

HYDROTILT®

Supporting Health Care Professionals with their seating prescription and meeting equipment criteria.

Clinical Justification & Case Studies

CareFlex

The HydroTilt

Supporting Health Care Professionals with their seating prescription and meeting equipment criteria.

The HydroTilt is CareFlex's much-loved dependable chair that encourages optimum posture management and pressure care whilst promoting comfort.

Introduction

The HydroTilt is an ideal solution for both individual prescriptions and multiple-user environments. Its adjustability and choice of accessories make it configurable for a wide range of seating needs in domestic, health and social care settings, and it is the perfect fit for community equipment services.

It is offered in mini, small, medium and large sizes. The HydroTilt provides high levels of comfort and the robust construction quality associated with CareFlex.

Top tip: Please refer to our HydroTiltXL Clinical Justification & Case Studies document for individuals with increased body weight and size.

Clinical Need

When an individual's ability to achieve good sitting posture is affected, either through illness, injury or disability, it can have a significant impact on their health and wellbeing.

Specialist seating aims to allow individuals, who might otherwise have difficulty, to achieve their optimum sitting posture to sit out comfortably, interact with their environment, participate in activities of daily living and enhance physiological function.

Top tip: Check out the CareFlex website for detailed information on specific postural challenges and how specialist seating can help.

The HydroTilt has been designed and engineered for individuals who present with mild to moderate postural needs and are at risk of pressure injury.

Mild postural needs include circumstances where:

- Sitting is the primary posture throughout the day.
- Assistance may be needed for the user to rise to standing and/or to change position.
- The primary goals include comfort, independence and energy management.

Moderate postural needs include situations where:

- Support is needed to manage the user's posture and pressure care needs whilst maintaining comfort, independence and interaction.
- Posture may be more challenging and additional support may be needed to correct or accommodate body segments.
- The primary goals include comfort and stability, enhanced functional movement, postural support, and pressure redistribution.

The HydroTilt meets the following chair requirements:

- Robust and adaptable, comfortably supporting the user's posture by achieving individualised seat dimensions.
- Offers security and stability to optimise function for activities of daily living and interaction with the environment.
- Integrated pressure management to reduce the risk of pressure ulcers as a result of immobility, prolonged and/or abnormal postures.
- Simple and safe to operate encouraging regular repositioning either independently or with support.

Top tip: For individualised prescriptions for users with more complex postural needs and an increased risk of pressure injury, consider the HydroFlex or SmartSeatPro.

Clinical Justification

Seating Objectives

The HydroTilt effectively balances four key objectives for specialist seating provision:

1. Comfort
2. Function
3. Postural management
4. Pressure care

The HydroTilt achieves this by enabling the user to meet the basics of good sitting posture:[1]

- The body is conformed to the supporting surface symmetrically.
- Body weight is distributed equally over the maximum surface area.
- A balanced and stabilised body that can adjust to change.
- Body segments are supported and aligned as much as is possible.
- Upper limbs are free from their load bearing role for function.



Comfort

Comfort is key for quality of life, and for this reason it is the top priority at CareFlex. Comfort may seem an easily achievable goal but everyone has their own ideas on what being comfortable actually means. To some it could mean feeling safe, to others it could mean feeling energised, to those using other specialist equipment it could mean the opportunity for some freedom, and to those who experience pain it could mean finally being able to relax.

The challenges experienced by individuals with postural needs can make it difficult for them to sit comfortably. Individuals with complex disabilities can present with abnormal muscle tone and involuntary movements, which are associated with painful spasms and instability. Comfort is equally important for individuals who experience a more sedentary lifestyle, as spending prolonged periods in a seated position can result in stiffness and chronic pain.

Specialist seating that promotes comfort and feelings of safety can not only enhance an individual's daily life but also increase tolerance of a desired seated position and compliance with equipment. If an individual isn't comfortable then they may not use the chair regardless of the clinical benefits.[2] Consistency of use is crucial for achieving outcomes and thus reducing the risk of secondary complications.

Top tip: Comfort is subjective. In order to achieve comfort, the client must be involved throughout the assessment and prescription process. The client is at the centre and we need to ensure that their views are respected, along with all those involved in their care.

Function

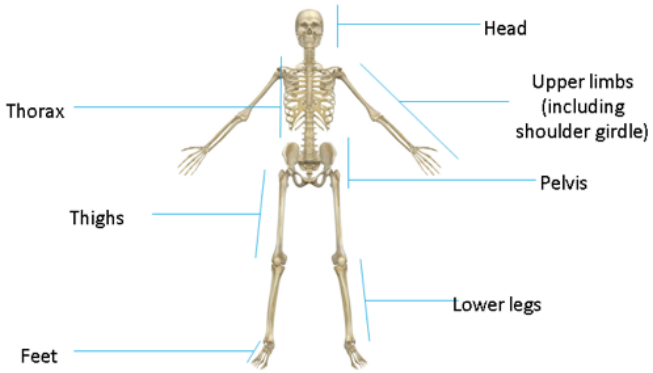
Specialist seating is not only important for protecting the body segments and reducing the risk of secondary complications but also encouraging normal functional movement and the promotion of independence. Independence is crucial for an individual's wellbeing and is an important factor in living a fulfilling life.
Freedom of movement is achieved through effective stabilisation of the pelvis and trunk[3] as the upper limbs are removed from their load bearing role. A stable posture has been shown to help an individual engage more fully in social activities at home, school or work, and as part of the community.[4]

The HydroTilt

Energy management is a critical part of promoting both comfort and function. Fatigue can affect all aspects of an individual's life and can significantly restrict their ability to engage in daily living, as well as having a negative impact psychologically and socially.[5] An unsupported posture can cause fatigue by making inefficient use of the body structure. Gravitational forces can also make sitting effortful for those who present with muscle weakness and abnormal muscle tone. Fatigue, if unmanaged, can be associated with significant postural challenges, including kyphoscoliosis, posterior pelvic tilt and contractures.
Early implementation of fatigue management strategies into daily life is critical, and could reduce the impact and the probability of fatigue becoming chronic.[6] The appropriate use of specialist seating can encourage energy conservation, making it easier for individuals to live a meaningful life. Specialist seating systems allow users to be more involved in activities of daily living, including interaction and engagement, due to the opportunity to rest and recuperate resulting in more energy throughout the day.

Postural Management

Postural management is the use of any technique to minimise postural abnormality[7] and is evidently linked to an individual's ability to achieve their seating objectives. Lack of postural care and prolonged abnormal sitting postures can cause tension on the body and increase the risk of significant secondary complications, such as exacerbated pain and postural deterioration.[8] Proper positioning has demonstrated that it can decrease fatigue whilst helping to alleviate chronic discomfort and maximise function.[9] As the body structure is supported, and the segments work together efficiently, the user will experience improved comfort, stability, functional movement, and energy conservation.



Top tip: Effective postural management targets all body segments;[1] pelvis, thorax, upper limbs, head, thighs, lower legs, and feet.

A major goal in postural management is to promote good health and enhance autonomic nervous system function.[10] A person's inability to sit upright can result in increased dependence and decline in overall health over time, primarily reflecting altered physiological function.[11] Trunk asymmetry and poor head position can impair respiration, cardiac efficiency, swallow function, and digestion. Consequently, increasing the risk of aspiration, infection, and any related hospital admission.

An appropriate seating system can provide the optimum position for respiratory and circulatory function.[8] An upright sitting position can also facilitate a normal swallowing pattern[12] and improve components of eating and drinking behaviour by maintaining good head alignment.[13]

Top tip: The pelvis is the foundation for a good sitting posture as it dictates what happens to the body segments above and below. Positioned at the person's core, it acts as a support system for the entire body. The pelvis should be stabilised in all planes of movement. The aim is to correct the pelvis if it can be corrected; however, any fixed pelvic challenges must be accommodated.

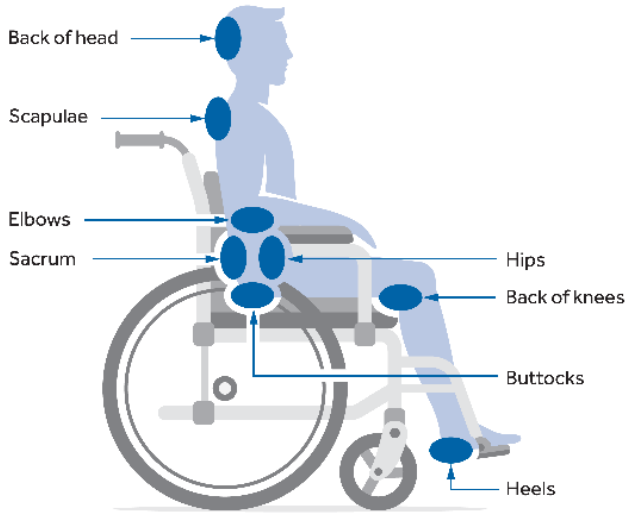
Clinical Justification

Reducing costs is also a long-term benefit of appropriate postural management.[14] It can reduce costs associated with hospital admission, pressure injuries and infection. It reduces the need for invasive and expensive interventions too.

Pressure Care

Posture and pressure are inextricably linked; body posture and positioning have a direct influence on the pressure going through specific body sites.[15] Even in the gold standard sitting position, body weight is distributed as follows:[16]

Through buttocks and thighs: 75%
Through the feet: 19%
Through the arms of the chair: 2%
Through the back: 4%



The body can only withstand high interface pressures for a short period of time, and when loading of tissues is unequal, and/or pressure isn't regularly relieved, pressure ulcers can occur.[17] There are also a number of contributing or confounding factors, including pressure, shear forces, friction and moisture, associated with pressure ulcers.

Everyone is potentially at risk of developing a pressure injury.[18] The impact of a pressure injury is profound, with individuals being affected physically, psychologically, socially, emotionally, spiritually, and financially.[19]
Top tip: Professional guidance from a Tissue Viability Nurse or District Nurse may be indicated.

A key intervention of pressure care is pressure redistribution; regular repositioning is critical for those deemed at risk of developing a pressure injury as it is believed to be one of the most effective methods for preventing skin damage.[15] The opportunity to sit out can offer a much-needed change of position to encourage blood flow and redistribute pressure. Specialist seating systems aim to reduce the risk of pressure injuries by distributing the user's body weight evenly throughout the chair over the maximum surface area with posture supported as aligned and symmetrical as possible.

Top tip: Tilt-in-Space* can aid repositioning with the aim of redistributing pressure regularly as part of the client's 24-hour posture and pressure management plan.

Appropriate management or, better still, prevention of pressure injuries can not only improve an individual's outcomes and quality of life, but it can also reduce the costs to health and social care services benefitting the wider community.

Specialist Seating Provision

Once an assessment is completed, Health Care Professionals will need to justify their specialist seating prescription. Clinical justification is important as it aids in decision-making, prioritising and securing funding for equipment. It is the opportunity for Health Care Professionals to advocate for the best client outcomes.

To clearly demonstrate an individual's need for specialist seating, and to comprehensively convey the clinical justification, a funding request should:

- Be holistic and, where possible, have a multi-disciplinary approach.
- Identify the seating needs, considering the aims and objectives of the client, their support network and the environment.
- Present the clinical findings and prove how the chair can meet the seating needs, but also state the risks of not prescribing the chair.

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- Back up any claims with evidence, including research, guidelines and legislation.
- Outline past and current interventions to demonstrate that less costly interventions have been considered.
- Demonstrate clearly the cost effectiveness of prescribing the chair and the cost implications of not prescribing the chair.

HydroTilt Seating Solutions

The HydroTilt offers comprehensive seating solutions, due to a range of functions and accessories, which will enable individual users to achieve their seating objectives whilst also being an ideal provision for multiple-user environments:

Reliability

- Since 1995 CareFlex has been collaborating with Health Care Professionals to develop innovative and effective specialist seating; CareFlex understand the importance of balancing comfort, function, postural support and pressure care.
- CareFlex have confidence and pride in their specialist seating and the positive impact they know it can have on people's lives. They have therefore submitted their products for independent testing and evaluation over the years, including pressure mapping and published clinical research. For further information, a copy of the summaries can be obtained from the CareFlex website: https://www.careflex.co.uk/info-centre/clinical-evaluations/

Adjustability

- Every chair must be set-up to fit its user; if it is not then it can cause more harm than good.
- Adjustable seat depth encourages pelvic stability at the back of chair whilst maximising the performance of the WaterCell Technology. Without posterior support, the user can go into sacral sitting with a posterior pelvic tilt. If the seat depth is too long, the user won't be able to flex their knees over the seat edge so they will slide forward in the chair to allow knee flexion. If the seat depth is too shallow the area over which body weight is distributed may be reduced, which increases the risk of pressure injury.
- To achieve the required seat width for lateral stability, the arm cushions are interchangeable allowing the width to be adjusted. Correct seat width can reduce the tendency for the user to lean or shuffle the pelvis. These undesirable movements can result in pelvic obliquity or pelvic rotation and the posture becoming increasingly unstable with unequal loading on tissues. Left unmanaged, this leaning posture could lead to the development of a scoliosis.
- Loose covers will also allow for multi-user adaptability.

Robustness & Durability

- The HydroTilt provides high levels of comfort and the robust construction quality associated with CareFlex.
- Small/mini chairs have a maximum user weight of 75kg.
- Medium/large chairs have a maximum user weight of 160kg.
- The castors have sealed bearing hubs for enhanced durability.
- Assurance arms allow the covers to wrap around the front of the chair sides to prevent picking of the arm seams, especially beneficial for users with wellbeing and behavioural considerations.
- For peace of mind the HydroTilt comes with a 5-year warranty on the frame and 1-year on all other parts and labour.



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Infection Prevention & Control (IPC)

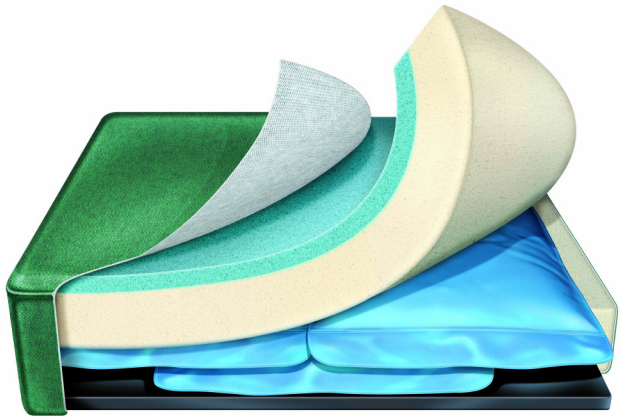
- Specialist seating systems within health and social care environments can be a cause of cross-contamination and therefore IPC must be considered during the assessment and prescription processes.
- To help in hospital settings or multi-user environments, where attention to IPC is critical, specialist covers are available for the HydroTilt; Velcro is replaced in all exposed areas with plastic profile fittings, and exposed seams are minimised.
- The HydroTilt features vapour permeable fabric as standard to all contact areas – seat, back, leg rest and arm rest.
- The HydroTilt's modular design also allows for simplified and easier cleaning of the individual chair sections and frame.
- A chair protector is available that fits over the seat, arms and lower back, which prevents contamination and stops debris getting trapped in the moving parts of the chair.

Tilt-in-Space*

- Tilt-in-Space can promote pelvic stability and assist with positioning by encouraging the pelvis to remain at the back of the chair.
- Tilt-in-Space can be a key function in order to achieve energy conservation by allowing periods of rest, without affecting the critical angles for sitting.
- Tilt-in-Space can be used to reposition an individual against the forces of gravity in different degrees of tilt to redistribute pressure and ultimately reduce the risk of pressure injury.
- Upgrading to motorised AutoTilt will allow tilt-in-space to be adjusted automatically over a short or long cycle allowing for regular repositioning and pressure distribution whilst promoting independence within the user's residence.

WaterCell Technology

- CareFlex WaterCell Technology provides a reliable and dynamic pressure care solution for people at medium to high risk of pressure injury.
- WaterCell Technology enables the individual to achieve a stable and functional posture without compromising on pressure care and comfort.
- The water cells work by allowing the seat cushion to contour naturally and effectively around the user's body.
- The layer of Visco-Elastic Memory Foam moulds to the shape of the buttocks and thighs, distributing weight over a larger surface area and minimising pressure build-up under bony areas.
- Vapour permeable upholstery works synergistically with the WaterCell Technology to provide continuous pressure redistribution.



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Pelvic Support

- A seat wedge is available that creates an acute hip angle to support the pelvis with stability at the back of the seat.
- Lateral blockers are L-shaped pads that can provide simple lateral support.

Waterfall Back

- The waterfall back option consists of a lumbar, thoracic and head section that encourages trunk alignment whilst promoting comfort.
- Wadding can be configured to accommodate kyphotic or lordotic postures to reduce the pressure at the apex of the curve and fully support the spine.

Contoured Back

- The contoured backrest promotes long-term comfort and pressure distribution via simple conforming support to the lower back in both sitting upright and in a tilted position.
- It provides gentle lateral support for the upper trunk and centralises the posture with contoured pads whilst allowing movement.
- This may be indicated for users who present with limited sitting ability due to weakness, abnormal muscle tone or fatigue.

External Lateral Support

- External and removable laterals with independent height and width adjustment may be indicated for individuals who require firmer trunk control to achieve an optimum upright midline position.



Height & Angle Adjustable Flip-Up Footplate

- Insufficient foot support can negatively impact on postural stability and pressure risk; individuals naturally seek support through the feet to obtain the proprioceptive feedback required.
- The height and angle adjustable flip-up footplate is ideal for users with a longer lower leg length or for those who require their feet to be supported.
- The footplate accommodates fixed angles of plantar flexion at the ankle, and provides a more restful ankle position whilst supporting the foot.
- The footplate can be adjusted and set to a choice of 5 positions; +90° (vertical), +15°, 0° (horizontal), -15° and -30°. This equates to a 120° range of adjustment. In all positions the footplate can be easily lifted up to vertical to move it out of the way for improved safety and foot placement during standing transfers.
- A detachable footplate pad, footplate lozenge and soft pillow are also available that can provide greater comfort, or may be indicated for shorter leg lengths
- A channelled footplate pad can also provide greater comfort to aid correct foot positioning and alignment.

Independently Elevating Leg Rest

- The independently elevating leg rest will provide lower limb positioning whilst promoting alignment and stability.
- It can also help to improve circulation and reduce swelling.
- Reflexions Foam® is incorporated in the leg rest to provide pressure care for the lower limbs. Reflexion foam reacts to body heat and uniquely moulds around the contours of the user so that body weight is spread more evenly across the whole surface area.
- A leg rest extension can be used to increase the length of the leg rest once elevated for those with longer lower limbs.
- A channel leg rest can help centralise limb positioning.
- The angle of leg rest elevation tolerated

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by an individual is dependent on their hamstrings muscles and knee joint range of movement; inappropriate elevation of the lower limbs can cause pain, a posterior pelvic tilt, and sliding down the chair increasing shear and friction forces.

Negative Angle Leg Rest

- The negative angle at the leg rest can accommodate limited knee range of movement allowing a more comfortable seating position for those with contractures or tight hamstrings muscles.
- A negative angle leg rest can also facilitate safe standing by allowing optimum foot placement.



Hand Grips

- Wooden hand grips are solid enough to support the user as they rise to standing.
- Soft hand grips are an alternative option and consist of an upholstered foam pad fitted in the same position.

Soft Headrest

- A comfortable rectangular pillow that can support the head if an individual presents with weakness or fatigue, available in shallow and deep.

Soft Profiled Headrest

- A contoured pillow that comfortably supports the shoulders, neck and head to encourage head alignment for interaction and optimum physiological function for users with reduced head control.

InLine Headrest

- Memory Foam lining providing full cranial support with cut-away sides for unobstructed sight and hearing.



Soft Pillow Headrest

- A deep, ultra soft pillow that conforms to the shape of head and shoulders providing a higher level of comfort.

Neck Headrest

- Has a deep profile to give greater lateral control.

Foam Headrest

- Available in shallow, medium and deep, providing basic lateral head control.

Belts & Harnesses*

- A pelvic belt is a simple webbing belt ideal for use during portering.
- A padded pelvic belt is an intervention that is available for anterior pelvic stabilisation that can also be used as a safety belt when portering clients.
- A 4-point padded pelvic belt has a centre pull adjustment and comfort pads to reduce pressure on the front of the pelvis with secondary straps that pull down over the thighs at right angles to the seat base to maximise pelvic stability and reduce the risk of sacral sitting.
- A groin harness is a positioning aid that provides maximum pelvic control to help stabilise the position of the pelvis and prevent the user from sliding forward in the chair.

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- A dynamic chest harness provides anterior support and comfort whilst not restricting active positioning and function; the lower straps have multi-direction buckles that swivel to avoid twisting.
- Sternum harness provides greater upper trunk stability whilst allowing for dynamic user movement.

Pommel

- An external pommel can encourage thigh alignment and further assist with maintaining pelvic stability.

Tray

- A tray with low profiled edges can be prescribed to offer further upper limb support and enable engagement in activities or occupation.

Support Network Considerations

- It is imperative that the client's support network and the environment in which the chair will be used are considered to ensure compliance and consistency of use.
- The HydroTilt is lifting hoist and standing hoist compatible to both promote safe moving & handling for non-ambulant users and facilitate transfers for those who remain ambulant or semi-ambulant; thus, reducing carer load and dependency.
- Two braked castors and two swivel castors promote security and smoother manoeuvrability.
- Tilt-in-Space can also assist with positioning during moving & handling by utilising gravity to position the pelvis at the back of the chair.

Chair functions can be operated by manual gas action control or battery controlled motors.



References

1. Pope PM (2002) Posture management and special seating In Edwards S (Ed) Neurological Physiotherapy London: Churchill Livingstone
2. Bartley C, Stephens M (2017) Evaluating the impact of WaterCell® Technology on pressure redistribution and comfort/ discomfort of adults with limited mobility Journal of Tissue Viability 26(2):144-149
3. Green EM & Nelham RL (1991) Development of sitting ability, assessment of children with a motor handicap and prescription of appropriate seating systems Prosthetics and Orthotics International 15:203-216
4. Trefler E, Taylor SJ (1991) Prescription and positioning: evaluating the physically disabled individual for wheelchair seating Prosthetics and Orthotics International 15(3):217-224
5. NHS (2020) Fatigue Available from: https://www.yourcovidrecovery.nhs.uk/managing-the-effects/effects-on-your-body/fatigue/
6. NHS England (2020) After-care needs of inpatients recovering from COVID-19 Available from: https://www.england.nhs.uk/coronavirus/publication/after-care-needs-of-inpatients-recovering-from-covid-19/
7. Farley R, Clark J, Davidson C, Evans G, MacLennan K, Michael S, Morrow M, Thorpe S (2003) What is the evidence for the effectiveness of postural management? International Journal of Therapy and Rehabilitation 10(10):449-455
8. Royal College of Physicians (2016) National clinical guideline for stroke Available from: https://www.strokeaudit.org/Guideline/Full-Guideline.aspx
9. Cook AM, Hussey SM (2002) Assistive Technologies Principles and Practice St Louis: Mosby
10. Jones M, Gray S (2005) Assistive technology: positioning and mobility In SK Effgen (Ed) Meeting the Physical Therapy Needs of Children Philadelphia: FA
11. Healy A, Ramsey C, Sexsmith E (1997) Postural support systems: their fabrication and functional use Developmental Medicine and Children Neurology 39:706-710
12. Pountney TE, Mulcahy CM, Clarke SM, Green EM (2000) The Chailey Approach to Postural Management Birmingham: Active Design Ltd.
13. Hulme JB, Shaver J, Acher S, Mullette L, Eggert C (1987) Effects of adaptive seating devices on the eating and drinking of children with multiple handicaps The American Journal of Occupational Therapy 41(2):81-89
14. Postural Care Action Group (2011) Postural care: protecting and restoring body shape Available from: www.preparingforadulthood.org.uk/media/293084/postural_care_booklet.pdf
15. Sprigle S, Sonenblum S (2011) Assessing the evidence supporting redistribution of pressure for pressure ulcers prevention: a review J Rehabil Res Dev 48(3):203–213
16. Collins F (2001) An adequate service? Specialist seating provision in the UK Journal of Wound Care 10(8):333–7
17. Waterlow (2007) Pressure Ulcers Available from: http://www.judy-waterlow.co.uk
18. National Institute for Health and Care Excellence (NICE) (2014) [CG179] Pressure ulcers: prevention and management Available from: www.nice.org.uk/guidance/cg179
19. Langemo DK (2005) Quality of Life and Pressure Ulcers: What is the Impact? Wounds 17(1)

The HydroTilt

Michael's Story

Michael is a 78-year-old gentleman who has lived a good life with a large family full of children, grandchildren and now great grandchildren. For years he loved going to dance halls with his wife, and he still loves listening to music. Michael was diagnosed with dementia (Alzheimer's disease) 5 years ago. He has recently moved in to a residential home as his needs can no longer be met at home; his wife continues to visit every day.

Michael needs prompting to complete activities of daily living and is becoming more dependent on care staff to complete certain tasks. His mobility is now limited and he requires maximum assistance of two to complete standing transfers. Michael also has a history of falls.

Michael had been sitting in a standard fixed armchair. Michael complained of being uncomfortable and at times became agitated with his wife. Care staff noticed moving and handling becoming more effortful and were considering introducing equipment. They had also started noticing areas of redness on his heels and back.

CareFlex were called in to see if a more specialist chair was needed to reduce the risk of Michael's pressure areas worsening, and to ensure he was comfortable and relaxed.

In the standard armchair it was evident that:

- Michael was too tall for the chair's dimensions;
    - Seat depth was inappropriate resulting in Michael sliding down the chair and falling in to a posterior pelvic tilt with a significant increased thoracic kyphosis.
    - Seat height was incorrect leading to the increased difficulties with standing that care staff had noticed during moving and handling.
    - This set-up resulted in unequal weight distribution with increased pressure through Michael's back and heels.
- Michael was fatiguing quickly against the effects of gravity, which was worsening his kyphotic posture.
- Michael was spending prolonged periods of time in the chair, further increasing his risk of pressure injuries.

It was agreed with Michael that his main goals from seating were to be comfortable, maintain his transfer ability for as long as possible, and manage his pressure areas. Michael trialled a range of CareFlex chairs and immediately felt comfortable in the HydroTilt:

- Adjustable seat depth ensured the correct set-up for Michael, promoting improved pelvic stability and spinal posture.
- The reconfigured waterfall back comfortably accommodated Michael's remaining kyphotic posture, reducing the pressure at the apex of his spine.
- Tilt-in-space promoted energy management and further stabilised his pelvis.
- Integrated pressure management with WaterCell Technology encouraged maximum support and equal weight distribution with the aim of resolving Michael's pressure areas.
- The flip-up angle adjustable foot plate fully supported his feet so pressure was taken away from his heels.
- A more appropriate seat height improved Michael's standing ability, in turn reducing carer staff effort and promoting safety.
- The negative angle leg rest allowed a more stable foot placement on the floor to further assist Michael with standing.

Care staff were educated on the need to ensure a regular change of position. They also agreed to seek further advice regarding Michael's pressure areas to ensure all intrinsic risk factors were considered.

Case Study 1

During a longer trial of the HydroTilt, Michael continued to feel the benefits. He was able to stay alert longer throughout the day and his improved posture meant he could interact with his wife more easily. His relaxed manner allowed them to spend quality time listening to music together once again.

At CareFlex, we strongly believe in our ethos: we strive to balance posture and pressure management with the individual's own goals, whilst promoting comfort, independence and a meaningful life. The ability to meet both Michael's seating objectives as the user, his support network's objectives, and our own clinical objectives effectively means we are achieving a true holistic approach. A holistic approach is what allows us to consider daily life and its challenges then make reasonable changes that impact on quality of life.

Get in touch to arrange a free no-obligation assessment if you think you or your loved one need specialist seated support, like Michael, from CareFlex specialist seating.



The HydroTilt

Zoe's Story

CareFlex had the pleasure of meeting with Zoe recently. Rebecca Dunstall, Clinical Specialist, and Les Jones, Business Development Manager, met with Zoe, her key worker and her Occupational Therapist at a specialist residential college where she lived in her own supported living flat. The aim of the visit was to see if CareFlex specialist seating could improve Zoe's quality of life.

Zoe is a 21 year old sociable lady who enjoys music, photography and watching television. She competently uses an AAC device to communicate.

Zoe's diagnosis is mixed cerebral palsy:

- Zoe presents with ataxia and spasticity, but maintains a good range of movement as a result of her commitment to therapy.
- She participates in regular therapy sessions, both on dry land and in the swimming pool.
- She does not report experiencing any significant pain.
- She is a wheelchair user; her Quickie Groove powered wheelchair gives her the independence she desires.
- She also wears specialist shoes with ankle support to aid her standing ability as she is able to complete step around transfers with assistance of one.

At home, Zoe uses her wheelchair for all seated activities, including watching television, eating and drinking. Her wheelchair has bilateral lateral support, a two-point pelvic belt, a contoured cushion, and footplates. This set-up helps her to maintain an upright posture throughout the day. It also offers her the stability she needs to manage her abnormal muscle tone and movements, and encourages function. However, the ability to achieve a regular change of position is limited and the wheelchair does not allow for true relaxation at the end of a busy day.
There is a sofa in Zoe's lounge but it does not offer adequate lateral support.

The inappropriate seat height also means her feet are not supported on the floor and impacts on her standing ability.

During the seating assessment it was clear that Zoe would benefit from an alternative seating system to encourage a change of position and, more importantly, the opportunity to relax at home. Specialist seating will enable Zoe to feel comfortable whilst also continuing to manage her postural needs and encourage energy conservation.

It was agreed with Zoe that a seating system that offered more freedom of movement and a different position to her wheelchair would be most beneficial. Therefore, the much-loved HydroTilt was trialled due to her non-complex posture and ability to engage her trunk.

The HydroTilt offers:

- Adjustable seat depth that ensures the correct set-up for Zoe and promotes pelvic stability.
- Tilt-in-space further encourages pelvic stability while promoting comfort, energy management and a regular change of position.
- A contoured back that comfortably accommodates Zoe's posture whilst providing the required trunk support.
- An adjustable footplate that provides the feedback Zoe needs for stability, in turn supporting her abnormal muscle tone and involuntary movements.
- The appropriate seat height that safely enables Zoe's standing and transfer ability in conjunction with the flip-up footplate.
- A negative angle leg rest, which allows a more stable foot placement on the floor to further assist Zoe with standing.
- A removable tray, which will enable Zoe to complete activities whilst sat in the chair.

Case Study 2

Zoe was very clear in displaying her like of the chair; she communicated that the headrest offered significant comfort and the tilt-in-space function helped her to relax.

That smile says it all.

Sitting down is a major part of daily life with, on average, more than nine hours spent in a seated posture. Clinical objectives are important, but nothing means more than seeing a person smile because they are finally content for what is a significant part of their day.

Feelings of safety, being comfortable and having the ability to relax must never be underestimated. These are outcomes that are critical to a person's quality of life and will ultimately determine whether they are compliant with using the chair.

At CareFlex, we strongly believe in our ethos: we strive to balance posture and pressure management with the individual's own goals, whilst promoting comfort, independence and a meaningful life.

Get in touch to arrange a free no-obligation assessment if you think you or your loved one need a supportive yet comfortable chair, like Zoe, from CareFlex specialist seating.



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*Tilt-in-Space and Back Angle Recline should always be prescribed responsibly, ensuring that they are safe and appropriate for the user following a comprehensive assessment of posture and risk, with advice sought from the multi-disciplinary team where indicated. In some cases, these functions will be contra-indicated, and they could also increase shear and friction forces.

*All belts and harnesses must also be prescribed, implemented and monitored responsibly following a comprehensive risk assessment. Please see the Device safety information alert for further information: www.gov.uk/drug-device-alerts/all-posture-or-safety-belts-fitted-to-supportive-seating-wheelchairs-hoists-and-bathroom-equipment-risk-of-serious-injury-or-death

The information given in this book represents current advice at the time of publication. It is intended as general information and guidance and is not a substitute for professional medical advice which should be sought for specific, individual cases. It is the responsibility of the treating clinician, relying on independent knowledge and skills, to determine the best intervention and method of application for the client.

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