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Want to see your TBI program thrive? Follow this SC rehab hospital's lead

SC program's census rises from 14 to 16 filled beds since 1996

If you're considering starting a traumatic brain injury (TBI) program, or if your current program has been declining financially in recent years, you need to know how a South Carolina rehabilitation hospital successfully launched and maintained its profitable TBI program.

Greenville, SC-based Roger C. Peace Rehabilitation Hospital's traumatic brain injury program has grown from a staff of six in 1988 to 30 employees today, serving a population that includes some of the poorest people in one of the nation's poorest states, and it's still managed to make a tidy profit.

In the past three years, the program has grown from an average of 14 inpatient beds to almost 16 out of a maximum of 18 beds. The TBI program has been profitable and consistently meets its budget, even while serving a patient population that consists of 10% to 20% Medicaid reimbursement, says **Sheldon Herring**, PhD, program director of the traumatic brain injury program for Roger C. Peace (RCP), which is part of the Greenville Hospital System in northwestern South Carolina.

"South Carolina's Medicaid program has minimal reimbursement for rehabilitation, and we're one of the leading providers of brain injury

Executive Summary

Subject:
Succeeding with a traumatic brain injury (TBI) program

Essential points:
- ❑ You need to market TBI to state and local agencies in order to build referrals and obtain state-funded staff.
- ❑ If you create a teamwork structure, staff will be more flexible and focused on patients' needs.
- ❑ By adding a Young Stroke Program, you can increase inpatient beds and make sure all TBI teams are busy, even during slow census periods.
- ❑ You should insist on per diem payment structures whenever possible.

rehab services to the underfunded, so our profit margin has not come at the expense of denying admission to nonreimbursing cases," Herring explains.

"Also, we've been able to provide good outcomes and still be a very viable, financially stable program that is going on at least five years of strong financial performance," he adds.

How has the program pulled this rabbit out of its hat? Herring describes the program's basic building blocks this way:

1. Sell brain injury services everywhere.

When Roger C. Peace, which has 53 beds, decided to add a TBI program in the late 1980s, it was an unusual concept for the textile region in the northwestern part of the mostly rural state. Until the 1990s, textiles were the region's biggest employers, and health care benefits were less generous than they were in more unionized Northern industries. Also, because South Carolina is one of the states that does not require auto insurers to insure the health costs of drivers who are at fault in an accident, drivers suffering brain injuries receive rehab services only to the extent their health insurer will provide coverage or they can pay out of pocket.

Nonetheless, South Carolina has a high accident rate, which sometimes is attributed to the lack of systemized driver's training and the early legal driving age of 15. Also, Greenville County began to grow very rapidly in the 1980s, a trend that has escalated since BMW opened a major auto plant in the area in the early 1990s. So the region served by the hospital system has had a great need for TBI services.

Herring started the program with a single treatment team of an occupational therapist (OT), a physical therapist (PT), a speech therapist (ST), a neuropsychologist, and a case manager. The program shared nursing staff with the rehab center.

From day one, Herring advocated TBI services locally and statewide, speaking with school officials, state rehabilitation and disability directors, and other groups that hold the purse strings.

"We've been advocating for our patients, and at the same time we've been providing services to these folks," Herring says. "I've done so many dog and pony shows it's not funny."

When a state agency called Herring in those early years and asked him to conduct a one-day workshop, he'd show up at no charge. "I've provided inservices for thousands of state employees over the past 12 years," he adds. Herring also served on various state committees and task forces formed by the state's Department of Education, the governor's office, and the Department of Disabilities and Special Needs.

Also, by using a resource center developed through a state Developmental Disabilities Council grant, the TBI program shares brain injury training information with local schools and state agencies. "We developed a whole set of curriculum for professional training in areas of brain injury, and we've used it in workshops for staff as well as for training school teachers, school psychologists, vocational rehabilitation counselors, and for other public organizations," Herring says.

Marketing program pays off

The benefits of this extensive, hands-on marketing include the following:

- The TBI program has a state vocational rehabilitation counselor, who is assigned to the program on a part-time basis at no cost to the program.
- The program also benefits from the services of a state employment training specialist, who works full time for RCP. "Instead of having the hospital system provide these services, we've partnered with state rehabilitation providers, and they're on an affiliated staff and are part of the team," Herring says.
- When RCP learned that the state Department of Vocational Rehabilitation couldn't provide funding for full-time outpatient neuropsychology services, the TBI program made the state an offer it couldn't refuse. RCP provides the neuropsychology tests that the state psychologists have no training to provide, and the state psychologists conduct the remaining psychology tests. In exchange, the

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state pays RCP $340 for its half day of testing services, instead of paying the normal neuropsychology testing fees of $800 to $900. For its part, RCP has one more steady customer for its TBI program.

"If we can do the neuropsych test, even if we're at a break-even point, it provides more business because it identifies the need for outpatient services," Herring explains. "And the state is not under such funding limitations when paying for PT and OT."

• The TBI program, in collaboration with the state Department of Disabilities and Special Needs, is applying for a federal grant to expand its outpatient work re-entry program.

2. Build a teamwork model to increase staff flexibility.

From the beginning, the TBI program was set up so all therapists report to their program leader instead of their individual therapy departments. The rehab center traditionally has had a departmental structure, although it's moving a little in the program direction, Herring says.

"When we started, there were OT, ST, PT departments at Roger C. Peace, but therapists who worked in brain injury would report to the TBI leader," he explains. "This structure reflects a philosophical orientation of, 'Let's build the program around the patient.'"

This approach has built a team cohesiveness that made it far easier to cross-train the staff and remain flexible when the department's census shifts. It also bypassed departmental politics. "If you're a speech therapist or occupational therapist and on the brain injury team, you don't have a home department to run to if things get uncomfortable," Herring says. "So if the speech therapist is concerned about what the occupational therapist is doing, then the speech therapist and the occupational therapist have to work it out because they don't have any other options."

Therapists also are given an opportunity to evaluate their peers in other disciplines as part of a formal review process. **(The peer review form is inserted in this issue.)**

Herring maintains this type of structure also builds rapport with patients and reinforces to staff that the patients' needs are the first priority. By making the entire team responsible for a patient's treatment, the TBI program ensures there won't be problems like one discipline stopping treatment without informing the others.

Also, the team approach has made it easier to cross-train staff to follow up on care provided by a different discipline. For instance, the entire TBI staff must understand the cognitive, emotional, and physical areas relating to brain injury. "I expect my physical therapist to understand the cognitive issues the speech therapist is working on," Herring says. "The recreational therapist should understand and participate in the behavioral interventions going on."

Each employee is expected to develop some expertise in an area outside his or her own domain. So the TBI program provides extensive training, including an orientation process that takes one year and in-depth training in cognition, memory and how it affects treatment planning, and awareness deficits.

For example, the physical therapist might have to ask this type of question: "How can I make this physical exercise challenge the person's memory or awareness or any other cognitive deficit that other team members are working on?"

The same is true for behavioral issues. An OT might ask the following questions:

• How will this affect the patient behaviorally, and how will my interaction style be received by the patient?

• What types of interventions are the rest of the team members using?

• Am I up-to-date on what the team is doing with this patient?

3. Add a program serving people who were active before their strokes.

The rehabilitation hospital naturally provided services for stroke patients. But there was an additional need to serve the segment of the stroke population that had been healthy and active before their strokes. They would need more specialized services to help them regain their former independence.

To serve this group, the facility created the Young Stroke Program in 1995. The program has helped stabilize the entire TBI program, Herring says.

"A lot of programs across the country have had trouble maintaining their autonomy because of fluctuating census and decreased market share," he adds. "But by bringing on a team of Young Stroke therapists, it has allowed us to weather the changes."

Sometimes the Young Stroke team will pick up brain injury patients, and other times the brain injury therapists will treat Young Stroke patients, depending on which area has the higher census.

Young Stroke patients are not necessarily young patients. The oldest patient was in his 80s, but he had been working part time before his stroke at a media communications job. The main criteria are that the patient had an active lifestyle before injury and has potential to return to that level of activity.

The Young Stroke Program also enabled the rehabilitation hospital to fill an extra six beds. The hospital had the TBI inpatient section on the third floor, where 20 beds were available. However, the brain injury program was licensed at 14 beds.

"So we had to figure out which population to put in those six beds, and our evaluation data revealed that almost one-third of our cardiovascular accident patients were under the age of 65," Herring says. "Then when we looked at their clinical needs to see what they required in intensity of therapy and team concentration, we thought there would be enough overlap to start a successful Young Stroke team."

4. Fight for per diem payment structure.

Between 30% and 33% of the rehabilitation hospital's patients are insured through managed care organizations, Herring says, although the type of managed care found in South Carolina controls the state's health care costs and reimbursements a bit less than those in California or Minnesota, for example. "So with the exception of maybe psychology benefits, we're seeing them want a high degree of accountability, but we're still able to get reasonable reimbursement."

Per diem payments prevent 'shopping'

The rehabilitation hospital always has been structured to charge on a per diem basis, which prevents insurers from cafeteria shopping; that is, eliminating particular therapies from their coverage. Insurers are offered one program that RCP decides is best for a particular patient. The per diem payment structure has been particularly important to the TBI program, Herring says.

For example, reimbursement for recreation therapy (RT) has been dropping nationwide, forcing some facilities to reduce RT staff. But at Roger C. Peace, the TBI program still employs RTs, who directly treat patients' physical and cognitive deficits that come with brain injury. Their involvement is due to the per diem structure.

The only exception to per diem is the TBI outpatient program, which is set up to charge whatever structure will accommodate the needs of external case managers. Some will pay a single daily charge, others a per-service reimbursement, and others a hybrid of that, Herring says.

"The per diem structure was already in place, but a number of times the hospital system considered dropping it," he says. "But we strongly lobbied in favor of maintaining the per diem structure for as long as we can." ■

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CDC releases analysis of TBI statistics

80,000 Americans permanently disabled annually

One American sustains a brain injury every 15 seconds. A staggering 80,000 of those, or nine people every hour, experience the onset of long-term disability following hospitalizations for traumatic brain injury (TBI), according to recently released statistics from the Centers for Disease Control and Prevention (CDC) in Atlanta.

This marks the first time national TBI incidence data have been analyzed for their impact on the health care system and society and released to the public, notes **Richard J. Waxweiler**, PhD, director of the division of acute care, rehabilitation research and disability prevention at the National Center for Injury Prevention and Control at the CDC.

Using data from a national database for 1995-1996, the findings presented at a recent press conference in Atlanta include:

- A million Americans are treated and released from hospital emergency departments for TBI each year.
- 230,000 people are hospitalized each year for TBI and survive.
- 50,000 people die each year from TBI.
- 5.3 million Americans, or 2% of the total population of the United States, are living today with

disability resulting from a previous hospitalization for TBI.

• The risk of TBI is highest for adolescents and young adults.

• The risk of TBI is twice as great for males as females.

• The leading causes of TBI are motor vehicle crashes, violence, and falls.

— Falls are the leading cause of TBI in adults over age 65.

— Transportation injuries are the leading cause of TBI in people 5 to 64.

Young males at greatest risk

A panel of medical experts convened by the Washington, DC-based American Medical Rehabilitation Providers Association found in a recent analysis of TBI studies that the annual incidence of TBI in the United States is estimated to be 102.8 per 100,000 people. However, in males between 15 and 24, the rate jumps to 248.3 per 100,000, and it's also high (243.4 per 100,000) in men over 75. The incidence in females for the 15 to 24 age group is 101.6; for the over-75 age group, it's 154.9.

The panel also concluded that about 75% of TBIs that require hospitalization are not fatal, and the medical costs of TBI treatment are about $48 billion per year. TBI length of stay (LOS) for inpatient rehabilitation ranged from 40 to 165 days from 1988 to 1992. One study said the average TBI LOS was 61 days, with an average charge of $64,648, excluding physician fees. Total charges averaged $154,256.

In more recent studies, however, the average LOS and charges were lower, ranging from 19 to 27 days and costing $24,000 to $38,000.

The panel considered the effectiveness of rehabilitation services, asking five questions related to inpatient rehabilitation of TBI patients. **(See summary of TBI panel's findings, p. 103.)**

TBI patients and their families desperately need information about the potential long-term consequences of brain injury and where to turn for help, says **Allan Bergman**, chief executive officer of the Brain Injury Association in Alexandria, VA.

"This is truly a silent epidemic. Few physicians and fewer Americans are aware of how many lives are touched by TBI," he says, "and physicians don't do a good job educating patients about TBI. Patients are released without adequate evaluation and follow-up. They're given a head injury checklist, and most are never seen again. Years later, these individuals may end up with cognitive impairments, learning disabilities, or in the criminal justice system, and no one ever makes the connection between their current problems and their past TBI." **(See p. 102 for a list of possible impairments caused by TBI.)**

Bergman says he hopes the new data will draw the attention of physicians and community members to the importance of accurate diagnosis and treatment. "How many coaches have watched a young athlete take a blow to the head, dusted him off, and sent him right back out on the field?"

The CDC plans to release a pamphlet, "Facts About Brain Injury," in upcoming months, says Waxweiler. In the meantime, the data and the pamphlet are available on the CDC's Web site: www.cdc.gov. ■

TBI survivor beats odds, becomes peer counselor

A Melbourne, FL, rehabilitation hospital has found that one of the greatest services it can offer traumatic brain injury (TBI) patients is a support group led by a peer counselor who has survived TBI.

K. Dorn Williamson, MS, suffered a severe brain injury in 1987 after a head-on collision with a pickup truck operated by a drunk driver. A college student majoring in psychology at the time, Williamson was in a coma for 3½ months. When she regained consciousness, she had lost her right field of vision in both eyes and couldn't walk. Also, her right arm's peripheral nerves were damaged, and she had lost all sense of taste and smell.

Returning to college to earn a bachelor's degree seemed to be an impossible goal when she began inpatient rehabilitation at HealthSouth Sea Pines Rehabilitation Hospital in Melbourne. However, as her ability to walk and use her right arm slowly returned, she began to dream of returning to school.

"When I was in outpatient treatment, I was determined to go back to school, and my psychotherapist said he didn't think it was a good idea because if I failed I might become depressed," Williamson recalls. "But I did it through hard work and taking one class a

TBI in a Nutshell

❑ **Possible cognitive consequences of TBI:**
• short-term memory loss • long-term memory loss • slowed ability to process information • trouble concentrating or paying attention • difficulty keeping up with a conversation • difficulty finding the correct word • spatial disorientation • organizational problems/impaired judgment • inability to do more than one thing at a time

❑ **Possible physical consequences of TBI:**
• seizures of all types • muscle spasticity • double vision, low vision, and blindness • loss of smell or taste • speech impairments such as slurred speech • headaches and migraines • fatigue, increased need for sleep • balance problems

❑ **Possible emotional consequences of TBI**
• lack of initiative • increased anxiety • depression and mood swings • impulsive behavior • denial of deficits • agitation • egocentric behaviors, such as failure to see how actions affect others

Source: Brain Injury Association, 105 N. Alfred St., Alexandria, VA 22314. Telephone: (703) 236-6000 or (800) 444-6443. Web site: www.biauas.org.

semester, whereas before I took a full load with no problems."

She kept up the schoolwork to earn a master's degree in industrial organizational psychology. After being a patient at HealthSouth Sea Pines for two years, Williamson began to volunteer as an intern, and eventually she created a job for herself as a peer counselor.

Now Williamson works with families of TBI patients to help them understand what it's like to live with a brain injury, and she continues to lead a brain injury support group, called Heads Together Support Group, which she started at the hospital nine years ago.

"Dorn's example shows that no matter what your disability is, you can turn it into something positive," says **Vernona L. Moseley**, BS, MS, rehabilitation liaison at the 80-bed hospital.

Determined to make her life meaningful, Williamson speaks as part of a "Think First" campaign that targets high school students. She tells teens about brain injuries and how they need to protect their heads by driving safely, avoiding alcohol when driving, and staying away from the wrong crowd. She also has raised money for the Brain Injury Association of Florida's annual survivor's jamboree, and she has received the National Head Injury Foundation's Survivor of the Year award.

But most importantly, She says her own experience as a TBI patient has helped her understand some of the key problems that many TBI survivors experience. While TBI survivors who are as motivated and capable as Williamson are not available in every rehabilitation hospital's community, the peer counselor concept is an important one for a TBI program to embrace. Peer counselors can help patients understand their own limitations, and they can help families understand the difference between being supportive and smothering.

For instance, independence is a major issue and often a source of conflict between the TBI survivor and rehab staff and family members, Williamson says. "You don't want to treat the TBI patient like the person is an invalid," she says, adding that after her brain injury, her father tended to treat her delicately, as though she was an infant again. "But my mother knew that I wanted to gain back my independence and do things on my own, so she didn't treat me like a baby."

Williamson also says she sometimes had to convince the rehabilitation staff she could regain her independence more quickly than they thought likely. "I know that when I was an inpatient I wanted to get out of the hospital quickly, and I met the goals for being discharged from inpatient therapy sooner than they expected because I worked hard on it," she says.

TBI patients need to feel independent

Williamson's family helped her walk the line between being independent and making decisions that were best for her rehabilitation. She recalls one Thanksgiving day when she was permitted to spend the night at home, and she didn't want to return to the hospital. But her family helped her understand why she had to return by being supportive and saying, "You have to return because you need it, and you've got to go for it, and once you have become an outpatient and do those therapies, you'll realize why it was good for you to stay there as long as you did."

As a peer counselor, she can speak directly to patients' anguish over why this horrible trauma happened to them. When she awoke from her coma and learned that her car collided with a pickup truck driven by a drunken driver, she often asked "Why me?" and "What am I going to do now?"

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But her mother would tell her, "You know it happened, and there's nothing you can do about it, and you can't change it, so you have to go on with your life." Those simple words helped her focus on the positives and gain the energy and inspiration she needed to make her new life as meaningful as possible.

Williamson tries to help TBI patients find some purpose in their new lives, something creative or meaningful that helps them reinvent themselves. She remembers one man who suffered a TBI who had been a construction worker before his injury. Afterward, he couldn't lift heavy objects and work in construction. He discovered that he had an interest and talent in art and became an artist.

"I help TBI survivors find anything they'd like to do, maybe a different talent or a different skill," she says. ■

Panel answers questions about TBI, rehabilitation

How effective is rehab care for TBI patients?

The American Medical Rehabilitation Providers Association in Washington, DC, asked a panel of experts to review medical literature relating to traumatic brain injury (TBI) and to answer five questions about TBI rehabilitation treatment.

A full synopsis of the panel's findings can be found on AMRPA's Web site at http://amrpa.firminc.com. Here's a thumbnail sketch of the panel's conclusions:

1. Should interdisciplinary rehabilitation begin during acute hospitalization for traumatic brain injury?

One small study supported an association between the acute institution of multidisciplinary TBI rehabilitation and decreased length of stay (LOS). But no comparative studies presented evidence for or against early rehabilitation in patients with mild or moderate injury.

2. Does the intensity of inpatient interdisciplinary rehabilitation affect long-term outcomes?

The panel concluded that it does not, when intensity is measured as the hours of application of individual or grouped therapies. However, the studies had weak methodology and may have missed a significant relationship. The studies had insufficient information about severity of injury and baseline function.

The panel also found no scientific support for a hospital to mandate a minimum number of hours of applied therapy for all TBI patients. It recommended that future studies should compare acute, inpatient rehabilitation to common alternatives such as care in a skilled nursing facility or less-intense variations of acute rehabilitation.

3. Does the application of cognitive rehabilitation enhance outcomes for people who sustain TBI?

Two small studies showed evidence that personally adapted electronic devices, such as a notebook and an alarm wristwatch, reduce everyday memory failures for people with TBI. Another study showed that compensatory cognitive rehabilitation reduces anxiety and improves self-concept and relationships for people with TBI.

4. Does the application of supported employment or vocational rehabilitation services and training enhance outcomes for people with TBI?

Some studies indicated that supported employment can improve TBI survivors' vocational outcomes. But those studies were limited and have not been replicated.

5. Does the provision of long-term care coordination enhance the general functional status of people with TBI?

The panel found few studies on the effectiveness of case management, and even those studies had mixed results, especially the study of the effects of case management on disability or functional status, living status, the family, and other aspects. The panel recommended that future research should focus on improving the outcomes

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measures used to examine the results of case management in TBI rehabilitation. Future research should include an indicator that looks at whether case management helped increase the use of community and rehabilitation services among families of TBI patients, the panel suggested. ■

Support mounts for FIM-FRG system

Hospitals wait and wait and wait some more

The summer doldrums have set in for rehab hospitals as they wait for the Health Care Financing Administration (HCFA) to iron out the last details of the industry's prospective payment system (PPS). In the meantime, **Rep. Bill Thomas** (R-CA), who helped write the Balanced Budget Act (BBA) of 1997, has lent his voice to the rehab industry in asking HCFA to drop its per diem proposal and use a per-case patient classification system instead. The American Medical Rehabilitation Providers Association (AMRPA) supports the use of the Functional Independence Measure-Function Related Groups (FIM-FRGs) for patient classification.

HCFA officials still had not decided on the proposed reimbursement methodology as *Rehab Continuum Report* went to press, but they say the proposals should be announced soon.

Some officials with rehabilitation hospitals say they also support the FIM-FRG system and hope that's what HCFA will select. "I would prefer the FRG system because it gives the country an incentive to become more efficient, and with either system you still want the outcomes to be as good or better than they are today," says **Bill Munley**, MHSA, CRA, administrator of rehabilitation, neurology, and orthopedics at St. Francis Hospital in Greenville, SC.

Despite the rehab industry's support of a per-case payment system, some say they believe HCFA will stick with the per diem approach. "HCFA has spent a lot of money and time developing the MDS [Minimum Data Set-Post Acute Care] system and the Resource Utilization Group, and they're not going to abandon that," predicts **Lynn Rosenblatt**, CRRN, director of utilization review for Healthsouth Sea Pines in Melbourne, FL.

Have any rehab hospitals taken the plunge in the chilly waters and made changes in anticipation of PPS? Several officials told *Rehab Continuum Report* it's too risky to make changes based on their own predictions of how HCFA will act.

"It's really been very confusing as to which way the pendulum is going to fall," says **Marggi Diercks**, MA, CCC, SLP, director of inpatient rehabilitation at Pinecrest Rehabilitation Hospital in Delray Beach, FL. Pinecrest is part of Tenet South Florida System, which is part of Dallas-based Tenet Health Systems.

"We can only do our best in re-engineering our hospital for better cost-effectiveness, and we've been doing that all along," Diercks says.

After what happened this past year, when part of the changes resulting from the BBA cost rehabilitation hospital hundreds of thousands of dollars, it's little wonder that no one is clamoring to be at the front of the PPS line.

TEFRA has forced cost-cutting measures

The BBA's new limits on the Tax Equity and Fiscal Responsibility Act (TEFRA) cost St. Francis Hospital in Greenville more than $250,000. The hospital, which opened in 1990, had a cost limit of $26,000 and had kept actual costs to less than $10,000 per case. This enabled the hospital to receive a TEFRA bonus of $1,400 per case, Munley says. Now the hospital receives a maximum bonus of $385 per case. "So we've already tightened the purse strings, trying to shorten our length of stay to enable us to take on more cases," he adds.

Pinecrest Rehabilitation Hospital also was hit hard by TEFRA, Diercks says. "We're trying to meet cost goals and meet our budget, but we're not overreacting to the government's decisions at this point."

The hospital also has implemented staff cross-training and a skills mix strategy, along with having employees share job responsibilities. "We're also looking at different service delivery models, such as group therapy," Diercks explains.

But before hospitals can make more changes than these, they'll need to know whether HCFA

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has decided to stay with a per diem model. And then they need to know how long it will take the government to cut rehabilitation daily reimbursement to very low levels, as has happened to nursing homes and skilled nursing facilities.

"I don't think the home health and skilled nursing home industries were prepared and knew that the BBA and PPS would be so restrictive," Rosenblatt says. "If they cut the rehab per diem payment by huge amounts, then we will have to look at how much therapy these patients can handle and what to do with them." ■

Rehab possible with drug-resistant infections

Protocol allows patients to leave their rooms

The Nebraska Methodist Hospital in Omaha has developed an infection control protocol that allows an infected patient to participate in normal rehabilitation activities, such as working on equipment in the therapy gym.

"Health care settings are facing a crisis in preventing and controlling rapidly increasing emergent multiple drug-resistant microorganisms and the spread of those organisms," says **Sandra Vyhlidal**, RN, MSN, CIC, epidemiology coordinator at the hospital.

In the past, rehab patients who were under infection control procedures were confined to their rooms, and the therapists, wearing gowns and gloves, came to them. This procedure limited the therapy activities to use of portable equipment that could be brought to the patients' rooms, Vyhlidal points out.

"When patients are admitted under precautions or in isolation, it restricts the rehabilitation department's ability to offer them the services they need to get stronger and go out into the community or home," she says.

The organisms the hospital is most concerned with are methicillin-resistant *Staphyloccus aureus* (MRSA) and vancomycin-resistant enterococci (VRE). The most common body sites where those organisms are found are the urinary tract, surgical sites, and the bloodstream, she says. MRSA and VRE can spread by person-to-person contact or through contact with contaminated surfaces.

Healthy people not at risk

"Usually the patient has been treated multiple times with multiple antibiotics in the acute care setting. They may have had pneumonia, bladder infections, or wound infections, and by the time they get to rehab, the bacteria is resistant to a lot of antibiotics," she says.

Healthy people are not at risk from the bacteria, but they can spread them to other people who are at risk, Vyhlidal says. "There is not so much risk to the staff as to the staff giving it to someone else," she adds. For instance, a healthy staff member could transmit the infection to a premature grandchild, a relative undergoing chemotherapy, or a friend with AIDS. Weak, debilitated patients, such as the frail elderly who might be in the hospital for a total hip replacement, also are at risk.

Executive Summary

Subject:
Infection control protocol allows patients under precautions to leave their rooms for therapy

Essential points:
- ❑ Patients are screened for drug-resistant bacterial infections before admission.
- ❑ Staff, patients, and visitors use special antibacterial soap for hand washing, bathing.
- ❑ Patients put on clean clothes before leaving their rooms.
- ❑ Items such as gait belts and walkers are dedicated to the "Contact Precautions" room.
- ❑ Special cleaning method is used in rooms after patient is discharged.

Once patients get an infection, it lengthens their stays and increases the amount of time it takes for them to recover, she says.

The infection control department became concerned when there were several documented cases of MRSA and VRE at the same time. A genetic study showed the organism probably came from the same source, which suggested it had been transmitted within the hospital. After the protocol was started, the hospital has had no further evidence of cross-contamination.

All patients tested

All patients are given a nasal cavity and a rectal screening as part of their routine lab tests. The infection control practitioner reviews all candidates for initiating the protocol.

If a patient is admitted under the infection control protocol, his or her room is marked "Contact Precautions," which alerts the staff to wear gloves and gowns in the room and that items in the room are confined to use by the patient. Those items include the electronic thermometer, the blood pressure cuff, the bed, and chairs, among other things.

Here are the other parts of the protocol:

- Patients are screened for the bacterial infections during the admissions process.
- Patients bathe with Cida Stat (CHG 2%), a special antibacterial soap that kills bacteria, and they put on clean clothes or a clean gown whenever they leave their rooms.
- Staff wear gloves and gowns whenever they assist the patients with ambulation or perform other activities that require patient contact.
- The patients, staff, and visitors wash their hands frequently with the Cida Stat soap.
- Family members are taught to remove their gowns and gloves and wash their hands before leaving the room.
- Therapy items such as gait belts, walkers, temporary knee braces, and other assistive devices are dedicated to each patient and may not be swapped among rooms.
- All surfaces and therapy equipment in the patient rooms or used by the patients are disinfected with a phenolic agent.

The infection control staff researched MRSA and VRE and found that the bacteria were commonly found on blood pressure cuffs, bed railings, and bed thermometers. Staff took samples in the precaution rooms after the housekeepers had disinfected them and still could culture the bacteria.

In their clinical trial, staff used a special no-dip procedure and found no bacterial growth on the items in the patient room. When performing the no-dip procedure, the housekeeper uses one clean rag dipped in a phenolic solution on one surface area, then discards it. Another clean, dipped rag is used on another surface, and so on until all the surfaces in the room are disinfected. The housekeeper repeats the procedure, cleaning all surfaces in the room with a clean rag twice. The normal procedure takes 30 minutes, while the no-dip cleaning takes 45 minutes.

"The procedure is cost-effective because all the rags are laundered for re-use," Vyhlidal says. ■

Need More Information?

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Master's requirements for future OTs likely

AOTA committee to vote on prospect

In what appears to be a trend in the rehab world, occupational therapists may be seeking post-baccalaureate degrees if a proposal by the Bethesda, MD-based American Occupational Therapy Association (AOTA) comes to fruition.

AOTA's representative assembly has adopted a resolution supporting a post-baccalaureate degree in as "the required level of professional entry into the field of occupational therapy," according to information posted on AOTA's Web site (www.aota.org).

Because the representative assembly does not have the authority to mandate a master's degree as the entry level of occupational therapists, the resolution recommends that AOTA's Accreditation Council for Occupational Therapy Education vote on the proposal, says AOTA education director **Rona Zucas**. There is no timetable for the vote, although the group's next regularly scheduled meeting is in August. Zucas did not wish to

elaborate on the proposal and declined to comment further.

If the Accreditation Council approves the move to a post-baccalaureate program, a vote by AOTA's board would not be required, Zucas says. Under the current proposal, according to information posted on the Web site, AOTA would not accredit any new programs at the baccalaureate level. Existing baccalaureate programs would have a defined period of time to make the transition to a master's program.

The move to a post-baccalaureate entry-level degree has been under discussion since 1958, according to AOTA's Web site. "Even then, they realized that the baccalaureate degree often put occupational therapists in a subordinate role with respect to other professionals and unfairly penalized them financially," the information states. However, "this certainly does not imply that people educated at the baccalaureate level would not be able to practice," Zucas points out.

The physical therapy profession has undergone a similar transition to master's-level programs in recent years. Most programs today are master's-level programs, and many are in the process of changing from bachelor's to master's programs. ■

Post-90 hip fracture patients spring back well

Study finds 50% regain activities of daily living

It used to be that inaccurate theories about rehab for older patients were as accepted as tried-and-true cliches like "the early bird catches the worm." But contrary to widely held beliefs, older doesn't always mean a lesser chance for functional recovery, a study by orthopedists at Presbyterian Hospital in New York City finds.

The study of 45 hip fracture patients ages 90 and older finds that 50% returned to their preinjury mobility and activities of daily living, reports study co-author **Heidi Michelson**, MD, of the hospital's department of orthopedic surgery. This compares favorably with studies finding that the 50% of all hip fracture patients recover their preinjury basic activities of daily living.

"Despite thoughts that increased age is a determinant in return to preinjury function, our study demonstrates that age does not preclude maintenance of living accommodation, basic activities of daily living or ambulatory capacity," she says.

"These figures . . . underscore the need to draw attention to hip fracture management in the over-90-year-old age group. Identification and optimization of factors that play a role in post-operative morbidity, mortality, and function in this often-underestimated age group can significantly improve both medical and economic outcomes," Michelson told *Rehab Continuum Report*.

The Presbyterian Hospital study concluded that important factors in a successful patient outcome are preinjury mobility and prevention of postoperative complications, specifically pulmonary problems, Michelson says. Seven of the 45 patients studied developed pneumonia, and all but one of them died, primarily within three months.

An average follow-up of 14 months was obtained for 43 of the 48 patients. In-hospital mortality was 6.3%; at one year, mortality was 33% among the patients. In addition, 44% were able to return to their prior living environments. ■

Correction

An article in the April issue of *Rehab Continuum Report* contained some inaccuracies. Headlined "Practitioners adapting to realities of managed care," the article focused on rehabilitation facility Allegheny and Chesapeake, based in Ebensburg, PA, which developed a program called Athletic Competitive Edge.

The article incorrectly listed the affiliation of **Larry Fronheiser**, director of corporate operations for Allegheny and Chesapeake, and **Peter Kovacek**, president of Kovacek-ManagementServices. They are not board members of the American Physical Therapy Association (APTA). The APTA is publisher of *The Guide to Physical Therapist Practice.* ■

Health care Y2K resource book is now available

It's not too late to prep your facility

With the year 2000 (Y2K) deadline fast approaching, hospitals, other health care providers, and the medical device industry are scrambling to complete a process that in many cases was started too late.

What once may have been a logistical issue is burgeoning into an overwhelming problem across all industries. It continues to be compounded by the scarcity of time, increasing costs, and a lack of available programming resources and expertise, particularly in health care settings.

As the year 2000 computer compatibility issue continues to move far beyond a simple technological problem, American Health Consultants, publisher of *Rehab Continuum Report*, has announced it is offering a special Y2K guide for health care providers. Called the *Hospital Manager's Y2K Crisis Manual*, the book includes a compilation of resources for nontechnical hospital managers.

Find solutions to millennium problems

The 150-page reference manual includes information, in nontechnical language, on the problems your facility will face, the potential fixes, and the possible consequences, including the following:

- ❒ Will your computers and software work properly in the year 2000?
- ❒ What does Y2K mean for patient care?
- ❒ What will happen to your facility's medical devices?
- ❒ How can you make sure your vendors are Y2K-compliant?
- ❒ Are you at legal risk due to Y2K?
- ❒ Are you prepared if Y2K delays Health Care Financing Administration payments?

The Hospital Manager's Y2K Crisis Manual is available now for $149.

For additional information on *The Hospital Manager's Y2K Crisis Manual*, contact American Health Consultants' customer service department by telephone at (800) 688-2421 or on the World Wide Web at the following site: www.ahcpub.com. ■

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