

HOW INNOVATION CAN PREVENT OCCUPATIONAL INJURY

LOCOfmotion field studies show potential of esense power assisted patient lifts

Musculoskeletal disorders are a major concern in occupational healthcare. Injuries occur frequently and are often due to repeated handling of patients. With the growing numbers of obese patients and elderly people who require more assistance with daily living activities, a healthcare worker's job becomes even more difficult. Studies conducted by research bureau LOCOfmotion, however, show that the innovative *esense* power assist for floor-based patient lifts can reduce the risk of musculoskeletal injury, increase quality of care and, also important, save costs in the healthcare sector.

Innovation put to the test

The availability of patient transfer lifts has reduced physical strain in daily healthcare practice. However, moving and manoeuvring floor lifts is still considered highly demanding. As a result, healthcare workers are facing a severe risk of back, shoulder/neck and arm injuries, and missing work due to these injuries. *esense*, the new generation power assist for patient lifts developed by Indes, aims to reduce these risks. Thus enhancing workers' health, improving quality of care and reducing costs associated with sick leave. Renowned research bureau LOCOfmotion has conducted field studies with *esense* in two Dutch healthcare facilities: Onze Stede in Steenberghe and Prisma in Waalwijk. In the studies, standardised and validated questionnaires have been combined with some specific questions. And the first results are very promising.

Making work easier

Healthcare workers involved in the studies experience clear advantages in their daily work practice using the *esense* floor lift. There is a short learning curve: "You have to get used to the fact that the lift is working for you." But once you are used to it, work becomes a lot easier - and more fun. Also compared to other assistive devices such as standard patient lifts, sliding mats and support stocking aids, the new intuitive power assisted floor lifts score well: They are user-friendly and require only little manual force to use.

Reduction of musculoskeletal pain

So healthcare workers are positive about the use of *esense*: It makes their job easier. But is this also reflected in reported musculoskeletal pain? Yes. In both studies we can see a strong reduction in back pain (30-40 percent) in the last three months. Also indicators for neck/shoulder pain (20-25 percent) and arm/wrist pain (up to 25 percent) have decreased. Respondents indicate a clear

Key benefits reported after using *esense*:

- ⊕ Moving and manoeuvring is easier and requires less force. Work has become much less physically demanding.
- ⊕ With *esense* you can easily get into the right spot, so manual lifting to reposition patients is limited.
- ⊕ *esense* lifts allow you to cover longer routes across hallways with ease. This means higher efficiency and less effort for the caregiver, and less hassle for the patient.
- ⊕ Transfers are quicker and smoother, which benefits patients.
- ⊕ Patients transfers can be easily and safely performed by only one caregiver.



correlation between work-related physical strain and musculoskeletal pain. When used over a longer period of time, the effects of this new technology are expected to increase, and help reduce absence due to illness.

esense floor lifts versus ceiling lifts

Another interesting question is how intuitive power assisted floor lifts compare to ceiling lifts. Clearly, the key advantage of ceiling lifts is that they require very little effort to operate. However, the usage area is restricted to where the rails are mounted. Also, active lifting - to a standing or almost standing position - remains a challenge. *esense* combines the key benefit of ceiling lifts - ultra-light operation - with complete freedom of movement, and can also be used with active patient lifts. This makes for a great alternative in a variety of care environments.

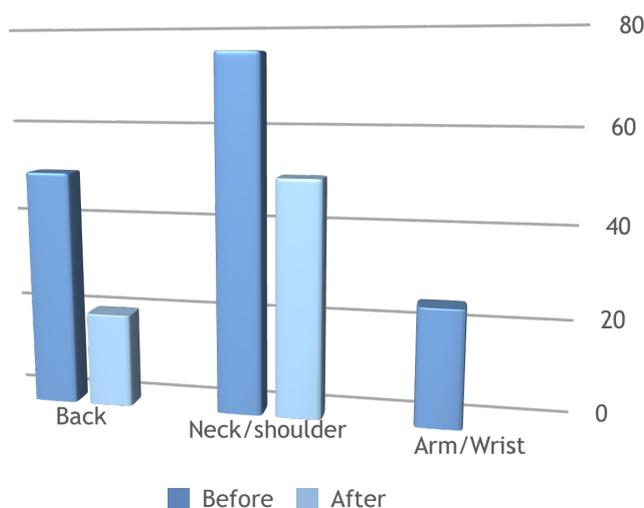
A healthy investment

Looking at the financial aspects, first of all, exposure to physical strain has clearly been reduced and the prevalence of back pain and neck/shoulder pain is significantly lower. Based on these results and previous biomechanical research by LOCOmotion, costs associated with absence due to illness are expected to be reduced in time (approx. 1.5-2 years). *esense* also fits well with preventative measures to protect aging caregivers from overexertion. Additionally, there are clear efficiency benefits to be gained from using *esense* technology. Patient transfer tasks can be performed quicker, easier and more accurately - by only one person. All of this makes *esense* a healthy investment choice.

What is next?

Today's fast-paced, short-staffed and physically demanding work environments in the healthcare sector call for innovative assistive technology. We invite you to explore the opportunities *esense* is offering to help you create a healthier workplace and improve quality of care, while keeping your budgets under control.

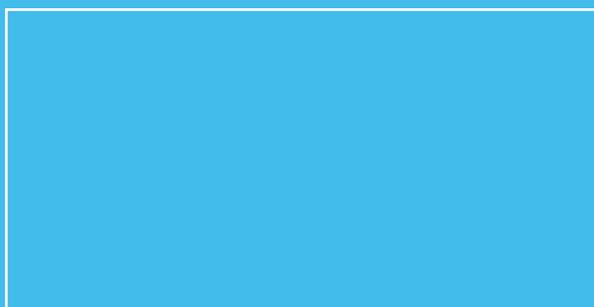
Prevalence of musculoskeletal pain
Onze Stede, Waalwijk



esense - this is how it works

esense is an innovative add-on solution for heavy mobile care products designed to improve ergonomics. Integrated sensors 'feel' the manual force of the user. The system transfers this to a smooth, intuitive drive support to ensure easy and safe moving and handling. In addition to floor-based patient lifts, *esense* can be applied to beds and stretchers for patient transport, facility trolleys and other heavy mobile medical equipment.

esense



Dealer stamp

More information

Find out more about what *esense* can do for your organisation? Or request a copy of the full test report? Please contact us:

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