

## IN BRIEF A Summary of the Evidence

# Sensory Rooms for Patients With Dementia in Long-Term Care: Clinical and Cost-Effectiveness, and Guidelines

### Key Messages

- It is unclear how sensory room therapy compares with other treatments for dementia.
- Sensory room therapy seems to result in improvements in dementia symptoms, at least in the short-term; but these improvements do not appear to be significantly different than those achieved with other treatments.
- The cost-effectiveness of sensory rooms for patients with dementia in long-term care is unknown.
- Two evidence-based guidelines recommend several non-pharmacological interventions for individuals with dementia, including sensory room therapy; and one of the guidelines suggests that, because each person might respond better to one dementia intervention than another, it is important to monitor each patient's response to a given intervention and then adapt the treatment plan accordingly.

### Context

Dementia is a progressive disease associated with the impairment of mental functions. It involves one or more of the following characteristics: memory loss, language impairment, disorientation, personality changes, behavioural changes, difficulties with daily activities, self-neglect, and psychiatric symptoms. It is estimated that more than 402,000 Canadians have been diagnosed with dementia, two-thirds of whom are women. This number is expected to increase in the future as the population ages. Caring for an individual with dementia is a substantial burden for both the caregiver and for the health care system.

### Technology

Dementia symptoms are managed using pharmacological and non-pharmacological therapies. Pharmacological therapies offer moderate benefits in the short-term; however, they are also associated with safety concerns. Also referred to as a multi-sensory environment, a sensory room is a non-pharmacological option that provides auditory, visual, olfactory, and tactile stimulations within calm and comforting surroundings. A sensory room can contain an array of equipment — for example, fibre optic lighting, aroma diffusers, projectors that generate changing colours and patterns, and water beds that gently vibrate and play music. It has been suggested that sensory stimulation can improve an individual's mood and reduce behavioural problems.

### Methods

A limited literature search was conducted of key resources, and titles and abstracts of the retrieved publications were reviewed. Full-text publications were evaluated for final article selection according to predetermined selection criteria (population, intervention, comparator, outcomes, and study designs).

### Results

The literature search identified 399 citations, with one additional article identified from the grey literature. Of these, 11 met the criteria for inclusion in this review — two systematic reviews, three randomized controlled studies, four non-randomized studies, and two evidence-based guidelines.

**Read more about CADTH and its review of sensory rooms for patients with dementia in long-term care at:**



[www.cadth.ca/sensory-rooms-patients-dementia-long-term-care-clinical-and-cost-effectiveness-and-guidelines-0](http://www.cadth.ca/sensory-rooms-patients-dementia-long-term-care-clinical-and-cost-effectiveness-and-guidelines-0).

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