Statement of
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Mr. Chairman and members of the Subcommittee: I am privileged to appear before you today to discuss the role of telemedicine in providing rehabilitation care and services to veterans across a broad spectrum of ages and disorders.

I am a physician specializing in physical medicine and rehabilitation privileged to be serving veterans in the North Florida/South Georgia Veterans Health System. It is particularly pleasing to work in VA, because the modern roots of rehabilitation medicine grew in response to the need to improve the abilities, opportunities, and quality of life of injured soldiers during and following World War II. In rehabilitation, the team carefully assesses the patient's strengths, deficits, and ambitions to create a pathway for veterans to regain and maintain self-directed and independent lives. Telerehabilitation is the logical extension of the care rehabilitationists have always strived to deliver to their patients.

VA is committed to delivering the highest standard of care to veterans wherever they live. In order to do this, VA must develop models and methods that allow expert care to extend beyond the bounds of a few medical centers typically located in urban settings. How to accomplish this? The inescapable answer is to use and develop telecommunications technologies for rehabilitation purposes. Usually advances in medicine and science creep along in slow, incremental steps. We are at a rare and exhilarating moment, poised to leap forward by using telecommunication technology to reach veteran patients

regardless of time or distance. I am convinced that we are crossing the threshold to a dramatic shift in quality and dimensions of health care.

I recently had the honor of representing rehabilitation services at the Care Coordination and Home Telehealth Leadership Forum sponsored by the VA Employee Education System and Office of Care Coordination. There I saw first hand the rich variety of emerging telerehabilitation practices, as well as the great interest, passion, and energy of physicians, psychologists, therapists, and nurses eager to deliver the right care at the place and the right time.

There are four models at different stages of development being implemented across the nation. In the first instance, veterans are evaluated by clinicians at distant sites, to allow rehabilitation assessments in clinics close to where patients live. Usually, these are one-time assessments, as opposed to ongoing care. Veterans with multiple sclerosis, spinal cord injury, amputations, diabetes, cardiopulmonary, and orthopedic disorders and other disorders are interacting with their clinicians in real time using television screens in programs originating in Cleveland, Ohio; Nashville, Tennessee; Minneapolis, Minnesota; Denver, Colorado; Fresno, California; Ann Arbor, Michigan; Tampa, Florida and elsewhere for wheelchair, wound, neuropsychological, rehabilitation admission, and prosthetic and orthotics assessments. For example, a spinal cord injured patient in Dayton, Ohio with skin breakdown related to his wheelchair seating, will be served by the team in Cleveland. The Cleveland Team can instantly see the results of pressure mapping, and work with the Dayton therapists to come up with the optimal wheelchair cushion and seating solution.

A second model delivers ongoing care to veterans at distant clinics. Examples include speech therapy, occupational and physical therapy, and psychological and social services. For example, therapists in Denver assisted a veteran hundreds of miles away. Using videoconferencing units located in the local clinic and in the medical center, they were able to help a veteran with a traumatic brain injury who had difficulties with mobility, self-care, bladder management and decision-making. Therapists were able to see how the patient functioned, and to speak to the patient's wife about problems the veteran was

having. From this, they were to determine practical ways they could help the wife care for her husband, by providing education and training to both to improve transfers, walking, and stair climbing.

While improving the quality and availability of care in local clinics is critical, if we had our choice, most of us would prefer to receive care in our own homes. The third model of telerehabilitation does just that. A VA study in Raleigh, North Carolina is using remote video links, to deliver physiotherapy in the home and comparing the outcomes to traditional physical therapy. The preliminary data look favorable. The low ADL monitoring program is targeting frail veterans in North Florida/South Georgia. These veterans, at high risk for failure receive necessary assistive devices such as grab bars, tub transfer seats, canes, reachers, long-handled shoe horns, dressing aids and adapted eating utensils. These devices are delivered and installed based on a home assessment by an occupational therapist and a technician. The patients are then monitored daily by either a text-messaging phone, computer, or a simple desktop device. This way, proactive and practical interventions can reach the veteran before a problem becomes a disaster. Data from the first 150 veterans show reduced hospitalizations and emergency room use and reduced nursing home bed days of care. A comparison of the six months prior to enrollment to the six months post enrollment shows a total savings of $1,200,000. It is not surprising that these veterans are showing high satisfaction with the program and are maintaining their independence and quality of life.

A fourth model of telerehabilitation links health care professionals at different locations together for education, to discuss or disseminate policy or to enable patient care. An example of this is the care delivered to a veteran with an anoxic brain injury in a small town in Montana. Instead of transporting the patient to Denver, the patient went to his local community-based outpatient clinic with his psychologist, where he was linked with a social worker in another small Montana town, and simultaneously linked with the traumatic brain injury team in Denver.

I have given you some examples of telerehabilitation today. However, I believe that greater excitement will be seen as telerehabilitation becomes

integrated into the standard care for veterans. An active collaboration is occurring between Rehabilitation Services and the Office of Care Coordination and Home Telehealth that is transforming health care delivery. I envision a day soon in the future when returning war-injured veterans needing rehabilitation are connected to fully integrated care that follows them from DoD, to VA Centers of Excellence, to their local VA medical centers, to their community-based outpatient clinics, and into the home. In this vision, the various levels of care communicate freely, and veterans remain connected to the assistance they need at the time it is needed.

Telerehabilitation is one of the ways we can keep our promise to the veterans who have risked so much to preserve the American way of life. With it, we keep our commitments to those special populations with polytrauma, traumatic brain injuries, amputations, spinal cord injuries, and multiple sclerosis. We hold faith with veterans and their families by reaching them where they live with help to live to their fullest, with self determination and quality of life.

Mr. Chairman, this concludes my statement. I look forward to answering any questions that you or other members of the Committee might have.