

beechwords

Deborah Cerra-Tyl, Editor

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Health, Aging and Brain Injury: Four Years of Investigation

*By Thomas Felicetti, PhD, Tina Trudel, PhD and
Michael Mozzoni, PhD*

Thirty years ago, a serious brain trauma was often a death sentence. But in three short decades, dramatic improvements in trauma diagnosis and care have spared the lives of hundreds of thousands of individuals with brain injury. This is naturally a splendid development, but the splendor is not without its serious consequences. These large numbers of people are now aging along with the general American population and the public health consequences bear very close scrutiny. And, at this point, our piecemeal health care system is not coordinating the long-term issues arising for people with traumatic brain injury.

According to the Brain Injury Association and the Center for Disease Control, over 5 million individuals are living with serious, long-term consequences of brain injury and 80,000 individuals per year experience brain trauma that results in long-term, often permanent, disability (BIA, 2001, CDC, 2001). Furthermore, according to the BIA and CDC, this population is expected to continue its rapid growth in the future. More than two thirds of the individuals under 30 who experience a brain injury are likely to survive for another 30–40 years. The implications of these trends for our already burdened health care, disability and aging services are alarming (Felicetti and Trudel, 2003).

In the late 1990s at the American Congress of Rehabilitation Medicine, the Long-Term Issues Task Force of the Brain Injury Interdisciplinary Special Interest Group (BI-ISIG) began work surveying this graying population of individuals with brain injury. With initial guidance and support from Marilyn Spivack, the task force moved in the direction of investigating health problems associated with aging (Felicetti, 2000, Trudel 2001).

There was not a great deal of literature on the health consequences of aging with brain injury. Goldstein and Shelly

(1975) identified similarities and differences between aging and TBI using neuropsychological testing of cognitive, perceptual and motor skills, but made no mention of health effects. Brooks et al (1987) noted the effects of severe TBI seven years post-injury and found high levels of post-traumatic changes several years after the injury, most notably in terms of caregiver stress and psychosocial changes. In a large-scale survey of individuals on average 13 years post-injury, Dawson and Chipman (1995) observed that large numbers required continued supports, had limited social integration and were often unemployed. Again, health status was not analyzed. Since the late 1990s, Mary Hibbard, Wayne Gordon and their colleagues at Mt. Sinai have published some quite suggestive works that began to unearth hidden undiagnosed health issues in this population (Hibbard, Uysal, Sliwinski et al, 1998).

In conversations with Drs. Hibbard and Gordon during a Long-Term Issues Task Force presentation at an annual ACRM conference and during subsequent task force discussions with the BI-ISIG group, there emerged a need to investigate headaches, seizures, endocrine disorders, obesity, cholesterol, high blood pressure, early dementias, falls and swallowing disorders, among other health issues noted among individuals aging with brain injury.

As the research project took shape, the BI-ISIG began to focus not only on the generation of data about health issues, but also on the question of whether this population is aging prematurely as defined by an earlier onset of serious medical problems.

As we moved into the year 2000, we wanted to develop a rigorous survey instrument that would carry us past anecdotal discussions and case studies and into a more careful inquiry from a methodological standpoint. Fortunately, a team of social scientists joined our task force and helped craft such an instrument, entitled "Study on Aging with Brain Injury" (Lemsky, Strauss, Mozzoni, Lambert et al).

Continued inside

Beechwood

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Continued from front

A pilot study was conducted to test the survey instrument and methodology. The survey instrument is now comprised of four parts: A 21-question demographic section, an 11-question questionnaire of health factors, a five-question health maintenance addendum and the MOS 36-Item Short Form Health Survey (SF-36).

Dr. Tina Trudel skillfully took the survey lead as project coordinator and Dr. David Strauss contributed additional research to the task force discussions that had been independently conducted at REMED Recovery Systems.

The current study is open to individuals who sustained a traumatic brain injury after age 16, are currently at least 10 years post-injury and are currently at least 30 years old.

Although our data collection is nearing its final stages, Dr. Trudel is continuing to accept requests to fill out the survey, sent to her attention by e-mail at ttrudel@lakeviewssystem.ws or by mail at BI and Aging Study, P.O. Box 266, Center Ossipee, NH 03814-0266. Survey forms are also available in the research section of the Brain Injury Association website, www.biausa.org.

To date, we have collected approximately 300 useable surveys representing a 14% response rate of return for surveys distributed. From this database, some exciting and perhaps sobering trends may emerge.

Some of these trends will be explored shortly in a special issue of "The Brain Injury Professional" and later, in the "Archives of Physical Medicine and Rehabilitation" (Kneipp, 2003).

What are the significant health issues faced by individuals with brain injury as they get on in years? Are they aging more quickly in some respects than the general population? Are there special precautions and considerations that emerge from these trends? Are there public health measures that should be taken now to prepare for a potentially complex future? How does all of this impact on public health policy in the coming decades? How does this affect the insurance industry and the case management community?

The quality of the answers to these questions by the professional community at large will have great impact, an impact eclipsed only by the quality of our actions in the public arena, once we have these answers.

The Beechwood Team successfully completed the Walk for Thought on October 14, 2006 at the Washington Crossing State Park in Titusville, N.J. Team members include from left back row: David Elman, Tom Byrne, Ian Price, Lindsey Price; and from left bottom row: Louann Boos and Kelly Wall.



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- Dr. Felicetti is the Executive Director of Beechwood Rehabilitation Services in Langhorne, Pa., and Chair-Elect of the Brain Injury Interdisciplinary Special Interest Group of the ACRM.
- Dr. Trudel is Vice President of Clinical Services, Lakeview Health Care System, Chair of the Long-Term Issues Task Force and Project Coordinator of the Brain Injury Survey.
- Dr. Mozzoni is the Director of Research at Timber Ridge Rehabilitation in Little Rock, Ark., and a long-time member of the Long Term Issues Task Force.
- Reprinted from Lippincott's Case Management: The Journal for Professional Practice, September/October 2005, Volume 10, Number 5.

Information Management and Performance Improvement

By Dr. Thomas Blash, Clinical Director

In December 2003, Beechwood Rehabilitation Services received a three-year accreditation from the Commission on Accreditation of Rehabilitation Facilities (CARF). This represented the fourth consecutive three-year accreditation achieved by Beechwood. In their formal report, the CARF survey team summarized their review by stating that Beechwood offers a rehabilitation program that significantly meets the needs of the persons served. The program clearly benefits the persons served and provides a well-trained and dedicated staff to administrate the program. The program's leadership has demonstrated a commitment to rehabilitation, and this same team is dedicated to program improvement and the provision of quality services.

One of the many ways to review the application of Beechwood's mission and core values is through the Information Management and Performance Improvement system. This mechanism has also been referred to as Information and Outcomes Management and Quality Assurance. The purpose of such systems is to measure the organization's performance against pre-established measures of quality. Following guidelines established by CARF, accredited facilities evaluate performance with data collected that provide information on the needs of the persons served, the needs of other stakeholders, and the business needs of the organization.

In the constant emphasis on quality improvement, the system has been refined to include information of the benefit to all stakeholders. Two objective measures achieve this aim. One is designed to describe the functional competence of the persons served. The other instrument traces the growth in functional competency from the time of pre-admission through post-discharge. The first methodology involves the use of a standard instrument called the Scales of Independent Behavior, Revised, or the SIB-R. The second tool was designed specifically for individuals in the post-acute phase of neuro-rehabilitation and is called the Critical Path Evaluation Tool, or CPET.

The SIB-R is a published scale with scientific indices of sensitivity, reliability and validity. The SIB-R allows individuals with similar levels of competence to compare their progress during their rehabilitation journey. The SIB-R also enables Beechwood to describe individuals in a functional way that is not rooted in medical diagnoses.

The CPET is composed of four parts. CPET-1 is administered before individuals enroll. CPET-2 and CPET-3 are given after enrollment and before one leaves Beechwood. The CPET-4 is solicited after the person returns to his or her community. A comparison of CPET outcome data permits Beechwood to track progress from before enrollment to after community re-entry. Outcome data suggest that individuals who receive rehabilitation services at Beechwood make and maintain measurable progress.

Semiannually, Beechwood solicits quantitative stakeholder feedback from three sources: the persons served, family members and funders. This information provides additional data on the agency's commitment to quality. Our surveys ask stakeholders to rate our performance on a scale from one to nine. The higher the score, the greater their satisfaction.

Since we initiated our system of Information Management and Performance Improvement, the persons served within our community have given Beechwood extremely positive ratings, most particularly in the way our staff members relate to everyone. The atmosphere created seems to have a salubrious impact.

Family members have consistently been impressed by the fact that the achievements attained by their loved ones have consistently exceeded their initial expectations. This outcome, as well as the growth and recovery of the persons served, has consistently exceeded the expectations of representatives of funding agents.

Exceptional appreciation from stakeholders reflects Beechwood's relentless commitment to quality, post-acute neuro-rehabilitation. The information gleaned from the Information Management and Performance Improvement program underlies Beechwood's continuous commitment to offering rehabilitation programs of the highest quality.

About Dr. Blash

Thomas W.C. Blash, Psy.D. completed his doctoral degree in Clinical Psychology with a specialization in Neuropsychology at Indiana State University. He completed a pre-doctoral internship in Clinical Psychology at the Devereux Foundation and post-graduate training in Neuropsychology at the University of Pennsylvania and the Center for Head Trauma in Devon, Pa.

His career spans 30 years and includes service in outpatient, inpatient and community-based programs. He has served as Beechwood's Clinical Director since May 1992. He is an Adjunct Professor at Chestnut Hill College, where he teaches courses in psychopharmacology and treatment fundamentals.

Dr. Blash and the great love of his life, Carol, have spent 29 years together. They are blessed with two thriving teens, Michelle Marie and Christopher Michael. His guiding philosophy reflects the humanistic one absorbed under the tutelage of his greatest clinical mentor, the late Dr. Austin M. DesLauriers, Director of Devereaux's Autistic Center.



Dr. Thomas Blash, clinical director (pictured above, on right) receiving the Woods Services 2006 President's Award of Excellence from Dr. Robert Griffith, president, Woods Services. The award was presented at the annual Employee Recognition Dinner in November.

Edifying Stakeholder Satisfaction

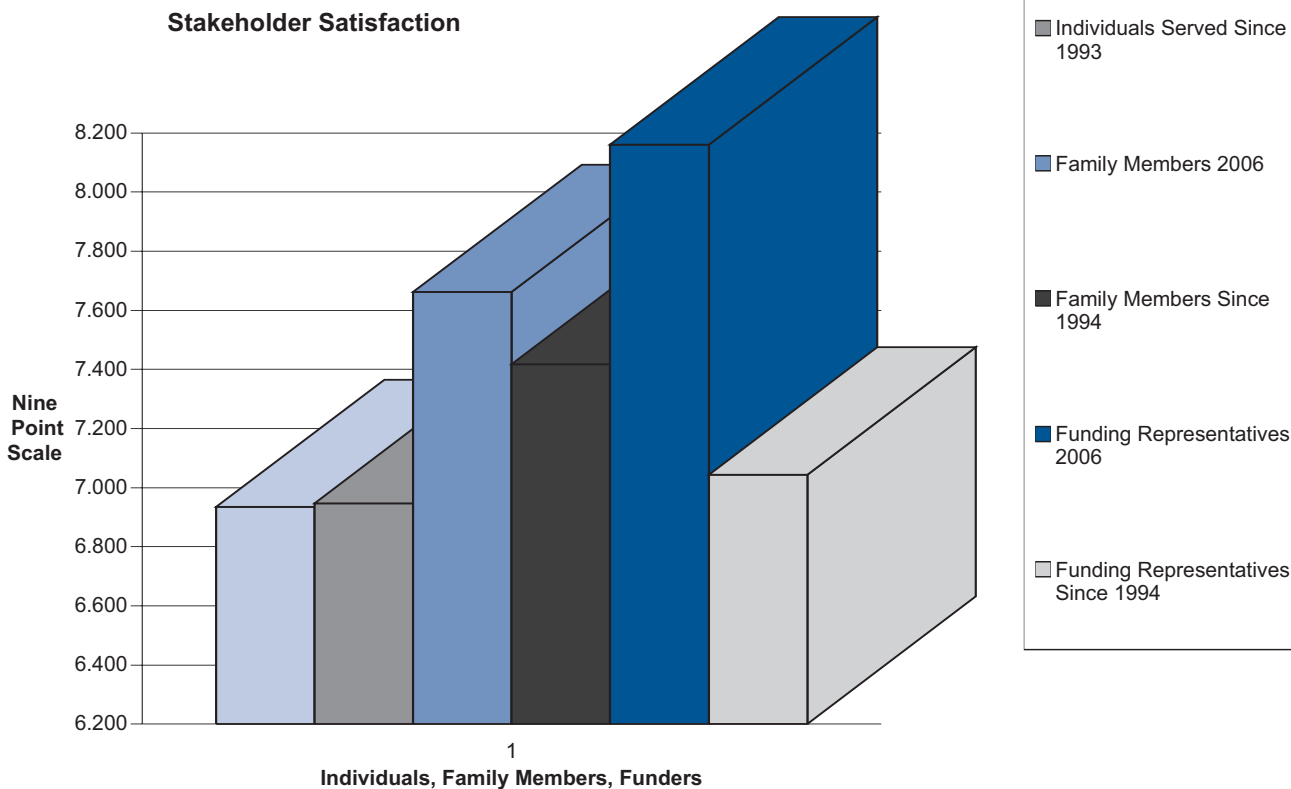
The Appreciation of Excellence Continues

By Dr. Thomas Blash, Clinical Director

Beechwood Rehabilitation Services has measured stakeholder satisfaction quantitatively since the 1990s. Twice each year we ask the individuals served, family members and funding representatives to assess our performance. Stakeholders appraise a number of performance spheres including expected outcomes, level of involvement in planning, the value of information provided, and the turnaround time for oral and written feedback.

Since its inception, our stakeholder satisfaction surveys have used the same nine-point scale to measure satisfaction. On this scale, stakeholder ratings from 1 to 3 reflect satisfaction inferior to expectations. Ratings from 4 to 6 reflect performance consistent with expectations. When we receive ratings from 7 to 9, stakeholders are telling us we are exceeding their expectations.

The graph revealing our performance ratings for the individuals served, family members and funding representatives during the first half of 2006 also presents the average ratings achieved since 1993 for the individuals served and since 1994 for family members and funding representatives. We are very pleased with the exceptional feedback our stakeholders give as we reaffirm our commitment to provide the very best in quality services to those who have entrusted us with their care.



Scents and Sensibility

*By Cheryl Kauffman, Director of Advancement,
Development Office, Woods Services*

Three afternoons a week in the Stabler Vocational Building at Beechwood Rehabilitation Services, various aromas permeate the hallway: sandalwood, lavender and green tea, for example. The scents come from the Beech Tree bath and body products being created by client workgroups.



George Jackson, seated left, and Danny LeRose, standing right, are pictured hard at work creating one of the Beech Tree products.

The Beech Tree was created as a vocational opportunity for Beechwood clients to re-learn workplace skills while providing a quality, competitive product for the community. It is one of several work options for clients.

Creating Beech Tree products starts with good, old-fashioned marketing. Staff and clients explore the type of products and scents being offered by other companies and survey friends and family for their opinions about what they like.

Once scents are selected, staff develops a formula for each product to ensure consistency of color and smell. The products are mixed, bottled and labeled during the work sessions. The most popular scents are oatmeal, milk & honey and green tea. During different times of the year, they offer seasonal scents such as harvest spice.

"I like being creative," George Jackson responded when asked what he enjoyed about working in the Beech Tree group. "My wife can't believe that I make lotions," exclaimed Dan LeRose who was a carpenter, guitarist and lead singer in a band before coming to Beechwood.

There is great camaraderie among the Beechwood clients in each working group. In one group, there is much discussion about the Yankees and the San Francisco Giants. In another, the discussion focuses on the careers each had before the life-changing incidents that brought them to Beechwood. They all share the drive to get back to the life they once knew.

They also share an interest in spreading the word about Beech Tree products to generate more sales. They plan to have a Web page on the Beechwood Rehabilitation Services website where people can learn more about their products and place orders. They also established an e-mail address that can be used for ordering. Customers can purchase products on the Woods Services' campus through the Yellow Daffodil flower shop or at Beechwood Manor.

Another way they are expanding their business is by offering personalized labels and packaging to commemorate special occasions. They have provided small lotions and body mists in decorative bags as wedding favors and have added special labels to lotions for guests attending a baby shower. The clients in the Beech Tree working groups are proud of their products and eager to share them with a wider audience.

To call for more information or to place orders, contact Dawn Scheidell, director of vocational services at 215-750-4584.



**Janice Dembowski
manning the Beechwood
Brain Injury Awareness
booth at St. Mary Medical
Center, Langhorne, Pa., in
March 2006 as part as Brain
Injury Awareness month.**

SAVE THE DATE!

Brain Injury Association of New Jersey Annual Conference

Wednesday, May 16 and Thursday, May 17, 2007, Eatontown, N.J. – for more information go to www.bianj.org

Brain Injury Association of Pennsylvania Seventh Annual Conference: “Building a Network of Supports: A Lifelong Commitment”

Monday, June 25 and Tuesday, June 26, 2007, Harrisburg, Pa. – for more information go to: www.biapa.org

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