



CREATING SAFE, EFFICIENT AND DIGNIFIED HYGIENE ROUTINES

# Showering solutions for assisted hygiene care

# An efficient and dignified approach to everyday hygiene care

Providing safe, comfortable and dignified assisted hygiene routines is essential for the quality of life of patients and residents in care facilities. However, this is one of the most time-consuming daily care tasks to perform. Research shows that carers devote 22% of their total working hours to washing, dressing wounds, showering, bathing and dressing.<sup>1</sup>

While it is crucial to improve efficiency for this essential daily routine, this should not be done by compromising the safety and dignity of the patient or resident, nor by putting the caregiver at risk of strain or injury.

## Saving valuable caregiver time

Although there is a common perception that washing-in-bed is the fastest method, a recent study has shown that using a height adjustable hygiene chair or shower trolley to perform hygiene routines for residents and patients with a 'C' mobility level can be 20%-35% more efficient.<sup>1</sup>

The use of appropriate hygiene equipment also enables caregivers to work more efficiently by reducing the number of required transfers, and enabling a single caregiver to perform the entire hygiene routine. This facilitates a focused, one-to-one interaction between the resident and caregiver, which can be beneficial for aiding communication and reducing stress, especially when caring for people with dementia.<sup>2</sup>

## Helping reduce the risk of injury

Results show that the most effective way to address the needs of caregivers is to provide them with the proper equipment for all patient and resident mobility levels, and to introduce the right working routines.<sup>3</sup>

The use of height adjustable equipment enables caregivers to work at their correct ergonomic height throughout the full hygiene routine, thus reducing the static load on their musculoskeletal system and subsequent risk of injury and long term damage.<sup>4</sup> Using suitable supportive equipment also offers a more pleasant, comfortable and dignified shower experience for both caregiver and resident.<sup>5</sup>

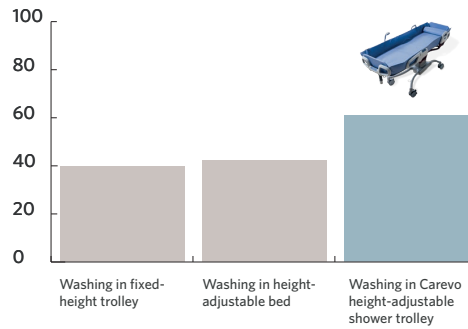
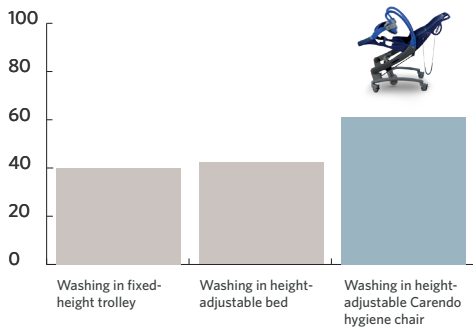
A study has shown that using a height-adjustable hygiene chair or shower trolley can be **up to 35% more efficient** compared to washing in bed.<sup>1</sup>



## Percentage of time spent in a healthy working posture

Caregivers spend 75% of their time in a healthy position when using a height-adjustable hygiene chair such as the Carendo.

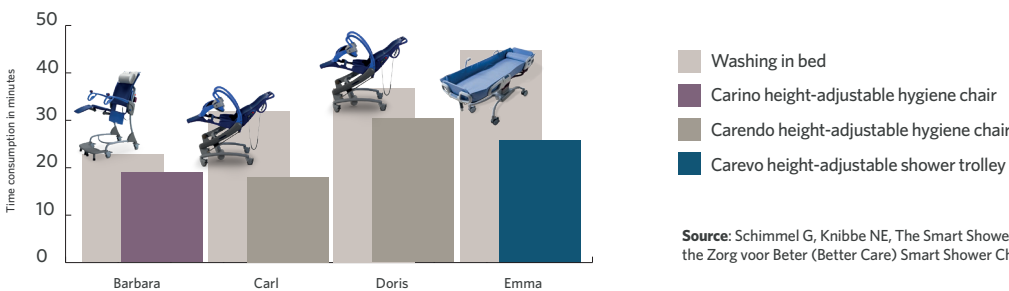
A height-adjustable shower trolley is an excellent solution for showering residents who need to remain in a recumbent position, as it can also be used to transport the resident from their bed to and from the shower area.



**Source:** Knibbe NE, Knibbe JJ, Postural load of nurses during bathing and showering of patients: Results of a laboratory study, Professional Study, 1996 Nov; 37-39. Brinkhoff A, Knibbe NE, The Ergostat program, pilot study of an ergonomic intervention to reduce static loads for caregivers, Professional Safety, 2003. Knibbe et al, How Smart is the Carevo®? Results of a Study on a New Shower Trolley Generation; The Ergonomics Open Journal 2013, 6, 1-5.

## Time saved

Although there is a widespread belief that washing a resident or patient in bed is faster, a height-adjustable hygiene chair can in fact be up to 35% more efficient.

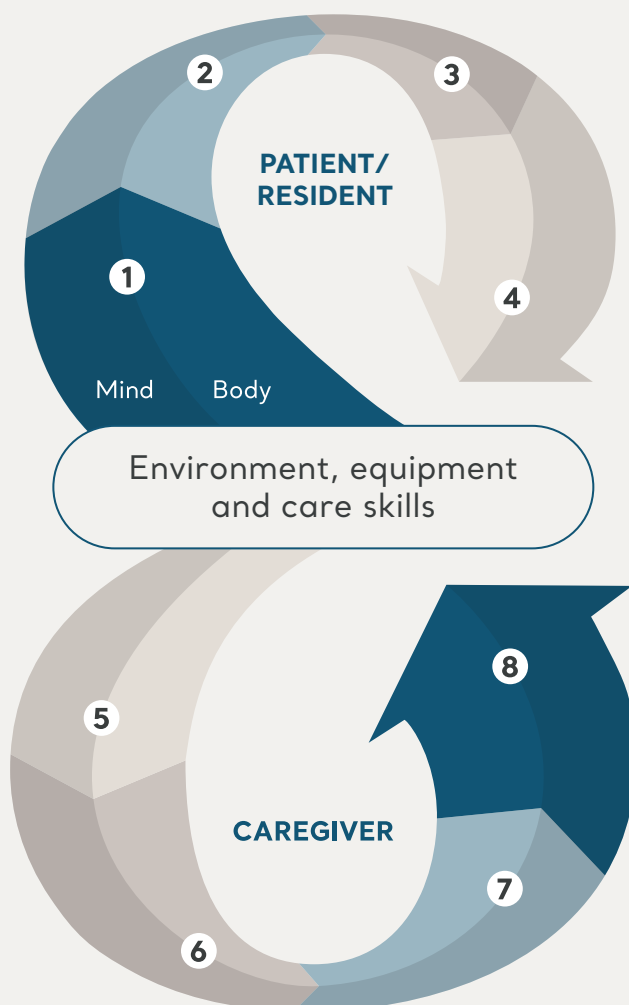


**Source:** Schimmel G, Knibbe NE, The Smart Shower Chair, Final Report of the Zorg voor Beter (Better Care) Smart Shower Chairs project, 2005.

# Promoting mobility through care

Promoting mobility is the driving force behind the Positive Eight – our proven philosophy for generating long-term benefits for patients, caregivers and care facilities.

**The Positive Eight philosophy** visualises the potential positive effects for both the caregiver and patient arising from investment in improved patient handling.



**The right environment, equipment and care skills need to be in place to allow the benefits of the Positive Eight to flow.**

## 1. Mobility

Stimulating and maintaining mobility

## 2. Improved vital functions

Stimulating vital bodily functions such as heart, lungs, circulation, bone and muscle structure

## 3. Reduced consequences of immobility

Minimising the risk of costly health complications, both physical and psychological

## 4. Quality of Life

Helping to improve confidence, independence, recovery times, and overall quality of life

## 5. Reduced need for support

More independent residents require less assistance

## 6. Reduced injuries and improved efficiency

Reducing physical strain and freeing up time

## 7. Reduced sick leave, turnover and compensation claims







Improved overall well-being and job satisfaction for caregivers

## 8. Improved care and financial outcomes

All this facilitates better quality of care at less cost to the care facility

# Comprehensive solutions for all mobility levels

Arjo showering solutions are designed to reduce the risk of strain or injury for caregivers, while providing comfortable, efficient and dignified hygiene routines for patients and residents. Our range of showering solutions can meet the full spectrum of patient and resident needs.

MOBILITY GALLERY	BARBARA & CARL	CARL & DORIS	EMMA
			
SHOWERING EQUIPMENT	CARINO	CARENDO	CAREVO
			
COMPATIBLE TRANSFER AIDS			
Active lifters*	•	•	
Passive lifters*		•	•
Ceiling lifters		•	•
Lateral transfer aids			•
SHOWERING TASKS			
Complete dressing and undressing		•	
Whole body accessibility		•	•
Hygiene care for discreet areas	•	•	•
Hair washing	•	•	•
Pedicure**	•	•	•
Complete drying		•	•
TOILETING			
Over toilet	•	•	
With bedpan	•	•	
Changing incontinence pads		•	

\* The difference between an active and a passive lifter is the amount of support it will give the resident. An active lifter will require some leg strength and upper body stability while passive lifters can handle a completely passive resident.

\*\* Carino can also be suitable for Alberts and Barbaras who find it hard to reach their own feet for hygiene, pedicure and drying.



# Carino®

Designed to reduce the number of transfers required for assisted showering and hygiene, Carino® enables a single caregiver to perform everyday hygiene tasks such as washing, toileting and foot care.

## Facilitates efficient showering routines

The patient or resident may remain seated in the Carino to transfer from the bedroom as well as for showering, toileting and other hygiene tasks, thus reducing the number of transfers required for daily hygiene routines.

## Patented curved frame

Combined with full length backrest to provide comfortable support at any height setting.

## Height-adjustability

Allows the caregiver to reach their preferred working height throughout the hygiene routine.

## Swing-away leg and foot rests

Patented leg rests allow caregiver access to the resident's legs and feet while maintaining a comfortable working position, and swing away to facilitate transfer into and out of the chair or allow the resident to use the foot rests. Foot rests can be tucked under the frame when not in use to allow caregiver to freely move around the chair.

## Easy manoeuvring

Integrated ergonomic grips and handles for easier handling and manoeuvring.



TOILETING



PEDICURE AND FOOT CARE



PATENTED SWING-AWAY LEG RESTS

# Carino

Compared to a fixed-height alternative, a height-adjustable hygiene chair increases working time in a healthy posture by **94%**.<sup>3</sup>



## Barbara & Carl

Developed for residents with a mobility level of Barbara and Carl.



# Carendo®

The Carendo multipurpose hygiene chair facilitates an efficient hygiene and showering routine within a single transfer, while allowing a comfortable working posture for the caregiver throughout the process.

## Carendo allows a single caregiver to address all hygiene needs

- Hair washing
- Showering
- Discreet hygiene tasks such as changing incontinence pads
- Dressing & undressing
- Foot care
- Avoid half-/undressed transport to and from shower area
- Toileting
- Managing compression stockings

## Perform discreet hygiene tasks

The Care Raiser function elevates the lower body of the patient or resident to enable access to perform discreet hygiene tasks while maintaining the patient's dignity.

## Easy positioning

Height-adjustable and reclining, Carendo can be positioned to the caregiver and resident's preference at the touch of a button.

## Enhanced support

The high backrest and sturdy armrests provide additional support for patients and residents with reduced upper body stability.

ERGONOMIC ACCESS FOR PEDICURE AND FOOT CARE



CHANGING INCONTINENCE PADS



HAIR WASHING



# Carendo

**78%** of caregivers in a long term care facility agree that using Carendo<sup>®</sup> improves their ability to perform washing and hygiene of all areas of the body including skin folds.<sup>7</sup>



## **Carl & Doris**

Designed for patients and residents with the mobility level of Carl and Doris.



# Carevo<sup>®</sup>

With features designed to enhance resident comfort while facilitating ergonomic working postures for the caregiver, the Carevo offers an efficient solution to perform daily hygiene tasks for patients and residents who need to remain in a lying position.

## **Facilitates ergonomic working posture**

Patented Ergo-Access areas allow closer proximity to the resident and enable the caregiver to spend more time at the resident's hip level, which helps to reduce static load.<sup>6</sup>

## **Encourages resident participation**

Easy-to-grip comfort handles provide support, enhance the resident's sense of security, and promote participation and mobility.

## **Streamlines the hygiene routine**

Carevo can be used to transfer patients from the bed directly to the showering area and back again.

## **Enhances patient comfort**

The patented Flexi Zone is designed to improve patient comfort by contouring to the patient or resident's body.

ERGO-ACCESS AREA



EASY-TO-GRIP COMFORT HANDLES



FLEXI ZONE



# Carevo

Differences seen when caregiver used a Carevo® compared with a traditional shower trolley<sup>5</sup>:

- **10%** improvement in time spent in a neutral safe back posture
- **9%** improvement in time spent in a neutral safe neck posture
- **13%** reduction in static load due to more time spent standing close to the patient's hip level



## Emma

Designed for patients and residents with the mobility level of Emma, who need to remain in a recumbent position throughout the hygiene routine.

## Planning an efficient showering environment

Arjo can support you to plan and create a showering environment that facilitates mobility and considers the changing needs of your residents. Visit the Arjo Guide for Architects and Planners on [www.arjo.co.uk](http://www.arjo.co.uk) for expert insights, detailed space requirement guidelines, and downloadable material to support your facility planning needs.



### References:

1. Schimmel G, Knibbe NE (2008) The Smart Shower Chair. Final Report of the Better Care Smart Shower Chairs Project.
2. Hallström K, Wiese N (2015) Improving Quality of Care and Workflow by Optimising the Working Conditions. A Case Study from a Danish Nursing Home. Proceedings 19th Triennial Congress of the IEA, Melbourne, 9-14 August 2015.
3. Knibbe NE and Knibbe HJJ, Postural Load of nurses During Bathing and Showering Patients: Results of a Laboratory study, Professional Safety, Journal of the American Society of Safety Engineers, Nov. 1996.
4. Brinkhoff A, Knibbe N (2003) The ErgoStat Program. Pilot study of an ergonomic intervention to reduce static loads for caregivers, [www.asse.org](http://www.asse.org). Professional Safety, Ergonomics, 32-39.
5. Knibbe JJ, Knibbe NE, Heitink DEBL (2016) Evaluating different methods of showering and washing patients: assessing ergonomic, time, and quality aspects. American Journal of Safe Patient Handling. Vol 6, Number 2, 49-64.
6. Knibbe NE, Knibbe JJ, Waijer E (2013) How smart is the Carevo? Results of a study on a new shower trolley generation. The Ergonomics Open Journal, 6, 1-5.
7. Schimmel G, Knibbe NE (2003) The Smart Shower Chair: Final report of the Zorg voor Beter [Better Care] Smart Shower Chairs project, Opella and Locomotion 2003.

March 2020. Only Arjo designed parts, which are designed specifically for the purpose, should be used on the equipment and products supplied by Arjo. As our policy is one of continuous development we reserve the right to modify designs and specifications without prior notice. ® and ™ are trademarks belonging to the Arjo group of companies.  
© Arjo

At Arjo, we are committed to improving the everyday lives of people affected by reduced mobility and age-related health challenges. With products and solutions that ensure ergonomic patient handling, personal hygiene, disinfection, diagnostics, and the effective prevention of pressure ulcers and venous thromboembolism, we help professionals across care environments to continually raise the standard of safe and dignified care. Everything we do, we do with people in mind.

**Arjo UK Ltd - Head Office** · Houghton Hall Business Park · Houghton Regis · LU5 5XF  
Phone: +44 (0) 8457 342000 · Private customer: +44 (0) 3457 342000 · Fax: +44 (0) 1582 745745 · Email: [sales.admin@arjo.com](mailto:sales.admin@arjo.com)

**Arjo UK Ltd - Service and Technical Centre** · St Catherine Street · Gloucester · GL1 2SL  
Phone: +44 (0) 8456 114114 · Private customer: +44 (0) 3456 114114 · Service fax: +44 (0) 1452 525207 · Email: [ukservice@arjo.com](mailto:ukservice@arjo.com)

**Arjo UK Ltd - Belfast Office** · Units 16-18 · 19 Heron Road · Belfast, BT3 9LE · Northern Ireland  
Phone: +44 (0) 28 9050 2000 · Fax: +44 (0) 28 9050 2001 · Email: [enquiries.belfast@arjo.com](mailto:enquiries.belfast@arjo.com)

**Arjo (Ireland) Ltd** · EA House · Damastown Industrial Park · Mulhuddart · Dublin 15 · D15 XWR3 · Republic of Ireland  
Phone: +353 (0)1 809 8960 · Fax: +353 (0)1 809 8971 · Email: [enquiries.dublin@arjo.com](mailto:enquiries.dublin@arjo.com)

[www.arjo.co.uk](http://www.arjo.co.uk)