

# CAPABILITY STATEMENT



HDmedical.org

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## EXERSIDES® REFRAINT®: THE WRIST RESTRAINT REPLACEMENT

Critical Care physician Marie T. Pavini founded HDmedical with the EXERSIDES® REFRAINT®, a safe mobilizing alternative to wrist/mitt restraints for patients with confusion, cognitive difficulties or PTS.

Dr. Pavini knew there was something inherently wrong with replacing a smaller patient harm with a larger one. At one time, securing vital medical equipment to a patient required restraint and sedation, causing delirium, muscle wasting, hypotension, and PTSD. Return to function was markedly prolonged both acutely and long-term. Now, by securing tubes and lines in a way that allows safe freedom of movement, patients and casualties require much less or no sedation allowing faster transition to improved cognition, better opportunity for assessment and treatment of pain, brain-muscle connection from the earliest moment, and faster rehabilitation and return to duty. Offering 'Least Restrictive Intervention', the EXERSIDES® REFRAINT®, a multi-level protective Physical and Chemical Restraint Alternative for use from ICU to ward to rehab to home is designed to preserve physical and cognitive function. Get them back out there faster and better!

**DUNS**  
080649279

**CAGE**  
7V3G0

**UEI**  
DHRMCMVMLND7

### CORE COMPETENCIES

#### Physical Restraint Alternative

##### Applications

- Trauma
- Neuro-rehab
- Med-evac transport
- Field Hospitals
- Critically Ill
- Intubated
- Tracheostomies
- Feeding tubes
- Post-traumatic stress
- Delirium
- Confused
- Dementia
- Nursing Home
- Hospice

### DIFFERENTIATORS

- **Protects vital tubes from moving hand**
- **Mitigates risk of post-traumatic stress by:**
  - Early Mobility
  - Sedation Minimization
  - Freedom
  - More respect
- **Multiple levels: liberal to strict**
- **Wrist/hand visible and safely available for:**
  - IV placement and integrity
  - Arterial lines
  - Pulse oximeters
  - Capillary refill & Glucose checks
  - Holding hands and objects
- **Mitigates muscle wasting**
- **Mitigates risk of pressure ulcers**
- **CMS compliance: Least Restrictive Intervention**

**NAICS**  
33911  
339112  
339113

**WOSB**



**Hubzone**



### PAST PERFORMANCE

- 2016: \$25k NIH Rehabilitation sub-award grant for prototype R&D
- 2017: Pilot Study: Single-center clinical trial
- 2018-2022: \$1.86M NIH award for multi-site Phase I+II clinical trials
- 2019: FDA registered. ISO-13485 compliance. Allowance of Patents.
- 2020: \$375k NIH Administrative Supplement award - manufacturing
- 2021: \$3.42M NIH CRP award for commercialization
- 2023: Launch - Robley Rex VA hospital; Mayo Clinic, VSU Nursing School