

Methodological Considerations in the Real-Time Monitoring of Suicidal Thoughts and Behaviors

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Disclosures

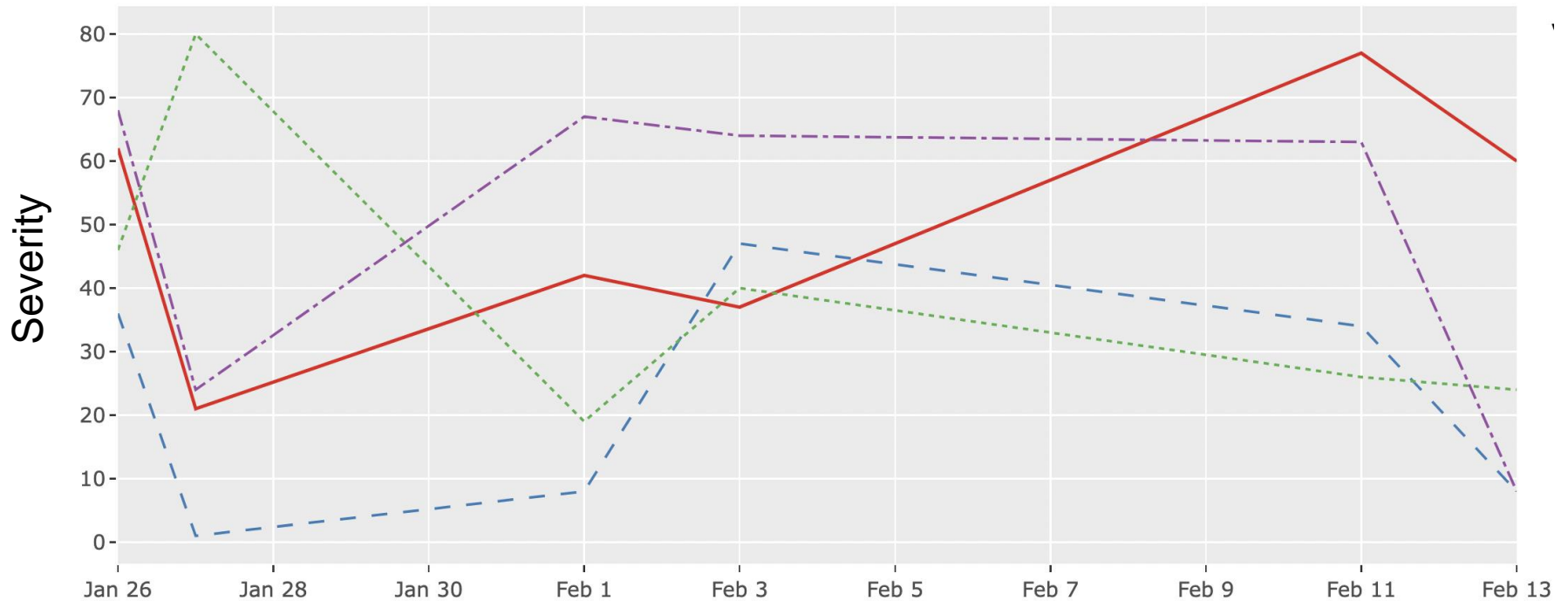
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Design Considerations

- Sample
 - Youth (Children/Adolescents) vs. Adults
 - Acuity
- Context
 - Community
 - Outpatient
 - Inpatient hospitalization
 - Inpatient discharge
 - Emergency department discharge

Predicting Suicidal Thoughts and Behaviors Post Emergency Department Discharge

— Depression Symptoms ····· Sleep Quality
- - - Suicidal Ideation - · - · Interpersonal Stress



Design Considerations

- Length of Study
 - Base rate (suicidal thoughts vs. behaviors)
 - Fatigue
 - Acceptable missingness
- Sampling Rate
 - Daily monitoring
 - EMA bursts
- Item Selection
 - Daily vs. Intensive
- Delivery System
 - Personal Smartphone vs. Study Smartphone
 - App vs. Text Messages

Missingness

- Expected vs. Unexpected Missingness
 - Non-response
 - Technological misfires
 - Clinically meaningful
- Compliance: The Good, Bad, and Ugly
 - STB studies: ~40-80% (e.g., Ammerman et al., 2022)
 - Optimizing strategies
- Imputation
 - Acceptable practice, but there are always implications
 - Approach contingent on method of assessment

Mobile Assessment for the Prediction of Suicide



Psychometric Properties

- Wild West
 - Researchers using wide range of approaches
 - Quasi-adapted from self-report (or not)
 - Idiosyncratic language
 - STB-EMA psychometrics (e.g., Forkmann et al. 2018)
- Suggestions for Best Practices
 - Reliability and validity statistics
 - Include item prompts (e.g., Supplement)

Observational and Interventional Approaches

- Designs
 - Observational: Testing prospective relationships
 - Interventional: Targeting specific changes
- STB Intensive Longitudinal Observational Designs
 - *Interventional Components* (e.g., “suicidal event”)
 - Safety triggers (e.g., crisis hotlines)
 - 24/7 On-Call
- Intervention
 - Tracking skill acquisition, skill utilization, symptom change
 - Just-in-Time Adaptive Interventions

Summary

- Clearly Defined Question
 - Context
 - Length
- Track Missingness Carefully
- Report Psychometrics
- Team Approach
 - Institute safety practices (and continually refine)
 - Participant tracking
 - Data analytics

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