Glaucoma Medication Non-adherence: Comparing the Accuracy of Different Tools in Identifying Syndrome and Health System Priorities with Cross-Sector Research

OBJECTIVES/GOALS: To compare the accuracy of pharmacy refill data and five measures of self-reported adherence in identifying patients with poor electronically monitored glaucoma medication adherence. METHODS/STUDY POPULATION: Glaucoma patients (age ≥40, poor self-reported adherence, and ≥1 medication) recruited at the University of Michigan completed five surveys of adherence and 3-months of electronically monitored medication adherence; pharmacy refill data were obtained. Electronically monitored adherence was summarized monthly as percent of doses taken on time. Median monthly adherence ≤80% was considered non-adherent. Pharmacy refill data were reported as the proportion of days covered. The accuracy of the measures in predicting ≤80% adherence was assessed with receiver operating characteristic curves such as estimation of area under the curve (AUC), sensitivity, specificity, and accuracy. RESULTS/ANTICIPATED RESULTS: 95 patients completed electronic monitoring with a median monthly adherence of 74% (±21%); 53 patients (56%) were non-adherent. Pharmacy refill adherence was not significantly correlated with electronically monitored medication adherence (r=0.12, p=0.2). A single-item adherence question (‘Over the past month, what percentage of your drops do you think you took correctly?’) offers an easy-to-implement tool for identifying glaucoma patients with poor medication adherence in clinical practice.

Assessing Transition Outcomes in Sickle Cell Disease (SCD) Prior to Implementation of A Formal Transition Program*

OBJECTIVES/GOALS: Improvements in care for children with sickle cell disease (SCD) have increased survival into adulthood. However, mortality rates are increasing in young adults. One of the challenges is providing appropriate care during transition from pediatric to adult care. The goal is to identify facilitators and barriers to a successful transition in care. METHODS/STUDY POPULATION: The UAB SCD Center serves a large area of Alabama. The pediatric program is in Birmingham and has outreach clinics in three other cities. The adult program only has one clinic located in Birmingham. With IRB approval, we performed a retrospective chart review of individuals with SCD (all genotypes) aged 18-24 (as of 1/31/2019) who were seen at least twice prior to age 18 (in pediatrics) and have confirmed SCD. Charts were reviewed for demographics, genotype, last known insurance, SCD therapy, clinic location, and transition status. Analyses were undertaken to determine predictors of successful transition (defined as coming to an appointment with an adult hematologist) and unsuccessful transition (defined as lost to follow-up (LTFU) without transfer of care). RESULTS/ANTICIPATED RESULTS: There were 544 individuals meeting inclusion criteria. Of this group, 234 were LTFU, 189