

Colorectal Cancer Screening, Medicare and Disability

Presented at
APHAs 135th Annual Meeting & Exposition
Washington, DC, 2007
by
Brian S. Armour, PhD¹

1. National Center on Birth Defects and Developmental Disabilities, CDC.



SAFER · HEALTHIER · PEOPLE™



Joint Work

Lesley A. Wolf, MPH†
Vilma Cokkinides, PhD††
Carol Friedman, DO§
Lisa Richardson, MD§

† Science Applications International Corporation for the Division of Health and Human Development, National Center on Birth Defects and Developmental Disabilities, CDC, Atlanta, Georgia.

†† Program Director, Risk Factor Surveillance, Department of Epidemiology and Surveillance Research, American Cancer Society, Atlanta, Georgia.

§ Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Atlanta, Georgia.

Colorectal Cancer (CRC)



- U.S. in 2005
 - Primarily affects people aged 50 years and older
 - Approx. 150,000 people dx.
- Late Stage CRC is fatal
 - Approx 56,000 deaths
 - 2nd leading cause of death among women
 - 3rd leading cause of death among men

CRC Continued



- Routine screening can reduce incidence and mortality
- Screening Methods
 - Fecal Occult Blood Test (FOBT)
 - Flexible Sigmoidoscopy
 - Colonoscopy
 - Double Contrast Barium Enema

Disability



- U.S. Census Bureau in 2000
 - 50 million people with disabilities (PWDs)
 - 14 million PWDs aged 65+
- Disability & Medicare's Solvency
 - Freedman 2002 -- disability rates ↓ among elderly
 - Bhattacharya 2005 -- disability rates ↑ among working age population
 - Skinner 2006 – rate changes second order concern

Cancer Screenings



- PWDs receive preventive cancer screening services at rates lower than Pw/oD's
- CRC screening rates are low
- Increased risk for PWDs
 - Secondary medical conditions—obesity & constipation
 - Behavioral health risks—physical inactivity & smoking
 - Sensory deficits

CRC Screening



- Why are CRC screening rates low?
 - Lack of health plan coverage
- Medicare expanded coverage screening colonoscopy
 - July 2001

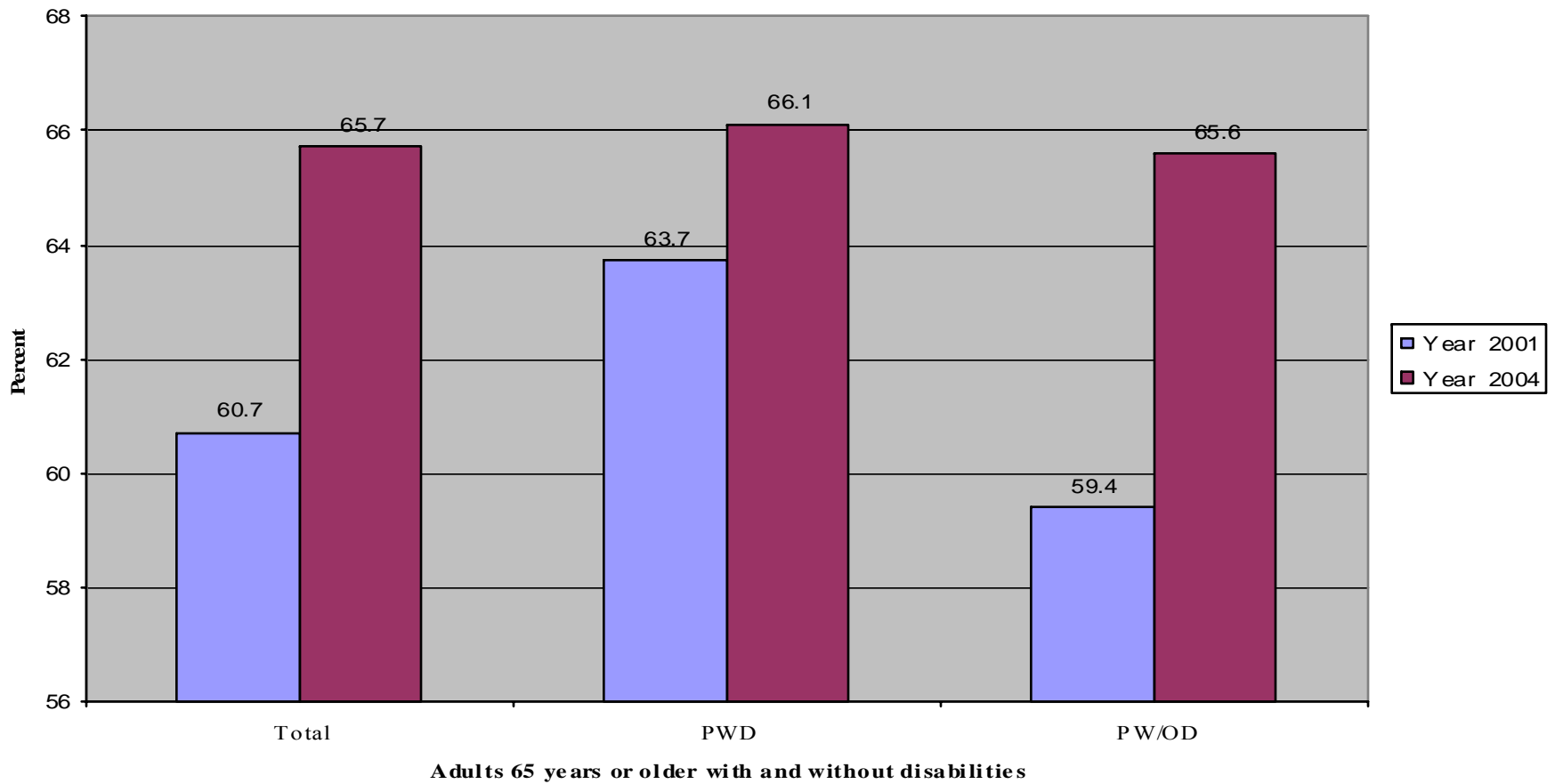
Objective



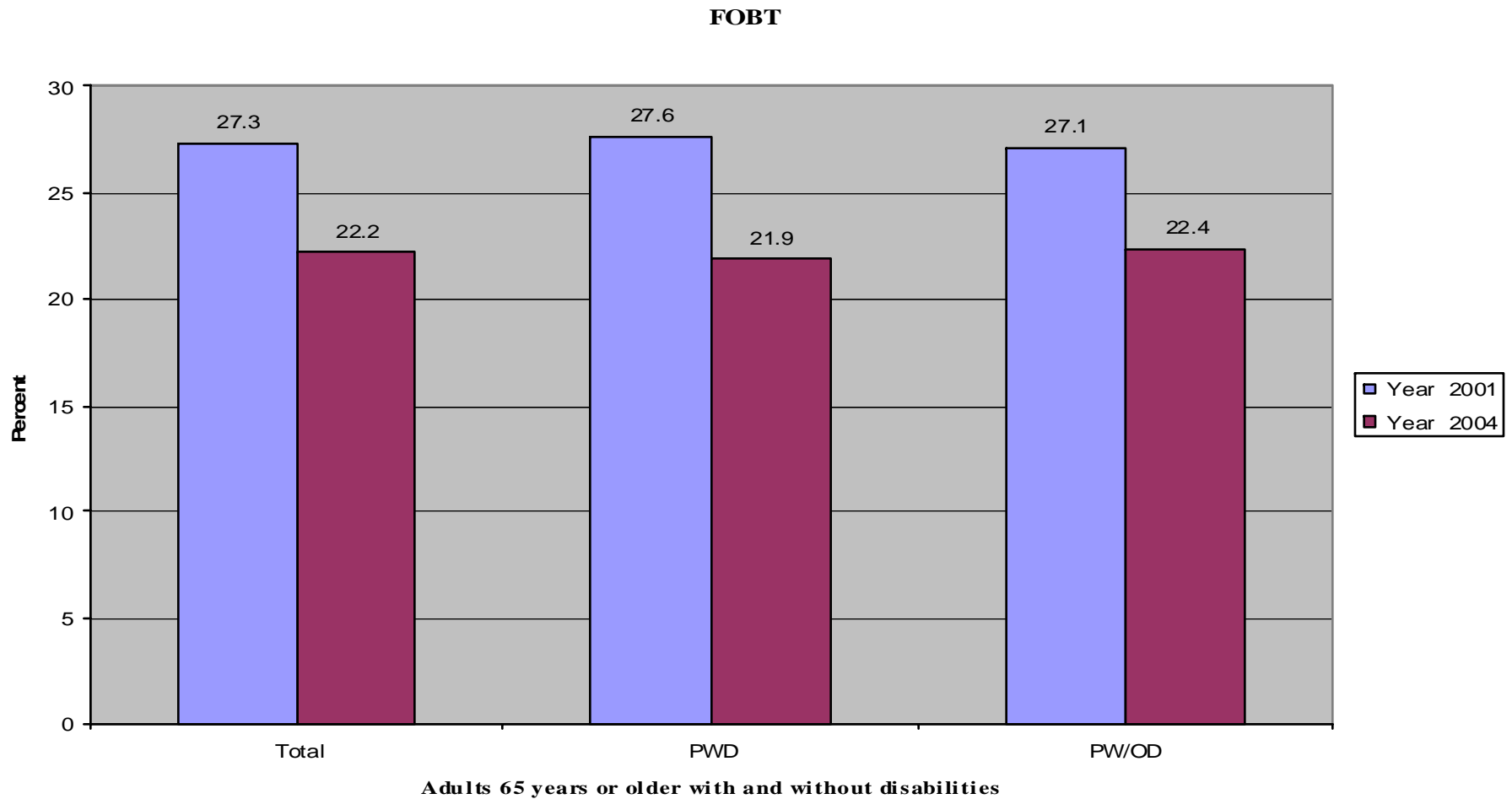
- Medicare's 2001 coverage expansion
 - Gender differences
 - Racial differences
 - What about people with disabilities?
- Ceteris Paribus

Descriptive Stats –BRFSS 2001 & 2004

Colorectal Cancer (CRC) Screening

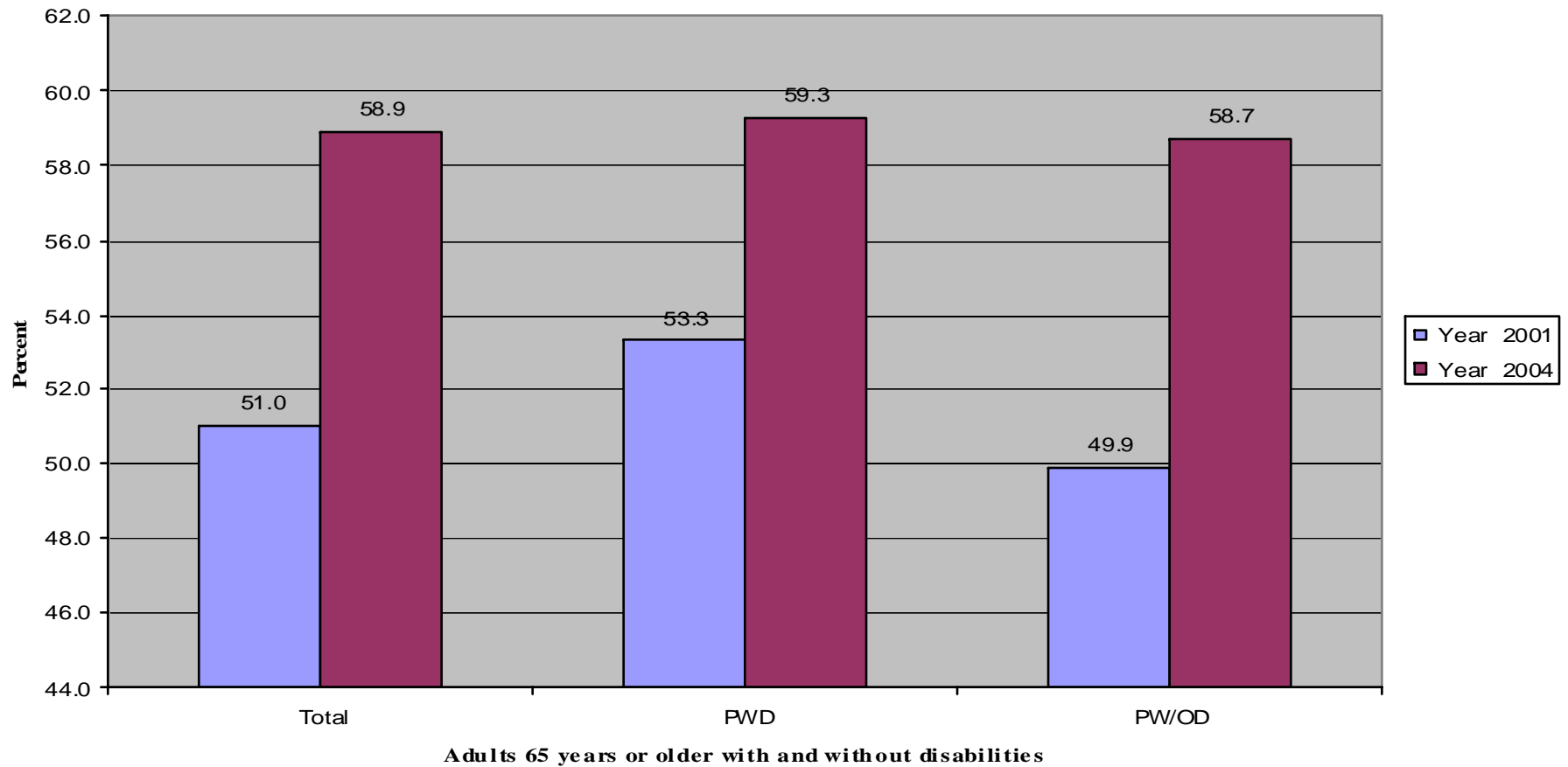


Descriptive Stats –BRFSS 2001 & 2004



Descriptive Stats –BRFSS 2001 & 2004

Lower Endoscopy



Model



Dependent Variable

- CRC screening
 - FOBT in the past year
 - Lower endoscopy in the past 10 years

Key Independent Variables

- Disability
- Year (2004)
- Interaction term disability*year

Model



Other Independent Variables

- Age, Age²
- Gender
- Race
- Annual income
- Education
- Marital status
- Employment status
- Smoked cigarettes
- BMI
- Had PCP
- Health status
- Regional dichotomous variables

Selected Logistic Regression Results – CRC Screening of U.S. Adults Aged 65 years or older—BRFSS 2001 & 2004



Characteristic	Adjusted Odds Ratio	95% CI
Disability	1.25	(1.14-1.38)
Year (2004)	1.22	(1.14-1.31)
Disability*Year	0.85	(0.75-0.96)

Discussion



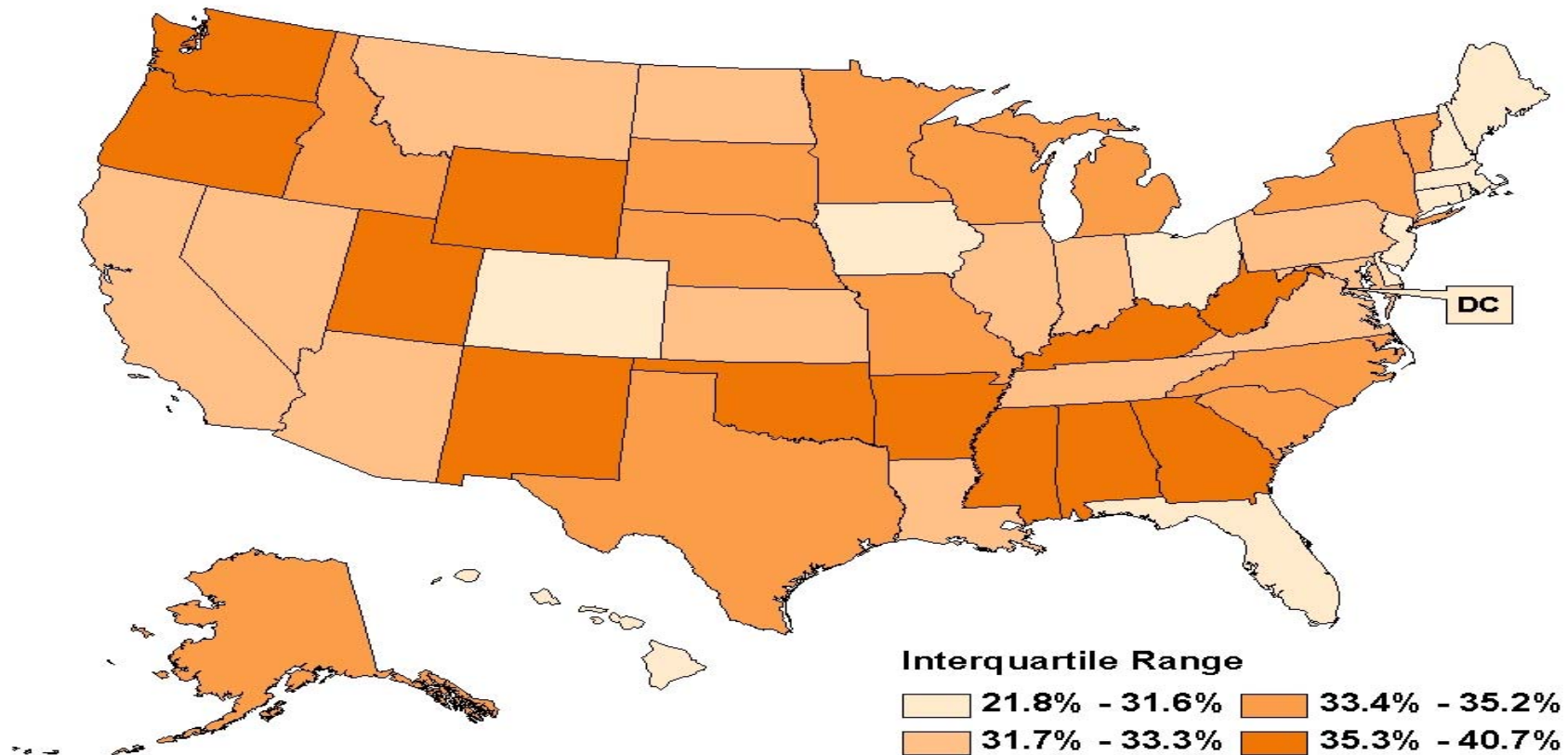
- Why growth rate in endoscopy use lower for PWDs?
- Other barriers to care remain
 - Inability to access services
 - lack of transportation
 - lack of assistive technology in physician offices
 - Difficulty communicating with providers
 - Crowding out of preventive care
 - Lack of care coordination between PCPs and specialists

Limitations

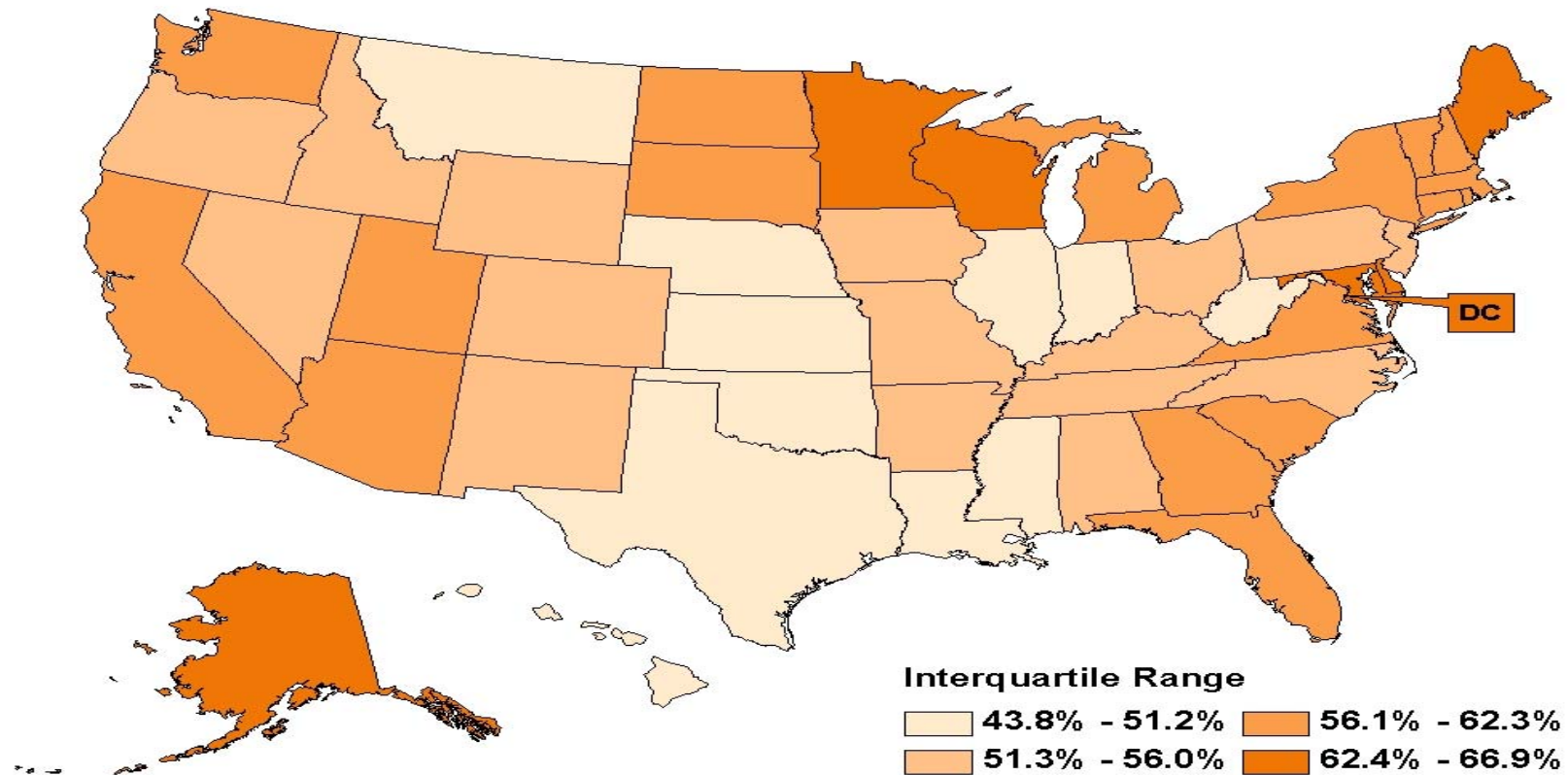


- BRFSS is a telephone survey
- Data is self-reported
- CRC procedures for screening vs. Dx.
- Causality
- Disability severity
- Unable ID type of health insurance
- Unable distinguish the effects of the Medicare program expansion from temporal trends

Adults with Disabilities Age 65+



Endoscopy Adults with Disabilities Age 65+



Future Work



- Public Health
 - QI opportunities
- Research
 - Disability
 - Severity, Permanence, Duration
 - CRC Screening
 - Flex Sig. vs. Colonoscopy
 - Dx. vs. Screening
 - Barriers to Care
- Policy Perspective
 - Dampened affect for PWDs
 - Alignment of incentives

Disclaimer



“The findings and conclusions in this presentation have not been formally disseminated by the Centers for Disease Control and Prevention (CDC) and should not be construed to represent any agency determination or policy.”

Contact



Brian Armour
barmour@cdc.gov