

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

Kevin H. McLaughlin, DPT

Assistant Professor, Johns Hopkins University School of Medicine



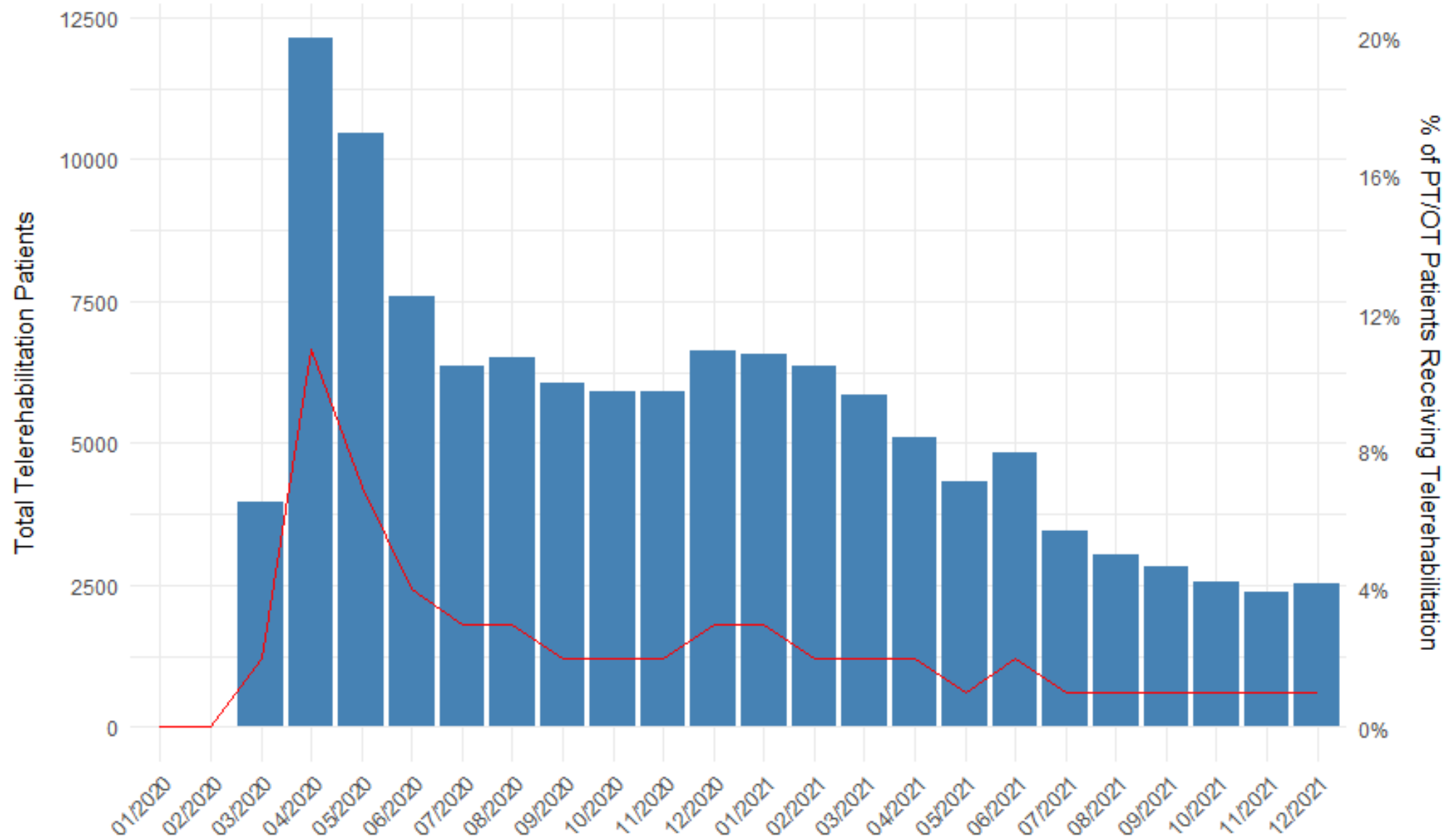
JOHNS HOPKINS  
M E D I C I N E

# Historical Context

- Telehealth long viewed as a means of improving access to PT
- Use limited by policy and reimbursement
- Changes due to COVID-19 expanded access
  - CARES Act
  - 1135 waivers
  - State-level policy changes
  - Commercial payer policy changes



## Telerehabilitation Users by Month



# PICOT

***Population:***

***Intervention:*** telehealth physical therapy

***Control:***

***Outcomes:***

***Time:***

# Population

*What populations have limited access to PT?*

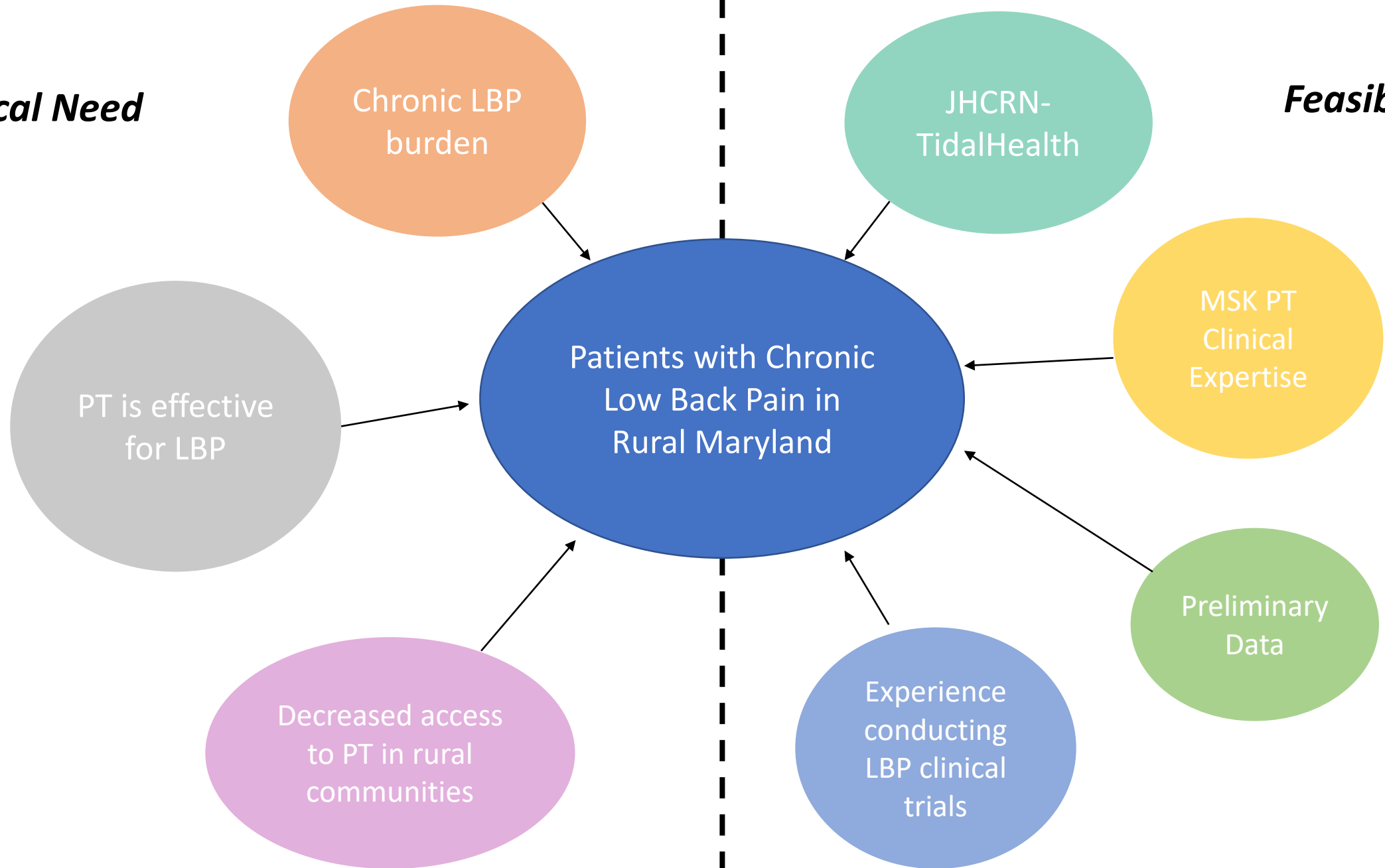
*What clinical groups stand to benefit from increased access to PT?*

*What populations do we have access to?*

*In what areas does our expertise and experience allow us to contribute?*

***Clinical Need***

***Feasibility***



Chronic LBP  
burden

JHCRN-  
TidalHealth

MSK PT  
Clinical  
Expertise

PT is effective  
for LBP

Patients with Chronic  
Low Back Pain in  
Rural Maryland

Preliminary  
Data

Decreased access  
to PT in rural  
communities

Experience  
conducting  
LBP clinical  
trials

# PICOT

***Population:*** patients with chronic LBP living in rural MD

***Intervention:*** telehealth physical therapy

***Control:***

***Outcomes:***

***Time:***

# Control/Comparison

---

What is usual care for patients with LBP living in rural communities when PT is not available?



# Clinical Guidelines for Nonspecific LBP

- Advice
- Medication
- Non-pharmacologic pain interventions (e.g., PT)

Chou R, Qaseem A, Snow V, Casey D, Cross Jr JT, Shekelle P, Owens DK. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. *Annals of internal medicine*. 2007 Oct 2;147(7):478-91.

# Considerations

- Avoid disruption to usual care
- Do no harm
  - ~~Medications~~
  - ~~Invasive procedures~~
- Maximize generalizability to rural setting
  - Advice likely most common intervention absent other in-clinic options
- Recruitment strategy

# PICOT

***Population:*** patients with chronic LBP living in rural MD

***Intervention:*** telehealth physical therapy

***Control:*** standardized education (website)

***Outcomes:***

***Time:***

# Outcomes

- Real-world burden of chronic LBP
  - Disability
  - Pain
  - Opioid use
- Comparability with previous and future studies
- BACPAC
- HEAL Common Data Elements

# PICOT

***Population:*** patients with chronic LBP living in rural MD

***Intervention:*** telehealth physical therapy

***Control:*** standardized education (website)

***Outcomes:*** LBP-related disability (Oswestry), pain, opioid use

***Time:***

# Time

- Length of intervention
  - 8 visits over 8 weeks
- Carryover of treatment effects
- Comparison to past and future studies
  - OPTIMIZE

# PICOT

**Population:** patients with chronic LBP living in rural MD

**Intervention:** telehealth physical therapy

**Control:** standardized education (website)

**Outcomes:** LBP-related disability (Oswestry), opioid use

**Time:** 10-weeks (primary), 4 months, 12 months





*Thank you!*