Gaylord is the only facility in Connecticut to have the Ekso™ bionic exoskeleton. The Ekso™ is a portable, adjustable bionic suit designed to help patients with lower-extremity paralysis or weakness, resulting from a spinal cord injury, stroke, or other neurologic condition, to stand and walk. The patient provides balance and proper body positioning while the Ekso™ allows the user to walk with a reciprocal gait. A physical therapist with special training uses the control pad to program the desired walking parameters, such as gait length and speed.

The Apple iPad® is used to provide assistance with communication and organization. Patients are taught to use applications that help with cognitive and functional capabilities. With this technology patients can Skype™ and keep in touch with family and friends. Our staff helps patients to use the best apps to maximize their time and effort.

Functional Electrical Stimulation (FES) is a rehabilitation technique that uses pulses of electrical current to stimulate peripheral nerves evoking muscle contractions and patterned muscle activity. Gaylord uses the RT300 FES cycle, which can create patterned movement in the arms, legs and trunk.

Dragon® Dictation recognizes and transcribes users’ words at lightning speed, giving patients the flexibility to dictate for any situation and making it easier for them communicate. Dragon allows patients with upper extremity weakness to access the Internet, write emails, and pay bills, while in the hospital or at home.
The Walk Aide® is a device that helps prevent “foot drop,” which is the inability to pick up the foot while walking. After a neurological event, it is common to have weakness in the leg, foot and ankle, which can result in foot drop. The small, self-contained device uses a switch to trigger electrical stimulation of the muscles that lift the foot and doesn’t require orthopedic or special shoes while in use.

The SaeboMAS™ dynamic mobile arm support system. It is a zero gravity upper extremity device specifically designed to facilitate and challenge the weakened shoulder and elbow during functional tasks and exercise drills.

The Bioness LS-300® is a computer based, wireless, sensor driven electronic stimulation unit used to control ankle and knee motion and stability during walking. This technology is proven to increase stability, speed and confidence during walking, while decreasing the number of falls.

The Bioness H200® is a wireless unit that uses functional electrical stimulation (FES) to restore or improve hand grasp. The unit stimulates muscle movements that emulate natural voluntary movements, which strengthens and retrains muscles, reducing spasms and improving the ability to perform activities of daily living, such as eating or dressing.

SmartWheel provides an in-depth assessment of the users’ propulsion techniques. A physical therapist with Professional Certification for Assistive Technology provides education and or modifications to the wheelchair to facilitate the most efficient propulsion style to minimize risk for repetitive stress injuries. Gaylord is the only facility in Connecticut with SmartWheel.
Pressure Mapping

Pressure mapping is a computerized tool for assessing pressure distribution on a seating surface in order to prevent wounds associated with prolonged sitting. If indicated, alternate support surfaces can then be evaluated to establish the most appropriate surface for pressure distribution and pressure relief in order to preserve skin integrity.

Environmental Control Technology

Environmental control devices enable patients of all abilities to completely control the equipment and systems in their room. A range of devices help people who lack full mobility to answer telephones and use the call bell, while also operating a host of electronic devices, from lamps and televisions to motorized chairs and beds. Adaptive phones allow for switch access or voice-activated operation allowing patients without the use of hand function to talk to their loved ones.

Spasticity Management using a Baclofen Pump

If conventional spasticity management (stretching, oral medication, splinting) fails, a baclofen pump may be an option. Gaylord was one of the first Spinal Cord Injury Model Centers in the country to use the intrathecal baclofen pump. We can provide a comprehensive evaluation that can determine if this technology is appropriate for a patient. Following placement of the pump, our physiatrists monitor the implanted device to make dose adjustments and manage medication refills.

LiteGait® (Partial Weight Supported Walking Therapy)

The LiteGait® is a weight supported harness system that is used in therapy to assist patients following a spinal cord injury. This system helps patients to re-establish normal walking patterns, while strengthening the core muscles of the trunk and abdomen, which are needed for sitting and standing.

MYOMO™

MYOMO™ is used to address residual arm weakness. It is designed to improve arm function and increase independence in patients following a spinal cord injury. The device works by creating muscle memory through repetition of exercises, enabling patients to incorporate the affected arm into activities of daily living such as eating, grooming and performing light household chores.