

Information sheet No.3

Rehabilitation Technology Unit RPH Shenton Park Campus



Custom Seating and Positioning for Optimal Function

Effective seating and positioning is a requisite for any person who uses a wheelchair or requires a seating system for daily living functions.

Positioning, as part of the wheelchair seating system is generally prescribed to include the following functions;-

- ◆ *to maintain skeletal alignment so that initial or progressive postural deformity is arrested.*
- ◆ *to optimise functional activities of the wheelchair user. This may include access to a communication device, optimal position for swallowing or effective propulsion of the wheelchair.*
- ◆ *to enhance pressure management requirements and prevent decubitus ulceration.*
(Ref: Info.Sheet, Pressure Management)
- ◆ *improvement in the field of vision,*
- ◆ *limit the effects of spasm,*
- ◆ *improve feeding.*

Appropriate postural control may apply to a range of physical disabilities including, spinal cord injury, cerebral palsy, muscular dystrophy, acquired brain damage, cardiovascular accident, multiple sclerosis, arthritis and motor neurone disease.

PROVIDING A QUALITY SOLUTION.

The typical procedure in the provision of a seating system at the Rehabilitation Technology Unit begins with an **assessment** of the client by a qualified occupational or physiotherapist. This includes the assessment of seating balance, range of motion of hips, knees, ankles and shoulders, flexibility of the spine and any other factors relating to the client's diagnosis or functional requirements.

The assessment is followed by a seating **system mock up** by an experienced technician. The mock up system is trialed for a period of generally one (1) week to highlight any unforeseen problems and to ensure that the seating system addresses the goals established. Following a **successful trial** the client is provided with a **final product**. Since subtle changes often occur, the client may be required to attend **regular follow up** checks to ensure that the seating system is still providing adequate postural control.

Functional change during the process of recovery and rehabilitation can be marked, in conditions like acquired brain injury. Where this is evident a definitive solution may be delayed until the person's impairment has stabilised. In such cases the Service will attempt to provide an interim solution, probably based on short term loan equipment but designed to provide therapeutic support and to further enable evaluation of the person's need during this time.

Where functional change is marked due to the progression of a disease or condition (eg. motor neurone disease) the Service will arrange a review process suited to the particular individual and their circumstance.





A RANGE OF TECHNOLOGIES

The Rehabilitation Technology Unit offers the client a range of seating systems which are both commercially available and/or manufactured in house. Commercial systems are adopted on merit, from a wide range available and in view of needs related to supply and cost efficiency. Seating and positioning systems that can be manufactured in house include;

- ◆ *Foam on ply*
- ◆ *Foam in place*
- ◆ *Hexcellite*
- ◆ *Sculpted foam*
- ◆ *a range of orthotic solutions and approaches*

PRESENTATION

As well as providing postural control, the wheelchair and seating system is generally considered a projection of the users image and as such must also be aesthetically pleasing. Clients who consider their seating system as ugly, often do not use it and therefore do not reap its therapeutic benefits.

The Rehabilitation Technology Unit will work to ensure that seating and postural support systems provided, while functional, are nevertheless as unobtrusive as possible, taking into account social goals and dress preference, for example.

Similarly, the seating and postural support system adopted will take into account the needs of the carer in their work to assist the client. Aspects related to transferring the client into and out of the system and its adjustment to ensure its optimal performance on a day to day basis, are crucial.

OTHER SEATING OPTIONS

Seating and positioning is not only confined to wheelchairs. Lounge chairs, car seats and any other chair that the client sits in may also be modified for therapeutic reasons. This is particularly important when the optional device is used in conjunction with a system specifically designed to protect or “treat” the client.

INTEGRATION OF TECHNOLOGIES - THE ONE STOP SHOP

The Rehabilitation Technology Unit can provide a full range of postural control seating services within the one area; from assessment to follow up.

Importantly, the need for functional seating is often required to facilitate goals in other areas; for example, to improve mobility and/or to enable the use of communication equipment, etc.

Where the various specialised services of the RTU are aware of these related needs, an integrated approach will be developed to design and to provide **a total solution** and hopefully, avoid the waste of time and resources which is inevitable when individual Services act in isolation. A slick solution in one area may be a major impediment in another.

for further information on specialised seating and posture management, please feel welcome to contact;

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