

THE ORTHOS.E.A.T. PROGRAM

Creative Solutions for a Variety of Special Needs

A referral to the OrthoS.E.A.T. Program at Mary Free Bed Rehabilitation Hospital is the beginning of a partnership in problem solving. Clients come to us with simple requests that have appeared to be insurmountable challenges for standard rehabilitation equipment and resources. However, OrthoS.E.A.T. therapists and technicians listen and plan, work together with dedicated DME suppliers, go through trial & error with roughed in solutions and finally fabricate a working solution. When design is combined with thorough documentation of medical necessity payers often approve funding for these custom solutions. Here is one of our recent success stories:

Request: A power wheelchair that can lift an adult person of short stature from the floor, up to a normal seat height and stop at any height along the way to allow access for toilet transfers and to other furniture.

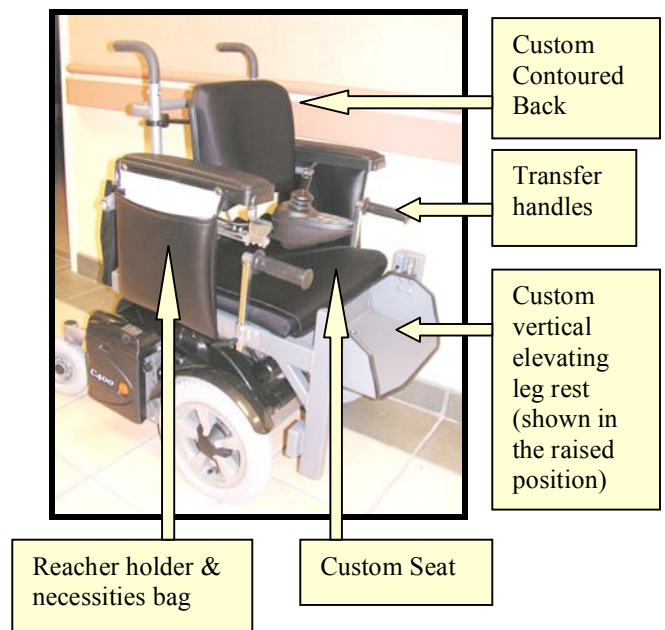
Problem: There is no existing power wheelchair with this capability and off the shelf seating options would not accommodate the positioning and functional needs during transfers.

Problem Solving Process:

- ∞ Physical evaluation to determine joint mobility limitations, measure reach distance for controls and observe transfer techniques used for various situations (toilet, bed, chairs).
- ∞ Trial with a variety of standard power wheelchairs (rear wheel drive, mid-wheel drive, and front wheel drive) to determine what would be the most functional chair to modify.
- ∞ Research and phone discussions with manufacturers to determine if they could design the needed foot platform to raise and lower – while supporting the full body weight.
- ∞ Design of the custom seating and accessory needs for the wheelchair (support handles for stability during transfers, bags for carrying objects, retractable joystick and toggle control for the foot platform).

Final Solution:

- ∞ The chair is a front wheel drive Permobil C400 Low-rider with customized vertical elevating leg rest.
- ∞ OrthoS.E.A.T. custom seating includes a contoured back with pressure sensitive foam, custom seat with a slight wedge and foam rounded over the front edge to ease transfers, a custom reacher holder and bag.



Stepping onto the elevating footrest from the lowest position.



Rising upward while on the footrest.



Turning around after the footplate has reached it's top position.



Final position – ready to move.

All photos used with permission.

This is just one example of how OrthoS.E.A.T. staff work together with clients, DME suppliers and equipment manufacturers to create a successful solution to one of life's not so simple challenges.

For more information or to make a referral please call:

**1-800-211-4813 or
616-242-0342**

You can fax a physician prescription for evaluation to 616-356-1868.

Restoring Hope and Freedom
Mary Free Bed
Rehabilitation Hospital

PROSTHETICS

New Technology

Mary Free Bed Prosthetic's Clinical Staff is currently incorporating Ossur's Seal-In Liners into both the transtibial and transfemoral socket designs. The Seal-In Liner incorporates a hypobaric sealing membrane that provides a firm and comfortable suspension. Ossur is a prosthetic manufacturer based in Iceland, who manufactures custom silicone liners as well as prosthetic feet and knee units.

Mary Free Bed Prosthetic Clinical Staff continues to use the C-Leg a microprocessor knee unit that provides microprocessor swing and stance phase control and customized settings. The efficiency of the C-Leg's swing phase dynamics, even at varying walking speeds and uneven terrain, provides a more secure, natural, and efficient gait. In addition the clinical staff has also trialed the Compact microprocessor knee unit, also manufactured by Otto Bock. The Compact is a microprocessor unit that provides patients with microprocessor stance stability only. This knee is indicated for patients who have low to moderate activity levels.

Continuing Education

Mary Free Bed Prosthetic Staff recently attended a training seminar on the fit and function of Silipos products. These products benefit the lower limb population, both transtibial and transfemoral. Silipos is a prosthetic manufacturer with headquarters in Niagara Falls, New York. Silipos manufactures prosthetic interfaces, such as liners, in addition to suspension sleeves.

Mary Free Bed Prosthetic Clinical Staff recently attended at training seminar hosted by Otto Bock. The training seminar was hosted at Mary Free Bed's Prosthetic facility and focused on C-Leg functioning and adjusting. This special C-Leg clinic lasted two days, and offered current C-Leg, as well as future C-Leg users the opportunity to interact with Otto Bock clinical and technical staff in person. Each patient was given the opportunity for gait analysis by Otto Bock and Mary Free Bed Clinical members, lending to further adjusting of the microprocessor unit if necessary. The C-Leg is a microprocessor knee unit that provides microprocessor swing and stance phase control and customized settings. The efficiency of the C-Leg's swing phase dynamics, even at varying walking speeds and uneven terrain, provides a more secure, natural, and efficient gait.

Dave Firlik, CP, and Mark Porth, CPO will be attending the national American Orthotic and Prosthetic Association (AOPA) meeting in Las Vegas, Nevada September 25th-28th. The meeting will highlight advance training in orthotics and prosthetics and clinical patient management.

Staff Updates and News

On Wednesday, October 12, 2005, **Mary Free Bed hosted Russian health care professionals** for a tour of Mary Free Bed facilities. The group was sponsored through the Library of Congress Open World Program, which is designed to bring Russian officials and leaders to the United States to meet their American counterparts and gain firsthand knowledge of American society. Visitors included Viktoriya Vladislavovna Pavlinova, M.D. Pediatrician, Tatyana Vladimirovna Romanova, M.D., Ph.D., Deputy Director for Science, ISC Velt, Yelena Valentinova Ahukova, Deputy Manager Yaroslavl Municipal Hospital #1, Aleksandr Vladimirovich Muravets M.D., Barbara Vant Hof, Tour Host and Jinny Bromberg, Translator. The group toured Mary Free Bed OrthoSEAT, Prosthetics, and Orthotics laboratories where they had a chance to question staff about these Mary Free Bed programs. Orthotics and Prosthetics Assistant, Mikhail Vezikov who speaks Russian, was able to provide direct explanations. At the end of the tour, the visitors accepted sample braces from Mary Free Bed to bring back to their medical facilities.

Jennifer Essex, R.T.O. and Carl Kirby will be sitting for the ABC Prosthetic Technical Exam in October, 2005 in Spokane, Washington. This exam will test their skills in the fabrication of prosthetic devices by a national board. If successful they will earn the title of registered prosthetic technician.

Lindsay Homrich, a board eligible prosthetist here at Mary Free Bed, completed her residency in July 2005 and will be taking her Boards in Prosthetics in November 2005. Lindsay is currently a staff prosthetist at Mary Free Bed Rehab Hospital and plans to continue her employment as a certified Prosthetist.

Michael Shedd R.T.P will be participating in a two week mission trip to Ecuador in January, 2006. The trips focus is to provide amputee patients with prosthetic devices. Michael will be assisting in the fabrication of prosthetic devices at on site laboratory.

Orthotic Pocket Reference

Mary Free Bed Orthotics now offers an Orthotic Pocket Reference for upper, lower, and spinal orthoses. This new pocket reference will provide the health care specialist with a description and function of available orthoses. Mary Free Bed Orthotics custom fabricates many orthoses to meet a patient's specific needs, so not all of the orthoses we provide will be listed in this catalog.

Some additional services we offer for health care providers are:

- Consultation about specific designs that will meet your patient's special needs.
- Tours of our fabrication and clinical facilities.
- In-services for health care providers.

For more information regarding these services, or to request a copy of the Orthotic Pocket Reference, please contact:

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www.maryfreebed.com



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