To promote quality improvement, Cleveland Clinic Florida has created a series of Outcomes books similar to this one for many of its departments. Designed for a physician audience, the Outcomes books contain a summary of our surgical and medical trends and approaches, data on patient volumes and outcomes, and a review of new technologies and innovations.

Although we are unable to report all outcomes for all treatments provided at Cleveland Clinic Florida — omission of outcomes for a particular treatment does not necessarily mean we do not offer that treatment — our goal is to increase outcomes reporting each year. When outcomes for a specific treatment are unavailable, we often report process measures associated with improved outcomes. When process measures are unavailable, we may report volume measures; a volume/outcome relationship has been demonstrated for many treatments, particularly those involving surgical techniques.

In addition to our internal efforts to measure clinical quality, Cleveland Clinic Florida supports transparent public reporting of healthcare quality data and participates in the following public reporting initiatives:

- Joint Commission Performance Measurement Initiative (qualitycheck.org)
- Centers for Medicare & Medicaid (CMS) Hospital Compare (hospitalcompare.hhs.gov)
- Agency for Healthcare Administration (ahca.myflorida.com)
- Centers for Disease Control and Prevention (cdc.gov)

Our commitment to providing accurate, timely information about patient care also will help patients and referring physicians make informed healthcare decisions.

We hope you find these data valuable. To view all our Outcomes books, please visit our website at clevelandclinicflorida.org.
Dear Colleague:

On behalf of Cleveland Clinic Florida, I am proud to present our 2010 Outcomes books. Each book is compiled by area of specialty to demonstrate our commitment to accountability, transparency and most of all, to outstanding patient care.

These books are designed to help you and your patients make informed decisions about treatments and referrals. We consider it a privilege to work in partnership with you to care for your patients, and we continuously challenge ourselves to improve and to achieve excellent outcomes on their behalf.

Each publication includes outcomes, volumes and other data, along with recent innovations and publications.

We hope you find the content informative.

Sincerely,

Bernie Fernandez, MD
Chief Executive Officer
Cleveland Clinic Florida
### What’s Inside

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It is my pleasure to present this 2010 collection of outcomes from Cleveland Clinic Florida’s Department of Neurology. This compilation of quality and outcomes measurements is important to share with our patients, referring physicians and others who are interested in our activities.

The Department of Neurology provides consultation in all areas of neurology but has outstanding expertise in stroke, neuromuscular diseases, headache medicine, movement disorders, epilepsy and dementias. Brain tumors are addressed in a multidisciplinary fashion along with the Oncology, Radiotherapy and Neurosurgical departments.

We recently expanded our Epilepsy Monitoring Unit from two beds to four, with two additional mobile units. Our Epilepsy Monitoring Unit allows us to monitor patients with epilepsy symptoms 24 hours a day, seven days a week and provide them with state-of-the-art diagnosis and treatment options.

Our department provides a multidisciplinary approach to the neurosciences, continuing neurological education and training of future neurologists and scientists. Our neurology trainees consistently scored above the 96th percentile in standardized testing when compared with the same group across the country.

We believe reporting outcomes serves the needs of the referring physician, patients, donors and friends of Cleveland Clinic in making various decisions. We hope you find this outcomes summary useful and informative.

Sincerely,

Néstor Gálvez-Jiménez, MD
Chairman, Department of Neurology
The Department of Neurology at Cleveland Clinic Florida is an integral part of the renowned Neurological Institute (NI) of Cleveland Clinic in Cleveland. Cleveland’s NI is a worldwide leader in neurology and neurosurgical care and its program has been ranked among the top 10 neurological programs in the United States for the past 15 years by *U.S. News & World Report*. Similarly, the Cleveland Clinic Florida neurology/neurosurgery program has been ranked as high performing in the South Florida region by *U.S. News & World Report* for the past two years, since it began keeping track of similar centers in the South Florida region. In addition, Cleveland Clinic Florida has been ranked best in Broward County for two years in a row by *U.S. News & World Report*. Our fellowship-trained neurologists and neurosurgeons offer a high level of expertise and experience in the management of all common and rare neurological/neurosurgical conditions. Collaboration is a must in our daily practice, echoing Cleveland Clinic’s founders call “to act as a unit” to evaluate the most complex medical and surgical conditions. We offer state-of-the-art neurodiagnostics such as electromyography, nerve conduction studies, single fiber EMG, QSART (quantitative sudomotor axon reflex test) and other autonomic testing. Additional services include botulinum toxin therapy, transcranial doppler ultrasonography, carotid ultrasound, digital video and remote electroencephalography (EEG), intensive care neurodiagnostic monitoring, state-of-the-art infusion therapy for immunosuppressants, immunomodulators, and chemotherapeutic agents. In addition, our multidisciplinary outpatient infusion center for headache management has been very successful for the evaluation and treatment of patients with severe headache and pain. Deep brain stimulation, evaluation, and programming and infusion of baclofen pumps are performed in our department in a routine basis.

Our programs include the following:

**Epilepsy**

The epilepsy program offers comprehensive diagnosis and treatment for patients with seizures and epilepsy. The epilepsy program is an integral
part of the renowned Epilepsy Center of Cleveland Clinic in Cleveland. Epilepsy patients who require surgery are referred to Cleveland Clinic in Cleveland because it allows us to provide them with access to cutting-edge surgical treatment.

**Movement Disorders**

Cleveland Clinic Florida’s movement disorders program, established in 1996, offers a multidisciplinary approach to the diagnosis and treatment of patients with all types of conditions affecting motor control. Parkinson’s disease, secondary parkinsonism (MSA, PSP, OPCA), mitochondrial myopathies, cerebellar ataxias, choreas, Tourette syndrome, restless legs, tremor, gait disorders and falls are some of the conditions we treat. We have a very active clinical trials program offering qualifying patients the most up-to-date treatment options. In addition, our program has a very active deep brain stimulation program, offering pre-surgical evaluation, programming and follow-up care for patients, particularly those with Parkinson’s disease, tremor and dystonia. To enhance our services, we work in close collaboration with the Center for Neurological Restoration at Cleveland Clinic in Cleveland.

**Neurodiagnostic Laboratory**

The neurodiagnostic laboratory provides comprehensive state-of-the-art evaluation for patients with a variety of neurological disorders such as epilepsy, stroke, neuromuscular disorders, motor control, imbalance and vertigo, sensory complaints and multiple sclerosis.

The studies performed at our laboratory include electroencephalography (EEG), ambulatory EEG, visual evoked responses, somatosensory evoked responses, brainstem evoked responses, electrocochleography, transcranial doppler ultrasonography, autonomic testing including the quantitative sudomotor axon reflex test (QSART), electromyography/nerve conduction studies (EMG/NCS), pudendal EMG, and botulinum toxin therapy.
Neuromuscular Diseases

The oldest of all programs within our department, the neuromuscular diseases program runs one of the busiest electrodiagnostic laboratories in Broward and Palm Beach counties. Specialists in the neuromuscular diseases program treat a variety of conditions including neuromuscular junction disorders such as myasthenia gravis, Lambert Eaton myasthenic syndrome, motor neuron diseases (ALS, Primary lateral sclerosis, post polio syndrome), peripheral neuropathies, genetic disorders (Charcot Marie Tooth, Dejerine Sottas and other HSM neuropathies) and myopathies, compressive neuropathies, and degenerative spine-related conditions. An infusion for the treatment of patients with neuromuscular diseases is available on an outpatient basis for those patients who qualify for such form of treatment.
Quality and Outcome Measures

Inpatient Epilepsy Monitoring Unit (EMU) Monitored Days
2002 – 2010

Outpatient Electroencephalogram (EEG) Studies
2004 – 2010
Cerebrovascular Diseases

From 2006 through 2010, our stroke service treated or evaluated:

- 2,895 patients undergoing stroke (infarcts)/transient ischemic attacks (TIA)
- 327 patients with carotid stenosis

The stroke service performed above the national and state norms in all recognized areas of prevention and acute treatment of ischemic stroke.
Conditions of Outpatient Stroke Patients (N = 128) 2006 – 2010

- Cerebral Infarction: 66%
- Transient Ischemic Attacks (TIA): 27%
- Carotid Stenosis: 4%
- Other: 1%

Conditions of Inpatient Stroke Patients (N = 227) 2006 – 2010

- Cerebral Infarction: 70%
- Transient Ischemic Attacks (TIA): 29%
- Other: 1%
Neurodiagnostic Case Volume
2010

Number of Cases
We ask our patients about their experiences and satisfaction with the services provided by our staff. Although our patients are already indicating we provide excellent care, we are committed to continuous improvement.

Below are the most recent results of the feedback that our patients have given to our department.

**Overall Rating of Outpatient Care and Services During Outpatient Visit (N = 252) 2010**

Source: Press Ganey, a national hospital survey vendor
Rating of Outpatient Care Provider (N = 250)
2010

Source: Press Ganey, a national hospital survey vendor

Likelihood of Recommending Outpatient Care Provider (N = 248)
2010

Source: Press Ganey, a national hospital survey vendor
**Inpatient**

With the support of the Centers for Medicare & Medicaid Services (CMS) and its partner organizations, the first national standard patient experience hospital survey (HCAHPS) was implemented in late 2006. Results collected for reporting are available at hospitalcompare.hhs.gov.

**HCAHPS Overall Assessment (N = 1750)**

2010

**HCAHPS Domains of Care (N = 1750)**

2010

Source: Press Ganey, a national hospital survey vendor
• Has the only neurology residency program offered in Broward county
• Offers one of only five residency programs in Florida
• Offers a two-year movement disorders fellowship program
• Produced more than 68 scientific publications, book chapters, and books in 2010
• Hosted 3 international/national symposia in 2010
• Has the largest dystonia clinic in South Florida
• Was the first to offer deep brain stimulation surgery in South Florida
  - Recently expanded to an 8-bed epilepsy monitoring unit
  - Is high-performing in the prevention and treatment of stroke
• Ranked regionally as a high performing specialty by *U.S. News & World Report* in 2010-2011
Selected Publications


Néstor Gálvez-Jiménez, MD
Chairman
Director, Movement Disorders Program and Parkinson's Disease Center

Imad Najm, MD
Director, Epilepsy Center

Maurice Hanson, MD

Hubert Fernandez, MD

Tarannum Khan, MD

Ramon Lugo, MD

Chetan Malpe, MD

Marvin Mordes, MD

Adriana Rodriguez, MD

Virgilio D. Salanga, MD

Efrain Salgado, MD

Po-Heng Tsai, MD
General Patient Referral
24/7 hospital transfer or physician consults
954.689.5150

General Patient Information
Toll-free: 877.463.2010

Referring Physician Center
For help with service issues, information about clinical specialists and services, details about CME opportunities and more:
954.659.5162
physicianrelations@ccf.org

Global Patient Services
Patient Services Center
954.659.5080
Toll-free: 877.463.2010
flgps@ccf.org
Weston Campus
2950 Cleveland Clinic Blvd.
Weston, FL 33331
Clinic: 954.659.5000
Hospital: 954.689.5000

Weston Family Health Center
1825 North Corporate Lakes Blvd.
Weston, FL 33326
954.349.1111

West Palm Beach
CityPlace Tower
525 Okeechobee Blvd.
West Palm Beach, FL 33401
Toll-free: 877.463.2010

Krupa Center
3250 Meridian Parkway
Weston, FL 33331
954.659.5000
Cleveland Clinic Florida, the Florida campus of the world-renowned Cleveland Clinic, is a nonprofit multispecialty academic medical center that integrates clinical and hospital care with research and education. Located in Weston and West Palm Beach, Cleveland Clinic Florida has nearly 200 physicians with expertise in 35 specialties and subspecialties working collaboratively to achieve excellent results for patients. The medical campus is fully integrated and includes diagnostic centers, outpatient surgery and a 24-hour emergency department located in the state-of-the-art hospital, which was named one of the nation’s 100 Top Hospitals® by Thomson Reuters in 2010.

Our West Palm Beach location extends our reach, enabling us to serve the Palm Beach County community. In addition to clinical care, our services include an infusion suite, pulmonary function testing and procedure room, as well as diagnostic imaging suites.

Cleveland Clinic Florida has been named one of the nation’s 100 Top Hospitals® for cardiovascular care for the last four years (2007, 2008, 2009, 2010) by Thomson Reuters. In 2010, it was named one of America’s Best Hospitals for gastroenterology and diabetes/endocrinology by U.S. News & World Report.

Cleveland Clinic Florida is an integral part of Cleveland Clinic in Cleveland, Ohio, where providing outstanding patient care is based upon the principles of cooperation, compassion and innovation. Established in 1988, Cleveland Clinic Florida has been committed to improvements in patient care and enhancements in medical education for more than 20 years.
**eCleveland Clinic**

eCleveland Clinic uses state-of-the-art digital information systems to offer several services, including remote second medical opinions to patients around the world; personalized medical record access for patients; patient treatment progress for referring physicians; and imaging interpretations by our subspecialty trained radiologists. For more information, please visit eclevelandclinic.org.

**DrConnect**

Whether you are referring from near or far, DrConnect can streamline communication from Cleveland Clinic physicians to your office. This online tool offers you secure access to your patient’s treatment progress at Cleveland Clinic. With one-click convenience, you can track your patient’s care using the secure DrConnect website. To establish a DrConnect account, visit eclevelandclinic.org or email drconnect@ccf.org.

**MyConsult**

MyConsult Remote Second Medical Opinion is a secure online service providing specialist consultations and remote second opinions for more than 1,000 life-threatening and life-altering diagnoses. The MyConsult service is particularly valuable for people who wish to avoid the time and expense of travel. For more information, visit eclevelandclinic.org/myconsult, email eclevelandclinic.org, or call 800.223.2273, ext. 43223.

**MyChart**

This secure online tool connects patients to their own health information from the privacy of their home any time, day or night. Some features include renewing prescriptions, reviewing test results and viewing medications, all online. For the convenience of physicians and patients across the country, MyChart now offers a secure connection to Google™ Health. Google Health users can securely share personal health information with Cleveland Clinic, and record and share the details of their Cleveland Clinic treatment with the
physicians and healthcare providers of their choice. To establish a MyChart account, visit clevelandclinic.org/mychart.

**Continuing Medical Education (CME) Opportunities**

Cleveland Clinic Florida is dedicated to advancing medical knowledge through continuing education. Our CME program provides educational opportunities of a high quality and a wide variety to physicians, nurses, and other healthcare professionals. Our mission is to develop educational programs of an appropriate scope and depth to satisfy the need for knowledge and skill development of the learner.

CME activities include didactic lectures, live surgery presentations, hands-on workshops and audience participation. Interactivity between faculty and participants is emphasized. All activities are designed to maintain, develop or increase knowledge, competence or professional performance with the intended result of improving patient care and reducing disease impact.

For a program schedule and more information, visit: clevelandclinic.org/florida and click on “Education” at the top of the page.