# Ethical and Regulatory Challenges/ Lessons Learned

Stephanie Morain, PhD, MPH Johns Hopkins University



### **Panelists**

- Michele Balas, PhD
  - Behavioral Economic and Staffing Strategies to Increase Adoption of the ABCDEF Bundle in the ICU (BEST-ICU)
- Diana Burgess, PhD
  - Reaching Rural Veterans: Applying Mind-Body Skills for Pain Using a Whole Health Telehealth Intervention (RAMP)
- Richard Skolasky, ScD
  - Advancing Rural Back Pain Outcomes through Rehabilitation Telehealth (ARBOR-Telehealth)

### **Session Goals**

- Hear from the NIH Collaboratory Trials about ethical and regulatory challenges encountered
- Discuss strategies for navigating ethical and regulatory complexities of ePCTs





### BEST ICU Trial: Ethical & Regulatory Issues Lessons Learned

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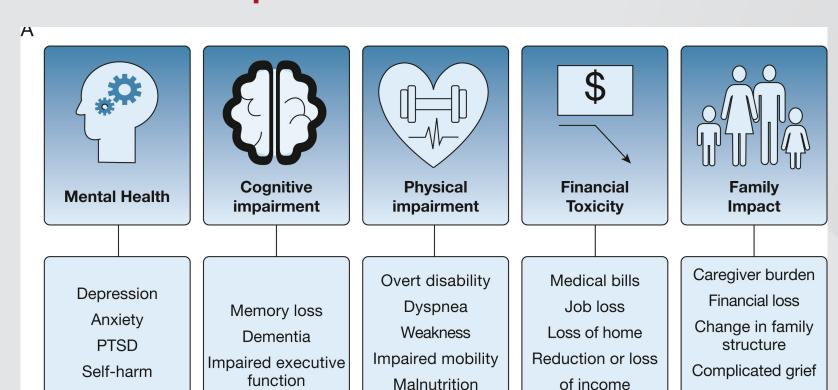
### Disclosures



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- Serves as Co-chair for:
  - SCCM's PADIS Guideline Committee
  - AACN's Healthy Work Environment Collaborative
- Past honoraria from:
  - SCCM
  - AACN
  - Ceribell

### Problem Addressed: Human & Financial Costs of ICU Survivorship





Sleep disturbance

Suicide

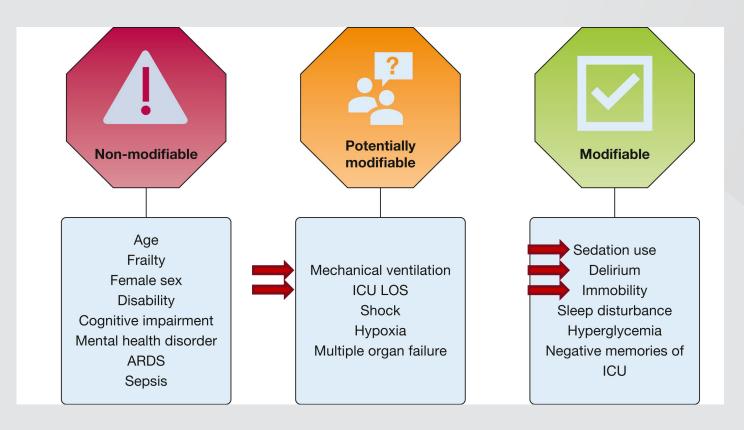
Loss of savings

Mental health

issues

### Risk Factors for Problem





Hiser et al. Journal of Intensive Care (2023) 11:23

### Solution to Problem

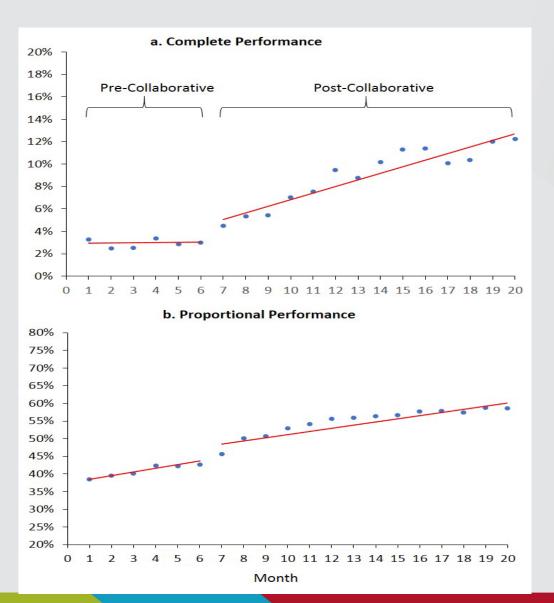


### The ABCDEF Bundle

- Assess & Manage Pain
- **B**oth SATs and SBTs
- Choice of Sedation and Analgesia
- Delirium Assessment & Management
- Early Mobilisation and Exercise
- Family Engagement

### Implementation Gap





### Trial Goals, Objective, & Design



- Behavioral Economic & Staffing Strategies to Increase Adoption of the ABCDEF Bundle in the ICU (BEST-ICU)
  - Overarching Goal: Support the "real-world" assessment of strategies used to foster adoption of several evidence-based clinical practices in healthcare systems that provide care to critically ill adults with known health disparities
  - Objective: Evaluate two discrete strategies grounded in behavioral economic & implementation science theory to increase adoption of the ABCDEF bundle
  - <u>Design</u>: 3-arm, pragmatic, stepped-wedge, cluster randomized hybrid type III effectivenessimplementation trial

### **UH3 Aims**



- Aim 1: Compare the effectiveness of real-time audit & feedback & RN implementation facilitator on ABCDEF bundle adoption (primary study outcome)
- <u>Aim 2</u>: Compare the effectiveness of real-time audit & feedback & RN implementation facilitator on clinical outcomes (duration of MV; ICU, hospital, & 30-day mortality; ICU & hospital length of stay; days with acute brain dysfunction; discharge disposition, psychoactive medication, discharge physical therapy utilization; & 30-day hospital readmission)
- Aim 3: Identify & describe key stakeholders' experiences with, & perspectives on, the acceptability & impact on work intensity of real-time audit & feedback & RN implementation facilitator



- Data & Safety Monitoring Plan Development
  - Risk/benefit of what?
    - Implementation interventions, evidence-based practice interventions (previously established safety & efficacy), both?
      - Consideration of harms of not getting evidencebased interventions
  - Complexity of monitoring adverse events & blinding in pragmatic clinical trials
    - EHR data lag, challenges of deidentified data
    - Site PI contact with intervention & staff
    - Website for reporting



Events that will be tracked as clinical outcomes & will not therefore be reported as AEs during the study (unless believed to be study related and/or more severe or prolonged than expected given the nature of the underlying illness).

- Hospital mortality
- Duration of mechanical ventilation, stratified by survival status
- Clinically significant falls acquired during hospitalization
- Tachyarrhythmias requiring treatment
- Cardiac arrest
- Reintubation within 24 hours of extubation



- Data breach of confidential, patient-level PHI
- Audit & feedback dashboard error resulting in a clinical action that was not indicated & resulted in patient harm
- RN implementation facilitator action that was not indicated & resulted in patient harm
- ICU providers feelings of being unduly pressured or coerced by either implementation strategy (i.e., realtime audit & feedback dashboard, RN implementation facilitator)
- Other
- SUSARs
- Unanticipated Problems



- DSMB reporting tables
  - How much & what kind of data required
- Current NIH templates
  - Geared toward traditional clinical trials, not dissemination
     & implementation science or pragmatic clinical trials
    - Would be valuable to have various templates
- Different NIH reporting forms (protocol, DSMB charter, DSMP)
  - Called out on redundancy, however NIH reporting templates have this redundancy built in

# Reaching Rural Veterans: Applying Mind-Body Skills for Pain Using a Whole Health Telehealth Intervention (RAMP)

### Diana J. Burgess, PhD

Core Investigator, Center for Care Delivery and Outcomes Research, Minneapolis VAHCS Professor, University of Minnesota Medical School

Director, VA QUERI Complementary and Integrative Health Evaluation Center (CIHEC)



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Project staff: Ann Bangerter, Lee Cross, Emily Hagel Campbell, Mallory Mahaffey



### RAMP Study Overview

<u>Phase 1 UG3 (2 years)</u>: Engagement activities including developing & working with multi-level advisory panels (n = 35-50) & single arm pilot study (n = 40)

### Phase 2 UH3 (3 years): Hybrid Type II Effectiveness Implementation Pragmatic Clinical Trial

- 1. Assess **effectiveness** of cohesive mind-body intervention delivered by Whole Health coaches via telehealth (RAMP), at improving pain and secondary outcomes among rural VA patients with chronic pain (n = 500)
- 2. Implementation. Work iteratively with multiple levels of advisors (patients, community advisors, VA healthcare system leaders and staff; n = 35-50) to co-develop, evaluate intervention implementation strategies used in the trial and adapt these strategies to scale up RAMP within the national VA healthcare system
  - a. Mixed-methods assessment of facilitators/barriers, RAMP use, etc.
  - b. Co-creation of plausible implementation strategies to scale up RAMP
  - c. Budget impact analysis



### Accountable to many entities; don't always align; distinguishing between "have to" and "suggestions"

### NIH Project Scientist and Program Director

HEAL (e.g., data collection and repository requirements)

NIH Pragmatic trials Collaboratory Workgroups (Ethics & Regulatory, Biostatistics)

### **Data Safety Monitoring Board**

- Institutional Review Boards
  - Minneapolis VA IRB and VA R&D (primary)
  - University of Iowa IRB
  - University of Minnesota IRB

**Example:** NIH and Mpls IRB have different protocol templates and requirements in terms of level of detail

**Solution**: Regular communication, especially with project scientist, program director and our local IRB



### Ambiguity over role of Veteran, Community, and Internal (VA) Advisors

- Advisors are explicitly not considered research participants, although we plan to use their data; different interpretations by IRBs
  - Also, employees are considered vulnerable
- Solution:
  - Worked closely with Minneapolis IRB to create a tailored approach; advisors considered participants for regulatory purposes
  - Explained to the Iowa IRB what was established in Minneapolis IRB so both align
  - Explain issue to advisors



Ethical & pragmatic approaches designed to maximize external validity can be at odds with more traditional beliefs about rigor (RCTs, maximize internal validity)

- Example: We are not denying participants the use of additional pain treatments during trial of mind-body approaches to pain; concern that this could water down effects
- **Solution**: Work closely with project scientist to address concerns (in this case, carefully measure other treatments used)
- **Broader solution:** Promote the values of pragmatic trials; can be tradeoffs pragmatic and explanatory elements





## Advancing Rural Back Pain Outcomes through Rehabilitation Telehealth (ARBOR-Telehealth)









MPIs: Richard L. Skolasky, ScD; Kevin McLaughlin, DPT
Funded by National Institute of Arthritis and Musculoskeletal and
Skin Diseases (UG3AR083838)

### Overview



### Low Back Pain (LBP)

- Most common cause of disability in the US
- Largest driver of US healthcare spending growth
- Number one reason for opioid prescriptions

### Physical Therapy (PT)

- First line treatment
- Cost-effective in reducing disability and pain
- Decreased risk of opioid use
- 7-13% of patients attend PT
  - Barriers surrounding travel, missed work time, etc.

### Overview



### Rural Communities

- 40% fewer therapists per capita
  - Longer distance to travel
- Fewer patients attend PT within 30 days of onset
- Higher rates of opioid use

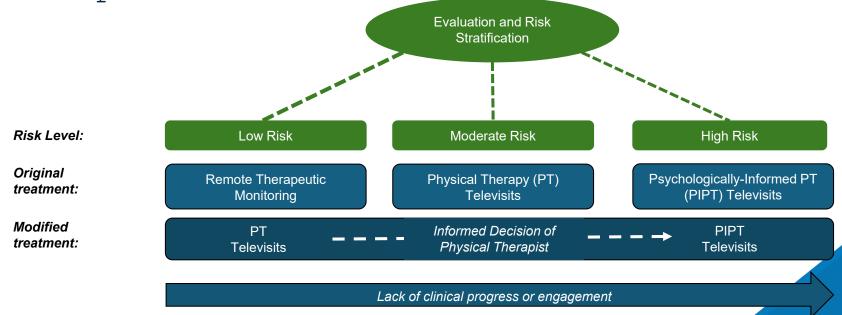
#### Telehealth

- PT provided by televisits for first time during pandemic
- Reimbursed by CMS and most commercial insurances
- New code for remote therapeutic monitoring (RTM)
  - Asynchronous telerehabilitation using



### Overall Objective

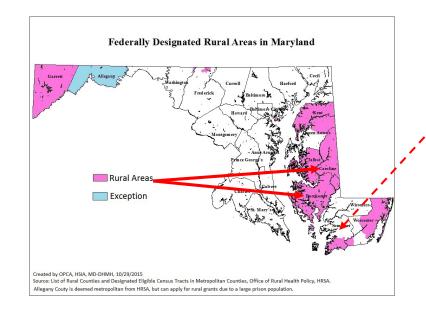
• To compare the effectiveness of a risk-informed telerehabilitation model to patient education to improve outcomes in patients with chronic low back pain in rural communities







- Randomized clinical trial
  - RiSC Telerehabilitation
    - Delivered by TidalHealth
  - Patient Education
    - Delivered via website
- Patients
  - 434 with chronic LBP
    - No spine surgery past 12m
    - Primary care office visit
  - 8 weeks active treatment
  - 12 months follow-up



Nearest PT Clinic

#### Caroline County, MD

- 33,593 (pop'n est. 2023 Census)
- 80.7% White, 13.8% Black, 8.9% Hispanic
- 17.7% Age 65+ years

#### Dorchester County, MD

- 32,897 (pop'n est. 2023 Census)
- 66.4% White, 29.2% Black, 6.4% Hispanic
- 23.1% Age 65+ years



### Potential Facilitators

### Treatment Strategy

- Clinical experience
  - JH implementation of telehealth strategies
- Research experience
  - Seasoned team of JH researchers
  - Tidalhealth Richard A. Henson Research Institute

### Institutional Review Board

- JH Clinical Research Network
  - Network of independent hospitals
  - History of collaboration on ethical and contractual issues
- JH IRB
  - Experience with reliance



### Potential Facilitators

### HIPAA Privacy Waiver

- EHR-based recruitment
  - IRB-approved plan to create Model Recruitment dataset
  - IRB-review plan to generate monthly list of potentially eligible patients

### Informed Consent

- EHR integration
  - Intervention adherence
  - Fidelity assessment
  - Healthcare use
- REDCap platform
  - Patient-reported outcomes
- Secondary data
  - Area Deprivation Index (ADI)
  - Others



### Potential Barriers

### Treatment Strategy

- Risk-based care model
  - How to discuss 'risk' with participant
  - Concern for knock-on effect
    - Patient discusses highrisk status with provider
    - Patient adopts a highrisk persona

### Study Risk Level

• Minimal vs. More-than-Minimal



### Potential Barriers

### Institutional Review Board

- Johns Hopkins
  - Review Board of Record
- Tidalhealth
  - Research Review Committee
  - WCG

### Data Safety Monitoring Plan

- NIAMS appointed
  - Study team input
- Program officer
  - Protocol changes





- Johns Hopkins
  - Richard L. Skolasky, Sc.D. (MPI)
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- Maryland Rural Health Association
  - Jonathan Dayton, Director

### Questions