REDCap Grand Rounds

Modernizing a **long**itudinal study: Ohio Regional Traumatic Brain Injury Model System

3/19/24 - Ally Guiher + Jess Hale

Traumatic Brain Injury Model Systems (TBIMS)

TBIMS is one of three Model Systems programs sponsored by NIDILRR (TBI, Burn, SCI). First funded in 1987 (7 sites)

- Primary goal: Improve care and outcomes for individuals with TBI
- Prospective, longitudinal, multicenter study
- 16 funded centers, 5-year grant cycle ('22-'27)
- Over 15,000 individual participants have data in the National Database (NDB)

TBIMS at OSU

- OSU: longest continually funded center, **since 1997** (30 years of funding), Pre-HIPAA!
- Over 1,460 participants enrolled
 - Over 950 participants active
 - 'End-point': death, withdraw, or center loses funding
 - oEnroll at least 35 new participants every year currently over-enrolling (randomization algorithm turned off 10/1/23) approaching all eligible participants
 - 79 eligible admissions in RY, 53 randomized to approach; 40 consented

Challenges:

- Hundreds of active participants to keep track of
- Paper documentation used in most workflows
 - Inefficiencies + redundancies
 - Space limitations (filing paper docs)
 - Growing participant load

Current workflows – paper galore!

- Consent paper
- Baseline data mostly paper -> electronic entry
- Contact call documentation paper
- Follow-up call documentation paper -> electronic entry (internal db)
- Local data paper -> electronic entry (excel, internal db)
- Gift card logs paper

REDCap Database - Total overhaul of workflows

Phase 1:

- Contact tracking log
- Structure of eConsent framework (will need IRB-approval)
- Instrument to upload scans of paper consent documentation

Phase 2 (development in progress):

- eConsent framework finalization
- Gift Card log
- Local data (baseline and F/U)
- Scheduling integration
- Detailed contact tracking dashboard by weekday and time of day

Phase 1 – Contact Tracking Database

