

# Challenges and Hot Tips for Conducting Multi-Site Group-Based Clinical Trials

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# Disclosure

The authors of this presentation have no conflicts of interest to disclose.



# Panel Discussion Outline

- Review Learning Objectives
- Introduction to panelists and their studies
- Open discussion with question prompts
- Panelist final thoughts and suggestions for future study teams
- Question and answer session



# Learning Objectives

1

Attendees should be able to explain why group-based multi-site clinical trials are important for the field of integrative medicine.

2

Attendees should be able to articulate examples of how and why a group-based intervention design increases the complexity of multi-site trials.

3

Attendees should be able to identify 3 strategies to prevent and/or overcome common challenges related to group-based multi-site clinical trials.

# Panelists



**Patty Moran, PhD**  
University of California  
San Francisco  
Research Project Director  
LEGEND Study



**Amanda J. Shallcross,  
ND, MPH**  
Cleveland Clinic  
Principal Investigator  
TEAM-M Study



**Natalia E. Morone, MD**  
Boston University  
Principal Investigator  
OPTIMUM Study



# Treatment for Migraine and Mood (TEAM-M)

- 60% of people with migraine report elevated depressive symptoms
- Depressive symptoms are associated with, 1) higher migraine disability, 2) chronic opioid therapy for migraine pain, 3) doubled healthcare costs for migraine
- Scalable treatments that address migraine disability and depressive symptoms is a major gap in migraine treatment
- Brief Mindfulness-Based Cognitive Therapy (MBCT-Brief)
- MBCT targets pain perception, pain catastrophizing, and distress tolerance involved in the maintenance of chronic pain and depression



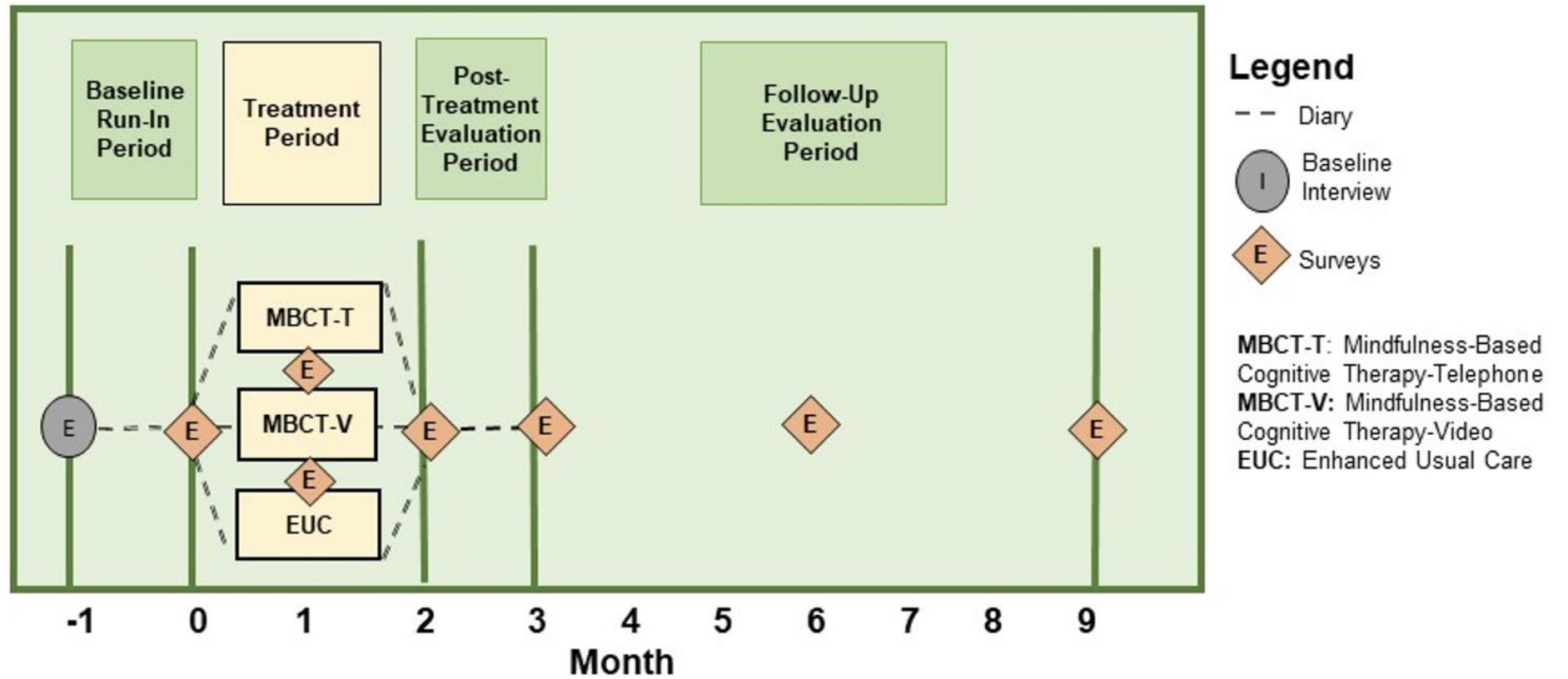
# Treatment for Migraine and Mood (TEAM-M)



- N = 144
- 3 arm RCT
  - MBCT-T (Telephone)
  - MBCT-V (Videoconferencing)
  - EUC (Enhanced Usual Care)
- 3 sites
  - Cleveland Clinic
  - Albert Einstein College of Medicine
  - Atrium Health Wake Forest Baptist
- Primary outcomes: fidelity, feasibility, acceptability, recruitment



# Treatment for Migraine and Mood (TEAM-M)





# The LEGEND Study: Lifestyle Education about Nutrition for Diabetes

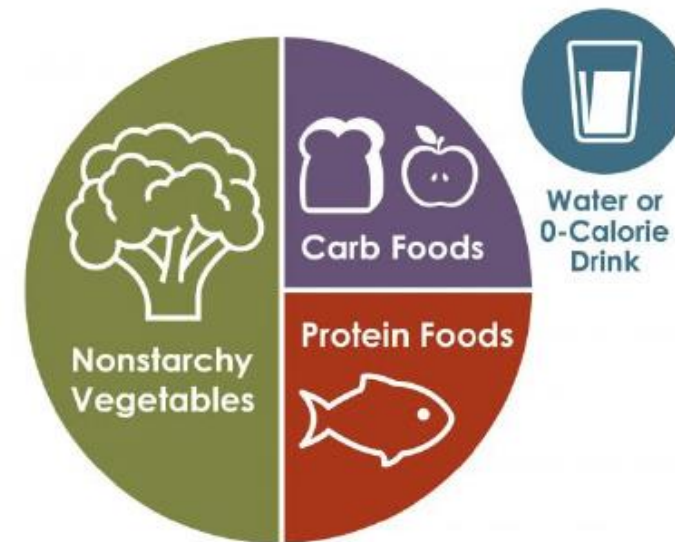
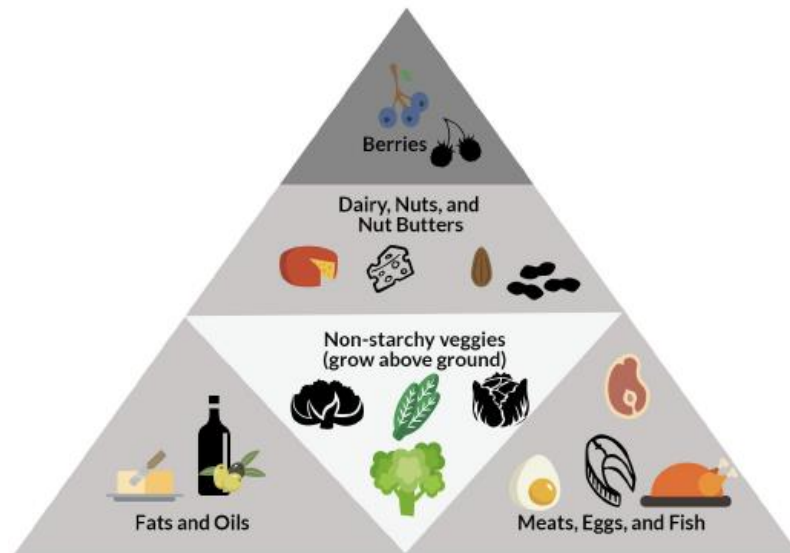
- Type 2 diabetes is the most expensive chronic disease in the U.S.
- Optimal carbohydrate intake is controversial in nutritional management
- RCT comparing two diets for glycemic control in adults with type 2 diabetes
  - NIH grant R01DK126898, Laura Saslow PhD, PI, University of Michigan, Ann Arbor (UM); Rick Hecht, MD, Site PI, University of California, San Francisco (UCSF)
  - [ClinicalTrials.gov NCT05237128](https://clinicaltrials.gov/ct2/show/study/NCT05237128)



# The LEGEND Study

- Participants randomized to one of two 20-session group-based diet and lifestyle intervention for one year, delivered via Zoom.

Keto (very low-carbohydrate) versus My Plate (moderate-carbohydrate)

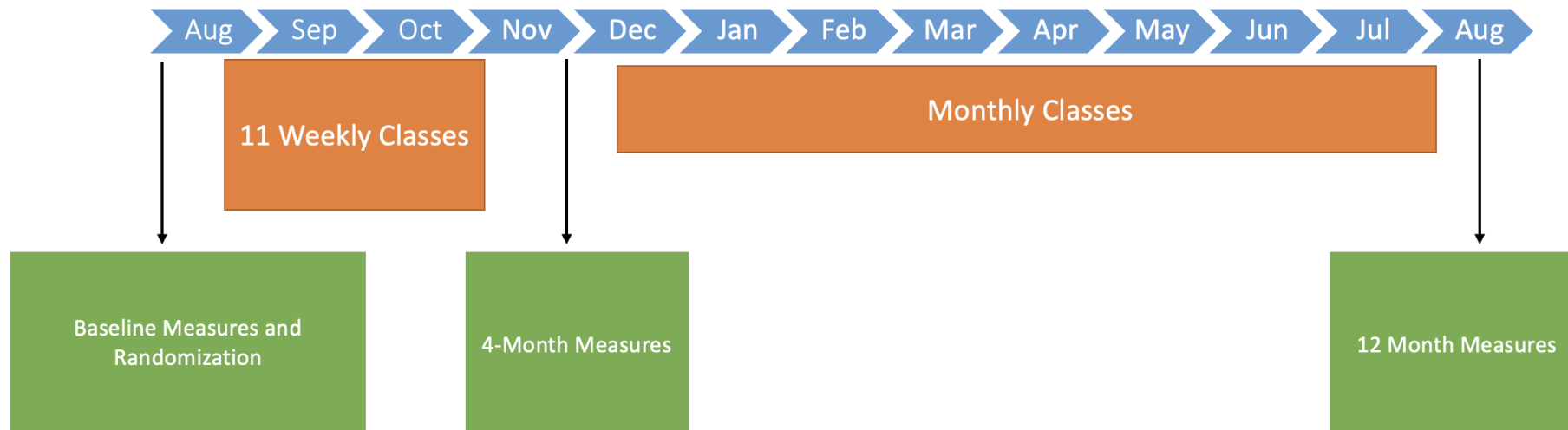


- N=182 (target n=180) adults with type 2 diabetes (HbA1c 6.5-11.9%)
- Two sites: UCSF (n77) and UM (n105)



# The LEGEND Study

- Outcomes assessed at baseline, 4, & 12 months.
- Primary outcome: HbA1c—average blood glucose levels over past 2-3 months.
- Secondary outcomes include:
  - Labs (LabCorp locations in CA and MI)
  - DEXA scans (at UCSF and UM)
  - Remotely-collected outcomes (body weight, diet intake/adherence, PROs)
- High retention to date in study classes and assessments out to 12 months.



# Optimizing Pain Treatment In Medical Settings Using Mindfulness (OPTIMUM)

## Summary

A pragmatic clinical trial integrating a telehealth group-based mindfulness stress reduction program into primary care settings for persons with chronic low back pain

## Study design

Pragmatic randomized controlled trial



One year follow-up

## Population



450 patients with chronic low back pain  $\geq 18$  years of age



Three healthcare systems: Boston Medical Center, Pittsburgh/UPMC, North Carolina

## Comparison



### Intervention group

225 participate in 8-week Mindfulness Based Stress Reduction program

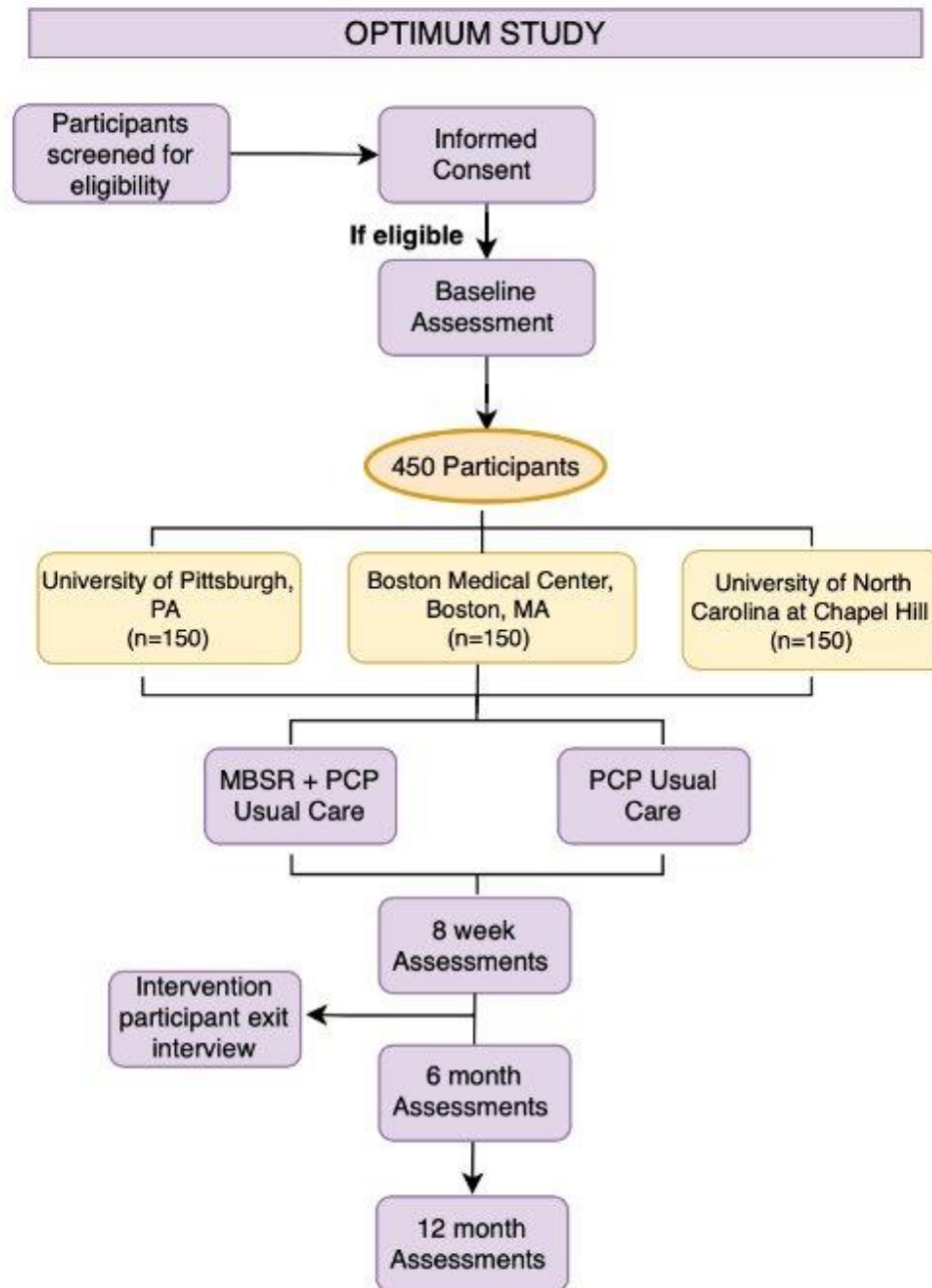


### Control group

225 receive usual primary care

## Outcomes

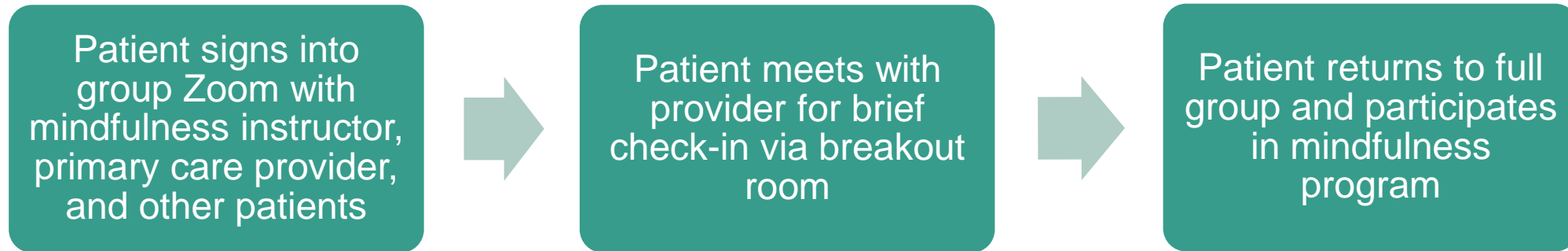
Mindfulness vs Usual Care	Baseline	w8	m6	m12
Pain Intensity & Pain Interference (PEG, Primary Outcome)				
Psychological function				
Physical function				
Healthcare utilization				
Pain medication/opioid use				



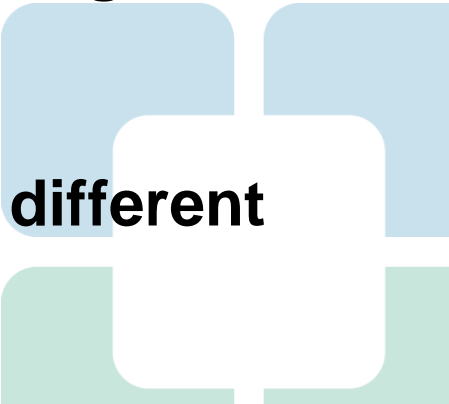
# Optimizing Pain Treatment In Medical Settings Using Mindfulness (OPTIMUM)



# Optimizing Pain Treatment In Medical Settings Using Mindfulness (OPTIMUM)



# **Question Topic: Recruitment and Intervention Delivery**

- 1. What do you need to consider when coordinating recruitment and intervention delivery across sites?**
  - 2. Are there benefits to mixing participants from various sites into one intervention group vs. having site-specific groups?**
  - 3. How do you manage scheduling group intervention visits when participants and intervention facilitators may have differing schedules and availability?**
  - 4. How do you coordinate intervention delivery across sites in different time zones?**
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# **Question Topic: Site Coordination/Management**

**5. What are helpful approaches to working with underperforming sites?**





# **Question Topic: Data Management**

- 6. What are best practices for managing data collection and staffing across sites?**
- 7. Is it best to use a single data management project (e.g., REDCap) for all sites, or have individual data collection projects at each site?**



# **Question Topic: Regulatory/IRB**

**8. What are the challenges with establishing the institutional review board (IRB) for multi-site group-based intervention studies? For example, should study teams submit their proposal to a third-party sIRB vs an sIRB at an academic institution?**



# **Question Topic: Regulatory/IRB**

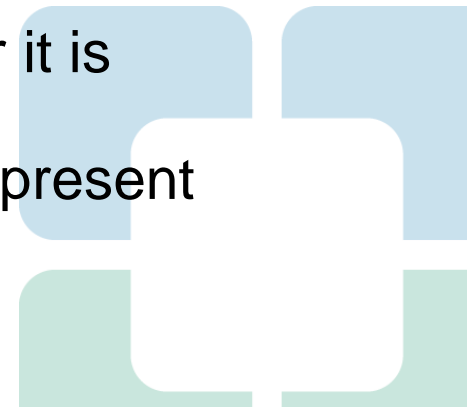
**9. Do all sites need to have IRB approval if they have limited involvement and may not be conducting “research activities”?**



# Lessons Learned & Suggestions for Future Study Teams

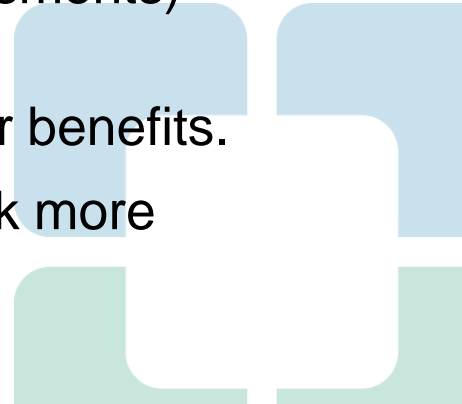
## TEAM-M STUDY

1. Understand each institutions policies and guidelines regarding data collection, how they vary, and work out in advance how you are going to comply with institutional guidelines to collect data in the most efficient way possible.
2. Think through the pros and cons of delineating across sites vs. within sites the recruitment process, from screening to consent to randomization (e.g., coordinate scheduling, streamline communication for participants).
3. Have a very clear understanding of your recruitment rate and whether it is feasible to run a multisite study where there are heterogeneous vs. homogenous groups across/within sites. Can you have groups that represent individuals at one site vs across sites?




# Lessons Learned & Suggestions for Future Study Teams

## LEGEND Study

1. Work as one team, as feasible.
    - Use a shared database and cross-train staff (with IRB approval) to work with participants at either site.
    - Consolidate some responsibilities under one site (time-consuming but participant payments, LabCorp).
    - Have a shared high-level/experienced project manager that meets weekly with staff at both sites and serves as key point person for staff to turn to for troubleshooting and handling problems day to day.
  2. Use a study design that includes at least some elements (interventions, assessments) that you have previously tested or implemented.
  3. Time differences between sites may complicate some things but may also offer benefits.
  4. sIRB initial approvals can be complicated and time-consuming but tend to work more smoothly as the study progresses.
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# Lessons Learned & Suggestions for Future Study Teams

## OPTIMUM Study

1. Flexibility is key in leading a multi-site group-based clinical trial as sites will be unique in their participant populations, recruitment strategies, and when they deliver the intervention.
  2. Regular communication is key to keeping all trial sites and team members informed about the study as well as an opportunity to share barriers and approaches to resolving barriers as they arise.
  3. Participant-centered approach to trial implementation enhances engagement and retention.
  4. Engagement and retention also improve when patient reported outcomes and their purpose is described.
  5. Many integrative interventions are group-based and rigorous study of them is critical to moving the field forward and translating group-based interventions into clinical practice.
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# **Q&A Session**

**Audience: What questions do you have for our panelists?**





**Cleveland Clinic**

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