

# Soft Tilt™

Case Studies



Yes, you can.®

# Introduction

The Invacare Soft Tilt is a **unique and innovative** new system designed to **automatically reposition patients in bed**, as well as **support care staff with daily moving and handling**. This booklet outlines a series of five case studies that took place in Denmark during 2016.

The case studies demonstrate how the Soft Tilt has improved the working environment for care staff, as well as enhancing both patient comfort and quality of life. Automated repositioning has reduced the number of visits required by carers, improved carer efficiency as well as supporting pressure ulcer management and prevention. Furthermore, the 'manual' feature has enabled single carer working by assisting carers with transfers, sling application and personal care.

To find out more about the Soft Tilt, please visit [www.invacare.eu.com](http://www.invacare.eu.com) where you can download our brochure.

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CASE STUDY 1

Enabled  
single carer  
working



Trial  
period  
Tranbjerg,  
Aarhus Denmark

A male patient with tetraplegia, tracheostomy and a speech disorder that renders unable to verbally communicate.

### The challenges faced

The patient needed to be turned every two hours during the twenty hours spent in bed. He spent some time during the day in his wheelchair – approximately two hours and was at high risk of developing pressure ulcers.

### Aims and objectives

1. Reduce the number of manual turnings by care staff.
2. Pressure ulcer prevention.

3. Improve the patient's quality of sleep.
4. Reduce physical strain on carers.
5. Reduce time spent manually turning patient.

### Solution

The automated program was used during the hours the patient spent in bed. The primary wing was elevated to 20 degrees and the secondary wing was elevated to 12 degrees; changing position every 30 minutes.

### Result

During the trial period, the patient felt safer and was calmer thanks to the automated turning. Enhanced support meant that he slept better and both his lung function and position in bed improved. No pressure ulcers developed during the trial period.

The working environment for care staff significantly improved and they felt less strain on their bodies when carrying out personal care and sling application.

The number of carers and visits were reduced and the user only required supervision when sleeping.

### Summary

The Soft Tilt had a positive impact on both the patient and care staff. **Number of carers required reduced from 2 to 1.**

CASE STUDY 2



Trial  
period

Vikærgården,  
Aarhus Denmark

The manual function proved very successful when tilting the user in bed as it decreased his tendency to resist movement.

A male stroke patient with left sided paresis and neglect, aphasia, hypertonia and pain in his left hip.

### The challenges faced

The user has no balance when sitting/standing and is heavy to move. He can assist care staff when given physical guidance by holding onto the side rail when being turned. He can sometimes be resistant when being moved due to confusion and poor health. He has a pressure ulcer on his sacrum.

### Aims and objectives

1. Reduce physical strain on care staff.
2. Support the healing of the pressure ulcer.

### Solution

Both the automatic and manual functions on the Soft Tilt were used. Automatic program was set so the patient spent 30 mins on his left side, 10 mins on his back and 30 mins on his right side.

### Result

During the trial period, his **pressure ulcer improved**. The manual function proved very successful when tilting the user in bed as it decreased his tendency to resist movement. Care staff no longer needed to use a glide sheet.

### Summary

The Soft Tilt helped prevent and heal the patients existing pressure ulcer. The manual feature **reduced physical strain on care staff** and helped prevent possible injury to staff working with this patient.

## CASE STUDY 3



Trial period

Kolding Municipality,  
Denmark

“If I knew it was going to be so good, I would have purchased the bed a long time ago”

A female wheelchair user with Parkinson’s Disease and dementia. Prone to pressure ulcers on sacrum and hip.

**The challenges faced**

As a result of Parkinson’s disease, the patient experiences muscle stiffness and is at high risk of pressure ulcer development. Currently she has redness at her sacrum and hip area. She prefers lying on her back throughout the night and uses an air mattress. She is anxious which is linked to her dementia and causes her to become difficult and uncooperative when care staff attempt to turn her or reposition her.

She was turned manually three times a night and had difficulty relaxing when going to sleep due to her anxiety.

**Aims and objectives**

1. Improve the patient’s quality of sleep.
2. Improve her cooperation with care staff.

**Solution**

The Soft Tilt was programmed to “hug” the patient for 30 mins, followed by gentle cradling.

After 2 hours, staff activated the automated turning – 31 minutes on her right side, 31 minutes on her back and 31 minutes on her left side. The Soft Tilt was also used manually in the morning by care staff.

**Result**

During the trial period, the patient slept better as she was no longer disturbed by care staff. After five days, the **redness in her skin decreased**.

She was more alert during the daytime, communicative and began to feed herself which she previously did not do.

**Summary**

Both the manual and automated functions **improved the quality of life for the patient**. The patient said “If I knew it was going to be so good, I would have purchased the bed a long time ago.”



CASE STUDY 4



Trial period

Kolding Municipality,  
Denmark

The patient can now lie on her back and on both sides without pain.

A female patient with bone cancer, suffering with pain in her back and right side.

### The challenges faced

When being repositioned and when lying on her back and right side, the patient experienced pain. She spent most of her time on her left side. She uses an air mattress with a turning aid and is supported by positioning pads. The turning aid caused her too much pain so she was turned manually by staff.

### Aims and objectives

1. Can the patient be repositioned without causing her pain?
2. Reduce the number of positioning pads used.

### Solution

Initially, the automated program was used for the whole day (24/7). Various angles and time intervals were trialed

### Result

When the Soft Tilt was operating automatically, the user was waking up constantly throughout the night. As an alternative, the manual tilt was used every second hour. One wing was tilted to the maximum 60° with the secondary wing elevated slightly so the user could sleep on her side and still benefited from the support of her air mattress.

Care staff also used the manual function for personal care.

### Summary

The **patient can now lie on her back and on both sides without pain.** Positioning pads are no longer required.

CASE STUDY 5



Trial period

Assens Municipality,  
Denmark

Female patient at high risk of developing pressure ulcers who suffers with back pain and red spots on her skin. She uses an air mattress.

### The challenges faced

Patient lives at home alone. She is manually turned during the night by care staff. She reports to not sleeping well and waking up frequently with back pain.

### Aims and objectives

1. Improve her quality of sleep.
2. Help ease the pain in her back.

### Solution

Automated program used to reposition patient throughout the night.

### Result

Patients quality of sleep improved and she is now sleeping through the night. Patient does not wake up when Soft Tilt is operating due to its smooth and gentle movements. Improvement in the patients skin redness.

### Summary

After the trial period, results showed that there was a reduction in care staff working hours and visits, which gave an annual saving of approximately 6700 EUR. The patient had a much better night sleep as she was no longer being disturbed by care staff throughout the night.

Annual saving of approximately 6700 EUR

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