

Companion Pets

Using robotic pets to help reduce stress and anxiety

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BACKGROUND

Loneliness and social isolation can have a significant negative impact on older people, particularly if they are living with dementia.

Dorset Council has been exploring ways to help people remain active and mentally stimulated in their own homes.



The reasoning behind this follows the premise that people would like to remain in their own home, carers need to be supported and social care resources can be better used when needs increase.

One of the pieces of technology we have been looking at, to complement our Technology Enabled Care (TEC) offering is a companion pet or “RoboPet”.

These robotic companion pets offer realistic fur which can be soothing to the touch and have movements and sounds.

Using the built in sensors, the pet companion responds to motion and touch such as petting and hugging, much like a real animal.

Petting an animal is a familiar action for a lot of people and being able to mimic the experience in a safe, controlled way, could be of significant benefit to the individual.





ADOPTION JOURNEY

Carers caseworkers from Dorset Council were invited to an engagement meeting to explore the potential uses and perceived benefits of using the companion pets to both the cared for person and carer. The TEC team also demonstrated the cat and dog at carer events to better understand people's responses to the companion pets.

The pets were purchased directly from Robopets and we were offered an NHS and Local Authority discount.

Cost per animal:

Cat - £96.00 plus VAT,

Dog- £107.00 plus VAT

Purrble -£42.00 plus VAT

The pets are provided at nil cost to the individuals using them. The only ongoing cost to the person is the cost of any replacement batteries.

In total we have received 25 referrals from across Dorset Council for the provision of a companion pet.



WHAT IS THE INNOVATION

Using a non-medical, simple piece of technology, to deliver stress and anxiety relief.

Our TEC team constantly scan the market to identify products that could enable people to remain living in their own homes for as long as possible.

Common themes surfacing from family members visiting our TEC lounge was that their loved one can at times experience moments of anxiety and distress and that they used to enjoy the company of animals.

This led to us scanning the market to identify suitable products that could be used as safe substitutes for a real pet.

We also looked at the academic literature, to identify studies linking emotional wellbeing and the effects of using a robotpet.

Many studies focus on the benefits of their use within care homes. (Abbott R, Orr N, McGill P, et al. How do “robotpets” impact the health and well-being of residents in care homes? A systematic review of qualitative and quantitative evidence. *Int J Older People Nurs.* 2019;e12239).

Interestingly, Google Scholar identifies more than 800 articles exploring this relationship. Clearly as technology becomes ever more present in our daily lives, we can expect academics to further explore this issue.

The main anticipated benefit which we are hoping to gain from RoboPets is a reduction in the anxiety levels of the end user.



HOW HAS IT SCALED AND WHAT WERE THE ENABLERS

Dorset Council is a forward-looking organisation, trying to do what is best for our residents, utilising technology and smarter, more efficient ways of working.

The RoboPets project has been receiving the support of the wider adult's team and has linkages with:

- Our Home care optimisation project, where we are exploring technological solution which can provide hybrid models of care delivery.
- The Digitising Social Care project, which is helping Adult Social Care providers introduce electronic care plans and sensor technologies into their settings.

Funding for the RoboPets project has been sourced via the Supporting Independence Through Technology (SITT) programme (funded via the Digital Transformation Fund - DTF)





KEY CHALLENGES & LEARNING

All pets were received very positively by the person and their families. However, it was agreed that if a person reacted negatively towards a companion pet, then they would be removed from the project and the pet returned.

Due to the design of the companion pets, it is not possible to fully sanitise them after use. Once a pet has been provided and used by a person it cannot be reused by another and is not easily recycled. The batteries used can be commonly recycled. Some people require support to change the batteries and to switch them on/off if required although the pets will automatically return to sleep mode when not in use.

Feedback from the baseline assessments indicated that it was important that the pets were easy to use and looked realistic in their appearance and behaviour. Therefore, it is important that we do not use pets that require charging or programming or that their movements are so minimal or unrealistic that it reduces the number of interactions.

What specific features would you find most important in a companion pet ?
Select all that apply



If the project were to continue a funding stream, referral process and a method for the delivery of the preferred pet would be required. We found that people preferred to choose their own pet and its colour, often choosing an animal that replicated a pet previously owned.

The cost of the companion pets may be prohibitive for some people to self-fund.



WHAT WAS THE IMPACT

The pets provided are a low-cost, one-off purchase. There are alternative pets available on the market at both a lower and higher price points.

We are yet to complete our benefits realisation insights and plan to complete these in the new year. However, our baseline assessments suggest the following:

In your opinion, how effective do you think robopets can be in reducing stress and anxiety ?



How frequently do you think you would use a robopet for stress relief and social interaction?



Some initial feedback:

Observed interaction between Ivy* and her companion pet.

Ivy - 'Oh hello Fluffy, aren't you so beautiful. You are such a good girl, just sit here quietly on my lap, that's right. What a well behaved puss cat you are, you are so beautiful. I should like to keep you. Does she need feeding?'

'...this morning was the first in three years that Katy didn't say how much she missed her Dad. She slept with 'Poppy' next to her in her bed ...and was so happy conversing with it and was so absorbed it was delightful to see ...',*



NEXT STEPS

Triage and provide companion pets to the remaining people who have been identified as benefitting from the project.

Complete the benefits realisation questionnaire and analyse results

Continue to provide information and advice about companion pets via the TEC lounge, roadshows and events




REFERENCES


Abbott R, Orr N, McGill P, et al. How do “robotpets” impact the health and well-being of residents in care homes? A systematic review of qualitative and quantitative evidence. *Int J Older People Nurs.* 2019;e12239.

World Health Organisation. (2024) Social Isolation and Loneliness. Available at [Social Isolation and Loneliness \(who.int\)](https://www.who.int/news-room/fact-sheets/social-isolation-and-loneliness) (Accessed 5th January 2024)



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