

Informal Caregiver Support Policies & Use of VA Health and Vocational Rehabilitation Services

VA HERC Health Economics Cyber Seminar
October 21, 2020

Megan Shepherd-Banigan, PhD, MPH

Research Scientist, Health Services Research and Development, Durham VAMC
Assistant Professor, Department of Population Health Sciences, Duke University





Overview

- RWJF S4A Mechanism
- Background
- Opportunities in VA
- Research Question 1
 - To explore how caregiver support facilitates engagement with medical and vocational/education services?
- Research Question 2
 - Examine if institutional support for caregivers impacts time to use of the post 9/11-GI Bill benefit, VR&E, and supported employment?
- Implications
- Q&A



Poll Question #1

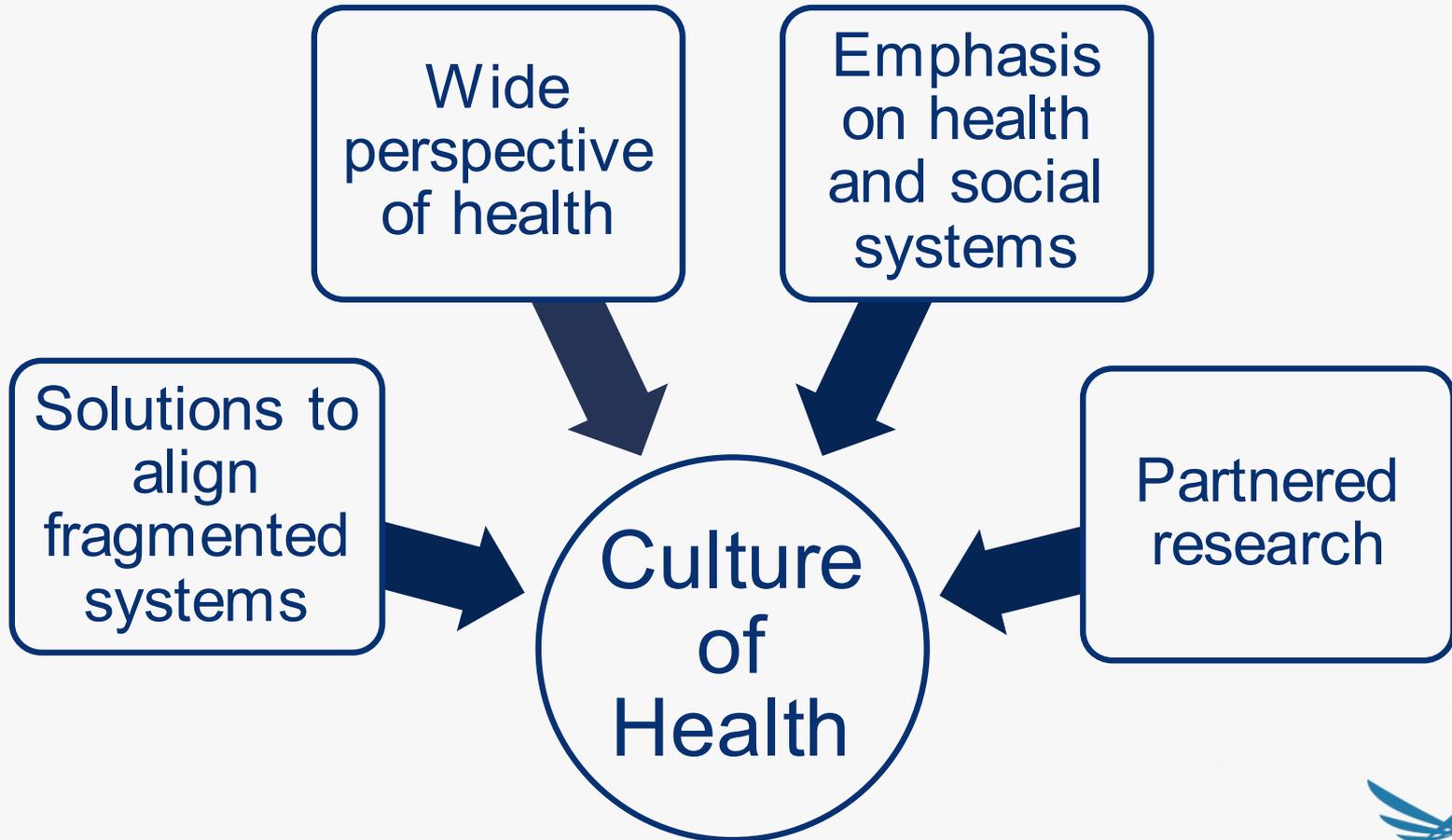
- What is your primary role in VA (*pick all that apply*)?
 - Student, trainee, or fellow
 - Clinician
 - Researcher
 - Administrator, manager or policy-maker
 - Other



Poll Question #2

- I am fairly familiar with supported employment, the post 9/11 GI Bill and/or VR&E (*pick on answer*)?
 - Agree
 - Somewhat agree
 - Disagree

RWJF Systems for Action



Robert Wood Johnson
Foundation

Acknowledgements: Team and Partners

VA HSR&D Durham

Courtney Van Houtven, PhD

Terri Pogoda, PhD

Nina Sperber, PhD

Valerie Smith, PhD

Karen Stechuchak, MS

Kevin McKenna, MPH

Katherine Miller, MSPH

Emili Travis, BA

VA CARES Evaluation Team

(PI: Van Houtven)

Caregiver Support Program VACO

Margaret Kabat, LCSW-C, CCM

Jennifer Henius, LCSW

***Citation:** Shepherd-Banigan, M, Sperber, N, McKenna, K, Pogoda, T, Van Houtven, CH. Leveraging institutional support for family caregivers to meet the health and vocational needs of patients with disabilities. Nursing Outlook. 2019 Sep 27. pii: S0029-6554(19)30272-6. doi: 10.1016/j.outlook.2019.08.006*

BACKGROUND



What is an informal caregiver?

- A family member or friend who provides cares for a loved one
- May conduct nursing tasks, help loved one to accomplish activities of daily living, protect/supervise, coordinate with health care teams, and attend medical appointments

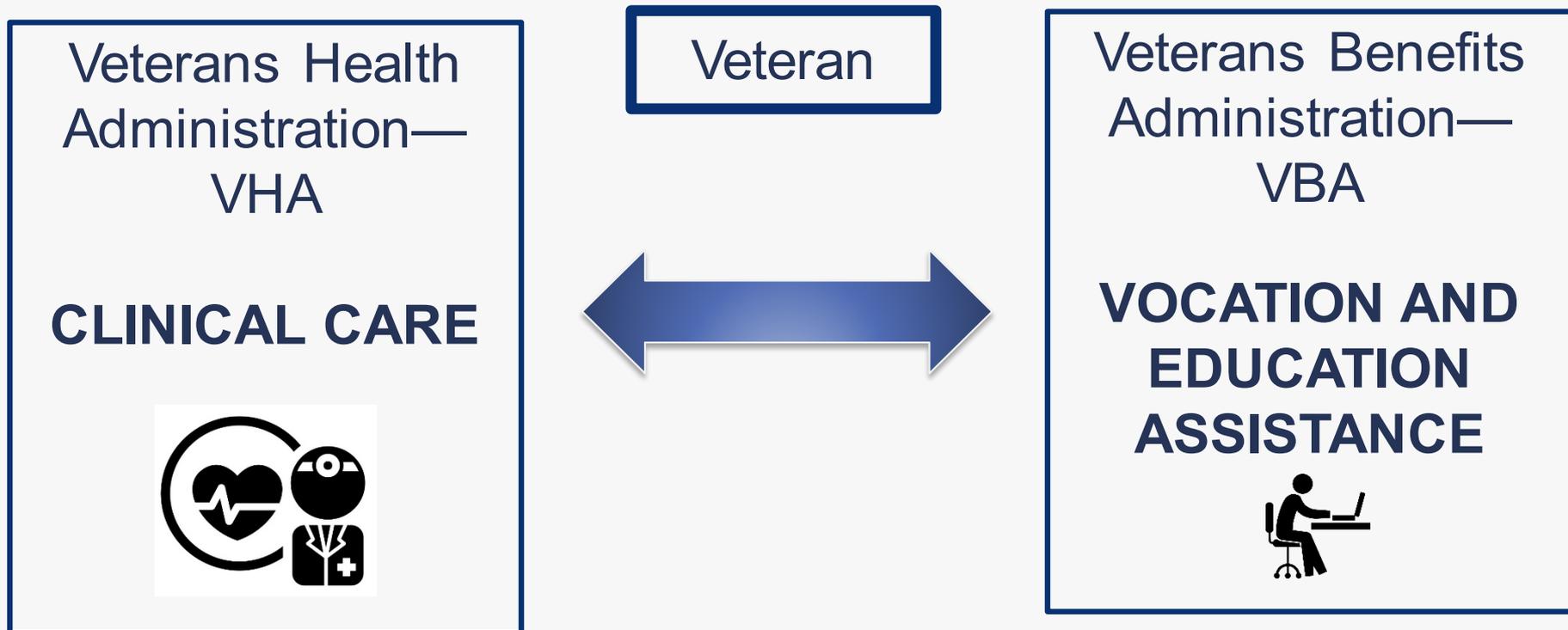
Complex health and social needs

Veteran

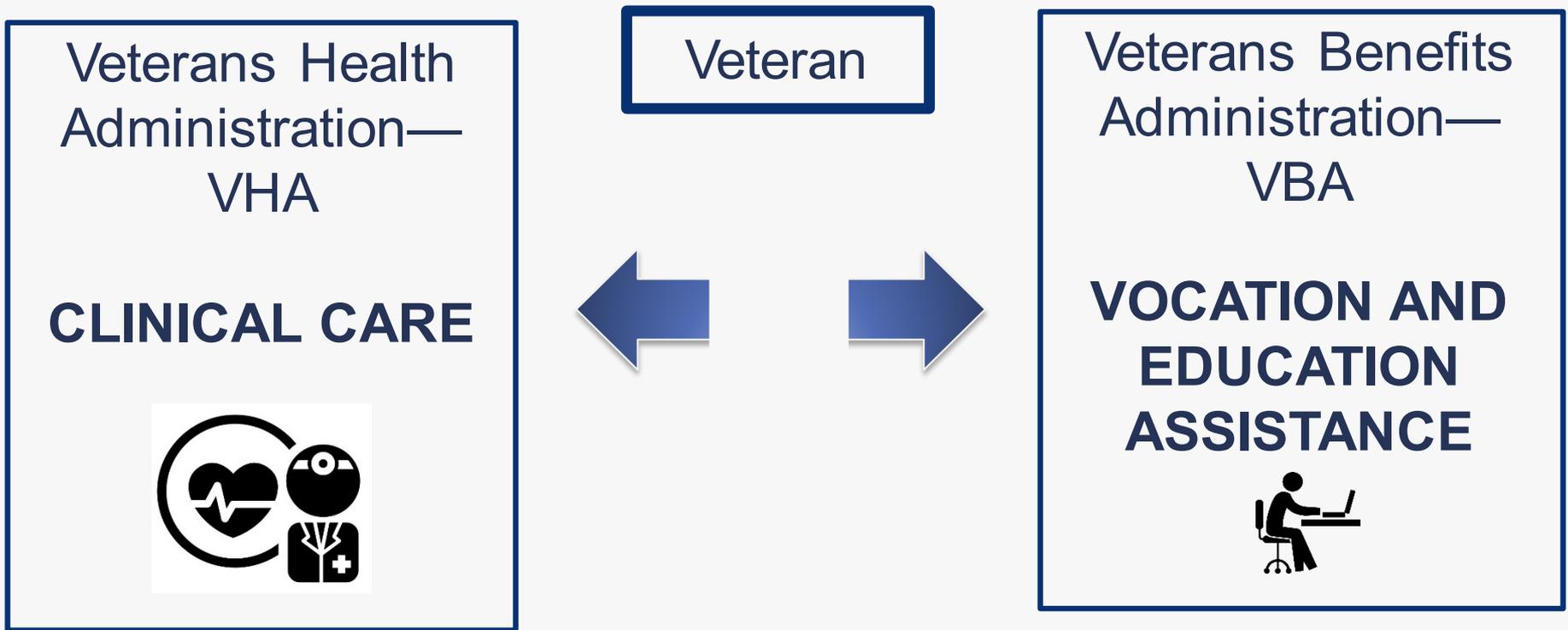
- 3.3 million deployed since 2001
- 14% PTSD; 19% TBI
- Challenges:
 - Maintaining social relationships, employment, education
 - Economic vulnerability
 - Decline in health



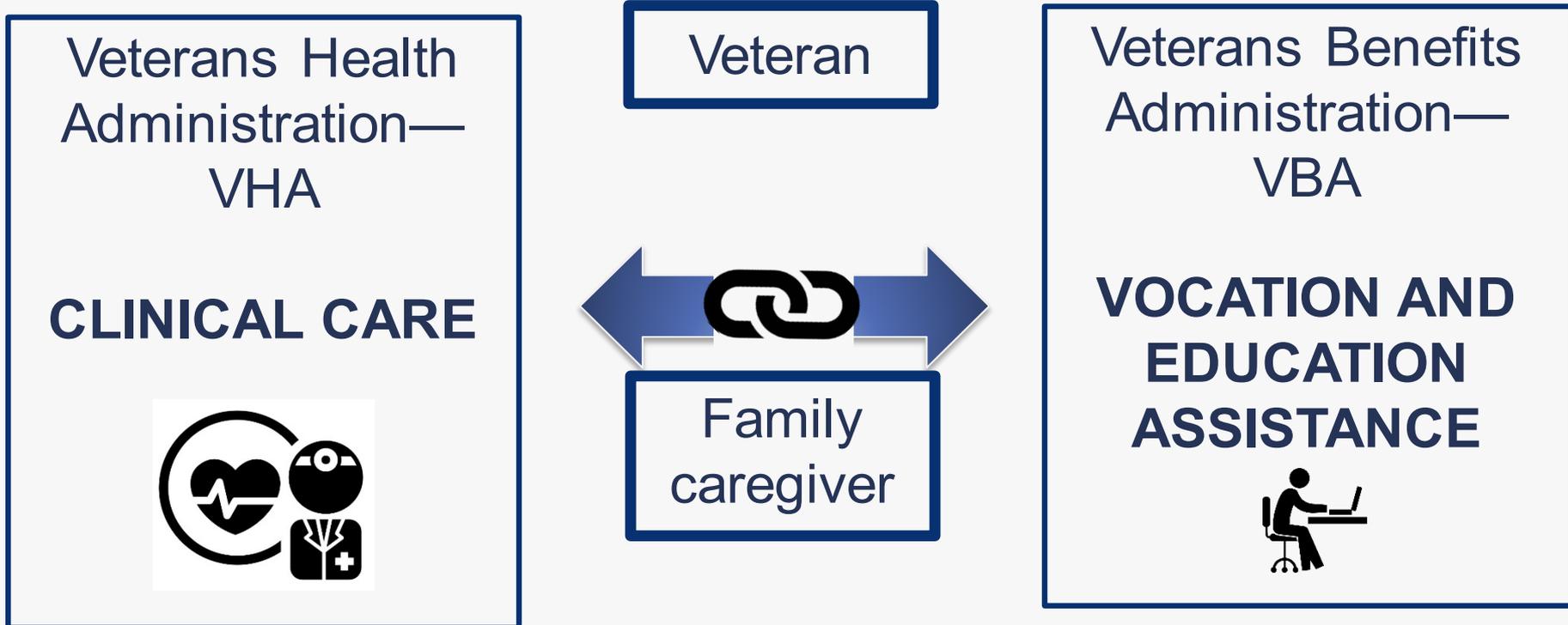
VA offers services to meet Veteran complex health and social needs



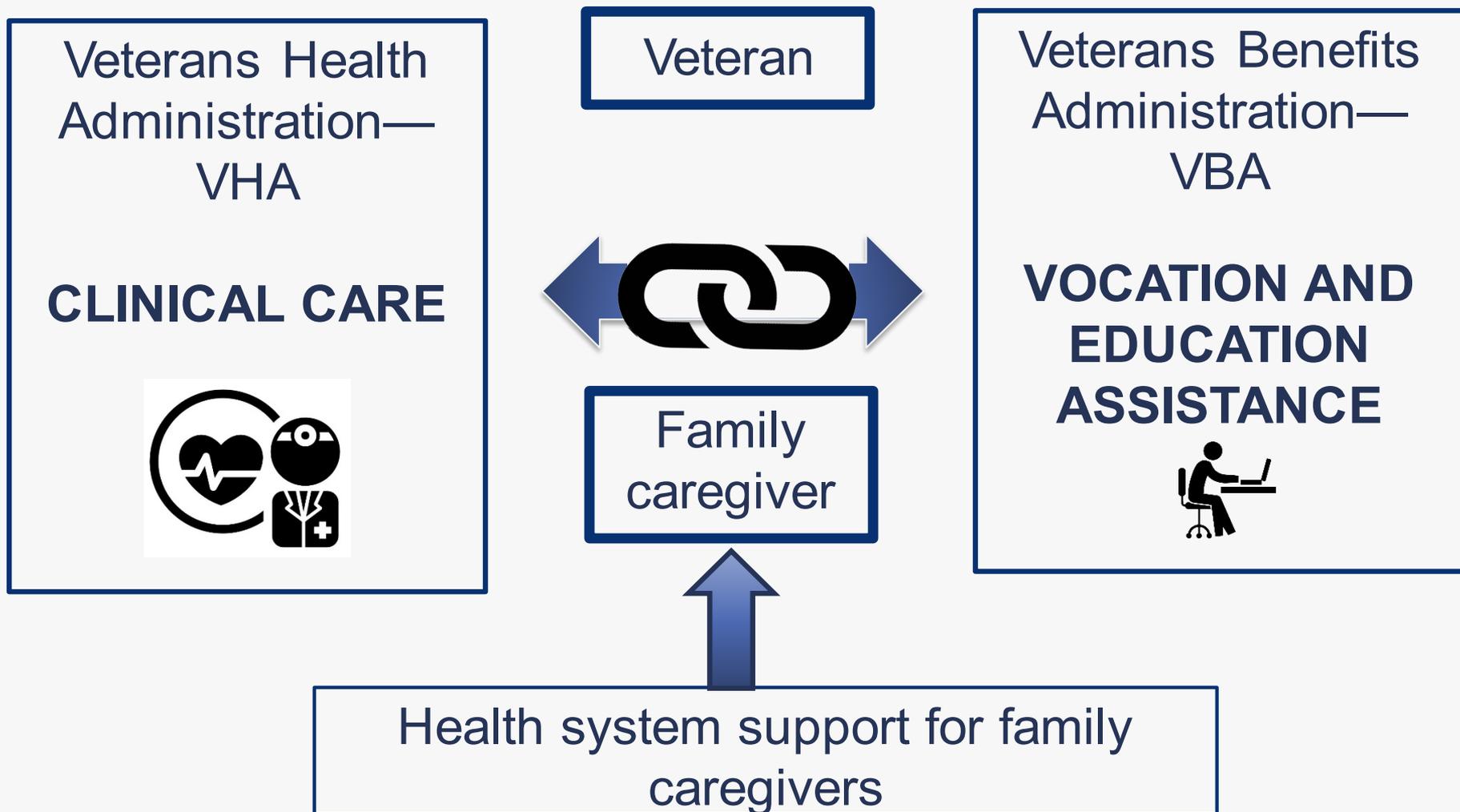
VA services delivery is often fragmented



Family caregivers can help to coordinate care to meet complex health and social needs



Support for caregivers can augment the skills needed to coordinate medical and non medical services



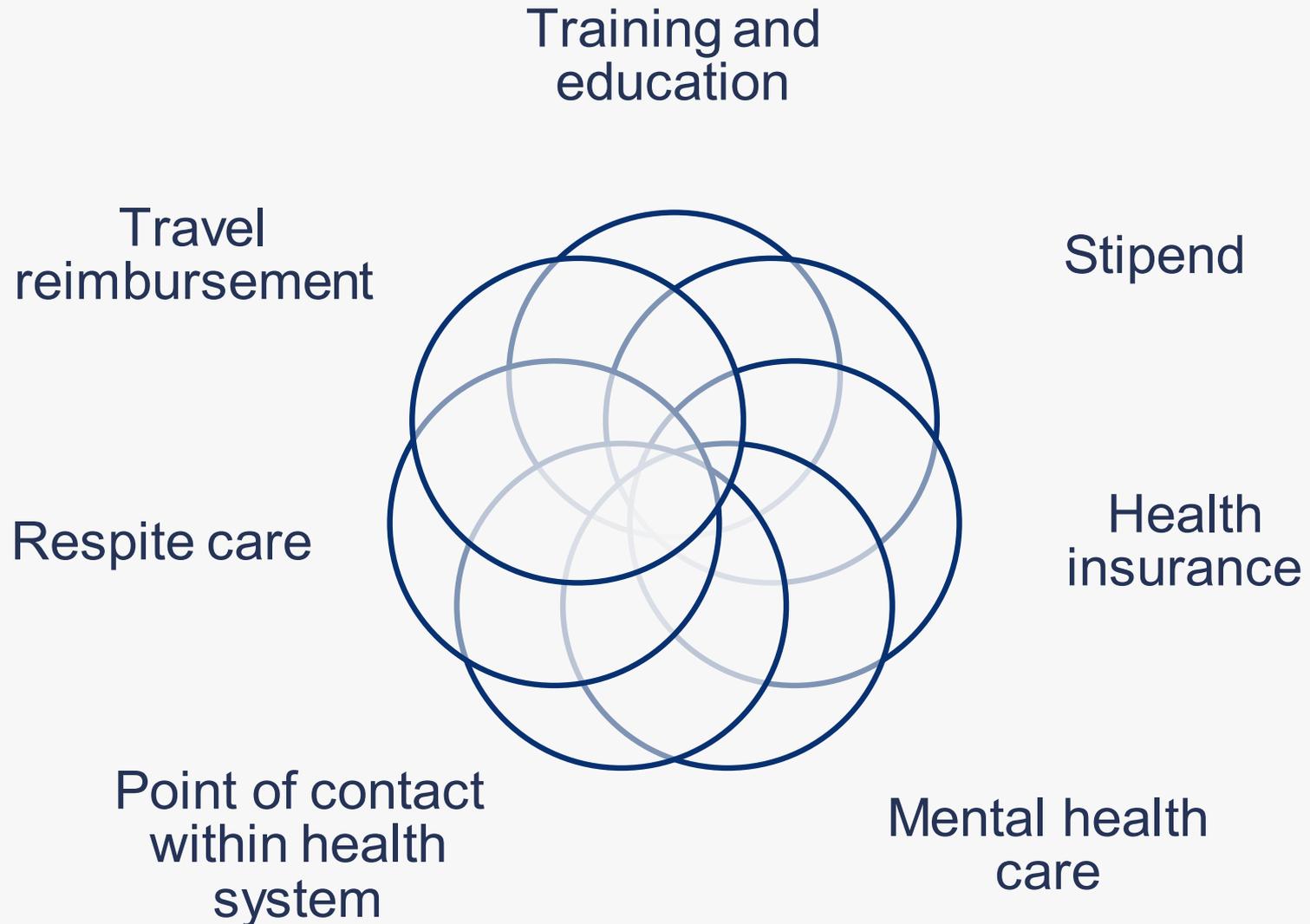
Opportunities in VA

VA Family Caregiver Support Programs



- PGCSS: Program of General Caregiver Support for caregivers
 - Eligible Veterans from all eras in need of a caregiver
- PCAFC: Program of Comprehensive Assistance for Family Caregivers
 - Eligible Veterans injured in the line of duty on or after 9/11/2001
- Mission Act of 2018

PCAFC services that build caregiver capacity to navigate the health system





Research Questions

RQ1. To explore how caregiver support facilitates engagement with medical and vocational/education services?

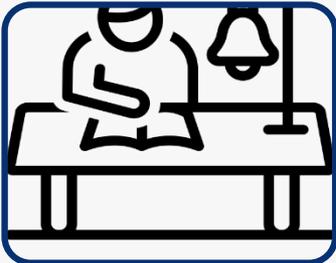
RQ2: Can institutional support for family caregivers through PCAFC impact use of employment/education services (e.g. post 9/11 GI Bill, VR&E, and supported employment)?



VA Vocational rehabilitation and educational assistance programs



Post-9/11 GI Bill



Vocational rehabilitation and employment (VR&E)



Supported employment

Opportunity for Data Integration



CAT Tracker data

- Caregiver demographics
- Veteran/caregiver relationship
- PCAFC application and enrollment data



CDW data

- Veteran demographics, health diagnoses,\
- Service utilization and costs
- Service-related compensation, eligibility priority
- Insurance status
- Nearest medical center
- VISN



VBA data

- Application to/use of VBA services
- Point-in-time, not historical
- Example data fields: use of VR&E Chapters 31 and 36, use and outcome of post 9/11 GI Bill, participate in home loan service, service-related compensation percentage by diagnosis

Opportunity for Data Integration



CAT Tracker data

- Caregiver demographics
- Veteran/caregiver relationship,
- PCAFC application and enrollment data



CDW data

- Veteran demographics, health diagnoses,
- Service utilization and costs
- Service-related compensation, eligibility priority
- Insurance status
- Nearest medical center,
- VISN



VBA data

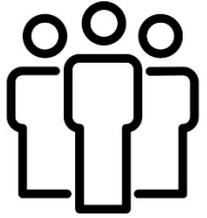
- Application to/use of VBA services
- Point-in-time, not historical
- Example data fields: use of VR&E Chapters 31 and 36, use and outcome of post 9/11 GI Bill, participate in home loan service, service-related compensation percentage by diagnosis

Merged via Veteran SSN

Research Question 1

To explore how caregiver support facilitates engagement with medical and vocational/education services?

Methods



Dyads in which caregivers had enrolled in PCAFC and veterans used one of the employment or education services



26 semi-structured interviews

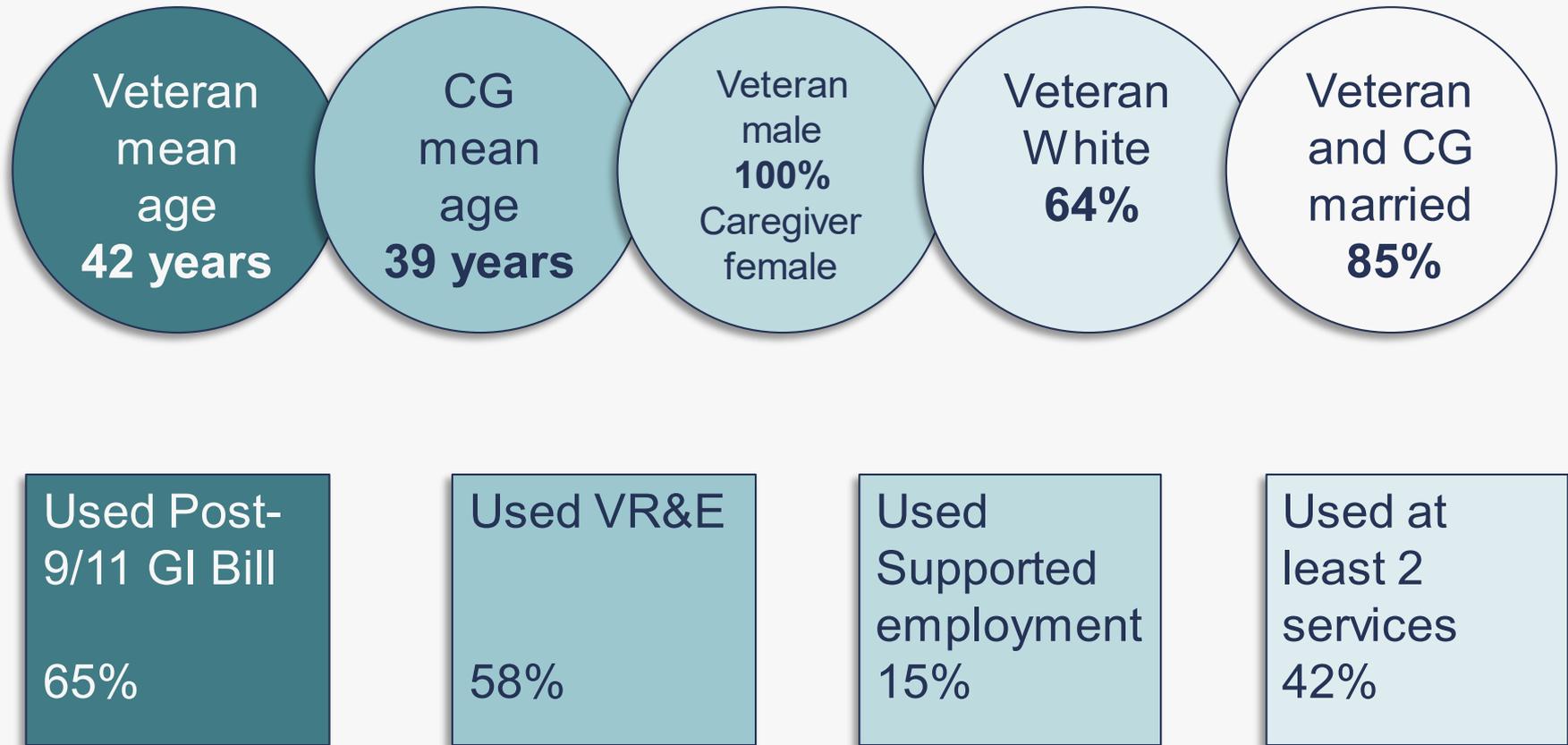
- Telephone
- Veteran and caregiver participate together



Thematic analysis

RESULTS

Descriptive Statistics (n=26)



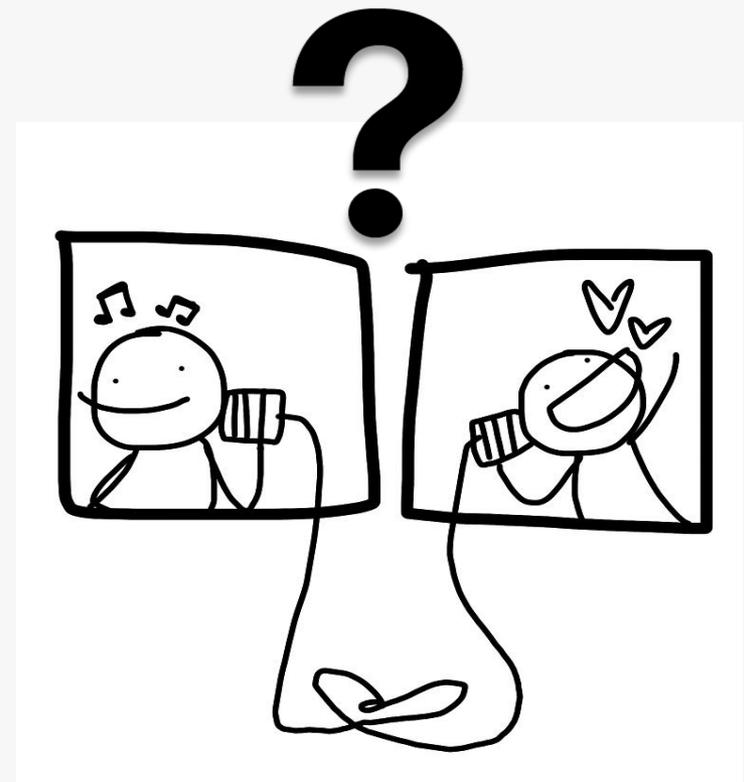
Veteran recovery encompassed health and employment/education needs



“For me it was therapeutic [...] I believe that something like that will help a lot of Veterans [that suffer] from PTSD.” (Veteran)

Lack of interaction between VA Bureaus inhibits VA's ability to address cross-cutting needs

“[there is a] disconnect between the service side, the benefits side, and the VA health care side. Health care providers, the admissions and the benefit [counselors] focus on theirs ... So they might know of [other services], but they wouldn't know how to apply or the details of the program.” [Caregiver]



Caregivers provide range of supportive tasks that help veterans engage in VA services



Instrumental support



Emotional support



Coordination



Advocacy



Informational Support

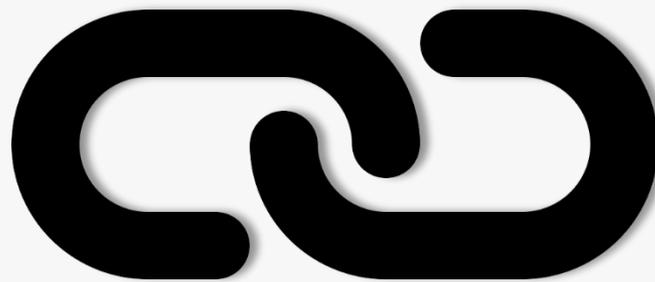
Instrumental support



- Driving Veteran to medical appointments
- Registering for classes
- Helping with assignments
- Completing paperwork for VA benefits or school disability services

Coordination

“Informing [providers] of progress at home, how he’s doing mentally, how he’s doing physically. And then letting them know side effects or anything that [is] going on with medications that he’s taking.” (Caregiver)



Advocacy



*“I was able to help by going to the registrar’s office, going to the special services department, and ensuring that everything was handled, and the professors were aware that he isn’t a joke and he’s here, and he wants to be taken seriously. But it’s more than just the arm that’s missing; it’s the intellectual and emotional disabilities that affect these Veterans more because it’s harder for us able bodies to recognize the difference.”
(Caregiver)*

Institutional support for family caregivers was key for improving veteran use of health care



Point of contact



Financial assistance



Acknowledging caregiver role



Institutional support for family caregivers helped somewhat for employment/education services

One of the nurses there [PCAFC Program] was saying, 'well you could do something for yourself, and you can go to school'".
(Caregiver)



Financial support



Encouragement

Research Question 2

Does participation in PCAFC impact time to use of the post 9/11-GI Bill benefit, VR&E, and supported employment?

Approach



- VHA EHR
- Caregiver Support Program administrative data
- VBA administrative data



- Veterans under 55 whose caregivers applied to PCAFC between May 1, 2010 and Sept. 30, 2014
- Excluded if used service outcome prior to PCAFC application

Approach



2SRI Instrumental variable Cox
proportional hazards regression models
(Cambor-Martinez et al, 2018)

Approach



2SRI Instrumental variable Cox
proportional hazards regression models
(Cambior-Martinez et al, 2018)

Treatment

Ever Approved PCAFC

Control

Applied, never approved PCAFC

IV

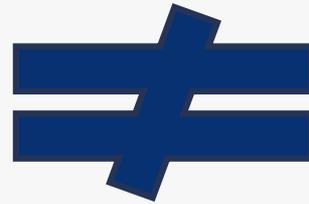
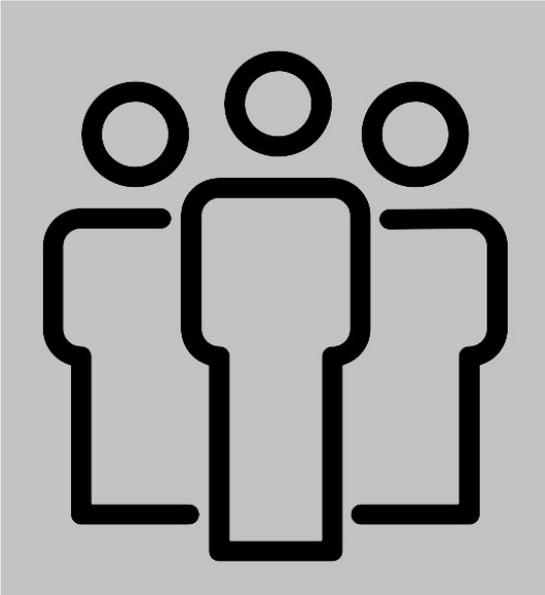
Facility-level percentage approval for PCAFC in the 6 months prior to application

Outcomes

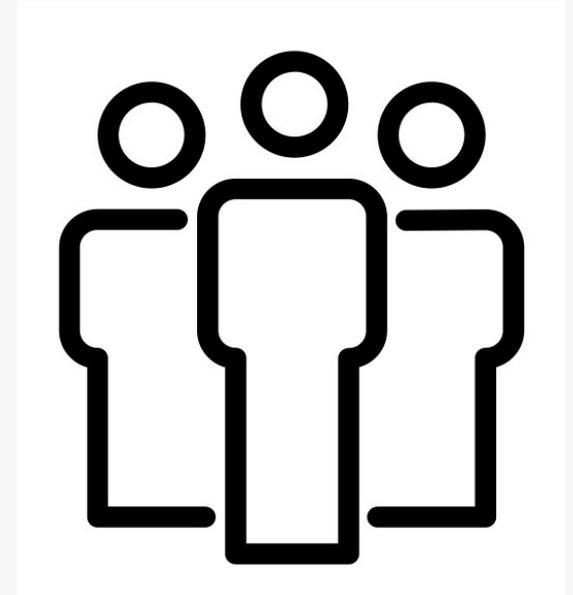
Time to application

Approach: Rationale for IV

PCAFC approved

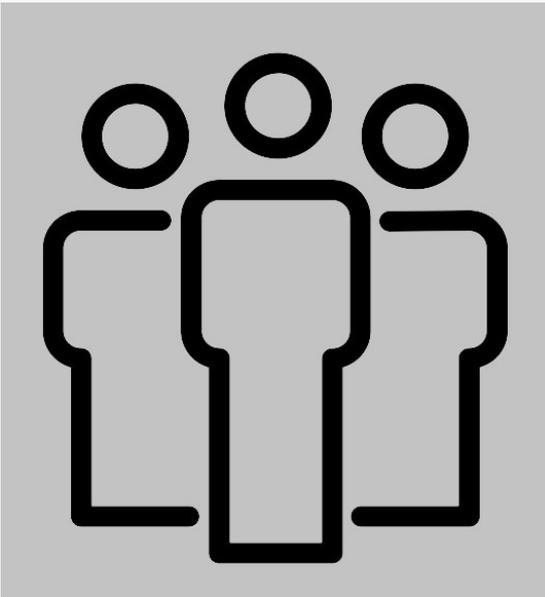


PCAFC denied



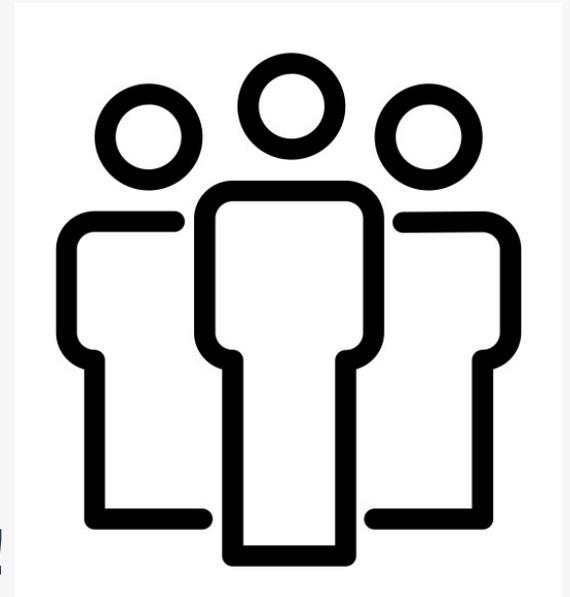
Approach: Rationale for IV

PCAFC approved



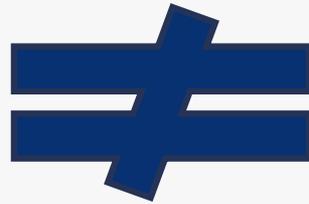
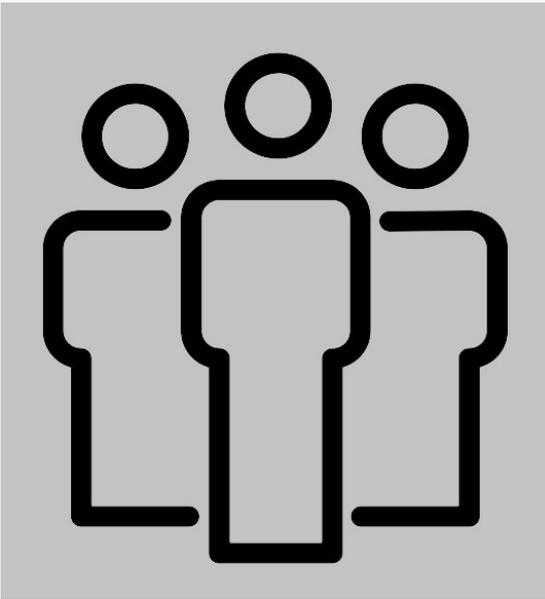
Assume non-random selection!

PCAFC denied



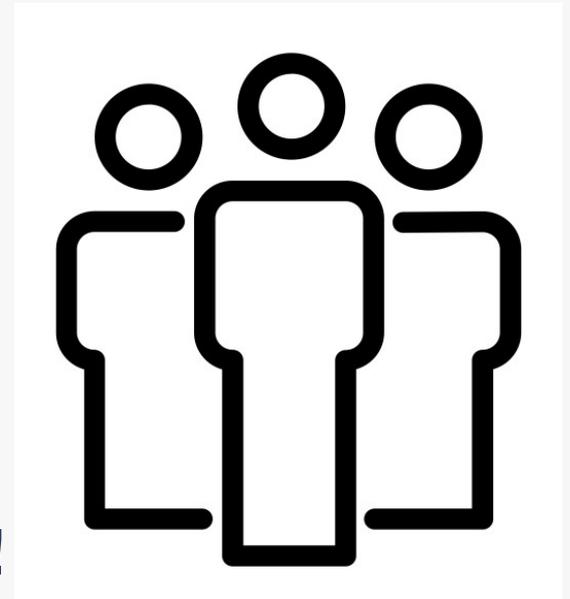
Approach: Rationale for IV

PCAFC approved



Assume non-random selection!

PCAFC denied



IV allows analyst to pseudo-randomize and sort individuals such that their characteristics are balanced across treatment groups

RESULTS

Table 1: Quantitative sample characteristics

	Post 9/11 GI Bill	VR&E	Supported employment
n	9,776	9,390	19,217
% service use	14.7%	19.2%	1.7%
Veteran Age (m, sd)	37 (30, 47)	36 (29, 46)	35 (30, 45)
Veteran male gender	91.6%	91.9%	90.5%
Veteran White race	74%	73.2%	70%
Veteran Hispanic ethnicity	11%	12.1%	12.3%
CG married to Veteran	80%	80.5%	80.4%
Veteran PTSD diagnosis	67.7%	68.5%	68.1%
Veteran TBI diagnosis	27%	27.6%	26.6%
Musculoskeletal disorder/disease	61.9%	59.1%	61.0%

IV Strength and Validity Assumptions

IV strongly
related to
treatment

- F-Statistic > 10

IV validity
(untestable)

- Covariates more balanced across levels of IV vs. treatment
- Assume unobserved also balanced

Hazard ratio (95% Confidence Interval)

Post 9/11 GI Bill

VR&E

Supported
employment

Naïve adjusted
Cox PH model

IV adjusted Cox
PH model (2SRI
+ frailty)

Models adjusted for health comorbidities, demographics, distance to nearest facility, caregiver/veteran relationship, VA-level disability and insurance variables, service use, facility fixed effects, and application time period fixed effects.

Instrumental variable=facility-level percentage approval for PCAFC in the 6 months prior to application

Hazard ratio (95% Confidence Interval)

	Post 9/11 GI Bill	VR&E	Supported employment
Naïve adjusted Cox PH model	0.94 (0.86, 1.04)		
IV adjusted Cox PH model (2SRI + frailty)	1.00 (0.45, 2.22)		

Models adjusted for health comorbidities, demographics, distance to nearest facility, caregiver/veteran relationship, VA-level disability and insurance variables, service use, facility fixed effects, and application time period fixed effects.

Instrumental variable=facility-level percentage approval for PCAFC in the 6 months prior to application

Hazard ratio (95% Confidence Interval)

	Post 9/11 GI Bill	VR&E	Supported employment
Naïve adjusted Cox PH model	0.94 (0.86, 1.04)	0.84 (0.75, 0.93)*	
IV adjusted Cox PH model (2SRI + frailty)	1.00 (0.45, 2.22)	0.94 (0.55, 1.95)	

Models adjusted for health comorbidities, demographics, distance to nearest facility, caregiver/veteran relationship, VA-level disability and insurance variables, service use, facility fixed effects, and application time period fixed effects.

Instrumental variable=facility-level percentage approval for PCAFC in the 6 months prior to application

Hazard ratio (95% Confidence Interval)

	Post 9/11 GI Bill	VR&E	Supported employment
Naïve adjusted Cox PH model	0.94 (0.86, 1.04)	0.84 (0.75, 0.93)	1.29 (1.01, 1.67)*
IV adjusted Cox PH model (2SRI + frailty)	1.00 (0.45, 2.22)	0.94 (0.55, 1.95)	1.35 (1.06, 1.79)*

Models adjusted for health comorbidities, demographics, distance to nearest facility, caregiver/veteran relationship, VA-level disability and insurance variables, service use, facility fixed effects, and application time period fixed effects.

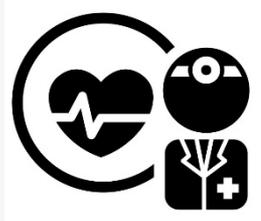
Instrumental variable=facility-level percentage approval for PCAFC in the 6 months prior to application

Limitations



Conclusions

CLINICAL CARE



Family caregiver

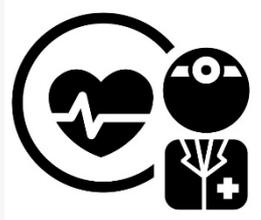
**VOCATION AND
EDUCATION
ASSISTANCE**



Health system support for family
caregivers

Conclusions

CLINICAL CARE



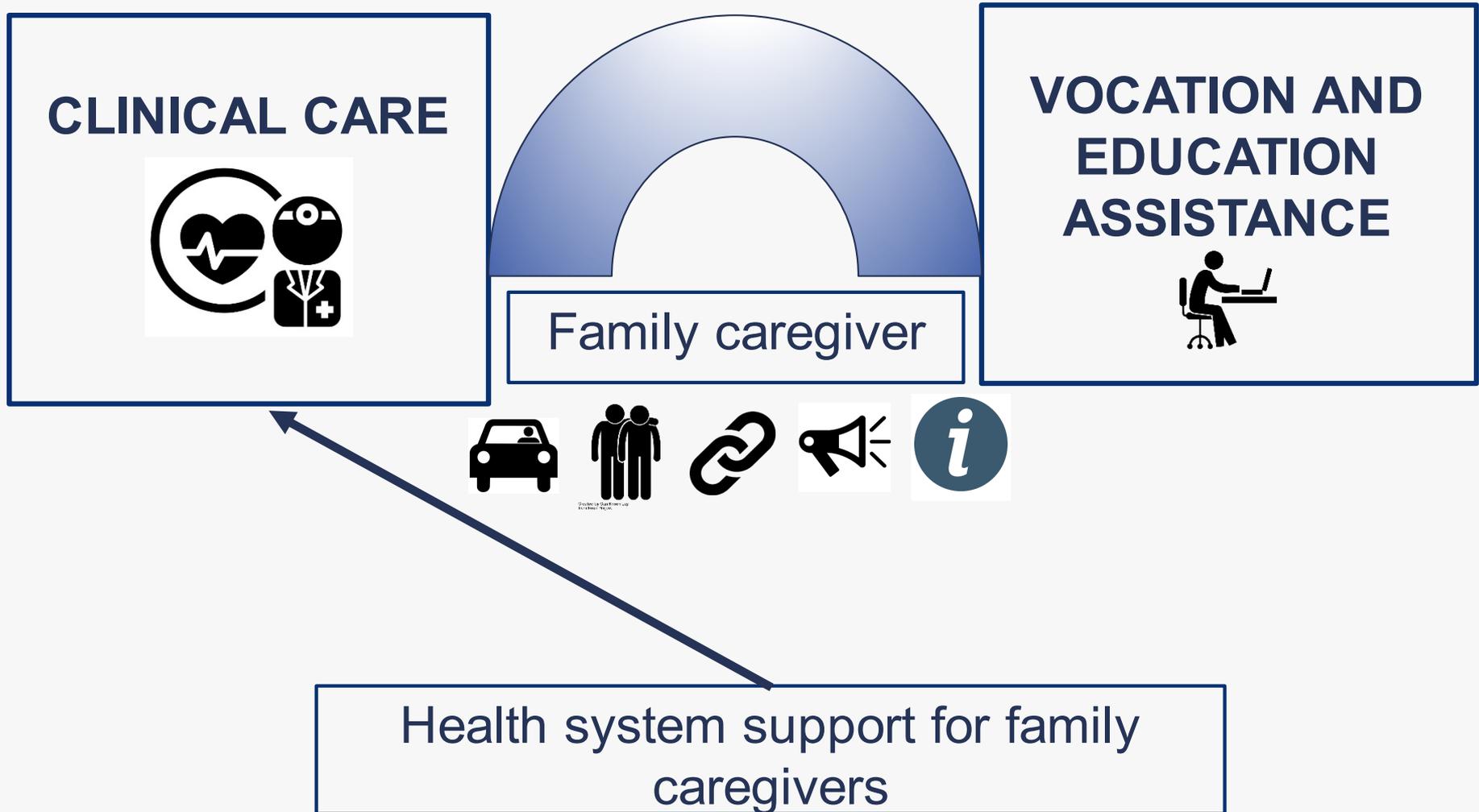
Family caregiver

VOCATION AND
EDUCATION
ASSISTANCE

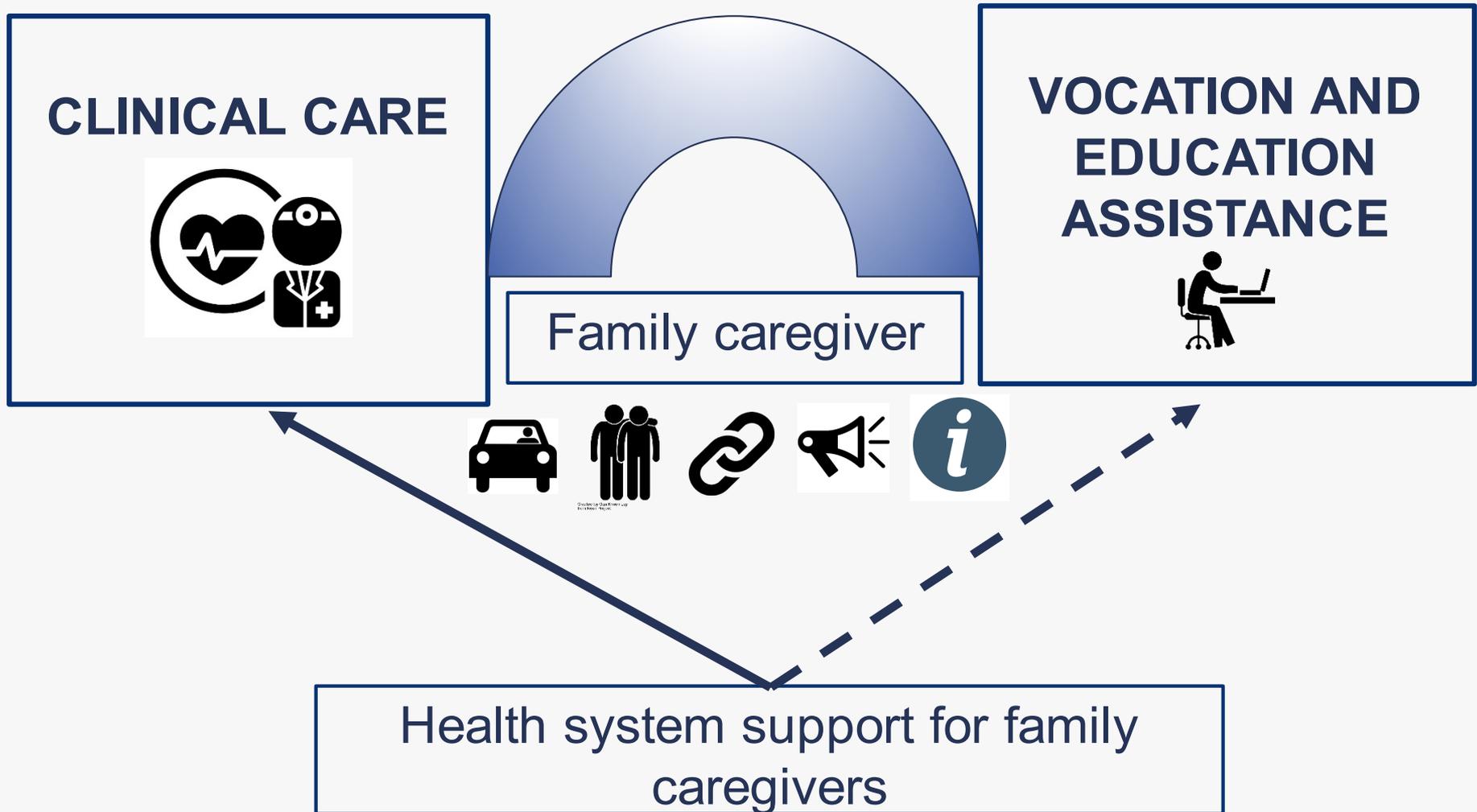


Health system support for family
caregivers

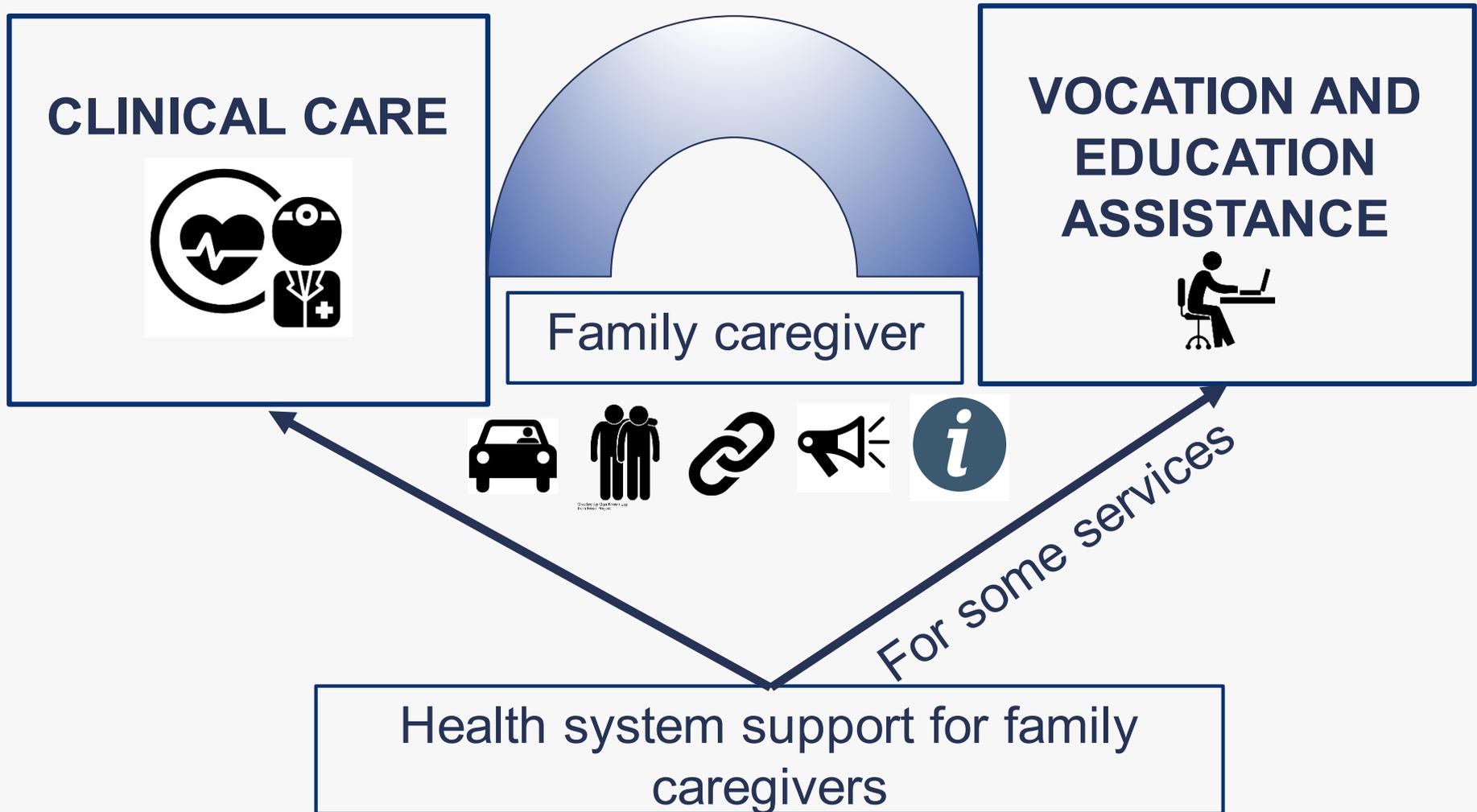
Conclusions



Conclusions



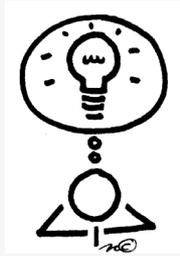
Conclusions



Implications for policy and practice



Change in perspective



Educate providers, caregivers and Veterans



Tools to help caregivers navigate VA



Treatment plans address vocational goals

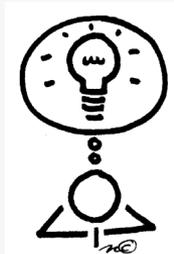


CSP/other VHA programs strengthen relationships with VBA

Implications for policy and practice



Change in perspective



Educate providers, caregivers and Veterans



Tools to help caregivers navigate VA



Treatment plans address vocational goals



CSP/other VHA programs strengthen relationships with VBA



Be careful not to overburden caregivers

Additional Resources

Caregiver Support Program

<https://www.caregiver.va.gov/>

Post 9/11 GI Bill

https://www.benefits.va.gov/gibill/post911_gibill.asp

Vocational Rehabilitation and Employment

https://www.benefits.va.gov/VOCREHAB/edu_voc_counseling.asp

Compensated Work Therapy Program (Supported Employment)

<https://www.va.gov/health/cwt/supportedemployment.asp>

Thank you!

Acknowledgements

Systems for Action is a National Program Office of the Robert Wood Johnson Foundation and a collaborative effort of the Center for Public Health Systems and Services Research in the College of Public Health, and the Center for Poverty Research in the Gatton College of Business and Economics, administered by the Colorado School of Public Health.



Additional Funding Disclosures: VA HSR&D ADAPT, VA
QUERI & VA Caregiver Support Program



Megan Shepherd-Banigan, PhD MPH
megan.shepherd-banigan@va.gov
mes86@duke.edu
@BaniganMegan

Funding Disclosures

- ❖ VA HSR&D/QUERI & VA Operations (CSP)
- ❖ Robert Wood Johnson Foundation