

# Using New Data to Understand a New Program:

## *Investigating VHA and Purchased Care Utilization Before and After Veterans Choice Program Implementation*

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# Acknowledgements

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- Joint effort supported by VA's:
  - 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.<sup>1</sup>**

21.6 million veterans<sup>2</sup>

9.1 million VHA  
enrollees<sup>2</sup>

**5.8 million  
VHA  
patients<sup>2</sup>**

**170 medical centers<sup>1</sup>**

**1,065 outpatient clinics<sup>1</sup>**

**\$68 billion global budget<sup>1</sup>**

**On average, patients relied on VHA for 50% of care<sup>2</sup>**

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 VHA<sup>3</sup>

Long deployments, frequently redeployed

60% utilized services at VHA<sup>3</sup>

92% of wounded survive<sup>4</sup>

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)

<sup>3</sup>Epidemiology 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.

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

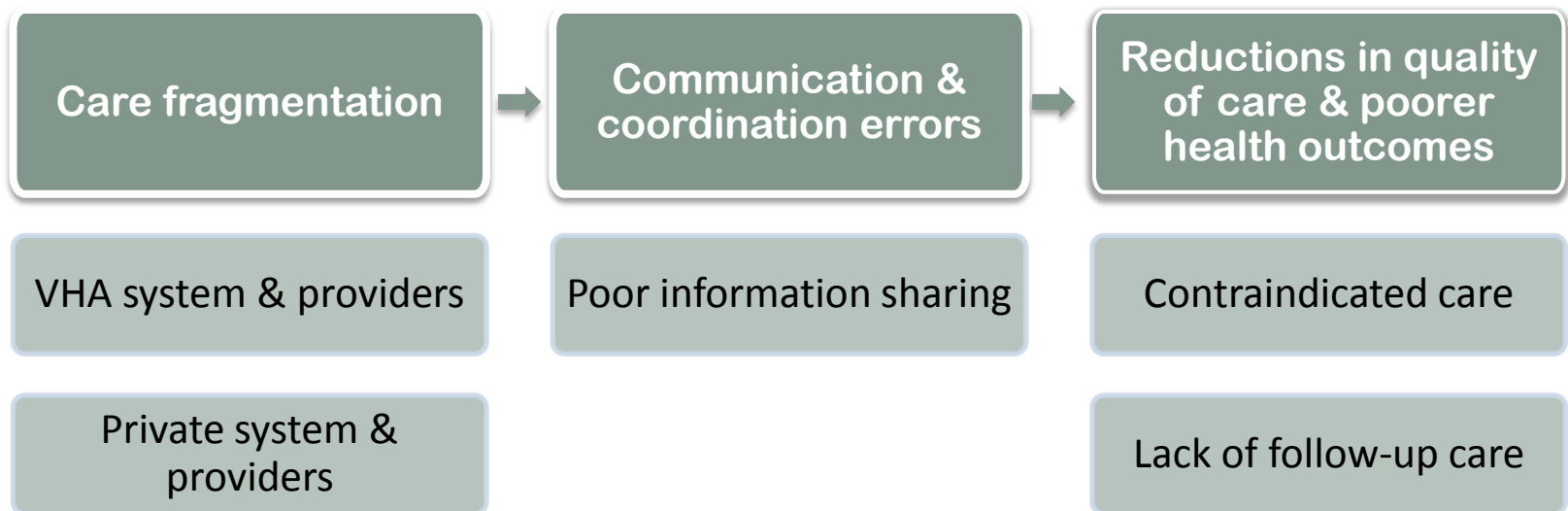
# VCP to Address Access Issues

- 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

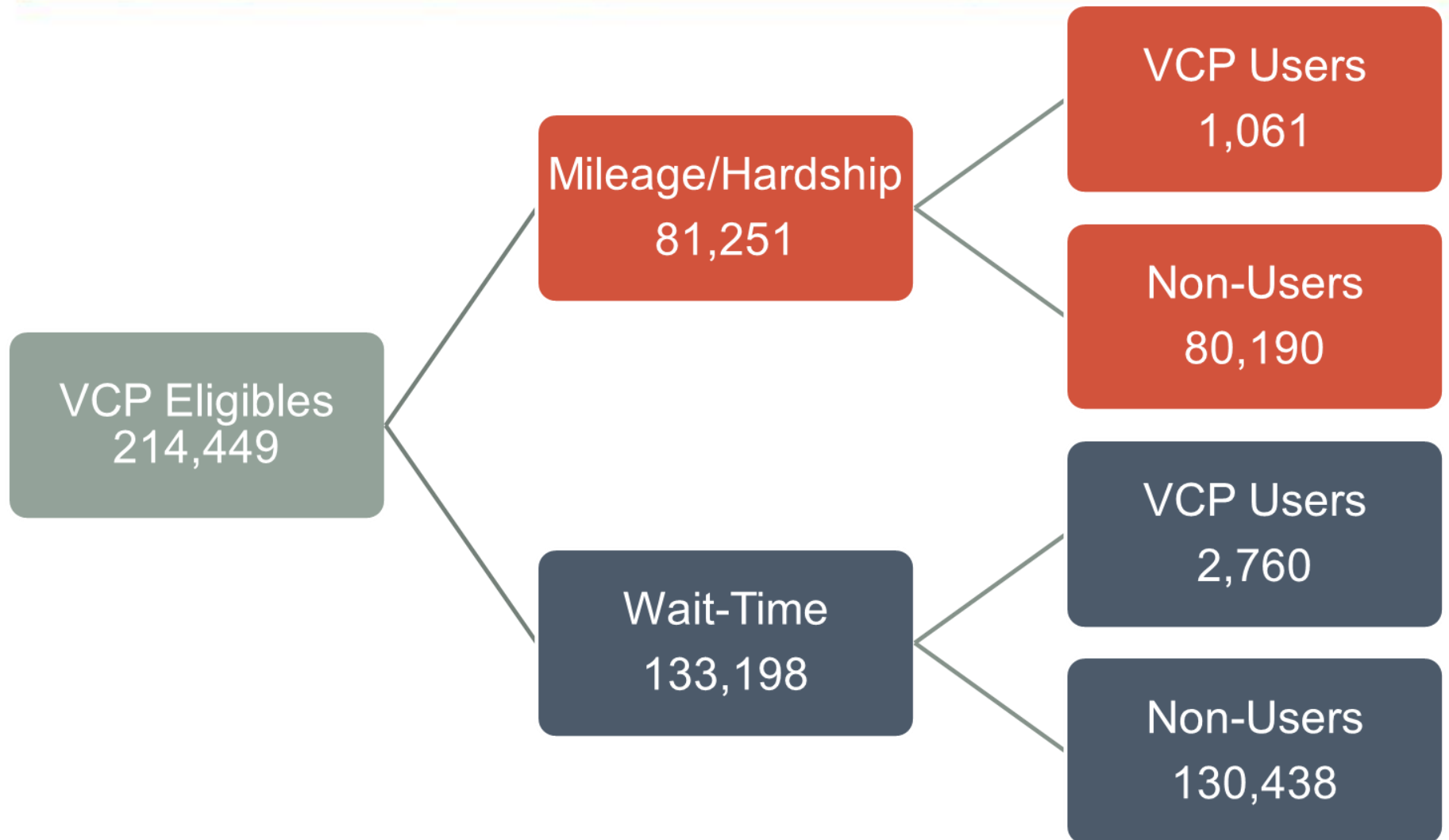
**Enrolled** in VHA and **eligible** for VCP; and

**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

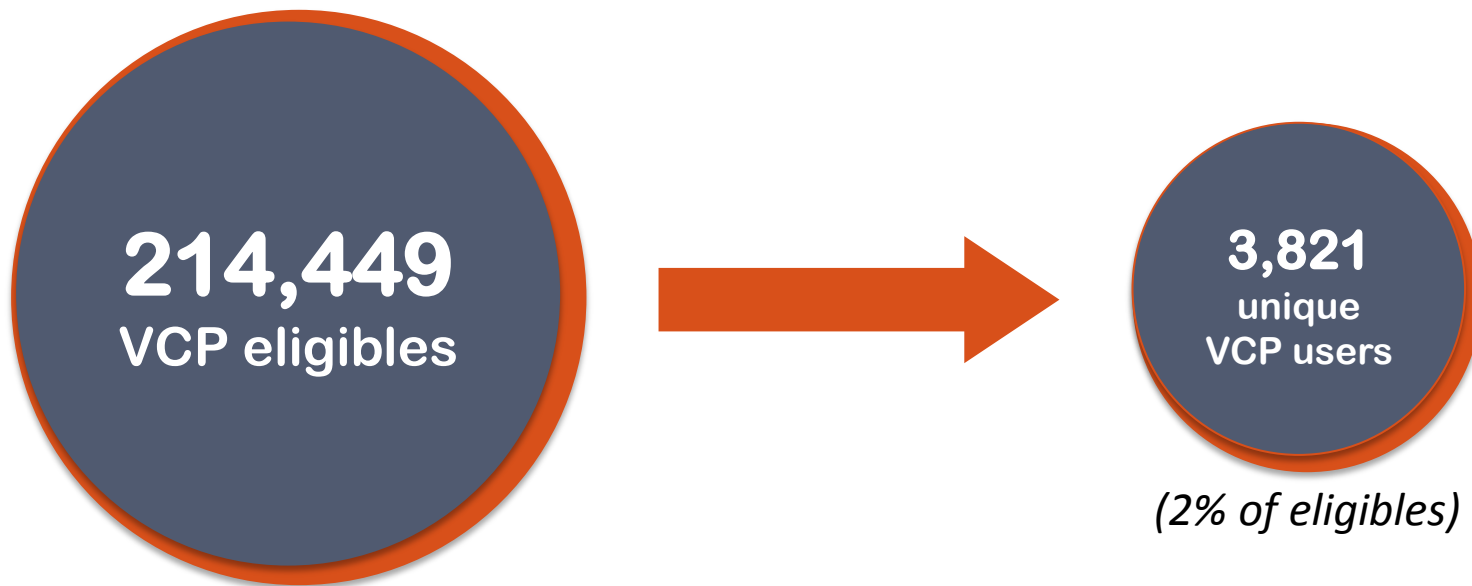


## Healthcare Access

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

# VCP Eligibles, Users, and Visits

FY2015



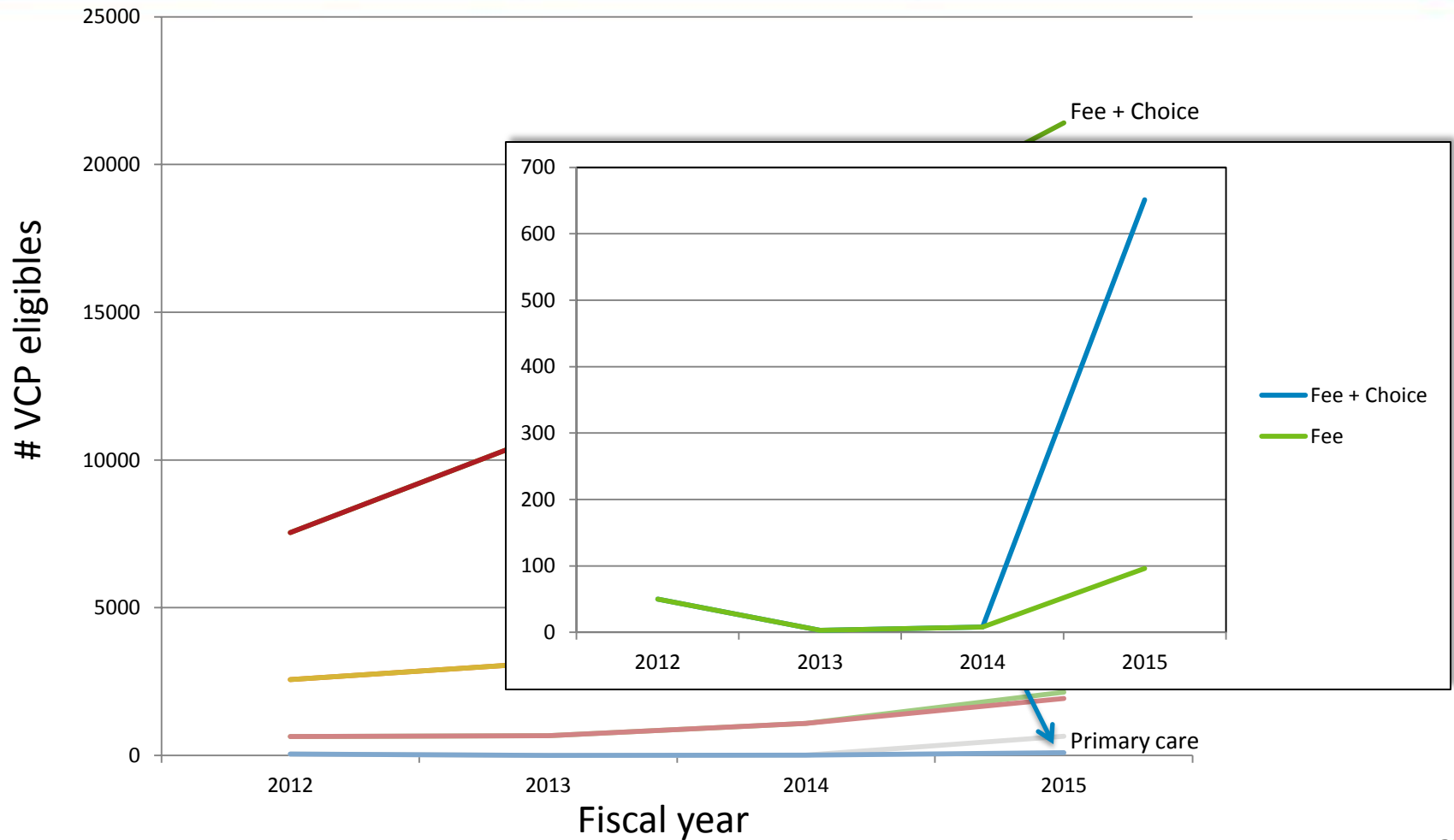
*Highest number of VCP users and visits – July 2015*

1,078 VCP users  
2,332 visits

# VCP Users by Top 6 Care Types

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

# Number of VCP Eligibles Using Care

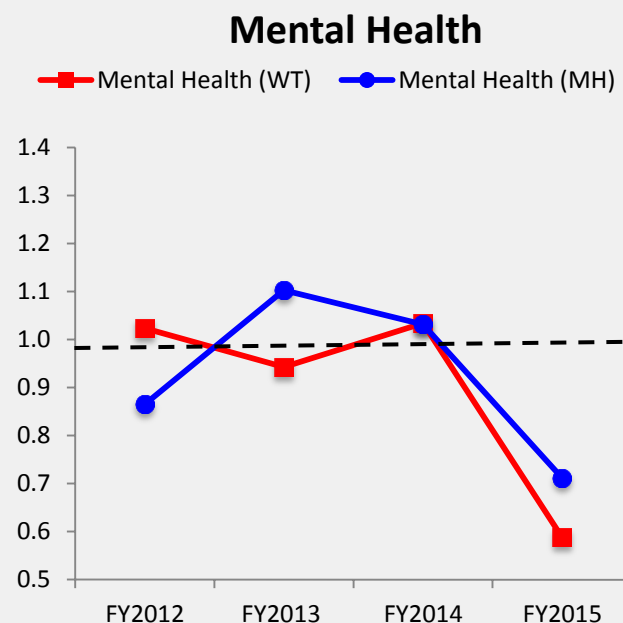
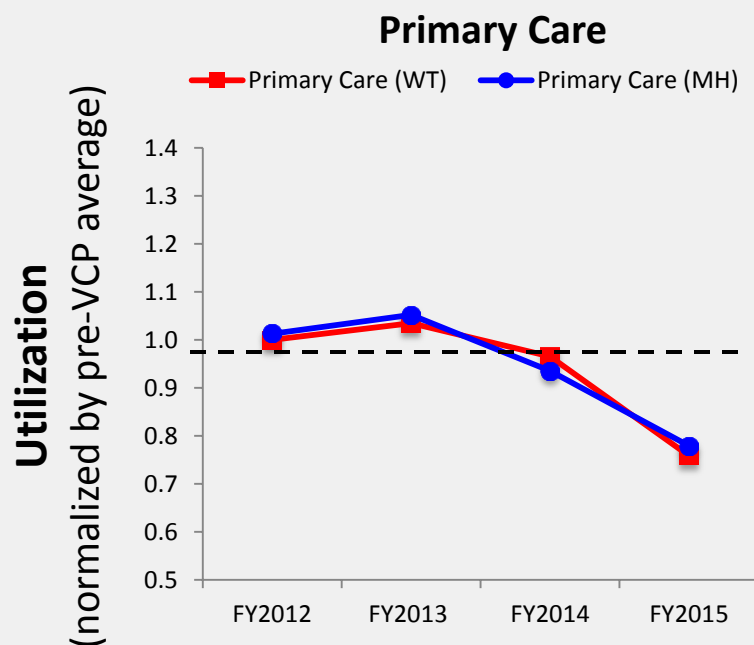


# Average Number of VCP Visits per VCP User

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



# VHA Utilization for VCP Users, normalized to average of pre-VCP years<sup>5</sup>



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

<sup>5</sup>Vanneman 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**

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# Next QUERI Session

Tuesday, October 17, 2017 at 12pm ET

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

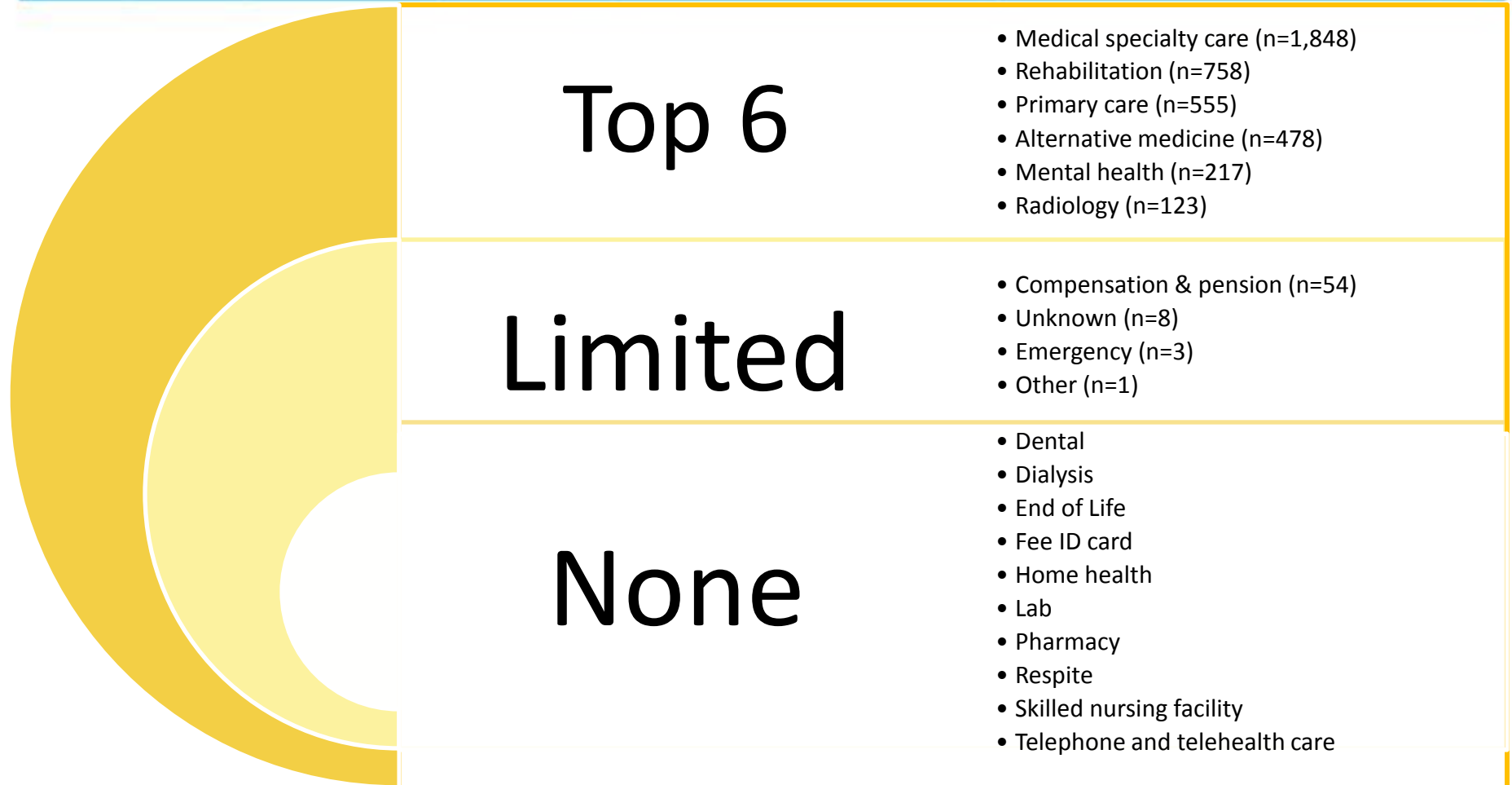
*Ronald “George” Hauser, MD  
VA Connecticut Healthcare System*

# 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

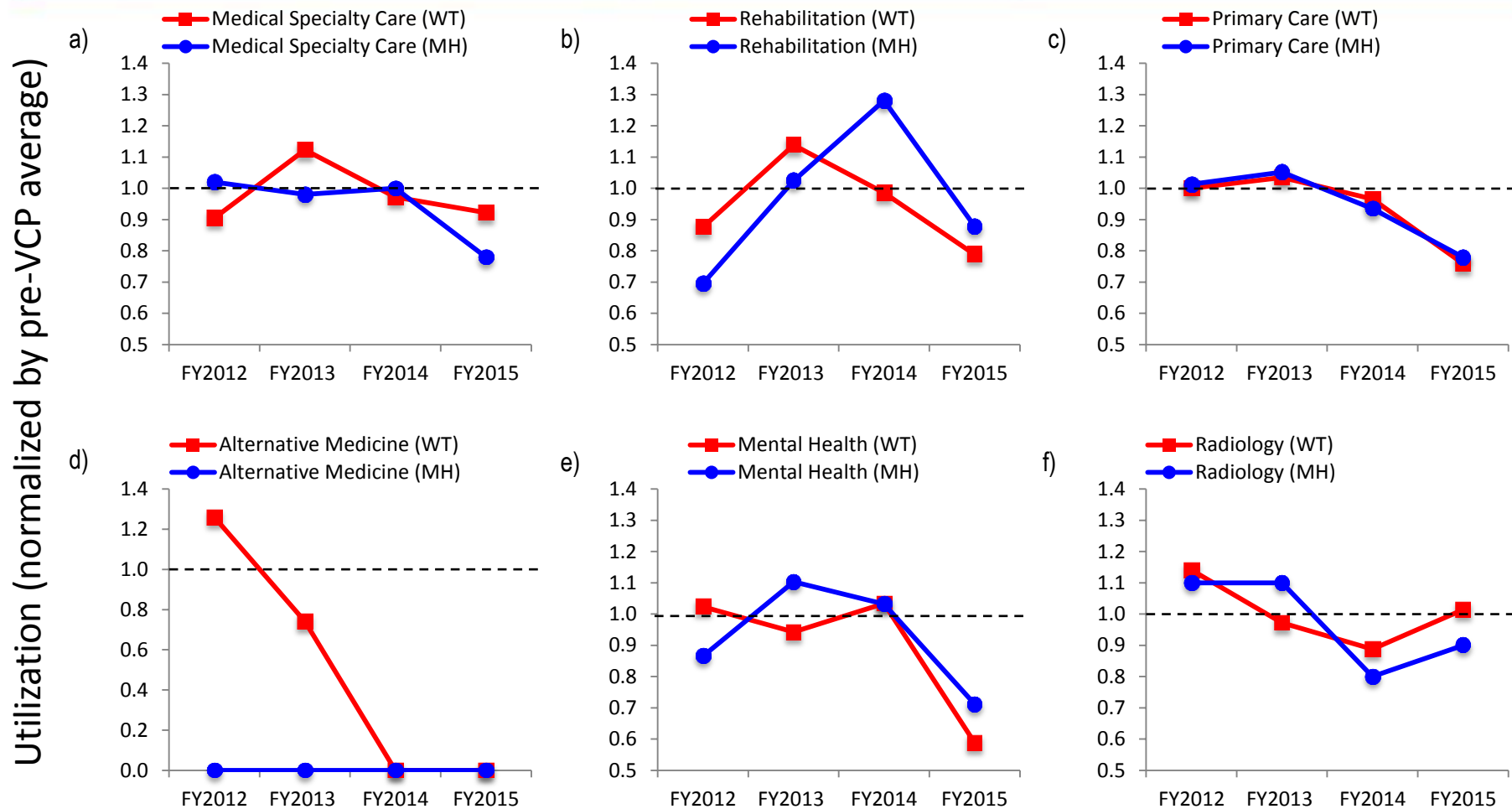
# VCP Users by Care Type



# Average Number of Purchased Care Visits per VCP User

	FY2012 Trad. Fee	FY2013 Trad. Fee	FY2014 Trad. Fee	FY2015 Trad. Fee	FY2015 VCP
<b>Medical Specialty Care</b>					
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
<b>Rehabilitation</b>					
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
<b>Primary Care</b>					
Wait-time	-	-	-	-	1.3
Mileage and/or Hardship	-	-	-	-	1.4
<b>Mental Health</b>					
Wait-time	13	17	10	15.3	3.6
Mileage and/or Hardship	6.0	2.8	10.9	8.5	4.5
<b>Radiology</b>					
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 years<sup>5</sup>



<sup>5</sup>Vanneman 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.