**Abstract – Comfort with Uncertainty in Medical Students and Family Medicine Residents**

*Study Purpose:* The overall purpose of this study is to assess comfort with uncertainty in both medical students and family medicine residents and determine its association with career choices. Previous research has shown that comfort with uncertainty is a core trait of family physicians, which is associated with many positive outcomes including less burnout and a larger scope of practice. Some studies have attempted to measure a snapshot of comfort with uncertainty in medical students and family medicine residents, and some have addressed how comfort with uncertainty may be teachable and changes over time. The continued dearth of medical students who choose to become family physicians in the US is well known and many factors have been identified as predictors of that choice, but little research has determined if there is a correlation between comfort with uncertainty and medical student career choice. There is also a dearth of literature exploring if, when, and how comfort with uncertainty progresses over a family medicine resident’s education.

Our study aims are:

* To measure the comfort with uncertainty of a general population of U.S. medical students and determine if there is a correlation between that comfort and career choice for family medicine and primary care, adjusted for the many other known influences of that choice.
* To measure the comfort with uncertainty in family medicine residents and to measure its change over time.

*Study Design: This study will consist of two parts: 1)* This will be a cross-sectional study of medical students’ comfort with uncertainty correlated with their final career choice, 2) This will be a prospective cohort study of the comfort with uncertainty among family medicine residents over their 3-year training period.

*Subjects and Setting: 1)* This is a study of 3rd-year medical students who are rotating on their regular 4- or 6-week family medicine clerkships. They will be surveyed at the beginning of their clerkship. The instrument will contain both standard scales measuring comfort with uncertainty and other features already known to correlate with the choice of family medicine or primary care as a career. After surveying all students rotating through our programs for one year, we will contact them late in their 4th year to determine in which specialty they matched. 2) This is a study of family medicine residents. They will be surveyed early in the academic year. The instrument will contain standard scales measuring comfort with uncertainty, basic demographics and career aspirations. Residents will be surveyed each year for 3 years. This will allow both a cross-sectional examination of comfort with uncertainty as it varies across residency training years and an examination of how this comfort may change in individual physicians over time.

*Outcome Measures:* 1) Specialty choice, either primary care or other specialty. 2) Residents’ career aspirations: anticipated breadth of practice, location, practice type, fellowship participation, and other practice features.

*Predictors:* 1) Physicians’ Reactions to Uncertainty Scale, Need for Cognitive Closure scale, Tolerance for Ambiguity scale, and features known to predict medical student career choice such as rural upbringing, parental education, student loan debt, and other factors. 2) Physicians’ Reactions to Uncertainty Scale, Need for Cognitive Closure scale, Tolerance for Ambiguity scale, and demographic information.