

# The Feasibility of RELAXaHEAD (A Smartphone Based Progressive Muscle Relaxation Therapy and Electronic Diary Application) For Use in a Headache Center





Sarah Jinich<sup>1</sup>, Thomas Berk, MD<sup>2</sup>, Sait Ashina, MD<sup>2</sup>, Richard Lipton, MD<sup>3</sup>, Scott Powers, PhD<sup>4</sup>, Mia T. Minen, MD, MPH<sup>2</sup> <sup>1</sup>Barnard College, <sup>2</sup>NYU Langone Medical Center, <sup>3</sup>Albert Einstein College of Medicine, <sup>4</sup>Cincinnati Children's Hospital

### **Background**

- --Most people with migraine do not undergo the Level A Evidence-Based behavioral treatments for migraine prevention
- -- Using a platform developed by IRODY, we created a smartphone app (RELAXaHEAD) that administers progressive muscle relaxation -- Initial feasibility testing will inform protocol refinements (PMR) treatment with an electronic headache diary to patients

## **Objectives**

-- To assess preliminary data of the feasibility of use of RELAXaHEAD in the outpatient Headache Center setting

#### **Methods**

- --Enrolled adults ages 18-85 meeting ICHD 3 beta criteria for migraine
- --Inclusion criteria: No behavioral treatment for migraine in the past year, 4+headache days a month
- --Initial baseline questionnaire with demographics and migraine history including migraine disability (MIDAS) administered
- --One PMR session completed during the enrollment session following the questionnaire
- --Patients asked to complete 20 minutes/day of PMR for 3 months and complete a daily headache diary

#### Results

- -- Within the first 30-day period, mean number of days of diary entry was 25.14 [SD: 6.44, range: 7-30]
- --Within the first 30-day period, mean number of days of PMR was 11.24 [SD 6.64, range: 3-28]
- -- 57% were reached for an initial 30-day follow-up survey

#### **Conclusions**

- --On average, patients performed PMR about 3 times per week
- -- Most patients enrolled in the study completed the headache diary on a near daily basis





