

2014 VIREC Databases and Methods Cyberseminar Series

# Assessing Race and Ethnicity

May 5, 2014

Presented by: Maria Mor, PhD

Center for Health Equity Research and Promotion  
VA Pittsburgh Healthcare System



# Session Overview

- Introduction
- Race and Ethnicity Data Collection in VA
- Race and Ethnicity in VA Data
- Race and Ethnicity in Medicare Data
- Quality of VA Race/Ethnicity Data
- Recommendations
- Where to Go for More Help

# Audience Poll

- **Have you ever used VA Race/Ethnicity Data?**
  - Yes
  - No

# Session Overview

- Introduction
- Race and Ethnicity Data Collection in VA
- Race and Ethnicity in VA Data
- Race and Ethnicity in Medicare Data
- Quality of VA Race/Ethnicity Data
- Recommendations
- Where to Go for More Help

# Introduction/Overview

- Racial/ethnic disparities in health and health care are well-documented and persistent in the US
  - Root causes and solutions are not well understood
  - While overall quality is improving, access is getting worse and disparities are not changing (AHRQ 2012)
- Racial/ethnic disparities also exist in VHA, where financial barriers to receiving care are minimized
  - Although quality has improved, significant within-facility disparities observed in clinical outcomes (Trivedi 2011)
- More research to detect, understand, and address disparities in health and health care is needed

# Introduction/Overview

- Accurate race/ethnicity data are essential to disparities research and research on clinical factors associated with race/ethnicity
- Problems with race/ethnicity data in the VA
  - Incomplete
  - Inaccuracies
  - Inconsistent over time

# Racial/Ethnic Distribution of Veterans

- Approximately 80% of all Veterans are White
  - 0.6% American Indian or Alaska Native
  - 1.3% Asian
  - 10.8% Black
  - 6.0% Hispanic
  - 1.4% Some other race
- Use of VA health care differs by race
  - Asian Veterans less likely to use (20.5 %)
  - Black, AIAN, Other race more likely to use (>30%)
- [http://www.va.gov/vetdata/docs/SpecialReports/Minority\\_Veterans\\_2011.pdf](http://www.va.gov/vetdata/docs/SpecialReports/Minority_Veterans_2011.pdf)

# Session Overview

- Introduction
- Race and Ethnicity Data Collection in VA
- Race and Ethnicity in VA Data
- Race and Ethnicity in Medicare Data
- Quality of VA Race/Ethnicity Data
- Recommendations
- Where to Go for More Help

# VA Race and Ethnicity Categories

## VHA Handbook 1601A.01 (2009)

### ■ Ethnicity

- Spanish, Hispanic, or Latino

### ■ Race (>1 may be selected)

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Unknown by Patient

### ■ Current reporting method

- 2 question format: ethnicity, race
- Self-reported

# Race and Ethnicity Data Collection Standards

- OMB Directive Revision No. 15 (1997)
  - Standards for maintaining, collecting, and presenting federal data on race and ethnicity
  - Implemented in DVA in 2003
- Joint Commission (2010)
  - Collection of patient demographic data (e.g., race and ethnicity) key element of performance
- Affordable Care Act (2011)
  - New data collection standards for race, ethnicity, primary language, and sex

# Acquisition of Race/Ethnicity Data in VHA

WHO:	WHAT:	WHEN:	WHERE:	HOW:
<p>Information Source:</p> <ul style="list-style-type: none"> <li>• Patient (self-report)</li> <li>• Proxy</li> </ul>	<ul style="list-style-type: none"> <li>• VA Form 10-10EZ, Application for Health Benefits (online, paper, or by interview)</li> </ul>	<ul style="list-style-type: none"> <li>• Enrollment</li> <li>• Hospital admission</li> <li>• Outpatient visit or pre-registration</li> </ul>	<ul style="list-style-type: none"> <li>• Online</li> <li>• Telephone call from local VHA facility</li> <li>• In-person visit to local VHA facility</li> </ul>	<ul style="list-style-type: none"> <li>• VHA Facility Enrollment Coordinator or designee (e.g., Admission Interview Clerk, Enrollment Specialist) or</li> <li>• Outpatient clinic personnel</li> <li>• Collects the information and enters into VistA</li> </ul>

# Race/Ethnicity Data Collection: Historical

- Method of ascertainment uncertain, primarily observer-reported
- No option for multiple race reporting
- Single question captured both race and ethnicity:
  - Hispanic, White
  - Hispanic, Black
  - American Indian
  - Black
  - Asian
  - White

# Race/Ethnicity Data Collection: Enrollment

- VA Form 10-10EZ (Application for Health Benefits)
- Data entered into the Veterans Health Information Systems and Technology Architecture (VistA)
  - Race Information and Patient Information Sub-files
- Demographic data (e.g., race) transmitted with encounter data to the Austin Information Technology Center
  - National Patient Care Database (NPCD)
- Medical SAS (MedSAS) datasets
  - Extracts of NPCD data

# Race/Ethnicity Data Collection: Clinical Setting

- Race and ethnicity obtained during pre-registration, if missing
- Race and ethnicity collected directly from the patient (or proxy)
  - Hospital admission
  - Clinic registration
- Data entered into VistA
  - Race Information and Patient Information Sub-files
- Separate VistA field for method of data collection

# Audience Poll

- **What sources of VA race/ethnicity data have you used (check all that apply)?**
  - 1 Never Used
  - 2 MedSAS files
  - 3 CDW
  - 4 VistA or regional warehouse
  - 5 Other VA data sources

# Session Overview

- Introduction
- Race and Ethnicity Data Collection in VA
- Race and Ethnicity in VA Data
- Race and Ethnicity in Medicare Data
- Quality of VA Race/Ethnicity Data
- Recommendations
- Where to Go for More Help

# Sources of Race and Ethnicity Data in VA

## Medical SAS Datasets

<b>Variable Name</b>	<b>MedSAS Dataset</b>	<b>Description</b>
RACE	Inpatient (PTF Main File)	FY1970 - present
	Outpatient (Visit File)	FY1997 - present
	Outpatient (Event File)	FY1998 - present
RACE1-RACE6	Inpatient (PTF Main)	FY2003 - present
RACE1-RACE7	Outpatient (Visit, Event)	FY2004 - present
ETHNIC	Inpatient (PTF Main)	FY2003 - present
	Outpatient (Visit, Event)	FY2004 - present

# Race/Ethnicity Variables in MedSAS

- Prior to FY 2003
  - Race and ethnicity captured jointly in the variable RACE
  - Single value allowed for race/ethnicity
- After FY 2003
  - Multiple races captured in RACE1-RACE7
  - Single value for ethnicity captured in ETHNIC
  - RACE1-RACE7 and ETHNIC have a length of 2 characters
    - First character has race or ethnicity
    - Second character has method of data collection
    - Common format used for method of data collection

# Medical SAS Datasets: Race/Ethnicity Values (Pre 2003)

- RACE: Single value for race and ethnicity

Value	Description
1	Hispanic, white
2	Hispanic, black
3	American Indian
4	Black
5	Asian
6	White
7 or missing	Unknown

# Medical SAS Datasets: Race Values (Post 2003)

- RACE1-RACE7 : Race and method of data collection
- The first character specifies race

1 <sup>st</sup> Character	Description
3	American Indian Or Alaska Native
8	Asian
9	Black or African American
A	Native Hawaiian or Other Pacific Islander
B	White
C	Declined to Answer
D	Unknown
**Other**	Missing

# Medical SAS Datasets: Ethnicity Values (Post 2003)

- ETHNIC: Ethnicity and method of data collection
- The first character captures ethnicity

1 <sup>st</sup> Character	Description
D	Declined To Answer
H	Hispanic or Latino
N	Not Hispanic or Latino
U	Unknown
**Other**	Missing

# Medical SAS Datasets: Race and Ethnicity Source (Post 2003)

- RACE1-RACE7, ETHNIC
- The second character specifies method of data collection

2 <sup>nd</sup> Character	Description
	Missing
O	Observer
P	Proxy
S	Self-identification
U	Unknown By Patient

# Medical SAS Datasets: Completeness of Race Data

- A substantial portion of patients do not have a “usable” race value\* in the VA Medical SAS Inpatient and Outpatient Datasets

FY	Usable Race, %	FY	Usable Race, %
1997	57	2005	67
1998	57	2006	72
1999	58	2007	75
2000	58	2008	76
2001	56	2009	78
2002	55	2010	80
2003	49	2011	83
2004	62	2012	85

\* A usable race value is any value that is not ‘missing’ or ‘unknown’ or ‘declined’

# Medical SAS Datasets: Completeness by Source

## ■ Visit-level data usability

	Inpatient		Outpatient	
FY	Race, %	Ethnicity, %	Race, %	Ethnicity, %
2006	78.0	50.9	66.8	68.8
2007	67.9	46.3	72.0	75.7
2008	51.3	37.3	75.3	80.3
2009	43.6	32.1	78.0	83.6
2010	40.7	31.4	80.1	86.2
2011	40.8	31.8	82.3	88.5
2012	41.7	31.8	84.9	90.9
2013	41.2	32.2	86.2	92.1

\* A usable value is any that is not 'missing' or 'unknown' or 'declined'

# Medical SAS Datasets: Completeness of Ethnicity Data

- 90% of visits in FY 2012 have a “usable” ethnicity value\* in the VA Medical SAS Inpatient and Outpatient Datasets
- Completeness of ethnicity in the VA Medical SAS Inpatient Datasets is low (32% for FY 2012)
  - Half of inpatient facilities have blank ethnicity data for at least 98% of inpatient records
  - 36% of facilities have blank ethnicity data for all inpatient records

\* A usable ethnicity value is any value that is not ‘missing’ or ‘unknown’ or ‘declined’

# Corporate Data Warehouse (CDW)

- National repository of data from VistA Patient File with race and ethnicity data from October 1999 -
- Contains 1 demographic record for each VA station a Veteran has visited
- Contains standard and nonstandard race values
- Stored in a view called PatSub.PatientRace
- Documentation: Best Practices Guide Race Data
  - Send va.gov email to [VIReC@va.gov](mailto:VIReC@va.gov) for URL

# Nonstandard Race Values in CDW

- 26 of 31 nonstandard race values can be mapped to 4 standard races

## Examples

Nonstandard Race	Standard
AMER INDIAN OR ALASKAN NATIVE, AMERICAN INDIAN, AMERICAN INDIAN / ALASKAN NATIVE	AMERICAN INDIAN OR ALASKA NATIVE
BLACK; BLACK NOT OF HISP ORIG; BLACK, NON HISPANIC; HISPANIC BLACK	BLACK OR AFRICAN AMERICAN
WHITE NOT OF HISP ORIG; WHITE, NOT HISPANIC; HISPANIC WHITE; CAUCASIAN;	WHITE
PACIFIC ISLANDER	NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER

# Non-Mapped Values (CDW)

- 5 values are not mapped to standard values
  - Asian or Pacific Islander
  - Asian Pacific Islander
  - Asian/Pacific Islander
  - Mexican American
  - Unknown
- 4.6% of data values fall into 1 of these 5 categories

# Multiple Race Values (CDW)

- Approximately 1.7% of patients linked to a standard race have more than 1 standard race
- Not possible to identify the most recent record for a patient
- Recommendation for multiple values
  - Use only self-identified races, if any are recorded
  - Use all recorded races for patients without self-identified race
- Documentation: CDW Race Data and Multiple Races
  - Send va.gov email to [VIReC@va.gov](mailto:VIReC@va.gov) for URL

# Race Capture (CDW)

- Percent of patients with a standard race in the CDW varies by year of most recent healthcare activity

<b>FY</b>	<b>Standard Race, %</b>	<b>FY</b>	<b>Standard Race, %</b>
1999*	39.0	2006	63.0
2000	42.6	2007	65.9
2001	43.5	2008	66.6
2002	44.1	2009	67.2
2003	48.2	2010	68.5
2004	53.8	2011	70.2
2005	58.7	2012	84.6

\* No activity after FY 1999

# Ethnicity (CDW)

- Ethnicity found in two CDW tables
  - PatSub.PatientEthnicity – new method
    - 'HISPANIC OR LATINO'
    - 'NOT HISPANIC OR LATINO'
  - PatSub.PatientRace – old method (Appendix A)
    - HISPANIC, WHITE
    - WHITE NOT OF HISP ORIG
    - HISPANIC, BLACK
    - BLACK NOT OF HISP ORIG
- Documentation: CDW Ethnicity Data
  - Send va.gov email to [VIReC@va.gov](mailto:VIReC@va.gov) for URL

# Ethnicity (CDW), continued

## ■ Results

- 61% of all patients have ethnicity recorded
- 88% of those with healthcare activity in FY 2012
- 78% with one standard category are self-identified
- 1% have conflicting ethnicity categories

## ■ Recommendations

- Only use ethnicity captured through self-identification, if available
- Otherwise, use ethnicity captured through new recording method (Patsub.PatientEthnicity)
- Use older collection methods (Patsub.PatientRace) when no other data are available

# CDW Summary

- 8.3 million unique patient records with standard race values
- 2.3 million patient records with nonstandard race values that can be mapped to standard values
- Can contain multiple records per patient if patient visited more than 1 facility
- Sample queries for CDW data contained in Best Practices Guide: Race Data
- When multiple values are present
  - Use self-identified race and ethnicity
  - Otherwise use new collection methods (not self-identified)
  - Only use older collection methods if no other data

# Session Overview

- Introduction
- Race and Ethnicity Data Collection in VA
- Race and Ethnicity in VA Data
- Race and Ethnicity in Medicare Data
- Quality of VA Race/Ethnicity Data
- Recommendations
- Where to Go for More Help

# Medicare Race/Ethnicity Data

- Potentially useful source for Veterans in Medicare
  - Age 65 and older (>95% of VA elderly)
  - Disabled (~20% of VA patients <65 years)
  - End stage renal disease
- Derived primarily from Social Security Administration
  - Obtained at the time of application for SSN and/or replacement card
  - Reporting sources: Usually self or family
- Distinctions from current VA race/ethnicity data
  - 'Hispanic' is a race category
  - No multiple race reporting

# Medicare Race Data from SSA

- Until 1980, 4 categories only
  - White
  - Black
  - Other
  - Unknown
- In 1980, 'Other' replaced by
  - Asian, Asian American or Pacific Islander
  - Hispanic
  - American Indian or Alaskan Native

# RTI Race in Medicare

- Research Triangle Institute created and implemented an algorithm to increase accuracy of race variable, especially for Hispanic and Asian individuals
- RTI\_RACE available in Medicare Denominator File
- Algorithm uses first name, last name, preferred language, place of residence
- Improvement in sensitivity of racial codes
  - Increased from 30% to 77% for Hispanic
  - Increased from 55% to 80% for Asian/Pacific Islander

# Sources of Medicare Race Data in VA

## ■ VA Vital Status File

- CMS\_RACE
- Race is in Master File only
  - Master File contains one record for each SSN-date of birth (DOB)-gender combination found in VA data
  - Some SSNs have more than one record

## ■ Denominator file from Medicare

- RACE (same as CMS\_RACE)
- RTI\_RACE

# Medicare Race Data Summary

## ■ Medicare race data quality issues

- Information on most enrollees (those who obtained SSN prior to 1980) limited to original 4 categories
- SSN application form – single question format and no multiple race reporting

## ■ Initiatives to improve quality of race/ethnicity data

- Periodic updates on American Indians and Alaskan Natives from Indian Health Service
- 1997 survey of enrollees classified as 'Other', 'Unknown', or with Spanish surname, requesting race/ethnicity self-report
- RTI Race Algorithm

# Session Overview

- Introduction
- Race and Ethnicity Data Collection in VA
- Race and Ethnicity in VA Data
- Race and Ethnicity in Medicare Data
- Quality of VA Race/Ethnicity Data
- Recommendations
- Where to Go for More Help

# Use of Medicare and DoD Data for Improving VA Race Data Quality

Stroupe, et al. (2010) *Journal of Rehabilitation Research & Development*

## Aims

1. To estimate the extent to which missing “usable” race data in VA MedSAS files can be reduced by using non-VA data sources
  - a. Medicare
  - b. DoD
2. To evaluate the agreement between VA self-reported race data in MedSAS files and
  - a. Medicare race data
  - b. DoD race data

# Use of Medicare and DoD Data for Improving VA Race Data Quality

Stroupe, et al. (2010) *Journal of Rehabilitation Research & Development*

## ■ Patient cohort

- 10% representative sample of VA patients who obtained services during FY 2004-2005
- N = 570,018

## ■ Medicare race data were obtained from Medicare Vital Status file

## ■ DoD race data were obtained from the VA/DoD Identity Repository (VADIR) database for individuals <65 years

- VA/DoD data-sharing agreement
- Self-reported race/ethnicity obtained from service members

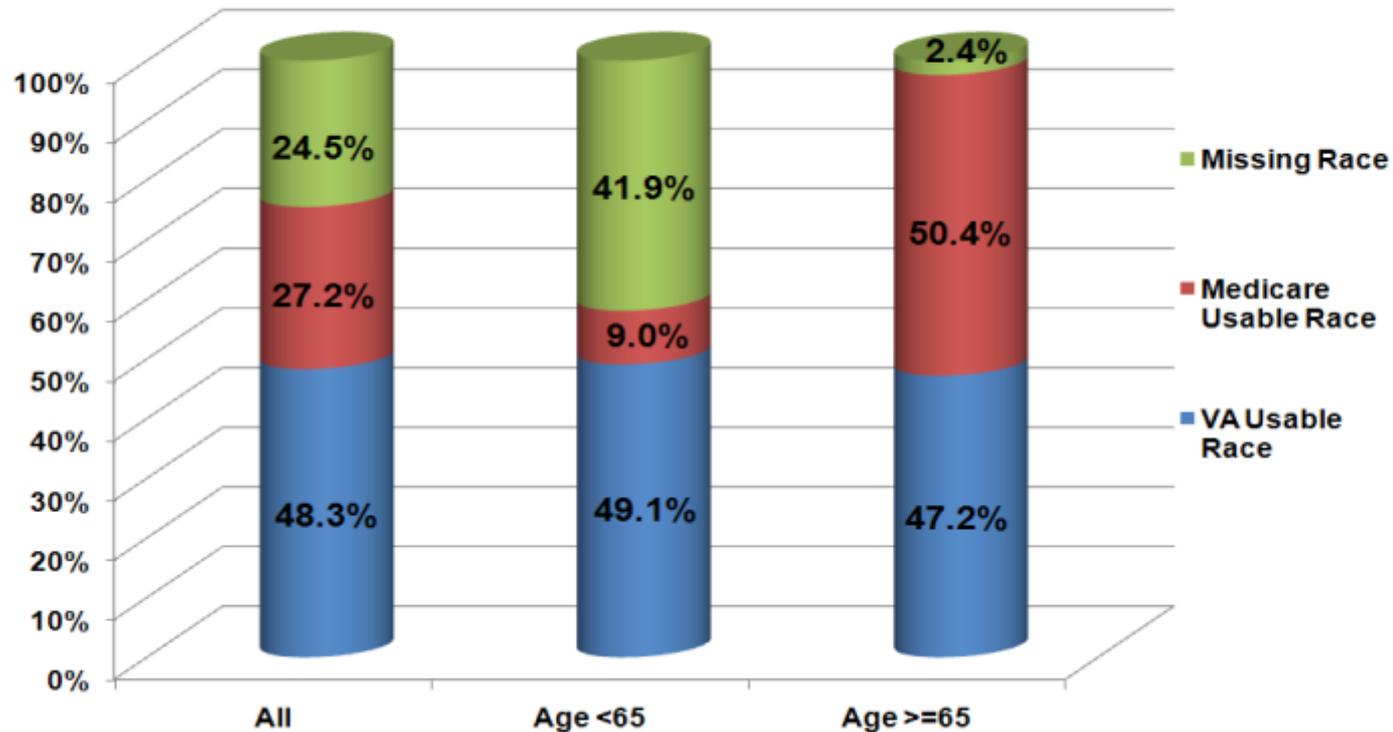
# Use of Medicare and DoD Data for Improving VA Race Data Quality

Stroupe, et al. (2010) *Journal of Rehabilitation Research & Development*

Patients with & without Usable Race Data in VA MedSAS	Usable Race Value (n=275,008)	No Usable Race Value (n=295,010)
Age, $\geq 65$ years, %	43	45
Male, %	94	89
Married, %	56	56
Geographic Region, %		
Northeast	16	17
South	44	37
Midwest	23	21
West	17	25

# Aim 1a: Improvement in Race Completeness with Addition of Medicare Data from 2004-2005

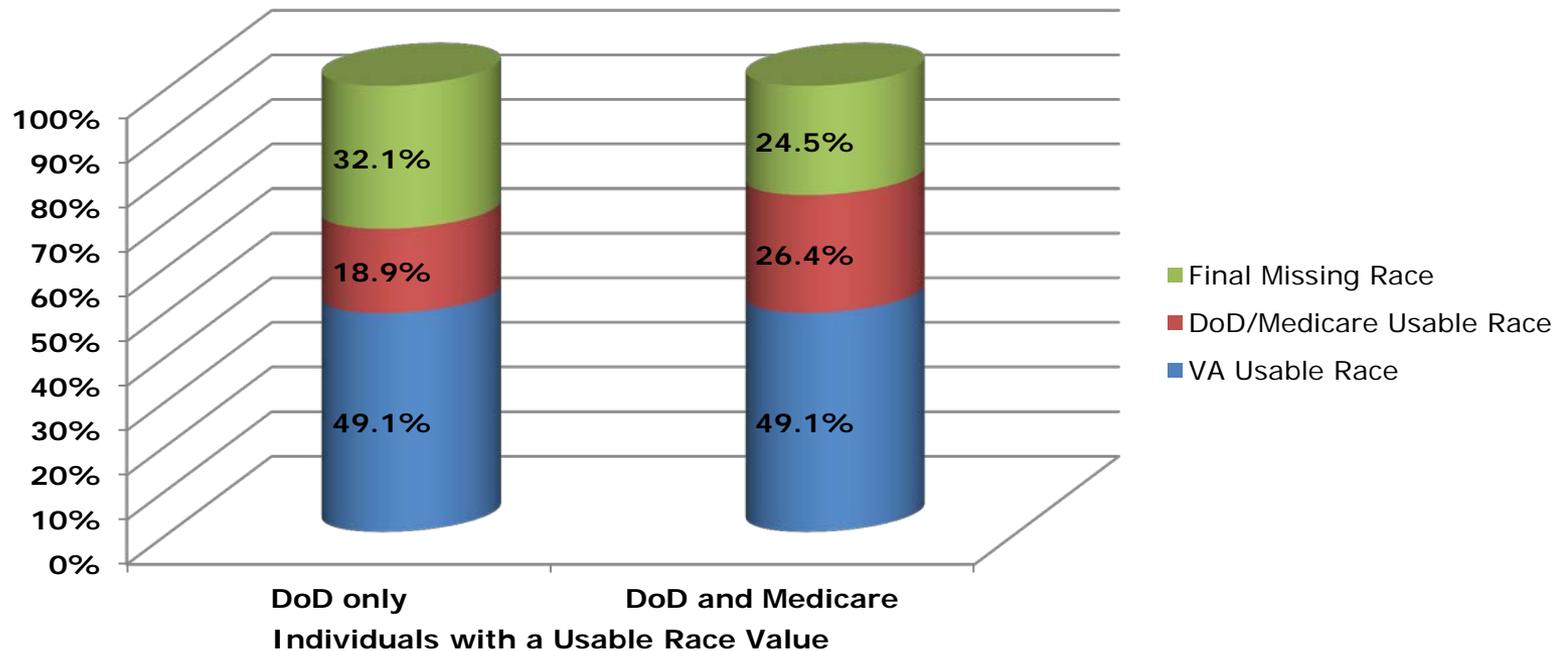
**Figure 3. Adding Medicare Data Improves Race Data Completeness <sup>a</sup>**



<sup>a</sup> Sample sizes: All 570,018; Age <65 319,756; Age >=65 250,262

# Aim 1: Improvement in Race Completeness with *Addition of Medicare and DoD* Data from 2004-2005

Figure. Adding DoD or DoD and Medicare Data Improves Race Data Completeness Among Non-Elderly (N = 319,756)

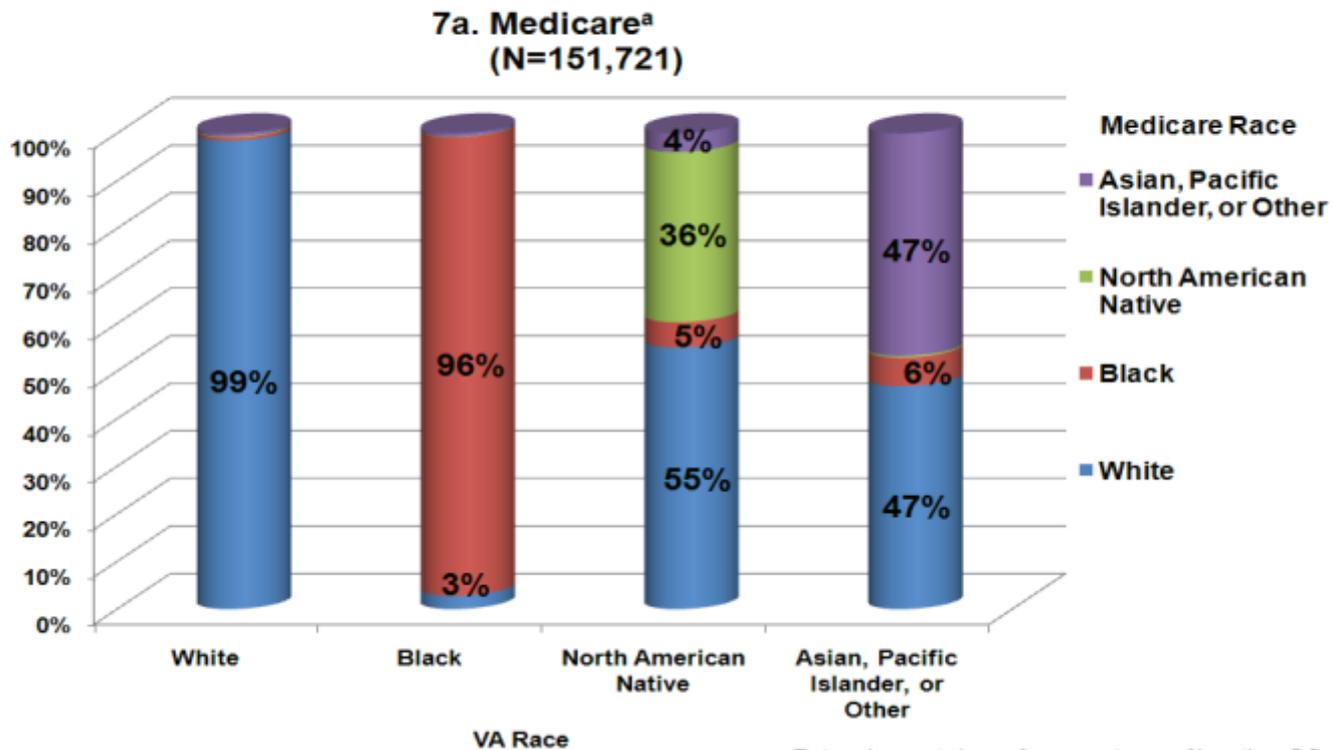


## Aim 2: Comparison of Medicare with VA and DoD Data, 2004-2005

VA Race	Medicare Race	DoD Data	Classification Constructed for Consistency Analysis
White	White	White	White
Black or African American	Black	Black	Black or African American
American Indian or Alaska Native	North American Native	American Indian or Alaska Native	North American Native
Asian	Asian	Asian or Pacific Islander	Asian, Pacific Islander, or Other
Native Hawaiian or Other Pacific Islander	Other	Other	

# Aim 2a: Comparison of VA with Medicare Data, 2004-2005

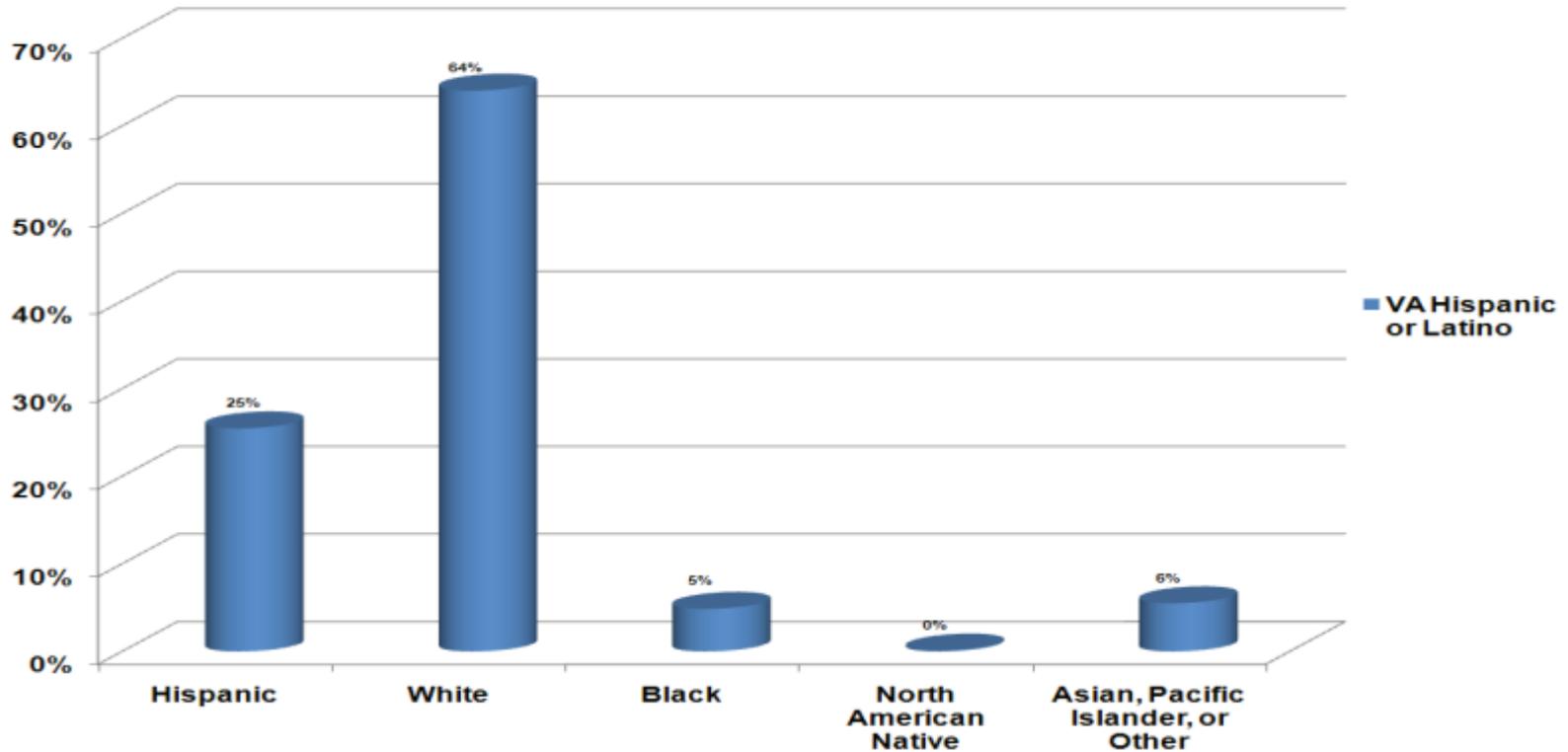
**Figure 7. Concordance Between VA Race Values and Race Values from External Sources**



<sup>a</sup>Data values not shown for percentages of less than 2.5

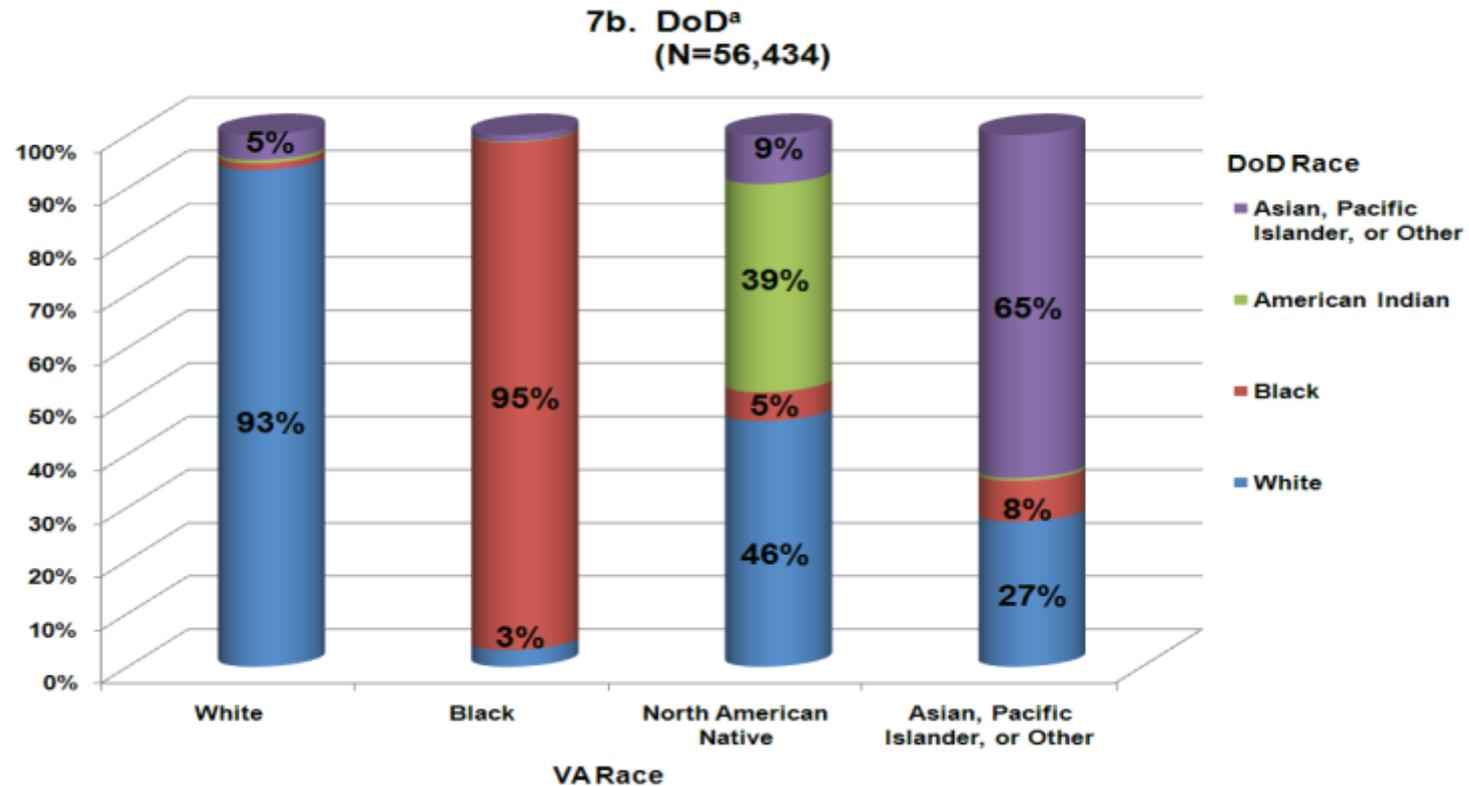
# Aim 2a: Comparison of VA with Medicare Data, 2004-2005

Figure 8. Medicare Race Among VA Self-Reported Hispanics



# Aim 2b: Comparison of VA with DoD Data, 2004-2005

**Figure 7. Concordance Between VA Race Values and Race Values from External Sources**



<sup>a</sup> Data values not shown for percentages less than 2.5

# Use of Medicare and DoD Data for Improving VA Race Data Quality

Stroupe, et al. (2010) *Journal of Rehabilitation Research & Development*

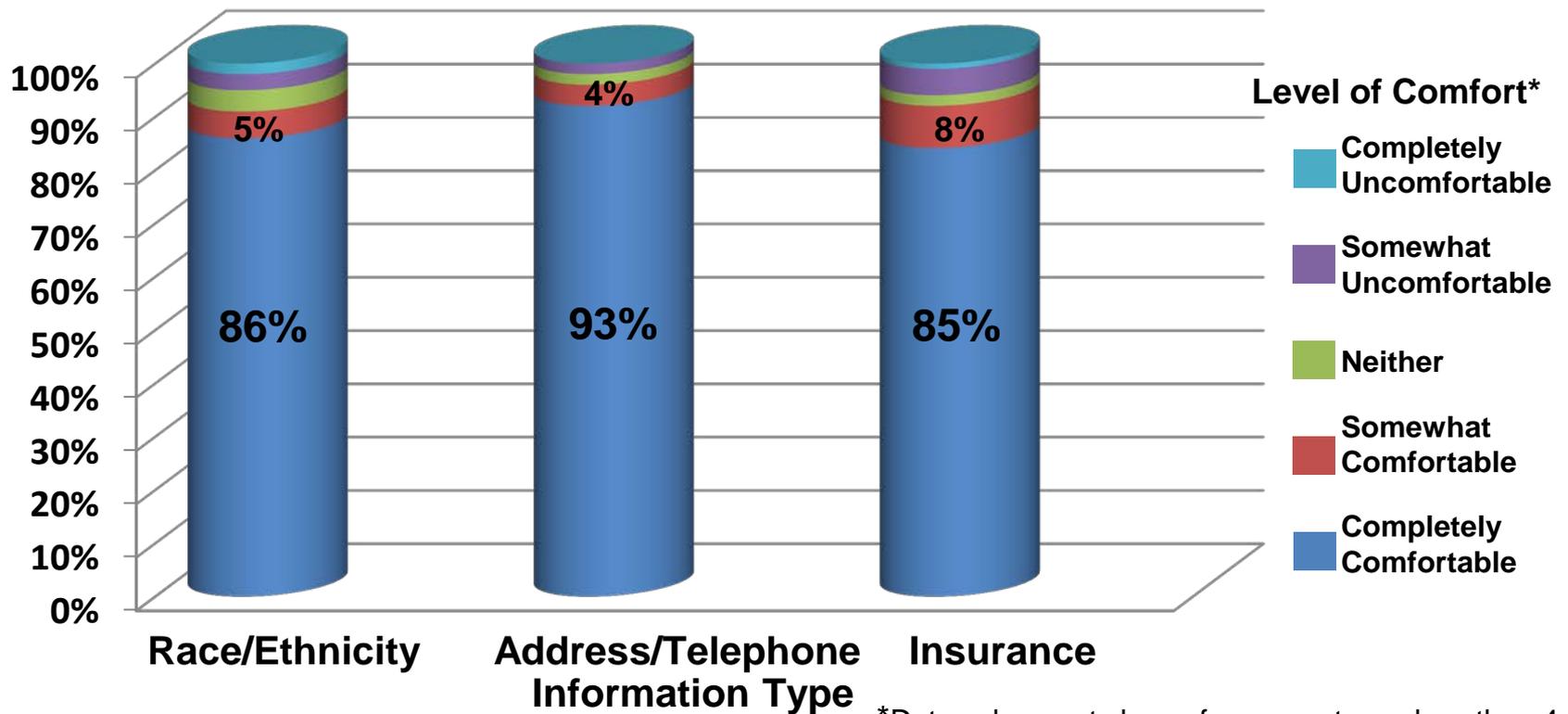
## Conclusion

- Supplementing VA with Medicare and DoD data improves VA race data completeness substantially
- More study is needed to understand poor rates of agreement between VA and external sources in identifying non-African-American minority individuals

# Improving Patient Demographic Information in VA Databases

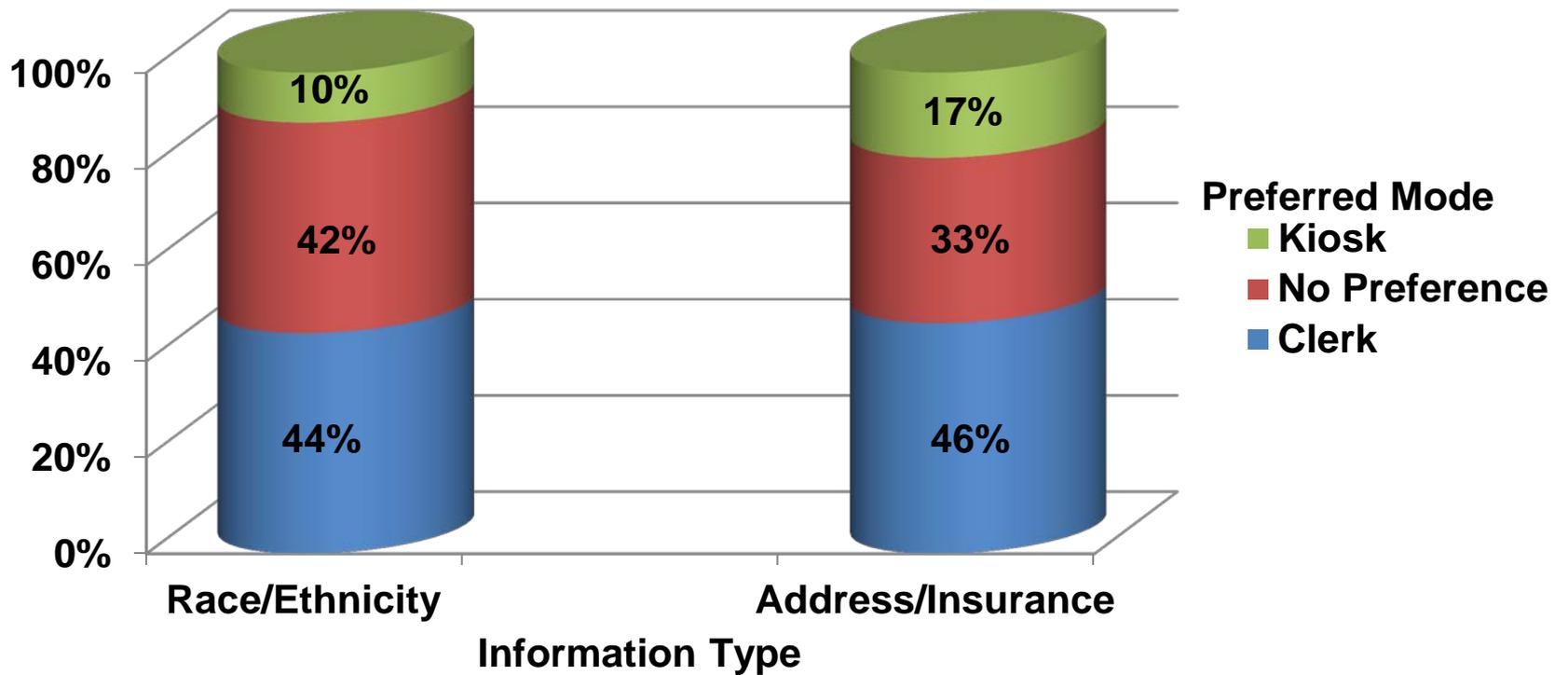
- T21-funded collaboration between Center for Health Equity Research and Promotion and Veterans Engineering Resource Center
- Patients (n=173) with missing or declined race at VA Pittsburgh Healthcare System were surveyed by telephone regarding their:
  - Comfort with being asked to provide race/ethnicity, address/telephone, and insurance when coming to the VA
  - Preference for providing that information to a clerk or computer kiosk (n=48 seen at site with kiosks)

## Comfort in Providing Requested Information (N=173)



\*Data values not shown for percentages less than 4

### Preferred Mode for Updating Information (N=48)



# Session Overview

- Introduction
- Race and Ethnicity Data Collection in VA
- Race and Ethnicity in VA Data
- Race and Ethnicity in Medicare Data
- Quality of VA Race/Ethnicity Data
- Recommendations
- Where to Go for More Help

# Recommendations

- Supplement inpatient race and ethnicity with outpatient data when using MedSAS files
- When multiple sources of race and ethnicity exist
  - Use self-identified race and ethnicity, if available
  - Use data from the old collection method, only if data from new collection method are not available
- Use the RACE variable to obtain ethnicity and race collected by the old method (MedSAS)
- Use Sub.PatientRace to obtain ethnicity collected by the old method (CDW)

# Recommendations

- Use of Medicare race information will reduce the problem of missing race in VA studies using administrative data
- When using VA VSF, match on date of birth and gender, in addition to (scrambled) SSN
  - Researchers will be most likely to identify the right individuals in the VSF if they use all 3 elements when conducting their VSF-study cohort record match

# Recommendations

- Classifying minorities as either Black/African American or Other in VA studies using Medicare race information results in higher rates of accurate classification than other groupings
  - VA North American Natives and Hispanics frequently misclassified as White (and Non-Hispanic) in Medicare
  - Medicare White and African-American categories, both had high predictive values for VA race

# Recommendations

- Medicare data cannot be used to identify Hispanics with any degree of accuracy or completeness
- RTI\_RACE in the Medicare Denominator file can increase the identification of Hispanics and Asians
- Consider other supplementary data sources
  - Department of Defense
  - Special surveys

# Session Overview

- Introduction
- Race and Ethnicity Data Collection in VA
- Race and Ethnicity in VA Data
- Race and Ethnicity in Medicare Data
- Quality of VA Race/Ethnicity Data
- Recommendations
- [Where to Go for More Help](#)

# VIReC Help

- VIReC Webpage (<http://www.virec.research.va.gov>)
  - Information on VA data sources and how to access data
  - Documentation on some VA datasets, e.g., MedSAS datasets
- HSRData Listserv
  - Join at the VIReC Web site
  - Discussion among >500 data stewards, managers, and users
  - Past messages in archive (on intranet)
- VIReC Help Desk
  - VIReC staff will answer your question and/or direct you to available resources on topics
  - [VIReC@va.gov](mailto:VIReC@va.gov) or (708) 202-2413

# Selected Recent References on Race/Ethnicity Data

- AHRQ (Agency for Healthcare Research and Quality) (2012). *National healthcare disparities report, 2012* (Rep. No. AHRQ Publication No. 13-0003). Rockville, MD: U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality.
- Baker DW, Cameron KA, Feinglass J, Thompson, JA, Georgas P, Foster S, et al. (2006). A system for rapidly and accurately collecting patients' race and ethnicity. *Am J Public Health, 96*, 532-537.
- Bertolli J, LeeLisa M, Sullivan PS. (2007). Racial Misidentification of American Indians/Alaska Natives in the HIV/AIDS Reporting Systems of Five States and One Urban Health Jurisdiction, U.S., 1984–2002. *Public Health Reports, 122*, 382-392.
- Blustein J. (1994). The Reliability of Racial Classifications in Hospital Discharge Abstract Data. *American Journal of Public Health, 84*, 1018-1021.
- Boehmer U, Kressin NR, Berlowitz DR, Christiansen CL, Kazis LE, Jones JA. (2002). Self-reported vs administrative race/ethnicity data and study results. *Am J Public Health, 92*, 1471-1472.
- Bonito AJ, Bann C, Eicheldinger C, Carpenter L. *Creation of New Race-Ethnicity Codes and Socioeconomic Status (SES) Indicators for Medicare Beneficiaries. Final Report, Sub-Task 2.* (Prepared by RTI International for the Centers for Medicare and Medicaid Services through an interagency agreement with the Agency for Healthcare Research and Policy, under Contract No.500-00-0024, Task No. 21) AHRQ Publication No. 08-0029-EF. Rockville, MD, Agency for Healthcare Research and Quality. January 2008
- Brahan D, Bauchner H. (2005). Changes in reporting of race/ethnicity, socioeconomic status, gender, and age over 10 years. *Pediatrics, 115*, e163-e166.
- Clegg LX, Reichman ME, Hankey BF, Miller BA, Lin YD, Johnson NJ, et al. (2007). Quality of race, Hispanic ethnicity, and immigrant status in population-based cancer registry data: implications for health disparity studies. *Cancer Causes Control, 18*, 177-187.
- Eicheldinger C, Bonito A. (2008). More accurate racial and ethnic codes for Medicare administrative data. *Health Care Financ Rev, 29*, 27-42.
- Elliott MN, Fremont A, Morrison PA, Pantoja P, Lurie N. (2008). A new method for estimating race/ethnicity and associated disparities where administrative records lack self-reported race/ethnicity. *Health Serv Res. 43*, 102-110.
- Ford ME, Kelly PA. (2005). Conceptualizing and categorizing race and ethnicity in health services research. *Health Serv Res, 40*, 1658-1675.
- Friedman DJ, Cohen BB, Averbach AR, Norton JM. (2000). Race/ethnicity and OMB Directive 15: implications for state public health practice. *Am.J Public Health, 90*, 1714-1719.
- Gomez SL, Kelsey JL, Glaser SL, Lee MM, Sidney S. (2005). Inconsistencies between self-reported ethnicity and ethnicity recorded in a health maintenance organization. *Ann Epidemiol, 15*, 71-79.
- Gomez SL, Glaser SL. (2006). Misclassification of race/ethnicity in a population-based cancer registry (United States). *Cancer Causes Control, 17*, 771-781.
- Hahn RA. (1992). The state of federal health statistics on racial and ethnic groups. *JAMA, 267*, 268-271.
- Hahn RA, Stroup DF. (1994). Race and ethnicity in public health surveillance: criteria for the scientific use of social categories. *Public Health Rep, 109*, 7-15.
- Hamilton NS, Edelman D, Weinberger M, Jackson GL. (2009). Concordance between self-reported race/ethnicity and that recorded in a Veteran Affairs electronic medical record. *N C Med J, 70*, 296-300.
- Institute of Medicine. (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care* Washington, DC: National Academies Press.
- Jones CP, Truman BI, Elam-Evans LD, Jones CA, Jones CY, Jiles R, et al. (2008). Using "socially assigned race" to probe white advantages in health status. *Ethn Dis, 18*, 496-504.
- Kashner TM. (1998). Agreement between administrative files and written medical records: a case of the Department of Veterans Affairs. *Med Care, 36*, 1324-1336.
- Kramer BJ, Wang M, Hoang T, Harker JO, Finke B, Saliba D. (2006). Identification of American Indian and Alaska Native veterans in administrative data of the Veterans Health Administration and the Indian Health.
- Laws MB, Heckscher RA. (2002). Racial and ethnic identification practices in public health data systems in New England. *Public Health Rep, 117*, 50-61.

# Selected Recent References on Race/Ethnicity Data

- Long JA, Bamba MI, Ling B, Shea JA. (2006). Missing race/ethnicity data in Veterans Health Administration based disparities research: a systematic review. *J Health Care Poor Underserved*. 17(1):128-40. Review.
- Mays VM, Ponce NA, Washington DL, Cochran SD. (2003). Classification of race and ethnicity: implications for public health. *Annu Rev Public Health*, 24, 83-110.
- McAlpine DD, Beebe TJ, Davern M, Call K T. (2007). Agreement between self-reported and administrative race and ethnicity data among Medicaid enrollees in Minnesota. *Health Serv Res*, 42, 2373-2388.
- McBean AM. (2006). Improving Medicare's Data on Race and Ethnicity. National Academy of Social Insurance. Medicare Brief, No. 15.  
Ref Type: Serial (Book, Monograph)
- Morgan RO, Wei II, Virnig BA. (2004). Improving identification of Hispanic males in Medicare: use of surname matching. *Med Care*, 42, 810-816.
- Office of Management and Budget *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity, Notice of Decision* (Rep. No. 62).
- Pan CX, Glynn RJ, Mogun H, Choodnovskiy I, Avorn J. (1999). Definition of race and ethnicity in older people in Medicare and Medicaid. *J Am Geriatr Soc*, 47, 730-733.
- Polednak AP. (2001). Agreement in race-ethnicity coding between a hospital discharge database and another database. *Ethn Dis*, 11, 24-29.
- Rhoades D. (2005). Racial Misclassification and Disparities in Cardiovascular Disease Among American Indians and Alaska Natives. *Circulation*, 111, 1250-1256.
- Saha S, Freeman M, Toure J, Tippens KM, Weeks C, Ibrahim S. (2008). Racial and ethnic disparities in the VA Health Care System: A Systematic Review. *Journal of General Internal Medicine*, 23, 654-671.
- Sohn M, Zhang H, Arnold N, Stroupe K, Taylor B, Wilt T, et al. (2006). Transition to the new race/ethnicity data collection standards in the Department of Veterans Affairs. *Population Health Metrics*, 4.
- Sondik EJ, Lucas JW, Madans JH, Smith, SS. (2000). Race/ethnicity and the 2000 census: implications for public health. *Am.J Public Health*, 90, 1709-1713.
- Stehr-Green P, Bettles J, Robertson LD. (2002). Effect of racial/ethnic misclassification of American Indians and Alaska Natives on Washington State death certificates, 1989-1997. *American Journal of Public Health*, 92, 443-444.
- Stroupe KT, Tarlov E, Zhang Q, Haywood T, Owens A, Hynes DM. Use of Medicare and DoD data for improving VA race data quality. *Journal of Rehabilitation Research & Development*. 2010; 47(8):781-795.
- Sugarman J, Soderberg R, Gordon J, Rivara, FP. (1993). Racial misclassification of American Indians: its effect on injury rates in Oregon, 1989 through 1990. *Am J Public Health*, 83, 681-684.
- Sugarman J, Holliday M, Oss, A, Astorina J, Hui Y. (1996). Improving American Indian cancer data in the Washington State Cancer Registry using linkages with the Indian Health Service and Tribal Records. *Cancer*, 78, 1564-1568.
- The Joint Commission: Advancing Effective Communication, Cultural Competence, and Patient- and Family-Centered Care: A Roadmap for Hospitals. Oakbrook Terrace, IL: The Joint Commission, 2010.
- Thoroughman DA, Frederickson D, Cameron D, Shelby L, Cheek, JE. (2002). Racial misclassification of American Indians in Oklahoma State Surveillance Data for Sexually Transmitted Diseases. *American Journal of Epidemiology*, 155, 1137-1141.
- Trivedi AN, Grebla RC, Wright SM, Washington DL. (2011). Despite improved quality of care in the Veterans Affairs health system, racial disparity persists for important clinical outcomes. *Health Affairs*, 30, 707-715.
- US Department of Veterans Affairs (2003). *VHA Directive 2003-027, Capture of Race and Ethnicity Categories* Washington, DC: US Department of Veterans Affairs.
- US Department of Veterans Affairs (2009). *VHA Handbook 1601A.01, Intake Registration* Washington, DC: U.S. Department of Veterans Affairs.
- Veterans Health Administration Decision Support Office (2009). *National Data Extract Technical Guide* Bedford, MA: U.S. Department of Veterans Affairs.
- Wei II, Virnig BA, John DA, Morgan RO. (2006). Using a Spanish surname match to improve identification of Hispanic women in Medicare administrative data. *Health Serv Res*, 41, 1469-1481.

**Questions?**

# Upcoming Seminar

## *Applying Comorbidity Measures Using VA and Medicare Data*

June 2, 2013

James F. Burgess, PhD

[Click here to register](#)

