

Voices of Experience:

Experts weigh in on the value of VitalStim® Therapy

For the most part, modern medicine has not adequately addressed the problems that plague patients with dysphagia.

But while the majority of physicians and speech language pathologists (SLP) continue to look for solutions beyond PEG tubes and thermal stimulation therapy, a growing number of professionals are seeing their dysphagic patients make significant progress with VitalStim Therapy, the first FDA-cleared method for safely re-educating the pharyngeal muscles with neuromuscular electrical stimulation (NMES).

Developed by Speech Pathologist Marcy Freed at the University Hospital of Cleveland,

What is VitalStim Therapy?

VitalStim Therapy is the only NMES technology cleared by the FDA to restore the swallowing function to patients with oropharyngeal dysphagia. In clinical and real-world settings, VitalStim Therapy has been proven safe and effective. It has successfully treated patients of every age and etiology, even those whose dysphagia has advanced beyond the six-month period of spontaneous recovery.

VitalStim Therapy is performed by passing a small current through specially designed electrodes placed on the neck. The electricity stimulates inactive or atrophied swallowing muscles. Concurrently, trained specialists administer rehabilitation therapy to help re-educate the muscles.

VitalStim Therapy is now being used in rehabilitation hospitals, acute care facilities and freestanding clinics worldwide. In these facilities, in as little as two weeks, VitalStim Therapy is helping SLPs retrain a large percentage of patients to swallow. Successful VitalStim Therapy is getting them off PEG tubes or thickened liquids and back to the joys of eating. A number of these therapists, referring physicians and administrators are eager to share their successes with their colleagues. Their stories follow.

Scripps Memorial sees tremendous benefits

Scripps Memorial Hospital
La Jolla, California
400-bed acute care hospital

Success with patients who failed traditional therapy

Jan Speirs, MS, CCC-SLP

Supervisor, Speech Audiology
Scripps Center for Voice and Swallowing

I put the VitalStim® Therapy electrodes on my own throat. I felt my muscles activate and contract. I felt myself wanting to swallow.

As far back as 1995, I had read an abstract about VitalStim Therapy by Marcy Freed and how she was getting people who were severe aspirators eating by the time they left the hospital, five to seven days later. Over the years I had kept in touch with her and knew she was continuing to get remarkable results with VitalStim Therapy and dysphagia.

But that moment in 2003 when I tried VitalStim Therapy on myself at a demonstration in Chattanooga was the moment I was more excited about swallowing therapy than I had been in my 18 years of work in the field.

Because my supervisor, Johan Otter, was a physical therapist who had broad experience using electrical stimulation to treat other muscle disorders, he had no qualms about letting me buy two VitalStim Therapy units right off the bat. Later, we bought additional units.

The first thing I did was bring in patients who had failed conventional therapy. Some of them had been suffering from dysphagia for a very long time, as much as a year or more. And, since typically spontaneous recovery occurs between onset and one year, there had been little or no hope they would spontaneously recover their ability to swallow.

One of those patients, for example, was a man who had a stroke and had a PEG tube. We had given him inpatient and outpatient therapy, including biofeedback.

But we had never gotten him to the point where it was safe for him to eat at home. We had to discharge him from swallowing therapy still on his gastrostomy tube.

After I had gotten my VitalStim Therapy training, I called him back in and after four visits, I could tell that his swallow was markedly better. We did a Modified

Barium Swallow and after that pulled his tube because his swallowing was restored.

When we analyzed the data from our first 13 VitalStim Therapy patients, we saw that 77% of them had been able to improve their swallowing, often significantly. Since then we have worked with approximately 75 more patients and the results have been consistent with those we first experienced. We have gotten a lot of people off their tubes.

Something else impressed me about VitalStim Therapy.

When you use conventional methods to help patients swallow again, they never refer to any physical

sensations that might be accompanying the therapy. They don't say to me, "I feel food going the wrong way or I feel like I still have something in my throat."

But when I use a VitalStim Therapy device, I get more feedback from the patients about what is going on in their throats. If someone is a silent aspirator, even I, though I am a trained therapist, can't monitor their swallowing as we are working together.

Now patients are telling me that they are more aware of what is going on in their throats. They can tell

“
That moment in
2003 when I tried
the VitalStim
Therapy on myself
was the moment
I was more excited
about swallowing
therapy than I had
been in 18 years.
”

me whether food is going down the wrong way, whether they feel food sticking. That improved sensation means that they are safer than they once were because they can alter their behavior and clear the food that is sticking, or cough if they think it has gone down the wrong way.

I have never been involved in a therapy that is so patient-driven. Word has really gotten out on the Internet and patient LISTSERV®, (those automated e-mailing lists that keep people informed about developments in a field in which they are interested). Patients are demanding that doctors prescribe this for them. We are even getting referrals from outside, from health maintenance organizations (HMOs) such as Kaiser-Permanente, which is almost unheard of.

On the other hand, patients may come to us thinking we have the “magic bullet” for them. However, when we get their Modified Barium Swallow results, I tell them exactly what we can and cannot do for them. I also let them know what other treatments they may need, like dilatation.

But it is really satisfying to see people swallow again who have not even been able to swallow, not even their own saliva. When they finally do, there are a lot of tears, and they look as if a cloud has been lifted. Just the other day I was working with a patient who got an audible contraction, which he had not had for a year-and-a-half. His eyes lit up. He looked at me and smiled. He knew he got his swallow back. This was a man who just a week earlier had no contraction of the pharyngeal muscle during his Modified Barium Swallow.

After VitalStim Therapy, patients can return to life.

No diet limitations for 73% of patients

Peter Belafsky, MD, PhD

Director of Scripps Center for Voice and Swallowing

Electrical stimulation is currently being used by numerous disciplines to control pain, to enhance muscle performance, to stimulate wound healing and to enhance sensorimotor recovery after stroke.

The use of transcutaneous electrical stimulation for the treatment of dysphagia is relatively new.

We have employed VitalStim Therapy at Scripps as an adjunct to swallowing therapy for more than a year.

“Some of the benefits over traditional therapy have been astonishing.”

Some of the benefits over traditional therapy have been astonishing. Although the treatment has not helped everyone, we have reported that VitalStim Therapy, in combination with minimally invasive surgery, has improved over 75% of the patients that we have treated.

Most importantly, there have been no complications attributed to the treatment.

Seventy-three percent of the patients we have treated have had no diet limitations at the end of treatment.

Challenging long-held assumptions

Johan Otter, PT, OCS

Director, Ancillary Services
Scripps Center for Voice and Swallowing

I was very excited when Jan Speirs introduced me to VitalStim® Therapy.

The therapy appeared to be more specific than anything we had available before and could be used in a functional manner for treating the throat area.

Second, VitalStim Therapy challenged the notion that you cannot use electrical stimulation (ES) in the throat area. In school we had learned that you could not use ES in the throat because doing so could loosen plaques in the carotid artery or adversely affect the nerve ganglions in the area.

We assumed that our professors were correct and did not challenge this notion even though there was not much in the way of scientific proof offered to back up the warnings about the contraindications.

VitalStim Therapy showed that our attitudes were based on fear, not science. It is the sort of thing that makes you wonder, why didn't anyone else think of it? Why didn't I think of it?

Since Jan Speirs brought VitalStim Therapy to us, we have trained all our professional speech therapy staff in it and now have eight certified VitalStim Therapy therapists.

More important, VitalStim Therapy has shown great promise with patients with swallowing difficulties, and we have had incredible results with it. Among our successes is a cancer patient who had not eaten in two years and who had shown no real improvement with conventional swallowing therapies. He ate for the first time after a series of treatments at our Voice and Swallowing Center.

While testimonials are great, more work needs to be done in double-blind studies and other clinical trials to demonstrate VitalStim Therapy's effectiveness, its reliability and to confirm long-term results.

In the meantime, we do intend to go on offering the therapy. There are no irreversible effects as long as the therapist is properly trained in the techniques, its indications and contraindications.

And, after all, patients are getting better.

“

VitalStim Therapy
has shown
great promise
with patients
with swallowing
difficulties, and
we have had
incredible
results with it.

”

Rehabilitation hospital shows treatment is effective.

HealthSouth Chattanooga Rehabilitation Hospital

80 beds, Division of HealthSouth, the nation's largest health care services provider, with nearly 1,700 locations nationwide and abroad

FDA determination was decisive

Donna L. Bourdon, MA, CCC-SLP

Administrator/CEO

In August 2003 three of our therapists attended the three-day VitalStim Therapy training.

We were so impressed with the treatment modality that we bought our first unit on the Monday following training and started treating patients on Tuesday. We observed such phenomenal results that we bought a second unit within a month. We did not want to be forced to treat one patient with state-of-the-art therapy while relegating another patient to more archaic methods for lack of equipment.

As CEO of a rehabilitation hospital, and a Speech Pathologist by training, I understood the clinical advantages VitalStim Therapy offered. The FDA's determination that the therapy is safe and effective satisfied the risk management concerns. This was an important determinant in implementing the program.

Later, when we looked at the first 13 patients we treated between August and December of 2003, the results showed that we had made the right decision.

Data on the effectiveness of traditional methods show that only about 2% of patients with neurological disorders and on PEG feedings return to full oral eating within one year. Five of the 13 patients we treated in 2003 were on PEG tube feeding. We were able to return all to oral feeding within 30 days and remove the PEG tubes. Three returned to regular diets;

one to a mechanical soft diet, and one was able to tolerate a puree diet.

The remaining eight also made impressive progress in their ability to return to an oral diet, some to mechanical soft food and others to a regular diet.

Would some of these patients have spontaneously recovered their ability to eat anyway?

Admittedly, our observations are empirical and certainly more studies need to be done, but it is my opinion that without VitalStim Therapy treatment we would not have seen the dramatic improvements—particularly in the patients who were receiving tube feedings.

Treating these patients with conventional therapies, such as thermal stimulation, would have resulted in longer duration of treatment with less desirable results regarding the consistency of the foods tolerated.

Our results were achieved with an average of 22 VitalStim Therapy

sessions per patient. Of the tube-fed patients, 100% advanced to a diet. And 93% advanced to either a mechanical soft diet or a regular diet.

With VitalStim Therapy, we saw wonderful quality of life outcomes that would not have been possible otherwise.



Our observations are empirical and certainly more studies need to be done, but it is my opinion that without VitalStim Therapy treatment we would not have seen the dramatic improvements—particularly in the patients who were receiving tube feedings.

Speeding recovery

David Bowers, MD

Medical Director, Neurological Division
HealthSouth Chattanooga

We have long known that muscles are responsive to weight training, repetitive exercises or electrical stimulation.

If you are treating patients with dysphagia, you obviously can't put weights on the swallowing muscles in your throat.

Repetitive swallowing exercises, which have been the treatment of choice, have their own drawbacks.

Patients find it difficult to practice swallowing repeatedly if they have nothing to swallow, yet if you give them small amounts of food to exercise their swallowing, you run the risk that food will get into the wrong pipe and be aspirated.

VitalStim® Therapy takes advantage of the third approach to strengthening muscles - electrical stimulation -and in that respect, it is neither an unreasonable nor an unexpected idea. It has given us an effective way to treat dysphagia, one that is consistent with what we know about muscles and how they function. Our results have borne that out.

We had a 36-year-old patient who was being fed through a tube surgically placed that goes directly to the stomach (PEG). The brainstem stroke had deprived him completely of the ability to swallow. Within a month of starting VitalStim Therapy he was on a regular diet, drinking thin liquids safely, and off his feeding tube.

A 78-year-old woman, also a stroke patient, came here with PEG tube in place, unable to swallow, drooling saliva. Within a month of starting VitalStim Therapy she was on a soft diet and thin liquids. Her tube was also removed.

It might be argued that these patients may have improved anyway, but I am confident they would not have recovered their swallowing abilities nearly as quickly, leaving them dependent on the PEG tubes for much longer.

Despite the successes we have had with VitalStim Therapy, it is not for everyone. We prescribe it only for patients who have neurologically based problems, such as

patients with stroke, brain injury, amyotrophic lateral sclerosis or multiple sclerosis.

We do not recommend it to patients with mechanical swallowing problems, strictures, esophageal spasms, and severe gastrointestinal reflux disease. Patients who cannot participate in the therapy include severely demented or cognitively

impaired patients. Patients who have pacemakers use it with caution.

Some patients are somewhat concerned when we prescribe VitalStim Therapy, though mostly they want to know if it hurts. We tell them that, generally, it does not and that if they feel any discomfort, we can always adjust the strength of the electrical signals to suit their comfort level.

As a whole, however, patients are excited when we discuss the potential results with them. It assures them that as a facility we are on top of things. It also allows them to look forward to quickly getting away from coffee thickened to nectar consistency, pureed hamburgers, pureed eggs - my land, that's disgusting - and getting back to their normal foods.



“Patients are excited when we discuss the potential results with them. It assures them that as a facility we are on top of things”.

Potential for lowering costs at nursing homes

Sai Oh, MD

Medical Director, HealthSouth Chattanooga

While we have seen that VitalStim Therapy has the potential to help patients who have swallowing difficulties, I believe that the therapy has positive economic impact as well.

VitalStim Therapy also has the potential for lowering health care costs, particularly those involved in caring for patients in institutions such as nursing homes.

A patient who is on a PEG tube has to use a special formula. Feeding through the tube has to be supervised by a nurse. The site of the tube has to be cleaned every day to make sure there are no infections. If a patient has limited swallowing capabilities and is part of a swallowing group at mealtime, a Speech Pathologist has to be present to supervise. The costs are even higher when there are other conditions associated with the dysphagia, including renal and pulmonary conditions.

I have not studied the cost of all the medical services associated with dysphagia, but according to an article in the Journal of the American Geriatric Society¹ in 2001, the average cost for maintaining older patients with PEG in a defined community was \$7,488 in 1997 and 1998 while the average daily cost of PEG feeding was \$87.21. Since then, of course, health care costs have gone even higher.

I used to visit nursing homes where I would see patients on PEG tubes for a long time, never given a chance to try swallowing on their own. If they were to be evaluated and given the chance to benefit from VitalStim Therapy, they would have a better quality of life and the

health care system could save money.

At HealthSouth we have seen that dysphagia patients can clearly benefit when treated with VitalStim Therapy.

Patients who are treated with conventional therapy such as thermal stimulation or who are taught compensa-

tions, such as a chin tuck when swallowing, will, after a time, manage to swallow. But from what I have observed, recovery from swallowing problems is much faster when patients are treated with VitalStim Therapy.

We treated five patients who were on PEG tubes because they could not take anything by mouth without risking that they would

aspirate food and develop pneumonia. All five were off their PEG tubes and were feeding by mouth when they were discharged.

Patients who were not on PEG tubes, but had swallowing difficulties, benefited from VitalStim Therapy as well. Some advanced from mechanical soft food to regular diet; some who could not tolerate any solids moved to mechanically soft food. Others who could not tolerate any liquids moved from honey-texture liquids to nectar liquids and eventually to thin liquids.

This therapy will benefit patients: stroke patients, patients with neurological disorders, patients with brain injuries and high quadriplegic injury patients.

We have to spread the word to the medical community.

“VitalStim Therapy has the potential for lowering health care costs, particularly those involved in caring for patients in nursing homes.”

Community hospital adds up benefits

Relief for long-time dysphagia patients

Denise Dougherty, MS, CCC-SLP

Speech Pathologist

Let's take a look at it for a month, the hospital told me when I brought back our first VitalStim® Therapy machine from the certification course I attended.

It didn't take a month for the hospital to see that this therapy was a very good thing.

Two physicians here—including one who had been very frustrated with the slow progress of some of his dysphagia patients—immediately began writing referrals. Within days I was working 10 to 12 hours a day, often staying until 9 in the evening, trying to accommodate the demand by dysphagia patients.

Two weeks later we had to add three machines and, shortly thereafter, another three. The patients were there and were being helped. The dollars were there. We haven't looked back since.

Of course, we are not successful with every patient we treat, nor do we promise to cure every patient who comes to us for help.

About 12% of the patients we have treated so far haven't benefited because they were not able to follow instructions or were not motivated enough to work successfully with the training.

Although we have seen great results with most of our patients, it is important that families and patients realize – especially with progressive disorders such as Parkinson's and amyotrophic lateral sclerosis – that we cannot promise results. We have seen some strengthening in their swallowing abilities, but the strength is not consistent enough to keep them from aspirating food. Dementia patients who are nonstop talkers are also very difficult to help because they are more likely to aspirate while talking.

But we have had success with up to 88% of those who have gone through VitalStim Therapy. Our success stories include stroke patients, patients with chronic obstructive pulmonary disease, people who developed

dysphagia after carotid artery surgery or choking accidents as well as children who lost the ability to swallow as a result of birth injuries.

Everybody is different, but we see improvements across the board – and see them fairly quickly compared to traditional dysphagia therapy.

Some patients have been able to return to oral intake and get off their PEG tubes completely. Other patients who had dysphagia for several years and had to live on a puree diet with honey-thick liquids were able to return to regular food and liquids following VitalStim Therapy. We also have had patients who have had to remain on the tube, but whose swallowing capabilities have progressed to the extent that they can enjoy a meal or snack with their friends.

We get results faster as well.

When we do conventional dysphagia therapy we may see very little change over a period of several months. With VitalStim Therapy, we see results in 10 to 12 sessions, which can span as little as two weeks. We have had patients who have been able to leave the hospital eating food and drinking liquids after five VitalStim Therapy sessions.

I have been a therapist for 28 years and this has helped many more people than anything I have tried before.

"I have been a therapist for 28 years and this has helped many more people than anything I have tried before."

Armstrong County Memorial Hospital

Kittanning, Pennsylvania

Skilled nursing and acute rehabilitation units, 126 beds

A skeptic converted

Jay Paul, MD

Pulmonary and Critical Care Specialist

As a pulmonary and critical care specialist I see a lot of people, particularly older people, who have trouble swallowing and aspirate. Some because of stroke and other diseases. Some because they were on endotracheal tubes for a long time and developed dysfunction of their swallowing muscles. Some simply because age has robbed them of the coordination they need to swallow.

Swallowing, after all, is a complex process involving 13 different muscles.

Unfortunately, there hasn't been much we have been able to offer patients with swallowing difficulties.

Therapies have been hard to implement. Many patients wind up on feeding tubes. Even those that can eat solid foods face an unpleasant future if they have to take thickened liquids to avoid aspiration problems. Imagine having to thicken all your water, pop and

coffee to the consistency of Metamucil®. Imagine never again feeling that your thirst has been quenched. At first when Denise Dougherty told us about VitalStim Therapy, a colleague, Dr. Malcolm Berger, and I were very skeptical because the data was basically too good to be true.

But we tried it and it worked.

It doesn't help every patient, those who are demented, for example. VitalStim Therapy will help some only to a limited degree. And some patients, such as those with progressive neuromuscular diseases like Parkinson's, will

only be helped for a limited amount of time as the disease progresses.

But on the whole it appears that VitalStim Therapy can help 85% of the people who are treated with it.

We are so confident that now, if we have a patient who has swallowing difficulties, we send the person home or for rehabilitation with only a nasogastric feeding tube or an intravenous line in place. We know we can jump past a PEG or a jejunum tube because within a couple of weeks of VitalStim Therapy training, Denise will be able to improve their swallowing function.

The only problems we have experienced with VitalStim Therapy are economic ones.

When a patient has to be hospitalized, our hospital is reimbursed with a flat fee. So we cannot bill for the VitalStim Therapy because it is not included in that fee. If we have a patient whose disorder includes swallowing difficulties, in order to charge for VitalStim Therapy we have to discharge him from the hospital and move him to an outpatient facility. That delays treatment.

If patients have to go to a nursing facility where there are no therapists trained in VitalStim Therapy, they do not get treated at all because the facility will not eat the cost of bringing in a trained therapist. Nor will nursing homes pay the \$700 or so it would take to provide for ambulance transportation to and from a facility where VitalStim Therapy is available.

Nevertheless, VitalStim Therapy has been a major, major change for us. I can offer patients hope now, where before I had very little I could offer them.

“A colleague and I were very skeptical because the data was basically too good to be true. But we tried it and it worked.”

Outpatient clinic experiences great progress

Patients travel far for treatment

Hal Hunsaker, MS, CCC-SLP

Speech Language Pathologist

In high school, I competed in track and field and other sports and on several occasions, I suffered injuries that improved dramatically with electrical stimulation.

When I read about Marcy Freed's work with electrical stimulation to help patients with swallowing difficulties, it made immediate sense to me.

Although I now run my own therapy facility with treatment rooms dedicated to VitalStim® Therapy, at the time I learned about this treatment, I was working at Colonial Vista Care Center. The administrators there did not immediately share my excitement regarding its potential and at first were reluctant to pay the fee for VitalStim certification training. When I told them I was prepared to pay for it out my own pocket, they decided it was worth a shot, but that they would not buy the equipment until after I returned.

The certification training was fantastic. The teachers not only gave us data but hands-on training to demonstrate the effectiveness of VitalStim Therapy. I was immediately sold on its potential effectiveness.

After I returned, Colonial Vista was still hesitant to pay for a VitalStim Therapy machine without the input of physicians. The administration asked me to get input from doctors about the therapy and then run some numbers to demonstrate how long it would take to pay off one VitalStim Therapy machine.

The doctors thought the potential was great and assured me they would be comfortable referring patients to us. The financial data demonstrated that we could pay for the equipment within six months. I got the go-ahead to buy one machine.

We could not have anticipated the response. Even though we did minimal marketing, word spread about VitalStim Therapy. Patients drove nearly 300 miles each way to come for treatments. Almost immediately, half my day was spent doing VitalStim Therapy treatments.

We paid for the machine in four weeks, not six months.

Although I tell patients who come to us that I am impressed with the results that I have seen with VitalStim Therapy, I also tell them there are no guarantees. Each patient is different and injuries such as stroke or cancer affect swallowing musculature in different ways. I also tell them that while it is probable that they will make significant progress, we cannot predict the extent of that progress.

That reflects our experience. While we have not succeeded in restoring every patient to totally regular diets, we have succeeded, to varying degrees, in more than 95% of the 70 to 75 people we treated while I was at Colonial Vista.

We treated a gentleman who had suffered a stroke four years before he came to Colonial. He was unable to drink any liquids and was able to eat only foods prepared in a blender. In the course of 20 sessions he improved to the point where he was safely able to drink regular liquids and eat many regular foods.

We have been able to return more than a dozen patients to independent feeding, even though they had been completely dependent on PEG tubes, sometimes for many years. Among them was a gentleman who had a

“
While we have not succeeded in restoring every patient to totally regular diets, we have succeeded, to varying degrees, in more than 95% of the 70 to 75 people we treated so far.
”

Achieve Center

A multidisciplinary outpatient clinic
Wenatchee, Washington

stroke following a serious motor vehicle accident. He had not been able eat or participate with his family at mealtime and, as a result, felt separated from his loved ones. After we treated him with VitalStim Therapy, he was able to return to a diet with many regular foods and even his favorite soda. On his next Thanksgiving he enjoyed eating turkey, stuffing and mashed potatoes with his family.

We also have used VitalStim Therapy with children and have had remarkable success with them.

One of our first pediatric patients was a nine-year-old boy who had eaten a corn dog containing a hidden, extra piece of wood. As he swallowed, the stick severely scratched his throat, which became infected. The infection led to dysphagia. Although he took liquids like juices and soup, he wouldn't – or couldn't – eat solids. The longer these problems persisted, the more he was frightened at the prospect of having to eat. He avoided social situations like birthday parties where he would be offered food.

After unsuccessful attempts at various clinics to get him to eat solids again, he was referred to us for VitalStim Therapy. When he came to Colonial, his swallowing coordination was poor and his swallowing muscles were weak.

When we offered him apple slices at the first therapy session he cried because he knew he would choke. But after six treatment sessions he returned to eating regular foods, including his favorite, pizza.

I believe that VitalStim Therapy is the most productive treatment option available today for swallowing disorders. I continually witness its ability to improve swallowing function and change lives.

A profitable alternative

Eric Burns

Chief Executive Officer

The cost of the VitalStim Therapy equipment is relatively small compared to the revenue it can generate. Thus, any traditional cost/benefit analysis will reveal that VitalStim Therapy is a profitable alternative to other therapies.

However, since VitalStim Therapy is reimbursed at a rate that is comparable to other therapy services, deciding whether or not to offer VitalStim Therapy is not a question of adding marginal revenue.

Rather, the decision to offer VitalStim Therapy is a decision to increase market share. Outpatient therapy centers that currently offer treatments for dysphagia will

“
Outpatient therapy centers
that currently offer
treatments for dysphagia will
want to offer VitalStim
Therapy. If they don't, their
patients will seek treatment
with those therapy centers
that do.

”

want to offer VitalStim Therapy. If they don't, their patients will seek treatment with those therapy centers that do.

As the success of VitalStim Therapy continues to be publicized, more and more dysphagia patients will seek it out as a vital alternative to current treatments.

And since it has been approved for Medicare reimbursement, it becomes that more attractive as a viable option.

For more information about VitalStim Therapy,
call 1-800-506-1130, +1-423-870-7200 or visit
our web site, www.vitalstimtherapy.com.



Individual results may vary.
© 2006 Encore Medical, L.P.
VitalStim is a registered trademark of
VitalStim, LLC.
Other trademarks are the property of
their respective owners.
#4494B