## Abstract for Application of Health Behavior Models to Predict Hearing Healthcare Outcome

Objectives. Eighty percent of hearing-impaired adults fail to treat their hearing loss in the initial 5-10 years after its detection, despite the many negative consequences of not doing so. This is not unique to audiology - similar data exist for many other chronic health conditions. Further, the factors that influence hearing health care (HHC) behaviors are similar to those that affect health behaviors for other chronic conditions. It is thus appropriate to examine HHC behaviors within the framework of health behavior theory. In this investigation three established health behavior theories will be used to identify the critical attitudes and beliefs underlying HHC behaviors, so that in the future theory-based behavior change interventions can be developed. This approach is promising because while some variables that influence HHC behaviors cannot be changed (e.g. severity of hearing loss, age, income level), it is possible to modify attitudes and beliefs through education and counseling. This study will therefore provide the foundation for the development of theory-based education and counseling behavior change interventions to increase HHC behaviors among for adults with mild-to-moderate hearing loss. The objectives of this study are to (1) Determine which HHC attitudes and beliefs best explain the HHC behaviors of help seeking and intervention uptake in adults with hearing loss. (2) Determine whether attitudes and beliefs underlying help seeking differ from those underlying intervention uptake. (3) Determine whether short form health behavior assessments that would be practical for use in the clinic are as effective at predicting HHC behaviors as long form assessments that will provide the necessary detail for developing an education and counseling behavior change program.

**Research Plan.** The proposed investigation will systematically identify the relationships between an adult's hearing health care (HHC) behaviors and his/her attitudes and beliefs about HHC and readiness for behavior change, using established health behavior theories, with the ultimate goal of developing interventions to modify the attitudes and beliefs that inhibit a person's engagement in the most appropriate HHC behaviors. A mixed methods longitudinal study will be conducted in which HHC attitudes and beliefs will be evaluated using long form and short form health behavior assessments that measure constructs of the Transtheoretical Model, Health Belief Model and Theory of Planned Behavior.

**Methods.** Participants will be 588 individuals who fail a community-based hearing screening. They will be contacted at regular intervals after the screening for up to 36-months to determine whether they have sought help, and whether those who have sought help, have gone on to follow the audiologist's recommendations. Health behavior constructs related to attitudes, beliefs and readiness for change will be assessed at baseline and at the study endpoint (the contact at which intervention uptake has occurred or 36-months after study enrollment, whichever is sooner). Potentially important explanatory variables that provide information additional to the health behavior constructs will be measured at the study endpoint. In addition, participants will take part in a structured interview so we can learn more about interpersonal and psychosocial influences on HHC behaviors.

Findings to Date. None, data collection has not yet begun.

MeSH terms: hearing loss, rehabilitation, hearing aids, health behavior, attitude to Health