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Rehab Without Walls® a Gentiva® company

alternatives

rehabilitation outcomes grow up

and Rehab Without Walls takes on a leadership role

In today's world, outcomes matter.

With health care, they answer the most basic of questions: Does the intervention work? How well? And for how long? Outcomes can identify best practices, help with process improvement, influence insurance coverage, determine treatment strategies and provide objective assessment of protocols.

In a dynamic, outcome-oriented field like rehabilitation, it seems that having a standardized outcome measurement system among programs would be a given. However, the majority of rehabilitation providers use a homegrown tool. And until recently, Rehab Without Walls was one of them.

"Our homegrown tool measured our efficacy well, but wasn't considered statistically valid," says Shannon Swick, Area Vice President, Rehab Without Walls. "The same is true with many rehabilitation providers across the country—able to collect good information but unable to compare in a meaningful way. That may be fine for an individual company, but it is not good for the industry as a whole."

That's why three years ago Swick, along with Irwin Altman, Ph.D., Area Executive Director, Rehab Without Walls, Phoenix, and other committee members, took on the daunting task of implementing new outcomes measurement systems for Rehab Without Walls.

It was an arduous process that involved extensive research and analysis, the creation of three pilot sites across the country, software upgrades, countless tweaks to the data reporting and recording process, and extensive training of Rehab Without Walls team members at all locations. The end result is a selection of a series of tools that are statistically valid and that allow comparisons among Rehab Without Walls locations as well as with other rehabilitation programs. The tools also let Rehab Without Walls do things it wasn't able to do before such as publish in peer review journals and present at national conferences.

Not Reinventing the Wheel

The ultimate goal for Rehab Without Walls' outcome-focused approach to treatment is to return clients to productive lives.

According to Dr. Altman, "We approached the process by investigating which tools already existed that might reflect the types of data we wanted to record, how we needed to record it and which type of settings they could be used in. Then we identified the ones we wanted to target and test. After extensive study, we ultimately chose the Satisfaction With Life Scale, the Supervision Rating Scale, the Mayo Portland Adaptability Inventory 4 (MPAI 4) and the Craig Handicap Assessment and Reporting Technique Short Form (CHART-SF)."

Why so many different tools? "Because different diagnoses call for different strategies and, as a result, the measurements that indicate effectiveness may vary widely," says Dr. Altman. "In the long run, this gives us more accuracy. For example, the Mayo Portland Adaptability Inventory measures outcomes with a variety of diagnoses including traumatic brain injury (TBI) and the CHART-SF tracks spinal cord injury (SCI) cases."

Rehab Without Walls actually has a history with the MPAI. It began collecting data with this tool in 2001 at three pilot sites and quickly developed a relationship with James F. Malec, Ph.D. Dr. Malec incorporated

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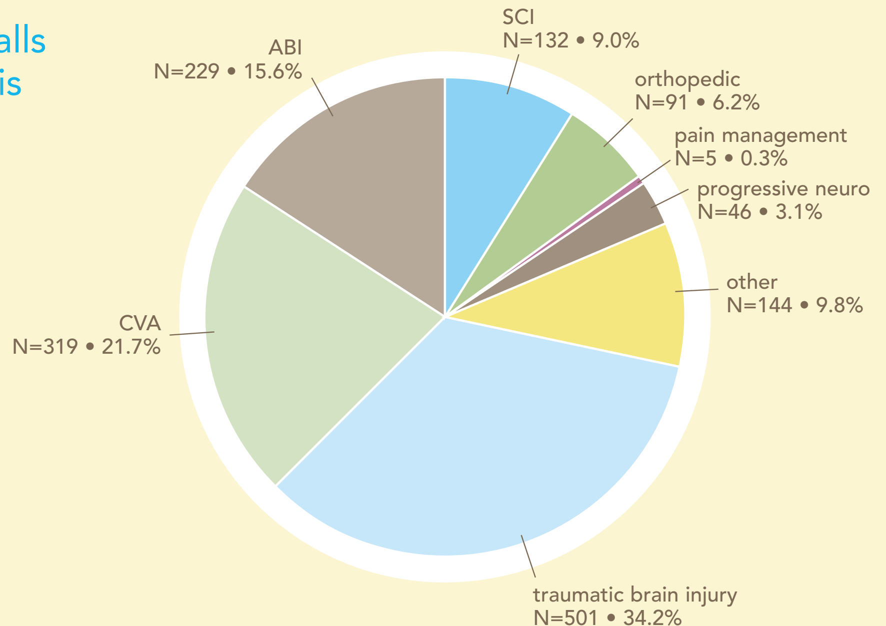


Rehab Without Walls' data and feedback into the tool's newest version, version 4, which debuted in 2005. "Dr. Malec claims our input helped make the tool better, especially with the normative data," says Dr. Altman. The Rehab Without Walls contribution also was mentioned in an article Dr. Malec co-authored in 2005 for the *Journal of Head Trauma Rehabilitation.*

A Shift in Focus

The timing of Rehab Without Walls' massive overhaul of its outcomes measurement tools couldn't have come at a better time. "There has been a shift among rehabilitation program providers from a competitive to a collaborative model," observes Swick. "As insurance coverage for catastrophic events such as TBI is dwindling, we need to be able show why rehabilitation for TBI is so important. Clear, consistent and measurable outcomes can help do that. They are more critical to our industry than ever before."

"We need to be able show why rehabilitation for TBI is so important. Clear, consistent and measurable outcomes can help do that."

The Brain Injury Association of America is currently putting together a brain injury council of leading rehabilitation providers across the country and Rehab Without Walls has been invited to participate. "We'll be working to get our data out there in a new way," says Swick.

Adds Dr. Altman, "Currently, we have more data in the MPAI than anyone else, and from it we will be able to create the largest database for home and community rehabilitation in the world. This puts us in a leadership position for setting the bar for the industry; it's a role we are happy to take on."

A Closer Look at Why Outcomes Matter

The Rehab Without Walls outcomes measures involve collecting data from clients at four critical points in the treatment process: admission, discharge, three-months post-discharge and one-year post-discharge. This provides so much more than simply a before-and-after picture. It also shows the durability of the outcomes—which is the rehabilitation equivalent of a home run. The more durable the outcomes, the better the client's quality of life, the fewer emergency room visits and rehospitalizations, and the better the return on the time, money and other resources invested in the client.

"This is extremely important to insurance companies—they want to see results from their investment in this very intensive process—but it is also important to all the other key people," says Swick. "For patients and families, outcome information gives them concrete information on progress, especially when the gains may seem small or the patient's own self-awareness may be impaired. It also can serve as a motivating tool. For doctors, outcomes give them accurate, functional information on their patient's status. This, in turn, allows them to make critical decisions such as whether to continue with a particular intervention."

The amount of information that the outcomes tools offer allow Rehab Without Walls to view its programs with a more objective eye as well. "We can see which interventions are most effective and the areas where clients consistently score lower or higher, then make adjustments," says Swick.

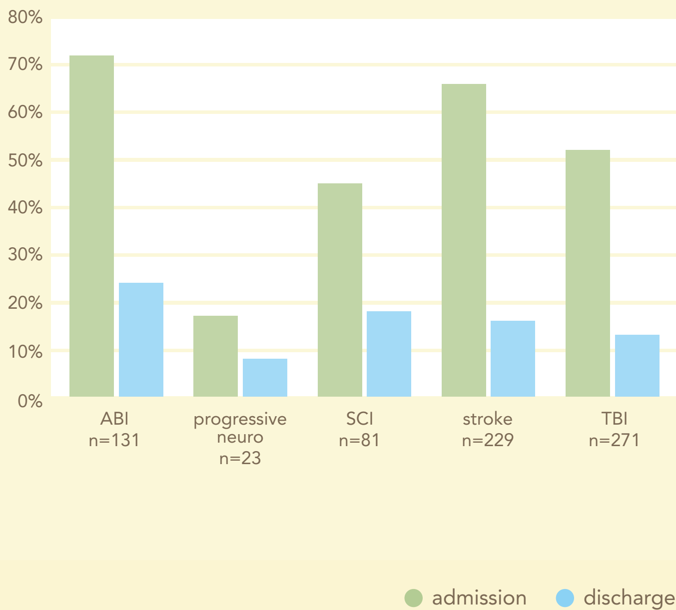
"In addition," adds Dr. Altman, "as we get more efficient with data collection we can give feedback to individual patients, patients by diagnoses and even the entire division. Once you have reliable and valid data, the possibilities are endless." ●

new outcomes tools show measurable results

The charts on this page show clients who completed the course of treatment with Rehab Without Walls in 2005 and 2006. The total number of clients may vary due to the fact that only clients with complete admission and discharge data sets were included. Clients who ended treatment early or clients with incomplete data sets were not included.

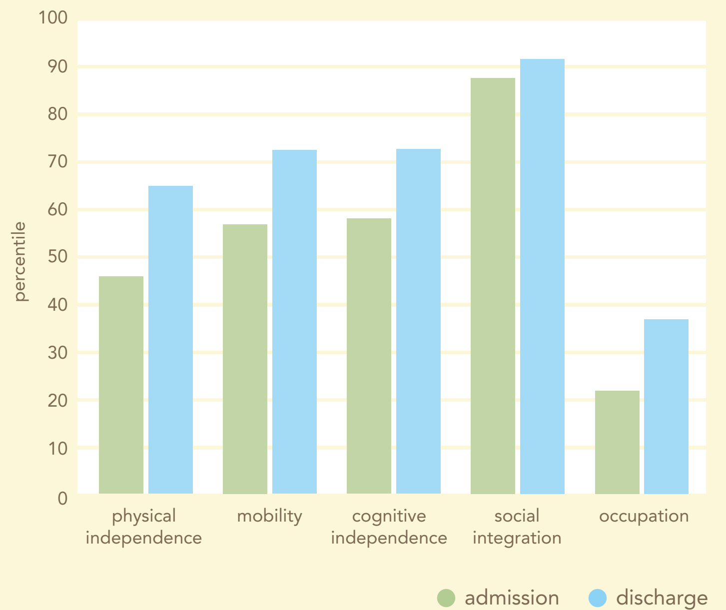
Supervision Rating Scale (SRS)

require 24 hour supervision



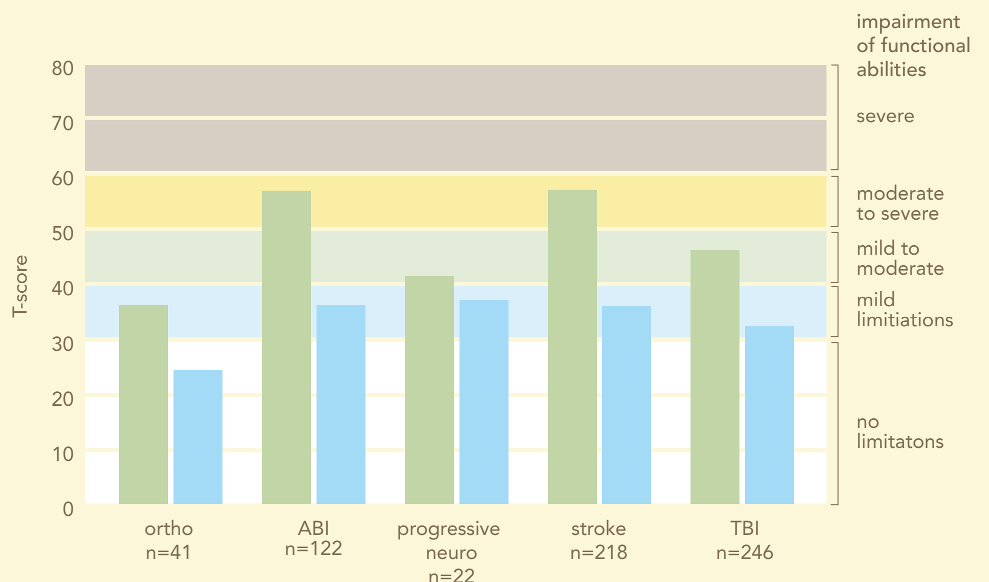
Craig Handicap Assessment & Reporting Technique Short Form (CHART-SF)

spinal cord outcomes



Mayo Portland Adaptability Inventory 4 (MPAI 4)

total score admit to discharge



admission discharge

outcomes in action

How does the Rehab Without Walls treatment team use the outcomes measures on a day-to-day basis? And how do our outcomes measures affect the rehabilitation process for each client? For every case, these measures give team members the tools to map progress, improve care, motivate the client and quantify success. Using one case study as an example, the next few pages will show how Rehab Without Walls puts outcomes into action.

case study

jenica's story

Background: One way to describe the status of Phoenix-area resident Jenica G. when she was admitted to Rehab Without Walls on August 27, 2007, was poor. Nineteen-year-old Jenica had experienced a severe and extremely rare drug reaction—officially called toxic leukoencephalopathy—that temporarily shut down her body systems and ultimately left her needing 24-hour supervision. "Jenica was extremely weakened," says Karen Schwarz, the occupational therapist on the case. "She couldn't hold her head up or use her arms; she was wheelchair-bound and unable to perform any activities of daily living. In addition, her speech was impaired, and she had some cognitive deficits."

Rehabilitation Needs: As Jenica describes it, "I couldn't do anything for myself." Her biggest challenge was severe fatigue and weakness, especially in her arms. As a result, Jenica needed daily rehabilitation therapy by the Rehab Without Walls team (consisting of an occupational therapist, physical therapist, speech language pathologist, social worker, neuropsychologist, therapeutic recreation specialist and clinical coordinator) to gradually build her strength and endurance. Her goal at the outset was clear: to fully return to an active life, which included walking, performing activities of daily living (ADLs), returning to work and going back to school.

The Rehabilitation Process: Jenica's daily routine focused on trunk/core control and strengthening, grip and coordination exercises, light weights for her arms and legs, walking with the aid of a walker and an assistant, and speech and breath control work. Because of her weakened condition, she performed some of the exercises while laying down until she could support her body properly. "At first it was exhausting," recalls Jenica. "I could only do an hour of physical therapy a day—by the end I was able to do two to three hours—and I needed to take a nap every afternoon." Despite this, says Schwarz, Jenica never gave up. "She was awesome in how hard she worked; she was an inspiration to both us and her family." As rehabilitation progressed, Jenica graduated to community outings including going to a local swimming pool and visiting the mall and grocery store. Later, as she got closer to discharge, she had several sessions at the Arizona Technology Assistance Program, which has a variety of adaptive equipment, including special computers and keyboards. This helped Jenica prepare for return to school.

Recovery and Results: Jenica was discharged from Phoenix Rehab Without Walls in May of 2008. Today, as an active 20-year-old, she walks on her own, talks without impairment, and even though she still lives at home, is fully independent. She is now working at a day care facility and studying psychology at a local community college. "There is nothing I can't do," says Jenica. She sees her Rehab Without Walls experience as life-changing, not only because of her physical recovery, but also because of the clarity it gave her. "The people at Rehab Without Walls really believed in me, and that made all the difference. I now can put my life into perspective, and I don't take anything for granted anymore. I now know how I want to spend the rest of my life—helping people—and for that I thank Rehab Without Walls."

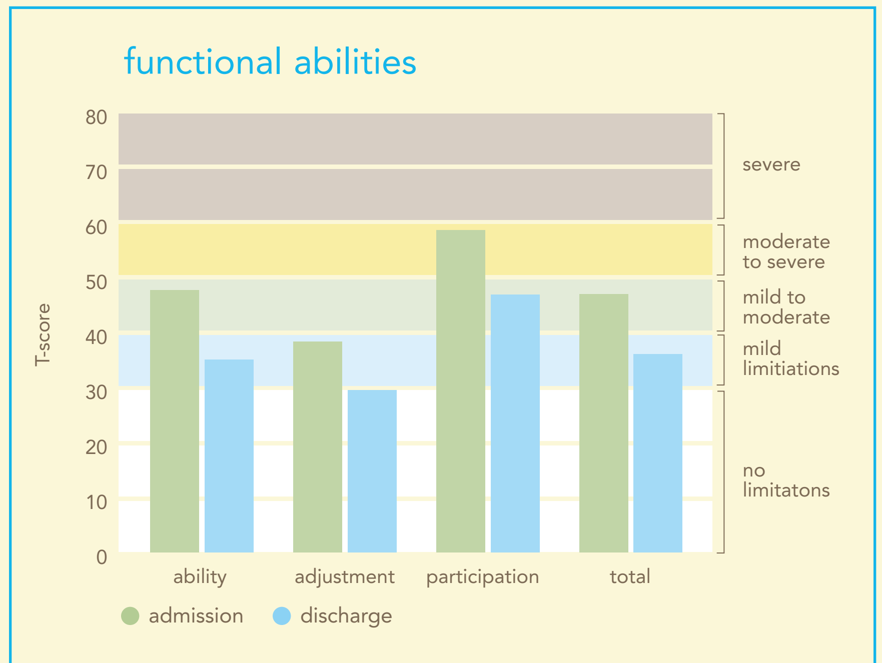
measuring client status

The primary goal for measuring and tracking outcomes is to assess the overall effectiveness of our program for our clients as a whole. However, at Rehab Without Walls, outcomes data is also used to measure and report individual patient progress. All treatment plans include a comprehensive list of strengths and barriers based on the scoring of all items from the Mayo Portland Adaptability Inventory 4. Following is an excerpt from Jenica's discharge report indicating changes in her status relative to those items from admission to discharge.

Item Being Assessed	Admission Status • August 2007	Discharge Status • May 2008
Mobility due to:		
Balance	• Profoundly impaired—standing • Moderately to severely impaired—sitting	• Within normal to functional limits static bilateral stance • Within normal limits sitting • Moderately to severely impaired dynamic balance with visual input • Severely to profoundly impaired dynamic balance without visual input.
Strength	• Severely to profoundly impaired—trunk • Mildly to moderately impaired—lower extremities	• Within functional limits to moderately decreased trunk and lower extremities.
Range of motion	• Mildly impaired—bilateral ankle dorsiflexion • Within functional limits except bilateral ankle	• Mild decrease in left heel cord flexibility • Within functional limits except right ankle
Coordination/motor control	• Severely impaired	• Moderately impaired, improving
Functional mobility	• Minimal assistance—applying wheelchair brakes • Contact-guard to moderate assistance—bed mobility • Severely impaired—ambulation • Maximum assistance—transfers • Dependent—wheelchair mobility, negotiating environmental barriers	• Independent—applying wheelchair brakes • Independent—bed mobility • Contact-guard to standby assistance for ambulation • Independent with transfers • Independent—wheelchair mobility, negotiating environmental barriers
Use of hands due to strength	• Moderately impaired—bilateral upper extremity strength	• Bilateral upper extremity strength—within normal limits
Motor speech	• Mildly to moderately dysarthric	• Generally within functional limits • Minimally to mildly impaired when fatigued
Verbal communication	• Moderately impaired—fluency	• Average for semantic fluency • Mildly impaired for phonemic fluency
Attention/concentration	• Average—sustained (in quiet environments), alternating, working memory • Moderately impaired—speed of processing	• Average—sustained (in quiet environments), alternating, working memory • Mildly impaired—speed of processing, improving
Fatigue	• Severe	• Moderate, improving
Impaired self-awareness	• Low-average to mild	• Functional
Family/significant relationship	• Mild levels of stress	• Average
Initiation	• Low-average to mildly impaired	• Normal
Leisure and recreational activities	• Severely restricted	• Mildly restricted; going on more outings with parents
Self-care	• Maximum assistance with 2 people—toileting • Maximum assistance—bathing, dressing	• Independent with toileting • Stand-by assistance—bathing, dressing • Able to independently don socks and slip-on shoes with set-up and enough time
Residence	• Total assistance required—homemaking, meal preparation, community skills	• Mild to moderate assistance required—homemaking, meal preparation, community skills

assessing client outcomes

While the table on the previous page is a partial list of strengths and barriers utilized in the treatment plan and based on the Mayo Portland Adaptability Inventory 4 (MPAI; Malec & Lezak, 2003), Rehab Without Walls also uses the MPAI's robust measurement properties to psychometrically assess clients' outcomes. The MPAI has three indices – Ability (i.e., motor, sensory and cognitive); Adjustment (i.e., emotional functioning, interpersonal relationships); and Participation (e.g., social contacts, productivity, money management). These are then combined for a total score.



The first chart is an illustration of Jenica's level of functioning both at the time of admission to Rehab Without Walls and when she was discharged. The ratings on each of the tool's 29 items were obtained through consensus by her professional team of therapists. This chart shows that at time of admission, Jenica's overall functioning (total score) fell in the mildly to moderately impaired range (T-score = 47). Her Ability Index was also in the mildly to moderately impaired range (T-score = 48), her Adjustment Index was in the mildly impaired range (T-score = 39) and her Participation Index was in the moderately to severely impaired range (T-score = 59). At time of discharge, all her scores had improved considerably. Jenica's total score was in the mildly impaired range (T-score = 36), her Ability Index in the mildly impaired range (T-score = 35), her Adjustment Index in the mildly impaired to no impairment range (T-score = 30) and her Participation Index in the mildly to moderately impaired range (T-score = 47).

A second outcome tool that Rehab Without Walls uses is the Supervision Rating Scale (SRS; Boake, 2001). The SRS is a single rating of the level of supervision that a client actually receives from caregivers. The ratings range from 1 to 13 with the lower the score the better. The second chart shows Jenica's admission rating to be a 10—the client is under full-time direct supervision. This means that "at least one supervising person is always present and the supervising person checks on the patient more than once every 30 minutes." At the time of discharge, her rating had improved significantly to a 2—the client is unsupervised overnight. This means that "the patient

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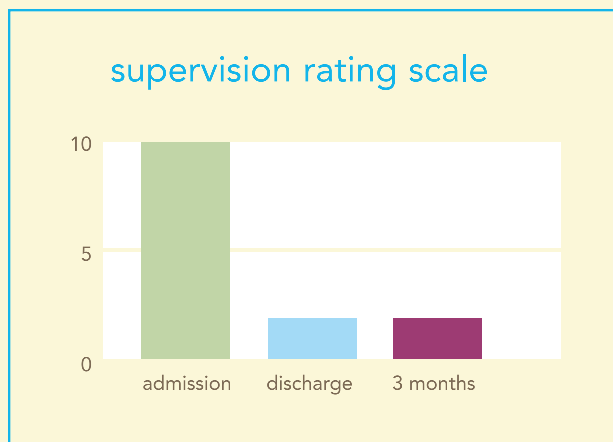

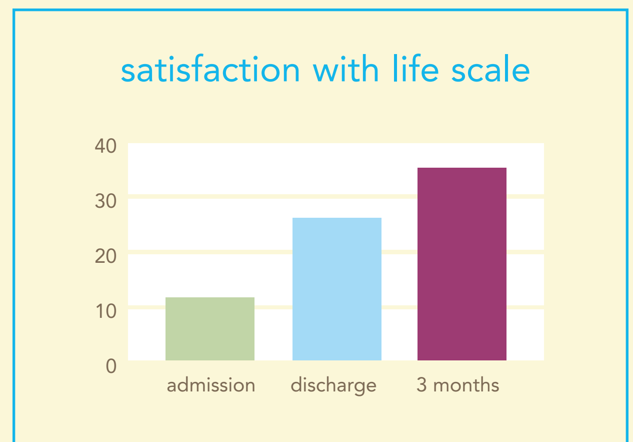

immeasurable!

While Rehab Without Walls has built a reputation on rigorous outcome tools and measurable results, we also are acutely aware that so much of what we achieve cannot be quantified. Rehab Without Walls knows that in the end, it's not about the numbers. It's more about a simple smile, a shared experience with family or successfully completing a routine task for the first time in a very long while. Consider how some describe the Rehab Without Walls experience and what mattered in the end to them.

"The greatest thing about my Rehab Without Walls treatment team was that they gave me back control. They allowed me to make decisions. They listened to my concerns. They accommodated my life. Coming into my own again never felt sweeter."

Laura A., former client and full-time mother who achieved full recovery following a stroke

"So many things made a difference for us: the consistency of care, the advocacy and the fact that the Rehab Without Walls team saw us as a family."

Sally C., wife of a former patient

"We've learned that emotions can shut down progress. Time and money are wasted if you only focus on the physical aspect of rehabilitation, which is why Rehab Without Walls focuses on the bigger picture. When a client is emotionally adjusted, motivation increases and stress decreases. When a family has access to coping skills, the client is better supported and can more easily return to his or her life. All of these things affect length of stay, compliance, durability of results and, of course, healthcare costs."

Jodie Sakaris, LCSW, Social Worker, and former Director of Clinical Management, RWW Sacramento

"I think what made the most difference for my son was that Rehab Without Walls focused on his whole body, his whole person, and figured out what would work for *him*."

Ginger M., mother of a five-year-old client

"I love that Rehab Without Walls encourages its clinicians to think outside the walls. A program with this model needs to be open to ideas. Therapists get to be creative and develop strategies. Almost anything goes as long as you meet the functional goals set out in the plan of treatment and the strategies are relevant to the client."

Pat Backus, Speech Language Pathologist, RWW Phoenix

"I loved that Rehab Without Walls took me outside the walls of my apartment…something that none of the other therapists that I had worked with ever considered. My PT just didn't let me be a couch potato, she got me out into my community again. It's the best thing I've ever experienced. It's the way rehabilitation should be."

Erinn M., former client with Multiple Sclerosis

"When I work with clients, I keep asking myself, 'What can we do to make you successful in your home and community?' That's what we are about—and it is an approach I can really get behind."

Wendy Williamson, Social Worker, RWW Michigan

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lives with one or more persons who could be responsible for supervision (for example, a spouse or roommate), but they are all sometimes absent overnight."

Rehab Without Walls also examines the durability of the outcomes achieved. One manner in which we accomplish this is by obtaining SRS at 3-month follow-up. Jenica's rating is maintained at a rating of 2—even three months post-discharge.

A third tool that looks at outcomes in a slightly different manner is the Satisfaction With Life Scale (SWLS). It is a global measure of life satisfaction and was developed by Ed Diener and colleagues (Diener, Emmons, Larsen & Griffin, 1985). The SWLS consists of five items that are completed by the client (Corrigan, 2000).

The third chart (see bottom right on page 6) presents Jenica's scores on the Satisfaction With Life Scale (SWLS) at admission, discharge and at 3-month follow-up. This scale's normative data is somewhat limited in the first year post-injury. Her admission score was obtained approximately four months post-injury. The SWLS norms indicate that for clients one year post-injury she is below the 25th percentile, suggesting considerable dissatisfaction with her life at that time. By time of discharge—approximately one year post-injury—Jenica's rating has shifted to a 26. This score is just below the 75th percentile, demonstrating a significant improvement and suggesting that Jenica is quite satisfied with her life. When we followed up with Jenica at three months post-discharge, her rating further increased to a 33, which corresponds to above the 75th percentile. ●

About Rehab Without Walls

With a focus on functional goals and measurable, durable outcomes, Rehab Without Walls® provides comprehensive rehabilitation in the setting that we've found most effective: the client's home and community. Using an interdisciplinary clinical treatment team developed to meet the specific needs of each client, we help clients return to life as quickly, fully and independently as possible equipped with the functional skills necessary to participate in practical, daily activities at home, school and the workplace—often at a significant cost savings. For more information or to make a referral, please call 1-866-734-2296 or visit us at www.gentiva.com/rww

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