Using Data & Information Systems in Partnered Research

Session 4:

Research to the real-world: Insights from implementation of a caregiver support training program

September 19, 2023

Hosted by **VIReC**

Courtney Van Houtven, PhD

Principal Investigator & Project lead, Function & Independence QUERI, Durham VA

Kasey Decosimo, MPH

Project Manager & Implementation Specialist, Function & Independence QUERI, Durham VA

Trisha Chadduck, MSW, LCSW

Operational Partner, VA Caregiver Support Program

 Using Data & Information Systems in Partnered Research Cyberseminar Series
 Third Tuesday of the month | 12:00 - 1:00 PM ET

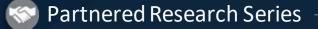
Presentations from the field focusing on VA data use in quality improvement and operations-research partnerships.

Sessions cover...

- Use of VA data and information systems in QUERI Projects and Partnered Evaluation Initiatives
- Operational data resources and QI-related data
- Challenges in using and managing multiple data sources
- VA resources to support data use
- Experiences working within operations/research partnerships

Select a title to register or visit <u>HSR&D's VIReC Cyberseminar Archive</u> to watch previous sessions





Where can I download a copy of the slides?

VA HSR&D CYBERSEMINARS

SAMPLE EMAIL

A Practical Approach to Working with VA-Purchased Community Care Data

Thursday, October 13, 2022 2:00 PM | (UTC-04:00) Eastern Time (US & Canada) | 1 hr

Please download today's slides Please click here for today's live captions

Join webinar

More ways to join:

Join from the webinar link

https://veteransaffairs.webex.com/veteransaffairs/i.php?



Poll #1:

What is your primary **role** in projects using VA data?

- Investigator, PI, Co-I
- Statistician, methodologist, biostatistician
- Data manager, analyst, or programmer
- Project coordinator
- Other please describe via the chat function



How many years of experience working with VA data?

- None I'm brand new to this!
- One year or less
- More than 1, less than 3 years
- At least 3, less than 7 years
- At least 7, less than 10 years
- 10 years or more





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Panelists







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Operational Partner VA Caregiver Support Program



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Department of Population Health Sciences Duke University School of Medicine

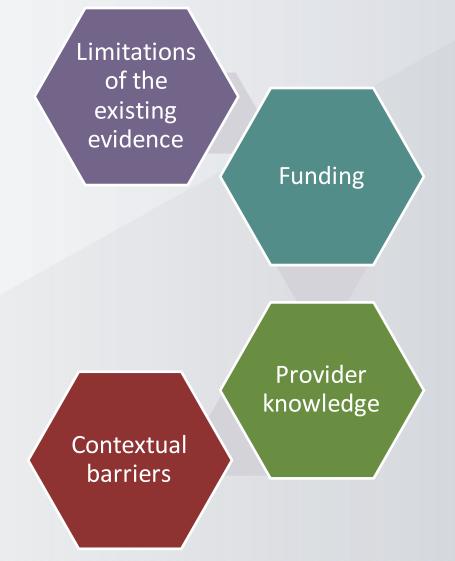






Challenges in Moving Family Caregiver Interventions from Research to Large-Scale Implementation

Committee on Family Caregiving for Older Adults (2016), National Academies of Sciences, Engineering, and Medicine





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Session Objectives

Our Story

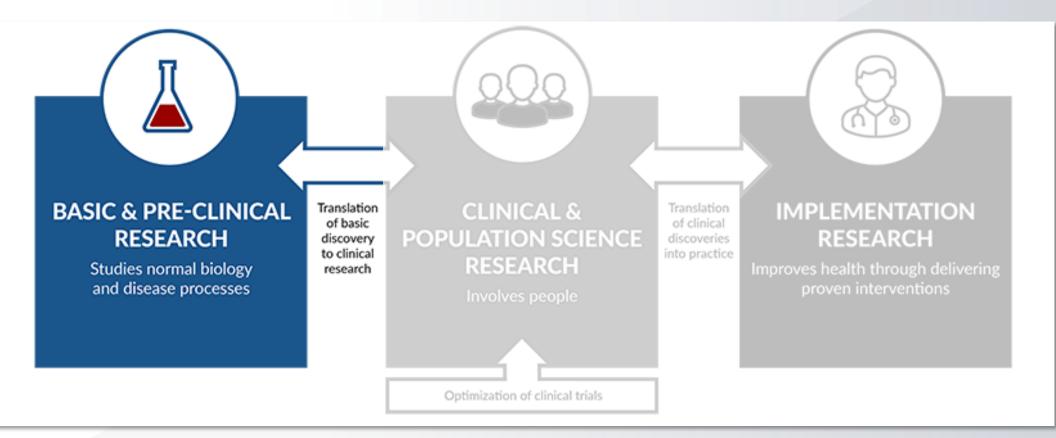
Developed and implemented a caregiver intervention from single site RCT to national adoption within Veterans Health Administration (VA)





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Chapter 1: Discovery



https://www.nhlbi.nih.gov/science/research-spectrum





Family caregiving: The "gap"



53 million caregivers in US, including 5.5 million military caregivers





<10% of caregivers report getting the training they need





Treatment Arm - Caregiver Skills Training

- Durham VA RCT, 242 caregiver-Veteran dyads
- Multi-component training intervention (group + individual components)
 - Caregivers FIRST (formerly HI-FIVES)
- Designed to help caregivers learn and practice coping, support-seeking, and hands on skills



Van Houtven et al., 2010; Nichols et al., 2011; 2016 Nichols et al., 2016; Van Houtven, Voils, & Weinberger, 2011





Core Classes: Outline

Class 1: Introduction and caregiving discussion

- Frustrations, rewards of caregiving
- Helping Veteran remain independent
- Relaxation exercise

Class 2: Hands-on and shared decision-making strategies

- Basics of daily care, safety
- Veteran preferences
- Communication with providers

Class 3: Coping skills and strategies

- Stress management
- Value of self-care
- Recognizing depression, burnout

Class 4: Support-seeking skills and navigation strategies

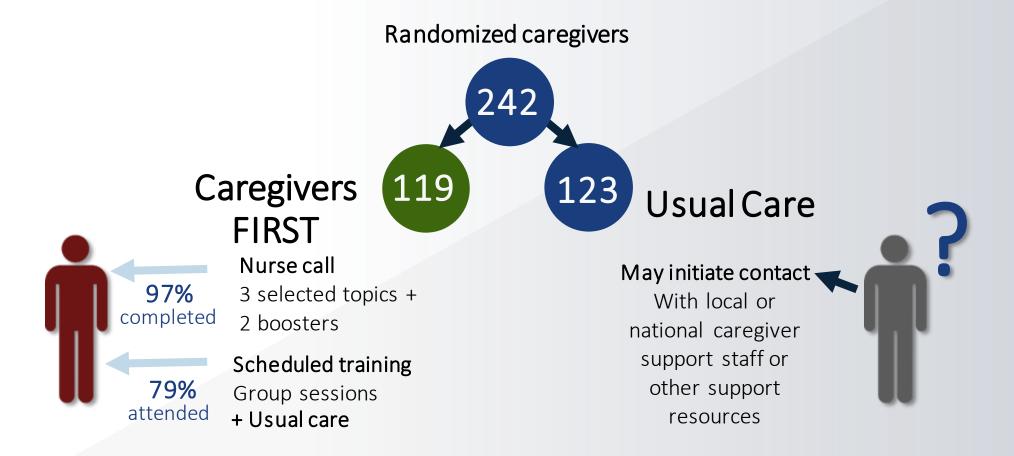
- VA services and Caregiver Support Program
- Non-VA resources
- Preparing for the future and legal issues







RCT Study Design





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Unique features of Caregivers FIRST

- General to any diagnosis Veteran may have
 - not focused on 1 condition
- Offered at potential tipping point when caregivers may need training and support
 - <6 months post- referral to VA Home and Community-based Services</p>
- Nationally relevant other public health payers searching for ways to control long-term expenditures



Usual Care – Acceleration of Caregiver Supports

Caregivers & Veterans Omnibus Health Services Act*

Program of Comprehensive Assistance for Family Caregivers (PCAFC)

 Eligible Veterans injured in the line of duty on or after <u>9/11/2001</u>

Program of General Caregiver Support (PGCSS)

 <u>All Veterans</u> in need of a caregiver

VA Caregiver Support Office

P.L. 111-163; May 5, 2010



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Pragmatic from the start

- Developed by a multidisciplinary team
 - Advisors
 - When grant was being written through 4 year RCT
 - Investigators
 - REACH and REACH-VA (largest multi-site caregiver trial from 1990s)
 - Operational partners
 - National Director of new VA Caregiver Support Program
 - Geriatrics and Extended Care operations members leading home- and community-based service delivery
 - Social workers serving caregivers





RCT Results



Research perspective "null trial" – yet, at trial's conclusion, VA CSP saw Caregivers FIRST could fill a gap in group trainings...therefore worth scaling up!







Partnership with Caregiver Support Program





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Optimizing Function and Independence

VA Quality Enhancement Research Initiative (QUERI) to evaluate implementation of Caregivers FIRST at 8 VA sites (2018-2020)



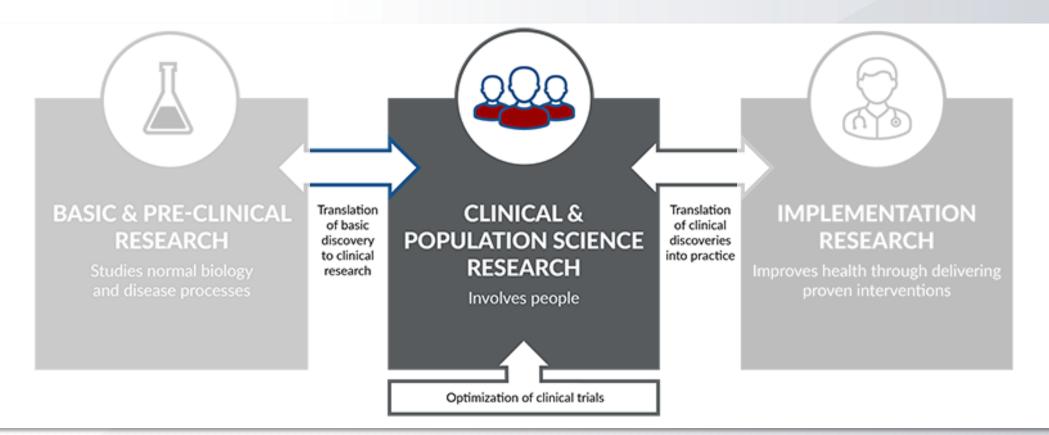
Evaluating impact of Caregivers FIRST on:

<u>Veteran Independence</u>: Veteran days spent at home

<u>Caregiver Function</u>: Caregiver burden, depressive symptoms, and satisfaction



Chapter 2: Fit in Real-World



https://www.nhlbi.nih.gov/science/research-spectrum







Uptake of tested interventions is limited by the **inherent tension** between intervention development & testing through RCTs & implementation in realworld settings.

Objectives:

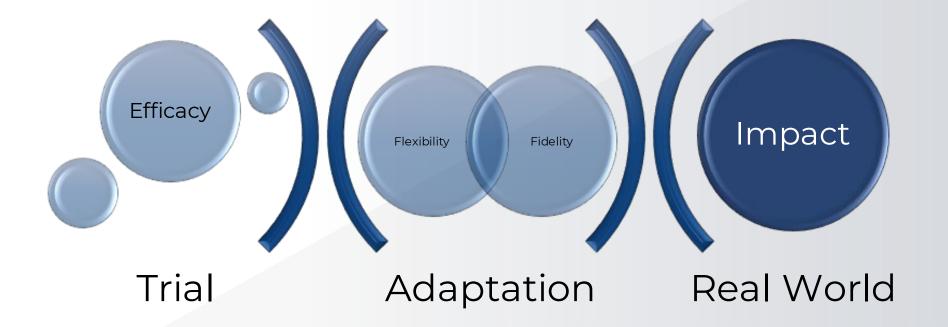


Describe the rapid adaptation and implementation of Caregivers FIRST from single site RCT to 8 sites

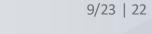




Rapid translation phases







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Steps in translation



RCT and implementation delivery occur under very different conditions

Wiltsey Stirman, S., Baumann, A.A. & Miller, C.J. *Implementationn Sci;* 2019 Lee SJ, Altschul I, Mowbray CT. Am J Community Psychol; 2008, Moores et al, 2017



'Core' vs 'optional' intervention elements

- Core = elements of the intervention that cannot be removed because they are active ingredients
- Optional = elements of the intervention that can be modified or even removed as needed

Core elements

 Content in group training: clinical skills, caregiver wellbeing, and navigating the VA system plus social time

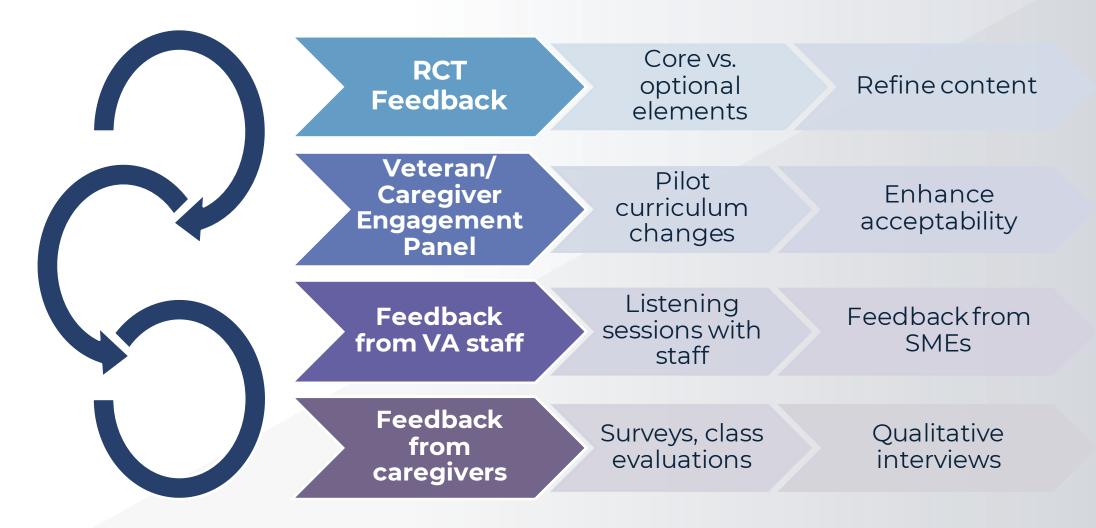
Optional elements

One-on-one telephone training with nurse interventionist



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Adapting Content—iterative and cyclical





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Implementation barriers

- Intervention to be delivered by clinic staff (collateral duty)
- Minimal time for staff intervention training
- Staff resources and availability differed by site and setting
- Caregivers have minimal time

Adaptations to optional (non-core) elements

Group classes → shorter

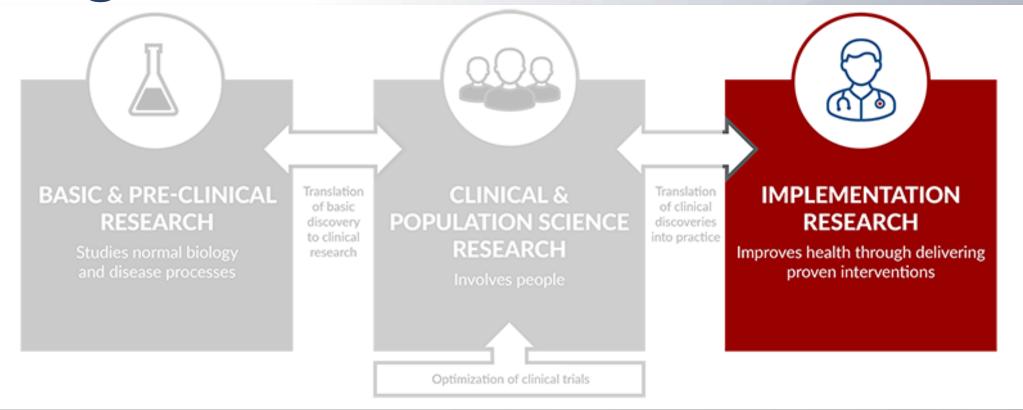
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- Individual calls (topic & booster) → optional
- Curriculum packaging → "grab and go"
- \cdot Flexibility \rightarrow delivery mode, class scheduling , facilitator, inclusion of local resources
- EHR templates for clinical staff

Shepherd-Banigan et al, J Nurs Scholarsh. 2020

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Chapter 3a: Designing implementation strategies



https://www.nhlbi.nih.gov/science/research-spectrum









Implementation Science

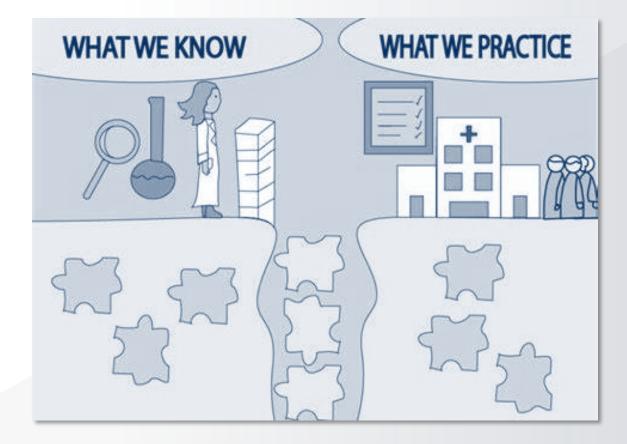
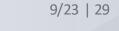


Image: https://activeagingrt.ca/bridging-the-know-do-gap-in-research/









There is little evidence on **implementation outcomes** of caregiver interventions within health care systems.

Objectives:



Assess the implementation of Caregivers FIRST delivered in 8 Veterans Affairs hospitals



Evaluate whether implementation strategies improve implementation outcomes (penetration and fidelity)



Examine the impact of Caregivers FIRST on patient and caregiver outcomes

QUE16-170





Caregivers FIRST 2020-2025

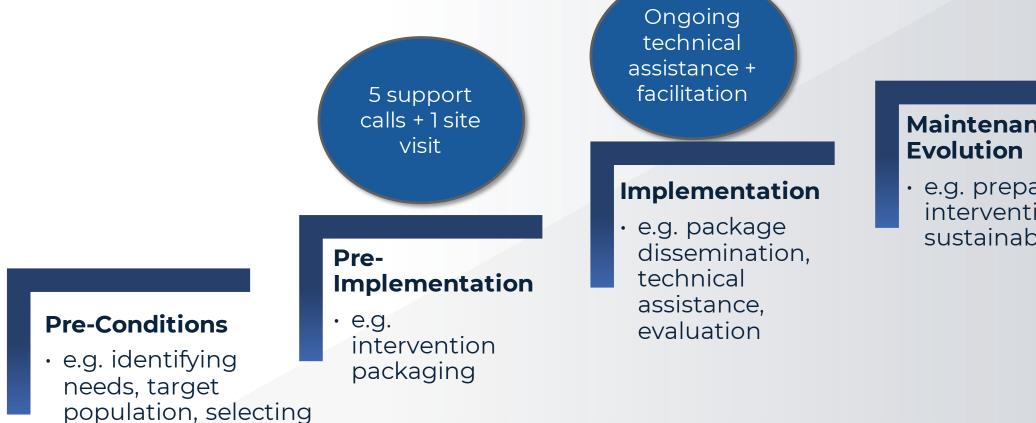






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Replicating Effective Programs



Maintenance and

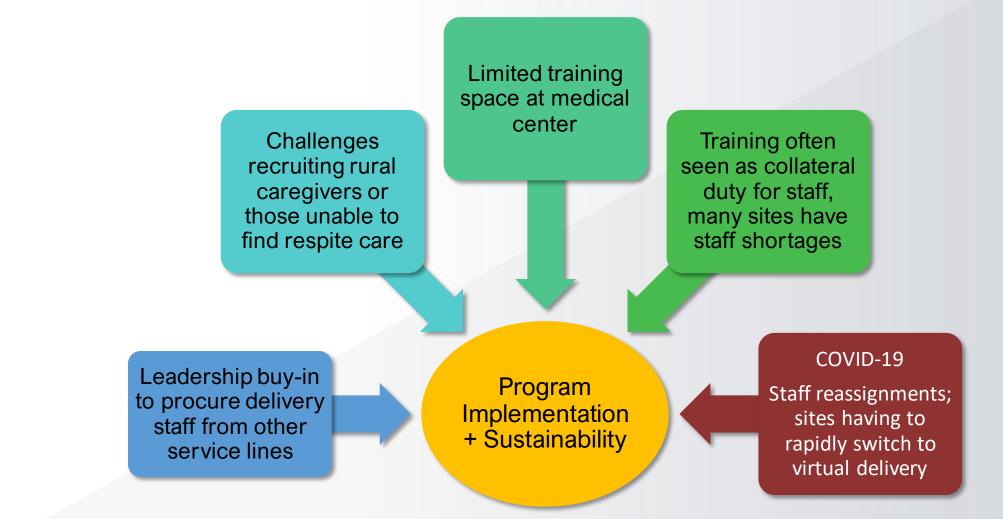
• e.g. preparing the intervention for sustainability

Centers for Disease Control; Kilbourne et al. 2007; Kind et al. 2016



intervention

Key implementation barriers





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Implementation at 8 sites

- Required novel practice patterns and service line coordination
- Required time-intensive training and technical assistance
 - Approx. 100-140 hours per site
- Level of support needed varied





Chapter 3b: Scaling nationally



https://www.nhlbi.nih.gov/science/research-spectrum







Few evidence-based caregiver support interventions have been **scaled for widespread dissemination** in the United States.

Objectives:



Evaluate the effectiveness of implementation strategies on implementation outcomes



Conduct a business case analysis of implementation strategies to identify costefficient strategies

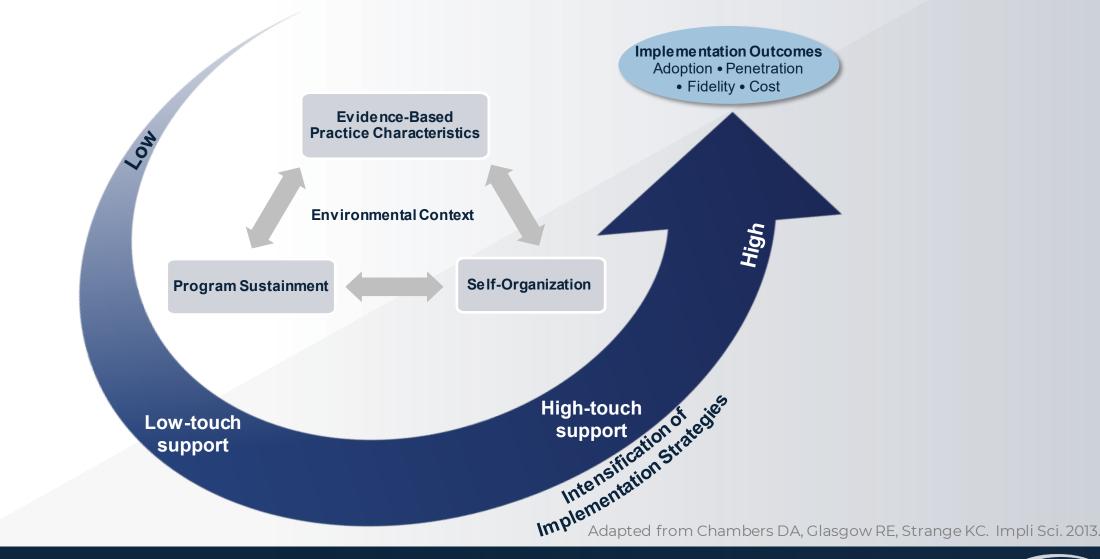


Assess effectiveness of Caregivers FIRST on Veteran home time



QUE20-023

TADAPT Implementation framework







Caregivers FIRST 2020-2025



- National implementation
 - All sites (142) received
 "low-touch"
 implementation support

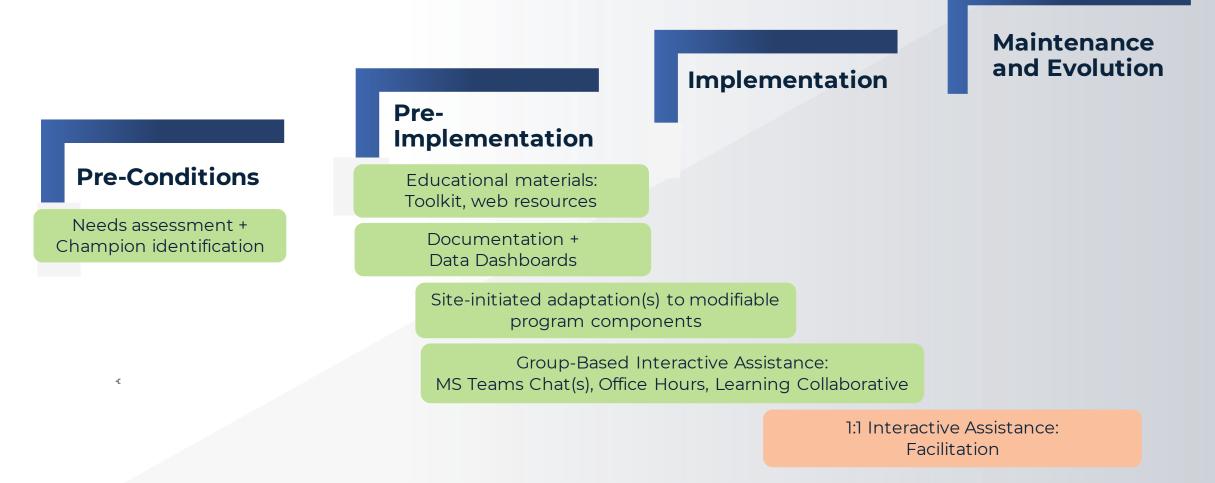
Enrolled sites = 25



TADAPT

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Testing 'right size' implementation support



Hughes J, et al., Gerontologist (2022)





Progress to date nationally



125 VA Medical Centers implemented Caregivers FIRST

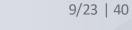
Over 1300 VA providers with access to lowtouch support

1300



Over 3600 caregivers trained since October 2020





Role of partnered research in scalability

We as researchers need to take more risks

Let's pitch our imperfect programs to decision makers

- Stop waiting for optimal study and pristine p-values
- Effective to partners ~ Pragmatic, Useful, Evidence-Based
- Filling an unmet need can be the "business case", not always proving cost savings

When our research questions align with decision maker needs (e.g., performance metrics), partnered research can make a real difference in creating a more caregiver-friendly health system





Operational Partner's Perspective









How did this collaboration benefit the Caregiver Support Program (CSP)?

- Brief history
- Caregivers FIRST
 - Known barriers
 - What went well
- Generalized beyond VA



Why take "null" intervention nationwide?

- Feedback from staff and caregivers
- Timing with creation of the foundational structure of general caregiver supports
- Caregiving 101/Entrance to CSP
- "Grab and Go" materials, support of Function QUERI team





What needs exist as CSP takes over operations of the Caregivers FIRST program?

- Minimal changes needed as CSP takes ownership
- VA ever-changing space





What does CSP see for the future of Caregivers FIRST once the research study is over?

- Recommended minimum standard FY24
- Update training as needed
- Expand offering in Spanish







THANK YOU

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- Josh D'Adolf, MSW
- Caitlin Sullivan, MS
- Matthew Tucker BA
- Rebecca Bruening, MA, MPH
- Nina Sperber, PhD

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• Karen M Stechuchak, MS

- Megan Shepherd-Banigan, PhD
- Nathan Boucher, DrPH
- Jessica Ma, MD
- Cathleen Colon-Emeric, MD
- George L. Jackson, PhD, MHA
- Teresa M. Damush, PhD
- Leah Zullig, PhD
- Connor Drake, PhD
- Virginia Wang, PhD
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Published resources

- Van Houtven CH, Smith VA, Lindquist JH, Chapman JG, Hendrix C, Hastings SN, Oddone EZ, King HA, Shepherd-Banigan M, Weinberger M. Family Caregiver Skills Training to Improve Experiences of Care: a Randomized Clinical Trial. J Gen Intern Med. 2019 Oct;34(10):2114-2122. doi: 10.1007/s11606-019-05209-x. Epub 2019 Aug 6. PMID: 31388914; PMCID: PMC6816649.
- Wang V, Allen K, Van Houtven CH, Coffman C, Sperber N, Mahanna EP, Colón-Emeric C, Hoenig H, Jackson GL, Damush TM, Price E, Hastings SN. Supporting teams to optimize function and independence in Veterans: a multi-study program and mixed methods protocol. Implement Sci. 2018 Apr 20;13(1):58. doi: 10.1186/s13012-018-0748-3. PMID: 29678137; PMCID: PMC5910600.
- Shepherd-Banigan M, Kaufman BG, Decosimo K, Dadolf J, Boucher N, Mahanna EP, Bruening R, Sullivan C, Wang V, Hastings SN, Allen KD, Sperber N, Coffman C, Van Houtven CH. Adaptation and implementation of a family caregiver skills training program: from single site RCT to multisite pragmatic intervention. Journal of Nursing Scholarship. 2019; 0(0):1-11. doi:10.1111/jnu.12511.
- Boucher NA, Zullig LL, Shepherd-Banigan M, Decosimo KP, Dadolf J, Choate A, Mahanna EP, Sperber NR, Wang V, Allen KA, Hastings SN, Van Houtven CH. Replicating an effective VA program to train and support family caregivers: a hybrid type III effectiveness-implementation design. BMC Health Serv Res. 2021 May 6;21(1):430. doi: 10.1186/s12913-021-06448-7. PMID: 33952263; PMCID: PMC8099701.
- Van Houtven CH, Drake C, Malo TL, et al. Ready, Set, Go! The role of organizational readiness to predict adoption of a family caregiver training program using the Rogers' Diffusion of Innovation Theory. Research Square; 2023. DOI: 10.21203/rs.3.rs-2402441/v1.
- Sperber NR, Boucher N, Hughes JM, Bruening R, Zullig LL, Decosimo K, Tucker M, Christensen LA, Allen KD, Hastings SN, Van Houtven CH. Mandated Caregiver Training in the Veterans Health Administration: Caregiver Inquiry Informs National Dissemination. Gerontologist. 2023 Mar 21;63(3):534-544. doi: 10.1093/geront/gnac162. PMID: 36327120.
- Decosimo K, Drake C, Coffman CJ, Sperber NR, Tucker M, Hughes JM, Zullig LL, Chadduck T, Christensen L, Kaufman B, Allen KD, Hastings SN, Van Houtven CH. Implementation intensification to disseminate a skills-based caregiver training program: protocol for a type III effectiveness-implementation hybrid trial. Implement Sci Commun. 2023 Aug 16;4(1):97. doi: 10.1186/s43058-023-00475-7. PMID: 37587517; PMCID: PMC10428549.



Questions?









Partnered Research BONUS SLIDES





Resources for VA Data Users

Select image to visit page







VIReC Cyberseminars

ON	RESOURCE CENTER (VIReC)	
	VA Millennium EHR Data Documentation & Resources	
ch	Overview	
	VA Millennium electronic health record (EHR) data documentation and resources help new and seasoned data users with understanding the structure and contents of COW Millennium data and provide information on VAS transition to the Cerner Millennium electronic health record (EHR).	Learn A VA Mill
	Sign-up for VIReC product news and updates. Email the VIReC <u>HeloDesk</u> to receive notification of VIReC's new Millennium Data products and product updates.	EHRM for D
	How are we doing? Take our <u>short survey</u> to share your thoughts about the Millennium resources below. We value your feedback.	EHRM
	Data Documentation	Genera # Data
	Expand each type of documentation below to view these resources.	E Data

Quick Guide to Frequently Used VA Data Resources

Resource Center (VIReC) is funded by the VA arch & Development Service (HSR&D) to 'to use data effectively for research and t programs, and to foster communication at a users and the VA healthcare community. Ppt edu

Quick Guide: Resources for Using VA Data (VA Intranet)











Questions about using VA Data?

HSRData Listserv

- Community knowledge sharing
- \circ ~1,400 VA data users
- Researchers, operations, data stewards, managers
- Subscribe by visiting

vaww.virec.research.va.gov/Support/HSRData-L.htm (VA Intranet)

VIReC HelpDesk

Individualized support

o Request Form:

varedcap.rcp.vaec.va.gov/redcap/surveys/?s=KXMEN77LXK (VA Intranet)

