Pilot Project:

Welfare technology that helps persons with dementia

feel calm and secure

Helping people with dementia is not easy. Especially not when they change characters, when they lose their senses of themselves and their surroundings, and when they become increasingly agitated and restless. Sleep disorders, inappropriate behaviour, and restless walking can make day-to-day life stressful not only for the person suffering from dementia but also for their relatives and the staff looking after them.

It is very important that we help persons with dementia to have a better quality of life and ensure that their carers have a good everyday life and a pleasant working environment. In light of this, a new project in Aarhus is focusing on welfare technology for persons with dementia.



The Welfare Technology Steering Group (in Denmark) has conducted a needs analysis among care staff at two nursing homes in Aarhus in order to identify the problems they experience in their day-to-day work. The project continued with testing the technologies that can help solve these problems. Technologies that can help persons with psychological and motor unrest turned out to be the primary focus area. This formed the basis for a pilot project in the Municipality of Aarhus (Aarhus Kommune) with the overall objective of improving the day-to-day lives of users and staff, as well as streamlining operations.

Method

Twenty-two technologies/products were selected for testing at two nursing homes in the first round. They were first tested at the nursing home DemensCentrum, after which 16 technologies were selected to go on to be tested at the nursing home Augustenborggade. A total of 27 users participated in the project, which produced both quantitative and qualitative data. A total of more than 3,000 entries were made over a 30-day period of before and after measurements. Parameters such as sleep patterns, the working environment, and frequency of use were measured. The products were divided into an Active Package and a Calm Package. A number of Protac's products featured in the Calm Package.

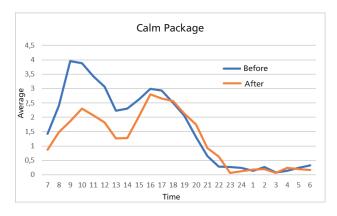


Figure 1: Before and after measurements based on a comprehensive entry form showing the effect of the Calm Package. Source: Pilot project 2018, Method, p3.

Pilot project:

Location:

DemensCentrum Aarhus and Augustenborggade (both nursing homes)

Period:

1st September to 15th December 2017

Project manager:

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For more information visit:

www.carewarenet.dk

Results

- Overall, the initiatives in the pilot project were seen to reduce psychological and motor unrest by 60% and contribute to increased comfort and a reduction in aggressive and extrovert behaviour.
- The Calm Package resulted in a total reduction in psychological and motor unrest of 23%. This resulted in fewer conflicts (40% reduction), fewer incidents of trying to get out (31%), and increased peace at night (33%). Improved sleep patterns resulted in longer periods of deep sleep and less getting out of bed.
- The working environment improved significantly during the period, and the technologies reduced the general risk of violence by 29%. At Augustenborggade, threats of violence have fallen by 40%, while the number of reports of violence at DemensCentrum has fallen by the same amount.
- The staff prefer technologies that are intuitive to use and that help users feel calm.

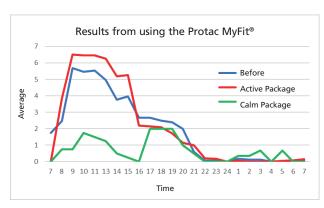


Examples from the pilot project

Results using Protac MyFit®

Users using the Protac MyFit® ball vest experienced very positive results. The green curve clearly shows that users had a much lower score on the entry form when using the vest than before they started using the vest (blue curve).





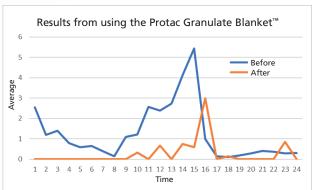
Effect of Protac MyFit® on users. Source: Pilot project, Appendix 1.

Results using the Protac Granulate Blanket™

The Protac Granulate Blanket™ had a very positive effect on users who used it when they slept. More specifically, the users' deep sleep increased by 42% and the number of times they got out of bed fell by 38%.

Deep sleep is essential for everyone's well-being in terms of our overall health and our mental capability the following day.





Effect of Protac Granulate Blanket™. Source: Pilot project, Appendix 1.





Conclusion of the project

The qualitative data clearly shows that technologies helping users to feel calm are the top priority. The technologies must be intuitive to use, as time and resources are key parameters of day-to-day life in a care home.

It is clear that the technologies work by helping users to feel calm and secure, as well as reducing the number of day-to-day conflicts between users and staff.

More specifically, this has resulted in the recommendation that five of the technologies tested in both the Active Package and the Calm Package are implemented at nursing homes in the Municipality of Aarhus, namely:

- Protac MyFit® (ball vest)
- Protac Granulate Blanket[™]
- Fibreglass animals
- Rocking chairs
- Sleeping animals

Source: Pilot project, p9

The pilot project documents the calming effect of Protac's products on persons with dementia. It also emphasises that sensory stimulation can give a sense of well-being and security through deep pressures and a clear body awareness - preventing and alleviating insecurity, anxiety and stress. In addition, it shows that the use of Protac's sensory stimulating aids has a positive impact on the working environment of the staff, making the nursing home a safe and more comfortable place to work.

Protac Granulate Blanket[™]and Protac MyFit[®] were part of the pilot project.

Furtermore, Protac offers products including Protac KneedMe®, Protac Sensit® Straight, Protac SensOn™, and Protac SensCircle® for the elderly and for persons with dementia.

Protac KneedMe®

A knee blanket with sensory stimulating balls that can be used to make ADL activities and personal care situations more comfortable.

Protac SenSit Straight®

Protac SenSit Straight®, is a sensory stimulating chair specially designed for elderly people who find it difficult to sit and raise again. The "wings", filled with balls, embrace the user to provide a sense of calmness and relaxation.

Protac SensOn™

A sensory stimulating collar that embraces the neck, shoulders, and chest. The collar is discreet and comfortable to wear. It can relieve worry and anxiety and strengthen concentration.

Protac SensCircle®

A shapeable and flexible nine-section pillow. The pillow can be shaped and wrapped in any number of ways for activity, relaxation, rest, or positioning.









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