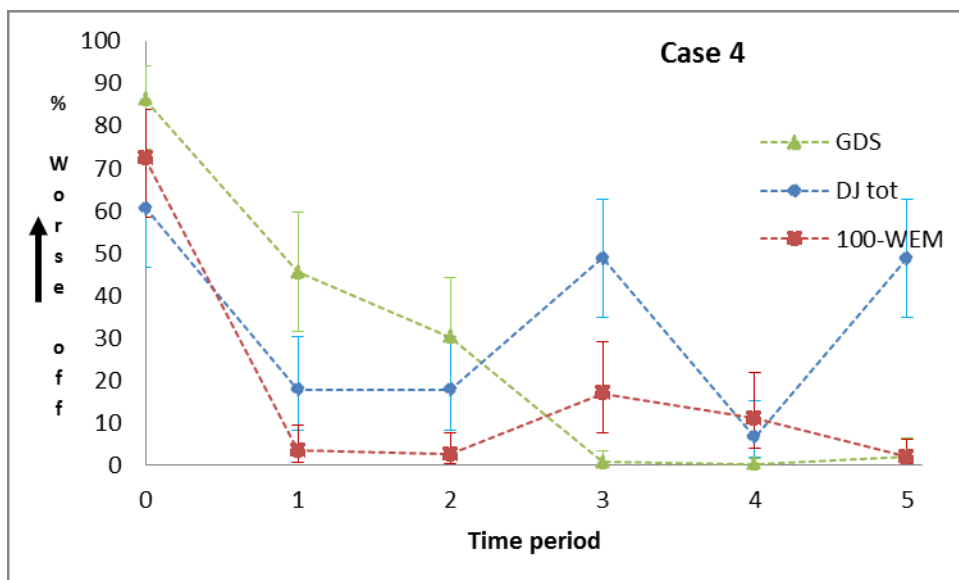


Figure 4: Summary of survey results from commencement of the programme to month 6: Case study 4.

attributes increased back pain to driving the scooter. What she thought would be liberating is now appearing to have an adverse effect on her quality of life.

Anne's base-line scores suggest that she was experiencing moderate to severe depression, loneliness and low level of mental well-being. At month one, she reported that she enjoyed everything about HENPOWER and this had had a positive impact on her mood, although she was limited in what she could take part in. During month 2 she was awaiting delivery of the mobility scooter and she anticipated that this would enhance the quality of her life. This positive change in her circumstances was reflected in the continual improvement in the survey scores:

"I push myself to get out and about – hopefully my scooter will allow me some independence – going to the local shops and GP under my own steam."

During month three she described her daily life as being dominated by back pain and sleepless nights. This restricted her walking and contributed to her sense of isolation. She was still waiting for the delivery of the scooter which added to her sense of isolation and frustration that is reflected in the increase in her loneliness and decrease in her wellbeing scores. However her mood remained stable over this period. During the following month she received her mobility scooter and hospital appointment to have steroids injections into her feet. This had a positive impact on her sense of well-being as evidenced by the WEMWBS scores and decrease in loneliness. She reported at month five that she found the scooter hard to handle and believed that it was contributing to the increase in her back pain. She had started to plan for her pending relocation to live near to her daughter. Though she looked forward to this change in her living circumstances she was concerned about the tension that existed between her daughters. She felt that the combination of health and relationship problems added to her sense of loneliness.

4.2.4.1 Views and experience of HENPOWER

Anne summarised her views and experiences of HENPOWER as:

"HENPOWER makes me joyful and much better in every way. I can't bend down to do things with the hens but I can go and be with them.....I am up early and ready for the day. It is great sharing the hens."

She enjoys checking on the hens by observing them through her window throughout the day. She is enthusiastic when talking about the hens:

"it has been really great as I enjoy seeing the hens and collecting the eggs. They all have different characters."

Anne's involvement in the henkeeping is limited due to her health problems. She supports the programme through her attendance at meetings and taking part in HENPOWER related events:

"I enjoy everything about them and having them here is all good fun."

She has a favourite hen and she talks about this one constantly. She enjoys going out with a group. Her involvement is sometimes limited, however, by the site to be visited. For example she was unable to take part in the visit to Beamish as she was unable to walk down the cobbled streets. In contrast she supports events when local school children come to the sheltered housing community to see the hens. In summary Ann enjoys seeing the hens, attending the meetings, joining in the hen-related banter and visiting the other settings where the henkeeping is being introduced.

4.2.5 Case Study five

John is a 94 year old man who lives alone in his bungalow. He has lived there for many years since his wife died. He has had what he describes '*an excellent life*': a good wife and family, a fulfilling career as an engineer which included travelling. He was brought up in NE England and despite living all over the world (including 2 years in Egypt) he always returned to his home town.

Since retiring, John worked hard to stay independent and has several hobbies. As well as watching the television and reading, John has been a keen photographer most of his adult life, taking and developing his own photographs. John was a member of a local photography group for many years and only stopped attending in June 2013 because he cannot get transport. As a result of this hobby, John had many opportunities, for example, he was invited as a VIP on the Tall Ships, and went out with the Fisheries Protection Cruiser. As part of his hobby, John travelled around the country to walk and take landscape photographs, he recollects that as part of the photography club remit, he was often asked to take portrait shots of people, but he really did not like doing that type of photography. John has some of his own work framed and hanging in his bungalow. John has no difficulty keeping busy; he is a keen cook and especially enjoys baking cakes, scones and bread, he cooks a couple of times per week. More recently, as a result of the HENPOWER project, John has produced very detailed drawings of hens. This has motivated him to take up more art work and more recently, he has begun painting with oils. He paints landscapes and relies on his memory for inspiration.

After retirement, John was extremely independent: he was able to undertake all tasks such as housework, DIY, shopping, attending appointments without support. Now he has some support to enable him to continue to live an independent life. This support includes his son who does shopping, cleaning and DIY for him. However, he now has mobility problems and walks slowly with 2 sticks, his legs swell and he has shortness of breath if he does too much. He attributes much of these symptoms to the heart bypass he had 12 years ago when the surgeons removed a section of vein from his leg. Since then his health has deteriorated. John has diabetes and a latest blood test showed he was anaemic; he also has gastric upset and has to pay close attention to his diet to avoid severe indigestion. During the 5 months of data collection he visited his GP on 3 occasions to assess his condition and review his medication.

Until recently 2010 John drove his own car which afforded him a good level of independence, John really misses his car and did not agree with the decision to

remove his licence, he feels that as he was only using it to travel around 200 meters to the local shops and doctor’s appointments, the decision to remove it all together was very severe. Now he relies on his son to take him shopping or bring his groceries in, take him for appointments and he relies on a taxi to transport him to and from the HENPOWER volunteer group.

It is clear from this background information that John’s circumstances with respect to his physical health and life style has gradually deteriorated. He was very reliant on the support of his son who made a continuous positive contribution to his life. His close relationship with his son is reflective in his DJ score of 4 at the commencement of data collection. John’s GDS score was 8.5, indicative of the need for a comprehensive assessment for depression and his WEMWBS score was 38, mid range score for mental wellbeing.

John’s mood improved over the period of data collection (reflected in GDS score of 1-7). The scores from the WEMWBS suggested that subjective wellbeing and psychological functioning had consistently improved over the period of data collection (initial responses – 53; latter responses 66.5). In contrast figure 5 illustrates variation in his sense of loneliness. At month 3 his son was spending much more time travelling to the South of the country to support his mother-in-law. He and his partner were extremely worried about her health. John attempted to support his son by being more independent and this only led to him having less contact with his son. This is reflected in an increase in the DJ score, indicative of increased loneliness.

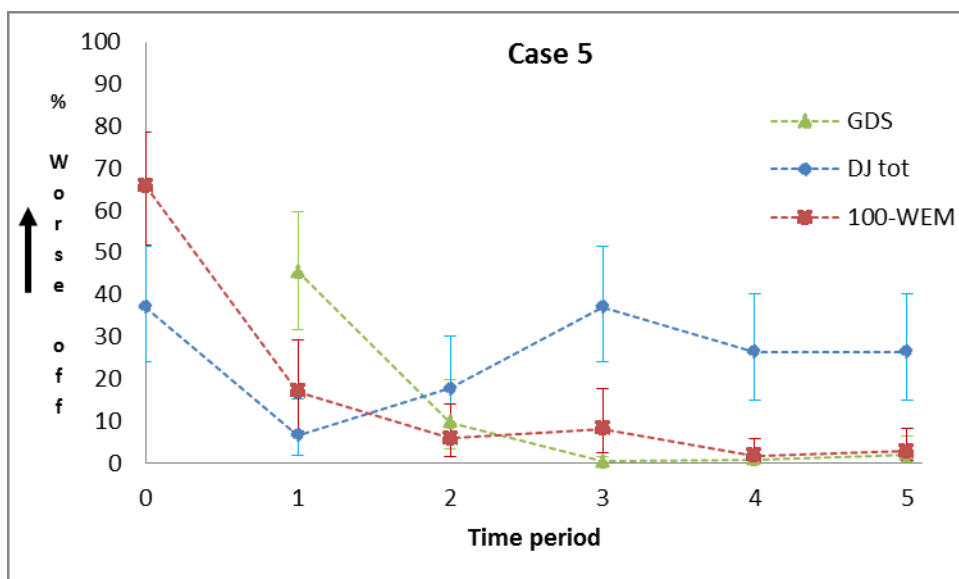


Figure 5: Summary of survey results from commencement of the programme to month 6: Case study 5.

4.2.5.1 Views and experience of HENPOWER

John has a long history of being involved in the care of animals, during interviews, he often reminisced about his responsibilities as a boy which included; being paid 2/6d to turn his uncle’s goats out onto a tether, check them at dinner time, bring them in at

night and once per week, clean the goat shed; his father and grandfather kept chickens in an allotment, which John would often help feed. He made the point that in those days the animals were kept for a purpose, the goats provided milk for the family (some was sold to neighbours to raise money), the chickens were kept for eggs and meat. If chicken was on the dinner menu, there was no problem with wringing a chicken's neck, although commonly John's father undertook this task, John had done it occasionally.

John recognises the strengths of the HENPOWER project, his limited mobility makes it difficult for him to become actively involved with the physical aspect of looking after the hens but he suggests the hens provide:

“A good talking point and a good way for people to get together”.

John makes a distinction between the attitudes and roles of the women volunteers, with that of the men in the group:

“they (the women) think the hens are cuddly but they back off and disappear when the chickens need cleaning or there are jobs to do”.

He intimated that the practical aspects of hen keeping were left to the men. John talked about how the hens provided some excellent sources of activities, designing and painting the henhouse, topics of conversations and drawing the hens. John enjoyed practicing his drawings and had produced several very detailed pencil drawings of hens.

John continues to attend the volunteer sessions despite not having much input into the day to day hen keeping tasks. He talked very positively about the project in terms of providing motivation for people to engage with the wider community, he recognised that some members of the group *‘go all over with the hens’*. Despite his reliance on his son to meet his personal daily needs, John considered himself to be independent. He suggested that he could do all the things he wants to do and acknowledged that he has a very positive attitude to life. His involvement in HENPOWER offered opportunities for him to enjoy the companionship of others and to develop new interests and skills at an advanced age.

Summary

The findings presented in this section indicate that the individuals who were recruited as HENPOWER volunteers had diverse backgrounds. Their motives for taking part varied; some had a desire to help others whereas some wanted to develop new interests, skills and knowledge. Though some individuals did have reservations about the idea of keeping hens within sheltered housing communities these views changed following the introduction of the hens. The majority were enthusiastic about HENPOWER suggesting that this was a *‘fantastic’* project that gave them *‘something to look forward to’* and fostered a *‘sense of purpose.’* Being able to engage in different ways with the project was important for inclusivity. Even those with complex health and personal problems were able to negotiate their contribution to the project. Involvement had a positive impact on the volunteers. This was reflected in the

significant positive impact on the GDS and WEMWBS scores that were identified in the comparison of baseline and follow-up volunteer survey. Similar trends were observed throughout the 5 case studies, and these also provided insight to the changes in mood and sense of mental well-being experienced by many of volunteers in response to life events. Whilst the volunteers indicated that HENPOWER had a positive impact on social interaction and relationships within their communities it is noteworthy that the findings derived from the De Jong Geirveld loneliness scale did not highlight significant changes from baseline to follow-up data collection. This points to a disparity across the qualitative and quantitative findings that is worthy of further investigation.

Section 5: Findings: HENPOWER recipients' views, experiences and reflections on HENPOWER

5.1 HENPOWER service user group

The group consisted of 50 service users (25 men, 24 women and 1 undisclosed) of white British ethnicity. They were aged between 61-97 years, with an average age of 79.2 ± 8.78 for the 44 who disclosed their age. Women were significantly older than the men (81.9 ± 8.26 $n=23$, 76.57 ± 8.68 $n= 20$; $p=0.048$ respectively).

Of the 43 service users that responded to the question concerning their living arrangements: 15 lived in EMI residential care; 12 in residential care; 15 had 24 hour on-site carers; and 1 received personal care through social services in their own home. The majority (74%) indicated that they had long standing illness, which reflected their living arrangements. Though this group reported high levels of chronic illness only 16 (32%) indicated that they had spoken to a GP during the previous 2 weeks and of those 4 had spoken to the GP a second time. The encounter resulted in receipt of a prescription for 13 individuals. Eighteen individuals reported that they had had an appointment with a nurse and these were not necessarily the same individuals who had seen a GP. No-one had visited the accident and emergency department during the previous three months, only 1 person reported that they had been an inpatient, whereas 14 individuals had out-patient appointments with specialist on $n=7$ on 1 occasion; $n=4$ on 2 occasions; and $n=3$ on 3 occasions.

When asked how satisfied they were with their life today 26.6% scored 5 or less on a scale of 0 (not at all satisfied) -10 (completely satisfied); and 73.3% between 6-10 on the same scale (5 non responders). Very few people reported that they were able to do all of the things that made them feel valued ($n=3$); considerably more individuals were able to do many things ($n=10$); 28 able to few things and 3 people indicated that they were unable to do things that made them feel valued (6 non-responders). They were also asked if they were able to do things that they considered enjoyable; 5 people reported that they were able to experience all the enjoyment and pleasure that they wanted; 18 reported a 'lot' of enjoyment and pleasure; and 26 'little' enjoyment and pleasure (1 non respondent). The total scores for the Warwick-Edinburgh Mental Well-being scale indicated that the service users experienced a range of self-reported mental well-being from medium scores (28) to high scores (70); with a mean of 47.04 (see table 5).

Total WEMWBS score					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	28.00	3	6.0	6.7	6.7
	33.00	3	6.0	6.7	13.3
	34.00	1	2.0	2.2	15.6
	38.00	3	6.0	6.7	22.2
	38.50	1	2.0	2.2	24.4
	39.00	1	2.0	2.2	26.7
	39.50	1	2.0	2.2	28.9
	41.00	3	6.0	6.7	35.6
	44.00	1	2.0	2.2	37.8
	45.00	1	2.0	2.2	40.0
	46.00	3	6.0	6.7	46.7
	48.00	1	2.0	2.2	48.9
	49.00	4	8.0	8.9	57.8
	50.00	3	6.0	6.7	64.4
	51.00	1	2.0	2.2	66.7
	52.00	3	6.0	6.7	73.3
	54.00	1	2.0	2.2	75.6
	55.00	3	6.0	6.7	82.2
	56.00	1	2.0	2.2	84.4
	57.00	1	2.0	2.2	86.7
	59.00	1	2.0	2.2	88.9
	60.00	1	2.0	2.2	91.1
	63.00	1	2.0	2.2	93.3
66.00	1	2.0	2.2	95.6	
68.00	1	2.0	2.2	97.8	
70.00	1	2.0	2.2	100.0	
	Total	45	90.0	100.0	
Missing	System	5	10.0		
	Total	50	100.0		

Table 5: Service user scores of the Edinburgh Mental Well-being scale at the commencement of the HENPOWER programme

Significant differences were seen between the women's and the men's scores for wellbeing (WEMWBS) (following figure). Men exhibited significantly lower wellbeing scores than the women ($p=0.045$) when tested by an independent samples Kruskal-Wallis test.

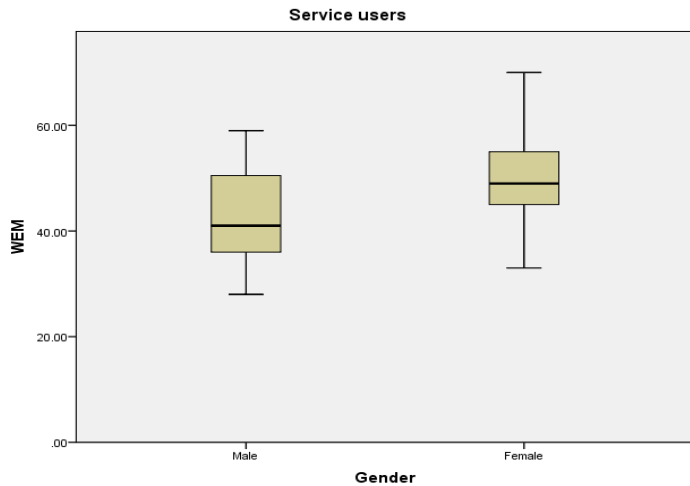


Figure 6: Box plot comparison of men’s and women’s wellbeing scores (WEMWBS) in the service user group. Boxes represent the interquartile range of the data with the median shown as a solid line; the whiskers indicate the full range of the data.

Within the service user population 49/50 scored between 3.5 -10 on the Geriatric Depression Scale. This is suggestive that some of these individuals required a comprehensive assessment for the presence of depression (see table 6).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.50	1	2.0	2.0	2.0
	4.00	3	6.0	6.1	8.2
	4.50	1	2.0	2.0	10.2
	5.00	9	18.0	18.4	28.6
	5.50	1	2.0	2.0	30.6
	6.00	8	16.0	16.3	46.9
	6.50	1	2.0	2.0	49.0
	7.00	10	20.0	20.4	69.4
	7.50	3	6.0	6.1	75.5
	8.00	7	14.0	14.3	89.8
	9.00	2	4.0	4.1	93.9
	10.00	3	6.0	6.1	100.0
	Total	49	98.0	100.0	
Missing	System	1	2.0		
Total		50	100.0		

Table 6: Total GDS scores for HENPOWER service user group

A score of 3 or higher on the De Jong Gierveld Loneliness Scale is considered as the presence of loneliness with scores of 3 – 8 indicating moderate loneliness; scores of 9 or 10 severe loneliness and score of 11 indicating extreme loneliness. It is clear from the following table 7 that the service users scores mapped across the range of scores.

Total De Jong score					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	10	20.0	22.2	22.2
	1.00	3	6.0	6.7	28.9
	2.00	2	4.0	4.4	33.3
	3.00	6	12.0	13.3	46.7
	4.00	3	6.0	6.7	53.3
	5.00	2	4.0	4.4	57.8
	6.00	4	8.0	8.9	66.7
	7.00	3	6.0	6.7	73.3
	8.00	4	8.0	8.9	82.2
	9.00	4	8.0	8.9	91.1
	10.00	4	8.0	8.9	100.0
	Total	45	90.0	100.0	
Missing	System	5	10.0		
Total		50	100.0		

Table 7 : DJ total scores for HENPOWER service user group

Further significant differences were seen between the women’s and the men’s scores for loneliness (DJ tot) (See following figure 7). Men exhibited significantly greater loneliness than the women ($p=0.003$) when tested by an independent samples Kruskal-Wallis test.

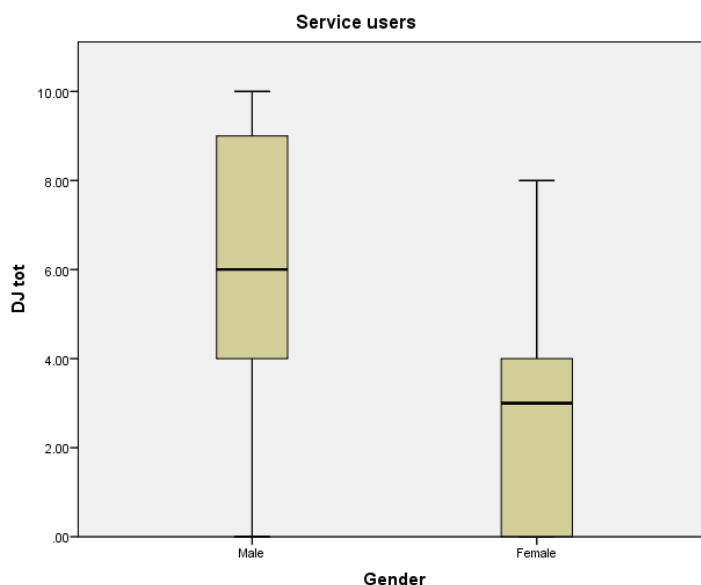


Figure 7: Box plot comparison of men’s and women’s loneliness scores (DJ tot) in the service user group. Boxes represent the interquartile range of the data with the median shown as a solid line, the whiskers indicate the full range of the data.

5.1.1 Relationship between well-being, depression and loneliness

Spearman’s rank correlation was used to explore relationships between the three independent scales: the Geriatric Depression Scale scores, the De Jong Gierveld short scales for emotional and social loneliness scores and the Warwick Edinburgh Mental Wellbeing scale total score for the 45 service users who completed them. A significant negative correlation was found between WEMWBS and the DJ tot (-0.629 , $p=0.00$). This indicated a strong negative association between wellbeing and

loneliness. On further exploration of WEMWBS and DJ tot for gender differences a weak non-significant negative correlation was seen in the women’s scores (-0.366, $p=0.10$, $n=21$), whilst the men demonstrated a significant strong negative correlation (-0.605, $p=0.002$, $n=23$). GDS was not significantly associated with WEMWBS or DJ tot scores. No clear associations were found between age and the scores on these three scales.

5.1.2 Pre and post intervention outcomes

Data was available for 41 of the original 50 service users at the follow-up stage for GDS scores and 37 of 50 for other scores. This data was tested using related samples Wilcoxon signed rank test. A significant decrease in GDS ($p<0.001$) scores were observed. The analysis of WEMWBS baseline and follow-up scores for service users indicated that there was a significant increase in the scores ($p<0.006$) suggesting that there were improvements in mental well-being in the study population. Analysis of the total scores for Gierveld Loneliness Scale indicated that there was no significant difference between scores attained at baseline and follow up ($p<0.516$). Table 8 gives a summary of baseline and follow up data for all scales for the HENPOWER service users.

		Statistics					
		GDS score	GDS score	WEMWBS	WEMWBS	Total De	Total De
		1	2	score 1	score 2	Jong score	Jong score
		1	2	score 1	score 2	1	2
N	Valid	41	41	37	37	37	37
	Missing	6	6	10	10	10	10
Percentiles	25	5.0000	2.0000	38.2500	42.5000	1.0000	2.0000
	Median	6.0000	5.0000	49.0000	50.0000	4.0000	4.0000
	75	7.7500	6.5000	55.0000	56.0000	8.0000	8.0000

Table 8: Summary of the HENPOWER service users data at baseline and follow up

Further analysis of this data with related samples Wilcoxon signed rank test indicated that the effect observed in the total population differed with respect to

		Statistics					
		GDS score	GDS score	WEMWBS	WEMWBS	Total De	Total De
		1	2	score 1	score 2	Jong score	Jong score
		1	2	score 1	score 2	1	2
N	Valid	21	21	19	19	19	19
	Missing	0	0	2	2	2	2
Percentiles	25	5.0000	2.5000	34.0000	36.0000	4.0000	3.0000
	Median	7.0000	6.0000	41.0000	47.0000	6.0000	6.0000
	75	7.5000	7.0000	52.0000	52.0000	9.0000	8.0000

Table 9: Summary of the male service users data at baseline and follow up

gender. There were significant improvements for men on the WEMWBS scores ($p < 0.049$) and no significant difference on the GDS scores ($p < 0.087$). The reverse was identified for women. There were significant improvements for women on the GDS scores ($p < 0.002$) and no significant difference on the WEMWBS scores ($p < 0.06$) (see tables 9 and 10).

		Statistics					
		GDS score	GDS score	WEMWBS	WEMWBS	Total De	Total De
		1	2	score 1	score 2	Jong score	Jong score
						1	2
N	Valid	19	19	17	17	17	17
	Missing	1	1	3	3	3	3
Percentiles	25	5.0000	2.0000	46.5000	47.5000	.0000	1.0000
	Median	6.0000	4.0000	50.0000	51.5000	3.0000	3.0000
	75	8.0000	7.0000	57.5000	59.5000	6.5000	6.5000

Table 10: Summary of the female service users data at baseline and follow up

The following figure 8 displays the difference in GDS score (time 2 minus time 1) against the average score for each individual in the service user group with paired data ($n=41$). A reduction in score (negative difference) indicates an improvement. For GDS the improvement for men, women and the combined scores were all significant ($p < 0.05$). Visual inspection shows that the majority of service users have an improved score with only 3 women and 6 men displaying worse scores most of whom have high average scores on the GDS.

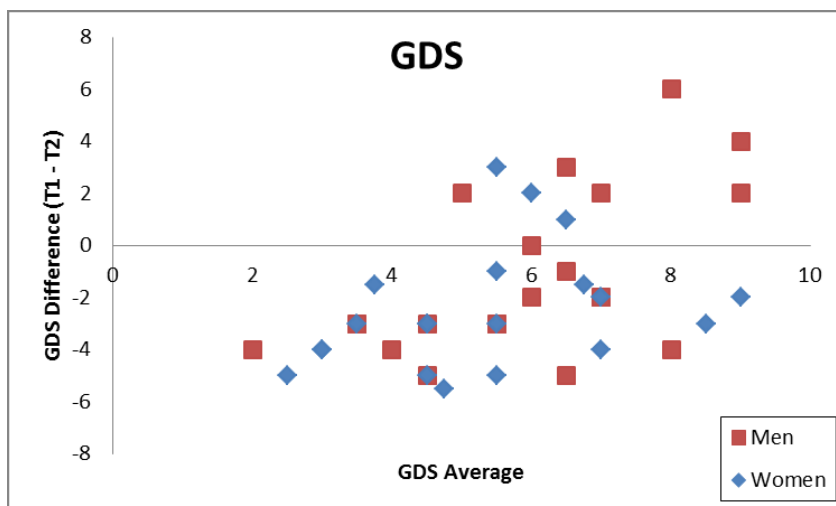


Figure 8: Difference in GDS score (time 2 minus time 1) against the average score for each individual in the HENPOWER service user group

Figure 9 presents the difference in WEMWBS score (time 2 minus time 1) against the average score for each individual in the service user group with paired data ($n=37$). An increase in score (positive difference) indicates an improvement. For WEMWBS

the improvement for men, women and the combined scores were all significant ($p < 0.05$). Visual inspection shows that the majority of service users have an improved score with only 3 women and 3 men displaying worse scores on the WEMWBS.

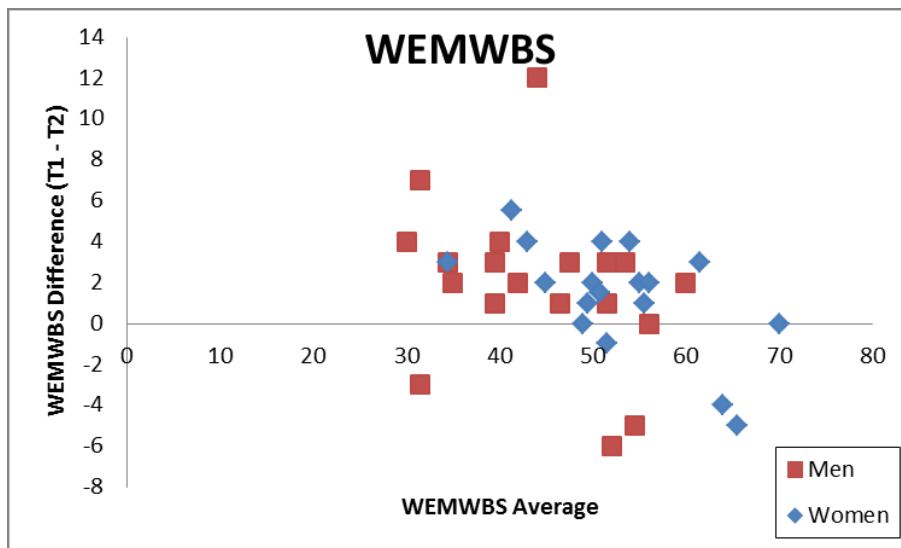


Figure 9: Difference in WEMWBS score (time 2 minus time 1) against the average score for each individual in the service user group

The following figure 10 illustrates the difference in DeJong Total score (time 2 minus time 1) is displayed against the average score for each individual in the service user group with paired data ($n=37$). A reduction in score (negative difference) indicates an improvement. For DeJong Total no significant difference was seen for men, women or the combined scores ($p > 0.05$). Visual inspection shows an even spread of data about the zero difference line.

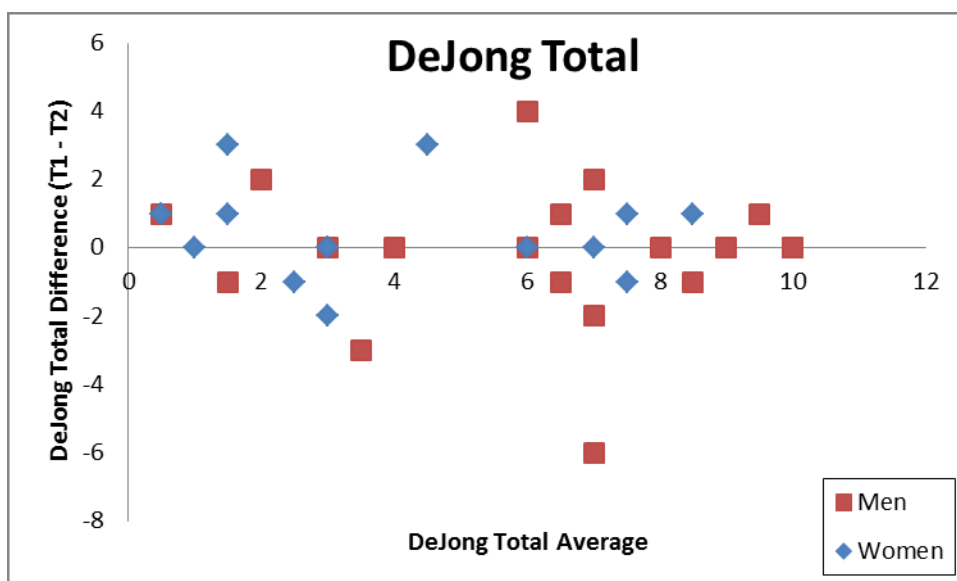


Figure 10: Difference in DJ total score (time 2 minus time 1) against the average score for each individual in the HENPOWER service user group

5.2 Service users views of taking part in HENPOWER activities

At approximately six months after the HENPOWER activities had commenced in the care settings focus group interviews were undertaken with residents. The overriding view that service users had of the hens either being kept at the care facilities or visits by the henkeepers (the volunteers) with their hens was enjoyment. They were keen to describe how they were involved with the selection of their hens, naming their hens, where they kept the hens, and how fed the hens and collected the eggs. Merely spending time watching the hens was a source of pleasure:

“Oh I spend time with them, they are always doing things. I sit and watch them They come, they go. There is always something to see.”

Discussion between service users also pointed to information being shared between them in relation to the hens. Those that had been involved with henkeeping in the past, shared their knowledge with those new to henkeeping. Different forms of knowledge were exchanged and acquired. These included knowledge relating to the practicalities of henkeeping such as feeding and management regimes; also knowledge relating directly to the HENPOWER hens such as their individual characteristics and habits. Residents recognised that sharing this information provided an interesting topic of conversation during everyday meetings with other residents. The hens were shared communal pets and many residents were interested in what was happening with them. They observed and spoke of what the hens were doing. They were pleased when it was announced that eggs had been laid.

In contrast a couple of service users declared that they had concerns before the project started. They were fearful of the hens, and they thought that they could be ‘*unpredictable*’ and likely to peck them if they got too close. Whilst these individuals continued to be careful and did not get too close to the hens, they acknowledged that they enjoyed having them around because the hens gave them something on which to focus and they were a good topic for conversation. Some residents expressed concern that the presence of hens in the care home would attract vermin. Such fears were reduced when it was clear that vermin did not appear.

The HENPOWER project provoked strong emotional responses from the service users. Indeed; several individuals declared that they would be extremely sorry if the hens would be removed from the care home: *“We would miss the hens, we love having the hens around.”* Two recipients declared emphatically that the project could not be allowed to stop. The desire to maintain HENPOWER within their community led some to identify and suggest ways in which the project could continue. For example they suggested selling eggs and breeding the hens to sell to other care settings would ensure the future security of the project in their home.

5.2.1 Social Interaction

It was mentioned in the previous section that the hens were a stimulus for conversations within the care settings. Having something to talk about is so important in these settings when much of the day is centred on the routines and

tasks of meeting personal needs. Communication took many forms. Residents commented on what the hens were doing at different points in the day. They noted their colours, movements and interaction with other hens. For some whose communication skills were limited as a result of dementia or other cognitive problems, communicating with others was primarily nodding or pointing to the hens. Some conversations appeared to lack meaning when residents used inappropriate words, yet there was a sharing of the henkeeping experience through non-verbal communication when residents maintained contact with another person or smiled in the presence of others and the hens.

Those who retained the ability to speak were able to swap factual information with fellow residents about their observations such as what the hens were eating, and how many eggs were laid. They were also able to exercise higher level communication skills through negotiating how the practical tasks should be organised, and who should be involved in their care, cleaning feeding of the hens. Some dialogue included recipients sharing ideas about their aspirations for the future of their hens and the HENPOWER programme including how the project could be sustained.

The hens also provided a trigger for residents to reminisce about their past experiences. Some of these discussions concerned memories of their childhood: one resident remembered how chickens were kept in a local park when she was a young girl, another remembered as a child, being tasked to search the nearby hedgerows for eggs. Some discussions were about very specific events:

“The chickens were in a big box. Me brother brought them in from the village. And he got on the bus and all these little chicks were going ‘cheep, cheep, cheep.’ And me brother had to put his hand over the top of the box and he got off the bus, he was glad to get off the bus and he got home to me mothers and he put them beside the fireplace, near the fire and it was lovely and warm for them. Me sister, who was young, banged the box and they were running all around the fireplace, and all around the living room, so me mum put her pinny on and she was collecting them up into her pinny pocket.”

Other reminiscences concerned the functional aspect of hen keeping. They spoke of the way that families kept hens for meat, for eggs and pest control in the garden:

“You used to wring their necks and pluck them, well I had brothers and we used to pluck them and then I used to cook them them for Sunday dinner.”

They contrasted these experiences with the care that they were giving to the HENPOWER hens. These hens were classed as pets. They observed, nursed and stroked these hens. They also engaged in themed activities: singing hen songs, painting hens, making hen ceramics and hen cards. These were ‘fun’ failure free activities that were enjoyed by the participants.

The residents also enjoyed others coming to the home to help look after the hens, which included volunteers and the volunteer co-ordinator. This broadened out opportunities for interaction with others and provided a shared focus for discussion.

5.2.2 Outdoor space

Service users discussed *'going out to see the hens.'* Most of the HENPOWER sites had contained gardens that were landscaped and had garden furniture. Residents were at liberty to walk or sit in the garden, yet many did not do this. Following introduction of the hens to the care setting, residents reported that they spent much more time in the garden. They indicated that the hens provide a reason for going out into the garden. Although residents acknowledged that they had support from the care environment staff and some volunteers, they wanted to do jobs and be involved in henkeeping through letting the hens out on a morning, looking for eggs, *'feeding them titbits'*. They valued the contribution of the male volunteers who maintained the hen run and did the more physical aspects of care of the hens.

Visitors to the home joined residents in the garden. In one home a bench was adjacent to the hen run. Residents, their family and friends could sit together watching and talking about the hens. This particular hen run had a small hedge within it, and the hens sheltered under the hedge. For some residents with advanced dementia the disappearance and appearance of the hens was captivating. They would prompt their visitors when the hens appeared; each time being an apparently new and interesting experience. When younger family members visited residents in the care setting they wanted to play in the garden and visit the hens. This encouraged residents to go into the gardens with their relatives, and share an experience with them. They preferred to do this. One relative who accompanied her mother in the focus group interview indicated that this shared experience was much valued. She had often sat with her mother in her room or the lounge, with limited conversation. When she sat near the hen run, verbal communication might have been limited yet they interacted with each other when her mother pointed to the hens or they smiled at each other when the hens suddenly appeared from under the hedge. Henkeeping within these homes added another element to possibilities of what individuals could do within the care community.

5.2.3 HENPOWER related activity

All the service users commented on their involvement in the HENPOWER activities that they had participated in. These included painting pictures of the hens, cooking with the hens' eggs, singing hen related songs, writing stories about the hens, using observations about the hens as a focus for facilitated conversation, sharing memories, general reminiscing, decision making in relation to naming the hens, physical exercise and physical contact (stroking and cuddling) with the hens. These activities enhanced the range of interests, crafts and arts that occurred within the care home. Their type of involvement in the various activities was negotiated with the individual to ensure that their preferences were addressed and that the skills that were required for participation were tailored to their abilities. This is illustrated in the discussion about singing:

P1 *"It's something about tea. Isn't it? I can't remember all the words to that song."*

P.2 *"It's something about for tea."*

P3 *"Someone comes in and leads the singing and that person knows all the words."*

P1 *"I think so. It's good. He'll tell you."*

Here one of the participants highlights her difficulty in remembering the words to the song. This problem is overcome by a leader providing the words to enable everyone to take part. In another situation an older man indicated that he was unable to do painting as a consequence of the loss of movement in his right arm. This was overcome with the use of a board that kept the paper in place whilst he was assisted to do the outline and paint the object.

Everyone appeared to be pleased with what they created or achieved during the HENPOWER activities. Some activities were familiar and required use of existing skills. Other activities were novel and the participant had to learn new skills. Some participants were anxious about taking part in the less familiar activities. However, with much encouragement and support they participated. There was one activity that they were particularly pleased with: they were involved with film-making concerning the HENPOWER hens. The film was to be aired on the television. Both residents and their families were pleased with what they had accomplished.

Summary

The findings presented in this section of the report indicate that the individuals who accessed the HENPOWER programme were living with a range of chronic physical and cognitive conditions, and received supported a high level of support in their daily lives. The difficulties that they experienced were reflected in their self-report of limitations in being able to do things that enabled them to feel valued and reduced ability to engage in activities that would provide opportunities to experience pleasure. It is noteworthy that men exhibited significantly lower WEMWBS scores than the women. Men also exhibited significantly greater loneliness than the women at the commencement of the programme. Furthermore there is evidence of a strong negative association between wellbeing and loneliness on the basis of the scores derived from WEMWBS and DJ total scales.

The majority of the service users that participated in the interviews indicated that they could engage with HENPOWER and its related activities. They enjoyed taking part in what they considered to be an enjoyable experience. This was reflected in the significant positive impact on the GDS and WEMWBS scores that were identified in the comparison of baseline and follow-up service user survey. These outcome measures indicated that the impact on service users differed according to gender, therefore this is an issue that could be examined further in future service development and research. The qualitative findings provided insight to the pleasure that participants experienced through their involvement with HENPOWER. They highlighted the importance they attached to interacting with other people. Being with the hens and taking part in HENPOWER activities became a focus for conversations and from this some identified with others and began to form relationships.

Having hens in the care settings led to purposeful activity occurring within their community. Residents were able to assume roles, such as henkeeper or egg

collector, which added meaning to their lives. Engaging in activity in the outdoor space in the care setting was valued. The outdoor space no longer was empty, it was a place where they could go and a place where they could meet visitors, other residents and staff. These findings suggests that henkeeping in care settings added a different positive element to daily life for those living these environments.

Section 6: Findings: Staff views of the HENPOWER programme

6.1 HENPOWER: an evolving concept

Keeping animals in care centres is not a new practice. Indeed evidence is increasingly pointing to the benefits to older people of animal assisted therapy. On the basis of this evidence hens were introduced to a respite and day care dementia service. Henkeeping was a positive experience for the service users and staff of this particular centre. Moreover care staff, with the support of Equal Art's staff and artists, developed a range of 'hen' related creative activities that people who were living with dementia could enjoy. This experience led the facilitators from Equal Arts to question whether these activities could be extended or indeed facilitated by older volunteers in a range of different housing environments for older people such as independent living centres, sheltered housing and care homes.

The funding for the HENPOWER pilot provided an opportunity to test the feasibility and practicality of henkeeping in different settings. This funding also provided the opportunity to test out 'who' could facilitate henkeeping activities in care settings such as older volunteers and 'what' hen related activities would be acceptable to older people. Hence the pilot HENPOWER programme was not predetermined; it was a platform for innovation and evaluation. From the perspective of the Equal Arts facilitators the HENPOWER programme became a continuously evolving concept:

"And I think our aspirations were a lot more humble than they have grown into. I don't think we ever anticipated things like necessarily running a hen road show or being asked to go into schools."

As ideas were suggested, these were implemented and tested out. By the end of the pilot programme there were opportunities for older healthy volunteers to construct hen houses, look after hens in their own communities, breed hens, and develop business strategies for sustaining HENPOWER in their community. There were also a broad range of opportunities that enabled the most disabled older people to take part in activities that met with their interests and abilities. These included feeding hens, collecting eggs, photographing hens, painting pictures of hens, making calendars, singing and dance. These activities could be undertaken individual or in group situations, some providing experiences within and between generations.

The development of the HENPOWER Facebook page and blog site opened up opportunities for the older volunteers and service users to engage with the internet. For some this was a new experience. For the programme this media created a virtual community who were able to generate ideas and new directions for further development. Hence HENPOWER has not been restricted to the physical process of henkeeping, the concept has evolved and now includes a multi-media, creative activity programme.

The programme within older people's housing and care facilities is tailored to the needs and aspirations of each community. This is achieved through the involvement of older people in decision making processes. In partnership with staff they decide

the position and shape of hen runs, design hen houses with artists, and accept responsibility for henkeeping. Some volunteers have drawn on their business skills to suggest various options for sustainable business models that could be adopted in their site. This level of involvement by the volunteers in the management of HENPOWER has led to a high level of commitment to the programme and variation across the sites where henkeeping has been implemented. It could then be argued that HENPOWER is evolving into a user-led organisation.

6.2 Care staff views of HENPOWER

“One lady was in the final stage of dementia. She did not communicate vocally at all. She would sit all day and just rock. When the chicks were hatching we gathered the residents around the incubator and as the chicks hatched she started to say ‘chicken, chicken..’ I was very tearful.....she put out her hand and cupped the chick and tried to kiss their beak. That is why I am so enthusiastic about the hens”

This quotation captures a powerful story retold by a care worker of her observations of a resident interacting with the hens. She was able to compare the usual behaviour of this resident with her response to observing and interacting with the chick. She identified changes – an individual who previously lacked interaction with her environment to one that was aware and interactive. Other staff reported different, yet positive changes in residents. HENPOWER gave:

“Residents really enjoy having the hens here - they show interest in the hens and this sparks memories when they kept hens in their own homes.”

“It is comical watching them...one was pecking the window and so the hens cause you laugh a bit and enjoy a bit of fun with the residents.”

“Hens have a calming effect – they (the residents) relax when watching the hens.”

“The daughter brought him here and her sister couldn’t believe the expression on his face. It made her cry. When I spoke with them I asked what is wrong? She said he thought he was going in a care home and would be in his room all day...now he watches the hens and enjoys the garden. They are so happy.”

“It is therapeutic for those who cannot get out – looking out of their window and just watching the hens.”

Keeping hens within the grounds of a care home was largely viewed as a positive addition to the home. These animals transformed the garden of the care homes into interesting places.

“I think it has brought life to the garden. Before the hens arrived the garden was just a big empty space. Now the doors are always open and residents

enjoy being in the garden. When families visit they bring their relative to the garden and they have fun times together.”

Some residents passively observed the hens whereas others had the ability to fulfil an active role with henkeeping. They were able to feed and care for the hens, and collect eggs. For some this provided a sense of purpose and a routine that was different to that of tasks and personal care that so dominated their lives as care home residents.

Although care staff were overwhelmingly positive following the introduction of hens into the care environment, some had concerns when they were initially told about HENPOWER. They were worried that the hens would smell and that there would be mess throughout the home. Others were concerned that the hens would attract vermin to the home, and others suggested that the increased workload would distract them from their prime responsibility of caring for residents. These issues were discussed and the care staff indicated that some of these issues did not materialise; others, such as additional cleaning, could be addressed through revising daily routines in the home. Indeed most staff highlighted that the benefits of HENPOWER outweighed any of the disadvantages that they had considered.

Care staff suggested that the HENPOWER team were enthusiastic and that this was an important factor that facilitated the successful introduction of hens in the care homes. Having access to a multiskilled team of ‘henkeeping’ specialists, creative artists and community development workers ensured that problems and barriers to the introduction of hens in a care setting could be addressed through innovative, solution focused problem solving. Some of the additional workload incurred through henkeeping was met by the HENPOWER volunteers. These individuals cleaned and repaired the hen runs. Wherever possible they attempted to include residents in these activities which provided important opportunities to extend involvement in henkeeping activities and for interacting with others who did not live in the care home.

6.2.1 Prerequisites for the successful establishment of HENPOWER

The staff who participated in focus group and individual interviews were mainly drawn from establishments that implemented HENPOWER. The views of these individuals are reflected in the above section, 6.2. It is of little surprise then that the majority of these individuals were very positive about the programme. There were two settings where there were delays in the commencement of the programme, and in one of these hen-related activities were kept to a minimum. The views of these staff, together with those that had well developed HENPOWER programmes shed light on the factors that were necessary for the establishment of HENPOWER. These include:

- A facilitative manager and staff for implementing HENPOWER within a sheltered housing or care home site. Individuals with a positive attitude to creating and testing new activities in older people’s communities embraced HENPOWER. They acknowledged the importance of purposeful and meaningful activity – in this case HENPOWER - to older tenant/residents emotional and social wellbeing.

- Support from individuals with expertise about henkeeping and implementing hen-related activities.
- An organisational culture and policies that promote and support creative activities in older people's communities optimises the likelihood that there is
 - a solution-focused approach to address problems as they arise in the implementation of novel activities
 - risk will be appropriately assessed and managed rather than taking a risk-averse approach to new developments. For example a response to infection control could be either avoiding the introduction of hens in care settings or to take proactive measures to manage potential problems. One manager took the latter position describing her approach to control of infection - *"I'm having some mats laid outside of the chicken coop and there'll be posters indicating how to handle the chickens"* another took the former position: *"And they are so averse to risk they just won't try anything challenging. They don't consider that having an environment that is not stimulating has a negative effect on resident's mental health."*
 - staff will receive training to enable them to support creative activities and
 - creative activities are adequately resourced.
- Procedures and processes to address problems that arise from the introduction of animals into older people's communities such as infection control and cleaning. One manager described the procedures in her care home: *"The domestics are scrubbing the patios every morning...at least they are clean and they are being bleached."* A senior carer suggested that her team had developed a routine of *"locking the hens away at night."* This simple approach protected the hens from cats and foxes.
- Creative use of outdoor space – older people's communities often have outdoor spaces that are barren and uninteresting that could be transformed through the introduction of hens.
- Staff who are skilled and facilitative of involving tenants/residents in activities: *"the staff who have become engaged in HENPOWER are closer to residents and like try to include them in and involve them. You know, not everybody is up to cleaning the hens out or whatever, but they can be brought to the window to have a look at them or be involved in the naming of the hens through asking 'What kind of a name do you think this looks like?' or, you could involve them in art work. Some staff really encourage residents to come and take part and support them to do whatever they can do."*
- An agreed implementation strategy within a community for the introduction of HENPOWER. In some sites there were delays in the introduction of the hens to the community which had a negative impact on the community's engagement with HENPOWER: *"I think the manager there does feel irked that we had meetings there in March, April and then it took a number of months before they got the new hen house that they designed. There were good reasons for the delay but all said and done it would have been preferable if the hens were introduced quite quickly following the discussions when everyone was prepared for the project."*
- Staff that support individuals to identify how they would like to be involved in the HENPOWER programme and in fulfilling their responsibilities. The HENPOWER programme has extensive opportunities for older people to use

their skills, knowledge and abilities. How they could engage with the programme requires exploration and assessment of the type of support that they require to become involved:” *relatively subtle things need to be taken into consideration, but knowing individuals can be quite crucial in determining what might be their interest. Even simple activities like who goes to feed the hens in the morning, who goes to collect the eggs in the morning can add something important to their life.” And “if a member of staff goes and does it as a task that needs to be done, then that’s just a huge missed opportunity for our older residents and completely fails the aims of the project.” “the staff who have become engaged are closer to residents and like try to include them in and involve them in. Not everybody is up to cleaning the hens out or whatever, but it is possible to identify something that they can do successfully and again be able to enjoy what they do and attain a sense of fulfilment. Staff can be really great advocates, encouraging residents to come and take part.”*

6.2.2 Barriers to implementing HENPOWER in older people’s communities

The previous section indicated the factors that are important to the successful implementation of HENPOWER programmes in different sites. Amongst these there are clearly factors that present barriers to the introduction and development of HENPOWER. The two factors that were frequently mentioned by staff were:

- Negative attitude of the manager: *“It won’t be successful if the manager isn’t on board.....the manager was just against it and she really actively, openly said ‘I don’t like hens, I won’t be involved with the project.’ It was then not possible for us to be involved.”*
- Prior negative expectations of staff: *“I thought that we would have to do more for the hens such as cleaning out all of the time. I thought that they were going to be a bit more hard work. I thought that they would smell. But they don’t bother anybody, they just wander around....I just thought that I would hear them and they would be noisy, but you don’t.”*

Many staff pointed out that their prior expectations of henkeeping ranged between curiosity and negativity. They were pleased to have opportunities to express their views with the HENPOWER team and to be able to explore how their concerns would be addressed. Being able to visit other sites where the hens had been introduced and finding out what procedures could be implemented within the daily routines of the community was also important in changing any prior expectations that were held by staff.

Following the introduction of the hens to the community staff valued the intense support of the HENPOWER team. The majority of staff indicated that they were apprehensive at the thought of looking after hens – they were not confident in their abilities and knowledge of henkeeping. With support they were pleased to find that they acquired the necessary skills quickly. These observations suggest that the process of introducing henkeeping to older people’s communities requires careful planning and management. In addition to the support that was provided by the HENPOWER team, staff indicated that it was important for the process to be continuous. When there were gaps between discussions and plans for HENPOWER

and the actual implementation of the programme this led to loss of impetus and enthusiasm for HENPOWER.

A final powerful factor that changed their negative perceptions of henkeeping was the positive impact that the hens had on older tenants/residents. These animals added a new and interesting dimension to the community. It is noteworthy that many staff highlighted the opportunities that henkeeping provided for male residents, particularly those who had previously lacked engagement with the community and tended to spend a lot of time on their own.

6.3 Sustaining HENPOWER within older peoples' communities and rolling out the programme to other communities

6.3.1 Maintaining henkeeping in older peoples' communities

Following the introduction of henkeeping in various communities, it was intended that the programme would be self-sustaining. Different approaches to this were adopted. In sheltered housing volunteers were recruited as henkeepers. These individuals negotiated their roles with other volunteers and with the HENPOWER team. It was important to have a core group of people that had a good understanding of the goals and schedules for their participation. They also needed to develop all henkeeping skills to ensure that when individuals were unable to fulfil their role, due to illness or other personal commitments, the henkeeping schedules were maintained.

In the care home settings there were volunteers who came to the home to clean the run and repair the henhouse. Hence care staff fulfilled the responsibility of henkeeping in this environment for most of the time. Although they attempted to involve residents wherever possible this often required some supervision from the staff. Having the HENPOWER programme in this environment added to the workload of staff. Staff worked to fit this additional activity within their routines – the positive impact of the hens on the residents quality of life became a strong motivator to achieving this within the context of their own care environment. The additional workload that was incurred from external agencies and staff wanting information about the hens was unexpected and could be overwhelming. One person commented:

“Do you know what I mean, I am kind of a bit desperate, it’s like I was saying to (Name) the other day like, I am a bit scared, there’s too many people that want to do this and there is only me and you, do you know what I mean, there’s like, it’s really taken off and people in other, you know, care settings across the country are sending (Name) emails and photographs ‘this is my garden, can we have chickens in it?’, ha, ha, you know.”

In addition to ensuring that there were individuals who fulfilled the daily henkeeping responsibilities in different environments it was important to address how the programme could be sustained beyond the initial start-up funding. The henkeepers devised strategies for income generation. In one setting hens were bred and the chicks were sold to other sites that were developing HENPOWER programmes. In

other sites eggs were sold and this paid for food and equipment required for henkeeping.

Within the HENPOWER programme merchandise was created (mugs/aprons/calendars) and these were sold at fayres and conferences as a way to increase funding. HENPOWER volunteers worked with creative artists to produce this merchandise. Everyone involved with the programme acknowledged the importance of developing a business strategy within each HENPOWER site that ensured that the programme could be sustained beyond the initial set-up funding.

6.3.2 Models for rolling out HENPOWER to older peoples' communities

When older people, family, friends and care staff are exposed to the HENPOWER programme this often provides the motivation to implement HENPOWER in other settings. The HENPOWER coordinator commented on his experience:

“ It’s like from the Facebook page, you know, we have like people, like, you know, contacting us on the Facebook page, it’s been a really positive factor and has like really gone out to a wider audience and stuff so there is obviously people there who are interested in chickens, but there’s people there who are interested in, you know, care, the care settings and people who have a parent who has dementia or whatever, so there’s lots of it that ties, you know, approaching people on lots of different levels. But we had somebody who contacted us last week saying, like, you know, ‘we have been so inspired from you know what we have seen on the HENPOWER page, we are going to do it down here in south London.’ They’ll become like a long distance learning partner and stuff for hen power, so it’s like, I think in terms of people being interested in HENPOWER and the effect HENPOWER has had on others is huge really.”

This suggests that publicity and having accessible information about the programme is essential to increasing interest in and knowledge of HENPOWER. The HENPOWER team have a publicity strategy that includes:

- Face-to-face contact between HENPOWER participants and the public
 - attendance at events such as professional and academic conferences
 - HENPOWER sessions in schools that provides opportunities for intergenerational interaction
 - participation in Science City in Newcastle where members of the public can meet the ‘henmen’ and interact with hens
- E-mail communication between care staff
- Publicity through
 - Newspaper
 - Radio
 - Leaflets
- Web-based information
 - HENPOWER page on Equal Arts web-site
 - Facebook page
 - Blog

Having access to information about the programme motivates older people and care communities to engage with HENPOWER. Within the NorthEast region it is possible for the team and volunteers to meet with those who want to start henkeeping in their own communities. During face-to-face encounters good practice is shared and learning transferred. Following the introduction of hens into an older peoples' community the HENPOWER team provides support. The combination of face-to-face meetings and subsequent support has evolved into a network of learning partners across the North East:

“Right you’re talking about the roll out in terms of learning partners... I think in year one we are looking at expanding outside of Gateshead so it becomes Tyne and Wear and outside of Tyne and Wear, but still pretty much in Northern England, say if we do one in Penrith, if we do one in Yorkshire, whatever it might be, but we will still kind of focus on where we can still, physically go and deliver and support and make sure it works and there isn’t any challenges that can’t be met. The sites can interact with each other and support each other through e-mail or telephone discussions. There can also be exchange visits. This is possible within the region.”

This quotation suggests that interaction between learning partners is feasible within a restricted geographic region. Travelling long distances for regular discussion between HENPOWER participants is difficult for some individuals with health problems and disabilities. Hence the team suggested that a distinction should be made between local and distant learning partners:

” I think in parallel to that we need to develop, distance partners, so the people in Birmingham, in Lewisham, in Anglesey, and Notting Hill, so care homes that are interested and want to do it can get involved. We have also had interest from abroad – in Germany and in Canada. We want to develop an online service which works. Our delivery that needs to grow, or that we need, is the kind of e-resources, develop the e-resources.”

This suggests that two modes for development and growth should be considered by the HENPOWER programme coordinators. These are

- Model 1: learning partners
- Model 2: distant partners' e-network.

Section 7: Discussion and Conclusion

7.1 HENPOWER: making a positive difference to the lives of older people

The pilot HENPOWER programme was effectively implemented in older peoples' communities across North East England. In each site henkeeping was a core activity which provided opportunities for older people to volunteer as henkeepers and for others to participate in hen-related activities. The introduction of animals to older people's communities and use of animal assisted therapy are not new ideas. There is a substantial body of literature that points to the positive impact that human-animal interaction can have on individuals (Berget and Braastad, 2011; Nimer and Lundahl, 2007; Walsh, 2009; Wells 2009). In contrast to most forms of animal assisted therapy, which tend to be brief interactions between humans and animals, the hens within this project live in the henkeepers community. Hence there is sustained interaction with henkeeping becoming an integral element of community life.

HENPOWER has a focus on henkeeping as a community based activity. An important feature of the programme was its inclusivity – everyone could be involved regardless of their physical or cognitive abilities. Some of the volunteers had extensive responsibilities for the daily care of the hens whereas others limited their involvement to participation in activities. The participants highlighted how their involvement in the project gave them a sense of purpose. This was very important for the majority of the HENPOWER members whose lives had been dominated by coping with chronic disease and disability. Their health conditions had led them to experience lost choice, decline and difficulty in everyday life. Taking part in this purposeful activity enabled them to focus on what they could do and what they could contribute to their community rather than what they could no longer do. It is noteworthy that many of the volunteers had engaged in henkeeping in their younger adult life therefore this was a familiar activity. This said being skilled in henkeeping was not essential to their participation in the project - there were opportunities to learn and develop new skills. They were able to negotiate with the co-ordinators the type of involvement and importantly they were supported to take part. In this way compensatory strategies were adopted to optimise their engagement with a meaningful activity in the context of deteriorating physical and cognitive capacities. Being engaged in HENPOWER and experiencing a sense of purpose that was derived from their involvement reflects what has been reported in the broader literature: activities offer roles that contribute to an older person's identity and sense of self in relation to others leading onto greater satisfaction with life, particularly when the individual can negotiate their involvement (see Lemon, Bengston and Peterson 2011; Phelan et al, 2004; Skaff, 2007).

Whilst being involved with HENPOWER led to work and activities, this was not a lone pursuit but a team effort. Involvement in the programme therefore brought an important social dimension to the lives of the volunteers. This was very important to the HENPOWER participants. Many had become quite isolated in their communities and they experienced social and emotional loneliness. Being a HENPOWER member brought these older people together in the pursuit of shared objectives. The qualitative data from this evaluation indicated that HENPOWER had a positive impact on social contact and social interaction within the participating communities.

Enhancing social contact in later life can act as a mediating variable on an individual's experience of felt loneliness (Kim, 1999). Furthermore, strategies that encourage older people to take part in social activities that will bring them into contact with others has been recommended (Adams et al, 2004; Catton et al, 2005; Hicks, 2000; Lauder et al, 2006). Being with the hens and taking part in HENPOWER activities brought people together and became a focus for conversations and from this some participants identified with others and began to form relationships. It should be noted that the findings derived from the volunteer self-report on the De Jong Geirveld loneliness scale did not indicate significant changes from baseline to follow-up data collection. It may be that this scale is not sensitive to capture changes in social networks and social interaction that the participants reported during their interviews. This does point to a disparity across the qualitative and quantitative findings that is worthy of further investigation.

As mentioned above, the HENPOWER initiative is an inclusive activity. Even those with complex health and personal problems were able to negotiate their type and level of engagement with the project. Involvement had a positive impact on the volunteers. This was reflected in the significant positive impact on the GDS and WEMWBS scores that were identified in the comparison of baseline and follow-up volunteer survey. Similar trends were observed throughout the 5 case studies, and these also provided insight to the changes in mood and sense of mental well-being experienced by many of volunteers in response to life events.

The positive impact on self-reported ratings on GDS and WEMWBS were also observed for the participant group who were living in care homes. A significant decrease in GDS scores was observed. The analysis of WEMWBS baseline and follow-up scores for service users indicated that there was a significant increase in the scores suggesting that there were improvements in mental well-being in this population. Further analysis of this data indicated that the effect observed in the total population differed with respect to gender. There were significant improvements for men on the WEMWBS scores and no significant difference on the GDS scores. The reverse was identified for women. There were significant improvements for women on the GDS scores and no significant difference on the WEMWBS scores. Though these findings point to the positive impact that involvement in HENPOWER had on participants these outcomes need to be treated with caution. There was no attempt to standardise the study population for a range of variables such as demographic characteristics, severity of chronic conditions (including dementia), nor living conditions (they all lived in care homes but the type of care home and approach to care did vary). Taking these factors into account, both qualitative and quantitative findings do point to the positive changes that followed involvement in HENPOWER.

7.2 HENPOWER: harnessing the social capital within the older population

HENPOWER provided volunteering opportunities within older peoples' communities with men being particularly targeted and recruited as peer workers. The project was successful with men responding positively to invitations to participate. Though there were many factors that influenced their decision they highlighted their desire to use their skills and knowledge to the benefit of their community. Designing hen houses

and henkeeping, for example, were activities that they wanted to do - there was some familiarity with these types of 'male-orientated activity.'

As some members of the community engaged in activities, others who were observers became interested and took part. Females were also encouraged to take part: interestingly they tended to adopt different roles to the men who took the centre ground in relation to assuming responsibility for the welfare of the hens. Introduction of hens to communities, including sheltered housing and care homes was not without its difficulties with people highlighting potential problems such as attracting vermin to communities and health and safety issues. These views changed following the introduction of the hens. The majority of residents quickly became enthusiastic about HENPOWER suggesting that this was a '*fantastic*' project that gave them '*something to look forward to*' and fostered a '*sense of purpose*.'

The HENPOWER evaluation findings point to the benefits that individuals derived from participating in the project. It is clear, also, that the efforts of individual participants encouraged others to take part. Consequently enthusiasm to be involved in HENPOWER spread throughout sheltered housing and care home communities. When involvement reached a critical point of many people being interested or engaged in the project benefits moved beyond the individual to community outcomes including enhanced group activities and increased social interaction between community members, leading to relationships that had not previously existed.

Enhanced interaction between older people living in different communities was also facilitated through HENPOWER. This was achieved by volunteers fulfilling henkeeping roles in the care homes, enabling HENPOWER to be established in care environments. This was important for frail older residents who can feel isolated and cut off from the world following their entry to a care home (Nolan, Grant, Nolan, 1995; Cook, 2010). Having the opportunity to meet and 'do something meaningful' with other people can enhance the residents' quality of life which is so important in a context where the reality of increasing health problems and decreasing emotional wellbeing often dominates the experience of residents. Other benefits were realised in care settings where HENPOWER volunteers supported resident and relative committees to access grants and hold summer fayres. A notable outcome being six groups raising £18k to support activities within the care environment.

Reciprocity and trust were evident between the HENPOWER volunteers when they co-operated in hen-related projects and supported each other to fulfil roles. These are shared social norms which are inherent in relationships and enable people from the same community to communicate and collaborate more easily. Adopting these social norms encourages people to balance their own self interest with the benefits of the community, creating a capacity for mutual benefit or common purpose. These norms improve the efficiency of society by facilitating coordinated actions pursuing common objectives within local objectives, in this case henkeeping. There was also a process of bonding between the volunteers and the participants - they shared some characteristics and this brought them together in unique ways that is rarely observed in other social situations, particularly with respect between community dwelling older people and those who live in specialised dementia care homes.

Coleman (1990) and Putnam (2000) suggested that social relations hold people together to act more effectively and to help pursue shared objectives, particularly in relation to the collective level. This was observed in HENPOWER suggesting that the volunteers became resources within their communities. In the context of social capital theory people are regarded as resources, and importantly the relationships between people can be utilised as community resources (Putnam, 1993; Kawachi and Berkman, 2000). As individuals entered the project they may not have envisaged themselves as requiring support or having unmet needs, yet the data suggests that involvement led to positive changes in their personal circumstances. They became relevant resources to meet their own needs, whilst becoming vehicles to meet the needs of others. In their own communities, the same individuals participated as volunteers who met the needs of others. Few would have considered themselves to be an important vehicle of social capital yet they were a resource in their community, serving their community and contributing to an improved well-being of other older people.

7.3 Promoting a positive image of older people

A significant area of learning derived from the pilot project has been that older people are the best advocates for the project by sharing what they enjoy and what they can achieve. The 'Hensioners' led presentations during Hen Roadshows and this generated interest and confidence to establish henkeeping in older people's communities. The 'Hensioners' also gave presentations in Birmingham, Manchester, Newcastle Science Festival and Gateshead Volunteering Event thus spreading the concept of HENPOWER across England. In addition to presentations as a form of dissemination the project received significant media attention. TV coverage included The Paul O'Grady Show with 3.9m viewers, Channel 4 broadcasting a 6 minute Hen Men documentary as part the documentary Shooting Gallery series with Producer Susie Wright saying 'We love the Hen Men and want it as part of our mini-series on ageing,' and Channel Eye, a Bangladesh speaking TV channel broadcast throughout Europe (SKY 633) filmed the World Egg Day event where the 'Hensioners' invited a group of Bangladeshi Muslim Elders for lunch where they shared egg recipes and stories about keeping hens. Press coverage included items in regional newspapers and articles in ageing and hen-keeping sector periodicals.

Some of the Hen Roadshows were held in schools. This was an opportunity for interaction between old and young. International research suggests that positive intergenerational interaction such as that occurring in HENPOWER has health and social benefits. These include improved mental well-being amongst the oldest old, (Grundy et al. 2007); reciprocal generational exchange of life skills and knowledge (Hatton-Yeo 2008); and tackling ageism across generations (Abrams, Eller and Bryant 2006). The Henmen told the children about henkeeping and the children were fascinated and wanted to learn about the hens. These encounters were positive for all of those involved.

The various types of publicity and dissemination activities presented positive images of HENPOWER and the Hensioners to diverse audiences. In a society where old age is widely considered to be associated with decline, disease and disability HENPOWER presented a very different image of older people as active, enjoying life and making a contribution to their local communities.

7.4 HENPOWER: influencing change in older peoples' housing and care settings

The introduction of HENPOWER to older peoples' sheltered housing and care homes brings about a number of changes. These include an increase in social interaction between community dwelling older people, residents and staff (discussed in section 7.2); an enhanced range of hen-related activities which includes using animals (in this case hens) as a therapeutic intervention; and increased use of outdoor space.

In many older peoples' communities there are policies and practices that do not encourage tenants/residents to keep animals. Though many reasons can be found to support this, there is equally good evidence indicating that human-animal interaction can contribute to improved health and wellbeing. The findings arising from the qualitative data certainly support the idea that involvement in HENPOWER is beneficial to those who are involved (see sections 5 and 7.1). In acknowledgement of the positive impact on older people service providers have changed their policies with respect to keeping animals in older peoples' housing. For example Housing 21 and North Tyneside Homes requested the Hensioners to deliver staff training about their Pet Policy. This has led to henkeeping being established in sheltered housing and care home. Furthermore, Akari Care now has an 'open door' policy with garden doors remaining unlocked. This has led to residents making optimal use of all of the environment including making use of the outdoor space. Gateshead Council's Adult Services profiled HENPOWER in their Care Quality Commission report (2013) and incorporated HENPOWER into their Department of Health Improving Dementia Environments Grant scheme.

There are physical and psychological benefits of gardens and gardening for older people, not least of which are pleasure and enjoyment. Gareth Chalfont (2006) highlights that people with dementia experience 'prosentia' which is the increased ability to sense, feel and express emotion and affection. The environment can have a powerful impact on what an individual senses and feels. It is therefore important that the environment in dementia care settings is optimised with the aim of enhancing sensory stimulation. This would include the outdoor natural environment. The introduction of hens to care home gardens adds something for people to do in the garden such as feeding and watching the hens. These animals are interesting and amusing to watch therefore henkeeping can provide opportunities for individuals to experience pleasure and joy.

Whilst opening up the landscape is considered to be beneficial in specialised dementia care settings, it should be recognised that being outdoors watching and interacting with the hens can be beneficial for everyone. Interacting with the hens and participating in hen-related activities such as design henhouses, landscaping and gardening has the potential to reduce stress, anxiety and tension. HENPOWER delivers multisensory activities that are stimulating and interactive. It could be argued that HENPOWER has a positive impact on older peoples' housing and care settings in many ways from enabling individuals to experience a stimulating external environment to changes in policies and practice in specialised care settings.

7.5 Prerequisites for the successful establishment of HENPOWER

The evaluation findings clearly indicate that HENPOWER can be successfully introduced into older peoples' communities. There were, however, instances where barriers and delays impeded the introduction of henkeeping. This suggests that the process needs to be managed and supported to effect change. A critical factor underpinning success is authentic leadership both from the HENPOWER management team and within the communities where HENPOWER is to be established. This form of leadership promotes team members' belief in the team's ability to succeed. The team in this case are the HENPOWER co-ordinators, Hensioners (the older volunteers), service manager and care staff. Effective leadership in the HENPOWER sites ensures that older people agree to participate and that everyone develops a shared understanding of the project. There is clearly 'trust' in the leadership by the volunteers and care staff and this increases loyalty to the HENPOWER programme, increasing performance as a result.

Having access to funds to support implementation of HENPOWER ensures that the co-ordinator and housing/care setting manager has access to financial resources. Without financial support implementation of HENPOWER would be difficult as this activity would compete with others for scarce resources. Unlike other forms of activities there is the potential to generate funds through HENPOWER outcomes and activities. This income can support sustainability without reliance on continual funding from external sources. It is this combination of effective leadership with financial resources that led to the establishment of HENPOWER in older peoples' communities during the pilot. When these existed other mediating factors influenced the extent that outcomes were achieved through the HENPOWER programme. These were:

- An organisational culture and policies that promotes and supports animal assisted interventions and creative use of outdoor spaces
- An agreed implementation strategy within a community for the introduction of HENPOWER.
- Procedures and processes to address problems and manage risk that arise from the introduction of animals into older people's communities
- Staff receive training that enable them to provide holistic and individualised support for older people to participate in henkeeping
- Recruitment and support of volunteers with expertise in henkeeping and those keen to develop skills to take part in HENPOWER.

7.6 Sustainability

During the HENPOWER pilot programme henkeeping was introduced in sheltered housing and care home sites with the support of start-up funding. From the outset it was clear that each site would be challenged to develop a strategy to meet its own costs to sustain henkeeping within the community. Approaches to income generation were developed in each site and these included: 'Sponsor-a-Hen' promotes individual donation – if each care home targeted 20 relatives who raised £50 each this would result in £1,000 that can cover annual costs of HENPOWER in the site. Sales of eggs 30p per/dozen eggs contributes additional income. Sales of HENPOWER merchandise (designed by participants includes mugs/tea

towels/aprons/bags/cards/wrapping paper/calendars) is another income stream. To date 30% of these sales has raised £2,500. The 'Hensioners' are currently developing a 'school egg incubation' programme which is a growth market and this has the potential to generate income from a learning programme delivered by older people.

In addition to generating funding to sustain henkeeping within sites much attention was given to developing models for developing the programme and increasing the number of HENPOWER sites. Two models emerged:

- Model 1: learning partners
- Model 2: distant partners' e-network.

The learning partners model (1) is comprised of a partnership between sites in a local area. There is now a North East HENPOWER partnership that enables established HENPOWER groups to share ideas of what works well in a community and how they have overcome difficulties. The partnership also seeks to 'get alongside' organisations that are interested in implementing HENPOWER and support implementation. At the time of writing this report there are 8 North East care settings which are keen to develop a HENPOWER programme.

There has also been interest in HENPOWER from organisations across the UK. It is clear that travelling long distances can be challenging for the Hensioners which mitigates against regular face to face contact for sharing of ideas and supporting implementation. An alternative model for supporting distant partners had to be considered by the HENPOWER partnership. Building on the success of Facebook and the HENPOWER blog attention is being devoted to developing E-Resources and exploring how to franchise HENPOWER. If successful these approaches will lead to the generation of a distant partners' e-network available to interested parties across the UK and the global market.

7.7 Conclusion

- **To be completed – captured peoples imagination**
- **The pilot project demonstrated that HENPOWER can attract and involve vulnerable isolated older men recruited through a range of mechanisms and multimedia approaches whilst continuing to work with partner agencies, particularly volunteer recruitment organisations that target isolated older people but also local GP's, community health professionals, social workers who refer clients and providers of sheltered housing.**
- **Positive outcomes**
- **Roll out strategy**

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Appendices

Appendix 1: HENPOWER survey

Appendix 2: Topic guide for focus group interview with volunteers

Appendix 3: Topic guide for follow up focus group interview with volunteers

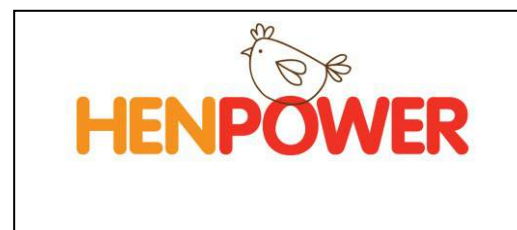
Appendix 4: Topic guide for focus group interview with recipients

Appendix 5: Topic guide for focus group interview with care and management staff

Appendix 6: Topic guide for monthly case study interviews with volunteers

Appendix 1: HENPOWER survey

Participant ID:
HENPOWER questionnaire



Section one: About you

1) Are you (*please tick*) Male Female

2) What is your date of birth? / /

3) What is the first part of your postcode? e.g. NE10

4) Today's date: / /

5) What is your ethnic group? (*Please tick one box only*)

White		Mixed	
British		White and Black Caribbean	
Irish		White and Black African	
Any other White background:		White and Asian	
Asian or Asian British		White and Chinese	
Indian		Any other mixed background:	
Pakistani		Black or Black British	
Bangladeshi		Caribbean	
Any other Asian background:		African	
Chinese		Any other Black background:	
Not stated:		Any other ethnic group: (<i>please write in</i>)	

6) All things considered, on a scale of 0-10 how satisfied are you with your life as a whole today? (Please circle one number only)

Not at all satisfied	0	1	2	3	4	5	6	7	8	9	10	Completely Satisfied
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7) Below are some statements about feelings and thoughts

(Please tick the box that best describes your experience of each statement over the past two weeks)

	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future					
I've been feeling useful					
I've been feeling relaxed					
I've been feeling interested in other people					
I've had energy to spare					
I've been dealing with problems well					
I've been thinking clearly					
I've been feeling good about myself					
I've been feeling close to other people					
I've been feeling confident					
I've been able to make up my own mind about things					
I've been feeling loved					
I've been interested in new things					
I've been feeling cheerful					

8) Do you have any long-standing physical or mental illness, or disability? (Note: by 'long-standing' I mean anything that has troubled you over a period of at least 12 months or that is likely to affect you over a period of at least 12 months.)

Yes No No comment

9) Do you receive any help around the home or other social care?

Yes No

If No please go to question 11.

10) If yes, please record the number of hours support you received per week for each of the following services:

Type of service	Hours of support
Visit from formal (paid) carers	
Meals on wheels	
Visit from befriender	
Cleaning service	
Shopping service	
Visit from informal (unpaid) carers	
Handyperson service	
Visual and hearing service	
Other (housing officers/social care) Please state:	

11) Please complete the number of different types of hospital visits you have made in the last 3 months?

Number of hospital visits as an out-patient	
Number of hospital visits as an in-patient	
Number of emergency hospital visits	
No hospital visits	

12) Please answer the following questions about contact with your GP in the last 2 weeks

Did you talk to a doctor (GP) about your own health either in person or by telephone?	Yes	No
If yes, how many times did you talk to doctor (GP) about your own health in these 2 weeks?		
As a result of speaking to a doctor (GP) about your own health in these 2 weeks, did they give (send) you a prescription?	Yes	No

13) During the last 2 weeks did you see a nurse about your own health?

Yes No

If No please go to question 15.

14) If yes, how many times did you see a nurse about your own health in these 2 weeks?

15) Doing things that make you feel valued: *(Please tick one box that is the best answer for how you generally feel)*

I am able to do all of the things that make me feel valued	<input type="checkbox"/>
I am able to do many of the things that make me feel	<input type="checkbox"/>
I am able to do a few of the things that make me feel valued	<input type="checkbox"/>
I am unable to do any of the things that make me feel valued	<input type="checkbox"/>

16) Doing things that are enjoyable and pleasurable for you: *(Please tick one box that is the best answer for how you generally feel):*

I can have all of the enjoyment and pleasure that I want	
I can have a lot of the enjoyment and pleasure that I want	
I can have a little of the enjoyment and pleasure that I want	
I cannot have any of the enjoyment and pleasure that I want	

17) Below are some questions about how satisfied you feel about your circumstances. *(Please tick the best answer for how you felt over the past week) for each question)*

Yes No

	Yes	No
Are you basically satisfied with your life?		
Have you dropped many of your activities and interests?		
Do you feel your life is empty?		
Do you often feel bored?		
Are you in good spirits most of the time?		
Are you afraid something bad is going to happen to you?		
Do you feel happy most of the time?		
Do you often feel helpless?		
Do you prefer to stay at home, rather than going out and doing new things?		
Do you feel you have more problems with memory than most people?		
Do you think it is wonderful to be alive?		
Do you feel pretty worthless the way you are now?		
Do you feel full of energy?		
Do you feel that your situation is hopeless?		
Do you feel that most people are better off than you?		

18) Below are some statements about how you feel. (Please tick one box for each statement)

	Absolutely Yes!	Yes	More or less	No	Definitely No!
There is always someone I can talk to about my day-to-day problems					
I miss having a really close friend					
I experience a general sense of emptiness					
There are plenty of people I can lean on when I have problems					
I miss the pleasure of the company of others					
I find my circle of friends and acquaintances too limited					
There are many people I can trust completely					
There are enough people I feel close to					
I miss having people around me					
I often feel rejected					
I can call on my friends whenever I need them					

Section two: About your involvement in HENPOWER

19) What is your intended contribution to HENPOWER?

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.....

.....

20) We would like to ask you whether you agree or disagree that your contribution to HENPOWER is valued: *(Please tick the box which best describes your view):*

Definitely agree	
Tend to agree	
Tend to disagree	
Definitely disagree	
Don't know	

21) We would like to ask you whether you agree or disagree that you can influence decisions in the residential care setting to establish hen keeping. *(Please tick the box which best describes how you feel):*

Strongly agree	
Agree	
Neither	
Disagree	
Strongly disagree	

22) How important do you feel it is to have projects like HENPOWER in the residential care settings? *(Please tick the box which best describes how you feel):*

Very important	
Important	
Not important	
Neither	

23) To what extent do you agree or disagree with the following statement: ‘Older people and young people benefit from being together more.’ *(Please tick the box which best describes how you feel):*

Agree strongly	
Agree	
Disagree slightly	
Disagree strongly	
Don't know	

24) Is there anything else you wish to tell us about HENPOWER?

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.....

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Thank you very much for taking the time to fill in this survey.

Appendix 2: Topic guide for focus group interview with volunteers

Motivation:

- What motivates you to volunteer?
- How important is volunteering to you?

Expectations:

- Is keeping hens like what you expected it to be?
- What is your intended contribution to HENPOWER?

Aspirations:

- What were your aspirations when you started your volunteering role with HENPOWER?
- What are the positive aspects of keeping hens?
- Are there any negative aspects?
- What did you want from keeping hens?
- Have these 'wants' been met?
- Do you think that your contribution to HENPOWER is valued and how?

Relationship:

- Have you made any new friends through the keeping hens project?
- Do you think that older people and young people benefit from being together more and how do they benefit?
- Do you think that older people are admired and respected by young people, if so what leads to you think that?

Confidence:

- Have there been any changes in your life as a result of keeping hens?
- Has keeping hens increased your confidence in any other aspect of your life?

Support:

- What type of support do you receive from the providers of keeping hens service?
- If this service did not exist would it make a difference to your life?

Decision making:

- Do you think that you can influence decisions in the residence (care homes/sheltered housing) setting to establish hen keeping and how?

- Do you feel more empowered to make decisions related to keeping hen or any other aspect of your life?

Achievements:

- Please tell us about your achievements during the keeping hens experience.
- Could your experience/achievements been improved? If so, how?
- As a result of being involved in HENPOWER, have you improved any of your skills and what and how have they improved?
- What effect has volunteering had on you?

Barriers:

- Did you encounter any barriers that interfered with your taking part in keeping hens?

Facilitating factors:

- Did you receive encouragement during keeping hens experience? How did this present itself?

Future:

- What would you like to happen now in terms of your involvement with keeping hens?
- Do you plan to continue volunteering?
- Would you recommend volunteering to other people?
- Have you contacted other people organisations, services, agencies as a result of your involvement with keeping hens? Please tell us about it
- Can you explain how important you feel it is to have projects like HENPOWER in the residences (care homes/sheltered housing) settings?

Is there anything else you wish to tell us about your involvement with HENPOWER?

Appendix 3: Topic guide for follow up focus group interview with volunteers

Motivation:

- What motivates you to volunteer?
- How important is volunteering to you?

Expectations:

- Is keeping hens like what you expected it to be?
- What is your intended contribution to HENPOWER?

Aspirations:

- What were your aspirations when you started your volunteering role with HENPOWER?
- What are the positive aspects of keeping hens?
- Are there any negative aspects?
- What did you want from keeping hens?
- Have these 'wants' been met?
- Do you think that your contribution to HENPOWER is valued and how?

Relationship:

- Have you made any new friends through the keeping hens project?
- Do you think that older people and young people benefit from being together more and how do they benefit?
- Do you think that older people are admired and respected by young people, if so what leads to you think that?

Confidence:

- Have there been any changes in your life as a result of keeping hens?
- Has keeping hens increased your confidence in any other aspect of your life?

Support:

- What type of support do you receive from the providers of keeping hens service?
- If this service did not exist would it make a difference to your life?

Decision making:

- Do you think that you can influence decisions in the residence (care homes/sheltered housing) setting to establish hen keeping and how?

- Do you feel more empowered to make decisions related to keeping hen or any other aspect of your life?

Achievements:

- Please tell us about your achievements during the keeping hens experience.
- Could your experience/achievements been improved? If so, how?
- As a result of being involved in HENPOWER, have you improved any of your skills and what and how have they improved?
- What effect has volunteering had on you?

Barriers:

- Did you encounter any barriers that interfered with your taking part in keeping hens?

Facilitating factors:

- Did you receive encouragement during keeping hens experience? How did this present itself?

Future:

- What would you like to happen now in terms of your involvement with keeping hens?
- Do you plan to continue volunteering?
- Would you recommend volunteering to other people?
- Have you contacted other people organisations, services, agencies as a result of your involvement with keeping hens? Please tell us about it
- Can you explain how important you feel it is to have projects like HENPOWER in the residences (care homes/sheltered housing) settings?

Is there anything else you wish to tell us about your involvement with HENPOWER?

Appendix 4:Topic guide for focus group interview with recipients

Activity:

- What are your views about keeping hens in the care home?
- How important is it for you?
- What activities have you been involved in as a result of keeping hens?
- Where they are activities you particularly liked? Or any you did not like?
- Was keeping hens like what you expected it to be?
- What did you want from keeping hens? Have these 'wants' been met?
- Are there any improvements you would make to the keeping hens experience?
- How can your experience of keeping hens be improved?

Changes:

- Has keeping hens changed any aspect of your life within the care home?
- If this activity did not exist would it make a difference to your life?
- Have you developed a relationship with the volunteers? Can you describe that relationship?

Benefits of keeping hens:

- What are the positive aspects?
- Are there any negative aspects?

Future:

- What would you like to happen now in terms of your involvement with keeping hens?
- Have you contacted other people organisations, services, agencies as a result of your involvement with keeping hens? Please tell us about it

Appendix 5: Topic guide for focus group interview with care and management staff

Activity:

- What are your views about keeping hens in the care home?
- How important is it for you?
- What activities have you been involved in as a result of keeping hens?
- What activities did you particularly liked? Or any you did not like?
- Was keeping hens like what you expected it to be?
- What did you want from keeping hens? Have these 'wants' been met?
- Are there any improvements you would make to the keeping hens experience?
- How can your experience of keeping hens be improved?

Changes:

- Have there been any changes taken place within the care home as a result of keeping hens?
- Has keeping hens changed any aspect of life within the care home?
- If this activity did not exist would it make a difference to life within the care home?
- Have you developed a relationship with the volunteers? Can you describe that relationship?

Benefits of keeping hens:

- What are the positive aspects?
- Are there any negative aspects?

Future:

- What would you like to happen now in terms of your involvement with keeping hens?

- Have you made contact with other organisations, services, agencies as a result of your involvement with keeping hens? Please tell us about it
- Are there any other changes planned in the care home following the experience of HENPOWER?

Appendix 6: Topic guide for monthly case study interviews with volunteers

Please tell me about your life in the previous month (what has been satisfying/ what has been pleasurable/what has been difficult).

Has your living circumstances changed?

Have there been any changes in your daily life?

Have you experienced good or poor health?

Is there anything else that you would like to tell me about your life during the previous month?