

July 20, 20xx

HealthSouth Rehabilitation Hospital of Austin  
PO Box 13366  
Austin, TX 78711

Dr. David McMurrey  
Director of Public Relations  
United Cerebral Palsy Association of Texas, Inc.  
900 Congress Ave.  
Austin, TX 78701

Dear Dr. McMurrey:

I am writing to inform you about my progress on the report on Therapeutic Electrical Stimulation Therapy (TES) for children with cerebral palsy, which will be handed out at the United Cerebral Palsy Program held at the Hilton Hotel. Immediately following the your organization's 15 June acceptance of my bid to present a seminar and background report on this topic, I began researching and gathering information in all areas of this project.

As a result of much research, I have gathered detailed information on the background on cerebral palsy in children and the effects of TES as a treatment for these children. I have made adjustments to the explanation about how cerebral palsy and TES affects the child's physiologically so that your clients, the parents, can fully understand this difficult topic easily.

With the help of my colleagues at HealthSouth Rehabilitation Hospital, I have completed one-third of the project; therefore, I expect to have the final report on or before the deadline, August 8.

In the following sections of this progress report, I have included a brief project description on what your clients can expect to receive at the seminar. I discuss the work that has been completed, the work I am currently involved in, and the work that needs to be finished. Finally, I will give the overall assessment of how the project is going.

## Project Description

Here is a review of the purpose and the scope of this project.

**Purpose.** Not many parents who have a child with cerebral palsy know what treatments are available. Once parents find all this information, they do not know what is best for their child and/or do not understand how these treatments improve their children's physical and social health. The purpose of this project is to educate parents about TES and its uses for children with cerebral palsy.

**Scope.** This technical report will cover the basic background about cerebral palsy and Therapeutic Electrical Stimulation Therapy. The report will be broken into two major topics:

(1) cerebral palsy and (2) TES therapy; however, each topic is described in detail. Cerebral palsy section will be discussed in the following four areas:

- Terminology used
- Causes of cerebral palsy
- Forms of cerebral palsy
- Treatments available

TES section however will include four broad areas:

- Background on electrical stimulation therapy
- Uses of TES therapy for children with cerebral palsy
- Studies done with TES therapy for children with cerebral palsy
- Advantages and risks of using TES

## Work Completed

As of this time, I have completed most of the research work and am putting the sections of the final report together. The following is what I have already done on the two major topics of the technical report.

**Cerebral palsy background.** The topic describing cerebral palsy is fully written. I have described in full detail the impact of this developmental disorder on children. This section includes the physiological background of cerebral palsy, the terminology needed to understand cerebral palsy, the forms of cerebral palsy, and the treatments available. All of these points will help parents understand their children's condition.

**Therapeutic Electrical Stimulation Therapy.** TES therapy has been fully researched. I have finished describing the history of electrical stimulation therapy which will give background to how TES evolved. So far, I have detailed information to discuss TES's uses for children with cerebral palsy, the One 2 One Stimulator, studies done with TES therapy for children with cerebral palsy, advantages and risks of using TES.

## Current Work

Right now, I am mainly involved in the organization of the TES information. Also, I am currently looking for graphics to illustrate cerebral palsy in a child and the TES effects.

**Cerebral palsy background.** Since this section of the report is done, I am currently determining which areas of this topic are lacking information. At this stage, I am asking my colleagues to proofread this topic of the report for proper grammar, accuracy of the information, and easy comprehension. If you wish, I can send the draft of this section for your review as well.

**Therapeutic Electrical Stimulation Therapy.** For this section of the report, I am in the process of finishing the written portion of the background on TES, its apparatus, the studies done with

TES, and the advantages and risks of using TES. Most of my time is devoted in this topic since it is the purpose of the technical report. I am also putting the finishing touches on the history and physiological background of electrical stimulation therapy and the differences between Functional Electrical Stimulation therapy and TES therapy.

## **Future Work**

I have planned to ask my colleagues to proofread the finished report so that the information in the report is explained accurately and understandably. I will also do some fine-tuning on the main part of the report—the effects of TES on children with cerebral palsy.

**Cerebral palsy background.** I will need to insert my graphics in the text of this section. I plan to use graphics illustrating the nervous system of human body so that a terminology used in the report can be fully understood. I will also make tables about the risks of cerebral palsy, so that parents have a reference as to what signs to look for to prevent other complications.

**Therapeutic Electrical Stimulation Therapy.** In this section of the report, I will include graphics in the text. I plan to put graphics illustrating the physiological effects of TES on the body, the apparatus, and the tables or graphics demonstrating studies done on children with cerebral palsy. I am however concerned that some of the technical terminology might be confusing to readers; therefore, I plan to have nonspecialists read this section so I can receive feedback.

## **Overall Assessment of the Report**

The project to give a seminar and technical background report on TES for children with cerebral palsy is coming along well. I have not come across any obstacles and have found a great amount of material on this subject.

Enclosed is a fully detailed outline of the report as it stands now. If you have any questions or suggestions about the outline, or if you would like to read the report in its current state, please let me know. As it stands, the progress of the report is coming together well; thus, I expect the final report to be turn in before or on the scheduled date.

Sincerely,

Lisa Candelas, P.T.  
HealthSouth Rehabilitation Hospital

Encl.: Outline of the Current Progress of the Report



## Technical Background Report on TES for Children with Cerebral Palsy: Outline

- I. Introduction
- II. Technical Background on Cerebral Palsy
  - A. What is Cerebral Palsy
  - B. Terminology Used to Describe Cerebral Palsy
    1. Muscle tone
    2. Nervous system
  - C. Causes of Cerebral Palsy
    1. Developmental brain malformation
    2. Neurological damage
  - D. Forms of Cerebral Palsy
    1. Spastic cerebral palsy
    2. Athetoid cerebral palsy
    3. Ataxic cerebral palsy
    4. Mixed forms
- III. Medication and Treatment Available
  - A. Electrical Stimulation Therapy
    1. History
    2. Physiological background
  - B. Comparisons with Functional Electrical Stimulation Therapy
  - C. Therapeutic Electrical Stimulation (TES) Therapy
    1. Its uses for children with cerebral palsy
    2. The Apparatus: One-2-One Stimulator
      - a. Equipment
      - b. Documentation
      - c. Problems
    3. Studies done with TES Therapy for children with cerebral palsy
      - a. Pilot studies done by Karen E. Pape, *et al.*
      - b. Research done by D. Gaebler-Spira, *et al.*
    4. Advantages and risks of using TES
      - a. Advantages of TES
      - b. Risks of TES
- IV. Conclusion
  - A. Summary of Medical Treatment for Children with Cerebral Palsy
  - B. Summary of TES and Its Successes for Improving a Child's Health