

# Executive Summary

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The contribution of  
dementia dogs to living  
well with dementia:  
a realistic evaluation

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# Background to project

Scotland's National Dementia Strategy (Scottish Government, 2013) focuses on how to provide support to enable people with dementia to live the best life possible. It is important, therefore, to develop an understanding of the types of supports which may enable people with dementia to continue to live as independently as possible in the community. The Dementia Dog project has been running in Scotland since 2013 ([www.dementiadog.org.uk](http://www.dementiadog.org.uk)). The aim of the project is to assess how dogs can be used within dementia care. The pilot programme was carried out from 2013-2015. This executive summary summarises the findings of a realistic evaluation of the Dementia Dog project.

## Aims

The aim of this evaluation was to understand the contribution of assistance and intervention dementia dogs to the lives of people with dementia and family carers. More specifically we aimed to:-

- Identify the range of outcomes that can be realistically expected by the individual with dementia and the family carer
- Expose possible mechanisms that liberate beneficial outcomes for the individual and family caring
- Understand what works well, for whom (including the dog) and under what circumstances (context)

## Literature review

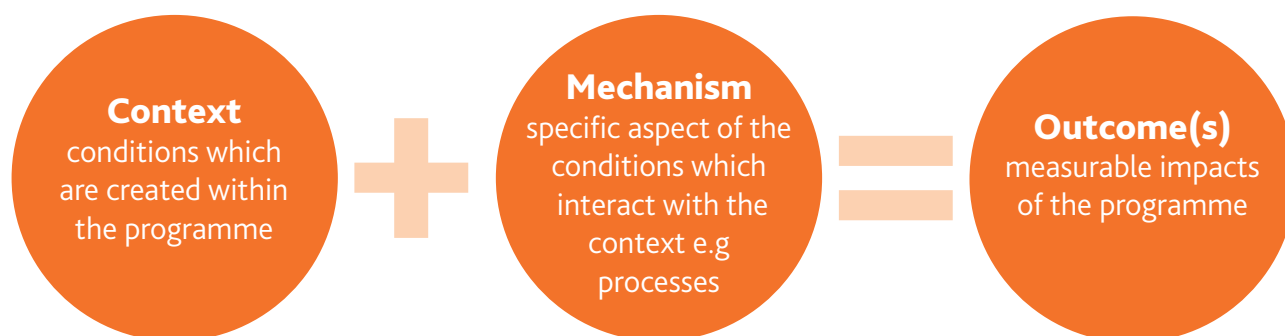
A literature review was carried out to provide contextual information around animal interventions with older people, individuals with a dementia diagnosis and pet ownership in the general population in order to understand the current research in this area to inform the analysis of the data and to inform future interventions. The key findings from the literature review were:

- The use of dogs in dementia care can have positive outcomes for in the individuals involved, including increased quality of life, improved communication, and emotional support and mood regulation.
- In order to achieve the positive outcomes it is important to have thorough assessment, dog-matching and review processes to deliver a person-centred intervention
- Research has mainly focused on dog interventions in dementia care homes, with little focus on the use of dogs for people with dementia living in the community.
- No previous research has examined the use of assistance dogs for people living with dementia.

# Methods

A Realistic Evaluation design (Pawson and Tilley, 1997) was selected due to the complexity and unique experience of living with dementia and the early stage of development of the dementia dog programme. Importantly the design with its focus on the combination of context and mechanisms to achieve outcomes (CMO) realistic evaluation can potentially illuminate why an approach may work in some situations but not in others. A definition of context, mechanism and outcomes is provided in figure 1 below.

**Figure 1: Context, mechanism and outcome in realistic evaluation**



Data included in the realistic evaluation came from three sources

- 1) Project records and documents
- 2) Video recorded interviews with couples with assistance dogs
- 3) Audio recorded interviews with dementia dog team members

Within the project, there were four couple who participated in the assistance dog programme and seven people with dementia who participated within the intervention. Due to the volume of data available on the assistance dog programme, each couple were treated as a case within the evaluation, and the intervention dog programme was treated as the fifth case. Table 1 below outlines the data sources which informed the analysis of each individual case. The interviews with five team members informed analysis and understanding of the project overall.

**Table 1: Outline of data sources informing analysis**

Case no.	Names	Number of documents	Video interviews
1	Assistance dog couple 1	22	3
2	Assistance dog couple 2	22	3
3	Assistance dog couple 3	13	1
4	Assistance dog couple 4	6	0
5	Intervention dog (7 participants)	75	n/a

# Case 1 – Assistance dog couple 1

*The best way I can describe about the dog is like having a bracelet and you've lost a link, we have found the link with Charlie. (June)*

Tom was diagnosed with vascular dementia in 2010. He is married to June, who is his main carer. The assistance dog, Charlie was placed with them full time in March 2013. Tom and June's experience of having a dementia dog has been positive. There have been some challenges along the way, but these have been managed well by the team. Charlie is the only dog of the four original dogs to still be working as an assistance dog to a person with dementia. Table 2 summarises the context, mechanisms and outcomes within this case.

**Table 2: Context, Mechanisms and Outcomes for assistance dog couple 1**

Context	Mechanism	Outcome
Charlie was well trained to provide support for Tom	Tom and Charlie developed a strong bond based on unconditional love and trust.	Charlie was able to pick up on Tom's moods as a result of this bond, helping to regulate his moods.
Charlie was placed with the couple when Tom was in the early stages of dementia	Charlie is very intuitive to Tom's needs and adopts the role of protector.	Additionally, Charlie provides care and support to Tom when June is not there, allowing her to continue working and feeling more confident at leaving Tom alone with the dog. This allows her to continue working and have time out for herself.
Tom and June's grandsons are available to care for the dog when Tom was in hospital.	Charlie views June as his carer and their relationship has developed on this basis.	

## Case 2 – Assistance dog couple 2

Susan was diagnosed with Alzheimer's disease in 2009. She lived with Peter, her husband and her full-time carer. Susan and Peter have had a positive experience of having Felix as a dementia assistance dog.

*He gets Susan up. He brings her medicine to her and he's a buffer between the two (of us), he's, he does that perfectly for us at the moment. (Peter)*

Over the course of the pilot, Susan moved into full-time care and has since passed away, however Felix continued to visit and support Susan after she moved into care. However, Felix was an important source of support for both Susan and Peter. Arguably, this case is the one where the carer has had the most benefit from having the dog, compared to the person with dementia. Peter still continues to benefit from having Felix and Felix has been an important source of support to Peter through the different transitions and appears to have provided routine and stability to Peter's life. Table 3 below shows the key context, mechanisms and outcomes within this case.

**Table 3: Context, Mechanisms and Outcomes for assistance dog couple 2**

Context	Mechanism	Outcome
Felix was trained to provide supports required by Susan.	Susan and Peter both developed a bond with Felix based on trust and the dog appeared very loyal to the couple.	Susan was well supported and responded well to Felix's task work in the early stages of the project
The support team helped Susan understand the task work and training.	Felix became the third element in their family, which facilitated additional emotional support for Susan and Peter.	Susan's communication was supported.
Susan's dementia progressed and she had to move into a care home.	Felix provided a focus for conversation, which in turn supported Susan's communication skills.	Peter received support through the transition of Susan moving into the care home. He also benefitted from the routine of having Felix.
		Although Susan stopped getting the physical benefits of an assistance dog in the care home, there were still emotional benefits for her. E.g. stress reduction and mood lifting.

## Case 3 – Assistance dog couple 3

James was diagnosed with Alzheimer's disease in 2008. He lived with his wife and full time carer, Paula. Baxter was only working as an assistance dog for James for a short period of time, as James became unwell and passed away in late 2014. However in this time Paula reports that Baxter made a significant difference to their lives and improved the quality of life they had in James's final year. Table 4 outlines the key context, mechanisms and outcomes for couple 3 in the assistance dog programme.

*James didn't want to go out, didn't want to do anything. He wanted to stay in the dark the whole time. He pulled all the blinds down and shut all the doors, turned all the lights off, just stare in the dark and when we got the dog I made him go out cause we dual walked the dog and made him go out just along to the shops for his paper at first and then back and again and then further and further until we were hitting the beach every day and it made such a difference. (Paula)*

**Table 4: Context, Mechanisms and Outcomes for assistance dog couple 3**

Context	Mechanism	Outcome
James' health deteriorated quickly throughout the course of the pilot project. This meant Paula had to spend more time caring for him, and as his dementia progressed, he was unable to be left alone.	The couple was responsible for the care of the Baxter. The dog has needs as a working dog and is reliant on the couple to provide them.	Baxter put on weight and did not get his required exercise.
There was no plan in place to support Paula with the care of the dog.	The matching of Baxter to James and Paula was timely, and Baxter was able to adapt to the situation quickly and learn how to help James.	Baxter provided emotional support to Paula
Baxter seemed to be the most obedient dog and most responsive to training.		For the first months of the pilot, Paula felt that their quality of life had improved because of the dog. James was more motivated to go out and was confident in the dogs abilities.

## Case 4 – Assistance dog couple 4

Alan was diagnosed with vascular dementia in 2011. He is married to Mary who is Alan's full-time carer. They were matched with Fred, the assistance dog. However, the placement did not go well and Fred was removed a few months into the project and Alan and Mary ceased participation in the project. Although Alan and Mary had high hopes from the project, it didn't work well for them. The following context, mechanisms and outcome analysis presented in table 5 attempts to understand why the project didn't work in this situation.

**Table 5: Context, Mechanisms and Outcomes for assistance dog couple 4**

Context	Mechanism	Outcome
Alan was an active individual who had retained a great level of social independence. Alan only required minimal support from Fred.	A bond developed between Mary and Fred before Alan bonded with Fred. This caused confusion for Fred especially over his role supporting Alan.	Fred's health and wellbeing was affected.
Mary and Alan were experienced dog owners, and often slipped into old habits which were not recommended for Fred's training.	Alan and Mary did not trust Vonn on social walks and with visitors so they had a tendency to over monitor them.	The couple experienced some benefits from Fred's task work but the overall anxiety of the situation appeared to outweigh these.
Fred had problems with social behaviour and obedience when he was not working.	Communication with the support team was not open.	Fred had to be removed from the situation and the pilot was ceased.



## Case 5 – Intervention dog

The Dementia Dog intervention project involved seven people living with dementia, in a variety of settings, including care homes, their own homes and very sheltered accommodation. As part of the pilot project, they received six visits from a dementia support worker and their pet dog. The pilot only ran for this short period, however there were many benefits of the dog visiting to the people with dementia.

Overall, it appears that the intervention dog programme was successful to various degrees for all the participants. There is limited data on the intervention dog programme and the analysis is only based on the notes of the teams, rather than the experiences of the participants. However, there are a number of similarities in terms of outcomes to the assistance dog programme, but to a lesser extent. Table 6 outlines the context, mechanisms and outcomes from the intervention dog programme. One of the clear benefits of the intervention dog programme is the flexibility built into the model; this allows people who are not eligible for the assistance dog programme to participate in the dementia dog programme.

**Table 6: Context, Mechanisms and Outcomes for intervention dog**

Context	Mechanism	Outcome
Dogs are not trained assistance dogs, but are trained to high levels of obedience.	A bond develops between the person with dementia and the dog	For person with dementia: <ul style="list-style-type: none"> <li>- Physical activity</li> <li>- Supported communication</li> <li>- Mood regulation</li> </ul>
Dogs and dementia support workers work in teams.	Interactions are supported by the dementia support worker and the dog promotes 'living in the moment'	For family carer <ul style="list-style-type: none"> <li>- Respite</li> <li>- Social interactions (with dementia support worker)</li> </ul>
Participants have a variety of needs and live in different accommodation types.	Flexibility allows the team to respond to the needs of the participants in a person centred way.	

# Key findings

## Context

The context of the Dementia Dog programme has been identified as

- Support from the team – it is important that the team builds up good relationships with the couples and manages the expectations of the couple with regards to the support the dog can provide.
- Review procedures – continual review and support is important to ensure the couple and the dog are well cared for and being supported.
- Wider support network to care for the dog – a third family member to look after the dog is required.

## Mechanisms

There were a number of important mechanisms identified which when combined with the appropriate context can unlock beneficial outcomes for the participants.

- Bond with the dog – a strong bond between the dog and the couple based on unconditional love and trust was important.
- Role of the dog within the family – the dog needed to be accepted as part of the family, and become a third element within the family
- Motivation – the responsibility of care for the dog led to the couple being more motivated to promote routine and activity within their own lives.

## Outcomes

Based on the realistic evaluation we have concluded that the following outcomes could be realistically expected following participation in the Dementia Dogs programme:

- Improved communication, between the couples and in social settings
- Emotional support for both the person with dementia and their partner
- Maintenance of routine
- Care and support for the person with dementia, their partner and the dog.

# Recommendations

1. Thorough assessment, matching and monitoring of the participants is required to ensure the bond between the dog and its family develop
2. A third party needs to be identified at the outset to provide care for the dog if required.
3. There is a need for a clear exit strategy from the assistance dog model to ensure the couple are secure in their future with the dog
4. The intervention dog programme may provide clearer benefits if it is an ongoing project.
5. There is a need for more research which looks at the role of dogs within dementia care, with a specific focus on people living in the community.





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