



COMMONWEALTH of VIRGINIA

DEPARTMENT OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

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Nelson Smith
Commissioner

Office of Integrated Health Health & Safety Alert/Information

Part 1: Mobile Rehab Engineering Team Services Health & Safety Alert

Introduction

The Mobile Rehab Engineering (MRE) team was established in 2015 and is part of the Office of Integrated Health Supports Network (OIHSN) at the Virginia Department of Behavioral Health and Developmental Services (DBHDS).

The MRE team mission statement is to provide durable medical equipment (DME) maintenance and repair services to individuals with intellectual and developmental disabilities (IDD) who don't otherwise have these services currently provided in the community.

The services provided by the MRE team are gap services which are funded through the Virginia General Assembly as a direct result of the [Commonwealth of Virginia's Settlement Agreement with the Department of Justice \(DOJ\) in 2012](#).

The MRE team is comprised of mechanical engineers, mechanical rehab technicians, registered nurse care consultants, a physical therapist (PT) and an occupational therapist (OT).

MRE Program Goals

The MRE program has been customized to help meet the needs of individuals with IDD within their community.

The aim of the MRE program is:

- Promote and support community integration of individuals with IDD.
- To reduce risk of bodily injuries due to DME failure.
- Promote and sustain safe use of all DME.
- Provide equal access to DME repair and cleaning services.
- Educate caregivers on the proper care and maintenance of DME.
- Educate caregivers regarding the process of obtaining new DME when needed and/or required.

MRE Team General Program Service Criteria

In order to receive MRE team services an individual:

- Must be diagnosed with an intellectual or developmental disability as defined by [Virginia Code, 37.2-100. Definitions](#); and
- Must have failed to obtain DME repair and/or cleaning services from a DME vendor; and/or
- Must be in need of a customized adaptation to current DME.

The MRE team's on-site services include:

- Safety assessments for most DME.
- Repairs to most DME.
- Pressure washing of washable DME during warm weather months of the year.
- Assessment for customized DME adaptations, when/if needed.

The MRE team off-site services include:

- Construction of customized adaptations to DME when needed/warranted.
- Sewing and/or welding repairs as needed.

You can find an MRE Team Flyer with general information about MRE team services at the following link to share with caregivers, staff, parents or others who provide support to individuals with IDD: [MRE Team Flyer](#)

MRE Team Service Areas

The MRE team has representatives in each of the five DBHDS Regions of the Commonwealth.

- Region 1 is the Central Piedmont area of Virginia.
- Region 2 is the Northern or NOVA area of Virginia.
- Region 3 is the Southwest area of Virginia.
- Region 4 is the South-Central area of Virginia which includes the greater Richmond area.
- Region 5 includes the Tidewater, Middle Peninsula, Northern Neck and Eastern Shore areas of Virginia.

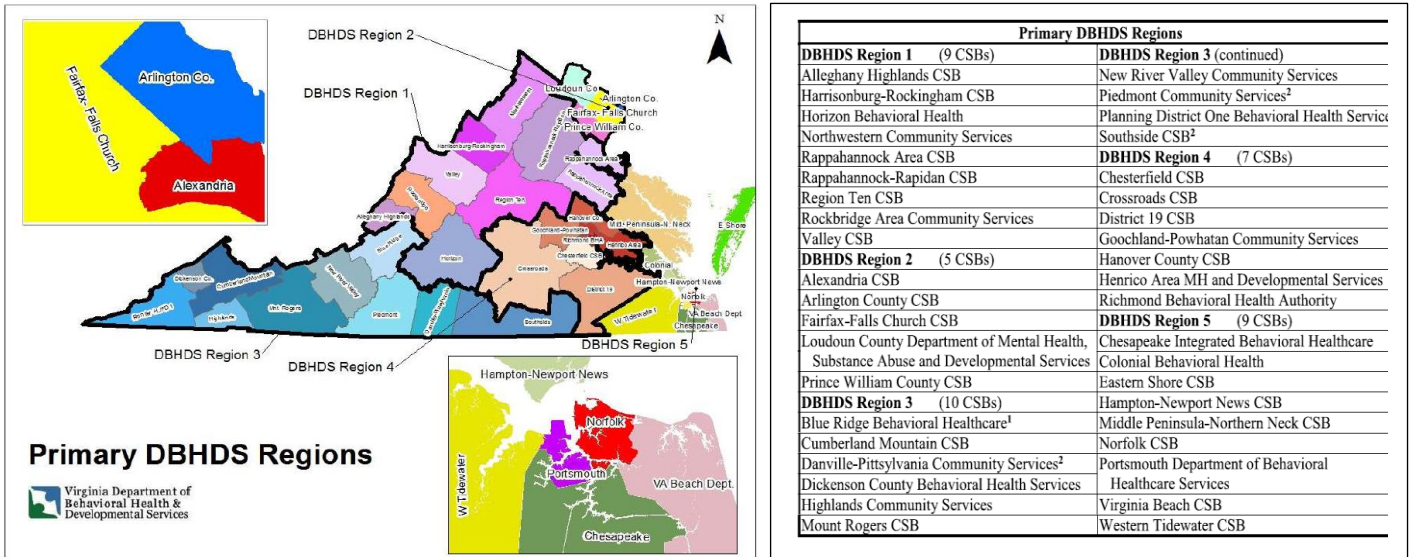
A graphic with all of the Community Services Boards categorized by Region is on the next page.

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The MRE team representatives travel around the Commonwealth and work out of many different sized vehicles, trucks, and vans depending on the repair needs and the community setting. All are employees of the Commonwealth and have state-issued, photo identification badges and are happy to provide you with proof of their identity when asked.



MRE Program Safety Assessments

During a safety assessment, an MRE team representative will thoroughly check each piece of DME for non-working parts, potential weak spots or other issues which require maintenance or repair. They use a specific DME checklist to review all parts of a piece of DME to verify its safety for use by an individual.

MRE Program Repair Services

The MRE team is capable of repairing all makes and models of manual wheelchairs* along with many other types DME.

They can replace and repair parts on:

- Wheelchairs.
- Walkers, rollators.
- Shower chairs and trolleys.
- Standers, gait trainers.
- Toileting chairs.
- Patient lifts.
- Hospital beds.
- Canes.
- Helmets.
- Hand, leg, and foot orthotics/splints.



*** Please note: The MRE team is able to make some small repairs on some types of electric wheelchairs, but not all.**

DME Pressure Washing

Daily, weekly, and monthly cleaning of DME by caregivers improves usable quality and can extend the life of equipment. Caregivers should follow all recommended cleaning instructions from the manufacturer.

The MRE team can provide pressure washing of DME annually between the months of March thru October, weather permitting. The MRE team cannot pressure wash DME during electrical storms, rain, extreme heat, extreme cold, or high wind conditions. They can pressure wash all DME which is washable per manufacturer instructions. No detergents are used during pressure washing, only hot water.



Any community agency which provides services, supports or advocacy to individuals with IDD in Virginia (day programs, group homes, Community Service Boards, schools, charitable organizations, etc.) can fill out a [Request Form for DME Services](#) to schedule a DME pressure washing clinic onsite.



The pressure washing site must have an outdoor water spigot, and an open, level, non-trafficked area for equipment set-up, that does not pose a safety threat to anyone in the community*, the environment** or the MRE Team.

*The MRE Team cannot pressure wash on state-maintained roads or in any way impede traffic flow for drivers.

**The MRE team voluntarily complies with the Virginia Clean Water Act [§ 62.1-44.2](#), which restricts drainage of any wastewater into any body of water (stream, pond, etc.).

Customized Adaptations

The MRE team's mechanical engineers and the OIH physical therapist (PT) working together have the capability to assess an individual's needs and determine if they are a candidate for a custom adaptation.

If the need for a customized adaptation is confirmed, the MRE team together with OIH PTs and OTs will determine if the MRE team has the capability to construct the recommended piece of equipment. If so, an individualized, tailor-made, one-of-a-kind adaptation to meet the individual's needs will be constructed at no charge.

A customized adaptation might be indicated if the individual is experiencing, or has experienced, any of the following while using, or as a result of using, their current, standardized piece of DME:

- Discomfort.
- Skin Breakdown.
- Poor positioning.
- Pain.
- An injury or fall.
- Slippage.



A calf panel for a wheelchair is a supportive piece of equipment designed to attach to the footrests and provide support for the lower legs, especially the calves, to prevent feet from dragging or slipping off the footrests. A calf panel can help an individual keep their feet safely on the footrests which lowers risk of being injured.



This customized pivot board was fabricated to help an individual safely transition from their wheelchair to the commode.



This lightweight, portable set of steps was fabricated to assist and enable a very short-statured individual to safely wash their hands at the sink.

If an individual's needs would be better suited with a new, different or updated piece of equipment, resource information for vendors throughout Virginia will be provided along with instructions on how to schedule an assessment appointment.

(More to come on these topics in Part 2: How to Order a New Wheelchair, Part 3: Wheelchair Maintenance, Safety and Transport, and Part 4: Durable Medical Equipment and Assistive Technology)

DME and Individuals with Intellectual and Developmental Disabilities (IDD)

Properly working and well-fitted DME for individuals with IDD can help promote and support community integration. When an individual's wheelchair isn't working properly it can lead to social isolation (1), missed healthcare appointments, and missed opportunities to socialize and participate in enjoyable activities.

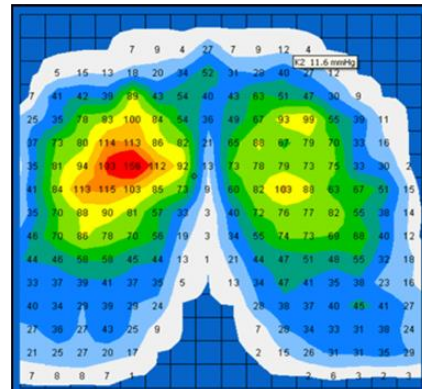
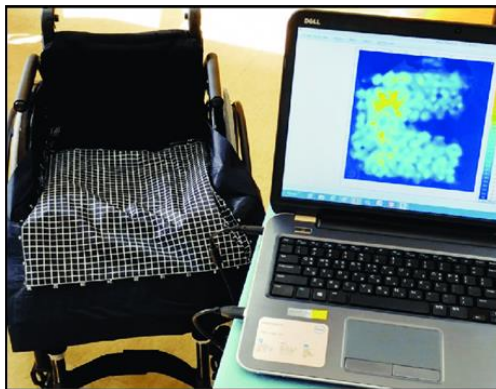
For some individuals, having a non-working wheelchair results in no device to assist or position the individual to even be able to sit up to eat, because they have no other positioning device which enables access to a table.

Due to this, those individuals who use their wheelchair most of the day, every day, should have an alternative positioning/seating device to use when their wheelchair needs maintenance or repairs. There are many alternative seating devices to choose from, however it is best to have the individual assessed by a PT or OT who will recommend the best device to suit the individual's needs. (More to come on this topic in Part 2 & Part 3.)

The use of DME has many benefits for the individual with IDD. DME increases an individual's independence, community participation, social integration, and improves their quality of life (1). DME can also help to restore and enhance functioning for individuals, which in turn promotes health and wellbeing (1).

Pressure Mapping

Pressure mapping is another specialized service offered by the MRE team. Pressure Mapping is an advanced technology which measures the amount of pressure an individual is experiencing from a surface and is typically used during wheelchair assessments.



The system measures the pressure, which is being applied across the area, reviews the distribution of force, then turns the data into a 2D chart on the computer showing the areas of highest contact and pressure. The red and orange colors in the computer-generated picture below, indicate the area where the highest amount of pressure or impact is on the individual's body. The green and blue areas indicate the areas with the lowest pressure or impact (3).

Pressure Mapping is often used as a part of a wheelchair assessment when the individual has a history of pressure injury, skin breakdown or other wounds, and/or if the individual is at high risk of a pressure injury, skin breakdown or another type of wound. Pressure

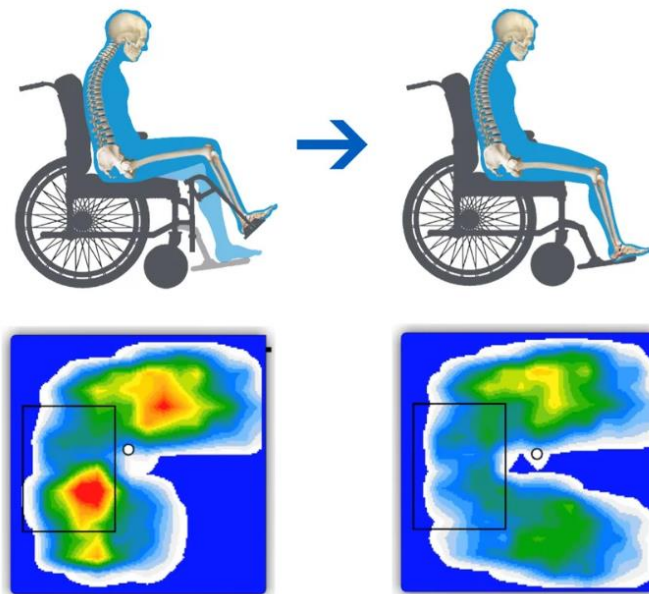
mapping provides an objective view of how gravity and the pressure from the surface is impacting the body of the individual when seated.

Pressure mapping gives the PT an opportunity to try out various cushioning and positioning choices in an attempt to lessen and/or help distribute the pressure more evenly, in order to lower pressure injury risk. Pressure Mapping can also be used to assess an individual's positioning while in bed or in a supine (horizontal, face up) position (2).

Supine



Using pressure mapping can allow the PT to choose from a range of surfaces (cushions, mattresses, etc.) which will distribute the load more evenly and can assist with improved upright (vertical) or sleeping (horizontal) positions (2).



“An ounce of prevention is worth a pound of cure” is the primary reason our PT and MRE team have pressure mapping devices at their disposal. While not everyone needs to have a pressure mapping assessment performed, having the technology available for those individuals who are at high risk for skin breakdown and pressure injuries (or those who have a history of them) helps promote and sustain better health outcomes.

Special Requests for Community Events

The MRE team is sometimes asked to participate in a community event which might occur on the weekends. Community events are considered on a case-by-case basis which require the MRE team to work on a Saturday or an extended weekday.

The MRE Team currently has two 12' x 12' canopies and four folding tables for these events. The MRE team can also bring handouts about the MRE team and other programs within the Office of Integrated Health.



Services Not Performed by MRE

- Assessments for new Durable Medical Equipment.
- Replacement of power wheelchair motors, wheels, joysticks, batteries or seating systems.
- Replacement of patient lift batteries, chargers or slings.
- Repairs on wheelchair ramps, or wheelchair elevators.
- Installment of wheelchair tie-downs and repairs on wheelchair accessible vehicles or vehicles lift systems.
- Assessments for new adaptive communication devices, adaptive software for computers, home environmental controls, hearing devices or vision devices.

How to Request MRE Services

If an individual with IDD meets the program requirements previously mentioned, you can request MRE team services (safety assessments, power washing, repairs, clinics and/or PT consultation, OT consultation, wound care consultation, or technical assistance) select the form below which best suits the individual's needs.

[Request Form For DME Services](#)

[Request Form for OT/PT/Technical Assistance/Wound Care](#)

Use the [Request Form For DME Services](#) to request individual or agency-wide DME services for:

- DME repairs; or
- DME safety assessments ; or
- DME pressure washing.

This section at the bottom of the 2nd page of the [Request Form For DME Services](#) is the section you will fill in for agency-wide services (services for multiple individuals at one site).

For Multiple Individuals, please fill out the following information *(Please select all that apply)*

Pressure Washing Clinic Safety Assessment/Repair Clinic

For Pressure Washing Requests Only: Do you have an outdoor spigot to accommodate? Yes No

Approximate Number of Pieces of Equipment: _____ **(Example: 25-30)**

Use the [Request Form for OT/PT/Technical Assistance/Wound Care](#) to request Technical Assistance, OT, PT, or Wound Care Consultations.

Please fill out the forms in their entirety whenever possible. If you are unsure about information or need help, please contact your Region's RNCC who will be able to assist you. If you do not know who your Regional RNCC is, please email: communitynursing@dbhds.virginia.gov. Please fill in as much information as possible. Filling in as much information as possible helps the MRE team members stock their vehicles with the parts and tools needed to complete the maintenance and repair needs required for each service request.


Once you have done filled in as much information as possible, please download and save the form to your computer and then email it back to MRETeam@dbhds.virginia.gov.

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When the completed request form has been received, it will be processed. Typically, within 3 to 7 days, a member of the MRE Team will contact you to schedule an appointment or discuss next steps.

Request Form for DME Services


		Request for Durable Medical Equipment Services	
<p>Form Instructions: This is a fillable PDF form and can be filled out electronically utilizing Adobe Reader/Acrobat. This form must be filled out completely. Incomplete forms may be returned to the Requester. Return this form to MRETeam@dbhds.virginia.gov. Forms will ONLY be accepted by email unless prior arrangements have been made with MRE Management.</p>			
Date of Request:		Date of Birth:	
Individual or Facility Name:		Preferred Name:	
<p>This individual has an intellectual or developmental disability as defined by the VA Code? <input type="radio"/> Yes <input type="radio"/> No</p> <p>Does the individual have Medicaid? <input type="radio"/> Yes <input type="radio"/> No Medicaid Number: _____</p> <p>Does the individual have a waiver? <input type="radio"/> Yes <input type="radio"/> No Waiver Type: _____</p> <p>Have you contacted your local DME for your request? <input type="radio"/> Yes <input type="radio"/> No Company Name: _____</p> <p>What were the barriers that hindered the DME Company from assisting you? _____</p>			
Indicate individual's type of residence: <input type="radio"/> Family Home <input type="radio"/> Group Home <input type="radio"/> ICF			
Name of Group Home/ICF (if applicable): _____			
Street Address:		Apt/Suite:	
City/Town:		Zip Code:	
Group Home Street Address (if different from above):		Apt/Suite:	
DAY SUPPORT INFORMATION			
Does the individual attend a Day Program? <input type="radio"/> Yes <input type="radio"/> No			
Day Program Name: _____			
Street Address: _____			
City/Town:		Zip Code:	
Days and Hours of Attendance: _____			
1			
Form 101 - 5.2023			
PREFERRED LOCATION OF SERVICE <input type="checkbox"/> Group Home <input type="checkbox"/> ICF <input type="checkbox"/> Day Support			
REQUESTOR INFORMATION			
Requestor Name: _____			
Requestor Representative: _____			
Requestor Phone: _____		Email: _____	
SCHEDULING CONTACT INFORMATION			
Scheduling Contact Name: _____			
Scheduling Contact Phone: _____		Email: _____	
<i>(if all that apply)</i>			
Assessment <input type="checkbox"/> Pressure Washing <input type="checkbox"/> Custom Adaptation			
Requests Only: Do you have an outdoor spigot to accommodate? <input type="radio"/> Yes <input type="radio"/> No			
Type of service below.			
Equipment Type: _____		Model: _____	
Make/Brand Name: _____		Description of Problem/Consult Needs: _____	
_____		_____	
_____		_____	
For Multiple Individuals, please fill out the following information (Please select all that apply)			
<input type="checkbox"/> Pressure Washing Clinic <input type="checkbox"/> Safety Assessment/Repair Clinic			
For Pressure Washing Requests Only: Do you have an outdoor spigot to accommodate? <input type="radio"/> Yes <input type="radio"/> No			
Approximate Number of Pieces of Equipment: _____ (Example: 25-30)			
If interested in a Safety Assessment Clinic or Pressure Washing Clinic, please email MRETeam@dbhds.virginia.gov .			
2			
CLEAR FORM			
Form 101 - 4.2024			

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Request Form for OT/PT/Technical Assistance/Wound Care

 <p>Virginia Department of Behavioral Health & Developmental Services</p>	<p>Physical Therapist/Occupational Therapist/Technical Assistance</p>
<p>Form Instructions: This is a fillable PDF form and can be filled out electronically utilizing Adobe Reader/Acrobat. This form must be filled out completely. Incomplete forms may be returned to the Requester. Return this form to MRETeam@dbhds.virginia.gov. Forms will ONLY be accepted by email unless prior arrangements have been made with MRE Management.</p>	
CLIENT INFORMATION	
Indicate individual's type of residence: <input type="checkbox"/> Family Home <input type="checkbox"/> Group Home <input type="checkbox"/> ICF <input type="checkbox"/> Apartment	
Name of Individual: _____	
Street Address: _____	Phone: _____
City/Town: _____	Zip Code: _____
Email: _____	
REQUEST TYPE	
Request Type (Please select all that apply)	
<input type="checkbox"/> PT Consult <input type="checkbox"/> OT Consult <input type="checkbox"/> Technical Assistance Consult <input type="checkbox"/> Wound Care	
MEDICAL HISTORY	
Diagnosis: _____	

Any recent changes in Health Status? (stroke, hospitalizations, surgeries, etc.) <input type="radio"/> Yes <input type="radio"/> No	
If so, what kind? _____	

Is the individual Ambulatory or Non-Ambulatory? <input type="radio"/> Ambulatory <input type="radio"/> Non-Ambulatory	
Ambulatory Foot Orthotics? <input type="radio"/> Yes <input type="radio"/> No	Hand Splints? <input type="radio"/> Yes <input type="radio"/> No
Wheelchair Type: <input type="radio"/> Manual <input type="radio"/> Power	Wheelchair Brand: _____
Does the wheelchair Tilt? <input type="radio"/> Yes <input type="radio"/> No	Wheelchair Ramp? <input type="radio"/> Yes <input type="radio"/> No
Stairs? <input type="radio"/> Yes <input type="radio"/> No	Stair or Chair lift? <input type="radio"/> Yes <input type="radio"/> No
Patient Lift? <input type="radio"/> Yes <input type="radio"/> No If yes, is the lift <input type="radio"/> Electric <input type="radio"/> Manual	
Does the individual ride in an Accessible vehicle while seated in a wheelchair? <input type="radio"/> Yes <input type="radio"/> No	
SEATING ASSESSMENT	
Date of Last Seating Assessment: _____	
Where was this assessment conducted? _____	
What DME Vendor conducted this assessment? _____	
Are there any issues with the wheelchair? _____	

<input type="button" value="CLEAR FORM"/> <input type="button" value="SUBMIT FORM"/>	
1	Form 101 PT/OT - 2023

Resources

- [OIH Website](#)
- [OIH Community Nursing and Interdisciplinary Team](#)
- [OIH Dental](#)
- [OIH Mobile Rehab Engineering](#)

References

1. [Friedman, C. \(2024, July\). Specialized medical equipment for people with intellectual and developmental disabilities allocated in Home and Community Based Services. *Journal of Policy and Practice in Intellectual Disabilities*, 21\(4\), e12525, 1-7. DOI: 10.1111/jppi.12525](#)
2. [Endsjo, A. \(2022, July\). Pressure mapping: A method to investigate persistent pressure injury. *Permobil Blog*. \[Internet\]](#)
3. [XSENSOR Marketing. \(2022, December\). What are pressure mapping sensors & what can you do with them? \[Internet\]](#)

To the best of the OIHSN Nursing Team's knowledge the information contained within this alert is current and accurate. If the reader discovers any broken or inactive hyperlinks, typographical errors, or out-of-date content please send email to communitynursing@dbhds.virginia.gov to include the title of the Health & Safety alert with specifics details of concern.

Mobile Rehab Engineering (MRE) Quiz/Evaluation

Name: _____ Date: _____

Email Address: _____

Quiz:

1. The Mobile Rehab Engineering (MRE) team was established in what year?
 - a. 2012.
 - b. 2016.
 - c. 2015.
 - d. 2013.
2. The MRE mission statement is to:
 - a. To provide durable medical equipment (DME) maintenance and repair.
 - b. To service individuals with intellectual and developmental disabilities.
 - c. Who don't otherwise have the services in the community.
 - d. All of the above.
3. Staff who make up the MRE team include...
 - a. Mechanical engineers.
 - b. Mechanical rehab technicians.
 - c. registered nurse care consultants.
 - d. A physical therapist (PT).
 - e. All of the above.
4. The aim of the MRE team is to:
 - a. Promote and support community integration of individuals with IDD.
 - b. Promote and sustain safe use of all DME.
 - c. Educate caregivers on the proper care and maintenance of DME.
 - d. All of the above.
5. The MRE team's on-site services include:
 - a. Safety assessments for most DME.
 - b. Repairs to most DME.
 - c. Construction of customized adaptations to DME when needed/warranted.
 - d. Sewing and/or welding repairs as needed.
 - e. A & B.
6. The MRE team does pressure washing between:

<ol style="list-style-type: none">a. April thru Decemberb. October thru March	<ol style="list-style-type: none">c. January thru Decemberd. March thru October
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7. The MRE team creates custom adaptation by:
 - a. Totally guessing at what the individual needs.
 - b. Working together with the OIH RNCC team and the OIH Dental team.
 - c. A collaboration between the MRE team's mechanical engineers and the OIH physical therapist (PT).
 - d. Working with the DME company's representative.

Mobile Rehab Engineering (MRE) Quiz/Evaluation

Name: _____ Date: _____

Email Address: _____

8. Properly working and well-fitted DME for individuals with IDD can...
 - a. Lead to social isolation.
 - b. Help promote and support community integration.
 - c. Lead to missed healthcare appointments.
 - d. Lead to missed opportunities to socialize.
9. Pressure mapping...
 - a. Reviews the distribution of force from a surface.
 - b. Turns the data into a 2D computer chart.
 - c. Is a service offered by the MRE team.
 - d. All of the above.
10. Services the MRE team does NOT perform are...
 - a. Replacement of patient lift batteries, chargers or slings.
 - b. Assessments for new adaptive communication devices, adaptive software for computers, home environmental controls, hearing devices or vision devices.
 - c. Assessments for new Durable Medical Equipment.
 - d. All of the above.

Evaluation:

1. Was the information presented in this Health & Safety Alert helpful?
 - a. Yes
 - b. No
2. Will you use this Health & Safety Alert information to train other staff?
 - a. Yes
 - b. No
3. Will you attend the Regional Nursing Meeting to obtain the Continuing Nursing Education (CNE) unit for this Health & Safety Alert?
 - a. Yes
 - b. Yes, but I would have attended the meeting regardless
 - c. No
 - d. No, I am not a nurse
4. What topic(s) would you like to have presented in a Health & Safety Alert for CNE's?

5. Other Comments:
