AWARD NUMBER: W81XWH-20-1-0756

TITLE: Supporting Caregivers of Veterans with TBI and Mixed Dementia: The REACH Hope Behavioral Intervention

PRINCIPAL INVESTIGATOR: Linda Nichols, PhD

CONTRACTING ORGANIZATION: Research Inc/VA Medical Center, Memphis, TN

REPORT DATE: September 2021

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Development Command

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13. SUPPLEMENTARY NOTES

14. ABSTRACT

Family members who care for Veterans with post traumatic brain injury (TBI) dementia often have heavy burden. Currently, there is no caregiving intervention that combines one-on-one coaching with digital flexibility for caregivers of Veterans with both TBI and dementia. The Department of Veterans Affairs (VA) national Caregiver Center and Virginia Commonwealth University have developed and are evaluating a one-on-one plus smartphone-based intervention, REACH Hope. REACH Hope combines two award-winning interventions: the VA's REACH VA (Resources for Enhancing All Caregivers Health) oneon-one behavioral caregiving intervention and the Department of Defense's Virtual Hope Box mobile app. The REACH VA component involves training in problem-solving and stress management skills one-on-one from a coach. The customizable Hope Box app provides anytime access to personalized coping and stress reduction content. This randomized clinical trial is testing the ability of REACH Hope to improve caregivers' burden, depression and anxiety, and confidence in themselves as caregivers, as well as Veteran safety. In a wait-list control design, half of 110 caregivers of Veterans with TBI and dementia receive REACH Hope at the beginning of the study and half after three months. Outcomes are measured at the start of the study, 3 months, 6-months for all participants, and 9-months later for wait list control participants.

15. SUBJECT TERMS

None listed.

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Unclassified	Unclassified	Unclassified	Unclassified	76	code)

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1. INTRODUCTION:

Family members who care for Veterans with both traumatic brain injury (TBI) and dementia often have heavy burden. Currently, there is no caregiving intervention that combines the strengths of one-on-one coaching with digital flexibility. In addition, there are no interventions for caregivers of Veterans with both TBI and dementia. The Department of Veterans Affairs (VA) national Caregiver Center and Virginia Commonwealth University have developed and are evaluating a one-on-one plus smartphone-based intervention, REACH Hope. REACH Hope combines two award-winning interventions: the VA's REACH VA (Resources for Enhancing All Caregivers Health) one-on-one behavioral caregiving intervention and the Department of Defense's Virtual Hope Box mobile app. The REACH VA component involves training in problem-solving and stress management skills one-on-one from a coach. The customizable Hope Box app provides anytime access to personalized coping and stress reduction content. This randomized clinical trial is testing the ability of REACH Hope to improve caregivers' burden, depression and anxiety, and confidence in themselves as caregivers, as well as Veteran safety. In a wait-list control design, half of 110 caregivers of Veterans with TBI and dementia receive REACH Hope at the beginning of the study and half after three months. Outcomes are measured at the start of the study, 3 months, 6-months for all participants, and 9-months later for wait list control participants.

2. KEYWORDS:

Brain injuries, Traumatic Dementia Caregivers Veterans Military Family Mobile applications

3. ACCOMPLISHMENTS:

What were the major goals of the project?

Goals	Timeline	Dates	Dates and Year 1 % Completed
Major Task 1: Prepare Regulatory Documents	Months		
Milestone Achieved: Local IRB Approval, Memphis, VCU	4	Nov-2021	100%, Memphis 26-Mar-2020 VCU 17-Jul-2020
Milestone Achieved: HRPO Approval	6	Jan-2021	100%, 30-Nov-2020
Milestone Achieved: Local IRB and HRPO Approval as needed and yearly	4-36	Nov-2021 - Aug-2023	Memphis continuing review 07 -Jan-2021 VCU continuing review - as an expedited proposal, there is no continuing review. Original approval date still applies. HRPO continuing review 12-Mar-2021
Major Task 2: Train Study Staff	Months		
Milestone(s) Achieved: Staff hired	1-6	Aug-2020- Jan-2021	100%, (final staff hired 10-Jun-2021)
Milestone(s) Achieved: Staff trained, certified	2-9	Sep-2020- Apr-2021	100%, 28-Jun-2021 (final staff)
Milestone Achieved: Maintained trained and certified Staff throughout study	2-36	Sep-2020 Aug-2023	Ongoing
Major Task 3: Finalize Research Protocol/Manual of Operations (MOP)	Months		
Milestone(s) Achieved: REACH Hope Program Coach Manual with format, topics and scripts	8-9	Mar-2021- Apr-2021	100%, 02-Feb-2021
Milestone(s) Achieved: Caregiver Notebooks	8-9	Mar-2021- Apr-2021	100%, 09-Feb-2021
Milestone(s) Achieved: Data collection forms, scripts, and documentation	8-9	Mar-2021- Apr-2021	100%, 31-Jan-2021
Major Task 4: Screening and Recruitment	Months		
Milestone(s) Achieved: Screening forms and scripts	6	Jan-2021	100%, 01-Jul-2020
Milestone(s) Achieved: Brochures, web site,	6	Jan-2021	100%, Website live 16-Jan-2021; Brochures mailed

Goals	Timeline	Dates	Dates and Year 1 % Completed
social media blurbs			15-Feb-2021; no social media yet
Milestone(s) Achieved: Approximately 250 participants screened	27	Nov-2022	17.2% screened (n=43), first person screened 18-Feb- 2021
Milestone(s) Achieved: 111 participants recruited	27	Nov-2022	27.3% (n=30)
Major Task 5: Randomization and Intervention Delivery	Months		
Milestone(s) Achieved: 111 participants randomized	27	Nov-2022	27.3% (n=30) enrolled and randomized, first person enrolled 25-Mar-2021
Milestone(s) Achieved: Completed interventions	9-30	Apr-2021- Feb-2023	2.7% (n=3) completed
Major Task 6: Data Collection/Data Entry	Months		
Milestone Achieved: Data collection (385 total interviews)	9-33	Apr-2021- May-2023	35.4% (n=39), first data collected 25-Mar-2021
Milestone Achieved: Data entry, quality	35	Jul-2023	35.4% (n=39)
Major Task 7: Data Analysis	Months		
Milestone(s) Achieved: Data analysis	36	Aug-2023	Not yet begun
Major Task 8: Preparation and Dissemination of Results	Months		
Milestone(s) Achieved: Papers and Presentations	28-36	Dec-2022- Aug-2023	CDMRP IPR presentation upcoming 20-Aug-2021
Milestone(s) Achieved: Manuals and materials and plan for dissemination	36	Aug-2023	Not yet begun

What was accomplished under these goals?

1) Major activities

- · Obtained regulatory approval
- Hired and trained staff
- Developed study protocol and Manual of Operations
- Developed REACH Hope Coaches Manual and Caregiver Notebook
- Developed detailed Hope Box installation and use guide
- Developed videos for inclusion in Hope Box app
- Began recruitment, which is on target (n = 30, with four more consented and awaiting data collection)
- Developed access data bases for recruitment, data collection, and intervention
- Began baseline and three-month data collection
- Began intervention delivery

2) Specific objectives

• Aim 1 completed: Modify/refine the REACH Hope intervention and caregiver materials for caregivers of Veterans with TBI and AD/MD, in conjunction with subject matter experts (SMEs).

3) Significant results

- Nothing to report
- 4) Other achievements
 - See Products below

What opportunities for training and professional development has the project provided?

Nothing to report.

How were the results disseminated to communities of interest?

Nothing to report.

What do you plan to do during the next reporting period to accomplish the goals?

- Continue recruitment
- Continue to provide intervention
- Continue to collect data
- Continue treatment fidelity checks, interventionist coaching, and data quality control

4. IMPACT::

What was the impact on the development of the principal discipline(s) of the project?

 No outcomes yet. However, planned submission of grant to Department of Defense Traumatic Brain Injury and Psychological Health Research Program (TBIPHRP) – all 5 VA Polytrauma TBI Model Systems – Richmond, Minneapolis, Palo Alto, Tampa, and San Antonio, as well as Caregiver Support Program's Caregiver Center at Memphis. Project will explore implementation of REACH for caregivers of Veterans with TB.

What was the impact on other disciplines?

Expanded Hope Box Users Guide has been shared with DoD developers of app

What was the impact on technology transfer?

Nothing to report

What was the impact on society beyond science and technology?

Nothing to report

5. CHANGES/PROBLEMS:

Changes in approach and reasons for change

Nothing to report

Actual or anticipated problems or delays and actions or plans to resolve them

 Problem: Delay in hiring data analyst at Virginia Commonwealth University Solution

> Hired data consultant at Memphis who developed data bases Data analyst hired 06-Jun-2021 and joined study 22-Jun-2021

Problem: Caregiver difficulty downloading Hope Box app (19%)

Solutions:

Developed detailed screen-shot instructions and four short YouTube videos to walk caregiver through process

Discuss downloading app and assist during introduction and randomization call If caregiver continues having difficulty, ask caregiver if they have someone to help them with downloading app

Changes that had a significant impact on expenditures

 Delay in hiring data analyst, was not hired until June 2021 (month 11 and third interventionist program coach also hired in June 2021)

Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents

Nothing to report

Significant changes in use or care of human subjects

- Nothing to report
- Memphis VAMC IRB approval 26-Mar-2020, Memphis continuing review 07-Jan-2021

 VCU IRB approval - 17-Jul-2020, VCU continuing review - as an expedited proposal, there is no continuing review. Original approval date still applies.

6. PRODUCTS:

Publications, conference papers, and presentations

CDMRP IPR presentation presented August 20, 2021

Journal publications.

Nothing to report

Books or other non-periodical, one-time publications.

Nothing to report

Other publications, conference papers, and presentations

Nothing to report

Website(s) or other Internet site(s)

REACH Hope site - https://www.memphis.va.gov/MEMPHIS/features/Memphis_researchers.asp

YouTube Hope Box videos - https://www.youtube.com/channel/UCT01GHg08qma66gZKYdOuCQ/videos

Technologies or techniques

 Expanded Hope Box User's Guide has been developed and shared with Department of Defense developers of Hope Box app

Inventions, patent applications, and/or licenses

Behavioral Chapters

Nothing to report

Other Products

• **REACH Hope Caregiver Notebook** – an easy-to-use resource with 28 short chapters on managing behaviors and 16 chapters on reducing stress and burden

An Overview of TBI and Dementia
Activities
Bathing
Combativeness
Communicating with a Person with TBI and Dementia
Confusion
Dressing
Driving

Eating Environment

Early-Stage Dementia

Hallucinations and Delusions

Hospitalization Incontinence Lifting and Moving Medications

PTSD, TBI, and Dementia Repeated Questions Safety Concerns

Sexuality

Caregiving Chapters

Addressing Problems
Adult Day Care
Asking for Help
Challenging Emotions

Communicating with Health Care Providers

Communicating with Others

Depression Feelings

Financial and Legal Concerns

Grief

Healthy Lifestyle

Holidays

Mood Management Navigating the System

Organizing Your Caregiving Life

Sexuality

Stress Management Taking Care of You

Shadowing
Sleeping
Sundowning
Telling Your Loved One and Others
Traveling
Understanding and Managing Anger
Visiting
Wandering

- Hope Box Users Guide screen shots and detailed descriptions for installation and use for Android and iPhone
- Twelve REACH Hope YouTube videos that caregivers can download into their personalized Hope Box app)
 link to all videos: https://www.youtube.com/channel/UCT01GHg08gma66gZKYdOuCQ/videos
 - Content videos
 - REACH Stretching Video https://youtu.be/pti5Ty1_kUU
 - REACH Conflict Resolution Video https://youtu.be/AU9JHdAVHtc
 - REACH Self-Esteem Video https://youtu.be/-1Yw-uaV82M
 - REACH Goal Setting Video https://youtu.be/_7gyyh3Kd-4
 - REACH Stress Management Video https://youtu.be/jk7OGrYuXqw
 - REACH Mood Management Video https://youtu.be/IR5LIUYnPIU
 - REACH Problem Solving Video https://youtu.be/4Ptl0Hs6-8U
 - REACH Guided Imagery Video https://youtu.be/IB5UaCXH-HQ
 - Process videos need links
 - How to Download the Virtual Hope Box app https://www.youtube.com/watch?v=NQVcRR2L7bg&pp=sAQA
 - How to Add REACH Signal Breath Video and Coping Card https://www.youtube.com/watch?v=ZhUdlYnFin4&pp=sAQA
 - Adding REACH YouTube Videos to Virtual Hope Box https://www.youtube.com/watch?v=RTRxeoXZwgo&pp=sAQA
 - How to Create Coping Cards in your Virtual Hope Box https://www.youtube.com/watch?v=zYiz4pD_p6l&pp=sAQA
- Databases to track study activities recruitment, data collection, and intervention
- Recruitment brochure

7. PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS

What individuals have worked on the project?

Memphis VAMC

Name: Linda Nichols Project Role: PI

Researcher Identifier: LNichols1

Person month: 3.0

Contribution: Overall direction and approval, writing and editing of materials

Name: Jennifer Martindale-Adams

Project Role: Co-I

Researcher Identifier: Jmartindale

Person month: 0.6

Contribution: Writing and editing of materials

Name: Carolyn Clark

Project Role: Research specialist

Person month: 6

Contribution: Development of materials for recruitment and intervention and data collection

Name: Jessica Roxy Martin Project Role: Research specialist

Person month: 3.0

Contribution: Development of materials for recruitment and intervention

VCU

Name: Paul Perrin Project Role: Co-Pl

Researcher Identifier: PPERRIN

Person month: 3.0

Contribution: Overall direction and approval, writing and editing of materials

Name: Ronald Seel

Researcher Identifier: RON_SEEL

Project Role: Co-I Person month: 1.2

Contribution: Research design

Robert Perera

Project Role: Statistician

Research Identifier: ORCID: 0000-0002-0375-0427

Person month: .36

Contribution: Statistical support

Carmen Tyler

Project Role: Program Coach (interventionist)
Research Identifier: ORCID: 0000-0001-5265-184X

Person month: 6.0

Contribution: Delivery of intervention

Chimdindu Ohayagha

Project Role: Program Coach (interventionist)

Research Identifier: https://orcid.org/0000-0003-3325-5424

Person month: 6.0

Contribution: Delivery of intervention

Ashley MacPherson

Project Role: Program Coach (interventionist)

Research Identifier: https://orcid.org/0000-0001-9654-4640

Person month: 6.0

Contribution: Delivery of intervention

Alexandra Ulbing

Project Role: Data analyst

Research Identifier: ORCID: 0000-0002-4578-0026

Person month: 4.8

Contribution: Management of data and data bases, statistical support

Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?

Paul Perrin, PhD.

Active support ended for grant: Identifying cognitive barriers to effective pressure ulcer self-care

Time Commitments: 5% (.6 Calendar Months)
Supporting Agency: Department of Defense
Performance Period: 03/01/2019 – 08/31/2020

Level of Funding: .

Ronald Seel, PhD

Active Support: Virginia Traumatic Brain Injury Model System

Time Commitments: 25%

Supporting Agency: National Institute on Disability Independent Living and Rehabilitation Research

Performance Period: 9/29/17-9/30/22

Level of Funding:

Active Support: Long-Term Impact of Military-Relevant Brain Injury Consortium (LIMBIC) Award

Time Commitments: 20%

Supporting Agency: Department of Defense, CDMRP W81XWH-18-PH/TBIRP-LIMBIC

Performance Period: 09/30/2019 - 09/29/2024

Active Support: Advanced Rehabilitation Research Training Project

Time Commitment: 5%

Supporting Agency: National Institute on Disability Independent Living and Rehabilitation Research

Performance Period: 9/30/15-9/29/21

Level of Funding:

Active Support: BeHEALTHY: Chronic Disease Management for Traumatic Brain Injury

Time Commitments: 3%

Supporting Agency: National Institute on Disability Independent Living and Rehabilitation Research

Performance Period: 9/1/20-8/31/2021

Level of Funding:

Active Support: Epidural Stimulation and Resistance Training for Overground Locomotion after Spinal Cord Injury

Time Commitments: 3%

Supporting Agency: Department of Defense, CDMRP

Performance Period: 09/01/2020 - 08/31/2024

Level of Funding:

Active support ended for grant: Evaluating Brain Injury Clubhouses and their effects on Neurobehavioral Functioning and

Participation

Time Commitments: (percent effort) 4%

Supporting Agency: Community Brain Injury Services (VA Department for Aging and Rehabilitative Services)

Performance Period: 7/1/2018 – 3/31/2020

Active support ended for grant: LiveWell RERC: The RERC for Community Living, Health and Function

Time Commitments: (percent effort) 12%

Supporting Agency: Shepherd Center (NIDILRR prime)
Performance Period: 2/15/2019 – 9/29/2020 Level of Funding:

What other organizations were involved as partners?

Organization Name: Virginia Commonwealth University (VCU)

Location of Organization: Richmond, VA

Partner's contribution to the project: VCU conducts intervention for caregivers, manages data, and will analyze all data

Financial support: Contract from Memphis to VCU

In-kind support: VCU provides all resources (space, computers, telephones) to their project staff

Facilities: VCU Departments of Psychology and Physical Medicine & Rehabilitation **Collaboration**): VCU and Memphis staff share data and meet together weekly

Personnel exchanges: N/A

Other: N/A

8. SPECIAL REPORTING REQUIREMENTS

COLLABORATIVE AWARDS: N/A.

QUAD CHART: Quad Chart with Recruitment and Consort Diagram attached.

9. APPENDICES:

- a. Recruitment Brochure
- b. Caregiver Notebook sample
- c. IPR Presentation
- c. Baseline Data Collection Battery

Supporting Caregivers of Veterans with TBI and Mixed Dementia: The REACH Hope Behavioral Intervention

Log and Task: AZ190094 – Year 1 Annual Report

Award Number: W81XWH-20-10756

PI: Linda Nichols Org: Research Inc/VA Medical Center Award Amount: \$1,299,885.00

Award Ar

- Study/Product Aim(s)
- •Aim 1. Modify/refine REACH Hope intervention and caregiver materials for caregivers of Veterans with TBI and dementia.
- •Aim 2. Compare efficacy of REACH Hope in improving burden, depression, anxiety and caregiving self-efficacy for caregivers of Veterans with TBI and dementia to a waitlist control.
- •Aim 3. Compare efficacy of REACH Hope in improving safety for Veterans with TBI and dementia whose caregivers have participated in REACH Hope to a waitlist control.

Approach

Randomized clinical trial of 110 caregivers of Veterans with TBI and dementia, half in each arm. Compare 6 one-hour individual sessions and use of Hope Box app, focusing on education, skills building and support over three months to wait list control. Data collected at baseline, 3, and 6 months for all, and 9 months for wait list control.

Timeline and Cost

Activities CY	20	21	22	23
Finalize materials, obtain approval, print materials				
Recruit subjects				
Administer interventions				
Collect, analyze, and process data				
Disseminate findings				
Estimated Budget (\$K)	\$143	\$447	\$483	\$227

Updated: 09-Sep-2021



- · Obtained regulatory approval
- Hired and trained staff
- Developed study protocol and Manual of Operations
- Developed REACH Hope Coaches Manual and Caregiver Notebook
- Developed detailed Hope Box installation and use guide
- · Developed videos for inclusion in Hope Box app
- · Began recruitment, which is on target
- Developed access data bases for recruitment, data collection, and intervention
- Began baseline and three-month data collection
- Began intervention delivery

Goals/Milestones CY20 Goals

- ☑ Prepare regulatory documents
- ☑ Train study staff
- ☑ Finalize research protocol/manual of operations (MOP)

CY21 and CY22 Goals

- ☐ Screening and recruitment
- ☐ Randomization and intervention delivery
- ☐ Data collection

CY23 Goal

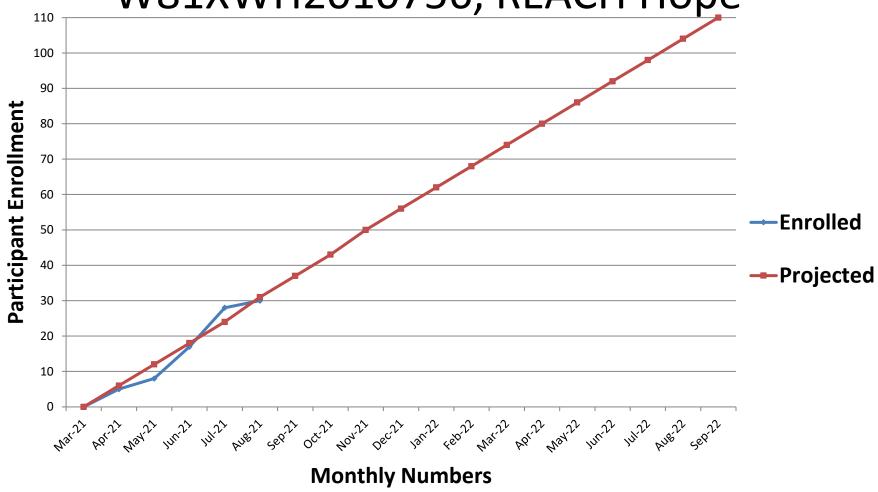
- □ Data analysis
- ☐ Preparation and dissemination of results

Comments/Challenges/Issues/Concerns

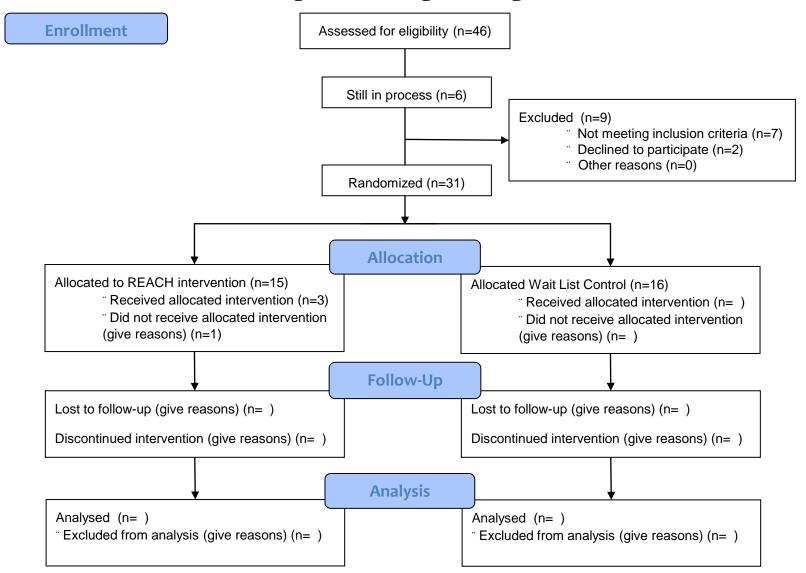
Nothing to report

Budget Expenditure to Date

Projected Expenditure: \$382,382.85 Actual Expenditure: \$\$245,295.50 Recruitment and Retention W81XWH2010756, REACH Hope



W81XWH2010756 CONSORT Diagram 15-Aug-2020 through 14-Aug-2021





Help for Caregivers of Veterans with Traumatic Brain Injury and Dementia

Are you caring for a Veteran with Traumatic Brain Injury (TBI) and Dementia?

If so, we would like to talk with you about a six month research project. The research program will be completed over the phone and provides information on:

- Caregiving
- Safety concerns
- Emotional well-being
- Health concerns
- Social support
- Patient problem behaviors

Sponsored by Department of Defense (DoD) & Veteran Affairs Medical Center, Memphis, TN









What Will I Do?

During this six month project you will be assigned by chance to one of two groups. One group will participate in six individual REACH (Resources for Enhancing All Caregivers Health) sessions for three months, receiving stress reduction and coping skills (mood management, communication, problem solving). A mobile app will also be used. One group will participate right after starting the study. The second group will participate after three months.

You will receive payment for answering questions during three or four interviews and a program evaluation, for a total of \$100-\$125. There is no cost to participate.

How Do I Enroll?

PHONE:

(901) 577-7485 or (800) 636-8262 Ext. 7485

EMAIL:

vhamemreach@va.gov

WEB:

www.memphis.va.gov/reachhope

LET US CALL YOU.

ALL INFORMATION WILL BE KEPT CONFIDENTIAL.

Using Your Caregiver Notebook

As you go through this Notebook you will find brief worksheets at the end of each chapter. The worksheets are designed to help you address concerns you may have and relate the material in each chapter to your situation. There are Commitment pages at the back of the Notebook. The Commitment page provides space to document the strategies you develop with your Program Coach so that you can track your progress.

If you are unable to attend a session, please notify your REACH VA Program Coach for your individual sessions. If you are participating in Telephone Support Groups, contact your Group Leader. You can contact them by telephone or through e-mail.

Program Coach name:	
Program Coach telephone number:	
Program Coach e-mail:	
Group Leader name:	
Group Leader telephone number:	
Group Leader e-mail:	

TBI and Dementia Support for Caregivers of Veterans

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Behavioral Issues



AN OVERVIEW OF TBI AND DEMENTIA

Understanding the diagnoses of Traumatic Brain Injury (TBI) and dementia is important to help you as a caregiver. In this Notebook, we discuss these two diagnoses and what it means in terms of daily life as a caregiver for someone who lives with these two conditions. The challenges of having these two diagnoses are not just the increased number of symptoms; they also have to do with the way TBI and dementia relate to each other. Mostly, and perhaps most importantly, we will discuss numerous daily living topics and offer tips for coping as a caregiver for your loved one.

In this chapter, you will learn about:

- The brain
- TBI causes, symptoms, and treatment
- Dementia causes, symptoms, and treatment
- Resources for understanding TBI and dementia
- Comparison between TBI and dementia
- In this book, we will use the term comorbidity to refer to the existence of two medical conditions at the same time in terms of how these two conditions relate to each other. The two conditions, dementia and TBI, are complex in how they relate to each other. Dementia may be more likely to occur before the age of 65 in a person who has TBI compared to people without TBI.
- Many symptoms will overlap, and there may be times when it will be unclear which diagnosis is responsible for a symptom (for example, diminished ability to smell). Other times, it may be clearer which diagnosis is likely responsible for a symptom (for example, seizures occurring with a penetrating TBI).

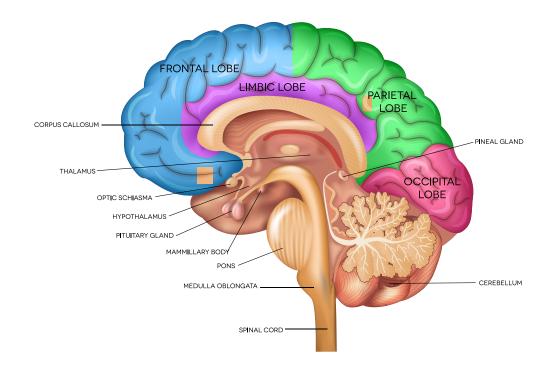
The brain...

The healthy brain

Understanding the basic structures, functions, and process of the brain may help you to understand your loved one's TBI and dementia. The healthy brain controls all the body's functions. These functions include breathing, sensing, and moving. The brain is the center of thinking, judgment, and emotional reactions to people and events. The brain includes these parts:

- ☐ The brain stem connects the brain to the spinal cord. It controls consciousness, arousal, swallowing, sense of balance, and basic vital functions such as breathing, respiration, and heart rate.
- ☐ The cerebellum coordinates movement and remembers movement patterns.
- ☐ The cerebrum is responsible for language, thinking, remembering, learning, mathematical reasoning, initiation of activity, emotional control, creativity, and expression of personality.
- ☐ The cerebrum is divided into two sides (hemispheres). Each hemisphere has four lobes with specific functions:
 - Frontal lobes emotions and higher intellectual functioning
 - Parietal lobes sensation, reading, listening, spatial sense, and memory
 - Temporal lobes memory, language, hearing, sequencing, and music
 - Occipital lobes visual perception

Diagram of the basic parts of the brain



Traumatic Brain Injury (TBI)...

A traumatic brain injury (TBI) happens when something outside the body impacts the head with force, either directly or indirectly, such as with whiplash.

TBI is the leading injury among military personnel in war zones. Motor vehicle crashes and falls are the leading causes for civilians. There are three main types of TBI:

- ☐ Closed-head injuries account for most brain injuries and occur when the brain is traumatized inside the skull.
- ☐ Penetrating head injuries or open-head injuries occur when there is a forceful blow to the head that pierces the skull. This type of injury is often life-threatening.

\Box Crushing injuries happen when the brain is compressed between two objects. This type of injury is rare but is the most destructive and life-threatening of the TBIs.
Other conditions that result in an injury to the brain
☐ Anoxic brain injury occurs when there is a death of brain cells from lack of oxygen to the brain, such as occurs with a stroke or suffocation.
Symptoms of TBI
TBI can range in seriousness from mild to severe, and a person with TBI might physically look the same as before the head injury.
□ Physical symptoms can include headache, feeling dizzy, being bothered by noise or light, being tired, trouble sleeping, or vision problems. More severe injuries can cause paralysis, speech difficulties, changes in sexual functioning, and decreased muscle coordination.
☐ Mental functioning changes may include lack of focus, poor memory, and trouble putting thoughts into words. A severe or moderate TBI may cause poor judgment or acting without thinking (e.g., impulsivity or disinhibition).
☐ Emotional changes can involve decreased ability to engage in social situations, changes in personality or mood, depression, anxiety, anger outbursts, and being quick to anger.
Treatment of TBI
Treatment of TBI depends on the severity, type, area of injury, and amount of time since the injury. Initial treatment may include strategies that decrease pressure inside the brain or surgery. Mild TBI treatment may focus on rest and a slow return to activity.
☐ Medications can sometimes be used to treat symptoms such as anxiety, depression, muscle spasms, and decreased alertness and attention.

Medications may also help prevent risks associated with TBI such as blood clots, seizures, excess fluid, and pressure in the brain.

☐ Physical, occupational, speech, and cognitive therapy can help persons with TBI relearn, improve, or strengthen skills. Vocational counseling can help with return to work.

Dementia...

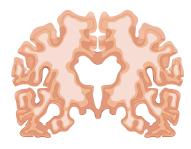
Dementia is a term used to describe loss of cognitive functioning (thinking, remembering, and reasoning) and behavioral abilities to such an extent that it interferes with a person's daily life and activities. The causes of dementia vary, and many people have mixed dementia, a combination of two or more disorders.

Common types of dementia

☐ Alzheimer's disease is the most common form of dementia in the U.S., accounting for 60-80% of dementia. Because of how common it is, much of the information in this Caregiver Notebook is targeted to Alzheimer's disease. It is caused by the deposit of two proteins in the brain, which cause brain cells to die, as shown in the picture below.



Healthy Brain



Mild Alzheimer's Disease



Severe Alzheimer's Disease

	Vascular dementia is the result of strokes, or decreased blood flow to the brain or bleeding in the brain, which causes brain cells to die. Vascular dementia alone accounts for around 10% of those with dementia, but approximately 40-60% of those with Alzheimer's disease also have vascular dementia.
	Lewy Body dementias (dementia with Lewy bodies and Parkinson's disease dementia), affecting around 10% of those with dementia, are caused when abnormal proteins are deposited in the brain. This causes both memory loss and Parkinson's disease symptoms.
	Frontotemporal disorders (such as Pick's Disease) involve damage to nerve cells in the frontal and temporal parts of the brain. Symptoms include personality and behavior changes, difficulty with language, and movement and muscle difficulties.
Ot	her conditions that may cause memory loss
	Emotional problems such as depression can make it difficult for someone to concentrate, increase memory loss, make a person more forgetful, and can be mistaken for dementia. Emotional problems can worsen cognitive symptoms for someone who has dementia.
	Acute (short-term) changes in memory, over hours, days, occasionally weeks, are emergencies. These can be caused by medicines, infections, falls, or injuries to the brain. Strokes can cause acute memory issues or chronic memory loss. Alcohol use and acute intoxication can also cause memory problems. Chronic alcohol use can cause dementia. Chronic liver and kidney disease can cause memory loss.

Symptoms of dementia

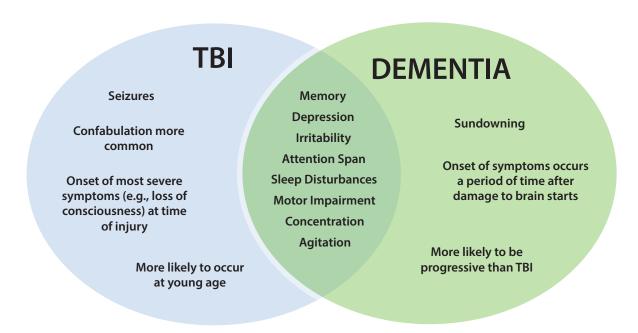
Symptoms of dementia vary between types of dementia and individuals. Each person will have different symptoms at different times. There are some

	mon behaviors, however. These behaviors may lead to a loss of ability to orm familiar tasks.
	roblems with memory may include not remembering recent events or eople and losing or misplacing things.
	roblems with abstract thinking, concentration, language, and confusion bout time and place can lead to getting lost or problems with paying bills.
	eople with dementia may experience changes in behavior and mood, ecoming irritable, suspicious, afraid, or less interested in activities.
Trea	tment for dementia
	tment for dementia focuses on maintaining mental ability, managing vioral symptoms, and slowing or delaying symptoms.
m Le de	Prugs approved to treat Alzheimer's disease do not slow the disease or return nemory and function to normal. Medications can help manage symptoms of ewy body dementia and Parkinson's disease dementia and manage vascular ementia risk factors, such as hypertension, diabetes and high cholesterol. Iedications may reduce behavioral symptoms of frontotemporal dementia.
pı	ehavioral management to decrease and manage symptoms and behavioral roblems is an important part of treatment for dementia. The REACH rogram focuses on behavioral management.

TBI and dementia comparison...

As a caregiver of someone who has been diagnosed with TBI and dementia, you may already be familiar with how much these two diagnoses overlap. Concentration, memory, and motor functioning are just a few of the areas where these two conditions overlap. There are other symptoms that are more closely associated with one diagnosis than the other. The diagram below shows some of these symptoms and their overlap.

- ☐ Seizures, although known to occur with dementia (10-22%), are significantly more likely to occur with an open-head TBI (65%).
- ☐ It is likely that you will not know if a specific symptom of your loved one is a product of the disease or the injury. However, the care techniques that you put in place will most often be the same, regardless of the source.



Resources for TBI and dementia...

As a family caregiver, you play an important role in caring for the Veteran at home and in the community. Each VA Medical Center has a Caregiver Support Coordinator available to assist you. Contact your local Caregiver Support Coordinator, check the website at www.caregiver.va.gov, or call the toll free VA Caregiver Support Line at 1-855-260-3274. Other resources are below. (VA does not control content for non-VA resources.)

Aregiver Support Line at 1-855-260-3274. Other resources are below. A does not control content for non-VA resources.)
VA's Polytrauma/TBI System of Care at www.polytrauma.va.gov.
Traumatic Brain Injury Center of Excellence (formerly Defense and Veterans Brain Injury Center) https://health.mil/About-MHS/OASDHA/Defense-Health-Agency/Research-and-Development/Traumatic-Brain-Injury-Center-of-Excellence
Alzheimer's Disease Education and Referral Center (ADEAR), National Institute on Aging. https://www.nia.nih.gov/alzheimers; toll-free number is 1-800-438-4380; and e-mail is adear@nia.nih.gov.
Alzheimer's Association. The website is http://www.alz.org; and the toll-free 24/7 Helpline is 1-800-272-3900 with translation into more than 200 languages.
The National Institute on Aging A-Z Health Topics website has publications and facts on all the different types of dementia. https://www.nia.nih.gov/health/topics/dementia



ACTIVITIES

The activities a person living with TBI and dementia can do will change as the disease goes on. As memory and the ability to pay attention change, basic activities can become hard. Your loved one will lose the ability to plan and start activities. Persons with TBI and dementia may sit in one place, pace, or search for objects. They may show little interest in activities that brought joy and meaning in the past. You can help your loved one enjoy life. The following ideas can help you plan exercises and activities your loved one can enjoy.

Here are some reasons a person living with TBI and dementia may not want to be active:

- Depression
- Trouble with eyesight and hearing
- Physical discomfort
- Change in routine
- Physical illness

How to get your loved one to stay active...

Plan activities		
	Think about what your loved one has always enjoyed. Use the Pleasant Events planning materials in the Stress Management chapter to plan activities you can do together.	
	Simplify your loved one's past activities (work and hobbies) to match current abilities.	
M	ake activities routine and structured	
	Do the same activities on the same day each week or at the same time each day. A daily routine may help your loved one feel more comfortable about an activity.	
Ke	ep favorite activities even if they aren't the same as before	
	A person who liked to read magazines may still enjoy looking at them. Your loved one may look through the paper without being able to understand it. The important thing is that your loved one enjoys the activity.	
	Your loved one can do activities that are similar to past hobbies. A person who was a gardener may still be able to rake leaves. Someone who played the piano may like listening to piano music.	
	For some, activities that are similar to work are enjoyable. A former bank employee might enjoy counting coins and putting them in holders.	
	A person who liked to cook may enjoy sorting cutlery in a kitchen drawer or baking something, using simple recipes or enjoy decorating cookies.	
	Jot down a list of activities your loved one can do. Keep it handy. Adapt the list as abilities change over time.	

Ac	tivities take planning and flexibility
	Adapt to your loved one's ability level. The level will change over time. Your loved one may refuse or not want to do an activity. This may mean the activity is too difficult, or your loved one can't do it or is afraid.
	Your loved one may have trouble with some part of an activity or task but may be able to do another part of the activity. Sorting and folding socks may be too hard. You can sort them. Your loved one can then fold them.
	Be aware of times of day that are better for your loved one; plan activities accordingly.
	Accept compromise. Let your loved one do what is possible, even if it isn't up to your standards.
Ke	ep your loved one involved in household activities and family life
	Choose activities that make your loved one feel like an important member of the household. Your loved one can still contribute.
	Dependent on the severity of the TBI and the stage of dementia, your loved one can do simple chores. Your loved one can sweep, vacuum, or help empty the trash. Persons with TBI and dementia often enjoy simple yard work.
Pla	an activities that include your loved one with the whole family
	Continue to plan for the family to get together. Keep the needs of your loved one in mind. Plan rest periods.
	Make sure the extra movement and noise in the house do not upset your loved one.
Do	on't make activities a test of skill or achievement
	Choose activities that fit your loved one's skills now. Dependent on the severity of the TBI and the stage of dementia, your loved one may become upset at not being able to do a task.

\square Set your loved one up for success, not failure.
\square Give your loved one plenty of support when working on tasks.
Plan for a realistic amount of activity
☐ You do not need to fill the whole day with activity. Balance activity with resortake breaks. As the disease gets worse, your loved one will have a shorter attention span. You may need to stop an activity or change activities.
Some suggestions for activities
Self-expression
A person with TBI and dementia may like to do things that express feelings and personality. Your loved one may enjoy reliving old memories. You may want to try these activities:
☐ Music. Music has been used across the ages to calm distressed individuals. Musical activities often work well with persons with TBI and dementia. Music may lower levels of agitation. Many musical activities do not need a long attention span or good coordination. Music is especially good for a person who has enjoyed or played music in the past.
Use music that is familiar and brings back pleasant memories or feelings. Soothing, slow pieces are very calming.
Activities such as singing, dancing, clapping along or keeping a beat are fun. Music that was popular when your loved one was growing up is also good choice for singing along.
☐ Crafts. Some individuals enjoy crafts. Keep activities simple. Plan them so they can be completed in a short time. It is best to use a few large pieces of material. Your loved one may like collages or scrapbooks. Try

	simple activities, such as drawing, winding a ball of yarn, molding clay, or finger painting.
	Animals. Activities with animals can help your loved one express emotion. Your loved one can visit with a loving, good mannered dog or cat or watch birds in outdoor bird feeders. A live animal may not be available or practical. Your loved one may enjoy a stuffed animal.
	Toys. Some persons with TBI and dementia enjoy playing with children's toys or looking at children's books. Toys could include dolls, puzzles, or simple board games. Don't worry about what others think. Feel free to take your loved one with you to local stores to look at toys.
Ex	ercise
	ere are simple exercise activities you might try. They depend on your loved e's ability.
	Play catch with a ball. Use a ball that is soft, such as a Nerf ball, to avoid injury or damage. A beach ball is large and easy to catch. Sitting down may make it easier for your loved one to catch the ball.
	Household tasks, like sweeping or dusting furniture, provide exercise.
	Take walks with your loved one on a regular basis. Walk daily if your loved one is able. You can walk to the corner, to the grocery store, or around the mall.
	Your loved one can get hand and arm exercise by rolling clay or tying simple knots. Both activities should be supervised. For example, show the person how to shape clay into a long roll. Then roll it back and forth from palm to fingertips. Tie simple knots in a soft cord and have your loved one copy you.
	Chair exercises can be done from a sitting position. For all chair exercises, begin slowly. Ask your loved one to imitate you.

- Chair exercises for the <u>upper body</u>. Sit upright with knees spread apart. Slowly bend forward from the waist, reaching the hands toward the floor. Hold for a count of two. Slowly return to a straight position.
- Place your hands behind your head. Twist to the right and then back to the center. Twist to the left and then back to the center. Do not move your hips. Repeat five times.
- Chair exercises for the <u>legs</u>. Start with feet placed flat on the floor. Raise one bent leg in front as far as you can. Hold for a count of two. Return foot to the floor and relax. Repeat with other leg. Hold onto chair arms if needed for balance.
- Stretching after the exercises. Chair exercise sessions should be ended with a slow stretch to cool down. Sit straight with arms on the lap. Slowly raise arms above the head. Take a deep breath. Slowly lower arms and exhale. Then relax.

Household tasks

Taking part in routines around the house may help your loved one feel useful
Stick with simple activities that can be repeated:
☐ Setting the table.
☐ Folding napkins, towels, or laundry.
☐ Raking leaves or picking up sticks.
☐ Sweeping or dusting.

Old memories

Recalling past events can provide your loved one with a mental activity.
$\hfill\Box$ Help your loved one think about old times by looking together at pictures of family and friends.
\square Old music or movies may be another way to recall the past.
☐ Create a memory board to display photos of people, places, and things that bring up good memories.
Self-care
Certain self-care activities may be enjoyable. Your loved one may need help from you, a hairdresser, or barber. Consider:
\square A beauty hour (working on hair, nails, or the face).
☐ Hand massage.
General ideas
These are things that have worked for other caregivers. They may work for you, too. They are not the only activities that can be done. They may not be right for everyone. Always plan activities with your loved one in mind. What activities best fit your loved one's likes and dislikes, past activities, and current ability? Using activities that fit will make your loved one's day, and your own day, more positive and enjoyable. Here are some suggestions:
☐ Sort things: beans; cards (by color, suit, etc.); silverware.
☐ Make cookies out of pre-formed dough.
☐ Play memory games: matching pictures and oversized numbers on cards; rolling dice.

☐ Complete familiar phrases, such as, "A stitch in time saves"
\Box Keep a list of activities and an activity box with things you might need handy.
\square Use simple math or word puzzles.
\Box Use simple hand-held games such as solitaire or tic-tac-toe. These can be brought along to appointments.
Activities Worksheet
1. What activities did your loved one formerly enjoy? Can you modify any activities to make them simpler?
2. What does your loved one like to do now?
3. What activities will let your loved one continue to contribute to the household?

Supporting Caregivers of Veterans with TBI and Mixed Dementia: The REACH Hope Behavioral Intervention

Linda O. Nichols, PhD Department of Veterans Affairs Paul Perrin, PhD Virginia Commonwealth University

15-Aug-2020 through 14-Aug-2023 AZ190094, W81XWH2010756 NCT04969796



Militarily relevant issue to be solved



- » Between 2000 and 2016, over 350,000 service members diagnosed with TBI (Defense and Veterans Brain Injury Center)
- » Moderate-to severe-TBI is associated with increased risk of dementia among those 55 years and older
- » Growing evidence suggests that sustaining 3+ mild TBIs increases dementia risk
- » People with post-TBI dementia often have more issues than those with dementia alone including:
 - » depressive, agitated, and irritable symptoms
 - » gait dysfunction, motor slowness, and falls
 - » Disinhibition and dysregulation
- » Caregivers often lack the practical skills to manage post-TBI dementia and experience significant distress and burden
- » There are no evidence-based interventions that utilize both personalized strategies and digital resources to meet the complex needs of post-TBI dementia caregivers



Solution



- » REACH Hope combines and delivers two award-winning behavioral interventions, incorporating one-on-one personalized coaching sessions and mobile supports
 - » Department of Veterans Affairs' REACH VA (Resources for Enhancing All Caregivers' Health)
 - » Personalized, one-on-one coaching to address caregiver's specific situations that create burden
 - » Department of Defense's Virtual Hope Box mobile app
 - » Anytime access to tools to meet caregiver needs during and beyond the one-on-one sessions
- » Randomized, controlled clinical trial compares caregivers of Veterans receiving the REACH Hope intervention to those in a waitlist control group

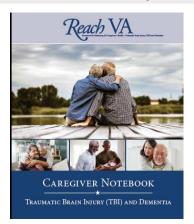


Solution



REACH VA

- » Evidence-based; protocol-driven
- » Targeted to dyad's risks
 - » safety, emotional and physical well being, social support, problem behaviors
- » Caregiver Notebook
- » Six individual one-hour sessions
- » Information, support, skills building
 - » problem solving, cognitive reframing, stress management



REACH Hope

Hope Box App

- Remind Me photos, videos, messages, music
- » Distract Me games, puzzles
- » Inspire Me quotes
- » Relax Me breathing, relaxation, guided meditation
- » Coping Tools coping cards, positive activity planner
- » Support Contacts user-selected contacts





Project Description



Aim

Modify/refine the REACH Hope intervention and caregiver materials for caregivers of Veterans with TBI and AD/MD, in conjunction with subject matter experts (SMEs).

Aim

Compare efficacy of REACH Hope in improving burden, depression, anxiety and caregiving self-efficacy for caregivers of Veterans with TBI and AD/MD to a waitlist control.

Aim

Compare efficacy of REACH Hope in improving safety for Veterans with TBI and AD/MD whose caregivers have participated in REACH Hope to a waitlist control.

Primary Hypothesis Caregivers of Veterans with TBI and dementia who participate in REACH Hope, compared to a waitlist control, will show reduced burden.

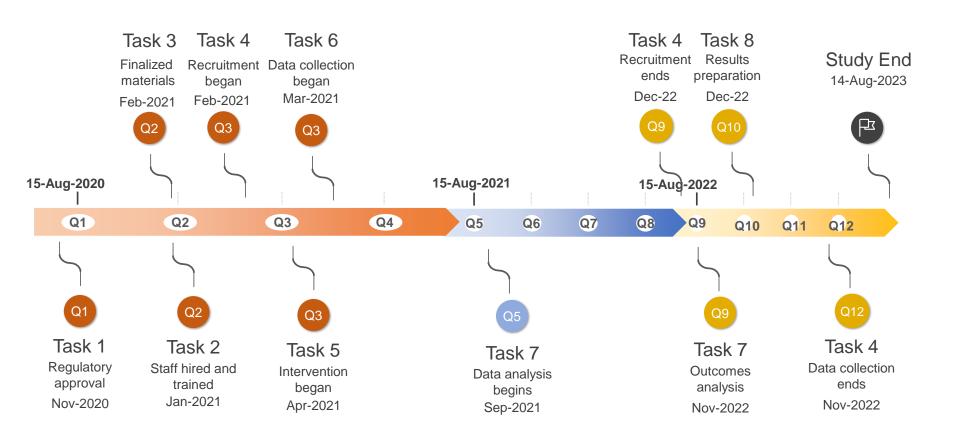
Secondary Hypothesis Veterans with TBI and dementia whose caregivers participate in REACH Hope, compared to a waitlist control, will show an improvement in reported safety risks.

Secondary Hypothesis Caregivers of Veterans with TBI and dementia who participate in REACH Hope, compared to a waitlist control, will show an improvement in depression, anxiety, and caregiving self-efficacy.



Study Timeline/Milestones







Successes to Date



- » REACH Hope Caregiver Notebook an easy-to-use resource with 28 short chapters on managing behaviors and 16 chapters on reducing stress and burden
- » Hope Box Users Guide screen shots and detailed descriptions for installation and use
- » Twelve REACH Hope YouTube videos that caregivers can download into their personalized Hope Box app (e.g., stretching, problem solving) https://www.youtube.com/channel/UCT01GHg08qma66gZKYdouCQ/videos
- » Databases to track study activities recruitment, data collection, and intervention
- » Recruitment on target (n = 29)





Challenges

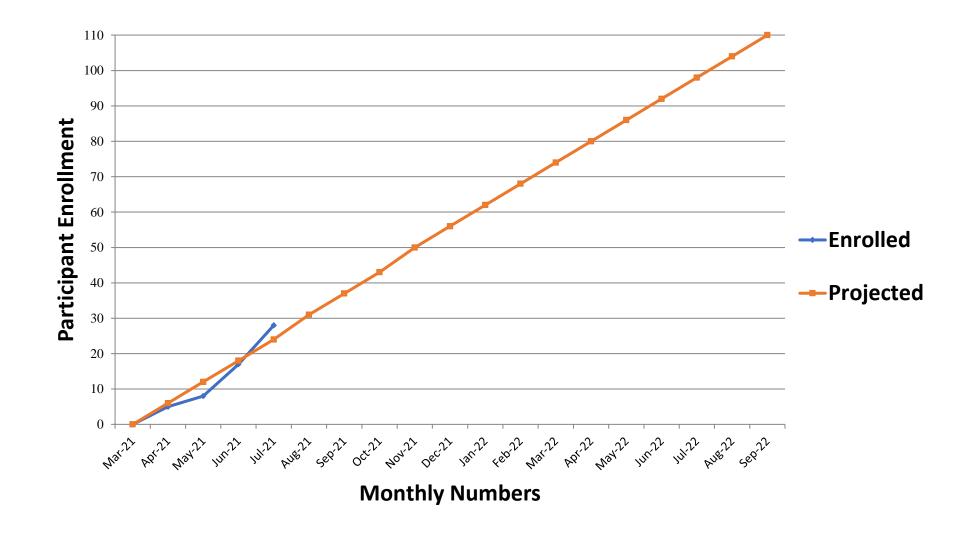


- » Problem: Delay in hiring data analyst at Virginia Commonwealth University
 - » Solution
 - » Hired data consultant at Memphis who developed data bases
- » Problem: Caregiver difficulty downloading Hope Box app (19% have had a problem)
 - » Solutions:
 - » Developed detailed screen-shot instructions and four short YouTube videos to walk caregiver through process
 - » Discuss downloading app and assist during introduction and randomization call
 - » If caregiver continues having difficulty, ask-caregiver if they have someone to help them with downloading app



Recruitment







What's Next



During next project year, 15-Aug-21 through 14-Aug-22

- » Continue recruitment
- » Continue to provide intervention
- » Continue to collect data
- » Continue treatment fidelity checks, interventionist coaching, and data quality control

Future directions

Submission of grant to Department of Defense Traumatic Brain Injury and Psychological Health Research Program (TBIPHRP)

 all 5 VA Polytrauma TBI Model Systems – Richmond,
 Minneapolis, Palo Alto, Tampa, and San Antonio, as well as Caregiver Support Program's Caregiver Center at Memphis



Possible DoD Applications



- » Inclusion of REACH Hope as a virtual, personalized, evidence-based caregiver intervention for the VA:
 - » Can be delivered by interventionists from the Caregiver Center and individual VAMC facilities
 - » Training materials for interventionists
 - » Interventionist manual and caregiver notebook to serve as intervention resources
 - » Hope Box app for caregivers to access and store personalized resources
 - » On-going update of user manuals and Hope Box app with new resources and materials
 - » Ongoing coaching support for interventionists through Caregiver Center
 - » Dissemination on Administration for Community Living evidencebased practice guidelines



Research Outcomes



» Preliminary

- » The REACH Hope virtual, personalized intervention can be successfully delivered to caregivers across many parts of the U.S. based on successful initiation and completion of caregiver intervention participants
- » Most caregivers (81%) appear able to access and use the Hope Box app successfully with reasonable assistance
- » We are slightly ahead of our projected recruitment goals, reflecting/validating the need for the intervention
- » Low study drop out rates and positive qualitative feedback from participants suggest that REACH Hope has potential as an effective, post-TBI dementia, caregiver intervention



Project Funding



	Current Budget	Expended Funds*	%
Current project year – 8/15/20-8/14/21			64%
All project years – 8/15/20-8/14/23			18.7%

^{*}Last month (7/15/20-8/14/20) expenditures estimated



Summary of Key Findings



Study Highlights During First Project Year

- » Obtained regulatory approval
- » Hired and trained staff
- » Developed study protocol and Manual of Operations
- » Developed REACH Hope Coaches Manual and Caregiver Notebook
- » Developed detailed Hope Box installation and use guide
- » Developed videos for inclusion in Hope Box app
- » Began recruitment, which is on target
- » Developed access data bases for recruitment, data collection, and intervention
- » Began baseline and three-month data collection
- » Began intervention delivery

REACH Hope

BASELINE INTERVIEW (BL), Version 6

Completion Log		
	Person	Date
Data collected		//
Data entered		/
System ID		,
Data verified and cleaned		/
Subject ID		1

Subject	ID:			

BASELINE INTERVIEW

T . 1	
Introd	luction
mnou	ucuon

is time to complete your base	from the Memphis VA Medical Center. It eline interview. This interview will take about 30 to 45 o complete the interview now?
() Yes () No	
If no: When would be a bette	er time for me to call you back?
Date:	Time:
<u>If yes</u> : I mailed you a respon Please get it out at this time.	se card that contains the answer choices for today's interview.

Baseline Battery Table of Contents

Form Name	Form Abbreviation	Page
Introduction		4
Risk Assessment	RA	4
Activities of Daily Living/Instrumental Activities of Daily Living	AL	10
Health Conditions	HC	11
Health and Health Services Use	HS	12
Family Needs Questionnaire (FNQ)	FN	13
Financial Strain	FI	15
Zarit Burden Interview (ZBI-12)	ZB	16
Generalized Anxiety Disorder (GAD-7)	GA	17
Patient Health Questionnaire (PHQ-9)	PH	18
Caregiving Self-Efficacy, Revised	SE	19
Participant Sociodemographics	SO	22

Please Use This Form To Record The Amount Of Time Spent Doing The Interview

1. Date of form completion: ____/ ___/ _____ month day year

2. Interviewer's name: ______ Last, First

- 3. During which visit is this interview taking place?
 - 1 () Baseline
 - 2 () 3 month interview
 - 3 () 6 month interview
 - 4 () 9 month interview
- 4. Was the interview completed in one visit? 0 () No 1 () Yes
- 6. Start time (military time): ____: ___ : ____ hours minutes
- 7. End time (military time): ____: ___ : ___ _ hours minutes

For reporting Alert only:

8. Were any of the following alerts reported during the interview?

0 () No	1 () Yes	Caregiver PHQ-9 depression score greater than or equal to 15
0() No	1 () Yes	Caregiver suicidal ideation or thoughts of harming self (#9 on PHQ-9)
0 () No	1 () Yes	Caregiver concern regarding Care Recipient access to gun
0 () No	1 () Yes	Caregiver concern regarding Care Recipient driving
0 () No	1 () Yes	Caregiver concern regarding Care Recipient aggression/violence
0 () No	1 () Yes	Caregiver concern regarding Care Recipient harming self

BASELINE INTERVIEW SCRIPT

Thank you for participating in the REACH Hope Project. The following questions will help us learn more about how to help people like yourself who are caring for someone with both dementia and TBI. The questions that I will ask take about an hour. There are no right or wrong answers; we are interested in your opinions and feelings. If you do not understand a question, please feel free to ask me to repeat or clarify, and if you would like to take a break at any time during the session, just let me know.

As a reminder, all of the information that you give me will be kept strictly confidential, and no information that could identify you will be available to anyone outside the study.

RISK ASSESSMENT (RA)

Please answer the following questions about your caregiving situations.

SAFETY

1.	Can your loved one get to dangerous objects (e.g., gun, knife or other sharp objects)?	0 () No	1 () Yes
	1.1 If yes, is it a gun?	0 () No	1 () Yes <u>(</u>
2.	(RC 1) Does your loved one drive?	0 () Never	1 () Sometimes 1 () Often 1
3.	Can your loved one respond to emergency situations?	0 () No	1 () Yes
4.	(RC 1) Does your loved one try to leave the home and wander outside?	0 () Never	1 () Sometimes 2 () Often
5.	Are there any safety concerns with your loved one smoking?	0 () No	1 () Yes
6.	(RC 1) Are there any concerns about your loved one engaging in aggression or violence toward you or others or property?	0 () Never	1 () Sometimes
7.	Are there any concerns about your loved one harming self?	0 () No	1 () Yes <u>•</u>
HI	EALTH/PHYSICAL WELL-BEING		
8.	<u>In the past month</u> , have you lost or gained weight without meaning to?	0 () No	1 () Yes
9.	<u>In the past 3 months</u> , have you missed any scheduled doctor's appointments?	0 () No	1 () Yes

10.	<u>In the past 3 months</u> , have you experienced any alcohol or drug problems?	0 () No	1 () Yes	
11.	(RC 1) Have you cut back on your physical activities, like exercise and walking, because of caregiving?	0 () Never	1 () Sometimes	2 () Often
12.	(RC 1) Do you miss taking your prescription medication on a regular basis?	0 () Never	1 () Sometimes	2 () Often
13.	(RC 1) How often do you get a good night's sleep?	0 () Never	1 () Sometimes	2 () Often
14.	(RC 1) Is providing support for your loved one negatively affecting your physical health in any way?	0 () Never	1 () Sometimes	2 () Often
15.	(RC 2) In general, would you say your health is: Excellent $4()$	Very Good 3 ()	Good Fair 2 () 1 ()	Poor 0 ()
<u>SO</u>	CIAL AND EMOTIONAL SUPPORT			
16.	If you were unable to care for your loved one or yourself, do you have someone who would take over?	0 () No	1 () Yes	
17.	(RC 3) Overall, how satisfied have you been in the past month with the support you have received from family members, friends, or neighbors?	0 () Not at all	1 () A Little	2 () Very
18.	(RC 1) Do you feel guilty about not providing good enough support to your loved one?	0 () Never	1 () Sometimes	2 () Often
19.	(RC 1) Does your loved one appreciate your assistance?	0 () Never	1 () Sometimes	2 () Often
20.	(RC 1) Does your loved one expect more than you can or are willing to do?	0 () Never	1 () Sometimes	2 () Often
21.	(RC 1) Do you feel you and your loved one are able to communicate your needs openly and without conflict?	0 () Never	1 () Sometimes	2 () Often
<u>CA</u>	REGIVER FRUSTRATIONS AND VIGILANCE			
22.	(RC 1) Is it hard or stressful for you to find resources to help or assist with your caregiving needs?	0 () Never	1 () Sometimes	2 () Often
23.	(RC 1) Is it hard for you to get helpful information from your loved one's doctor or nurse?	0 () Never	1 () Sometimes	2 () Often
24.	(RC 1) How often in the past three months, have you felt like screaming or yelling at your loved one because of the way he/she behaved?	0 () Never	1 () Sometimes	2 () Often
25.	(RC 1) How often in the past month, have you had to keep from hitting or slapping your loved one because of the way he/she behaved?	0 () Never	1 () Sometimes	2 () Often

29. About how many hours a day do you feel the need to "be there" or "on

duty" to care for your loved one? [24 hours acceptable]

from 24 if Caregiver has difficulty]

30. About how many hours a day do you estimate that you are actually doing hours things for your loved one? [Subtract sleeping & other activity hours

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(RC 4) <u>PROBLEMS/CONCERNS</u> - The following is a list of problems individuals with TBI and dementia sometimes have. Please indicate if [CR] has had any of these problems <u>during the past month</u>. If Caregiver answers yes; then ask about Distress.

-	Caregiver answers yes; also ask out caregiver distress.	occui (in	rred? past nth)	due to t	hat symp from 0 t tressing	otom (so 5 wi and 5	RESS you how it aff th 0 being ver distressing	fects <u>yo</u> g not a y sever	ou on a t all
		NO	YES	Not at all	Minimal	Mild	Moderate	Severe	Very Severe
1.	Have false beliefs, such as thinking that others are stealing from him/her or planning to harm him/her?	0 🗆	1 🗌	0 🗆	1 🗆	2 🔲	3 🗌	4 🗆	5 🗌
2.	Hallucinations such as false visions or voices? Does he or she seem to hear or see things that are not present?	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗆	4 🗆	5 🗌
3.	Resistive to help from others at times, or hard to handle?	0 🗆	1 🗌	0 🗆	1 🗌	2 🗆	3 🗆	4 🗌	5 🗌
4.	Seem sad or say that he /she is depressed?	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
5.	Become upset when separated from you? have any other signs of nervousness such as shortness of breath, sighing, being unable to relax, or feeling excessively tense?	0 🗆	1 🗆	0 🗆	1 🗌	2 🗌	3 🗆	4 🗆	5 🗌
6.	Appear to feel too good or act excessively happy?	0 🗆	1 🗌	0 🗆	1 🗌	2 🗆	3 🗌	4 🗌	5 🗌
7.	Seem less interested in his/her usual activities or in the activities and plans of others?	0 🗆	1 🗆	0 🗆	1 🗌	2 🗆	3 □	4 🗌	5 🗌
8.	Seem to act impulsively, for example, talking to strangers as if he/she knows them, or saying things that may hurt people's feelings?	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗆	4 🗆	5 🗌
9.	Impatient and cranky? having difficulty coping with delays or waiting for planned activities?	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
10.	Engage in repetitive activities such as pacing around the house, handling buttons, wrapping string, or doing other things repeatedly?	0 🗆	1 🗌	0 🗆	1 🗌	2 🗆	3 🗆	4 🗆	5 🗆

-	Caregiver answers yes; also ask out caregiver distress.	occui (in j	Has it occurred? (in past month) (If <u>yes</u>), Rate the DISTRESS you experience due to that symptom (how it affects <u>you</u> on scale from 0 to 5 with 0 being not at all distressing and 5 being very severe/extremely distressing)						ou on a t all
		NO	YES	Not at all	Minimal	Mild	Moderate	Severe	Very Severe
11.	Awaken you during the night, rise too early in the morning, or take excessive naps during the day?	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗆	4 🗌	5 🗌
12.	Lost or gained weight, or had a change in the type of food he/she likes?	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗆	4 🗆	5 🗌
13.	Have problems with bathing or refusing to bathe	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗆	4 🗌	5 🗌
14.	Aggressive to others verbally	0 🗌	1 🗌	0 🗆	1 🔲	2 🗌	3 🗌	4 🔲	5 🗌
15.	Trouble remembering recent events (e.g., items in newspaper or TV)	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗌	4 🗆	5 🗌
16.	Trouble remembering significant past events	0 🗆	1 🗌	0 🗆	1 🗌	2 🗆	3 🗌	4 🗌	5 🗌
17.	Lose or misplace things	0 🗆	1 🗌	0 🗆	1 🔲	2 🗌	3 🗌	4 🔲	5 🗌
18.	Start, but not finish, things	0 🗆	1 🗌	0 🗆	1 🔲	2 🗌	3 □	4 🔲	5 🗌
19.	Difficulty concentrating on a task	0 🗆	1 🗌	0 🗆	1 🔲	2 🗌	3 □	4 🔲	5 🗌
20.	Have problems with dressing or refusing to get dressed	0 🗆	1 🗌	0 🗆	1 🗌	2 🗆	3 🗌	4 🗌	5 🗌
21.	Accidents of the bowel or bladder	0 🗆	1 🗌	0 🗆	1 🔲	2 🗌	3 🗌	4 🔲	5 🗌
22.	Ask the same question over and over	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
23.	Inappropriate sexual behavior	0 🔲	1 🗌	0 🗆	1 🗌	2 🗌	3 □	4 🔲	5 🗌
24.	Misuse alcohol or other substances	0 🔲	1 🗌	0 🗆	1 🔲	2 🗌	3 □	4 🔲	5 🗌
25.	Get upset when friends or family visit	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗆	4 🗌	5 🗌
26.	Difficulty communicating (forgetting/misusing words)	0 🗆	1 🗌	0 🗆	1 🗌	2 🗌	3 🗌	4 🗌	5 🗌
27.	Wandering outside the home	0 🗆	1 🗌	0 🗆	1 🔲	2 🗌	3 □	4 🗌	5 🗌
28.	Disorientation/confusion about surroundings (e.g., thinking they are not home when they are, inability to recognize family in home)	0 🗆	1 🗆	0 🗆	1 🗌	2 🗆	3 🗆	4 🗆	5 🗌

Questions 1-12 are the Neuropsychiatric Inventory (NPI). (© JL Cummings, 1994, all rights reserved; permission for commercial use required; npiTEST.net)

ACTIVITIES OF DAILY LIVING/ INSTRUMENTAL ACTIVITIES OF DAILY LIVING (AL)

Now, I will ask about tasks (CR) needs to perform in daily life and whether you help with any of these tasks.

Do you help (CR) with...?

No	Yes
0 🗌	1 🗌
0 🗌	1
0 🗌	1
0 🗌	1
0 🗌	1 🗌
0 🗌	1
0 🗌	1
0	1
0 🗌	1
0 🗌	1
0 🗌	1
0	1
0 🗌	1 🗌
0 🗌	1

HEALTH CONDITIONS (HC)

(RC 5) These are some questions about conditions that you and/or [CR] might have.

Has a doctor or other health professional ever told either of you that you have...

If yes, who has condition?

	No	Yes	CG	CR	Both
1. hypertension or high blood pressure?	0 🗌	1 🗌	0	1	2
2. congestive heart failure?	0 🗌	1	0 🗌	1	2
3. a myocardial infarction or heart attack?	0 🗌	1	0 🗌	1	2 🗌
4. heart arrhythmias?	0	1	0 🗌	1	2 🗌
5. a stroke?	0	1	0 🗌	1	2 🗌
6. emphysema or asthma or COPD?	0	1	0	1	2 🗌
7. high blood cholesterol?	0	1	0	1	2
8. diabetes, high blood sugar, or sugar in the urine?	0	1	0	1	2
9. pneumonia?	0	1	0	1	2
10. liver disease (such as hepatitis)?	0	1	0	1	2
11. rheumatoid arthritis?	0	1	0	1	2 🗌
12. osteoarthritis?	0	1	0	1	2
13. sleep disorder like sleep apnea?	0	1	0	1	2 🗌
14. cataracts?	0	1	0	1	2 🗌
15. chronic pain?	0	1	0	1	2 🗌
16. Parkinson's disease?	0	1	0	1	2 🗌
17. alcoholism?	0	1	0	1	2 🗌
18. drug addiction?	0	1	0	1	2
19. depression?	0	1	0	1	2
20. anxiety?	0	1	0	1	2 🗌
21. panic attacks?	0	1	0	1	2 🗌
22. bipolar disorder or manic-depression?	0	1	0	1	2 🗌
23. attention deficit disorder (ADD)/attention deficit hyperactivity disorder (ADHD)?	0 🗆	1	0	1	2 🗌
24. obsessive-compulsive disorder?	0	1	0	1	2
25. PTSD (post-traumatic stress disorder)?	0 🗌	1	0 🗌	1	2 🗌

HEALTH AND HEALTH SERVICES USE (HS)

The next questions are about your health and use of health services.

1.	(RC 6) Compathe same?	ared with <u>12 mont</u>	<u>hs ago,</u> would you say	y your health is be	tter, worse, or about			
	Better 1	Worse 2 \square	About the same 3	<i>Unknown</i> -3 □	Refused -4 □			
		3 months, have yo your own health	ou seen or talked to a	any of the followi	ng health care			
2.	A mental he clinical social	-	l such as a psychiatri	ist, psychologist,	psychiatric nurse, or			
	No 0 □	Yes 1 □	<i>Unknown</i> -3 □	Refused -4 □				
3.	A medical d	loctor or nurse p	ractitioner or physic	ian assistant.				
	No 0 □	Yes 1	Unknown -3 □	Refused -4 □				
4.			v many times have ye er		spital emergency			
5.		ast 3 months, how Number	v many times have yo	ou been admitted	to the hospital for			
	5.1	. How many day	ys were you in the ho	spital?	days			
6.	5. <u>During the past 3 months</u> , how many times has (CR) been to the hospital emergency room for his/her health? Number							
7.	7. <u>During the past 3 months</u> , how many times has (CR) been admitted to the hospital for his/her health? Number							
	7.1	. How many day	ys was (CR) in the ho	spital?	days			
8.		0	nce you last saw or ta nealth? Include docto					
		months						

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9.	In the past 30 days, for how many days were you totally unable to carry out your usual activities or work because of any health condition?
10.	In the past 30 days, not counting the days that you were totally unable, for how many days did you cut back or reduce your usual activities or work because of any health condition?

FAMILY NEEDS QUESTIONNAIRE (FN)

 $(RC\ 7)$ The following is a list of needs families sometimes have. Please indicate if this need has been met for your family. Answer N/A (Not applicable) if your family has not had this need.

Has the needl	oeen met?	Yes	Partly	No	N/A
1to be shown that medical, educational or rehabilitation respect the patient's needs or wishes	staff	1 🗌	2 🗌	3 🗆	-2 🗌
2. to be told daily what is being done with or for the patient		1 🔲	2 🔲	3 🗌	-2 🗌
3. to give my opinions daily to others involved in the patien rehabilitation, or education	t's care,	1 🗌	2 🗌	3 🗌	-2 🗌
4. to be told about all changes in the patient's medical statu	S	1 🔲	2 🔲	3 □	-2 🗌
5. to be assured that the best possible medical care is being the patient	O	1 🗌	2 🗌	3 🗌	-2 🗌
6. to have explanations from professionals given in terms I understand	can	1 🗌	2 🗌	3 🗆	-2 🗌
7. to have my questions answered honestly		1 🗌	2 🔲	3 □	-2 🗌
8. to be shown that my opinions are used in planning the patreatment, rehabilitation or education	itient's	1 🗌	2 🗌	3 🗆	-2 🗌
9. to have a professional to turn to for advice or services when patient needs help	nen the	1 🗌	2 🗌	3 🗆	-2 🗌
10. to have complete information on the medical care of trau injuries (e.g. medications, injections, or surgery)	ımatic	1 🗌	2 🗌	3 🗌	-2 🗌
11. to have complete information on the patient's physical properties, weakness, headaches, dizziness, problems with vision walking)		1 🗌	2 🗌	3 🗌	-2 🗌
12. to have complete information on the patient's problems i thinking (e.g., confusion, memory, or communication)	n	1 🗌	2 🗌	3 🗆	-2 🗌
13. to have complete information on drug or alcohol problem treatment	ns and	1 🗌	2 🗌	3 🗌	-2 🗌
14. to be told how long each of the patient's problems is expelast	ected to	1 🗌	2 🗌	3 🗌	-2 🗌
15. to be shown what to do when the patient is upset or actin	g strange	1 🗌	2 🔲	3 🗌	-2 🗌
16. to have information on the patient's rehabilitative or edu progress	cational	1 🗌	2 🗌	3 🗌	-2 🗌
17. to have help in deciding how much to let the patient do b himself/herself	y	1 🗌	2 🗌	3 🗌	-2 🗌
18. to have enough resources for the patient (e.g., rehabilitat	ion	1 🗌	2 🗌	3 🗌	-2 🗌

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 19. to have enough resources for myself or the family (e.g., financial or legal counseling, respite care, counseling, nursing or day care) 20. to have help keeping the house (e.g, shopping, cleaning, cooking, etc.) 21. to have help from other members of the family in taking care of 	2 🗆	3 □ 3 □ 3 □	-2
 20. to have help keeping the house (e.g, shopping, cleaning, cooking, etc.) 21. to have help from other members of the family in taking care of 			
<u>.</u>	2 🗆	3 □	• 🗆
the patient			-2 🗌
22. to get enough rest or sleep	2 🗆	3 □	-2 🔲
23. to get a break from my problems and responsibilities 1	2 🗆	3 🗌	-2 🗌
24. to spend time with my friends	2 🗆	3 □	-2 🗌
25. to pay attention to my own needs, job or interests	2 🗆	3 🗌	-2 🗌
26. to have my significant other understand how difficult it is for me $1 \square$	2 🗆	3 🗌	-2 🗌
27. to have my partner or friends understand how difficult it is for me. $1 \square$	2 🗆	3 🗌	-2 🗌
28. to have other family members understand the patient's problems $1 \square$	2 🗆	3 □	-2 🔲
29. to have the patient's friends understand his/her problems $1 \square$	2 🗆	3 □	-2 🗌
30. to have the patient's employer, coworkers or teachers understand his/her problems $1 \Box$	2 🗆	3 🗌	-2 🗌
31. to discuss my feelings about the patient with someone who has gone through the same experience $1 \square$	2 🗆	3 🗌	-2 🗌
32. to discuss my feelings about the patient with other friends or family $1 \square$	2 🗆	3 🗌	-2 🗌
33. to be reassured that it is usual to have strong negative feelings about the patient $1 \square$	2 🗆	3 🗌	-2 🗌
34. help getting over my doubts and fears about the future $1 \square$	2 🗆	3 □	-2 🗌
35. help in remaining hopeful about the patient's future $1 \square$	2 🗆	3 🗌	-2 🗌
36. help preparing for the worst	2 🗆	3 🗌	-2 🗌
37. to be encouraged to ask others to help out	2 🗆	3 🗌	-2 🔲

FINANCIAL STRAIN (FI)

1. $(RC\ 8)$ How much of a financial strain would you say that caring for your loved one is on a scale from 1 to 5 with 1 being Not a strain at all and 5 being Very much a strain?

Not a strain at all				Very much a strain	
1 🗌	2 🗌	3 🗌	4 🗌	5 🗌	
care? Include medic	cal/dental/vision legal, travel, and	expenses, househ d other expenses,	old expenses, pe caregiver persor	for your loved one's ersonal care items nal expenses/respite (a	ides
			No	Yes	
3. Dip into your per	rsonal savings to o	cover expenses	0 🗆	1 🗌	
4. Dip into your ret expenses	irement savings t	o cover	0 🗌	1 🗌	
5. Reduce how muc	h you save for re	tirement	0 🗌	1 🗌	
6. Take out a loan, member or assume		•	0 🗌	1 🗌	
7. Cut back on pers	•	- ·	0 🗌	1 🗌	
8. Cut back on sper such as going to the		·	0 🗌	1 🗌	

ZARIT BURDEN INTERVIEW (ZB)

(RC 9) Please choose the response that best describes how you feel currently.

	DO YOU FEEL	Never	Rarely	Sometimes	Quite Frequently	Nearly Always
*	1. that because of the time you spend with (CR) that you don't have enough time for yourself?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
*	2. stressed between caring for (CR) and trying to meet other responsibilities (work/family)?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
	3. angry when you are around (CR)?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
	4. that (CR) currently affects your relationship with family members or friends in a negative way?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
*	5. strained when you are around (CR)?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
	6. that your health has suffered because of your involvement with (CR)?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
	7. that you don't have as much privacy as you would like because of (CR)?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
	8. that your social life has suffered because you are caring for (CR)?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
	9. that you have lost control of your life since (CR's) illness?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
	10. uncertain about what to do about (CR)?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
*	11. you should be doing more for (CR)?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌
	12. you could do a better job in caring for (CR)?	0 🗌	1 🗌	2 🗌	3 🗌	4 🗌

★ = items for Program Coach to note

GAD-7 (GA)

(RC 10) Over the <u>last 2 weeks</u>, how often have you been bothered by the following problems?

		Not at all	Several days	More than half the days	Nearly every day
*	1. Feeling nervous, anxious or on edge	0 🗌	1 🗌	2 🗌	3
*	2. Not being able to stop or control worrying	0 🗌	1 🗌	2	3 🗌
	3. Worrying too much about different things	0 🗌	1 🗌	2 🗌	3 🗌
	4. Trouble relaxing	0 🗌	1 🗌	2 🗌	3 🗌
	5. Being so restless that it is hard to sit still	0 🗌	1 🗌	2 🗌	3
	6. Becoming easily annoyed or irritable	0 🗌	1 🗌	2	3 🗌
	7. Feeling afraid as if something awful might happen	0 🗌	1 🗌	2 🗌	3 🗌

★ = items for Program Coach to note

PHQ-9 (PH)

(RC 10) Over the <u>last 2 weeks</u>, how often have you been bothered by the following

							Not at all	Several days	More than half the days	Nearly every day
*	1.	Little i	interest or p	pleasure in o	doing things		0	1	2	3
*	2.	Feeling	g down, dep	oressed, or l	nopeless		0 🗌	1	2	3 🗌
	3.	Troub much	le falling or	staying asl	eep, or sleeping t	too	0 🗌	1 🗌	2 🗌	3 🗌
	4.	Feeling	g tired or h	aving little o	energy		0 🗌	1	2 🗌	3 🗌
	5.	Poor a	ppetite or o	vereating			0 🗌	1 🗌	2 🗌	3
	6.	,	_	•	or that you are a your family dov		0 🗌	1 🗌	2 🗌	3 🗌
	7.	7. Trouble concentrating on things, such as reading the newspaper or watching television 0 \(\square 1 \)		1 🗌	2 🗌	3 🗌				
	8.	8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual				0	0 🗌	1 🗌	2 🗌	3 🗌
	9.	_	•	ı would be l n some way	oetter off dead, o	or of	0 🗌	1 🗌	2 🗌	3 🗌
		probl	ems?							
	7	★ = item	s for Progra	m Coach to n	ote	A	dd columns:	·	+	+
							Total: _ (cumulative		<mark>⚠</mark> .ll columns)	
		10.	Is the scor	e of the PHQ	$Q-9 \ge 15$? No 0 (() Y	Yes 1 () <u>↑</u>			
		11.	Is the answ	wer to #9 an	ything other than	Not at	all? No 0	() Yes	s 1 () 🚹	
	1	hurtin dange protoc	ng yourself in er, the interv col (Yellow i	n some way' iewer will st	y every day" for '' ' and the interviev op the interview o l). Interviewer sh ver office.	wer fee at that	ls that the C question and	aregiver i d start the	is in immediate Suicide Caller	
If interviewer feels that the Caregiver is NOT in immediate danger, the interviewer can fininterview and notify the data manger that the Caregiver needs to be given immediately to Program Coach.										

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CAREGIVING SELF-EFFICACY (SE)

(RC 11) Please think about each one and tell me how confident you are that you could do each item. Rate your degree of confidence from 0 to 100 where a 0% confidence means that you cannot do it at all, a 50% confidence means that if you gave it your best effort, chances are about 50-50 that you could perform the activity, and a 100% confidence means you are certain you can do it. You can use any score between 0 and 100 (10, 20, 30, etc.) to express your confidence.

Self-Efficacy for Obtaining Respite

How confident are you that you can ask a friend/family member to...

	Cann at all	ot do				oderate tain car	•			_	ertain can do
1. stay with [CR] for a day when you need to see the doctor yourself?	0	10	20	30	40	50	60	70	80	90	100
2. stay with [CR] for a day when you have errands to be done?	0	10	20	30 	40	50	60	70	80	90	100
3. do errands for you?	0	10	20	30 	40	50	60	70	80	90	100
4. stay with [CR] for a day when you feel the need for a break?	0	10	20	30 	40	50	60	70	80	90	100
5. stay with [CR] for a week when you need the time for yourself?	0	10	20	30	40	50	60	70	80	90	100

Self-Efficacy for Responding to Disruptive Patient Behaviors

		Canno at all	ot do				oderate ain can	-			_	ertain an do
6.	When [CR] forgets your daily routine and asks when lunch is right after you've eaten, how confident are you that you can answer him/her without raising your voice? (Clarify that "answer" can be direct or a distraction.)	0	10	20	30	40	50	60	70	80	90	100
7.	When you get angry because [CR] repeats the same question over and over, how confident are you that you can say things to yourself that calm you down?	0	10	20	30	40	50	60	70	80	90	100
8.	When [CR] complains to you about how you're treating him/her, how confident are you that you can respond without arguing back? (e.g., reassure or distract him/her?)	0	10	20	30	40	50	60	70	80	90	100
9.	When [CR] asks you 4 times in the first one hour after lunch when lunch is, how confident are you that you can answer him/her without raising your voice?	0	10	20	30	40	50	60	70	80	90	100
10.	When [CR] interrupts you for the fourth time while you're making dinner, how confident are you that you can respond without raising your voice?	0	10	20	30	40	50	60	70	80	90	100

Self-Efficacy for Controlling Upsetting Thoughts about Caregiving

All caregivers sometimes have negative thoughts about their situation. Some thoughts may be brief and easy to get rid of. Other times, thoughts may be hard to put out of your mind, just like a silly tune is sometimes hard to get out of your mind. We would like to know how well you can turn off any of the following thoughts. Use the same confidence rating. Don't be concerned about how often the thoughts come up. We want you to rank your confidence that you can turn off or get rid of each type of thought when it does come up." (Administrator: When caregivers state that they have absolutely never had the thoughts in one of the items, put "N/A" (not applicable) on the line for rating confidence.)

How confident are you that you can control...

that you can control	Cannot do at all			Moderately certain can do						Certain can do	
11. thinking about unpleasant aspects of taking care of [CR]?	0	10 	20	30 □	40	50	60	70	80	90	100
12. thinking how unfair it is that you have to put up with this situation (taking care of [CR]?	0	10 	20 □	30 □	40	50	60	70	80	90	100
13. thinking about what a good life you had before [CR]'s illness and how much you've lost?	0	10	20	30 □	40	50	60	70	80	90	100
14. thinking about what you are missing or giving up because of [CR]?	0	10 	20	30 □	40	50	60	70	80	90	100
15. worrying about future problems that might come up with [CR]?	0	10 	20	30 	40	50	60	70	80	90	100

SOCIODEMOGRAPHIC QUESTIONS (SO)

Fii	nally, some general information about you and your loved one.
1.	Sex of the CR: 1 Male 2 Female 3 Other Specify
2.	Is CR's primary ethnic group Latino/Hispanic?
	NoYesUnknownRefused0 \Box 1 \Box -3 \Box -4 \Box
3.	What is CR's racial group?
	 White/Caucasian Black/African American American Indian/Alaska Native Asian Native Hawaiian/Pacific Islander More than one race Other
	3.1 If "More than one race" or "Other," specify race(s):
4.	What is CR's age?
5.	How many years did CR serve in the military?
6.	Which branch of the military did CR serve?
	1 () Army 2 () Navy 3 () Air Force 4 () Marines 5 () Coast Guard
7.	Did CR receive a medical discharge from the military?
	NoYesUnknownRefused0 \Box 1 \Box -4 \Box

8. (RC 12) What level of education did CR complete?

0 () No formal education	9 () Grade 9
1 () Grade 1	10 () Grade 10
2 () Grade 2	11 () Grade 11
3 () Grade 3	12 () Grade 12/High School Diploma/GED
4 () Grade 4	13 () Vocational/training school after high school
5 () Grade 5	14 () Some college/associate degree
6 () Grade 6	15 () College graduate (4 or 5 year program)
7 () Grade 7	16 () Master's degree (or other post-graduate training)
8 () Grade 8	17 () Doctoral degree (PhD, MD, EdD, DVM, DDS, JD etc)

9. (RC 12) What level of education did you complete?

0 () No formal education	9 () Grade 9
1 () Grade 1	10 () Grade 10
2 () Grade 2	11 () Grade 11
3 () Grade 3	12 () Grade 12/High School Diploma/GED
4 () Grade 4	13 () Vocational/training school after high school
5 () Grade 5	14 () Some college/associate degree
6 () Grade 6	15 () College graduate (4 or 5 year program)
7 () Grade 7	16 () Master's degree (or other post-graduate training)
8 () Grade 8	17 () Doctoral degree (PhD, MD, EdD, DVM, DDS, JD etc)

10.	What is your relation	onship to (CR)? i.e., tl	he CG is	CR's	
	THE TO STATE TO COLUMN	, and a contract of the contra	, •,	10 0 0 15		

1 () Wife	10 () Husband
2 () Daughter	11 () Son
3 () Daughter-in-law	12 () Son-in-law
4 () Sister	13 () Brother
5 () Niece	14 () Nephew
6 () Granddaughter	15 () Grandson
7 () Step daughter	16 () Step son
8 () Mother	17 () Father
9 () Partner	18 () Other, specify:

11. (RC 13) What is your current marital status?

1 () Married
2 () Single
3 () Divorced
4 () Separated
5 () Widowed
6 () Single, living as married
7 (Other

12.	(RC 13) Wha	nt is CR's cur	rent marital s	tatus?		
2 (3 (4 (5 (6 (ng as marrie				
13.	Does CR live	with you?				
	No 0 □	Yes 1 □		nknown 3 🔲	Refused -4 □	
	13.1 <i>If no</i>	, where does	CR live (with	friends, by	self, with spouse, fac	ility, etc)?
14.	(RC 14) Wh a	nt is your cur	rent employm	ent status?		
2 (3 (4 (5 () Employed) Homemal) Not curre) Not curre	l at a job for j ker, not curre ntly employed	d, not retired			
15.	(RC 14) Wha	nt is CR's cur	rent employm	ent status?		
2 (3 (4 (5 () Employed) Homemak) Not curren) Not curren	•	oay, part-time ntly working f l, retired l, not retired	or pay		
16.	What is you	r current mor	nthly househol	ld income be	efore taxes?	
			r you to pay fo d you say it is:	-	asics like food, hous	ing, medical
	Not at all Difficult	Not Very Difficult	Somewhat Difficult	Very Difficult		

18. Are you rece home visit)?	eiving services a	as part of the VA's I	Family Care	givers program	(stipend,
No 0 □	Yes 1	<i>Unknown</i> −3 □		fused	
18.1 If yes, in the last 6 months, has the amount					
	Increased 0	Stayed Same 1	Decreased 2	<i>Unknown</i> -3 □	Refused -4
19. Do you have	any injuries/co	onditions that make	it difficult to	care for your	loved one?
No 0 □	Yes 1	<i>Unknown</i> -3 □		Refused -4 [
1 () As soon 2 () When y 3 () When a 4 () Other:	as your loved or our loved one co previous Careg	you begin providing ne returned injured ould no longer care for iver could no longer care care care to the results of this research.	him/herself are for your l	oved one	shad?
No	Yes	Unknown		fused	siicu:
0 🗌	1 🗌	-3			
21.1 <i>If yes</i> , 1	how would you	like to be contacted	1?		
☐Email ☐ Postal Mail					
22. Have you an	d/or (CR) teste	ed positive for COVI	D-19?		
No 0 □	Yes 1	<i>Unknown</i> -3 □	Re -4	fused	
22.1 If yes,	who tested posi	itive?			
CG 0 □	CR 1 □	Both 2 □	Unknown -3 □	Refused -4 □	
23. Has the CO	VID-19 panden	nic caused you any c	hallenges fo	r your caregivi	ng?