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Device Interventions for Behavioral and Postural Deficits

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Efficacy and Caregiver Perceptions of Child Passenger Safety Device Interventions for Behavioral and Postural Deficits

Michaela Isenberg OTD/S, CPST

Mission & Vision:

Mission
Through the exceptional capabilities and caring spirit of its people, Vanderbilt will lead in improving the healthcare of individuals and communities regionally, nationally and internationally. We will combine our transformative learning programs and compelling discoveries to provide distinctive personalized care.

Vision
• To deliver the highest quality medical care to children
• To create a special environment for children and their families
• To serve as a resource that is responsive to the community

Identified Needs:

Motor vehicle crashes (MVCs) are the leading cause for injury and death in children, and children with special healthcare needs (CSHCN) are at an increased risk for injury or death in the event of a crash, when compared to typically developing children. To promote safe transportation of CSHCN, some travel accommodations may be required when their needs cannot be met by a conventional child passenger safety device (CPSD).

The Special Needs Mobility Program at the Monroe Carell Jr. Children’s Hospital at Vanderbilt (MCJCHV) Rehabilitation Services at One Hundred Oaks aims to address these needs through the evaluation and recommendation of specialized CPSDs that can meet the transportation needs of CSHCN. The clinicians of this program identified the following needs to enhance current provided services:

• Identify and answer the current gaps in literature concerning the efficacy of specialized CPSDs
• Assess the efficacy of the current clinical processes in both addressing the needs of caregivers and educating them on safely transporting their CSHCN.

Goals of Experiential Component:

• Review the literature concerning CPSDs for children with postural and behavioral safety concerns
• Explore available CPSD resources and equipment
• Meet with CPSD therapy practitioners and complete an educational child passenger safety technician (CPST) course to determine current practices for CSHCN
• Develop a research plan for Dr. Bryan and the MCJCHV Rehabilitation Services at One Hundred Oaks
• Explore and complete related research forms for submission to the International Review Board (IRB) for Vanderbilt and Belmont University.
• Develop educational resources for caregivers of the Special Needs Mobility Program

Outcomes:

Literature Review
Completed written literature review and analyzed to identify research questions

Research Design
Developed an approved research design to be integrated into the current clinic process

Surveys
Used gaps in research to develop surveys to serve as the outcome measure

Research Protocol & Consent Form
Completed research protocol and consent form

Handout
Developed handout to relay the clinic processes and care of specialized CPSDs to caregivers

Next Steps:

1. • Research protocol, consent form, and developed surveys will be submitted to Vanderbilt’s and Belmont University’s IRB by Dr. Missy Bryan.

2. • Following IRB approval, data collection will begin through the Special Needs Mobility Program at the MCJCHV Rehabilitation Services at One Hundred Oaks.

3. • Data will be analyzed and the results, their conclusions, and previously gathered information will be written, formatted, and submitted for journal publication.

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References Available Upon Request