



## Overview of Mixed Methods to Assess Short-Term Impacts of VA Caregiver Support on Veterans and Caregivers

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# Outline of Today's Talk

- I. VA Caregiver Support Program Overview
  
- II. VA CARES Evaluation Center
  - Evaluation Plan



# I. VA Caregiver Support Program Overview

Background slides provided by Ms. Laura Taylor, CSP  
Care Management & Social Work Services  
Department of Veterans Affairs

# Creation of the VA Caregiver Support Program

P.L. 111 – 163 – the Caregivers and Veterans Omnibus Health Services Act of 2010 was signed into Law by President Obama on May 5, 2010. Title One –Sections 101-104 outlined specific new services to be provided for Caregivers of Veterans.

The law established:

1. Program of Comprehensive Assistance for family Caregivers for Caregivers of eligible Veterans injured in the line of duty on or after September 11, 2001
2. Program of General Caregiver Support Services for Caregivers of all Veterans in need of a Caregiver

Organizationally, the Caregiver Support Program Office is within Care Management and Social Work Services, Patient Care Services.

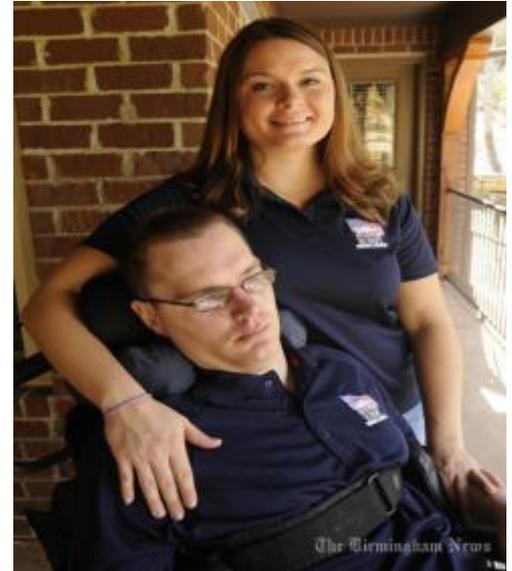
# Caregiver Support Program

**Mission Statement:** *To promote the health and well-being of family Caregivers who care for our nation's Veterans, through education, resources, support, and services.*

- Allow Veterans to remain at home in the community
- Address specific needs of Family Caregivers with a menu of programs/services
- Promote Veteran & Caregiver health and well-being
- Provide one location to obtain needed information
- Provide training & information on common conditions
- Reduce isolation with professional & peer support
- Provide options to give Caregivers respite
- Sensitize health care providers to the Caregivers' role

# Caregiver Support Coordinators

- At all VA medical centers (n=225)
- Clinical experts on Caregiver issues
- Knowledgeable about VA and non-VA resources
- Organize Caregiver focused activities and services
- Assist with application for Comprehensive Assistance Program



# Outreach to Caregivers

## - VA Caregiver Support Website

- Caregiver Support Coordinator locator
- Contact info for Support Line
- “Caregiver Toolbox”
- Caregiver “Connections” with stories from peer Caregivers
- Link to application for new benefits/services with live chat support
- Videos of Family Caregivers and Veterans

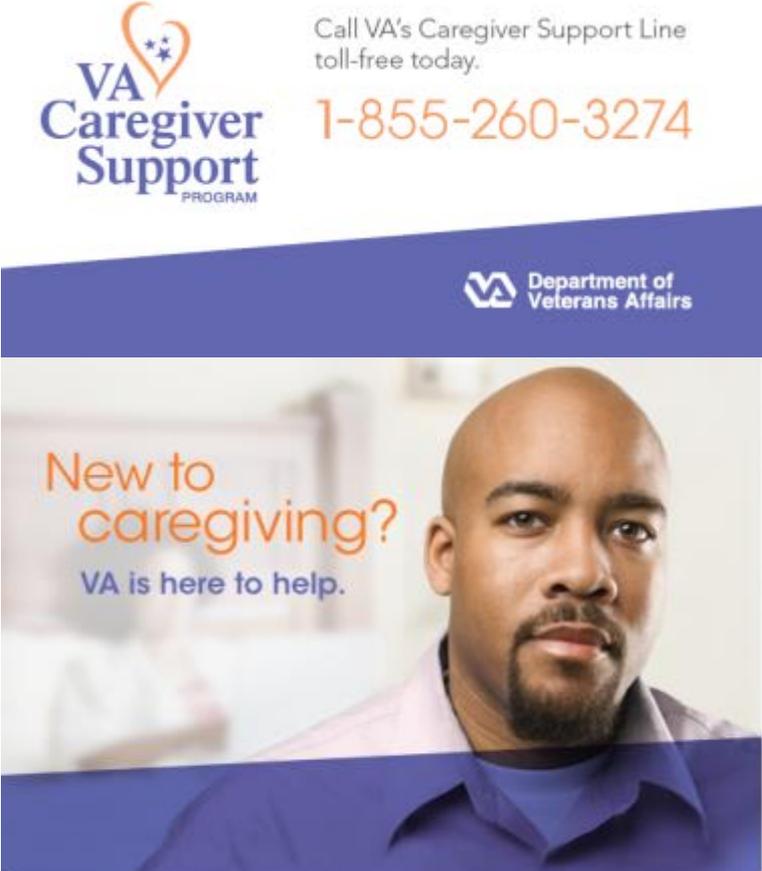


[www.Caregiver.va.gov](http://www.Caregiver.va.gov)

# Outreach to Caregivers

## - Caregiver Support Line (CSL)

- Staffed by licensed social workers
- 24/7 coverage provided by Veteran's Crisis Line
- Follow-up provided by local Caregiver Support Coordinators



Call VA's Caregiver Support Line toll-free today.  
**1-855-260-3274**

VA Caregiver Support PROGRAM

Department of Veterans Affairs

New to caregiving?  
VA is here to help.

The advertisement features a photograph of a Black man with a goatee, wearing a light blue shirt, looking directly at the camera. The background is a blurred indoor setting. The text is overlaid on the image in various colors and fonts.

# Program of Comprehensive Assistance for Family Caregivers - Eligibility Criteria

Veterans OR Service member undergoing medical discharge, who incurred or aggravated a serious injury in the line of duty on or after September 11, 2001 (includes Traumatic Brain Injury, psychological trauma or other mental disorders).

*and*

Veteran or Service member requires on-going assistance from a Caregiver for a minimum of 6 months to:

1. Assist with the management of personal care functions required in everyday living;
2. Significantly enhance the Veteran's or Service member's ability to live at home safely; **and**
3. Support the Veteran or Service member's potential progress in rehab.

***\*\*Note: there are additional criteria beyond what is listed here.***

# Primary Family Caregiver Benefits

- **Stipend**
  - Direct payment to primary Family Caregiver
  - Based on wages of a home health aide in the geographic area where the Veteran resides
    - \$613-\$2340 depending on Tier
- **Healthcare Coverage**
  - Civilian Health And Medical Program of the Department of Veterans Affairs (CHAMPVA)
- **Travel, Lodging and Per Diem**
  - Integrated into existing beneficiary travel program
- **Mental Health Services**
  - Individual/Group psychotherapy and counseling
- **Standardized Core Curriculum and Ongoing Support and Certification**

## Program of Comprehensive Assistance for Family Caregivers - Current Data (May 2011 – April 2014)

- Applications filed: ~28,000
- Approved Applications: ~15,000
- New Healthcare Coverage enrollees: ~4,000
- Caregiver Demographics:
  - 91% women
  - Spouses (78%) and Parents (13%)
  - 26-40 yrs old (53%) and 41-64 years old (35%)



## II. Overview of Mixed Methods to Assess Short-Term Impacts of VA Caregiver Support on Veterans and Caregivers

# Two year partnered evaluation with CSP, QUERI and Durham VA HSR&D

## HSR&D Durham

- Courtney Van Houtven
- Susan Hastings
- Eugene Oddone
- Matt Maciejewski
- Nina Sperber
- Maren Olsen
- Darryl Wieland
- Karen Steinhauser
- Corrine Voils
- Cristina Hendrix
- Karen Stechuchak
- Merritt Schnell

- Jennifer Lindquist
- Valerie Smith
- Bradley Dokter
- Avi Alkon
- Kate Miller

## CSP – VACO

- Margaret Kabat
- Margaret Campbell-Kotler
- Jennifer Henius

## QUERI

- Amy Kilbourne
- John Midolo
- Linda McIvor

## Objective

To provide a rigorous evaluation of the short-term impacts of CSP on Caregivers and Veterans, to help CSP achieve its mission of providing the most effective support to Caregivers and Veterans that they can within the guidelines of the law.

# Evaluation Questions

AIM 1: Does Caregiver support reduce veteran avoidable use?

AIM 2: How does Caregiver support affect Caregiver wellbeing?

AIM 3: How do Caregivers use and value components of the comprehensive program and the general program?

AIM 4: What is the value of services offered (comparison of services and costs)?

Results from this evaluation will begin to inform CSP about its return on investment and provide information on best practices for improving and better targeting its programs.

# Conceptual Model

**Figure 1. Conceptual Model of CSP**

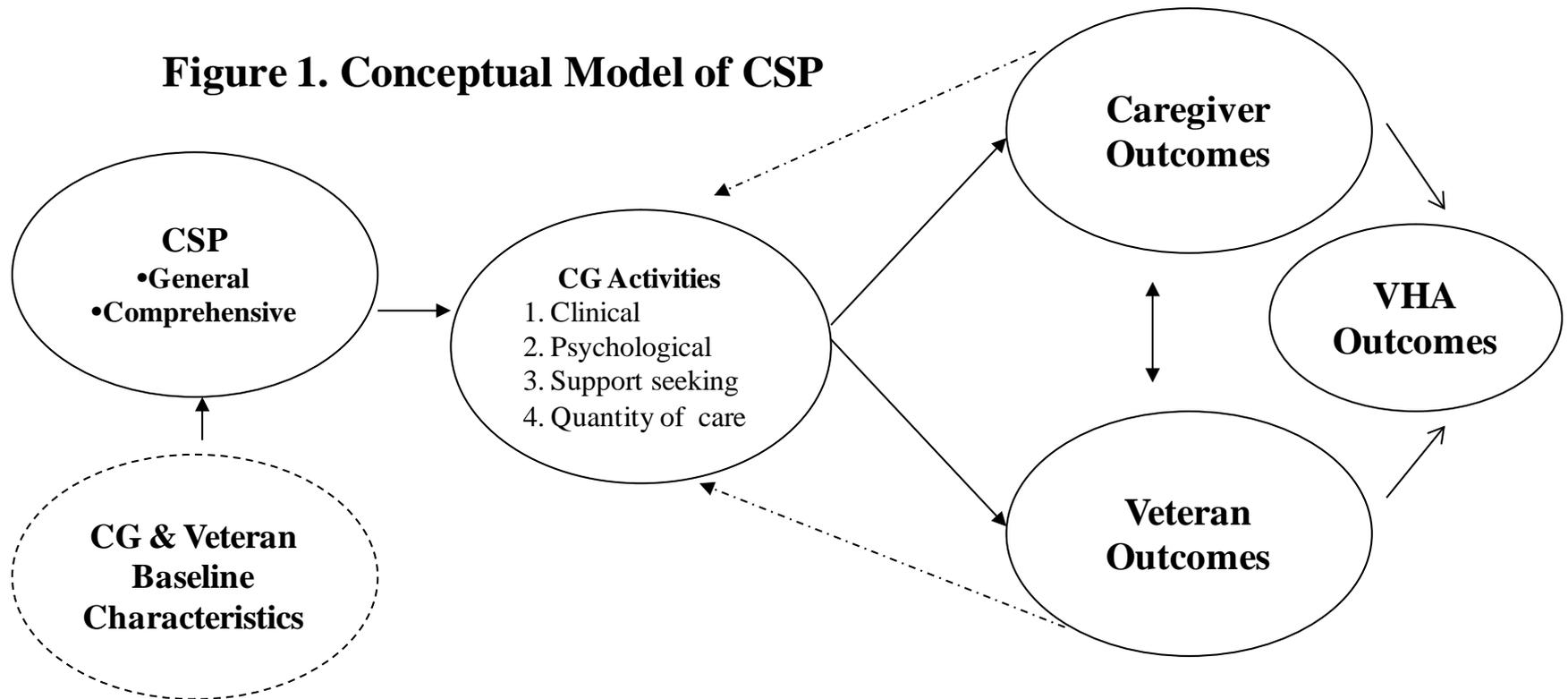
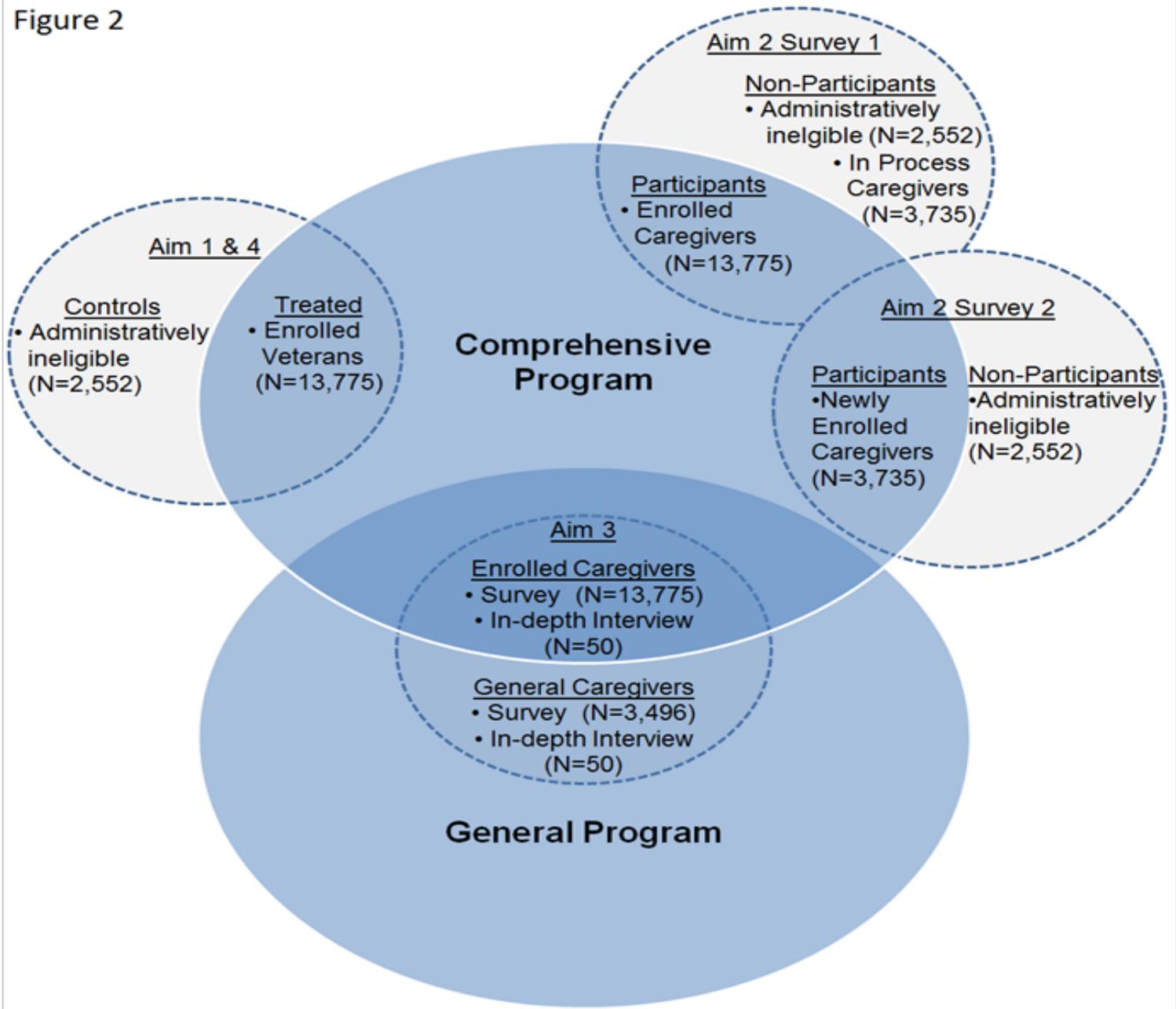


Figure 2



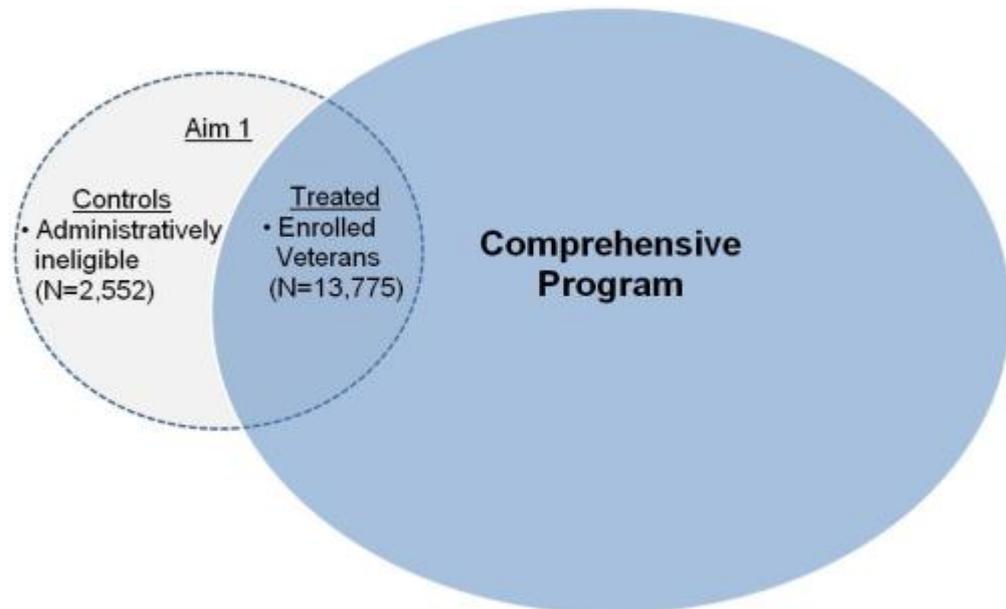
# AIM 1: Does Caregiver support reduce veteran avoidable use?

## Study design

- Pre-post cohort design
- Non-equivalent control groups
  - Increase internal validity and increase the likelihood that we identify “true” program effects that are unbiased by confounding from other contemporaneous change that affect outcomes

# Aim 1 Sample Inclusion

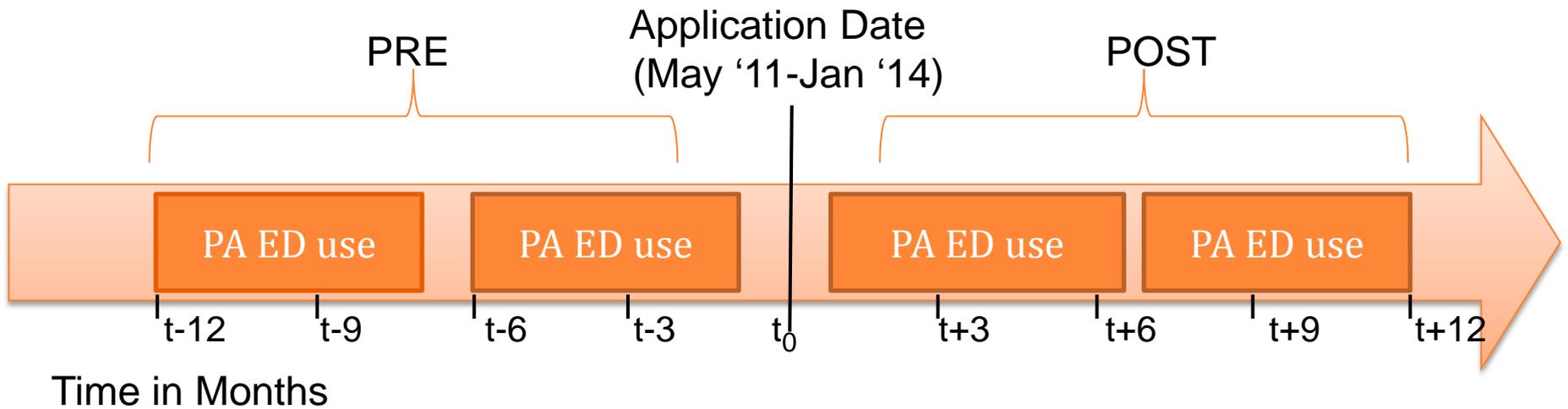
- Treatment group
  - All Veterans whose Caregivers were in The Comprehensive Program Jan. '14
- Control group
  - Veterans 'administratively ineligible' for The Comprehensive Program Jan. '14



# Aim 1 Outcomes—Utilization expected to be sensitive to CSP

- Potentially avoidable utilization
  - Potentially avoidable hospitalizations (PAH) and emergency department (PAED)
- Mental health outpatient care
- Home and Community-Based Services
  - Home-Based Primary Care (HBPC)
  - Skilled home health
  - Unskilled home health (Homemaker Home Health Aide Services)
  - Adult day health
  - Respite care
- VHA perspective – VA-provided and VA-financed health care

# Aim 1 – Longitudinal outcomes in 6 month intervals



# Aim 1 – Covariates

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## Variable Descriptions

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### DEMOGRAPHICS

#### Race

White  
Black  
Other Race  
Unknown

#### Ethnicity

Hispanic

#### Marital Status

Married

### ACCESS TO CARE

#### Eligibility for LTC

Service Connectedness  
Low (<10%)  
Medium Low (11% to 49%)  
Medium High (50% to 69%)  
High (70% and above)

#### Means Test

### Insurance

Tricare  
Other private  
Medicare  
Medicaid  
No non-VA insurance

### HEALTH STATUS

#### TBI Diagnosis<sup>1</sup>

#### SCI Diagnosis<sup>1</sup>

#### Polytrauma Diagnosis<sup>1</sup>

#### Mental Health Diagnoses

PTSD  
Depression  
Substance Use Disorder  
Anxiety Disorder  
Adjustment Disorder

#### TBI & Mental Hlth Diagnosis

#### SCI & Mental Hlth Diagnosis

#### Musculoskeletal

### OTHER COVARIATES

#### Date of Injury

#### Date of Separation from Military

#### Branch of Military Service

Army  
Navy  
Air Force  
Marines

#### Medical Center where PCP located

#### Polytrauma Care Used

Use of PRC PNSs  
Use of PSCT  
Use of POC

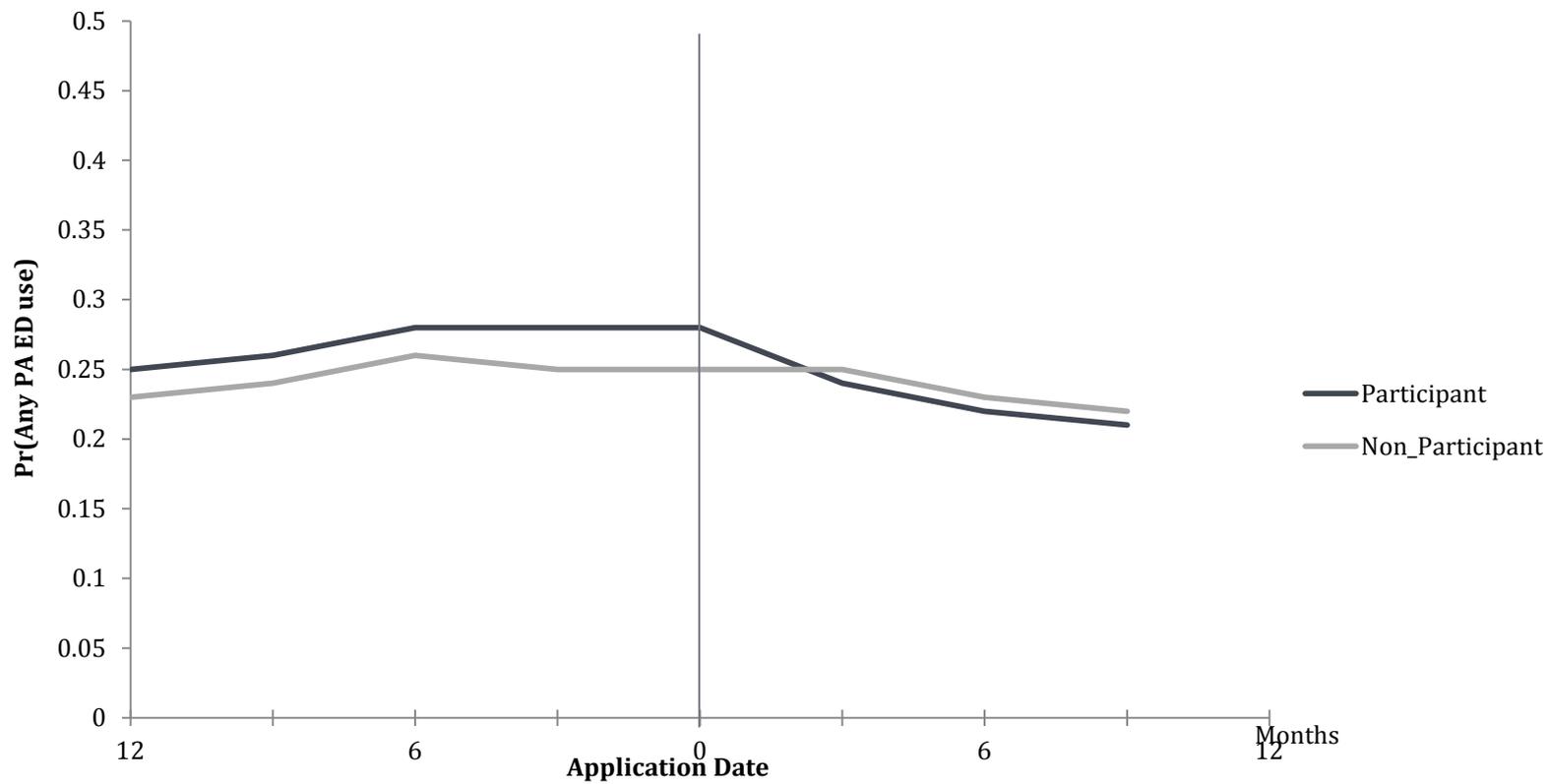
Other?

# Aim 1 Methods – (1) Propensity Score Methods

- Concern that control and treatment groups may be different at baseline
- Use propensity score to construct inverse probability of treatment weighting (IPTW) (Austin, 2011; Rosenbaum, 1987)
- Apply weights to create a pseudo-population
  - Distribution of the observed baseline covariates is independent of treatment.
  - Weights allow creation of an analytic sample that is more comparable between the two groups
- Obtain Average Treatment Effect among the Treated (ATT)(Morgan & Todd, 2008) in our multivariable outcomes models

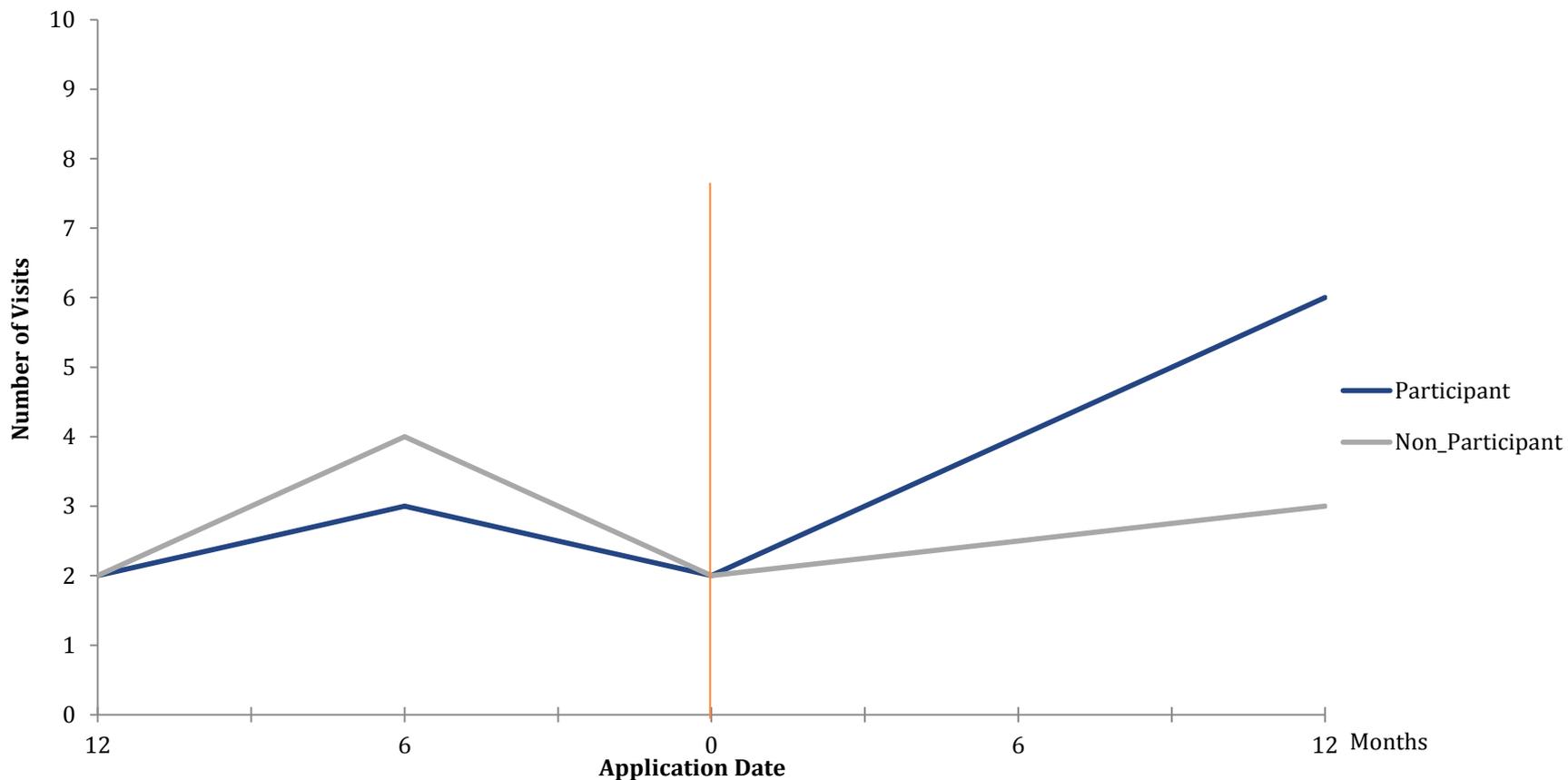
# Aim 1 EXAMPLE OF POTENTIAL FINDINGS -- SIMULATED RESULTS

## Impact of CSP on Potentially Avoidable ED Visits



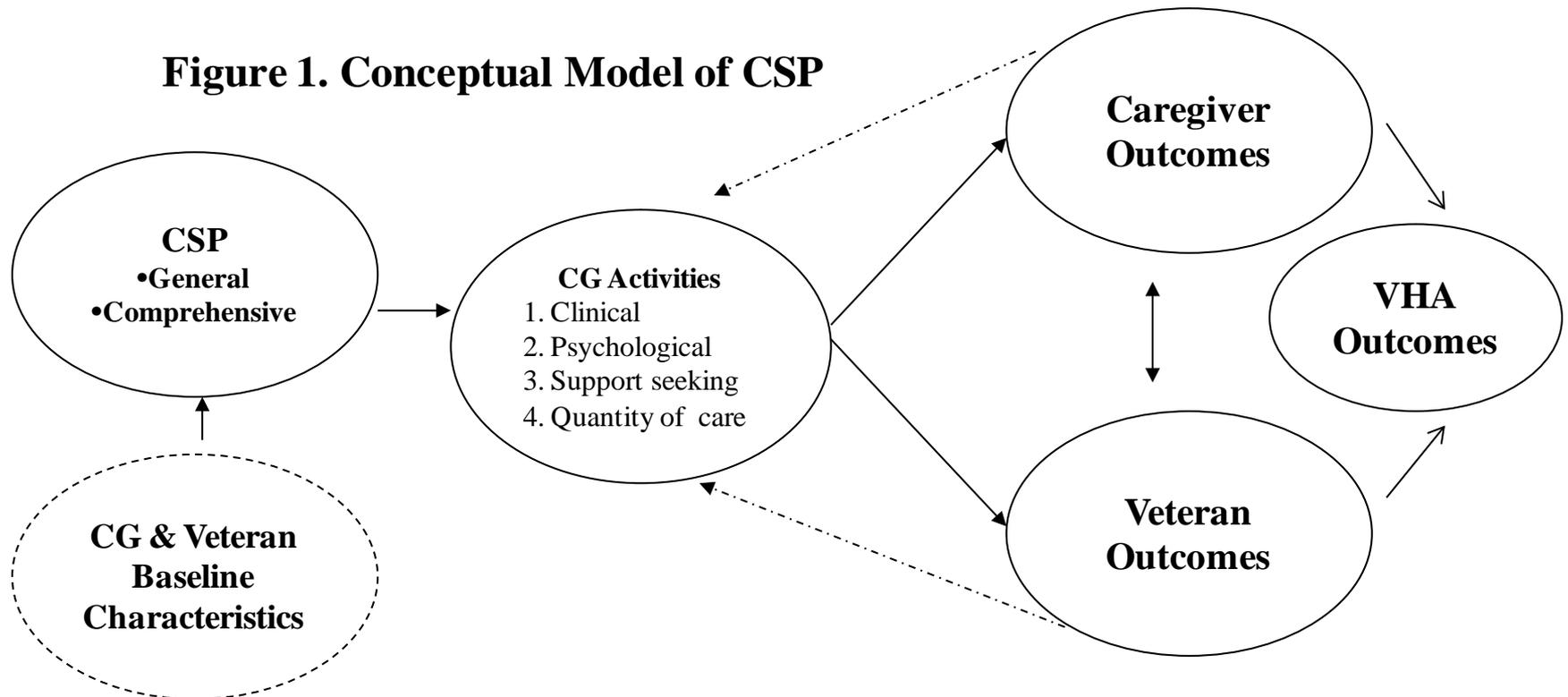
# Aim 1 EXAMPLE OF POTENTIAL FINDINGS -- SIMULATED RESULTS

## Impact of CSP on Mental Health Outpatient Visits



# AIM 2: How does Caregiver support affect Caregiver well-being

**Figure 1. Conceptual Model of CSP**



## Aim 2 - Caregiver Activities

Contents	Source	Info About: CG or V
<b>Caregiver Activities (clinical; psychological; support seeking; quantity)</b>		
A. Medication Management/ Adherence	Voils et al. 2012	V
B. Coping Skills	Pruchno & Resch 1989b	CG
C. Self-care (Health Behaviors & Exercise)	REACH I 2001 & REACH II 2004	CG
D. Community Engagement	FACES 2009	CG
E. Communication with Providers	Adapted from CAHPS© 2013	CG
F. Continuity of Care	CAHPS© 2013 & REACH II 2004	CG, V
G. Time use (Quantity of Caregiving and Work Shocks)	Health and Retirement Study 2012 & FACES 2009	CG

## Aim 2 – Caregiver Outcomes

<b>Contents</b>	<b>Source</b>	<b>Info About: CG or V</b>
<b>Caregiver Outcomes</b>		
A. Perceived Financial Strain	Given et al. 1992	CG
B. Positive Aspects of Caregiving	Tarlow et al. 2004	CG
C. CAHPS©	CAHPS© 2013	CG, V
D. Zarit Burden	Bédard et al. 2001 & Zarit 1980	CG
E. CESD-10	Andresen et al. 1994	CG
F. Relationship Satisfaction	Lawton et al. 1989 & Struchen et al. 2002	CG
G. Health Shocks	Health and Retirement Study 2012	CG

## Aim 2 – Veteran Outcomes

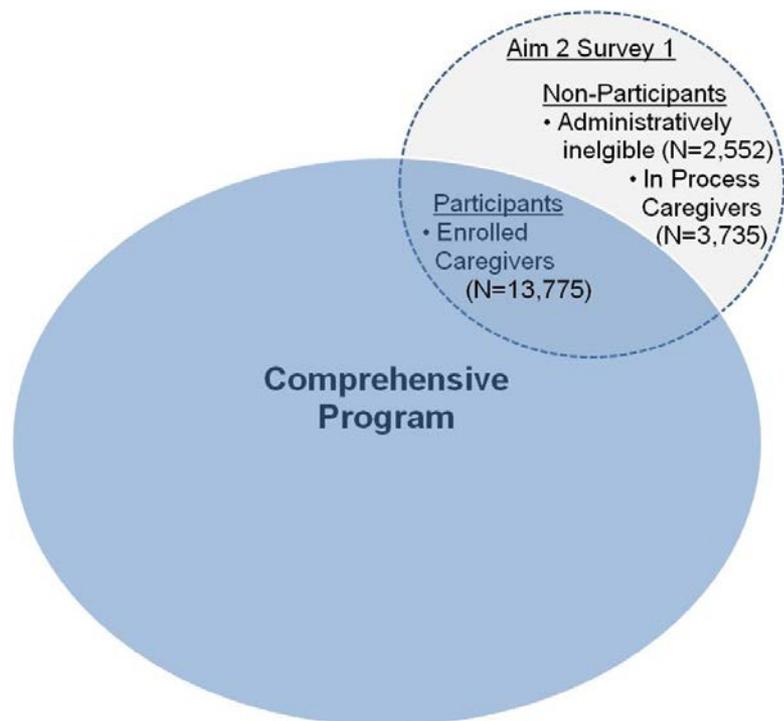
<b>Contents</b>	<b>Source</b>	<b>Info About: CG or V</b>
<b>Veteran Outcomes</b>		
A. Veteran Functioning	Scoring Guide, Caregiver Support Program	V
B. Veteran non-VA Health Care, incl mental health	Adapted from Bhandari & Wagner 2006	V
<b>Other Key Characteristics</b>		
C. Demographics, Socioeconomics	Health and Retirement Study 2012	CG, V
D. Use and value of CSP programs/services	Created by study team	CG

# AIM 2: How does Caregiver support affect Caregiver well-being?

## Objective (1)

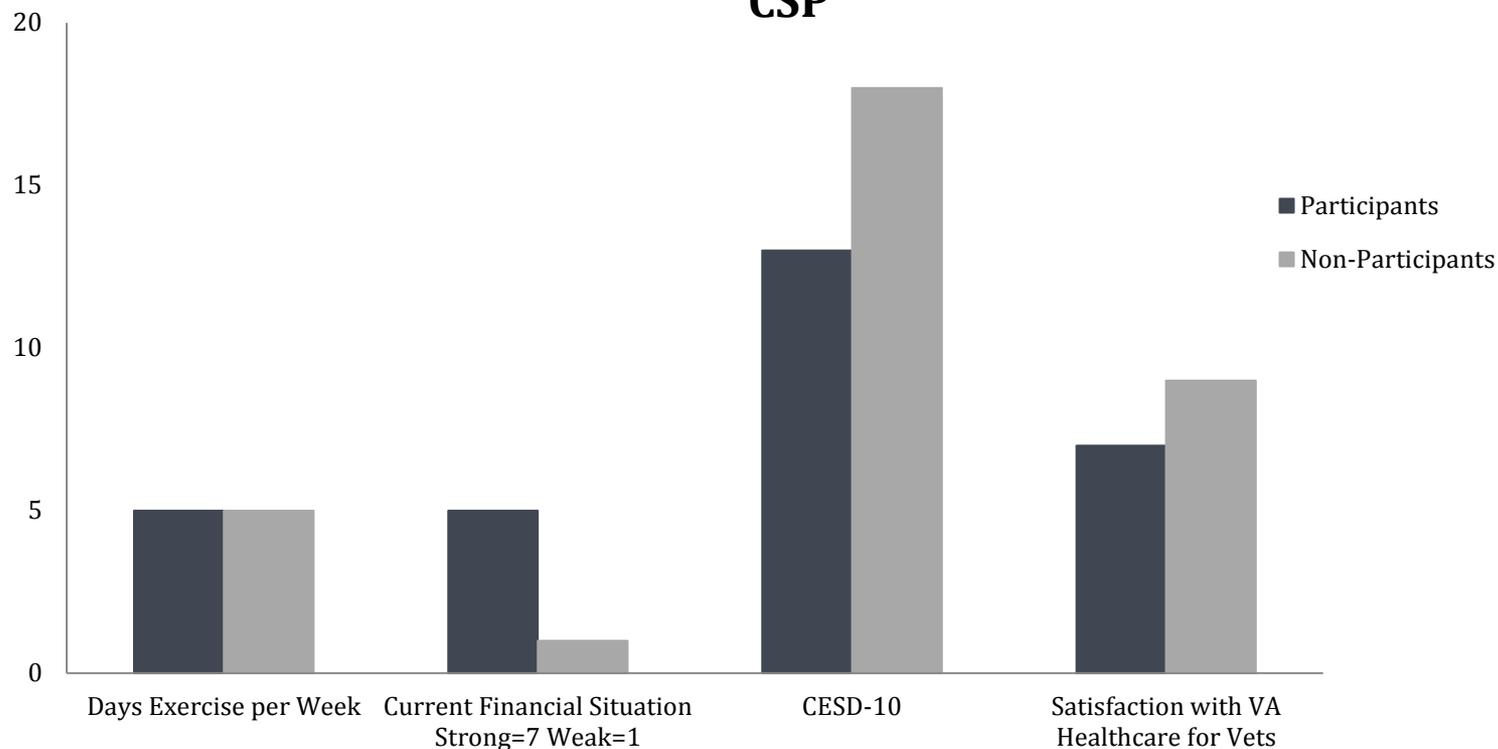
Describe differences in Caregiver activities, skills, and outcomes between participants and non-participants

Sample for cross-sectional survey



# AIM 2: EXAMPLE OF POTENTIAL FINDINGS --SIMULATED RESULTS

## Differences in Caregiver Well-being by Participation in CSP

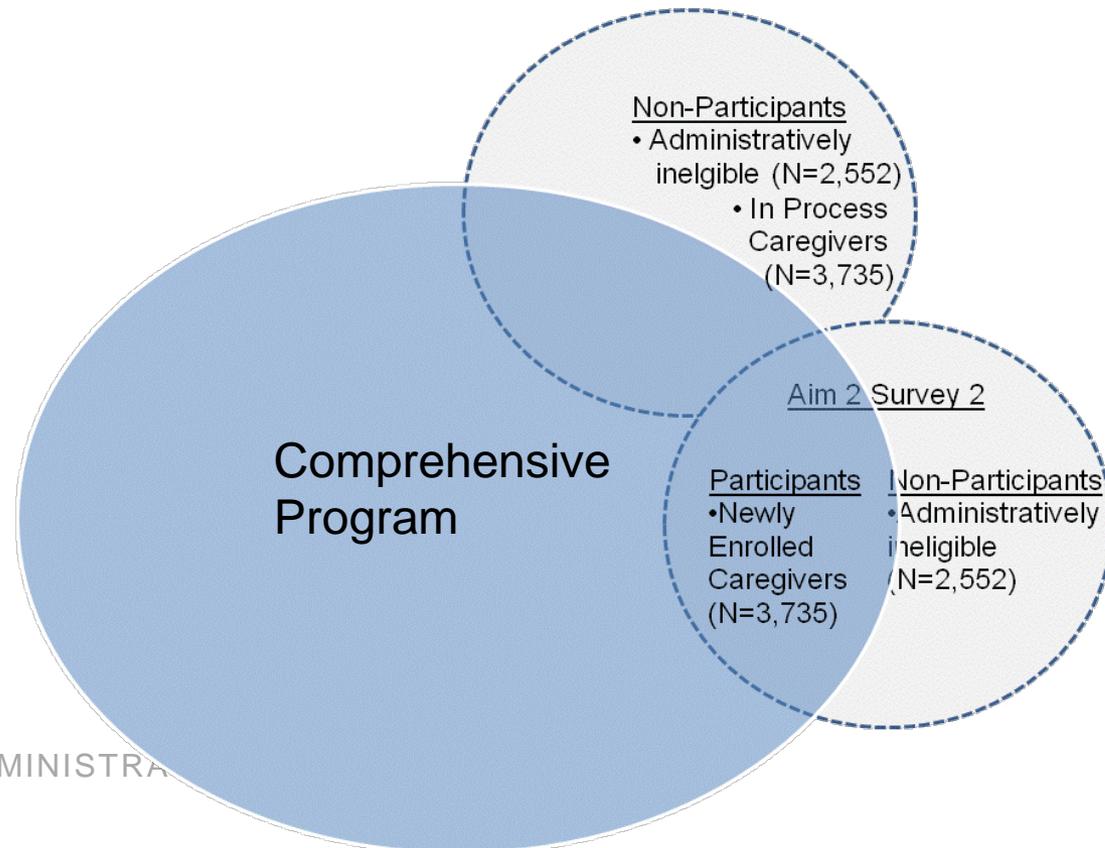


# AIM 2: How does Caregiver support affect Caregiver well-being?

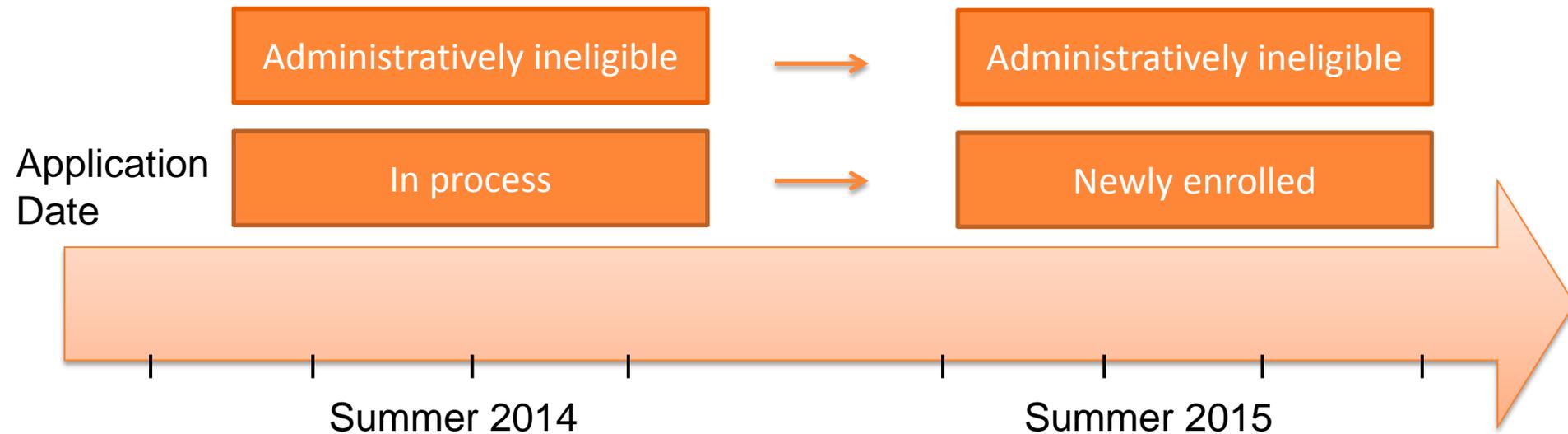
## Objective (2)

Describe the impact of The Comprehensive Program on Caregiver activities, skills, and outcomes by comparing changes in outcomes for new participants and non-participants

## Sample

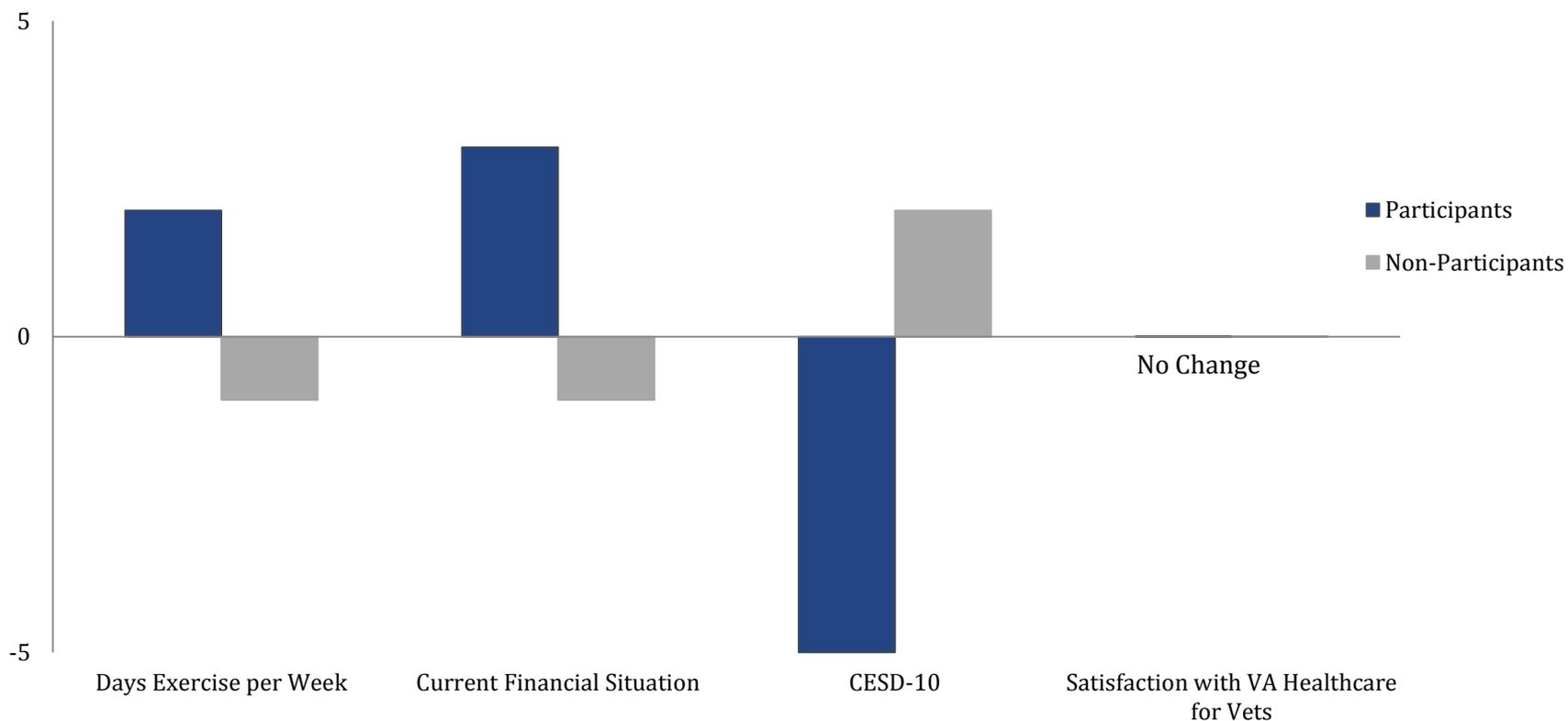


## Aim 2 – Objective (2) Sample



# AIM 2: EXAMPLE OF POTENTIAL FINDINGS – SIMULATED RESULTS

## Impact of CSP on Caregiver Well-being



## Aim 2 -Survey Administration

- Recruiting
  - Letter mailed to all eligible Caregivers with
    - generic web link to survey
    - ~\$2-\$3 token incentive (i-tunes credit or Forever stamps)
  - Email sent to Caregivers with individualized web link to survey
    - +85% of Caregivers provided email addresses
  - Will send reminder postcard at 2 weeks
- Caregiver can call by phone if do not want to complete by web

## AIM 3: How do Caregivers use and value components of the Comprehensive program and the General program?

Study Design: Sequential quantitatively-driven mixed method design

(QUAN → *qual*)

- (1) Quantitative: Survey of Caregivers (Aim 2) will provide a population level picture of which services Caregivers use the most and regard as most helpful.
- (2) Qualitative: Individual semi-structured interviews to understand in-depth contextual information about experiences using services
- (3) Integrate findings at results phase. Qualitative to enhance understanding and interpretation of quantitative results (Morse & Niehaus 2009)

## AIM 3: How do Caregivers use and value components of the Comprehensive program and the General program?

### Sample

- Quantitative: Aim 2 survey sample of treated/enrolled Caregivers
  - 13,775 Comprehensive Program Caregivers
  - 3,496 General Program Caregivers
- Qualitative: Purposeful sampling to select Caregivers from among 10 local programs with attention to geography, program size, services offered, etc.
  - 50 Comprehensive Program Caregivers
  - 50 General Program Caregivers

# INITIAL DRAFT – TO BE REFINED

## A. Use and Value of CSP Programs/Services

1. Do you use [insert service from list below]? (yes/no)
  - a. Building Better Caregivers
  - b. Caregiver Support Lline;
  - c. Self-care courses;
  - d. Peer support program
  - e. Direct counseling in person from a CSC at your usual VAMC
  - f. Direct counseling on the phone from a CSC at your usual VAMC;
  - g. Referral for other services from a CSC?
  - h. Training from a CSC online
  - i. Training from a CSC face to face
  - j. Training from a CSC Online?
  
2. How often would you say you access this service?
  - a. Once a day
  - b. Once a week
  - c. Once a month
  - d. Once every few months
  - e. Once a year
  
3. On a scale of 1 to 10, with 1 being not helpful at all and 10 being very helpful, how helpful is [services in q. 1] program for you?
  
4. [ASK ONLY COMPREHENSIVE CAREGIVERS] On a scale of 1 to 10, with 1 being not at helpful and 10 being very helpful, how helpful would you say are the following parts of the Caregiver Program?
  - a. Stipend
  - b. Travel expenses when Veteran receives care
  - c. Health insurance for you (CHAMPUS)
  - d. Mental health services for you
  - e. Caregiver training provided by Easter Seals
  - f. Respite care
  
5. How has the stipend impacted your life? [Text Box]
  
6. Please state the extent to which you agree or disagree with the following statements? (5 response options, 1= strongly disagree to 5= strongly agree). The caregiver support program has helped me:
  - a. To navigate the VA health care system
  - b. To schedule appointments for the Veteran
  - c. To schedule appointments for myself
  - d. As a point of entry to the VA when the Veteran was discharged from the military.

## Aim 3 Analysis Plan - Quantitative

- For each component and service of CSP
  - Mean frequency of use
  - Mean level of perceived helpfulness
  - Mean agreement that the CSP has helped them with caregiving activities.
- Calculate cross-sectional differences by Caregiver criteria, including socioeconomics and demographics.

## Aim 3 Qualitative

- 30 minute in-depth interviews with each Caregiver by phone
- We will ask participants to reflect upon their experiences with the program and discuss:
  - What portions of the program they used and under what contexts and conditions
  - What they found more and less helpful
  - Needs not addressed by the program
- Prior to fielding the interviews, we will consult with key stakeholders at Central Office, including program designers, to refine our questions.
- All interviews will be audio recorded and transcribed.

## Aim 3 Analysis Plan - Qualitative

- Directed approach to content analysis
- Will develop codes based on predetermined categories, such as those derived from interview questions.
  - Also allow emergent themes.
- Use theme matrix technique to identify patterns in the data based on program or Caregiver characteristics.
  - See if they might be differences

## Aim 4 -What is the value of services offered?

This aim is provisional and formative.

### Study Design

- Hybrid approach: (a) data from Aims 1-3; (b) budget data, and (c) a brief survey of Caregiver Support Coordinators on time use
  - Model the effect of The Comprehensive Program on Veteran health care costs
  - Quantify delivery costs of CSP programs and services and compare them to program components considered of very high value
- Achieving this aim will allow for an initial assessment of the relative value of programs and services and return on investment for VHA

## Aim 4 -Proposed metrics to frame value

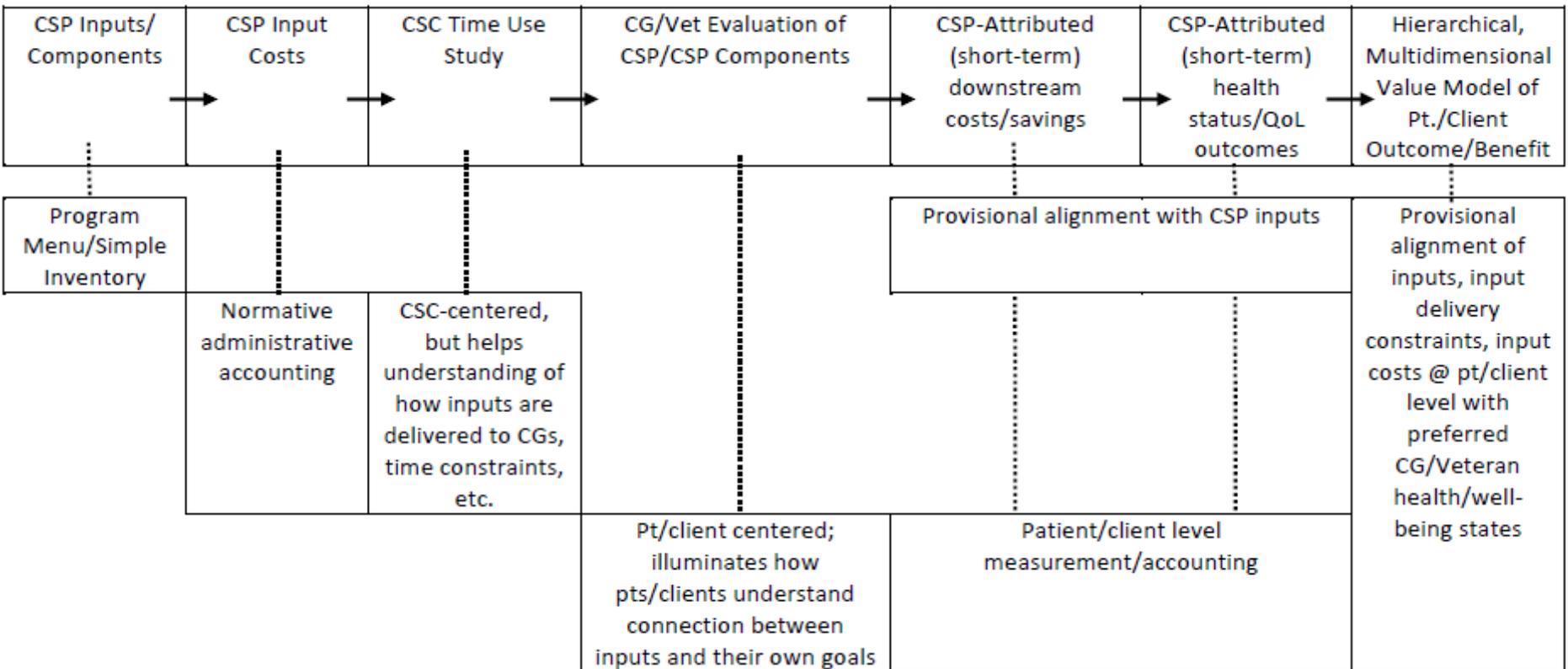
### Costs:

- Direct input costs: cost of programs and services
- Indirect input costs: cost of CSC time spent on specific tasks
- Direct VHA costs: Veteran resource utilization costs

### Utility:

- Caregiver satisfaction with VHA, CSP and its benefits and services
- Caregiver evaluation of relative usefulness of national programs (eg Caregiver Support Line; Caregiver training)
- Caregiver evaluation of relative usefulness of Comprehensive Program services (e.g. Stipend, health insurance, mental health care)

# Aim 4 - What is the value of services offered?



# Questions and Comments?

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# Draft Interview Protocol

- Please tell me about your experience using the \_\_\_\_\_ program.
- When did you start using it? How were you referred?
- What were the circumstances that led to you enrolling in the program?
- Which specific program components have you used?
- Did you have experience using (INSERT SERVICE, for example Caregiver support hotline)? If so, would you tell me about your experience with that.
- Tell me about those parts of the program that you found most helpful about the \_\_\_\_\_ program?
- Tell me about those parts of the program that you found least helpful?
- Tell me about any needs you had as a Caregiver that were not covered by the program.
- Tell me about any parts of the program that were available but you could not access?
- **Note:** We will probe all themes elicited spontaneously, during the interview.

# Menu of VA Services

## In-Home Care

- Skilled Nursing
- Home Health Aide
- Home Based Primary Care
- Veteran Directed Home & Community Based Care

## Respite Care

## Services to Address Mobility Issues

- Equipment
- Home Modification
- Automobile Modification

## Education and Training

## Financial Support

- Aid and Attendance
- Caregiver Stipend (Post 9-11)

## Information and Referral

- Caregiver Web site: [www.Caregiver.va.gov](http://www.Caregiver.va.gov)
- Caregiver Support Line: **1-855-260-3274**

## Caregiver Support

- Support Groups
- Caregiver Support Coordinators
- Peer Support Mentoring Program
- Caregiver Education and Training
- Building Better Caregivers™

## Standardized Core Curriculum



# Program of Comprehensive Assistance for Family Caregivers

## Caregiver Education and Training

### Standardized Core Curriculum

- Developed in collaboration with Easter Seals
- In-person, workbook/DVD, or web-based
- Includes modules on:
  - Caregiver Self-Care
  - Home Safety
  - Basic Caregiver Skills (vital signs, etc)
  - Providing Personal Care
  - Managing Challenging Behaviors
  - Resources (legal, financial, VA, community, advocacy)



### Training Data Update:

- More than 18,400 Family Caregivers have completed training to date

## On-going Support to Veteran & Caregiver

- In-Home initial visit by VA Clinicians
- Well-being checks every 90 days or as clinically indicated
- Home visits are supportive and instructive
- Evaluation of Veteran and Caregiver's physical and emotional well-being
- Recommendations for additional training, support, equipment, etc.