

## **NIMLAS New Measurement Technologies Meeting Minutes**

### **Call to Order**

The meeting for the New Measurement Technologies Working Group was held on Thursday, June 22, 2023 from 12-1pm.

### **Attendees**

Members in attendance: Nekehia Quashie, Muntasir Masum, Aleda Leis, Neil Alexander, Katie O'Doherty, Mengyao Hu

(NIMLAS: Brady West, Esther Friedman, Nia Holland)

### **Reports**

#### **Introduction of New Measurement Technologies Working Group and Present Members**

#### **Prior and Upcoming Workshops on New Measurement Technologies**

- April- Community Based Participatory Research (CBPR) Workshop presented by University of Michigan, Wayne State University, and Detroit Community Partners on how to effectively involve community members in academic research
- May- Workshop presented by Ritika Chatuverdi from the University of Southern California on a study surrounding wearable technology in conjunction with the Understanding America Study (Note: Ritika's slide deck will be posted soon.)
- Upcoming workshop in August on Community Advisory Boards presented by researchers from University of Minnesota
  - Details and registration forthcoming
- Florian Keusch- Workshop covered the use of wearable technology in data collection, provided during the 2022 Plenary Meeting
- All past workshop materials are available on the [NIMLAS Website](#)

#### **Pilot Project Updates**

- Data collection beginning with custom data collection software approaches (Florian Keusch)
- Review of whether or not wearable technology can help to enhance studies of individuals with dementia (Colleen Peterson)
  - Currently conducting device testing and availability to determine devices that are best suited for this population
- Upcoming call for pilot project proposals in September 2023
  - Will support up to \$50,000 in direct costs and \$78,000 in indirect costs
  - Proposals will be reviewed by NIMLAS, 3-4 will be selected
  - Findings from pilot projects will be presented at NIMLAS Plenary Meeting each year

## **Roundtable Discussion of new research and publications to include in the NIMLAS**

### **Bibliography**

- Device use and attention to the measures produced at the micro vs. macro level (Neil)
  - Important to consider how data is collected from devices, what type of data is collected
  - Cost is also an important consideration when comparing devices
- Collecting visual and auditory function data using various devices to improve the accuracy of data collection (Mengyao)
  - Reference: Hu, M., Freedman, V. A., Ehrlich, J. R., Reed, N. S., Billington, C., & Kasper, J. D. (2021). Collecting objective measures of visual and auditory function in a national in-home survey of older adults. *Journal of Survey Statistics and Methodology*, 9(2), 309-334.
  - Reference will also be available on the NIMLAS site
- Actigraphy measurement devices, future studies may want to address a way to standardize the measurements between different devices
  - Will also aid in selecting the best wearable device for a particular study
  - [Relevant reference](#)
- ROAMM is a wearable device that collects both self-report and GPS data
  - Authored by Todd Manini
- ActivPAL allows for 24/7 data collection and is a wearable device worn on the thigh
- It is important to consider the impact of SES when utilizing wearable device technology
  - This issue can possibly be mitigated by allotting study funding to provide wearable devices to participants
  - Related reference: Clarke-Deelder, E., Rokicki, S., McGovern, M. E., Birabwa, C., Cohen, J. L., Waiswa, P., & Abbo, C. (2022). Levels of depression, anxiety, and psychological distress among Ugandan adults during the first wave of the COVID-19 pandemic: cross-sectional evidence from a mobile phone-based population survey. *Global Mental Health*, 9, 274-284.

### **Action Items**

- If interested in presenting a workshop, reach out to NIMLAS (Brady, Sunghee and/or Esther)
  - Aiming to have 3-4 workshops in the next year

### **Next Steps/Goals for Next Meeting/Suggestions for future work**

- Reach out to Neil if interested in work related to wearable technology and its applications at the micro level
  - Email: [nalexand@umich.edu](mailto:nalexand@umich.edu)

**Adjournment**  
1:00 p.m.