



**Outpatient Division Clinical Education Department**

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TO: Managers and Clinicians  
FROM: Alan Evans, PT, MOMT, FAAOMPT, MCSP  
DATE: 7/28/2010  
RE: **EDUCATION PROGRAM ANNOUNCEMENT**  
**Current Concepts and Practical Clinical Applications**

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Please find below information regarding a clinical education course scheduled for your area:

**COURSE:** **Modality Interventions: Electrotherapy and Acoustic**

**DATES:** October 9, 2010

**SCHEDULED INSTRUCTOR:** Eric Quick, PT, OCS, CSCS – Jupiter, FL  
Diane Reiley, PT, ATC – Jupiter, FL

**LOCATION:** Select Physical Therapy  
600 S. Pine Island Road, Ste. 200  
Plantation, FL 33324  
Host Center Manage/Contact: Bill Proxmire

**DIRECTIONS:** From I-95 & Turnpike: Take I-595 West, Exit Pine Island Road, Head North until 6<sup>th</sup> Ave. Make Right, Southpointe Medical Building is on left side. From I-75: Take I-595 East, Exit Pine Island Road, Head North until 6<sup>th</sup> Ave. Make a right, Southpointe Medical Building is on the left side. Parking is available at the facility. Ft. Lauderdale Int'l Airport is 12 miles, Miami Int'l Airport is 30 miles.

Tuition is waived for employees of Select Medical Corporation's Outpatient Division. Course enrollment is limited to 30 participants.

Space is limited and is allocated on a first come first serve basis. Course participants will be given a certificate for 8 contact hours of education. Participants will receive notification by fax or e-mail from the Clinical Education Department confirming their acceptance into the program 4 weeks prior to the course. If you have not received confirmation of your status 30 days prior to the date of the program, call 817-488-5159 or email [linda.gilles@selectmedicalcorp.com](mailto:linda.gilles@selectmedicalcorp.com)

All participants are expected to attend the entire educational program. No partial continuing education credit can be extended. In the event that an individual who has been confirmed for a program fails to attend without giving prior notification, notification of their absence will be sent to their Market Manager.

Please be advised that the Clinical Education Department will not be able to reimburse the participant foany travel, lodging, or meal costs associated with attendance at the program.

## **Modality Interventions: Electrotherapy and Acoustic**

**October 9, 2010 – Plantation, FL**

### **Course Description:**

This course focuses on the application of electrical and acoustic modalities. The clinician will have an understanding of the electrophysiological, neurophysiological and anatomy involved with the application of electrical and acoustic modalities. There will be background information provided on certain physical laws associated with acoustic and electrical modalities and their effect on human tissue. In this course the clinician will be able to identify abnormal and normal responses to acoustic and electrical modalities as well as identify the indications and contraindications, safety rules/precautions of each modality. They will be able to understand the safe administration, dosage, duration, mode and location of these modalities and the proper documentation associated with such treatment. Clinicians will be competent in educating patients/clients about the process and outcomes of treatment including risks and benefits. Furthermore, the clinician will be able to document the effects of treatment and be knowledgeable as to the characteristics of the equipment involved including safe operation, adjustment, and care.

**Target Audience:** PT, PTA, OT, COTA, ATC

**Instructional Level:** Intermediate

### **Course Learning Objectives:**

Following completion of the course the participant will be able to:

This course will provide training which teaches the therapeutic uses of **electrical stimulation devices** and provide for the following minimum competency level:

1) Standards:

- The expected outcome is consistent with goal of electrotherapy
- The safe administration at the proper dosage, and to the correct area
- Proper/adequate documentation of electrotherapy

2) Current Duration and Mode:

- Ability to determine the duration and mode of current appropriate to the patient's neurophysiological status while understanding Ohm's Law of electricity, physical laws related to the passage of current through various media, as well as impedance
- Ability to describe normal electrophysiology of nerve and muscle; understanding generation of bioelectrical signals in nerve and muscle; recruitment of motor units in normal muscle and in response to a variety of external stimuli
- Ability to describe normal and abnormal tissue responses to external electrical stimuli while understanding the differing response to varieties of current duration, frequency and intensity of stimulation

3) Selection of Method and Equipment

- Ability to identify equipment with the capability of producing the preselected duration and mode
- Ability to describe the characteristics of electrotherapeutic equipment and understanding the therapeutic value of different electrotherapeutic equipment
- Ability to describe safety regulations governing the use of electrotherapeutic equipment
- Ability to describe principles of electrical currents
- Ability to describe requirements/idiosyncrasies of body areas and pathological conditions with respect to electrotherapeutic treatment

4) Preparation of treatment:

- Ability to prepare the patient for treatment through positioning and adequate instructions

5) Treatment Administration

- Ability to correctly operate equipment and appropriately adjust the intensity and current while understanding rate of stimulation, identification of motor points and physiological effects desired
- Ability to adjust the intensity and rate to achieve the optimal response, based on the pertinent evaluative data

6) Documentation of Treatments

- Ability to document treatment including immediate and long-term effects of therapeutic electrical current
- Understand that proof of training required by this rule can be requested by the board or departments for any OT or OTA using electrical stimulation

B. This course will provide training which teaches the therapeutic uses of **ultrasound devices** and provide for the following minimum competency level:

1) Standards:

- The expected outcome of treatment with ultrasound is consistent with goal of ultrasound
- The safe administration of ultrasound at the proper dosage, and to the correct area
- Proper/adequate documentation of ultrasound

2) Instrumentation:

- Ability to describe the physiological effects of pulsed versus continuous modes as well as differentiate tissue response to the modes of application
- Ability to describe ultrasound absorption characteristics of various body tissues and identify sources and causes of excessive absorption in normal versus abnormal tissue
- Ability to determine the medium to be used and the temperature of that medium
- Ability to select the appropriate sound head size and contour considering the area and condition being treated
- Ability to describe equipment characteristics, indications and contraindications for treatment, including identifying source and mechanisms of generation of ultrasound energy and its transmission through air and physical matter

3) Preparation for Treatment

- Ability to prepare the patient for treatment through positioning and adequate instruction

4) Determination of Dosage:

- Ability to determine dosage through determination of target depth, chronic versus acute nature of the condition, and application of power/dosage calculation rules

5) Treatment Administration

- Ability to administer treatment through identification of controls, sequence of operation, correct sound head application techniques and application of all safety rules and precautions

6) Documentation of Treatment

- Ability to document treatment, including immediate and long-term effects of clinical ultrasound
- Understand that proof of training required by this rule can be requested by the board or departments for any OT or OTA using ultrasound

**Agenda:**

7-730	Sign in
730-830	Neurophysiology : Nerve and Muscle
830-930	Physics : Ohm's Law and Physical Laws of Electricity
930-1030	Clinical Use of Electromodalities: Selection of method, use of equipment, and documentation
1030-1045	Break
1045- 1145	Electromodality Case Studies & Lab Demonstration
1145-1245	Lunch
1245-245	Acoustic Lecture (Principles of Physics, Physiology)
245-300	Break
3-4	Acoustic Lecture Continued ( Clinical Applications)
4-5	Acoustic Case Studies & Lab Demonstration

### ***Instructor(s) Biography:***

**Eric Quick, PT, OCS, CSCS** is a graduate of the University of Florida earning his Bachelors of Health Science in Physical Therapy in 1998. He went on to earn his Certified Strength and Conditioning Specialist designation in 2002 and became a Board Certified Orthopedic Clinical Specialist in 2003 from the American Board of Physical Therapy Specialties. He received his Doctor of Physical Therapy degree from Arizona Still University. Eric has been a lecturer for the clinical education department over the past 5 years and has also presented in the online WebEx lecture forum. Eric will be performing the didactic portion of the program with emphasis on anatomy, physiology, biomechanics, and pathology.

**Diane Reiley, PT, ATC** received her bachelors in Sports Medicine and Athletic Training degree from Central Michigan University in 1989 and received her Physical Therapy degree from Florida International University in Miami in 1996. Diane is a Center Manager at Select Physical Therapy in Jupiter, FL. She has worked in the outpatient, orthopedic setting for the last 21 years during which she has specialized in treatment of the foot and ankle along with orthotic fabrication.

### ***Instructor(s) Disclosure Statement:***

The instructors have declared that they do not have a financial interest or other relationship with the manufacturers or providers of services that may be discussed in the course.

### ***Program Accreditation:***

The Select Medical Outpatient Clinical Education Department is approved or has applied for accreditation by the following organizations or licensing bodies to provide continuing education for this program. The program offers 8 contact hours for full attendance and completion of all course requirements. Accreditation by the providers below does not imply endorsement of the course content, specific products, or clinical procedures. Approval or endorsement by other organization or licensing bodies is the responsibility of the participant.

#### **Florida Physical Therapy Association**



### ***ADA Compliance:***

The Select Medical Outpatient Clinical Education Department will take all reasonable measures to guarantee equal access to learning opportunities for attendees with disabilities. Educational programming will be sensitive to any sensory or physical impairment that requires special arrangements on behalf of the participant. Please indicate on your registration form if you should be contacted regarding any physical or mental impairment that would require special accommodation to ensure a satisfactory learning experience.