

Using New Data to Understand a New Program: *Investigating VHA and Purchased Care Utilization Before and After Veterans Choice Program Implementation*

Megan E. Vanneman, PhD, MPH

Core Investigator, VA Salt Lake City Health Care System
Assistant Professor, University of Utah School of Medicine

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 - Office of Analytics and Business Intelligence (OABI), now Office of Reporting Analytics, Performance, Improvement and Deployment (RAPID) (**Joe Francis**)
 - Office of Research and Development (ORD)
 - QUERI (**Amy Kilbourne**)

Poll Question #1

What is your **primary role at VA?**

Pick the best possible answer.

- Research
- Operations
- Healthcare provider
- Other

Poll Question #2

What is your **familiarity with VA community care programs** (e.g., the Veterans Choice Program)?

- No familiarity
- Some familiarity
- Very familiar

Poll Question #3

What is your **familiarity with VA community care data** (e.g., Fee data) in VA's Corporate Data Warehouse (CDW)?

- No familiarity
- Some familiarity
- Very familiar

Objectives

- Describe use of Veterans Choice Program (VCP) in **first 10 months after program initiation** (Nov 2014 – Aug 2015)
- Identify **types of outpatient care utilized**
- Describe process of understanding and analyzing **newly available VCP data**

Outline of the Talk

1. Background
2. Methods
3. Results
4. Study Implications
5. Lessons Learned from Collaborative Process
6. Q&A



BACKGROUND

VHA Overview

VHA is the largest **integrated** healthcare system in the U.S.¹

21.6 million veterans²

9.1 million VHA
enrollees²

**5.8 million
VHA
patients²**

170 medical centers¹

1,065 outpatient clinics¹

\$68 billion global budget¹

On average, patients relied on VHA for 50% of care²

1. Department of Veterans Affairs. About VHA. <http://www.va.gov/health/aboutvha.asp>; accessed September 1, 2017;

2. Giroir BP, Wilensky GP: Reforming the Veterans Health Administration – beyond palliation of symptoms. N Engl J Med 2015; 373(18): 1693-95.

Needs of Iraq and Afghanistan Veterans

2 million Iraq & Afghanistan Veterans eligible for VHA³

Long deployments, frequently redeployed

60% utilized services at VHA³

92% of wounded survive⁴

VHA low-cost option

High levels of physical and mental health problems
(Traumatic brain injury (TBI); Post traumatic stress disorder (PTSD); Substance use disorders (SUD); Depression)

³Epidemiology Program, Post-Deployment Health Group, Office of Patient Care Services, Veterans Health Administration, Department of Veterans Affairs. Analysis of VA Health Care Utilization among Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) Veterans: Cumulative from 1st Qtr FY 2002 through 3rd Qtr FY 2015 (October 1, 2001 – June 30, 2015). 2017 Jan.

⁴Vergun D. Survival rates improving for Soldiers wounded in combat, says Army surgeon general. Healthmil News 2016.

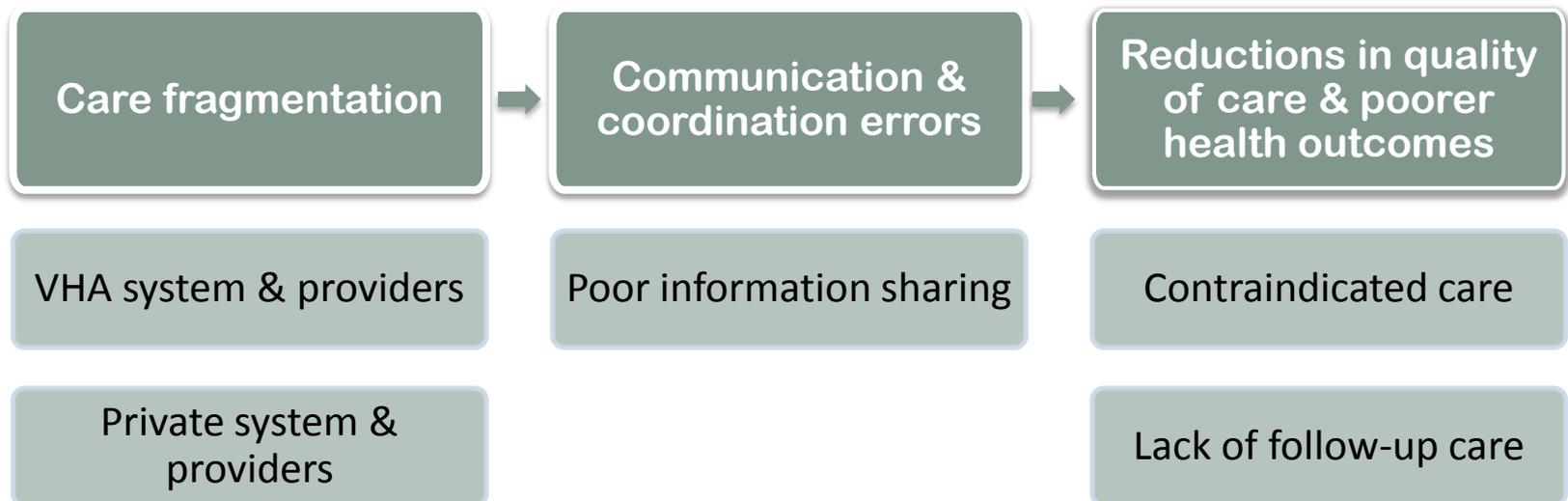
VCP to Address Access Issues

- Congress allocated **\$10 billion** for FY2015-17
- Pays for veterans to receive care **outside VHA**
- Eligible if long wait times, large driving distances, and/or particular hardships
 - **Wait-time** qualify for specific services outside VHA
 - **Mileage/hardship** qualify for any services outside VHA
- Purchased care program (“**traditional Fee**”) existed before

Note: This analysis does not include those eligible through Choice First, which began June 10, 2015.

Pros and Cons of VCP

- Broader **access** and **coverage**
- **Care fragmentation** (having providers inside & outside VHA)



Hypotheses

- **More VCP use by mileage/hardship group** than wait-time group, due to VCP access differences
- **Substitution** of outpatient care – reduction in VHA care after VCP implementation



METHODS

Sample

2 million Iraq and Afghanistan veterans

OEF/OIF/OND Roster

**1.5 million VHA enrollees
between FY2012-2015**

*Spatient, Corporate Data
Warehouse (CDW)*

**214,449 VCP
eligible**

*VACAA,
CDW*

Key Variables for Descriptive Analyses

Variables	Location in Corporate Data Warehouse (CDW)	Significance
vc_eligibilitycodeid	VACAA.Patients	VCP eligibility groups: wait-time or mileage/hardship
category_of_care	FBCS.outpatientauthorization	Care groups for purchased care
stop & credit	DSS.Out & DSS.Out2	Care groups for VHA care

Defining VCP Eligibles and VCP Users

VCP Eligibles

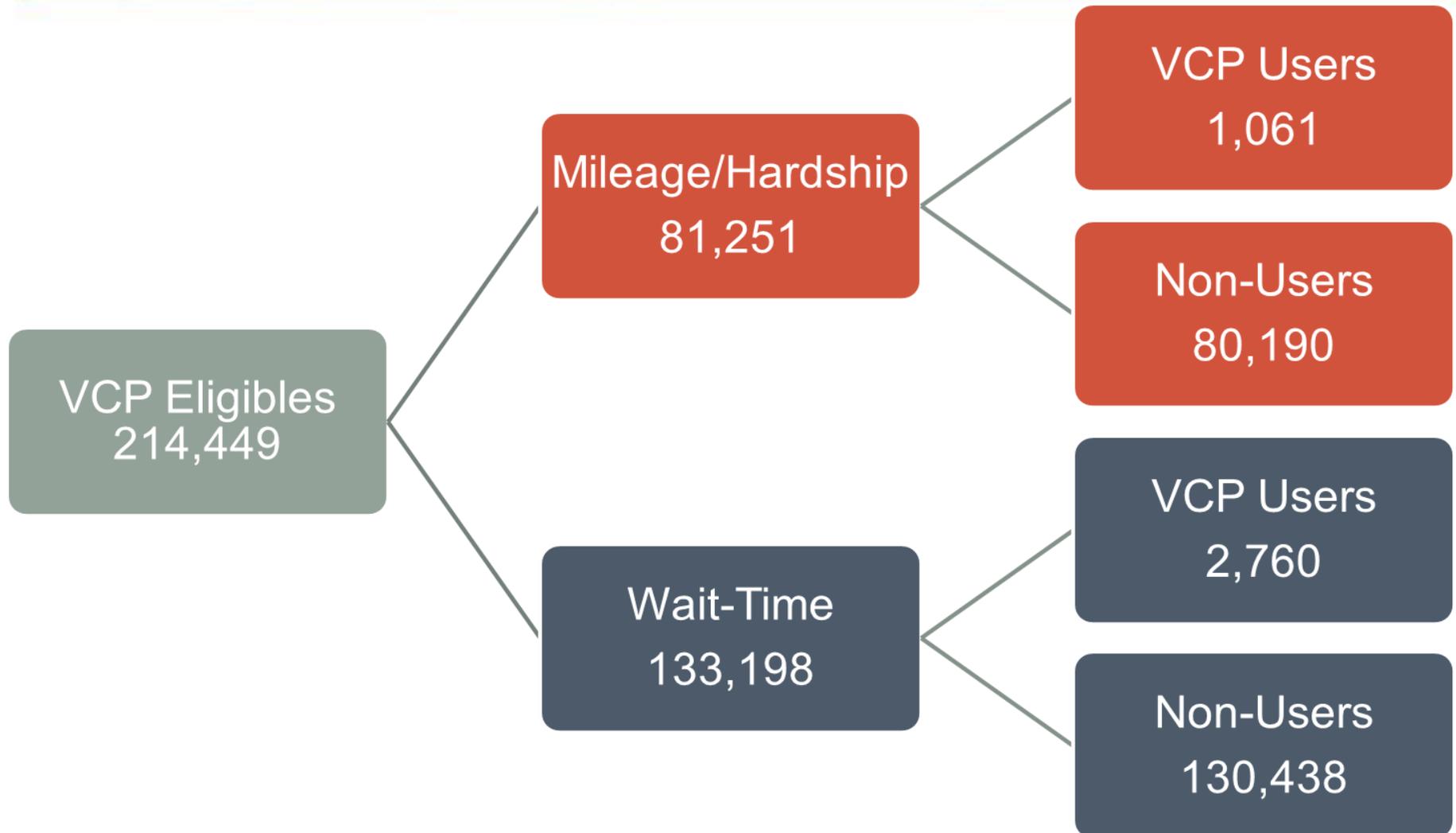
Enrolled in VHA and **eligible** for VCP; and

Received care through any of the VHA, traditional Fee, or VCP channels, regardless of whether they used VCP care or not

VCP Users

Subset of VCP eligibles who **received VCP care**

Stratified by VCP Eligibility Type





RESULTS

Summarized Characteristics of VCP Eligibles



Demographic

- Late thirties
- Male
- High school diploma
- White
- Half married



Military

- Army
- Active Duty
- Enlisted
- Half deployed multiple times

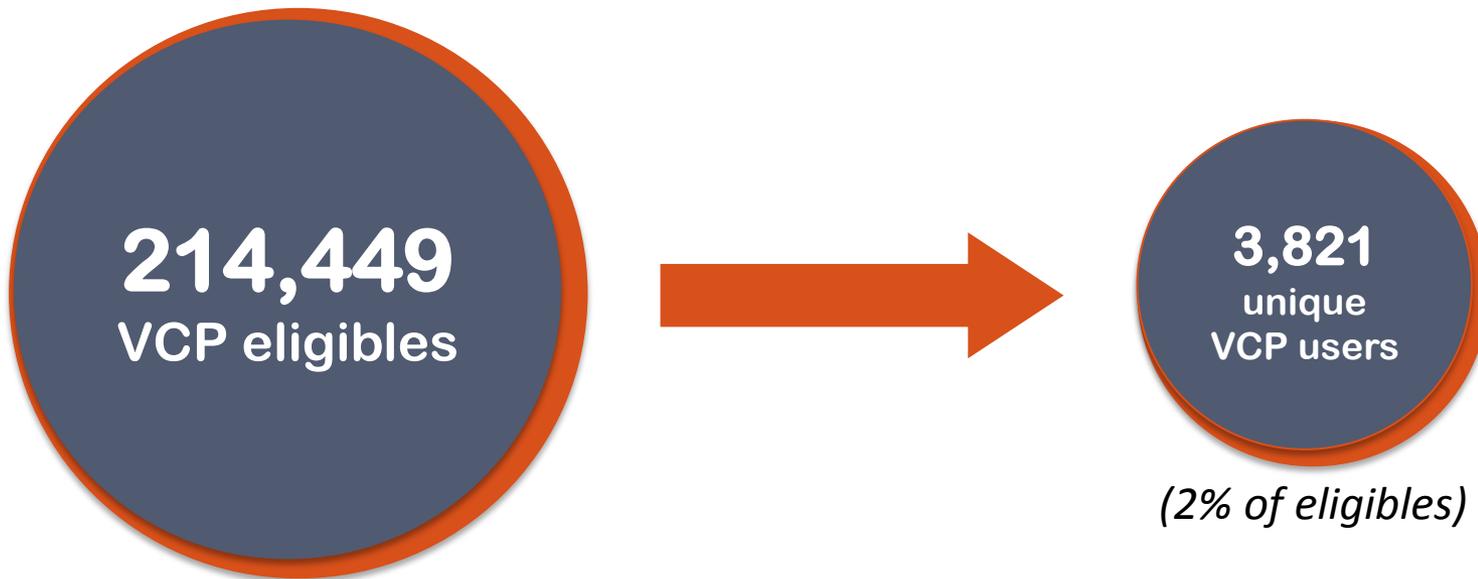


Healthcare Access

- VA priority level 1
- No health insurance
- More rural for mileage/hardship
- > Mean driving distance for mileage/hardship

VCP Eligibles, Users, and Visits

FY2015



Highest number of VCP users and visits – July 2015

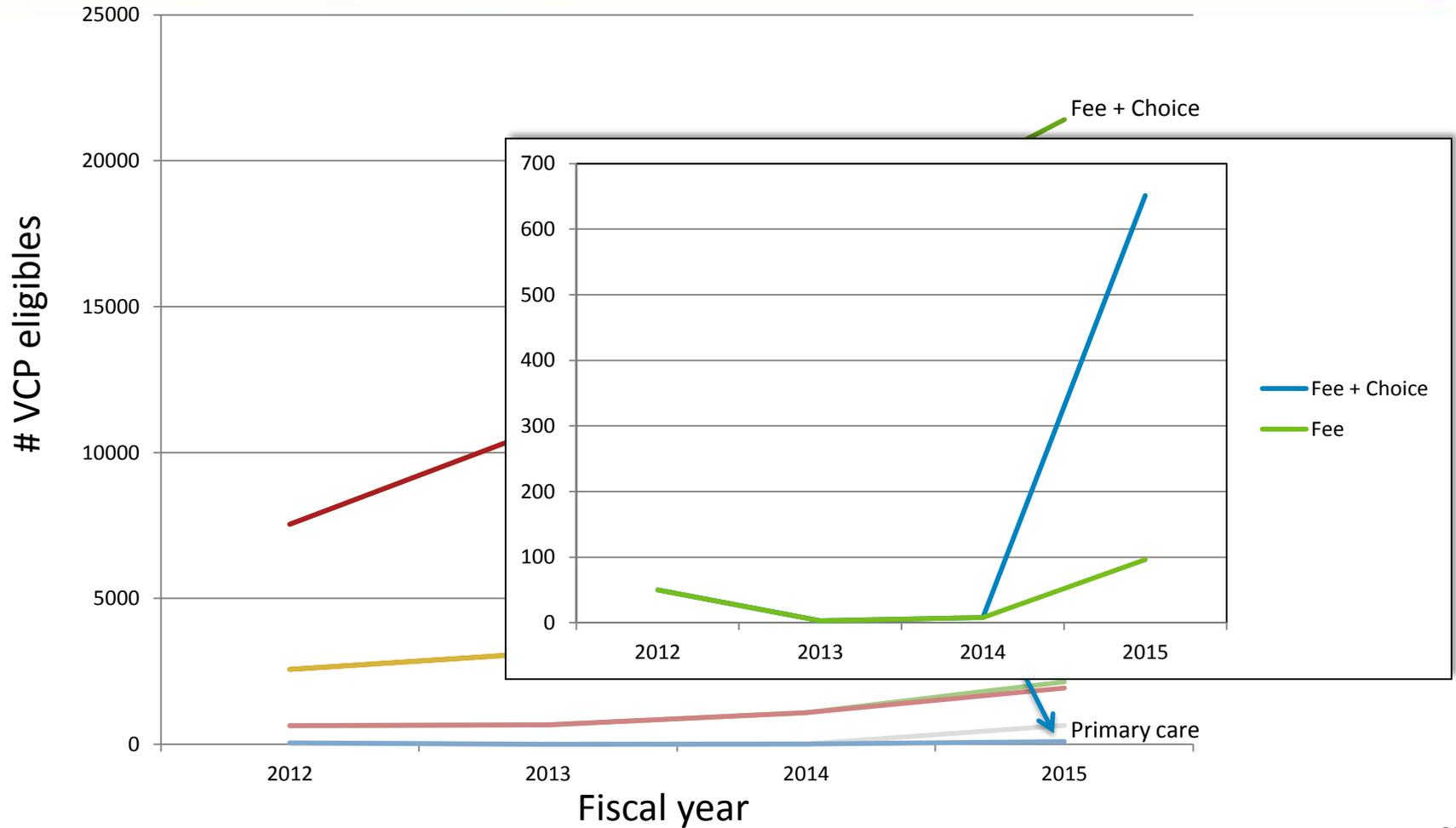
1,078 VCP users

2,332 visits

VCP Users by Top 6 Care Types

Category of Care	# of VCP Users
Medical specialty care	1,848
Rehabilitation	758
Primary care	555
Alternative medicine	478
Mental health	217
Radiology	123

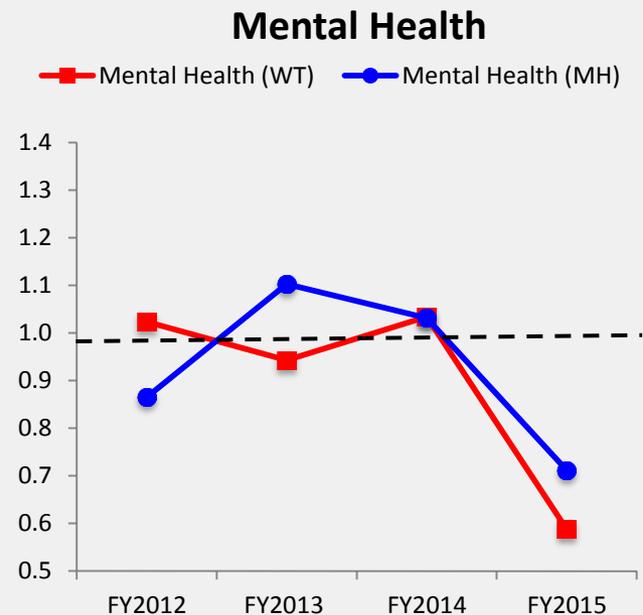
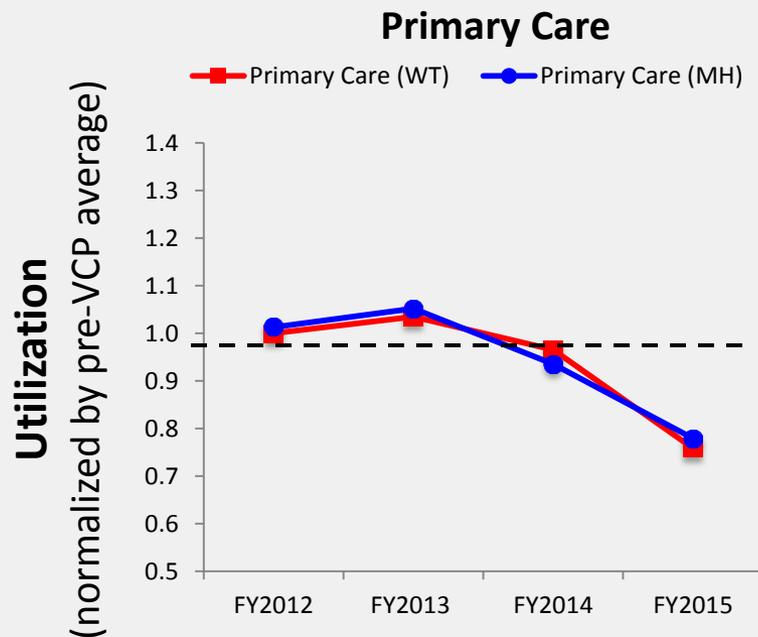
Number of VCP Eligibles Using Care



Average Number of VCP Visits per VCP User

Type of Visit	FY2015 VCP
Medical Specialty Care	
Wait-time	1.5
Mileage and/or Hardship	1.5
Rehabilitation	
Wait-time	5.8
Mileage and/or Hardship	6.0
Primary Care	
Wait-time	1.3
Mileage and/or Hardship	1.4
Mental Health	
Wait-time	3.6
Mileage and/or Hardship	4.5
Radiology	
Wait-time	1.1
Mileage and/or Hardship	1.1

VHA Utilization for VCP Users, normalized to average of pre-VCP years⁵



WT = wait-time
MH = mileage and/or hardship

⁵Vanneman ME, Harris AH, Asch SM, Scott WJ, Murrell SS, Wagner TH. Iraq and Afghanistan veterans' use of Veterans Health Administration and purchased care before and after Veterans Choice Program implementation. Med Care 2017.

Results Summary

Uptake of VCP was very slow in first 10 months of program, but generally increased over time

- Greatest volume of VCP related to specialty care
- Fastest growth of VCP related to primary care

Volume of use among users

- Per capita VCP utilization was often higher for mileage/hardship versus wait-time group
- Per capita VHA utilization generally decreased after VCP implementation (substitution effect?)

Limitations

- First year of program
- VCP data in CDW are new and need further evaluation
- Work needed to examine validity of category-of-care variable
 - Part of current HSR&D planning grant (SDR 17-157),
MPI: Wagner, Rosen, Vanneman



STUDY IMPLICATIONS

Implications

Low initial VCP utilization

- VHA access relatively adequate prior to VCP?
- Veterans prefer care in VHA?
- Easier to use another source of payment for care outside VHA?
- Veterans still learning about program?
- Imperfect program implementation?

VCP implementation appears to have impacted VHA utilization amongst Iraq and Afghanistan veterans

VHA's Changing Role

Growing role as payer

- Consolidation of traditional Fee and VCP (Public Law 114-41)
- Possible eligibility expansion of VCP

External environment

- Decrease care fragmentation
- Improve quality and outcomes, decrease costs. Mixed evidence on achievability in accountable care organization (ACO) literature



LESSONS LEARNED FROM COLLABORATIVE PROCESS

Collaborative Process

Establishing and continuing communication between evaluation groups takes a lot of **upfront time**, but results in:

- **Achieving more for partners** using a collaborative approach
Avoids unnecessary overlap in questions to operations partners, data experts, etc. (especially important in a new topic area)
- Presenting a more **cohesive body of work** – special supplement on Veterans Choice Act in *Medical Care*
Avoids unnecessary overlap in projects

Questions?

Contact information

Megan.Vanneman@va.gov

Megan.Vanneman@hsc.utah.edu

Next QUERI Session

Tuesday, October 17, 2017 at 12pm ET

**Making Laboratory Data Accessible:
Pitfalls and Solutions in Working with CDW Data**

*Ronald “George” Hauser, MD
VA Connecticut Healthcare System*

Extra Slides

Unique VCP Eligibles by Fiscal Year

Choice Group	FY2012	FY2013	FY2014	FY2015
Wait-time	90,196	104,834	119,522	133,198
Mileage and/or Hardship	58,909	67,368	74,619	81,251
Total	149,105	172,202	194,171	214,449

VCP Users by Care Type

Top 6

- Medical specialty care (n=1,848)
- Rehabilitation (n=758)
- Primary care (n=555)
- Alternative medicine (n=478)
- Mental health (n=217)
- Radiology (n=123)

Limited

- Compensation & pension (n=54)
- Unknown (n=8)
- Emergency (n=3)
- Other (n=1)

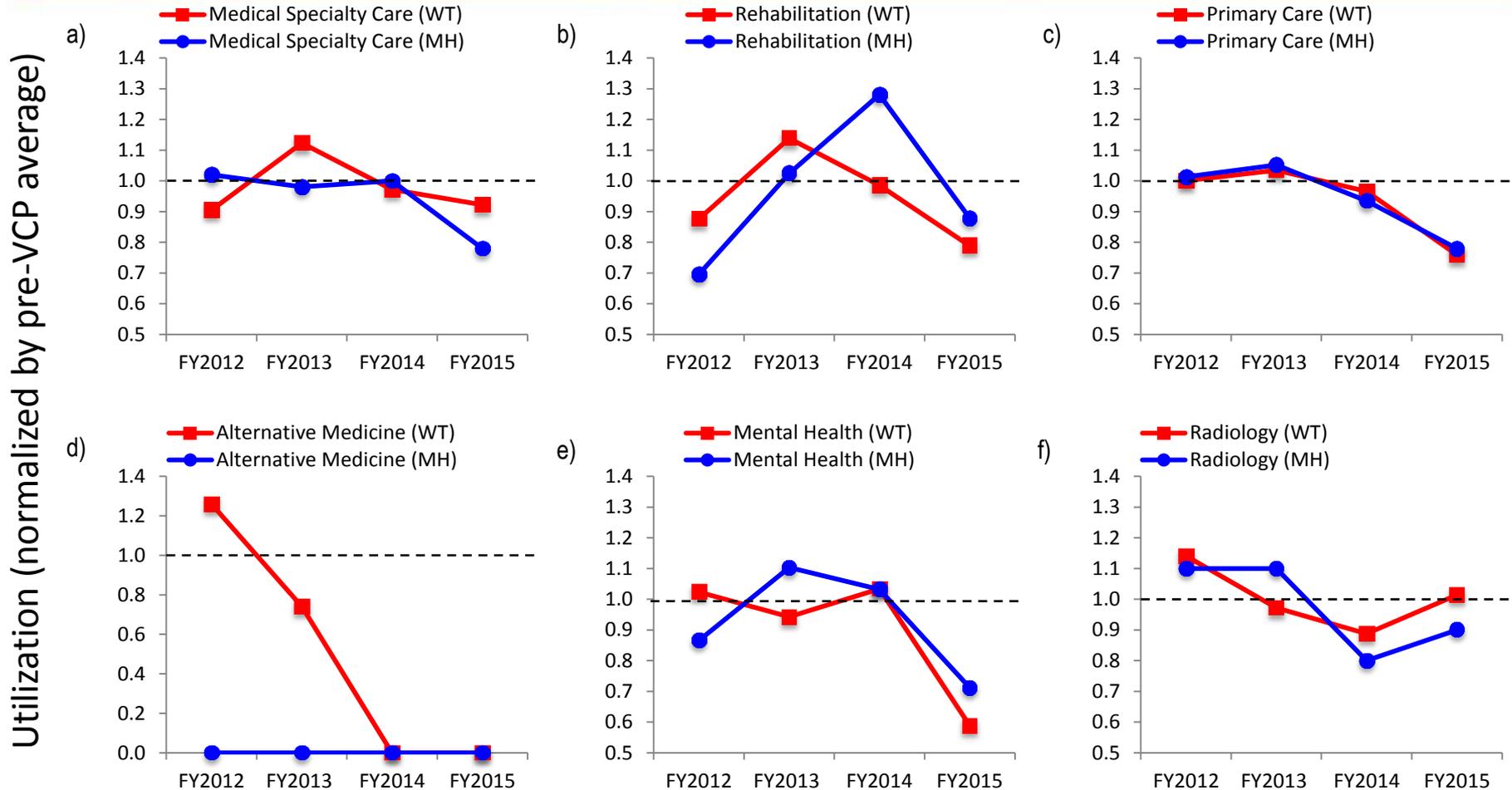
None

- Dental
- Dialysis
- End of Life
- Fee ID card
- Home health
- Lab
- Pharmacy
- Respite
- Skilled nursing facility
- Telephone and telehealth care

Average Number of Purchased Care Visits per VCP User

	FY2012	FY2013	FY2014	FY2015	
	Trad. Fee	Trad. Fee	Trad. Fee	Trad. Fee	VCP
Medical Specialty Care					
Wait-time	2.9	2.8	3.5	4.5	1.5
Mileage and/or Hardship	4.1	3.2	3.9	4.2	1.5
Rehabilitation					
Wait-time	9.3	10.4	9.4	8.4	5.8
Mileage and/or Hardship	9.9	9.6	9.3	15.3	6.0
Primary Care					
Wait-time	-	-	-	-	1.3
Mileage and/or Hardship	-	-	-	-	1.4
Mental Health					
Wait-time	13	17	10	15.3	3.6
Mileage and/or Hardship	6.0	2.8	10.9	8.5	4.5
Radiology					
Wait-time	1.0	1.7	1.5	1.3	1.1
Mileage and/or Hardship	1.0	1.5	1.3	1.3	1.1

VHA Utilization for VCP Users, normalized to average of pre-VCP years⁵



⁵Vanneman ME, Harris AH, Asch SM, Scott WJ, Murrell SS, Wagner TH. Iraq and Afghanistan veterans' use of Veterans Health Administration and purchased care before and after Veterans Choice Program implementation. Med Care 2017.