Adapting and Implementing a Nurse Care Management Model to Care for Rural Patients with Chronic Pain (AIM-CP)

Co-PIs: Sebastian Tong and Kushang Patel

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Overall Objective

- To adapt and test a Nurse Care Management model to provide comprehensive coordinated care for patients with chronic pain in rural communities

- Long-term: reduce geographic disparities in pain-related outcomes through dissemination of this comprehensive approach to chronic pain management
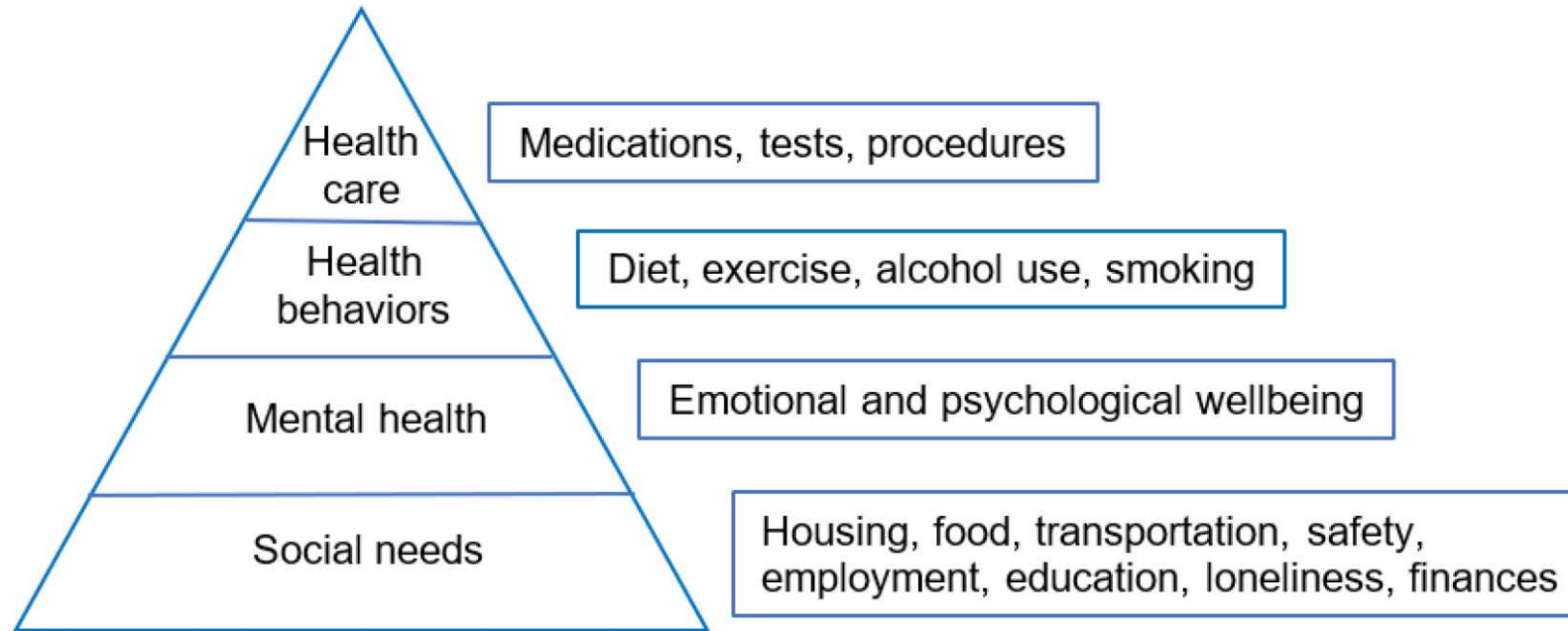
Care Management Model

- Care Coordination
- Cognitive Behavioral Therapy
- Remotely delivered Enhance Fitness exercise program
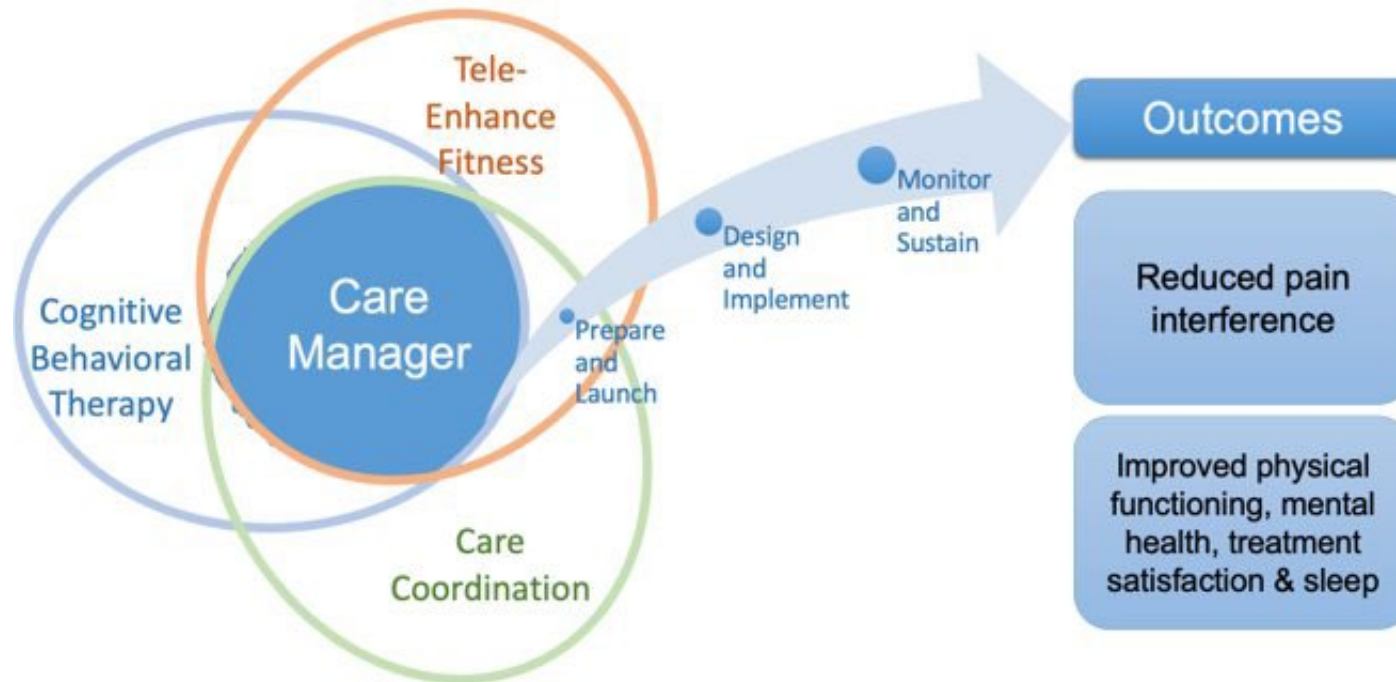
Theoretical Basis

- Adapted from Maslow's hierarchy of needs

Components of Model

Individual component	Description
Care Coordination	• Assessing patients for social service, behavioral health and specialty care needs • Linking patients with community resources • Tracking and supporting patients when care received outside health system • Coordinating behavioral health and specialty care • Using PainTracker to develop goals of care, track progress and refine treatment plans
Cognitive Behavioral Therapy	• 6-10 weekly to every other week sessions with care manager to develop strategies to change maladaptive cognition and behaviors around pain
Tele-Enhance Fitness	• Instructor-led, group exercise program for 1-hour, 2-3 times weekly remotely delivered program

# University of Washington Team Members and Roles

- Sebastian Tong, MD (contact PI)
- Kushang Patel, PhD (MPI)
- Brennan Keiser, MSW (Project Manager)
- Laura-Mae Baldwin, MD (Co-I; clinic/patient engagement)
- Basia Belza PhD, RN (Co-I; clinic/patient/partner engagement)
- Bryan Comstock, MS (Co-I; lead biostatistician)
- Elise Hoffman, MPH (tele-EF implementation manager)
- Caleb Holtzer, MD (Providence site research champion)
- Bill Lober, MD (Co-I, PainTracker)
- Kari Stephens, PhD (Co-I; CBT and care coordination)
- Mark Sullivan, MD, PhD (Co-I; PainTracker)

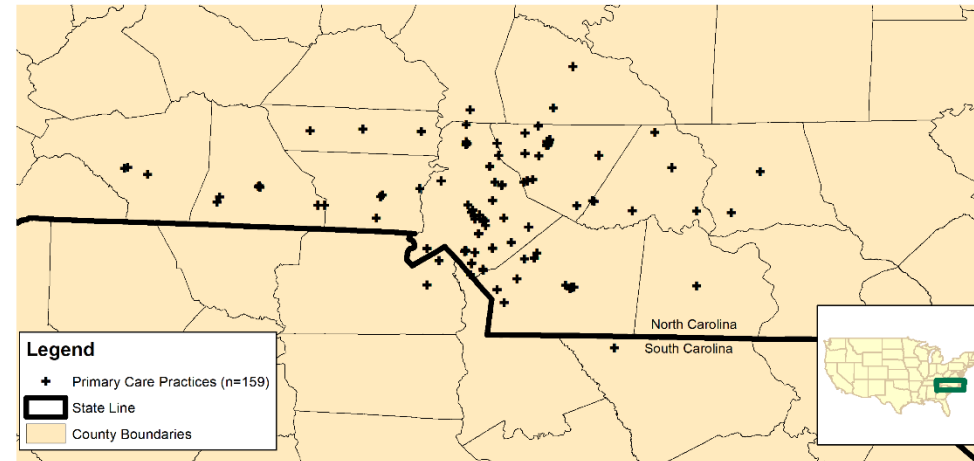# Wake Forest/Atrium Health Team Members and Roles

- Dennis Ang, MD (site PI)

- Hazel Tapp, PhD (Co-I; co-director of PBRN)

- Tom Ludden, PhD (Co-I; informatics)

- Erica Steinbacher, MD (Co-I; clinic lead at Atrium Health)

- Christine O'Neill (Research Coordinator)

Settings

- WWAMI (Washington, Wyoming, Alaska, Montana, and Idaho) region Practice and Research Network

WPRN WWAMI region Practice & Research Network

- Mecklenburg Area Partnership for Primary Care Research (North Carolina)
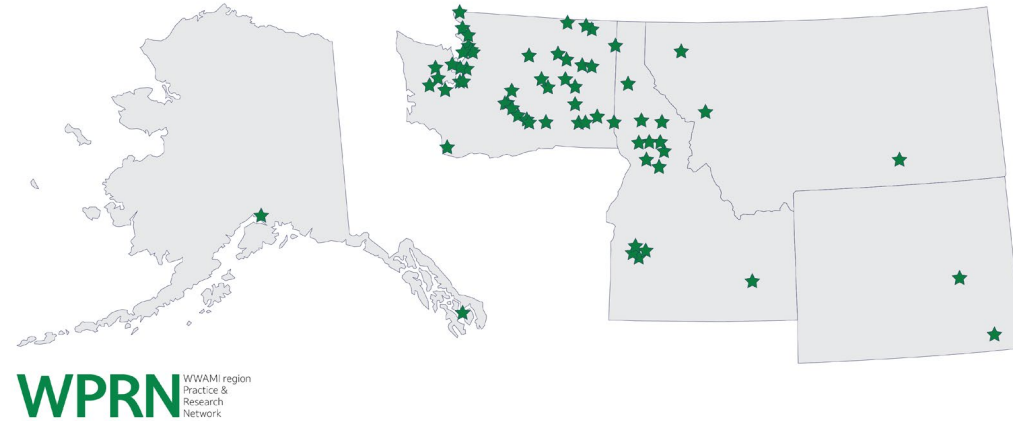
Primary Care Practice Locations for the
Mecklenburg Area for Partnership for Primary Care Research (MAPPR)

Legend
+ Primary Care Practices (n=159)
▬ State Line
▭ County Boundaries

North Carolina
South Carolina

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Outcomes

Outcome	Measure	Data Source
Pain interference	PEG	Patient Report
Pain intensity	PEG	Patient Report
Physical Function	PROMIS Physical Functioning Short Form 6b	Patient Report
Sleep	PROMIS Sleep Disturbance	Patient Report
Pain Catastrophizing	Pain Catastrophizing Scale	Patient Report
Depression	PHQ-9	Patient Report
Anxiety	GAD-7	Patient Report
Global Satisfaction with Treatment	Patients' Global Impression of Change scale	Patient Report
Substance Use Disorder	TAPS-1	Patient Report
Pharmacologic Treatments	Medication name, dose and, if opioid, morphine milligram equivalent	EHR and/or Patient Report
Health care utilization	Hospital admissions; ED, urgent care, primary care visits	EHR and/or Patient Report

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UG3 Specific Aims

1. To finalize outcome measures and data extraction processes through our learning collaborative and participation in NIH Collaboratory workgroups.

2. To refine trainings, identify community-based partners and streamline workflows to adapt the NCM model to serve rural patients with chronic pain.

3. To pilot test the adapted NCM model with 30 patients across two sites.

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UH3 Specific Aims

1. To determine the effectiveness of the adapted NCM model vs. usual care for improving pain interference with daily functioning (416 rural dwelling patients with chronic pain).

2. To evaluate the implementation of the adapted NCM intervention.

3. To explore if there are disparities in response to the NCM intervention by examining heterogeneity in treatment effect in the primary (pain interference) and secondary outcomes.

Barriers Scorecard

Barrier	Level of Difficulty*				
	1	2	3	4	5
Enrollment and engagement of patients/subjects				X	
Engagement of clinicians and health systems		X			
Data collection and merging datasets			X		
Regulatory issues (IRBs and consent)			X		
Stability of control intervention		X			
Implementing/delivering intervention across healthcare organizations			X		

*Your best guess!
1 = little difficulty
5 = extreme difficulty

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Data Sharing UG3

- What is your current data sharing plan and do you foresee any obstacles?
  - Deidentified individual-level patient reported outcome data
  - May have difficulty sharing this in UG3 phase since only 30 patients

- What information did the IRB require about how the data would be shared beyond the study in order to waive informed consent, if applicable?
  - IRB pending

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Questions?

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