

Position paper: The use of floor-mounted wayfinding signage for people with dementia living in residential care

Floor-mounted signage normally takes the form of stickers, tape or painted lines which lead users along a route or indicate a destination. Frequently installed in hospitals, car parks, shopping malls and transport hubs, they are sometimes also used in care home environments. In the public realm their primary purpose is as a novel and effective way to help people find their way, particularly in large spaces where there is little wall space for traditional signage.

Dementia Centre recommendations

1. Signage should be used minimally in a residential care home environment, once other strategies for improving wayfinding have been implemented.
2. Signage on the floor should not be used as part of a general wayfinding strategy in a residential aged care setting.
3. In an individual person's case, when all other methods of helping the person find their way have been employed and been unsuccessful, repositionable signage could be trialled at a height which interrupts the view of the person in the first instance on the wall (maximum 1.2m above floor level).
4. Avoid positioning signage on the floor unless:
 - a. there is no available wall space at a low level **and**
 - b. the floor is only used by the resident in question (e.g. in their bedroom, outside their ensuite bathroom)
5. As with most signage, use a system which can be removed without damage, so that it is easily trialled and can be removed if the person's needs change.
6. All signage employed should be clear, simple and meaningful to the person. Consider the environmental context of the sign, and any symbol used as well as lighting, size of symbol and 'readability'.
7. Placing floor stickers such as strongly contrasting lines, blocks of colour or strong patterns, is not acceptable as a method of reducing a person's access to an area.

Background

Being disorientated can contribute to a person's feelings of inadequacy and limits their ability to perform activities of daily living independently. It is a prime reason for someone with dementia to move into institutional care and is seen to reduce quality of life indicators.

Successful wayfinding relies on a person

- being able to understand their environment,
- orientating themselves in a physical space
- being able to decide to go somewhere,
- knowing their destination,
- knowing and following a route and
- recognising the destination on arrival.

The person will need to complete these steps in reverse order, facing the opposite way, to find their way back. This process requires problem-solving and decision-making functions and can be increasingly hard with the progression of dementia.

Myth or fact? The best way to help people with dementia find their way is with signage

There are many signage manufacturers now offering signage which is designed specifically for people with dementia. Often chunky in format, brightly coloured with large text and images, these signs follow dementia design principles to varying degrees.

These signs aim to compensate for the vision impairments associated with age and dementia. People with dementia can have significant vision impairment, aside from the ones common to old age. They are more likely to have impaired colour vision, with colours appearing desaturated. Older people generally require additional light, more contrast and stronger colours to see equivalent to younger people. These common problems mean that for signage to be effective, it does need to be extremely simple, clear and to stand out from its background to compensate for these impairments.

However, it is the **physical layout** of the space / building which is the most critical to how effectively a person will be able to navigate, specifically,

- Designed on a small scale.
- Direct visual access to key spaces such as the toilet, dining room and outdoors
- Simple decision points. For example, on exiting a bedroom having only two options, both leading to meaningful destinations.
- Memorable, distinctive reference points, such as significant spaces, or landmarks such as a piano.
- Spatial proximity of key spaces, such as the living space being close to the garden.

Myth or fact? Floor stickers help people with dementia and vision impairment find their way

Floor-mounted signage stickers are sometimes used as a response to the idea that older people, and particularly those with dementia and vision impairment have a downward gaze, and that signage on the floor is most likely to be effective.

Partially sighted people do tend to look downwards when walking, within two meters, and continually scan the scene in front of them. People use this technique irrespective of the type of vision loss they have. Being able to see the wall/floor junction and the features on the wall up to 1.2m above floor level is particularly important.

Occasionally the use of markings on the floor as a method of limiting access to someone with dementia has been observed, and indeed this idea was explored in a piece of research in 1996. This small study found that a two-dimensional grid pattern laid out on the floor could be perceived by some people with dementia as a barrier. There are other more general limitations. Advice for floor signage in airports (which do seek to accommodate travellers with various vision and physical impairments) warns that effectiveness can be limited by wear and tear from people walking over the signs and wearing away the sign as well as the presence of other people in the environment which may disrupt the clarity of the sign.