



*The new, modern ceiling lifts and high-tech wheelchairs are currently being installed in 1,600 assisted living facilities in the municipality of Aalborg, in Denmark. Here, two assisted living workers demonstrate how the lifting sequence can be carried out by one person.  
Photo:Guldmann*

## **New technology can save at least DKK 360 million per year**

**By Søren Munch, Jyllands-Posten, October 24<sup>th</sup> 2013**

*Outstanding results reported by Danish municipalities, which are far ahead of the curve in the area of elder care welfare technology.*

Advanced ceiling lifts and high-tech wheelchairs for residents in elder care facilities can save Danish municipalities hundreds of millions of kroner annually, and the initial investment in the technology will pay for itself in just a few years.

At the same time, the new technology can provide caregivers more time for other tasks, and assistance for the elderly residents is offered by a more attentive and observant staff.

It may sound like a simple breakthrough for Denmark's municipalities, but the new technology is backed up not only by the National Board of Social Services, but also by the initial real-life experiences of the municipalities, which are among the most advanced when it comes to modern welfare technology for elder care and assisted living facilities.





## From two to one caregiver for a lifting sequence

In the area of ceiling lifts and wheelchairs for the mobility of residents at elder care and assisted living facilities alone there is huge potential for rationalisation and improvements in elder care. For example, the new lifting technology makes it possible for a single caregiver to move an elderly resident from their bed to a wheelchair, whereas previously, two people were needed to perform such a procedure.

In a report from April 2011, the National Board of Social Services estimated that municipalities could reduce the cost of 860 full-time positions, which corresponds to about DKK 360 million, if the lifting technology were to be implemented nationwide.

The calculations were based on pilot projects in the municipalities of Odense and Slagelse, where 75 per cent of all patient moving sequences were performed by a single caregiver throughout the project period.

## Local councillor sees huge potential

Odense Municipality has since installed lifts and chairs in all of its elder care facilities, and in Aalborg the process of installing ceiling-mounted lifts in 1,600 assisted living homes at 46 elder care facilities is about halfway done. The Aalborg project represents an investment of DKK 23 million, and a conservative estimate has been made that only half of the two-person lifts can be replaced by one-person lifts.

“We’ve only calculated for 50 per cent of the moving, lifting and hygiene routines for high-needs seniors to go from requiring two caregivers to one. But the potential is certainly there for raising this figure,” says councillor Tina French Nielsen of the Liberal party, who has often wondered why more municipalities have not invested in the welfare technology.

### Money to be saved by using ceiling lifts and wheelchairs

Time saved	Year 0*	Year 1**	Years 2-4***
Time saved (in work years)	321	658	859
Time saved (in DKK million)	133	273	357

Source: National Board of Social Services, 2011

- \*) About 60% of all patient moves are performed by one caregiver, and there is a six-month implementation period.
- \*\*\*) About 60% of all patient moves are performed by one caregiver.
- \*\*\*) About 75% of all patient moves can be performed by one caregiver after the first year.

“There are several advantages. In the beginning, we were a bit nervous about a full-scale implementation, but no matter how we look at it, this is a good project,” explains councillor Nielsen.

Currently, there are around 2,000 Social Service caregivers in Aalborg Municipality who are being trained in how to use the new technology. Among other skills, they must learn how to assess when two caregivers are needed to lift a resident.



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*Tina French Nielsen, Liberal party councillor, Aalborg Municipality.*

*Foto: Aalborg Kommune*

The number of one-person “patient lifts and moves”, as the procedures are known in elder care, depends on the functional ability of the given resident. As such, the number of patient lifts performed by a single caregiver varies from facility to facility, and from municipality to municipality.

## Odense exceeds expectations

In Odense Municipality, the number of one-person patient lifts has increased as both caregivers and residents have become comfortable with the ceiling lifts, chairs and remote controls.

At the elder care facility at Thulebakken in Odense, moving instructor Betina Dejbjerg Larsen finds that there are still some residents who need to be lifted by two caregivers.

“Experience has shown, though, that up to 90 per cent of our residents only need assistance from one caregiver. There are only two residents who require assistance from two caregivers, and that is primarily because they are uncomfortable and nervous about using the new equipment,” Larsen explains.





## An investment paid off in four years

In Aalborg, the total technology, installation and instruction costs were DKK 23 million, and the investment has resulted in annual savings of DKK 5 million. According to councillor Nielsen, however, the potential is much greater.

“We’ve only taken in a portion of the savings to pay for the equipment, which we’ve paid for over four years. The potential savings are DKK 8.5 million per year, but we’ve opted to take away just DKK 5 million per year from the budget, so that there could be a carrot at the end of the stick for the elder care facilities,” Nielsen says.

She even describes the DKK 8.5 million as a “conservative estimate,” because it is based on just 50 per cent of all patient lifts being performed by one caregiver, whereas the National Board of Social Services has indicated that 75 per cent is a more likely projection.

## Local councillor: What are you waiting for?

The Aalborg councillor is calling on other municipalities to join in with this simple yet brilliant “Egg of Columbus”.

“Many municipalities are probably afraid that this will turn into a battle, thinking, ‘Does this mean employing welfare technology instead of warm, caring hands?’ The matter at hand, though, is about finding a better way to get things done, and I can’t understand why more municipalities aren’t doing the same. It’s most likely due to a somewhat hysterical discussion about replacing warm, caring hands with cold technology,” says Nielsen, who adds that “everyone in our administration has supported this initiative because they could see the advantages in it.”

Figures from Denmark’s Trade and Labour Association (known as ‘FOA’ in Danish) show that 30-40 per cent of the approx. 124,500 employees in the Danish health and social services sector are set to retire by 2020. This means that some 63,700 new caregivers will need to be hired by 2020.

## Mayors: We can rationalise

An Epinion poll of 54 mayors in Denmark earlier in October showed that 41 of them believe the public sector could be made significantly more efficient.

The government expects that DKK 12 billion can be saved in public expenses between now and 2020, and professor Peter Birch Sørensen, chairman of the Danish Productivity Commission, believes this goal is tenable.

FOA chairman Dennis Kristensen is quite surprised by the mayors’ survey responses, and in a statement to an online Danish newspaper he remarked that, “experiences show that it is much, much harder to get efficiency improvements to work than we are led to believe.”

## NEW TECHNOLOGY

- Welfare technology is part of a 30-point, joint digital strategy that was presented in late September 2013 by the Danish government, along with Local Government Denmark and Danish Regions. A technology boost - including telemedicine, feeding robots, self-cleaning toilets and other technology - will be implemented in all Danish municipalities by 2020.
- The digitalisation strategy is part of the Danish government’s growth plan, which is intended to free up DKK 12 billion for so-called “core welfare” initiatives by implementing efficiency improvements in other public sector areas.
- Approx. 20,000 residents nationwide must be moved each year - comprising just below 7,000 in the optional care area and approx. 13,000 in elder care and assisted living facilities. Social Service caregivers spend 30 per cent of their time on lifting, moving and hygiene routines.

Source: National Board of Social Services, 2011  
<http://www.socialstyrelsen.dk/om-os/about-us>