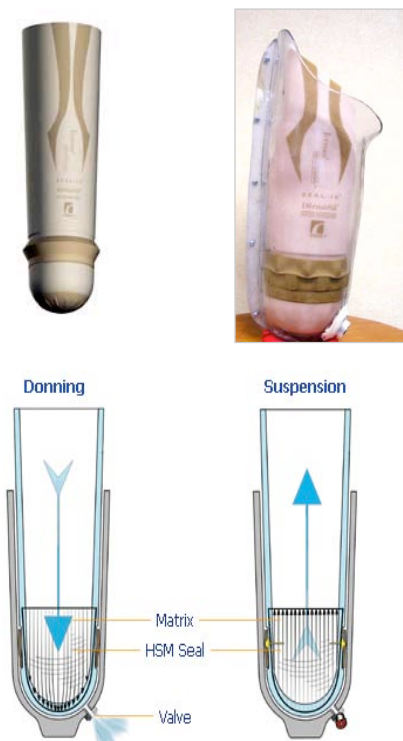


PROSTHETICS

New Technology

Mary Free Bed Prosthetists continue to utilize Ossur Iceross Seal-In Liners for both transtibial and transfemoral level amputees. Ossur is a prosthetic supplier based in Iceland, which manufactures custom silicone liners as well as prosthetic feet and knee units. The Seal-In liners have been available to the prosthetic industry for approximately 1.5 years, and the cost for the liners is comparable to that of other silicone liners on the market.



Photo's courtesy of Ossur

With Iceross Seal-In-Liners, a **Hypobaric Sealing Membrane (HSM)** conforms to the shape of the socket wall, creating an airtight seal. This liner is comfortable, and the clinician is able to fit it to a patient without donning aids of any kind. The Seal-In-Liner also accommodates the volume reduction of the residual limb. With the HSM, the hypobaric pressure will always

be in direct proportion to the suspension force needed, ensuring superior stability, comfort and control. The membrane also provides for a firm and comfortable suspension.

The Iceross Seal-In Liner is manufactured using silicone. Silicone material permits different levels of softness and strength depending on your patient's needs. These liners are durable and easy to clean. The Iceross Seal-In Liner also incorporates a stabilizing matrix, which provides benefit by limiting vertical stretch at the distal aspect of the residual limb, enhancing comfort and reducing tissue damage.

When fitting a Seal-In Liner, it is critical to choose the correct liner size based on residual limb measures. It is imperative that the socket fit the patient intimately for proper suspension and function. The prosthesis must also incorporate a one-way valve. When the patient dons the liner and steps into the socket, air is expelled through a distal valve, creating a hypobaric suction below the seal.

The Seal-In Liner is used on patients with transtibial amputations as well as transfemoral amputations. It can also be used on low to moderately active individuals who need additional cushioning at the distal aspect of the socket, amputees with skin problems, diabetic patients, and individuals with compromised vascular conditions.

Mary Free Bed prosthetists have had excellent success incorporating these liners into their every day practice. Mary Free Bed therapy staff also has positive comments about the liner performance. The liners are extremely durable and easy to use, and at this time, we have had no problems with liner failure. Patients simply invert the liner and roll it onto their limb, much like any other silicone liner. The patient must pay special attention to the location and position of the membrane to ensure proper suspension of the prosthesis. The membrane has to sit correctly around the full circumference of the patient's limb and must not be inverted.

For more information, contact Mary Free Bed Prosthetics at 800-211-4813 or 616-242-0342.

PROSTHETICS – cont.

West Michigan Amputee Coalition

This support group was started by a group of amputees from the Holland area, Holland Hospital, and Mary Free Bed Orthotics and Prosthetics. The group meets monthly in the Holland area to assist persons with limb loss to adjust to life's new circumstances. For information on meeting times, contact co-coordinators Todd Vanderlaan (269) 665-0001 or Dennis Vanderiest (616) 786-0133.

OUTREACH CLINICS PROVIDED BY MARY FREE BED ORTHOTICS, PROSTHETICS AND ORTHOS.E.A.T

Orthotics, Prosthetics, and OrthoS.E.A.T. have fully staffed permanent offices where patients are seen daily. These offices are located in Grand Rapids, Holland and Muskegon. We also provide services through numerous outreach clinics, including living centers and schools, to assist patients who are not ambulatory or, due to work schedules, are unable to schedule a standard appointment. Depending on the patient's special needs, we may also treat patients in their homes.

Our orthotists, prosthetists and seating specialists evaluate patients usually with the assistance of the primary physical or occupational therapist. The orthoses, prosthesis, or wheelchair/insert design is determined. Major fabrication is done at our main labs, followed by fitting appointments. This process allows us to get input from primary care therapists and/or caregivers while maximizing patient convenience and fabrication expertise.

Orthotics and Prosthetics care is provided at the following outreach locations:

River Valley Orthopedics - Daily
Spectrum Health Continuing Care Center – weekly
Big Rapids Satellite Office – weekly
Hastings Satellite Office – weekly
Ottawa Area Schools in Zeeland – bi-weekly
Lincoln School – bi-weekly
Lincoln Developmental Center – bi-weekly
Ken-o-sha School – bi-weekly
Grand Rapids Veterans Facility – bi-weekly

OrthoS.E.A.T. travels to the following outreach locations on a regular basis:

Cadillac
Kalamazoo
Ottawa Area Schools in Zeeland
Lincoln School
Lincoln Developmental Center
Ken-o-sha School
Muskegon Community Mental Health
Spectrum Residential Homes

Other sites included based on patient demand are:

Allegan Developmental Center
Hope Network in Big Rapids
MOISD Educational Center in Big Rapids
Spectrum Health Kent Community Campus
Metro Health Assisted Breathing Center
Seiter Educational Center in Greenville
Ionia County ISD
Mason Lake ISD in Ludington
Brookhaven Medical Care Facility in Muskegon
Muskegon Schools
Shiawassee RESD in Owosso
Clinton County ISD in St. Johns

Along with these locations, we visit area AFC homes and individual homes where patients are homebound.

CONTINUING EDUCATION

Orthotics and Prosthetics

Patrick Nimphie, clinical manager CPO, and other staff plan to attend the American Academy of Orthotists and Prosthetists national meeting in Chicago, IL. The meeting is scheduled for March 2006, and will highlight advanced training in orthotics and prosthetics clinical patient management.

Mark Bennett, CPO and **John Flynn clinical manager, CPO** attended the Ohio Willow Wood Continuing Education Seminar in Ohio in December 2005. The seminar provided clinicians with hands-on experience in techniques promoting comfort, security and performance for prosthetics patients. This course also focused on residual limb volume management and offered additional information in regards to alpha liners, suspension feet and knees. Ohio Willow Wood, a Prosthetic supplier based in Ohio, is one of the main manufacturers of custom silicone liners.

CONTINUING EDUCATION – cont.

Patrick Nimphie, clinical manager CPO, will be attending the MAS Socket Design Course in March 2006. The MAS socket design differs from that of standard ischial containment socket designs in that the ischial tuberosity and part of the ramus, as well as the medial aspect of the ramus, are encapsulated within the medial aspect of the socket brim. This design also allows for a lower anterior medial trim line, to avoid ramal pressure. Since the socket incorporates ischioramal weight bearing principals, the need for gluteal support is eliminated allowing for the exclusion of those tissues from the socket.

John Flynn CPO, Pediatric Orthotist, Becky Walter PTA Pediatric Outpatient Therapist, and Mary Berkenpas MPT Pediatric Outpatient Therapist attended a continuing education seminar entitled, "Pediatric Orthotics - A Team Approach" on January 26 -27, 2006. The session was presented at Rehabilitation Institute of Chicago and covered the latest trends and approaches to the Orthotic and Therapy treatment of children with CP and Spina Bifida.

Rehab Technology Center

Peggy Barbour, OTR and Mary Hamell, COTA recently attended the National Medtrade Conference held in Atlanta, GA. This conference brings together the manufacturers and suppliers of all the latest designs in lower cost home medical equipment. Peggy and Mary received training and exposure to the newest designs in wheelchairs, lift equipment, home access products, and many other medical equipment categories.

Sister Kathryn Mullarkey, FSE, MA, CRC, LPC, ATP recently attended the Michigan Rehabilitation Association Conference. This conference provides training and highlights various Rehabilitation Counseling Services within Michigan. Topics included job accommodations, transitioning from school to work, and funding options for services and/or equipment.

Staff Updates and News

Lindsay Homrich, a board eligible prosthetist here at Mary Free Bed, completed her written examinations in Prosthetics in November 2005. Lindsay took her CPM exam in January 2006. She is currently a staff prosthetist at Mary Free Bed Rehabilitation Hospital and plans to continue her employment as a certified Prosthetist.

We welcome **Ethan Leavitt** and **Stephanie Millis** to the Orthotics department.



Ethan Leavitt continues his orthotic residency and is due to finish in July 2006. Ethan received his Bachelors degree in Orthotics and Prosthetics from the University of Washington.

Photos used with permission.

Stephanie Millis comes to us from Gazelle Sports where she worked for 7 years, the last three as a pedorthist. She coaches adult runners and is a USATF certified coach. Stephanie joined our team as an orthotics assistant. She will be expanding her experience in orthotics to encompass more than shoes and foot orthoses.



Michael Shedd R.T.P. participated in a two week mission trip to Ecuador in January 2006. The trip's focus was to provide amputee patients with prosthetic devices. Michael assisted in the fabrication of the prosthetic devices at an on site laboratory.

New Staff Credentials

Matthew Scholtens, MA, ATP successfully added to his Rehab Engineering background by completing the credentialing requirements for Assistive Technology Practitioner (ATP). Our program now has 3 staff members with ATP credentials.

Brent Tuinstra traveled to Dallas in December for the 2nd section of his national orthotics examination.

Anthony Hill sat for his orthotic technician board exam in Spokane, Washington and is now a registered technician in orthotics (RTO).

Mike Vezikov finished his Orthotic Certificate course at Northwestern University in Chicago, and will be an orthotic resident at Mary Free Bed through 2006.



Staff Contacts:

Orthotics: John Flynn CPO (Clinical Manager 616-459-1810), Rex Brown CO (Pediatrics 616-356-1886), Gina Corazza CO (Plagiocephaly 616-356-1887), Mark Bennett CPO (Scoliosis 616-242-0457), Doug Richardson CO (Spinal Deformities, Brain Injury and Facial Burns 616-242-0315), Becky Meyer CO (Spinal and Pediatrics 616-242-9213), Larry Dubinshak CPed (616-356-1884), Becky DeLongpre CPed (616-356-1894), Stacy Mulder, Assistant (River Valley Orthopedics 616-493-9698).

OrthoS.E.A.T.: Karen Gora (Clinical Manager 616-242-0347), Steve Anderson (Production Supervisor 616-456-4847), Joel Allchin (SLP 616-242-0342), Peggy Barbour (OTR 616-356-1907), Mary Hamell (COTA 616-456-4843), Lisa Newhouse (OTR 616-242-9278), Amy Ortego (OTR 616-242-9289), Matthew Scholtens (Assistive Technology Specialist 616-356-1892).

Prosthetics: Patrick Nimphie CPO (Clinical Manager 616-356-1865), David Firlirk CP (Upper Extremity 616-242-0453), Tony VanEss CP (Pediatrics 616-242-0461), John King CP (Trans Femoral 616-242-9240), Lindsay Homrich (Staff Prosthetist 616-242-0437).

Rehab Technology Center: Karen Gora (Clinical Manager 616-242-0347), Sister Kathryn Mullarkey (Assistive Tech Coordinator 616-242-9253).

Orthotics & Prosthetics Muskegon / Holland Satellites: Mark Porth (Clinical Manager 616-392-6240).