Teleworking and Care Recipient Management

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First: Step Back and Look at this Situation

- Longer days of caregiving
- Greater sense of isolation
- Added strains of telework – Zoom exhaustion
- Loss of social stimulation from in person work

Acknowledge and Grant Forgiveness in Advance: Compromises are Called For And in Order
From Guidance to Management

**Optimal Caregiving**
- Care with ADLs
- Activities Chosen and Designed to:
  - Promote fullest engagement
  - Provide variety
- Days as calm, safe, and pleasant as possible

**Caregiving in Current Time**
- Slippage in ADL Care
  - Same outfits 3 days running
- Probably more highs and lows
  - Need more diversions
- Go-To Activities:
  - Person will be reliably involved
  - Less variety; more repetition
  - Maybe less creative
Two Possible Scenarios

- Co-residence with care recipient
- Distance caregiving
Distance Caregiving

Review Pre-Pandemic Arrangements

• Home health care
• Regular check-in visits by you
• Assorted Visitors
• Occasional Adult Day Care

Revise Arrangements

• Home health care: still possible with appropriate precautions
• With precautions
• Might need to restrict
• Off the table for now
Adjustments

- Greater reliance on and more time by Home Care
  - Need to strengthen daily activities Go-To toolkit

- More frequent and longer visits by you
  - More strain on you

- Strategic engagement of others – perhaps fewer, but more regularly
  - Carefully expand the pod

All Undertaken in the Context of Infection Control Precautions
Co-Resident Caregiving

Teleworking

• Home more, physically, but with no additional time for caregiving
• Likely had home help
• Presence creates demand for attention

Let’s not even consider a homeschooling parent who’s a caregiver
Adjustments

• Assume some Home Care arrangements in place
  • Negotiate how to incorporate and ignore your presence
  • Organize telework to enable some caregiving
  • Might use self to help home care get person involved in a Go-To activity

• Expand the Pod – even though you’re at home
  • Act as though you are not

• Extra Attention to self-care
  • Double whammy of longer caregiving days and Zoom life
Understanding Adult Vaccines

Monica W. Parker, MD
Director, Minority Engagement Core (MEC)
Emory Goizueta Alzheimer’s Disease Research Center
There Are Vaccines You Need as an Adult

• **All** adults need:
• Influenza (flu) vaccine every year
• Td or Tdap vaccine
• You may need other vaccines based on your age, health conditions, job, lifestyle, or travel habits.
Vaccines recommended for everyone:

**Influenza vaccine** every year during flu season, including pregnant women during any trimester.

**Tdap vaccine** one time, no matter when you got your last tetanus (Td) vaccine. Pregnant women also need Tdap vaccine during every pregnancy.
WHO?
All adults 65 years or older should get one dose of PPSV23 (polysaccharide vaccine).
Adults 65 years or older who have never received a dose can discuss and decide, with their vaccine provider, to get one dose of PCV13 (conjugate vaccine).

HOW OFTEN?
If someone wants both vaccines, get PCV13 first followed by PPSV23.
Shingles (Zoster)

• WHO? Adults 50 and older, including adults who have had shingles or got the previous shingles vaccine (Zostavax) HOW OFTEN? Two doses, 2 to 6 months apart
Human papillomavirus (HPV)
Recommended if you haven’t received the full series

• WHO? Females and males 26 or younger

• One time series of two or three doses
Measles, mumps, rubella (MMR)* Recommended as a catch up if you didn’t receive as a child

• WHO? Adults born in the United States in 1957 or later who have not received MMR vaccine, or who had lab tests that showed they are not immune to measles, mumps, and rubella

• HOW OFTEN? One time for most adults; however, certain people, such as college students, international travelers, or healthcare professionals, should get two doses
Chickenpox (Varicella)*
Recommended as a catch up if you didn’t receive as a child

• WHO? Adults born in the United States in 1980 or later who have not received two doses of chickenpox vaccine or never had chickenpox
• HOW OFTEN? One time series of two doses
CDC Resources
online tool and app to download

The Adult Vaccine Assessment Tool
www2.cdc.gov/nip/adultimmsched/
Partnered Rhythmic Rehabilitation for Enhanced Motor-Cognition in Prodromal Alzheimer's Disease

Short title: PARTNER
1R01AG062691-01

ClinicalTrials.gov ID: NCT04029623

Emory University School of Medicine
PI: Madeleine E. Hackney, PhD (Department of Medicine)
Co-Is: Ihab Hajjar, MD; Felicia Goldstein, PhD; Whitney Wharton, PhD; Deqiang Qiu, PhD; J. Lucas McKay, PhD; Molly Perkins, PhD
Multifactorial interventions more likely to be successful for Alzheimer’s Disease (AD)

• GAP: AD interventions mostly focus on memory deficits; ignore problems with motor-cognitive integration
  • Ability to modulate and integrate complex motor and cognitive actions

• Early in prodromal AD (pAD), declining motor-cognitive integration impacts functional decline through subtle gait changes, and falls
  • These changes may precede other forms of decline

• Combined motor and cognitive training may help improve motor-cognitive function in people with pAD
PRR trains motor, cognitive and social domains:

Motor/physical:
- Fitness
- Mobility
- Strength

Social:
- Attrition
- Satisfaction
- Beliefs, tolerability

Cognition:
- Executive Function
- Visuospatial, Attention/WM
- Language, Memory

Pathways:
- Cardiovascular
- Inflammatory
- Neural

Figure 1. Partnered rhythmic rehabilitation trains motor, cognitive and social domains and may impact cardiovascular, inflammatory and neural pathways. WM: working memory.
Central Hypothesis

PRR is safe, tolerable and associated with improved motor-cognitive function, and brain (neuronal), vascular (blood vessels) and inflammatory biomarkers that might affect function.
PARTNER design: A Phase II, single-blind RCT

Screen

Baseline (n=66) & Randomization
- PRR
- WALK

Training (biweekly 90-min classes 3 months)
- PRR
- WALK

Maintenance (weekly 90-min classes, 9 months)
- PRR
- WALK
Aim 1

• To determine acceptability, safety, tolerability and satisfaction with PRR in pAD
  • Acceptability: identify barriers/ facilitators to participation and beliefs about PRR as therapy and motor-cognitive integration through focus groups conducted before the trial
  • Safety: absence of injurious falls during PRR classes
    • H1: We expect PRR to be safe (0 injurious falls during the PRR classes)
  • Tolerability: attrition
    • H1: Attrition will be <15%
  • Satisfaction: focus groups post-tx and Exit questionnaire
    • H2: Participants in PRR will have higher satisfaction ratings and better attitudes regarding therapy's efficacy in addressing functional performance compared to WALK participants
Aim 2

• To determine a) efficacy of PRR vs. WALK for improving motor-cognitive integration in pAD; b) to identify sensitive endpoints in other domains to power a future phase III trial

• Primary efficacy outcome: FSST collected at entry, three months, and 12 months.

• **H3:**
  • PRR participants exhibit better motor-cognitive performance, as measured by faster performance speed on the FSST than WALK at 3 months and 12 months.
  
  • Other candidate endpoints for future Phase III trial:
    • volumetric hippocampal and cortical thickness
    • behavioral measures (executive function, visuospatial, and memory)
Exploratory Aim

• Explore potential **mechanisms** by which PRR affects pAD
  • Estimate effect size of intermediary measures for powering sample size for future trial that will definitively identify mechanisms
    • Structural and functional brain measures
      • E.g., Task fMRI
    • Vascular and inflammation measures
      • arterial stiffness; cerebral perfusion
    • Inflammatory markers
      • Cytokines, chemokines, endothelial adhesion markers
PRR Intervention

- Interpret motor goals through touch
- Connect previously learned and novel steps
- Explore novel steps and movements
- Develop musicality in movement
- Class structure: Practice previously learned steps, a 20-minute warm-up, partnering and rhythmic exercises done to music
WALK intervention

Safe walking mechanics
- head up, shoulders relaxed, abdominals engaged, heel strike, roll and toe off
- Maintain natural stride length, and speed up cadence to increase speed
- Cues given every session for reinforcement

- 10-minute warmup, 20 minutes of balance and stretching, calisthenics; 55 minutes walking with breaks as necessary
- Participants lead the pace; Participants of similar walking abilities 'buddy' with research assistants who will act as group back-markers
- Instructors will keep walking logs for each participant
## Study procedures in project stages

<table>
<thead>
<tr>
<th>Phase</th>
<th>Screen</th>
<th>Baseline</th>
<th>Post Training</th>
<th>Post Maintenance</th>
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<td>Months</td>
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<td>3 month</td>
<td>12 month</td>
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<td>Neuropsychological &amp; motor cognitive battery</td>
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<tr>
<td>Psychosocial questionnaires</td>
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<tr>
<td>Inflammation (blood draws)</td>
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<tr>
<td>Vascular function (Pulse Wave Velocity, Augmentation Index)</td>
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<tr>
<td>Time (minutes)</td>
<td>45-80</td>
<td>180-300</td>
<td>180-360</td>
<td>180-300</td>
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Baseline, post Training and post Maintenance visits will be completed over two days within 3-4 day period.
Randomization, Recruitment

• Stratified randomization to ensure equal distribution of potential confounders (age and gender) using REDCap randomization module

• Blinding
  • Investigators and staff but not instructors blinded to treatment
  • Participants will know treatment but will not know if it is experimental or control
  • All outcomes blinded

• Recruitment: We will use ADRC and CHA infrastructure at Emory, including clinical space, personnel, and laboratory facilities
  • Emory Memory Disorders Center
  • Clinical core of the ADRC
  • 2 other clinical trials with which Dr. Hajjar is involved
  • Community outreach
  • CEP
Inclusion

• age: 50 - 80 years
• Amnestic MCI
  • Subjective memory concern
  • Abnormal memory function documented by education adjusted cutoff score on the delayed paragraph recall from the Wechsler Memory Scale-Revised (WMS-R).
  • Montreal Cognitive Assessment score between 18 and 25.
  • Single domain (defined as impairment in memory only) or multi-domain amnestic MCI
  • CDR= 0.5
  • General functional performance sufficiently preserved
• Achieves less than 150 minutes of moderate intensity or 75 minutes of vigorous intensity aerobic activity per week
• Not involved in any structured exercise program within the past 3 months (brisk walks are considered formal exercise but leisurely walks are not).
• Willing to commit to a one-year research program.
<table>
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<tr>
<th>Table 3. Timeline of Study</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<td>Cumulative Enrollment - assumes 25% attrition</td>
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<tr>
<td>Prep/submit proposal for Phase III trial</td>
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COVID-19 Updates

• Remote screening visits
  • E-consenting approved by IRB

• Reduced in-person visits to 20% of all intervention visits
  • Participants will attend in-person 1 of every 5 classes.

• Tango training course being taught online by P.I.

• Transitioned to administering assessments through telehealth

• Implementing a virtual walk program for participants
Practical Bathroom Safety
Reducing Fall Risk
We Know A Lot About Falls

• WOMEN are more apt to fall than MEN

• Falls are the LEADING CAUSE of FATAL and NONFATAL injuries for those OVER the AGE of 65

• We are TWICE AS LIKELY to be INJURED if the fall is in the BATHROOM

• We do not tell our doctors about our falls. We need to change this!!
Why Do We Fall?

- Balance
- Strength
- Pain
- Coordination
- Vision
- Sensation
- Ergonomics
- Medications
- Supplements
- Poor footwear
- Lighting
- Throw rugs
- Age
Simple Changes = Big Impact

- Variety of shower chairs/ benches
- Grab bars
- Toilet modifications
- Accessories improve safety and fall prevention
Options for Bathing

ADJUSTABLE LEGS

NON-SLIP RUBBER FEET
TUBBENCH

- UNABLE TO BALANCE ON ONE FOOT
- PAIN /ROM ANKLE, KNEE, HIP, BACK
- KEEP BALANCE WITH EYES CLOSED
- AMPUTATIONS
- FREQUENT FALLS
- WHEELCHAIR LEVEL
GRAB BAR OPTIONS Placement and Stability
Nice option..

TUB SAFETY RAIL SAFETY BAR

- PORTABLE
- VERY EASY INSTALL
- NON-SCRATCH
- STABLE
Increase the height to 17-19 inches base to bowl guidelines. Personalize!
REDUCE SLIPPING
Other considerations
Ideas to think about....

- Grabbars
- Nonslip mats
- Good lighting
- Shower chair or Shower bench
- Elevated toilet or bars
What to Do?

• Ask your primary care doctor/ NP or PA for Occupational Therapy Home Evaluation

• OT can offer suggestions on improving safety in your entire home

• Assist with selecting the correct items for you or your family

• Measure, Order, Set up, Training

Contractor grab bar, railing/lifts and the like