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Green dementia care in accommodation and care settings – opportunities, barriers and good practice

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Introduction

This pilot study explored the opportunities, good practice, enablers and barriers relating to green (nature-based) dementia care for people living with dementia in accommodation and care settings, particularly care homes and extra care housing schemes or villages.

There is growing interest in the impacts of engaging with nature on the physical, psychological, emotional, social and spiritual health and wellbeing of people living with dementia. Green dementia care refers to indoor and outdoor experiences and activities that aim to promote health and wellbeing through interaction with nature for people living with dementia. It includes a range of health-promoting interventions encompassing living organisms (plants and animals) and natural elements (e.g. the weather). Green care links traditional health care to gardening (horticultural therapy), agriculture (green care farming), animals (animal assisted interventions) and exercising in the natural environment (green exercise).

Increasing numbers of people with dementia are supported in care homes (residential care homes or care homes with nursing), while extra care housing is now widely viewed as an alternative form of accommodation that can provide opportunities for maximising independence. Many people living with dementia in such settings have limited opportunities to connect with the natural world often due to organisational concerns about safety and security and outdoor spaces that are not fully accessible. For people with dementia the loss of nature in their lives is often sudden and occurs when they move from their own home into accommodation and care settings. Due to fears about the physical risks involved, residents living with dementia are often discouraged from going outdoors, which means that they can quickly lose confidence to go outdoors with or without support. This puts them at risk of losing their nature relatedness (personal connection to nature) and the benefits engaging with nature may bring to their health and wellbeing.

It is hoped that the findings of this pilot study will inform the development of a large-scale multi-site, multi-provider research project involving in-depth evaluation of the impact of nature-based interventions on the health and wellbeing of people with dementia in care settings. This research theme is one of the top research priorities of the Housing and Dementia Research Consortium (the HDRC is a UK wide network of around 100 housing and care providers and commissioners and other interested parties including academics, architects, advisors, researchers, policy makers and third sector organisations committed to research and knowledge exchange across the sector). High quality, large-scale research in this area is necessary in order to inform policy and practice concerning green dementia care, including any impacts on

the health and wellbeing of individuals and the cost effectiveness of care. This pilot study was an important step in developing an understanding of the opportunities for people living with dementia in residential care and extra care housing to engage with the natural world, to explore what works and why, and to identify the main barriers and enablers to engagement.

Study aims, design and methods

The pilot study aimed to:

- Explore existing evidence for the impacts of interaction with nature on health and wellbeing of people living with dementia and examples of good practice.
- Identify the opportunities available to people living with dementia in accommodation and care settings in the UK to experience nature.
- Understand the benefits, barriers and enablers to interaction with nature in these settings for people living with dementia.
- Understand management / staff perceptions of the enablers and barriers to engagement with the natural environment for residents with dementia and the challenges and successes.

The pilot study, comprised 3 stages:

Stage 1

A comprehensive literature review that drew together the published and grey literature on: the impact of interaction with nature on health and wellbeing outcomes for people living with dementia; opportunities for people living with dementia in accommodation and care settings in the UK to engage with nature; successful nature engagement approaches for people with dementia.

Stage 2

An online survey was distributed to care homes and extra care schemes in the UK to gather data on the provisions that currently exist in terms of interaction with the natural environment for residents living with dementia and the extent to which residents with dementia engage with these provisions.

Stage 3

In-depth exploration of the green care experiences and activities at 6 case study sites (3 extra care schemes and 3 care homes) via interviews with residents living with dementia and staff.

Key findings

Impacts on people living with dementia

There are numerous ways in which people with dementia can connect with nature in these settings, such as gardens and gardening, horticultural therapy / therapeutic horticulture, care of indoor plants, walking in nature, green exercise, animal assisted therapy and nature-based arts and crafts.



Covered outdoor area at extra care housing scheme



Goats at a care home pet farm



Artificial beach at care home



Outdoor paths at extra care housing scheme

The existing evidence on health and wellbeing outcomes of engaging with the natural environment for people living with dementia is very limited and fragmented and there is a need for more rigorous research in the area. Furthermore, research on this topic that focuses specifically on accommodation and care settings is even more limited. There is also a lack of consistency in the tools and measures used to assess wellbeing outcomes. Nevertheless, there is some emerging evidence in the literature suggesting that engaging with the natural environment has beneficial health and

wellbeing outcomes for some people living with dementia, which can be summarised as follows:

- In terms of evidence for an improvement in behaviour and emotional health, the evidence of reduction in agitation is the most convincing.
- Interaction with nature appears to act as memory trigger for activities that people with dementia used to enjoy in the past and, for those living in long-term care settings, a connection with life before moving into such a setting.
- Being in the natural environment can have a calming, relaxing and restorative effect on some people living with dementia.
- People living with dementia are at risk of losing independence and a sense of self and this risk is intensified for long-term care residents living with dementia. Engaging in productive green or animal-based activities or, for some, just still being able to go outdoors, can give people with dementia a sense of achievement, pride, self-confidence, self-esteem, self-worth, freedom, independence and a confirmation of self.
- Productive nature-based activities, such as growing food or keeping hens, provides meaningful activity, which is especially important for long-term care residents living with dementia, and can be an empowering experience.
- Taking part in nature-based activities with other people appears to improve social interaction and communication.
- Involving local communities in the nature-based activities at a care setting is a means of providing inclusion in the community for the residents and can result in a reduction in the social isolation of the care setting's residents and the stigma experienced by people living with dementia.



Raised flower beds at Extra Care housing scheme



Potting table at Extra Care housing scheme

The beneficial impacts of engaging with nature as found in the survey and case studies can be summarised as follows:

Mental and emotional benefits

- Offering a feeling of normality, peace and wellbeing
- Giving a feeling of freedom and a change from the confinement of the care setting indoor environment
- Improved mood and raised spirits
- Feeling happier and more motivated when carrying out activities
- More settled, relaxed and less stressed
- Feel-good factor, having fun and enjoyment
- Spontaneous reminiscence / triggering memories and providing a connection to the past
- Steady mental wellbeing (as measured using a wellbeing scale)
- Providing meaningful occupation and a sense of purpose
- Offering freedom from the symptoms of dementia
- Giving a sense of ownership
- Instilling a sense of pride
- Gaining comfort and companionship from animals
- Pleasure on seeing animals

I'm not an inside person. That's where I like to be.

You feel a bit more freedom than when I'm in here.

I like being out there, unless it is ridiculously inclement, I like being out there.

You forget everything else

Well, I like to hear the birds.

Oh, yes, yes. I like to get out. I've always done a lot of fishing. Not sea, I've done sea fishing, but I've also done river fishing. And that gets you into the fresh air and into the country. Because I'm a Brummy, I like to get into a bit of country.



Extra Care housing resident in the garden



Care home resident with PAT dog

Social benefits

- Encouraging social interaction and cohesion among residents
- More interaction and participation
- Improved socialisation
- Feeling like a part of the community
- Triggering memories, spontaneous communication and subjects for conversation
- Improved/increased use of language
- Involving family

I love to sit here for hours. I love the sun. It's like out the back of my house.

I think anything to do with nature, to me, is a fascination. OK. I love people and all the rest of it, but when you look at just little things ... there was a good 5 blossoms out together and it was lovely

Behavioural benefits

- Encouraging prolonged engagement in a task
- Residents are busier and more engaged during the day
- Reducing agitation
- More motivated
- More alert

I'm always out there. I do a little bit of tidying up. I'm not asked to, but I just mess about, keep myself busy.

Physical health and wellbeing benefits

- Improved sleep patterns
- Improved core strength and balance
- Less medication required
- Fewer falls
- Improves motor skills when participate regularly
- Improved eating and drinking (stimulating appetite before a meal)

I love walking, Love walking. Always have done.



Care home resident planting beans



Care home resident feeding guinea pig

There is evidence in the literature and some evidence from the staff interviews at the case study sites that the benefits of engaging with nature may be sustained for hours or for the rest of the day, for example, in terms of reduced agitation for the rest of the day or improved sleep that night. Longer-term effects are difficult to establish scientifically for people living with dementia due to the fluctuating and progressive nature of the disease. The attitude of several of the staff interviewees was that an activity is a success if the resident had enjoyed it at the time and it had contributed towards them having a good day – it was a positive outcome if the resident had engaged in meaningful activity, experienced pleasure while doing so and was happy and calm that day as a result.



Care home resident shelling peas



Bird feeder on outside of window to enable bird viewing from indoors.

The only negative impact of engaging with nature found in the literature, survey and case studies related to self-identity or the sense of self: the confirmation of self that can be gained from carrying out nature-based activities can be a negative experience when people living with dementia discover that they are no longer able to carry out activities they used to enjoy.

Word Cloud

All of the relevant residents' quotes relating to their past experience with nature, nature-based activities they are currently engage in, their reasons for engaging in them and how engaging makes them feel were collated in a qualitative data analysis software package and a word cloud of the 100 most frequently used words was created (see Figure 1).



Figure 1: word cloud of the 100 most frequently used words by residents living with dementia when talking about their experience with nature and how it makes them feel (Note: 'yes' was removed from the analysis as this was very frequently used at the start of a quote in response to a question from the interviewer).

Impacts on family members

The literature review found some evidence of positive impacts of gardening activities on the quality of life of family carers, as well as their relatives living in accommodation and care settings, and improvement in communication between residents and their family carers when collaborating on outdoor group activities. However, family carers could be overly concerned about the risks of more time spent outside for residents living with dementia.

While some survey respondents said that family members do not get involved, the majority indicated a positive effect of nature-based activities on family members in terms of engagement with the resident, engagement with staff and emotional wellbeing. The staff and family members participating in the case study interviews also felt that green care activities had a positive impact on family members. This arose from their pleasure at seeing their relative engaging in activities that they enjoy and improving the quality of visits by providing something that the family and the resident can engage in and talk about together.

It should be born in mind, when considering impacts on family members, that the survey responses reflect the perception of the survey respondents (mainly managers of accommodation and care settings) and the case study findings mainly reflect the views of the staff interviewees.

Impacts on staff at the care setting

The literature review described case studies that had found positive impacts of gardening activities on the quality of life of staff as well as residents and family carers. However, like the family carers, staff could be overly focused on the risks of more time spent outside for residents living with dementia. The survey and case studies found that being involved in green dementia care activities appears to have strong positive impacts on staff in terms of morale, job satisfaction, confidence, feelings of empowerment and, to a lesser extent, positive effects on staff retention and sickness/absence. All of these factors have potential financial benefits for accommodation and care settings in terms of staff retention and turnover.

The respondents' examples of negative impacts of green dementia care activities on staff given in the survey could be seen as reflecting the underlying culture of care. A lack of staff engagement or an unwillingness to look beyond care packages could potentially be an indication of a task-related approach to care rather than a person-centred or holistic one, for individual members of staff, more widely within the care or at an organisational level. No negative impacts of involvement in green dementia care activities for staff were found in the case studies.

Challenges, barriers and enablers to green care provision in accommodation and care settings

Providing access to the outdoors for people living with dementia is not only a matter of good person-centred practice in dementia care but also central to the promotion of the human rights and social inclusion of people with dementia. The literature review found a strong evidence base on the barriers and enablers to accessing nature for people living with dementia in accommodation and care settings. Many accommodation and care settings have gardens but these are often underused by the residents, particularly those living with dementia. Risk aversion, as manifested in

the lack of awareness and understanding among staff of the health and safety aspects of garden use for people living with dementia and in the care culture of the organisation, is a crucial factor in the underuse of a care setting's outdoor space. Thus, staff education and a care culture that promotes residents' independence, has a positive attitude towards the outdoors and is supportive of residents with dementia going outdoors is critical to the success and effective use of the garden for such residents.

The staff survey respondents and case study interviewees described many barriers and challenges that they had encountered in ensuring that residents living with dementia engage with nature and the outside environment, including:

- availability of staff / time constraints;
- availability of volunteers;
- financial constraints;
- transport;
- concerns regarding mobility, safety or risks;
- having to cater for a range of needs and ensure activities are meaningful and have a purpose for different residents;
- adjusting to changing moods;
- negative staff attitudes;
- lack of engagement from residents living with dementia (discussed above);
- organisational policies;
- lack of space;
- too much outdoor space;
- setting up and maintaining a pet farm;
- ensuring safety for both residents and animals when they interact;
- lack of management understanding of the needs of residents living with dementia and the benefits to such residents of interacting with nature;
- getting the family's permission to take residents with dementia on outings;
- finding the time to carry out risk assessments of a potential sites for a day trip visit.

Although all of the survey respondents indicated that their care setting offered a good range of indoor and outdoor nature-based activities, many stated that they would like to be able to offer more than they do currently. The most common reasons given for not being able to offer more activities were availability of staff / time constraints, followed by availability of volunteers and financial constraints. These barriers were explored in more depth in the management and staff interviews at the case study sites. Some of the case study sites were also struggling with these barriers, particularly the extra care housing settings.

Concerns about residents' mobility and safety when outside was a challenge encountered by the survey respondents, which are issues related to design on the outdoor spaces. The literature review found that design of the outdoor space so that, for residents with dementia, it is easy to visually and physically access and safe to use on their own was also an important factor in successful use of the space and is best achieved by considering the outdoor space together with the indoor space during the design of the setting as a whole. Rather than incurring the expense of adding a garden as an afterthought, accommodation and care settings may derive greater benefit for the residents living with dementia by finding out about and making use of local programmes and organisations that offer nature-based experiences or activities for people with dementia.

Advice from the survey and staff interviews on how to overcome the common barriers and challenges that may occur when providing green dementia care is incorporated into the recommendations below.

Care culture and the provision of green dementia care in accommodation and care settings

The literature review found that a crucial factor in the successful use of a care setting's outdoor space is an organisational ethos or care culture that is person centred, promotes residents' independence, has a positive attitude towards risk-taking and is supportive of residents going outdoors.

The case studies also revealed how crucial the care culture of the setting is to maintaining a connection to nature for residents living with dementia. The more person-centred the care culture, the more contact with nature (both spontaneous and arranged) is integrated into daily life. The care homes in particular appeared to have inculcated the importance of contact with nature to a maintaining a good quality of life for the residents living with dementia whereas at the extra care settings, with their focus on independent living, there was less onus on staff to actively encourage residents to go outdoors or join in nature-based activities. This meant that extra care residents living with dementia, particularly those with concurrent physical, mobility or sensory issues, who may be less able to express their desires, may be missing out on the benefits of engaging with the natural environment.

Factors related to care culture that influence the success of green dementia care include:

- **Barriers to the provision of green dementia care**

Many of the barriers to the provision of green care activities found in the survey and case studies could be considered symptoms of the underlying care culture,

which exist within specific care settings, but could also reflect regional or organisational priorities. The organisational care culture will have an impact on what managers and staff are able to achieve in terms of green dementia care. This highlights the need to address the culture of care at all levels within an organisation rather than individual barriers in isolation.

- **Management and staff perception of green dementia care**

The survey findings also suggested that nature-based activities are often seen by management and staff at long-term accommodation and care settings as additional activities requiring extra time, staffing and resources, rather than recognising that green dementia care could offer an alternative way of running existing activities or a slightly different approach that could be incorporated into everyday care. This attitude could also be considered to reflect the underlying care culture.

- **Staff knowledge and training**

Providing training in green dementia care, its benefits and positive risk-taking approaches to managers and staff could be a solution to changing the negative perceptions and risk aversion around green dementia care. In the case studies, staff knowledge and training in green dementia care and its benefits was more evident at the care homes than at the extra care housing settings and was found to be important to successful provision of green dementia care. Staff who had a full understanding of green dementia care and its benefits showed true dedication to ensuring that residents living with dementia had contact with nature on a daily basis.

- **Staff morale and job satisfaction**

All of the positive impacts of green dementia care on staff, taken together with effective and active use of the outdoor space and successful integration of nature-based activities in the daily life of the care setting, could be indicative of a care culture that is person-centred and risk-taking as opposed to task centred and risk averse. Thus, perhaps it is not the case that using green dementia care fosters happier, satisfied, more empowered and confident staff, rather it is the underlying culture of care that exists in the care setting, or even at organisational level, that is a determinant of the effectiveness of green dementia care and use of outdoor spaces as well as staff morale and job satisfaction.

- **Staffing structure**

A valuable finding that emerged from the case studies stage of the research was that having a team dedicated to providing activities, a good quality of life and meaningful occupation for residents was important to successful provision of green dementia care. A care culture that understands residents' need for a good

quality and meaningful life, as well as daily care, and that maintaining contact with nature is fundamental to this will see the necessity for such a team with knowledge and education in green dementia care and its benefits.

- **Size of provider**

Another interesting finding from the case studies was that the two care homes that belonged to small housing providers appeared to provide the most opportunities for their residents to engage with nature, made extensive use of external organisations providing nature-based experiences and activities and had truly integrated nature into the daily life of the residents. At these case study sites the recognition of the importance of maintaining contact with nature for the residents appeared to stem from the highest levels of the organisation.

Determinants of successful green dementia care

The evidence gathered from the literature review, survey and case studies suggests that green dementia care has a key role to play in the quality of life and wellbeing of people living with dementia in accommodation and care settings. However, the study also found a number of barriers that can hinder effective and successful provision of green dementia care in such settings. Individual barriers related to residents' personal preference, lack of confidence or belief in their ability, and fear of aggravating a physical condition.

A number of care setting or organisational barriers to the implementation of green dementia care also existed, primarily time, resources and funding, which suggested that there is a more fundamental issue around the underlying care culture that exists in certain accommodation and care settings or higher up at a regional or organisational level. The most crucial determinants of successful green dementia care are:

- a positive approach to risk-taking;
- having a team of staff dedicated to activities and meaningful occupation;
- management buy-in and support;
- management and staff training in green dementia care;
- good availability of trained volunteers;
- finding appropriate approaches to encouraging individual residents living with dementia to engage;
- reducing staff costs;
- fundraising for green dementia care activities;
- design of the outdoor space so that it is easy to visually and physically access and safe to use for residents living with dementia.

All of these factors stem from the foundation of a person-centred care culture that is supportive of people with dementia going outdoors and taking part in nature-based and outdoor experiences and activities.

Recommendations for successful provision of green dementia care

Using the evidence gathered from the three stages of this study – the literature review, survey of accommodation and care settings and interviews with residents living with dementia, managers and staff at case study settings – recommendations for good practice in green dementia care can be made on how to overcome the common barriers and ensure successful green care provision and use of outdoor spaces. These recommendations also take into account the key factors that emerged from the staff survey and interviews in supporting and enabling successful green dementia care provision and overcoming the challenges. The survey respondents and staff interviewees were also asked for advice that they would give to others considering providing nature-based activities for residents with dementia and this is also included in the recommendations. The recommendations are summarised in Figure 2.

Approach to green dementia care

Green dementia care is promoted through a person-centred care culture with a positive attitude to risk-taking that is supportive of residents living with dementia going outdoors and taking part in nature-based and outdoor activities. The accommodation and care setting, and regional and organisational priorities, need to recognise residents' need for a good quality and meaningful life, as well as daily care, and that maintaining contact with nature is fundamental to this. The more person-centred the care culture, the more contact with nature (both spontaneous and arranged) is integrated into daily life.

- The culture of care needs to be addressed at all levels within an organisation rather than addressing individual barriers to green dementia care in isolation.
- In relation to green dementia care, such a care culture would: promote residents' independence; have a positive attitude towards the outdoors; be supportive of residents going outdoors; educate management and staff on the health and safety aspects and benefits versus the risks of engaging with nature for residents living with dementia; create high levels of staff morale and job satisfaction.
- Mobility and safety concerns about residents when outdoors can be addressed by good risk assessments and having staff work with smaller groups of residents so that they are more able to manage the risks and prevent falls.

Management buy-in and support is key. A can-do, risk-taking attitude is needed at management level. Education is fundamental to changing perceptions around risk

and to understanding the potential benefits of green dementia care, what is needed to overcome the barriers to delivering green dementia care and that nature-based activities need not be complicated or costly. Management, in turn, need to encourage a positive attitude to risk-taking and engagement with nature for residents living with dementia among the staff as a whole at accommodation and care settings. Managers need to:

- Incorporate nature into organisational strategies so that it is embedded within care settings and is integrated into the daily lives of residents;
- Support staff and residents to try new ideas and different ways of doing things;
- Encourage positive risk-taking.
- Persevere and fight the barriers.

Choose and plan appropriate nature-based experiences and activities for residents living with dementia but also be prepared to be flexible and realistic in your approach. Planning activities well and knowing the residents should make it easier to adapt to unexpected situations:

- Be flexible and adaptable with residents living with dementia and recognise that what works well one day might not work the next day as people's preferences and moods can change;
- Adapt to the weather rather than seeing it as a barrier;
- Don't be afraid to be spontaneous and make use of what you have, including spells of nice weather.
- If considering appropriate animals for people living with dementia, guinea pigs, rabbits and dogs were good animals for residents living with dementia and provided the best value for money.

Be positive but take it slowly to start with. There is no right or wrong way to provide green dementia care, but it is important to learn from experiences:

- Start slowly with simple, short activities to give residents – and staff – time to adjust and get used to the introduction of green dementia care;
- Don't be afraid to try things, you won't know if it works until you try.

Ensure that there are nature-based or outdoor experiences and activities in place at the care setting that can be easily integrated into the day. This will reduce the time and cost that can be incurred by organising external organisations or day trips.

Encourage wider engagement outside of the immediate care setting. Don't feel that everything has to be done 'in-house':

- Develop links with groups and organisations in the local area to help build a sense of community and belonging and a support network for green dementia care provision;

- Be aware of local charitable organisation that offer nature-based experiences and activities, explore the potential for joint working with these organisations and make use of their expertise and experience.

Staff and volunteers

Address staff attitudes and training needs in green dementia care. Provide training to address negative perceptions and risk averse attitudes among staff around green dementia care and encourage them to identify opportunities for residents living with dementia to engage with nature. Such training can be crucial to successful provision of green dementia care. The training should:

- Provide understanding of the potential benefits and risks of engaging with the natural environment for residents living with dementia;
- Provide understanding of how to encourage and support residents living with dementia to engage with the natural environment (see below);
- Provide information on how to incorporate nature into everyday care as well as ideas for different activities;
- Recognise that engagement with nature and nature-based activities do not need to be complicated;
- Recognise and focus on the potential benefits of green dementia care and understand that for every challenge there is a least one solution;
- Recognise the importance of good staff teamwork and preparation but also the need to be flexible and adaptable when organising nature-based experiences and activities for residents living with dementia.

Have a team of staff dedicated to provision of activities and meaningful occupation. This can be crucial to provision of green dementia care and ensuring that residents living with dementia do not lose contact with nature.

- Having no dedicated activity staff can create barriers to providing nature-based activities;
- While relying on residents to run activities can help build a community with extra care housing settings, this approach does not ensure consistent provision of activities.

Ensure good availability of trained volunteers. Having trained volunteers can make a big difference to activity provision and the costs of this in an accommodation and care setting.

- Having plenty of volunteers can: take the pressure off care staff to find the time to organise and arrange activities, reduce the need for staff to come away from their care duties to accompany a resident outside or support a resident with an activity and reduce the financial barriers to activity provision;

- In the case of providing animals, it is important to have staff who know how to care for animals and have creative ideas about other activities that relate to the animals but do not necessarily directly involve them;
- High levels of staff morale, feelings of empowerment and job satisfaction can mean that staff are willing to volunteer to help out with activities in their spare time. Their family members may also volunteer too.

Encouraging and supporting residents living with dementia to engage

Careful planning. Introducing green dementia care to an accommodation and care setting requires careful planning to ensure individual interests and capabilities are appreciated and respected. However, managers also need to be flexible and willing to change the plans and allow the project to evolve once the residents have started the activities and they have seen how it works in practice. During the planning stage staff need to:

- Plan for variety and individuality;
- Research possible experiences and activities for residents with dementia;
- Try to develop experiences and activities that residents with dementia and staff are able to participate in and enjoy together;
- Match the experiences or activity to a resident's preferences and interests, based on their life history and on their current preferences and abilities, but at the same time be aware that residents may be willing to engage in activities they had previously shown no interest in;
- Consider the residents' abilities and what they will need to enable them to carry out the green care activities;
- Offer a variety of one-to-one and group experiences and activities throughout the year (these could be linked to the changing seasons);
- Understand that short experiences and activities can work well – just a short dose of nature can be enough to lift mood – and you don't need to have longer activities to have an impact;
- Acknowledge that people have personal preferences and not everyone may appear to like nature, but there may still be a way to encourage engagement if you know your residents well.

Be flexible and adaptable on a day-to-day basis. Plans for the day may need to change due to weather conditions, staff numbers and resident's willingness to participate.

- Consider providing a space for bringing nature-based activities indoors if the weather is inclement or staff numbers are low;

- Be flexible and adaptable with residents living with dementia and recognise that what works well one day might not work the next day as people's preferences and moods can change.

Be persistent. Staff need to take an active role in getting residents to engage in nature by asking, encouraging or actually taking the resident outside or trying the activity with them and then judging from their behaviour whether they want to take part. While no one should be forced to engage in an activity against their wishes, previous 'disinterest' should not preclude future attempts to include residents in activities as people's preferences can change and the right type of activity that secures their interest may simply not have been found yet.

Ensure that residents with dementia and concurrent physical, mobility or sensory issues are not ignored. This particularly applies to the independent living context of extra care housing settings, where residents are able to go outdoors or join in activities when they please and there is less onus on staff to actively encourage residents to do so than in care home settings. At extra care settings it is a matter of offering activities, informing the residents and families of what was available and seeing if the activities are taken up by the residents. In such environments, the needs, preferences and desires with regard to contact with nature and nature-based activities of such residents should not be ignored simply because they may be difficult to ascertain.

Design of the outdoor environment

Providing access to the outdoors for people living with dementia is not only a matter of good person-centred practice in dementia care but also central to the promotion of the human rights and social inclusion of people with dementia.

Design the outdoor space so that it is easily accessible and safe for residents living with dementia to use on their own. This important determinant in the effective and successful use of the outdoor space at accommodation and care settings is best achieved by considering the outdoor space together with the indoor space during the design of the setting as a whole:

- Ensure that the care setting's outdoor space is visually and physically accessible to enable spontaneous engagement with nature for all residents, even the less mobile;
- Rather than incurring the expense of adding a garden as an afterthought, accommodation and care settings may derive greater benefit for the residents living with dementia by finding out about and making use of local programmes and organisations that offer nature-based experiences or activities for people with dementia;
- Before planning outings, check the facilities and accessibility of external venues.

- Consider the implications for maintenance costs when planning the size and design of outdoor spaces at accommodation and care settings.

Financing green dementia care

The case studies provided some suggestions for funding green dementia care.

Fundraising. Fundraising can help with providing the necessary funds for maintaining and improving outside spaces and for nature-based activities and projects.

Reduce staff costs. Reducing staff costs can free up funds for green dementia care activities:

- Reduce staff turnover and recruitment costs. A care culture that is person-centred, has a positive approach to risk-taking, is supportive of residents living with dementia going outdoors and successfully integrates nature in the daily activities of the residents can have strong positive impacts on staff in terms of morale, job satisfaction, confidence, feelings of empowerment, staff retention and sickness/absence. All of these factors have potential financial benefits for accommodation and care settings. Recruiting or replacing staff can be costly, so anything that reduces the need to do this is likely to have a beneficial financial impact for care settings;
- Reduce use of agency staff.

Recruit and train volunteers. Having plenty of trained volunteers can reduce the financial barriers to green dementia care activity provision. Staff who have high levels of morale, feelings of empowerment and job satisfaction can be willing to volunteer to help out with activities in their spare time, although this is not a sustainable solution.

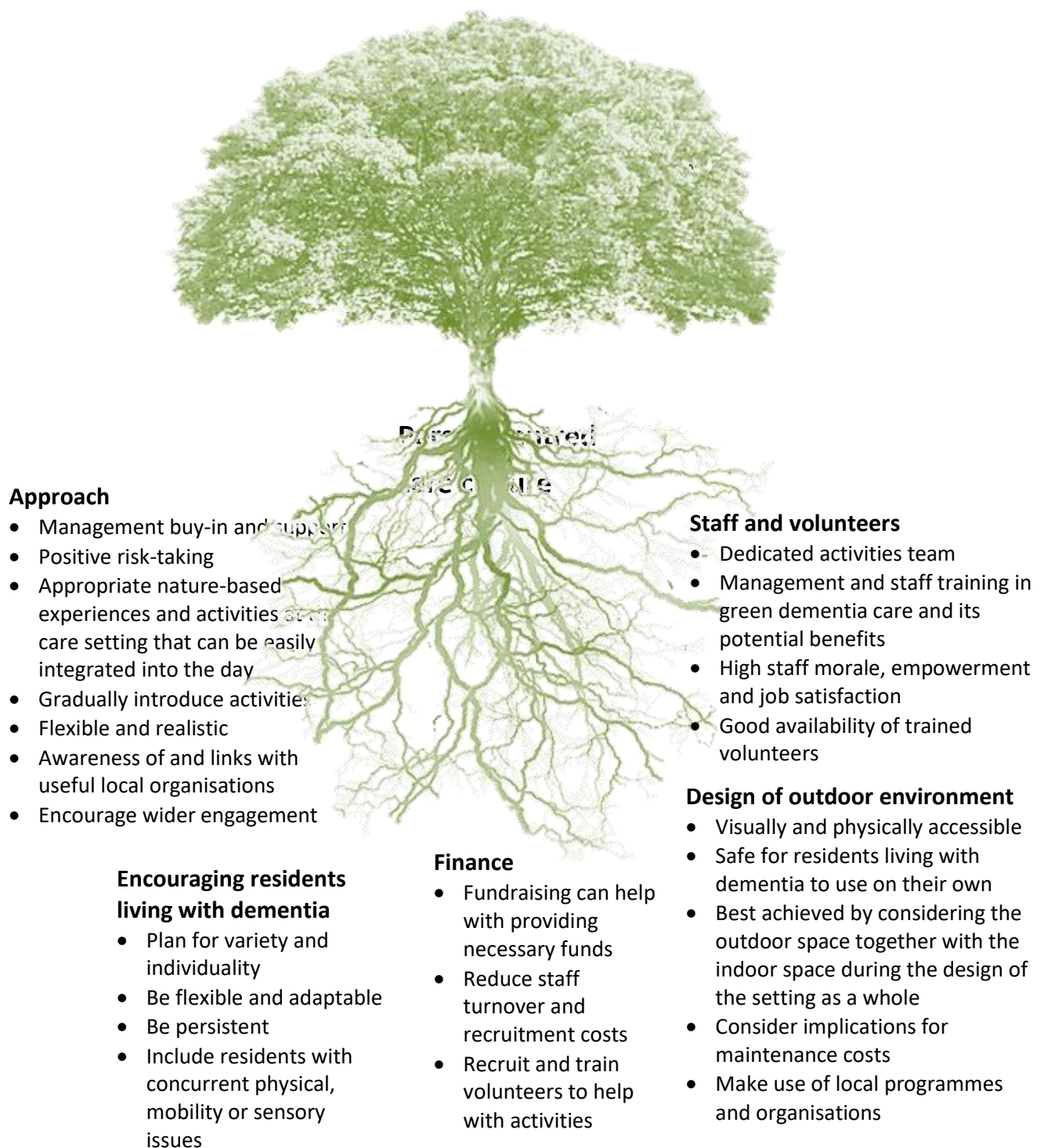


Figure 2: Summary of recommendation for effective and successful green dementia care