

**Telephone Tinnitus Education for Patients with TBI**  
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**MeSH words:** Tinnitus, traumatic brain injury, counseling, education, evaluation studies, quality of health care

**Objectives.** Traumatic brain injury (TBI) is strongly associated with tinnitus. Tinnitus management for Veterans and military members with TBI has become a critical concern. Our research has focused on developing effective, evidence-based methods of tinnitus management for Veterans. These efforts led to the development of Progressive Tinnitus Management (PTM). We completed a pilot study to adapt PTM to meet the unique tinnitus management needs of Veterans and military members with TBI using a novel home-based program called Telephone Tinnitus Education (TTE). Data analyses from a pilot study indicate that TTE is feasible and efficacious. The present study will modify TTE in accordance with the pilot findings and evaluate the modified TTE using a randomized clinical study design.

**Plan.** The 4-year study is based at the VA National Center for Rehabilitative Auditory Research (NCRAR). Qualified candidates will be randomized to receive either immediate-TTE or usual care (wait-list control—WLC). All subjects will complete questionnaires at baseline and at 3, 6, 9, and 12 months post-baseline. The WLC group will receive TTE after completing the 6-month questionnaires. The primary outcome measure is the Tinnitus Handicap Inventory (THI).

**Methods.** Information about the study and recruitment flyers will be provided to potential recruitment sites in the U.S. The flyer includes a toll-free telephone number and interested callers talk to the Research Assistant who conducts screening to determine: (a) if the caller has a tinnitus problem warranting the intervention; (b) the caller's *probable* TBI status (mild TBI history, moderate/severe TBI, or no TBI); and (c) if the caller has had a hearing evaluation within the past 2 years (and uses hearing aids if recommended). Callers who pass screening are sent a package containing the informed consent form (ICF) and baseline questionnaires. About 1 week after screening, the Research Coordinator (RC) calls the candidate to (a) explain the ICF; (b) assess capacity to consent; and (c) provide instructions for completing and returning the questionnaires and ICF. After the signed ICF has been received by the RC, the Study Psychologist calls the participant to determine TBI status and conduct screening for anxiety, depression, PTSD, and sleep disorder. Following this call, the RC randomizes the participant to receive either immediate-TTE or WLC (WLC participants will receive TTE after 6 months.) The total number of participants required (based on power analysis) is 336. The predicted number of subjects for each category (based on the pilot study recruitment rates) are 168 for mild TBI, 24 for moderate/severe TBI, and 144 for no TBI (total n=336). TTE intervention involves a series of seven telephone appointments, conducted at approximately 1, 2, 3, 4, and 5 weeks, and 3 and 6 months after enrollment is finalized. Telephone counseling is provided by the Study Psychologist at weeks 1, 3, 5, and month 6, and by the Study Audiologist at weeks 2 and 4, and month 3.

**Findings to Date.** Study candidates are currently being recruited. Sixty-six participants have been enrolled and randomized to date. No data have yet been analyzed.

**Relevance to VA's Mission.** Patient-care goals for VA are to increase access, ensure quality, and provide our Veteran clients the best possible, patient centered care. TTE has the potential of providing needed tinnitus services to Veterans across the country for a relatively small cost and with minimal impact on individual VA hospitals.