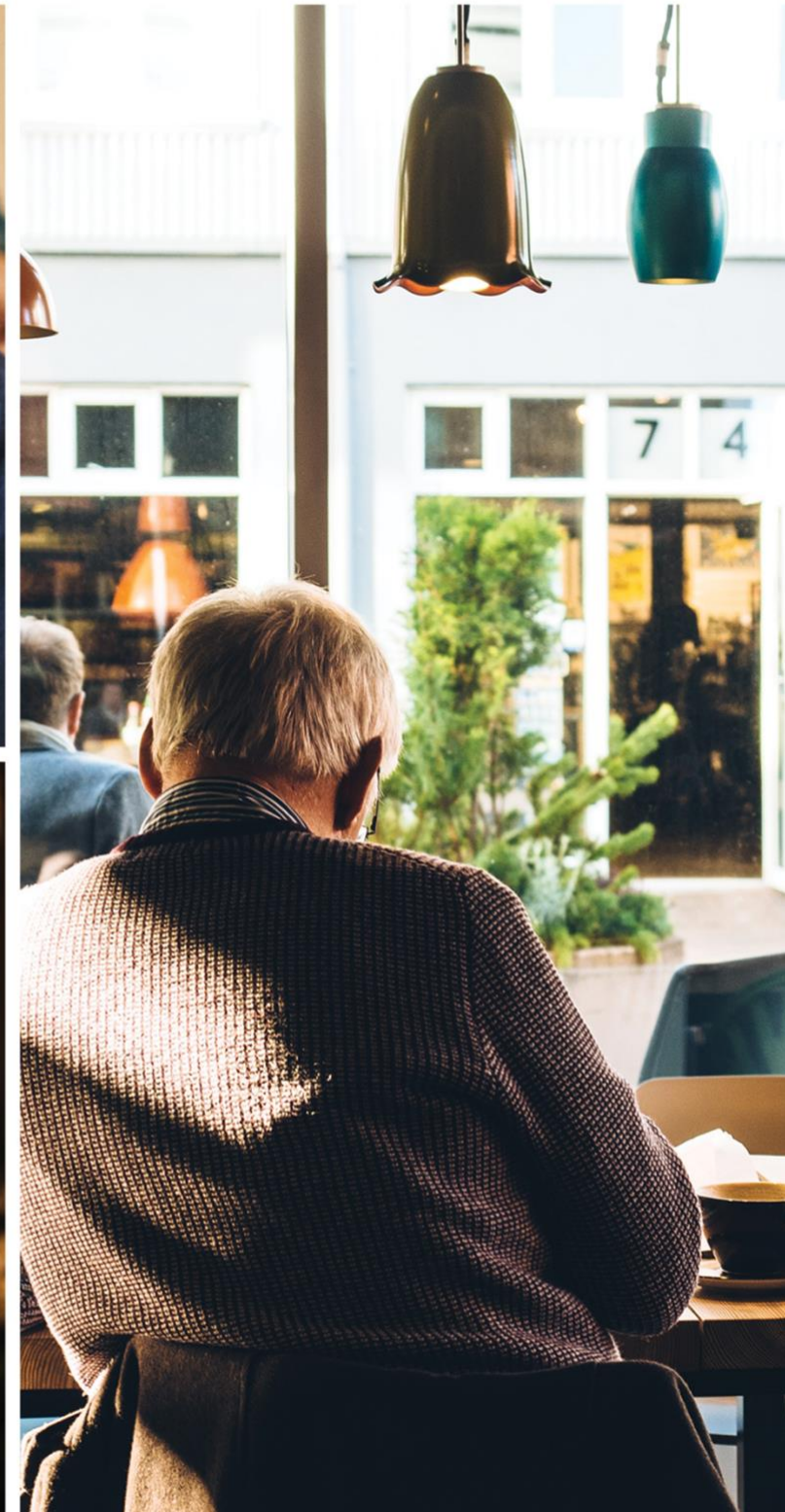
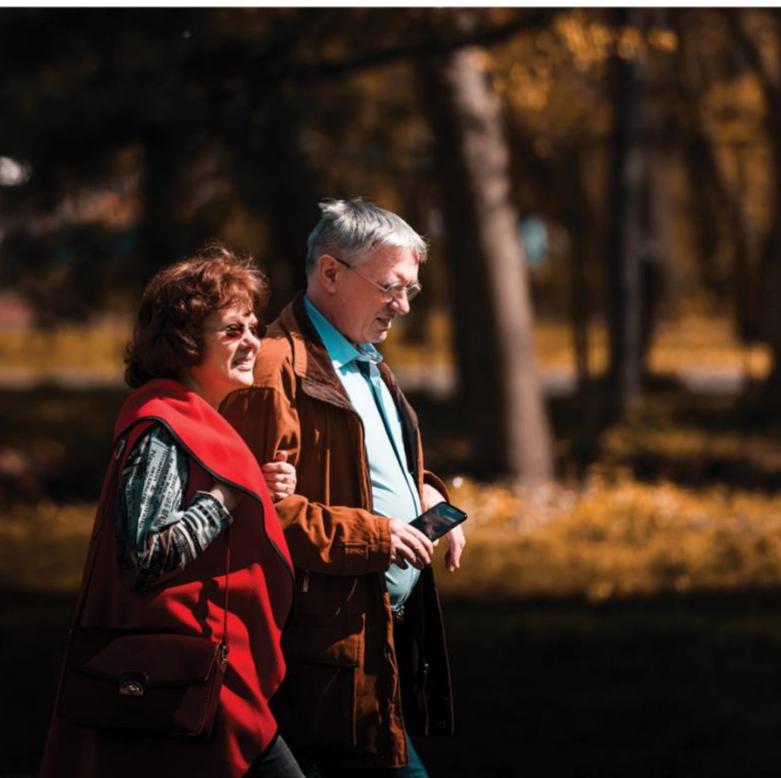


## An Introduction to Dementia Friendly Design



## 1. Introduction

This Guidance and the accompanying environmental Assessment Tool 'Is your clinic dementia friendly?' were commissioned by The Royal College of Chiropractors (RCC) in recognition that the number of patients and carers living with dementia who are accessing chiropractic services is increasing.

The built environment is known to impact on people living with dementia, and the Guidance and Assessment Tool, based on evidence and best practice, have been designed to support members in self-assessing their working environment and in developing more dementia friendly clinics. This *Introduction to Dementia Friendly Design* is designed to support practitioners in completing the Tool.

The RCC's Lay Partnership Group (LPG) has been instrumental in this development which has been supported by the Association for Dementia Studies, University of Worcester.

It is hoped that in due course the completion of the Assessment Tool may form part of The RCC's quality assurance process.

Further advice on caring for people affected by dementia, both patients and carers, is available from the organisations listed in section 7. This section also lists useful contacts including the Dementia Friends initiative and links to information on staff training.

## 2. Why Dementia matters to the Chiropractic Profession

The number of older adults that Chiropractors see as patients is increasing. Although dementia is not a natural part of ageing, the risk of developing dementia increases with age. There are currently thought to be around 850,000 living with dementia in the UK with an additional 670,000 people acting as their primary carer (Alzheimer's Society, 2014). Chiropractors are increasingly seeing both carers and people with dementia and cognitive problems more frequently.

The prevalence of pain in people with dementia is high with between 40% and 80% of people reporting frequent pain (Corbett et al, 2014). Pain experienced by people with dementia is difficult to ascertain subjectively and is often reported by proxy measures which are not reliable. Pain is, however, recognised as a trigger for the behavioural and psychological symptoms of dementia (BPSD), particularly those associated with agitation and aggression.

### 3. Dementia overview

Dementia is a syndrome, usually of a chronic or progressive nature, in which there is deterioration in cognitive function (i.e. the ability to process thought) beyond what might be expected from normal ageing. It affects memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgement.

Consciousness is not affected. The impairment in cognitive function is commonly accompanied, and occasionally preceded, by deterioration in emotional control, social behaviour, or motivation (WHO, 2017). There are many different types of dementia.

Dementia is caused by a variety of diseases and injuries that primarily or secondarily affect the brain, such as Alzheimer's disease or stroke. Alzheimer's type dementia is by far the most common and accounts for 62% of all dementias (Alzheimer's Society, 2014). This type of dementia is caused by a build-up of amyloid plaque in the brain and neurofibrillary tangles which disrupt communication signals. It has a gradual progression and can begin with symptoms such as becoming confused, word finding problems, changes in mood, not understanding how simple household or frequently used appliances work and behavioural changes. People with Alzheimer's disease often feel restless and agitated and feel the need to walk. Walking with purpose (often referred to as 'wandering') and fractures are frequent in this population.

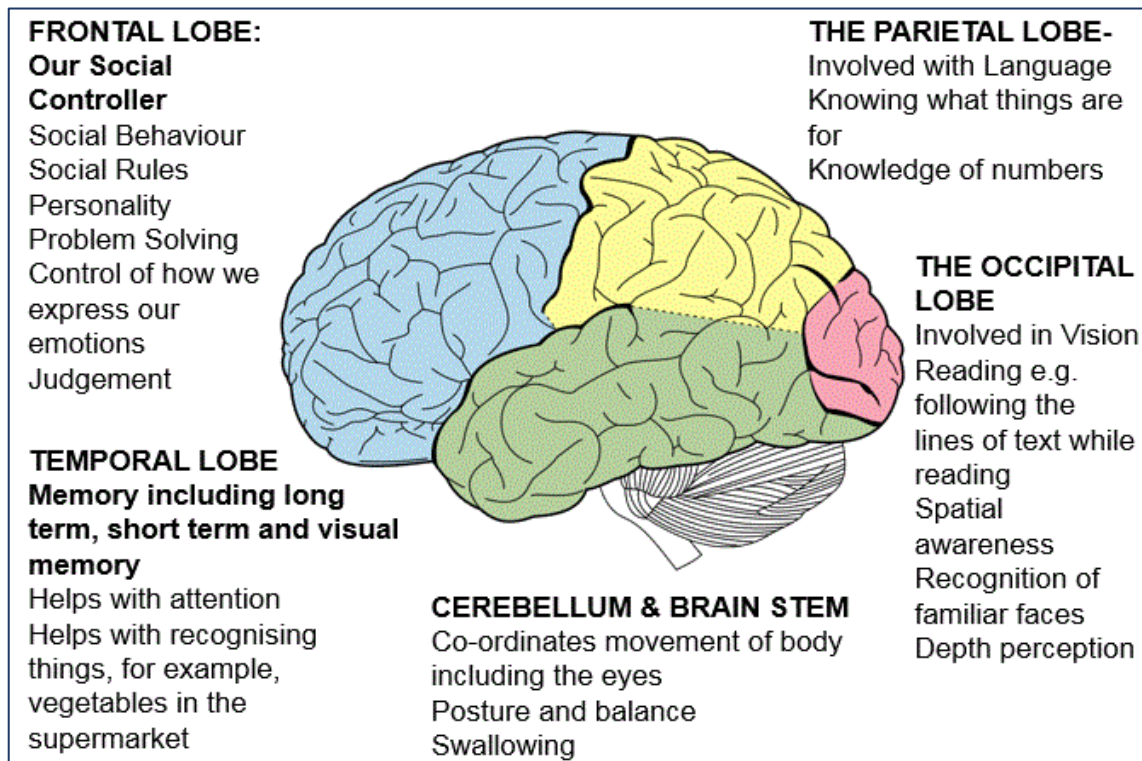
The second most common form of dementia experienced is vascular dementia account for 17% of all dementias (Alzheimer's Society, 2014). This type of dementia is caused by cerebral blood flow disruptions usually caused by strokes or heart deficiencies, but can also be caused by head trauma through accident or injury. This type of dementia has a stepped or staged progression as each assault to the brain causes additional damage. Common symptoms include loss of memory, emotional outbursts (laughing or crying), incontinence, visual disturbance or mistakes, hallucinations and psychological problems. Visual mistakes can include distortions in the environment perceived by someone with dementia. For example, they may mistake a shadow or a dark area of carpet as a puddle or a hole; a patterned stair carpet may look like a waterfall; patterned wallpaper or curtains may appear to move or take on a 'creature' like appearance.

There are many other rarer types of dementia including Fronto-Temporal Lobe Dementia, Posterior Cortical Atrophy, Korsakoff's dementia, dementia with Lewy bodies/Parkinson's Disease Dementia, Creutzfeldt-Jakob Disease and Huntingdon's disease. Mobility is particularly an issue for people with Parkinson's Disease Dementia and dementia with Lewy bodies. These two types of dementia are closely



related and share many of the same symptoms which may include difficulty in planning, spatial disorientation, trembling limbs, hallucinations and falls.

The human brain is complex and its function relies heavily on optimal interconnectivity between different brain regions to maximise cognitive efficiency. The diagram below illustrates the function ascribed to different brain regions and helps us to understand how damage in any particular area can affect a person's ability to function:



## 4. The evidence for the impact of the environment for people living with dementia

Changes in the brain for people with dementia may affect:

- Memory
- Language
- Visual perception
- Comprehension
- Orientation to time & space
- Mobility & fine motor skills
- Recognising objects
- Learning new skills

Due to a loss of cognitive ability, a suitably designed physical environment is recognised as important in overcoming behavioural issues, providing comfort, assisting with wayfinding and promoting independence (Hadjri, Faith & McManus, 2012). We know that for people living with dementia, their condition and associated symptoms are known to be influenced by the physical environment (Ebersole, Hess & Schmidt Luggen, 2004; van Hoof & Kort, 2009).

There is good evidence from recent systematic reviews that adaptations to the home setting/care setting and to clinical settings such as hospitals can be beneficial to people living with dementia (Soilemezi et al, 2017; Marquardt, Bueter & Motzek, 2014; Parke et al, 2017; Dijkstra, Pieterse & Pruyn, 2006; Harris et al, 2002).

At a national level the government have placed a high priority on supporting people with dementia to live a better life (Department of Health, 2012). This has been supported in parallel by the NHS' directive to deliver overall better health and social care outcomes. The impact of design on people's well-being has received much attention and is strongly associated with their ability to recover from illness and lead a healthy, fulfilled life; design quality is important in the context of health and social care buildings, where well-designed buildings can help patients and residents maintain and recover their health and well-being, and have a positive effect on staff performance and retention (Department of Health, 2015).

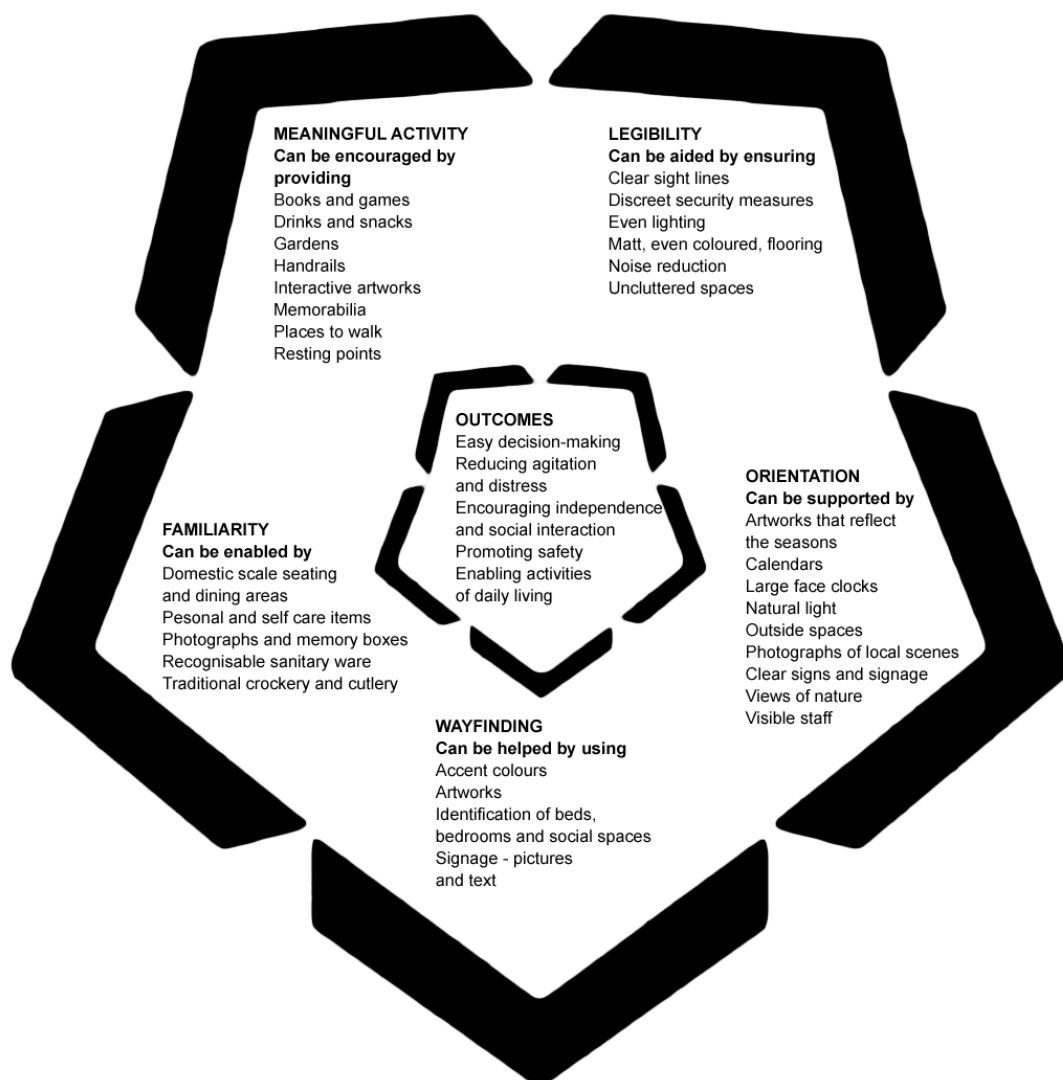
## 5. Key elements of dementia friendly design

The purpose of developing supportive design is to enable people living with dementia to continue to live as active a life as possible by encouraging independence and social interaction, easing decision making and promoting safety. Every person will have a different experience of dementia depending on the type of the disease and its progression. However memory loss and a decline in cognitive functions including visual and special abilities are more common features.

People living with dementia may therefore find it difficult to see things if they are the same colour as the background wall, for example handrails, while highly polished floors could look wet and slippery and shadows can be misinterpreted as a change in floor level. For people living with dementia it is particularly important to provide orientation and wayfinding cues as impairments in cognitive function and decision making abilities mean that navigating a building can be very challenging. Signage should include both pictures and text as some patients may not be able to recognise words but can read text. It would also be helpful to provide an easy-to-read clock that also shows the date to assist with orientation. Noise can be very distracting and

disorientating particularly in confined spaces so if possible a quiet waiting area should be provided.

In unfamiliar buildings legibility, orientation and wayfinding are particularly important in easing agitation and distress. Good lighting, matt flooring and clear signage together with comfortable waiting spaces can help patients remain calmer in outpatient and clinic settings. The King's Fund has developed a set of overarching design principles for dementia friendly design which focus on promoting well-being and independence. Drawn from a number of sources including research evidence, the principles bring together best practice in creating more supportive care environments for people with cognitive problems and dementia (Waller, Masterson & Finn, 2013). Each of the five sections contain a list of design elements that are known to support, encourage and enable people with dementia in care settings.



© The King's Fund 2014

## 6. Introduction to the environmental assessment tool

The environmental assessment tool has been developed in partnership with a Reference Group drawn from The RCC's membership and tested by practitioners in a range of settings and clinics. The tool is available as a separate download but should be read in conjunction with this guidance.

The format is based on the very successful King's Fund's Enhancing the Healing Environment assessment tools which have led to significant changes in the environment of care for people living with dementia and those that care for them.

The tool focuses on those aspects of the physical environment known to impact on people living with dementia. It has been developed to be as flexible as possible to take account of the varied buildings where chiropractic clinics are located and not all questions will apply to every clinic. A rationale for each of the elements has been provided. Working through the elements within the tool may help to identify potential staff training needs to ensure a common understanding of dementia and the importance of the physical environment.

The Reference Group has chosen to adopt an overarching view of the clinic environment. It is therefore important that whoever is completing the tool walks round all the clinic areas that are accessed by patients and visitors including the entrance and reception area, changing rooms, corridors and stairs as well as any rehabilitation facilities before completing the seven sections.

## 7. Useful resources

### **Age UK**

[www.ageuk.org.uk/about-us/local-partners/](http://www.ageuk.org.uk/about-us/local-partners/)

Provide a range of services to older people, including information and advice, home help, and IT and other training.

### **Alzheimer's Society**

<https://www.alzheimers.org.uk/>

Dementia support and research charity for anyone affected by any form of dementia in England, Wales and Northern Ireland. Provide a range of leaflets for people living with dementia including *Making your home dementia friendly* available at

[https://www.alzheimers.org.uk/info/20001/get\\_support/783/making\\_your\\_home\\_dementia\\_friendly](https://www.alzheimers.org.uk/info/20001/get_support/783/making_your_home_dementia_friendly)

### **Association for Dementia Studies, University of Worcester**

<http://www.worcester.ac.uk/discover/association-for-dementia-studies>

A national and international centre providing training, education and research in dementia studies.

### **Dementia Friends**

<https://www.dementiafriends.org.uk/>

Provide information, dementia friendly awareness sessions and resources to help people understand what it is like to live with dementia.

### **DSDC Dementia Services Development Centre**

[www.dementia.stir.ac.uk](http://www.dementia.stir.ac.uk)

International centre for design solutions for people living with dementia.

### **Fire and rescue service**

[www.cfoa.org.uk/frs](http://www.cfoa.org.uk/frs)

Can provide free home safety visits.

### **Home Improvement Agencies**

[www.findmyhia.org.uk/findhandyperson](http://www.findmyhia.org.uk/findhandyperson)

Home improvement and handyperson service providers.

### **National Dementia Helpline**

0300 222 1122

Provide information, support and advice about dementia.

### **Skills for Health**

[www.skillsforhealth.org.uk/services/item/176-dementia-core-skills-education-and-training-framework](http://www.skillsforhealth.org.uk/services/item/176-dementia-core-skills-education-and-training-framework)

Sector skills council for Health that has developed the Dementia Core Skills Education and Training Framework.

### **Stand By Me**

[elarning@nsahealth.org.uk](mailto:elarning@nsahealth.org.uk) 0844 7703770

Free on-line training resource for those caring for people living with dementia from Skills for Health. You will need to contact the helpdesk using the details above to access the training.