

# GEORGIA ALZHEIMER'S DISEASE & Related Dementia Report, 2016



**GEORGIA ALZHEIMER'S DISEASE**  

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**& Related Dementia Report, 2016**

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Perceived Cognitive Impairment (PCI)  
Among Georgia Residents:  
Analysis of the Georgia BRFSS  
2011-2015





# EXECUTIVE SUMMARY

DPH HAS PARTNERED WITH THE DIVISION OF AGING SERVICES WITHIN THE GEORGIA DEPARTMENT OF HUMAN SERVICES AND THE ASSOCIATION OF STATE AND TERRITORIAL HEALTH OFFICIALS (ASTHO) TO CONVENE STAKEHOLDER MEETINGS INCLUDING MORE THAN 40 INTERNAL AND EXTERNAL PARTNERS:

Georgia Department  
of Human Services,  
Division of Aging

Georgia Alzheimer's  
Association

Georgia Hospital  
Association

Medical Association  
of Georgia

State Legislators

Georgia Department  
of Community Health  
(Medicaid, State Health  
Benefit Plan)

West Virginia and South  
Carolina Alzheimer's and  
Related Dementias  
Registry Staff

Carl Vinson Institute,  
University of Georgia

University of Georgia,  
College of Public Health

Emory University, Rollins  
School of Public Health

Members of the healthcare  
provider community

## Background

**DURING THE 2013 GEORGIA LEGISLATIVE SESSION**, the Georgia General Assembly created the Georgia Alzheimer's and Related Dementias State Plan Task Force (GARD) to meet during the following summer. The task force was charged with creating a state Alzheimer's disease plan, including recommendations to collect statewide data to inform the evaluation and care infrastructure. All four legislative healthcare committee chairs and state health agency commissioners served on the task force and chaired issue-specific subcommittees.

Georgia Department of Public Health Commissioner, Brenda Fitzgerald, M.D., chaired the Healthcare Research and Data Collection Subcommittee which included clinical and state agency stakeholders. One of the goals for the subcommittee was to identify and make recommendations about using surveillance data to enhance Alzheimer's awareness and action in public health programming and state planning <sup>[1]</sup>. The subcommittee found that there was a paucity of data about Alzheimer's disease and related dementias in Georgia and that no central repository for these data existed. Furthermore, this has created a barrier to estimating accurate Alzheimer's disease and related dementias prevalence rates in Georgia to inform planning, research and reporting efforts. One key recommendation made was to establish a statewide Alzheimer's Disease and Related Dementias (ADRD) Registry that will provide accurate and current data to address these urgent needs.

During the 2014 Georgia Legislative Session, legislation (HB 966) regarding the establishment of an ADRD registry within the Georgia Department of Public Health (DPH) was introduced and subsequently passed (O.C.G.A 31-2a-17) <sup>[2]</sup>. As a major proprietor of health data in Georgia, DPH is uniquely situated to house such a registry. And given its existing footprint in the areas of health policy and promotion, DPH was identified as a prime coordinator of stakeholders and partners in the registry planning and development effort.



## Benefits of a State Alzheimer's and Related Dementias Registry

- Provide legislators, state planners and administrators, and members of the private sector with accurate data that will enable informed planning for current and future healthcare and social service needs (e.g. nursing home beds, adult day care, etc.).
- Provide a resource for Georgia researchers to secure National Institute of Health (NIH) funding and establish an environment that will attract clinical trial and biotechnology investments, and create new jobs.
- Serve the people of the state of Georgia by guiding efforts to educate the public on ADRD and serve as an information clearing house on ADRD for patients and caregivers.
- To further serve Georgians by supporting cutting edge clinical research that will offer more effective treatments for dementing diseases

## Goals for the ADRD Registry in Georgia

- Collect and disseminate usable data to inform programs and services for the aging population.
- Determine the burden of ADRD among Georgians
- Identify epidemiologic trends.
- Bring awareness at the state level to issues of ADRD and increase the potential for positive statewide health outcomes and influence the management of associated healthcare costs.
- Inform stakeholders for planning and for future registry needs.

## Data Sources for the ADRD Registry

Georgia DPH currently collects and consolidates data from various sources including Medicare, Medicaid, Vital Records, Hospital Discharge Records, Emergency Room Visits Records, Physicians Reporting Portal ([https://sendss.state.ga.us/sendss!/alzheim.alzheim\\_login](https://sendss.state.ga.us/sendss!/alzheim.alzheim_login)), the State Health Benefits Plan, Nursing Home Data, and Georgia Regents Health Plan.

The Georgia Behavioral Risk Factor Surveillance System (BRFSS) also serves as a primary source of information on the prevalence of perceived cognitive impairment (PCI), other chronic health conditions, health risk behaviors, and the use of clinical preventive services among adult Georgia residents <sup>[3]</sup>. Additionally, it provides information on the challenges facing caregivers of individuals with ADRD, and other long-term illnesses or disabilities. The analysis in this annual report is based on data collected in the Georgia BRFSS during calendar years 2011, 2012, 2013, and 2015.



# HIGHLIGHTS & UPDATES

## 2016 GEORGIA ALZHEIMER'S AND RELATED DEMENTIAS (GARD)

The Alzheimer's Disease and Related Dementias (ADRD) State Plan Coordinator began working in the Department of Human Services, Division of Aging Services on **June 1, 2016**.

GARD Advisors and Advisory Council met **July 2016** and revitalized six existing work groups.

**190** people are included in GARD email distribution and are updated on progress.

**70** people are engaged in six active work groups.

**Over 45** new members were added to GARD email distribution since **June 2016**, with many now engaged in work groups.

There are **6** active work groups.

## GARD WORK GROUP UPDATES

### Workforce Development

**Chairs:** Kathy Simpson (Alzheimer's Association, Georgia Chapter) and Dr. Jennifer Craft Morgan (Georgia State University, Gerontology Institute)

**Established State Plan Goals:** Assess the current workforce in Georgia, improve/increase dementia capability of workforce, develop education and training curricula, and improve workforce retention.

#### 2016 Update:

- Produced a one-year report about an online dementia education module for physicians, which showed that 77 healthcare professionals completed the training and that the education proves to be impactful. Participants demonstrated a strong understanding of the basics of Alzheimer's disease and the Annual Medicare Wellness Visit after completing the modules.
- Collaborated with the Culture Change Network of Georgia and convened a group of providers to develop standard competencies for professionals who support people living with dementia.
- The workgroup is comprised of three subcommittees: Healthcare Provider Education, Direct Care Worker Competencies, and Data Collection & Analysis.

### 2017 Vision and Goals:

- Creation of a second web-based dementia training module for physicians
- Complete a dementia education competency guide for the direct care workforce
- Expand data collection on dementia competency and training of long-term care workforce

## Service Delivery

**Chair:** Eve Anthony (Athens Community Council on Aging)

**Established State Plan Goals:** Assess the regional capacity of our state including rural versus urban access to services, train workforce in person-centered care, promote use of person-centered care models in long-term care, improve access to services and information, improve care transitions, and ensure high-quality services and quality care measurement in dementia services.

### 2016 Update:

- Established a chairwoman, reconvened membership, and reviewed the established goals of service delivery.
- Communicated with work groups to determine collaboration opportunities

### 2017 Vision and Goals:

- Work toward the established goals in the state plan
- Collaborate with Workforce Development work group on common goals and strategies

## Public Safety

**Chair:** *This work group did not have a chair in 2016.*

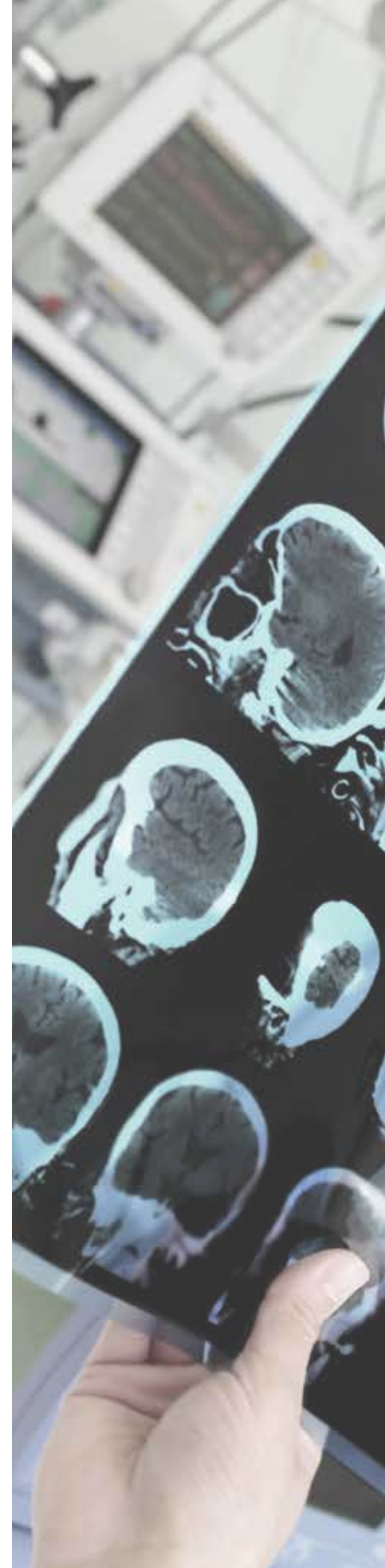
**Established State Plan Goals:** Ensure safety of persons with dementia who are at-risk for abuse, neglect, or exploitation and reduce rates of injury among people living with dementia.

### 2016 Update:

- Reconvened and decided to continue to support the Abuse, Neglect, and Exploitation initiatives that were established.
- Explored the current policies in the state of Georgia around the determination of decision-making capacity in someone living with dementia.

### 2017 Vision and Goals:

- Determine next steps in the creation or revision of a decision-making capacity toolkit for professionals including physicians, mental health professionals and judges
- Revisit the goals established in the state plan and determine next steps
- Expand work group membership to include first-responders



# HIGHLIGHTS & UPDATES



## Outreach and Partnerships

**Chairs:** Natalie Zellner, JD (Emory University, Alzheimer's Disease Research Center) and Ginny Helms (Alzheimer's Association, Georgia Chapter)

**Established State Plan Goals:** Raise public awareness about dementia, educate the public about "dementia-friendliness," expand state's capacity to address the needs of persons living with dementia through partnerships and leveraging resources.

### 2016 Update:

- Determined a plan to bring awareness of the importance of early detection and diagnosis, which includes education about using the Medicare Annual Wellness Visit as a means to conduct cognitive screenings.
- Focused attention on partnership and connectivity to the faith community as a way to educate people on the topic of early detection.

### 2017 Vision and Goals:

- Use media outlets to disseminate information about the importance of early detection and diagnosis to the public
- Attend and participate in professional conferences for healthcare professionals as a means to communicate the importance of early detection and diagnosis
- Collaborate with faith communities on educational programming

## Policy

**Chairs:** Sheila Humberstone, Principal (Stone Bridge Consulting Group)

**Established State Plan Goals:** The policy workgroup serves to assess the statutory, regulatory, and state funding environment as it relates to Alzheimer's disease and make necessary recommendations. The group serves to vet and move forward as appropriate any policy changes requested by other workgroups as well as independently consider policy changes which would assist individuals with dementia and their families.

### 2016 Update:

Worked with GARD members on priorities during the 2016 Legislative Session, including:

- Increase in Home and Community Based Services (HCBS) funding
- Allocation of funding for Georgia Bureau of Investigation (GBI) to hire additional staff for abuse, neglect and exploitation of vulnerable adults.
- Uniform Adult Guardianship and Protective Proceedings Jurisdiction Act

### 2017 Vision and Goals:

- Work with the other GARD workgroups to develop a strong policy platform for 2018
- Pursue budgetary, legislative, and regulatory actions as advised by the GARD workgroups



## Healthcare, Research, & Data Collection

**Chair:** *This workgroup did not have a chair in 2016.*

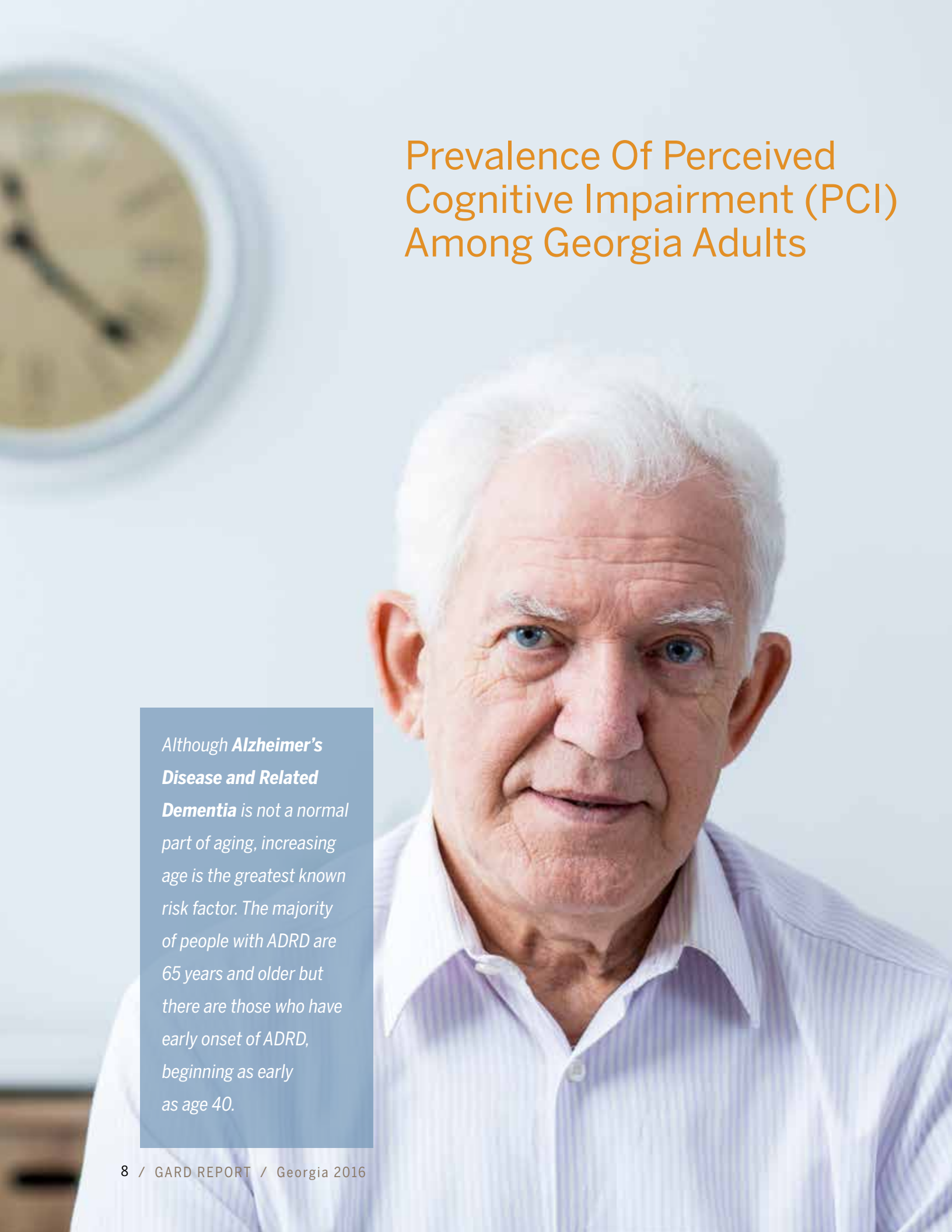
**Established State Plan Goals:** Ensure early and accurate diagnosis of dementia, use surveillance data to enhance awareness for state planning, recognize Alzheimer's as chronic disease, and improve the care and health outcomes of people living with dementia and their families.

### 2016 Update:

- Reconvened in order to establish direction.
- Began work on a data set catalogue to assess existing data on dementia in the state of Georgia.
- Welcomed the new full-time staff person leading the ADRD registry efforts to the work group.

### 2017 Vision and Goals:

- Complete data set catalogue and determine next steps
- Use multiple data sets to analyze the accessibility challenges and health disparities that exist in our state for people living with dementia
- Continue to support the improvement of the ADRD registry efforts of Department of Public Health



## Prevalence Of Perceived Cognitive Impairment (PCI) Among Georgia Adults

Although **Alzheimer's Disease and Related Dementia** is not a normal part of aging, increasing age is the greatest known risk factor. The majority of people with ADRD are 65 years and older but there are those who have early onset of ADRD, beginning as early as age 40.

## HIGHLIGHTS

### More than 2.8 million Georgia adults are 45 years and older.

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Approximately **385,500 (13 percent)** self-reported PCI.

The prevalence of PCI was relatively consistent among races and ethnicities.

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Georgians aged **75** years and older reported a higher prevalence of PCI

(Weighted Frequency (WF)\* = **61,550; 17 percent**) than those less than **65** years.

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Georgians who had less than a high school education reported the highest prevalence of PCI

(WF\*=**106,200; 22 percent**) than those with higher levels of education.

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Georgians who rated their general health as Fair or Poor (WF\*=**211,480; 30 percent**)

were significantly more likely to report PCI than those who reported good or better general health

(WF\*=**173,830; 8 percent**).

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The prevalence of PCI is significantly higher among Georgians without any form of health care

coverage (WF\*=**61,720; 17 percent**) than those who have some form of coverage

(WF\*=**322,788; 13 percent**).

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Approximately **80 percent** (WF\*=**262,260**) of Georgians who reported PCI had not

discussed their condition with a health care provider (HCP), and had therefore not received any treatment

or therapy. Only **8 percent** (WF\*=**24,940**) had discussed their condition with a HCP

and received treatment.

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\* The BRFSS employs a complex survey design to account for overrepresentation or underrepresentation of various population subgroups within the final sample of respondents. Responses to the survey are then weighted to adjust for the distribution of the sample data. The weighted frequency represents the estimated number of adult Georgians who responded to a particular question.

# INTRODUCTION

*Like other chronic diseases, **Alzheimers Disease and Related Dementia** is not randomly distributed in the population. It is more common in certain demographics than others, such as older adults and women.*

**More than 16 million U.S. residents** are living with cognitive impairment <sup>[4]</sup>. While cognitive impairment is not an inevitable result of aging, age is the greatest risk factor. As the U.S. population continues to age and the number of people ages **65** years and older increases, the prevalence of cognitive impairment also is expected to increase. The number of Americans ages **65** years or older who are living with Alzheimer's disease is projected to increase from **5.1 million** in 2000, to about **13.2 million** in 2050 <sup>[5]</sup>. Cognitive decline may also be the result of other reversible conditions/diseases (e.g., depression, infections, medication side effects or nutritional deficiencies), which can be serious and should be treated by a health care provider as soon as possible <sup>[6]</sup>.

**Perceived cognitive impairment** (PCI) is the self-perceived impression of declining cognitive function that is not readily identifiable through neuropsychological testing, but which may be the first preclinical sign of Alzheimer's disease and other dementias <sup>[7,8]</sup>. Studies show that older adults with memory complaints have a greater risk than those without memory complaints for developing mild cognitive impairment (a potential precursor to Alzheimer's disease) <sup>[9]</sup>. While having cognitive decline and impairment does not necessarily mean a person will develop future dementia, current estimates indicate that **32 percent** to **53 percent** of individuals with mild cognitive impairment will experience some form of dementia later in life <sup>[10-12]</sup>.



Cognitive impairment is when a person has trouble remembering, concentrating, learning new things, or making decisions that affect their everyday life. Cognitive impairment ranges from mild to severe. With mild impairment, people may begin to notice changes in cognitive function, but may still be able to do their daily activities. Severe levels of impairment can lead to the inability to understand the meaning or importance of something and the ability to talk or write, resulting in the inability to live independently. Cognitive impairment may be the result of causes or diseases other than Alzheimer's disease <sup>[10]</sup>.

# PREVALENCE

## Prevalence of PCI

Approximately **13% (385,500)** of Georgians aged **45** years or older reported they had experienced PCI that was happening more often or was getting worse during the past **12** months.

## Prevalence by Sex

Fourteen percent (**14%**; **177,500**) of males and **13% (208,000)** of females reported experiencing PCI over the past **12** months.

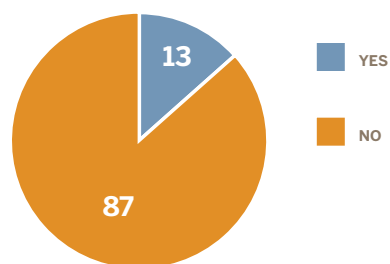
## Prevalence by Race/Ethnicity

Approximately **13% (251,500)** of Non-Hispanic Whites, **13% (96,600)** of Non-Hispanic Blacks, and **15% (13,900)** of Hispanics reported experiencing PCI over the past **12** months.

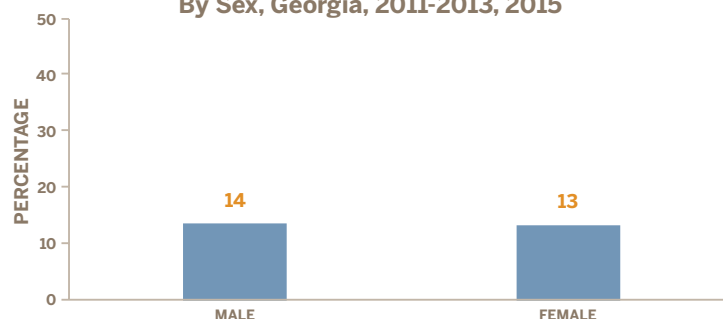
## Prevalence by Age

Nearly **17% (61,550)** of Georgians **75** years and older reported experiencing PCI that was happening more often or getting worse over the past **12** months. This was significantly higher than the prevalence among **45-54** and **65-74** year olds (**12% each**).

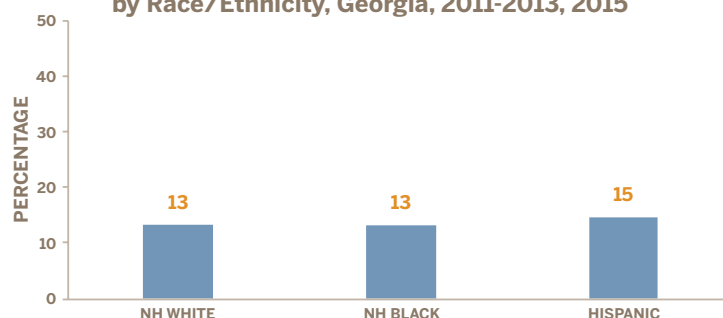
Prevalence of PCI among Adults Aged 45 Years or Older, Georgia, 2011-2013, 2015



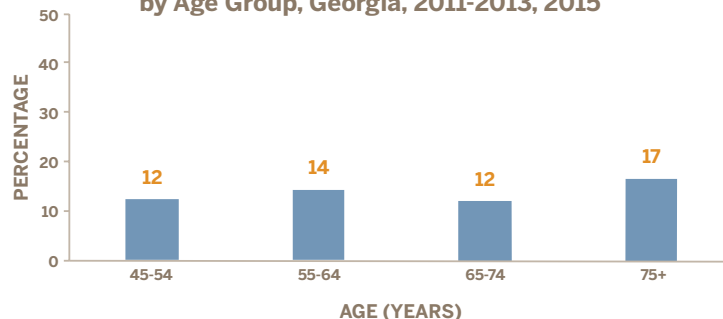
Prevalence of PCI among Adults Aged 45 Years Or Older, By Sex, Georgia, 2011-2013, 2015

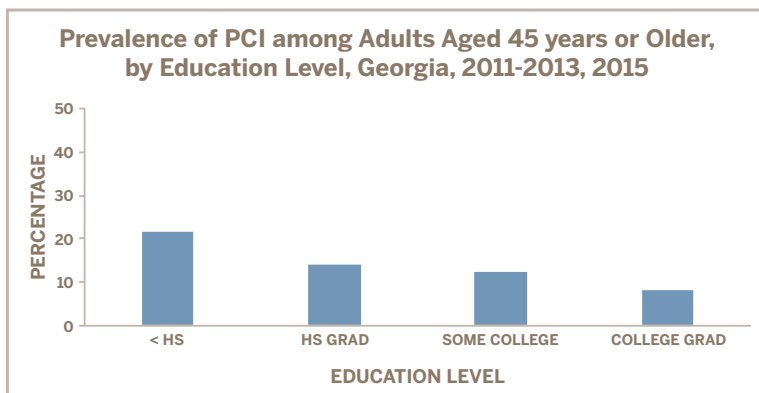


Prevalence of PCI among Adults Aged 45 years or Older, by Race/Ethnicity, Georgia, 2011-2013, 2015



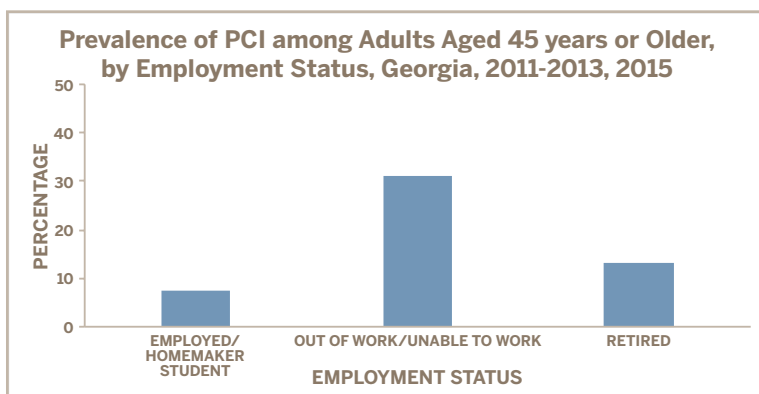
Prevalence of PCI among Adults Aged 45 years or Older, by Age Group, Georgia, 2011-2013, 2015





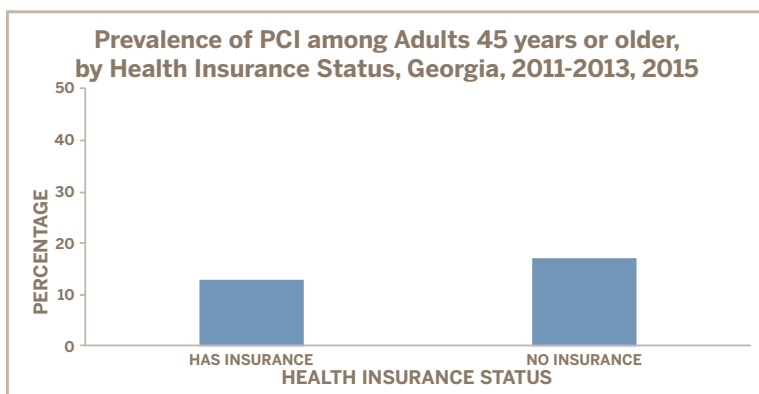
## Prevalence by Education Level

A significantly higher percentage of Georgians **45** years and older with less than a high school education (**22%; 106,200**) reported having PCI than those with higher levels of education. Conversely, Georgians with at least a college degree had significantly lower PCI (**8%; 57,800**) than those with all other education levels.



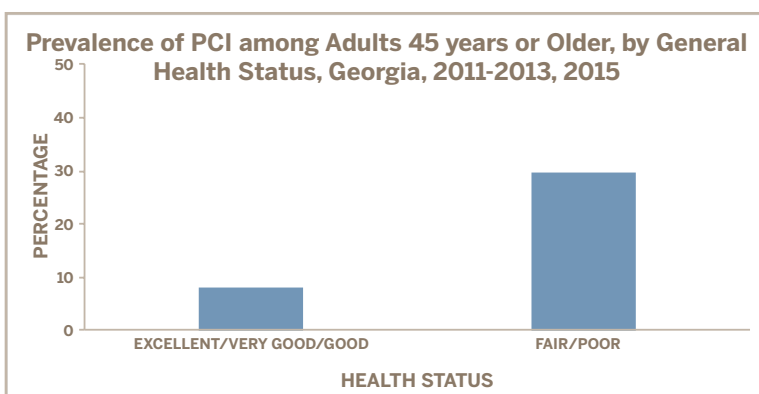
## Prevalence by Employment Status

The prevalence of PCI was higher among Georgians who were either out of work or unable to work (**31%; 159,920**) than those who were employed/homemakers/students (**7%; 107,370**), or retired (**13%; 117,420**).



## Prevalence by Health Insurance Status

The prevalence of PCI was significantly higher among Georgians who did not have any form of health care coverage (**17%; 61,720**) than those who had some form of coverage (**13%; 322,790**).



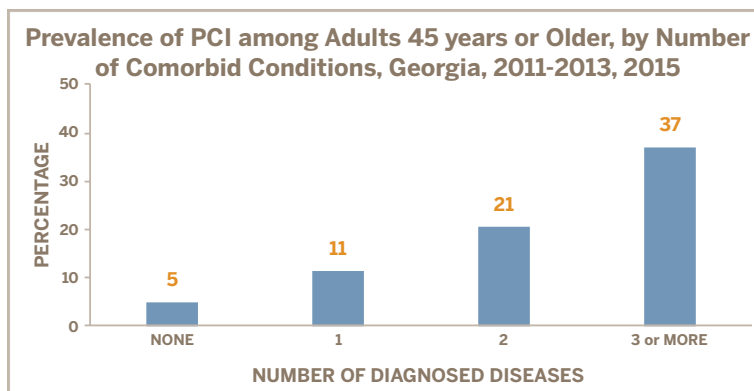
## Prevalence by General Health Status

The prevalence of PCI was significantly higher among Georgians who described their general health as fair/poor (**30%; 211,480**) than those who rated themselves as having at least good general health (**8%; 178,830**).

# PREVALENCE

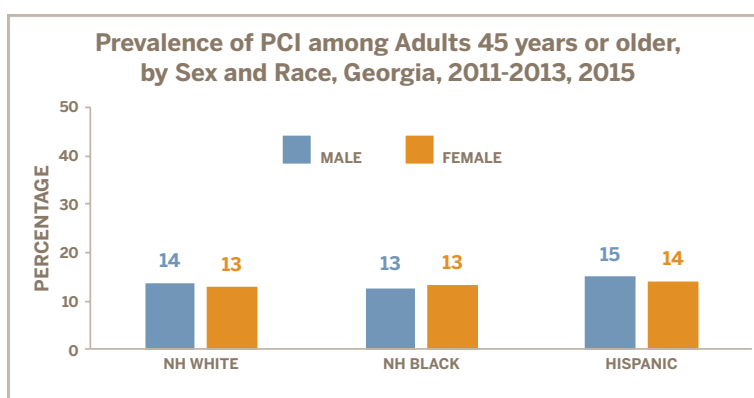
## Prevalence by Number of Diagnosed Chronic Conditions

The prevalence of PCI significantly increased with every increase in the number of diagnosed comorbid chronic conditions from none (5%; 58,030), to one (11%; 93,700), two (21%; 84,570), and three or more (37%; 119,350).



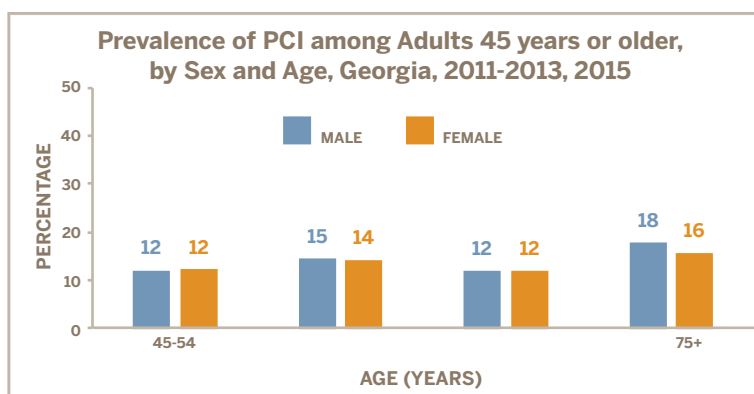
## Prevalence by Sex and Race

The prevalence of PCI was 14%, 13%, and 15% among Non-Hispanic White, Non-Hispanic Black, and Hispanic males, respectively (*Table 1, Appendix*). Similarly, the prevalence of PCI was 13%, 13%, and 14% among Non-Hispanic, Non-Hispanic Black, and Hispanic females, respectively (*Table 1, Appendix*).



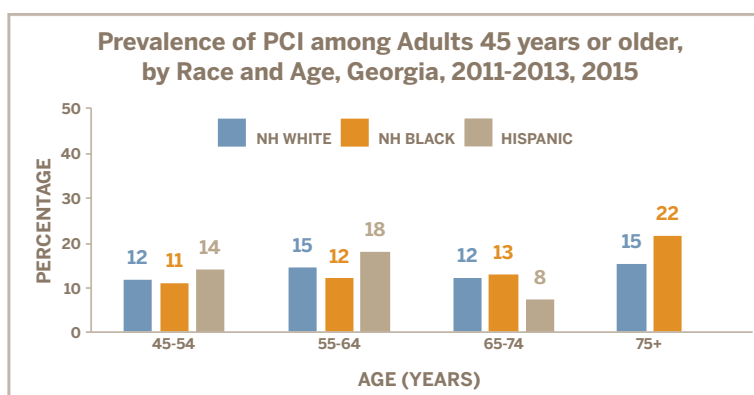
## Prevalence by Sex and Age

The prevalence of PCI was highest among males and females 75 years or older (18% and 16% respectively). However, the differences between sex-age groups were not significant. (*Table 1, Appendix*).

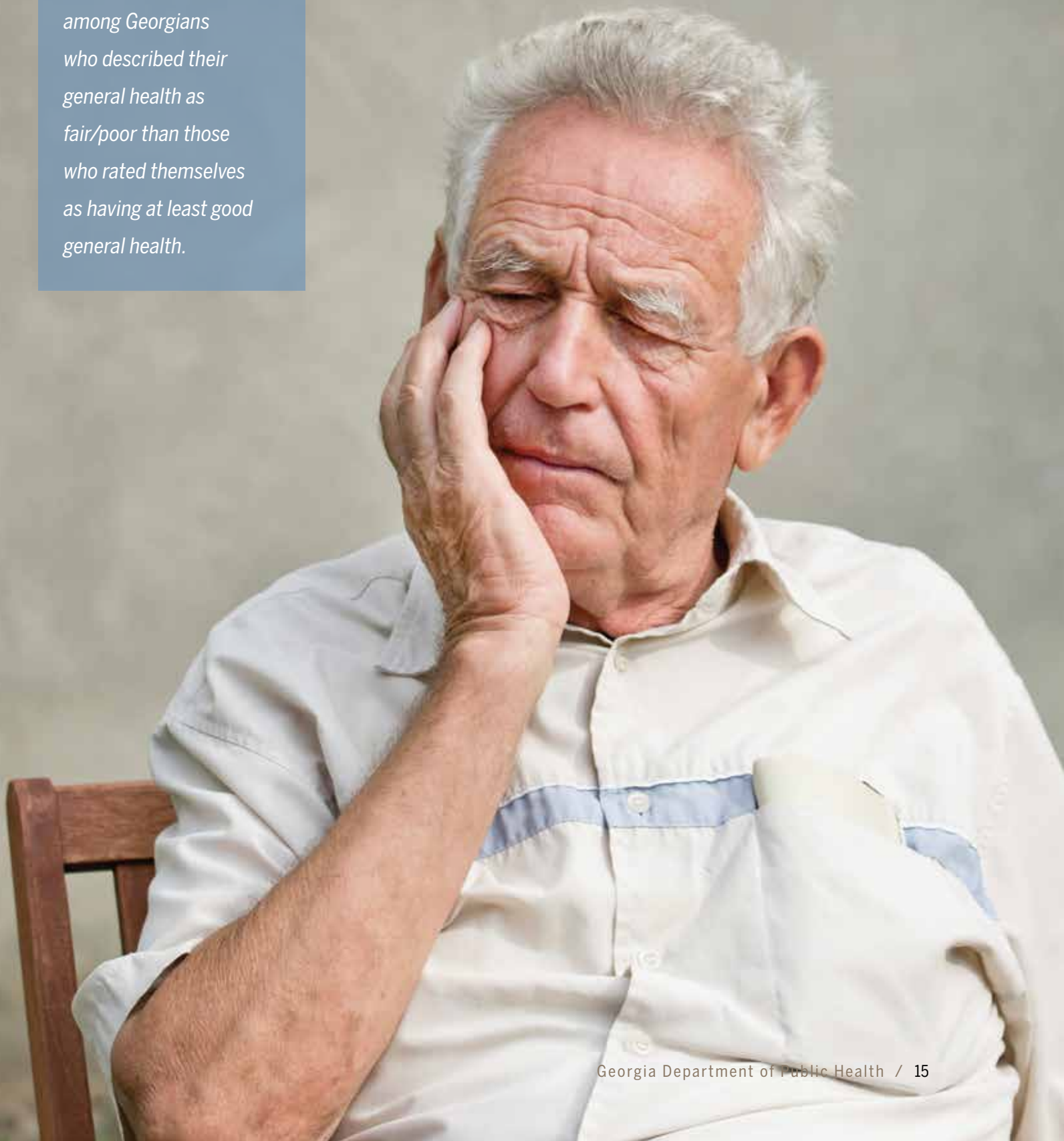


## Prevalence by Race and Age

Among Non-Hispanic Blacks, a significantly higher percentage of Georgians 75 years or older (22%) reported PCI than those aged less than 65 years. (*Table 1, Appendix*).



The prevalence of **Perceived Cognitive Impairment** was significantly higher among Georgians who described their general health as fair/poor than those who rated themselves as having at least good general health.

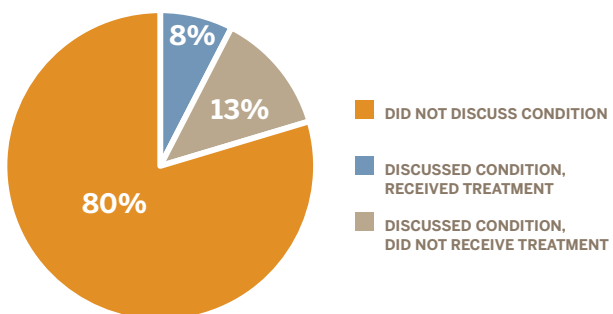


# DISCUSSING MEMORY ISSUES

## Discussed PCI with a Health Care Professional (HCP) and Received Treatment/Therapy

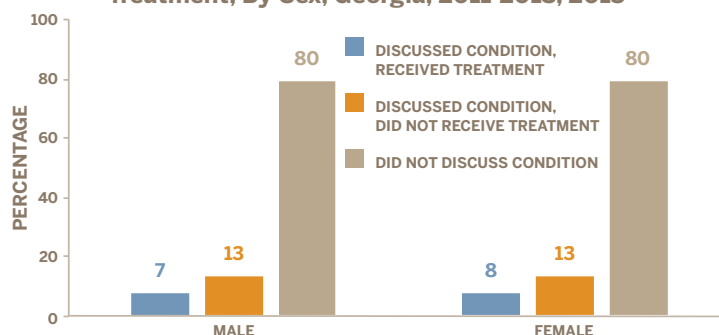
Approximately **80%** of Georgians with PCI had not discussed their memory issues with an HCP, and therefore had not received any form of treatment or therapy. Only **8%** of Georgians with PCI had discussed their condition with a HCP and received some form of treatment or therapy.

Percentage of Adults Aged 45 Years or Older with PCI Who Have Discussed Condition with HCP and Received Treatment, Georgia, 2011-2013, 2015



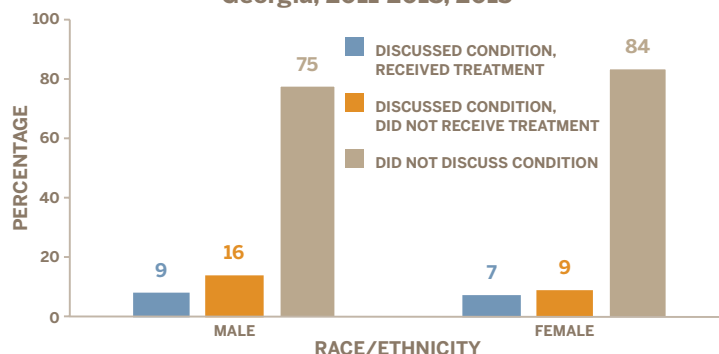
A similar proportion of males (**7%**) and females (**8%**) with PCI reported that they had discussed their condition with an HCP and had received some form of treatment or therapy.

Percentage of Adults Aged 45 Years or Older with PCI Who Have Discussed Condition with HCP and Received Treatment, By Sex, Georgia, 2011-2013, 2015



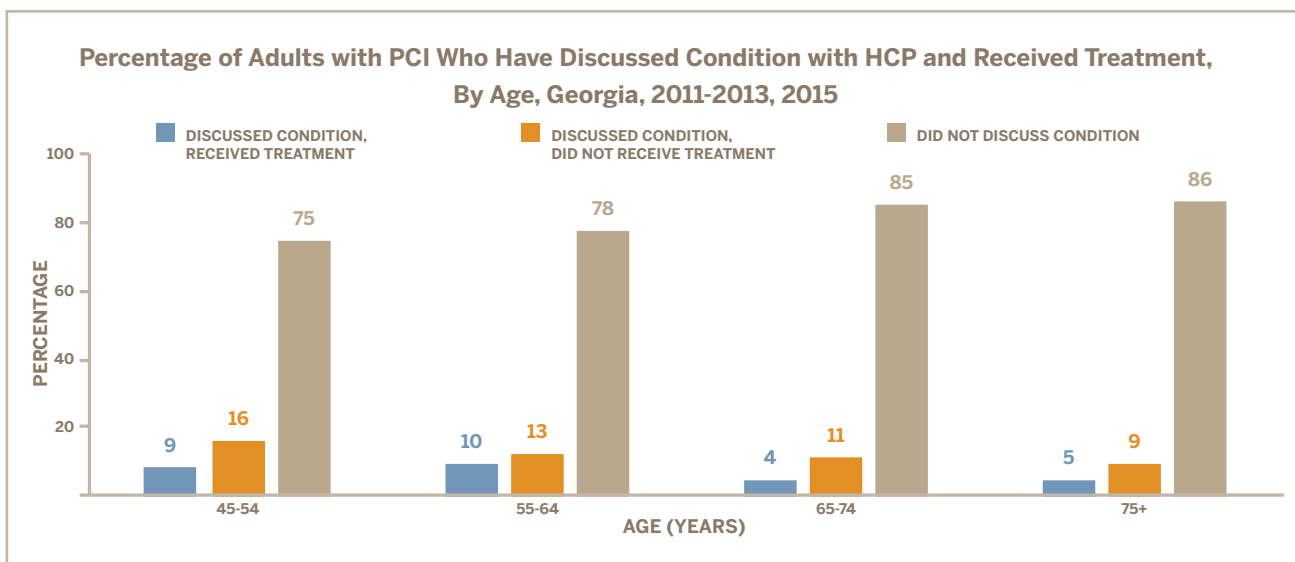
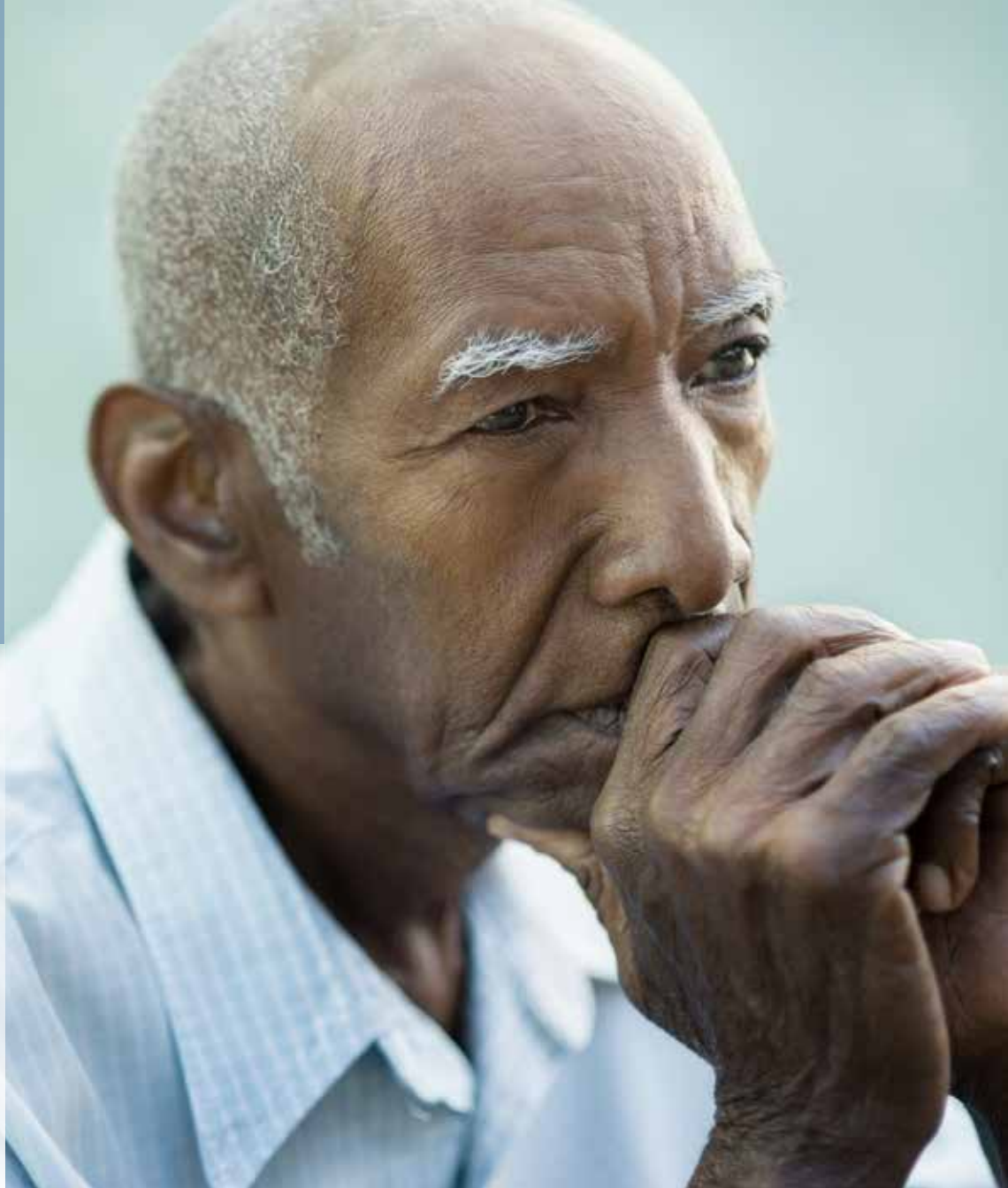
Approximately **78%** of Non-Hispanic Whites, and **84%** of Non-Hispanic Blacks with PCI had not discussed their condition with an HCP, and had therefore not received any treatment.

Percentage of Adults with PCI Who Have Discussed Condition with HCP and Received Treatment, By Race/Ethnicity, Georgia, 2011-2013, 2015



Approximately **80%** of Georgians with **Perceived Cognitive Impairment** had not discussed their memory issues with a health care provider, and therefore had not received any form of treatment or therapy.

Among Georgians **65 years and older**, a higher percentage had not discussed their PCI with an HCP, and therefore had not received any treatment, than those **less than 65 years**. However, the differences were not significant.

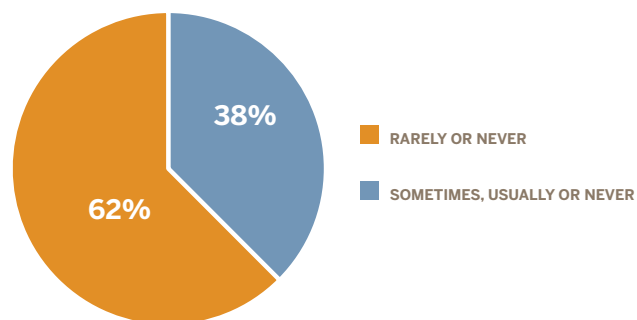


# ACTIVITY & ABILITY

## Inability to Perform Household Activities /Chores Due to PCI

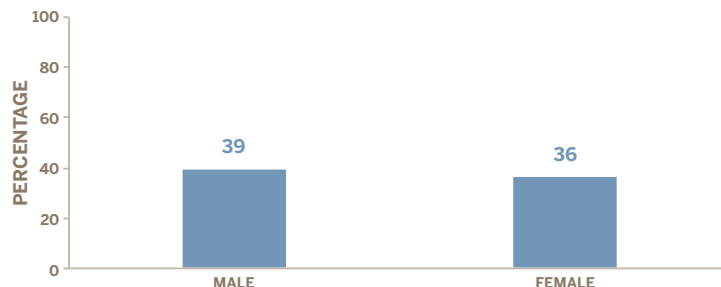
Approximately **38%** of Georgia adults with PCI reported that they sometimes, usually, or always gave up on performing household chores or activities during the past 12 months because their confusion or memory loss was happening more often or was getting worse.

Percentage of Adults Aged 45 Years or Older With PCI who Reported Difficulty in Performing Household Activities, Georgia, 2011-2013, 2015



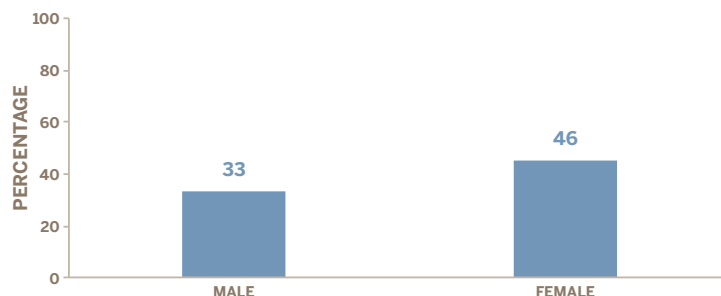
A similar proportion of males (**39%**) and females (**36%**) with PCI reported that they sometimes, usually, or always gave up on performing household chores or activities during the past 12 months due to their worsening condition.

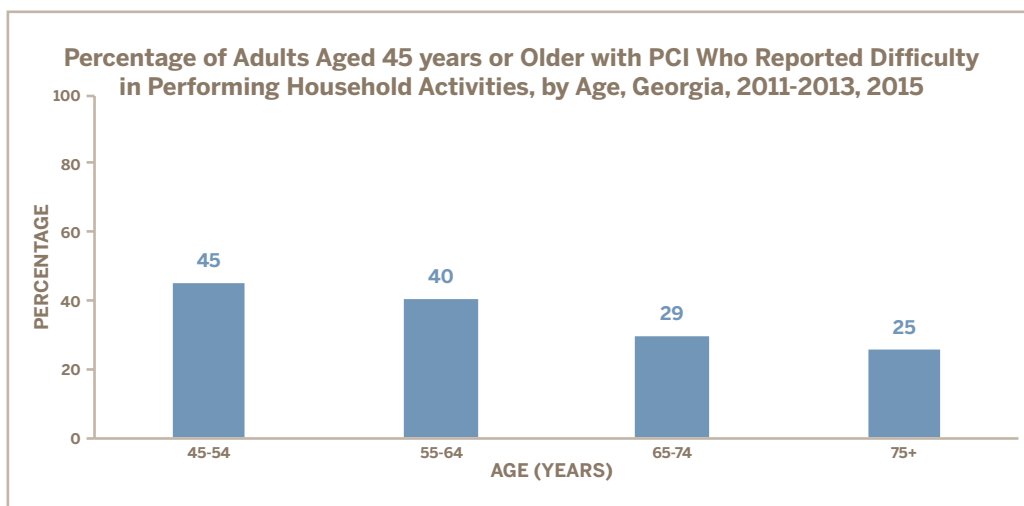
Percentage of Adults Aged 45 Years or Older with PCI who Reported Difficulty in Performing Household Activities, By Sex, Georgia, 2011-2013, 2015



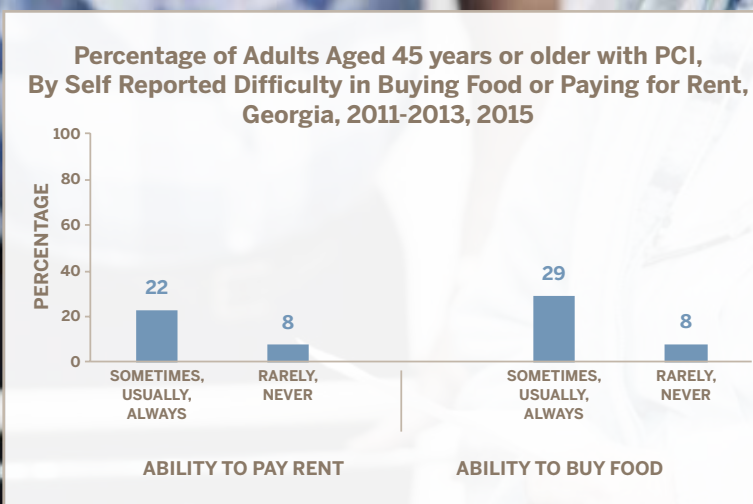
A significantly lower percentage of Non-Hispanic Whites (**33%**) than Non-Hispanic Blacks (**46%**) with PCI reported that they sometimes, usually, or always gave up on performing household chores or activities during the past 12 months due to their worsening condition.

Percentage of Adults Aged 45 years or Older with PCI Who Reported Difficulty in Performing Household Activities, by Race/Ethnicity, Georgia, 2011-2013, 2015





The percentage of Georgians with PCI who reported that they sometimes, usually, or always gave up on performing household chores or activities decreased with increasing age.

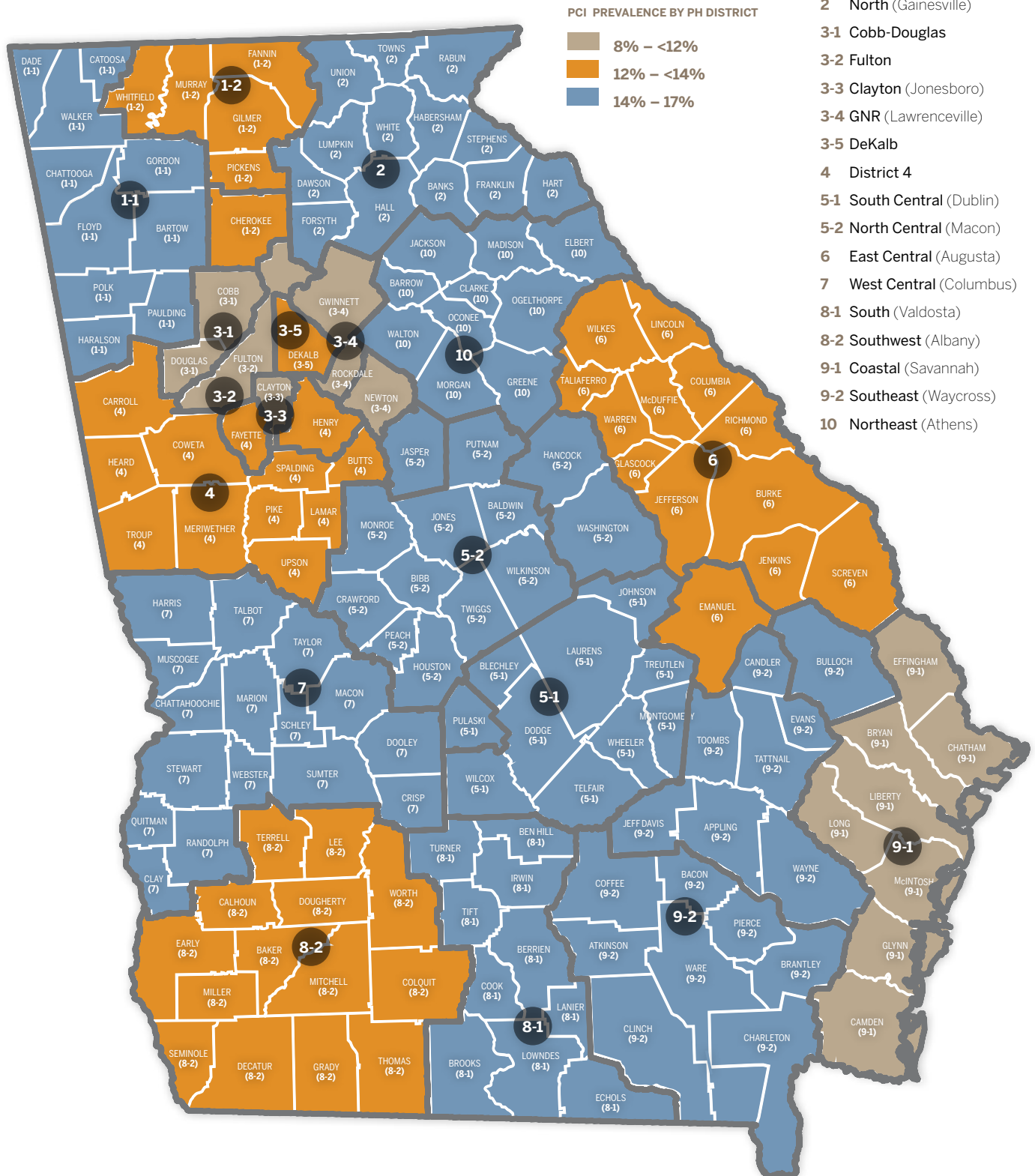


### Social Context and PCI Prevalence

A higher percentage of Georgia adults who sometimes, usually, or always had difficulty paying rent (22%; 106,030), or buying food (29%; 104,090) reported PCI than those who rarely or never had difficulty paying rent (8%; 80,620) or buying food (8%; 96,800).

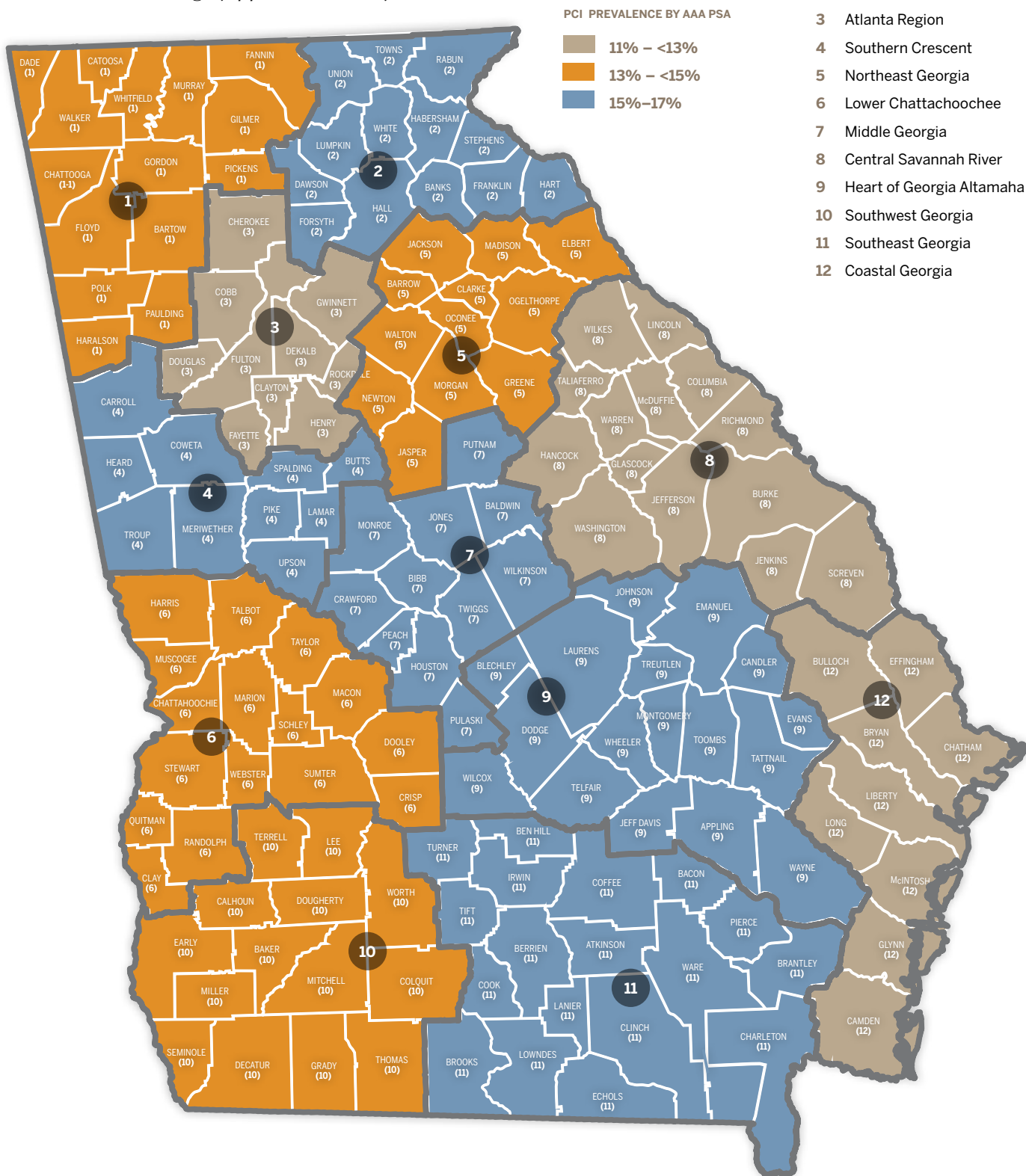
## Prevalence of PCI by Public Health District

Southeast, South, Northwest, North Central, and North Health Districts had the highest prevalence of PCI, but none was significantly higher than the state average (*Appendix, Table 2*).



## Prevalence of PCI by Georgia Area Agencies on Aging (AAA) Planning and Service Areas (PSAs)

Middle Georgia, Heart of Georgia Altamaha, and Southeast Georgia PSAs had the highest prevalence of PCI, but none was significantly higher than the state average (*Appendix, Table 2*).



## SUMMARY

**Approximately 92,000 (6.4 percent)** of Medicare beneficiaries in Georgia were living with Alzheimer's disease and related dementias (ADRD) in 2013 <sup>[14]</sup>.

Our analysis showed that approximately **80 percent** of Georgians who perceived themselves as having some form of cognitive impairment have not discussed their condition with their health care provider (HCP) and therefore have not received treatment. Additionally, a significant percentage of Georgians who discussed their condition with their HCP do not receive any treatment or therapy for their complaint. Considering that individuals with PCI may have a greater risk for developing cognitive impairment later in life, equitable access to care and early diagnosis are critical not only for maintaining quality of life and independence, but are important steps in reducing the potential economic burdens of cognitive impairment. There is the need for an education campaign to encourage Georgians who experience persistent confusion or memory loss to consult with their health care providers. Efforts should also be made to integrate memory screening into regular checkups for elderly Georgians who may be more at risk of developing ADRD. While there is currently no established treatment for mild cognitive impairment, consultation with an HCP will help identify and treat any contributing medical conditions such as depression, ADRD, and blood clots or tumors in the brain <sup>[15]</sup>. Increased physical activity, spending time with family and friends, and learning new skills have also been shown to help improve memory <sup>[15]</sup>.

**As the Georgia population continues to age**, the proportion of the population diagnosed with ADRD is projected to increase significantly. By analyzing data from the various data sources, the GA ADRD Registry provides a clearer picture of the burden of ADRD in Georgia. Plans for 2017 include merging data from the various resources available to the registry to produce a complete analytical dataset, and getting more physicians to sign on and submit information in the Physicians Reporting Portal (available at [https://sendss.state.ga.us/sendss!/alzheim.alzheim\\_login](https://sendss.state.ga.us/sendss!/alzheim.alzheim_login)). Ongoing analysis of the Georgia BRFSS will also serve as a valuable surveillance tool for monitoring the prevalence of PCI and the challenges faced by caregivers of ADRD-affected Georgians.



# APPENDIX

<b>TABLE 1.</b>			
<b>Characteristics of Georgia Adults 45 Years and Older Who Reported Perceived Cognitive Impairment (PCI), Georgia BRFSS, 2011-2013, 2015</b>			
	<b>WEIGHTED FREQUENCY*</b>	<b>N (%)</b>	<b>95% CI</b>
<b>GENERAL SAMPLE</b>	<b>385492</b>	<b>2079 (13.44)</b>	<b>12.70 - 14.21</b>
<b>SEX</b>			
Male	177470	733 (13.53)	12.34 - 14.82
Female	208022	1346 (13.36)	12.46 - 14.31
<b>RACE/ETHNICITY</b>			
Non-Hispanic White	251449	1449 (13.27)	12.41 - 14.17
Non-Hispanic Black	96628	466 (12.91)	11.46 - 14.53
Hispanic	13914	35 (14.62)	9.57 - 21.69
<b>EDUCATION</b>			
Less than HS	106175	428 (21.88)	19.39 - 24.60
HS Grad	119895	673 (13.96)	12.65 - 15.40
Some College	100338	526 (12.55)	11.24 - 13.99
College Grad	57802	445 (8.04)	7.16 - 9.01
<b>AGE GROUP (YEARS)</b>			
45 - 54	126714	463 (12.26)	10.91 - 13.75
55 - 64	126803	665 (14.41)	13.10 - 15.83
65 - 74	70429	484 (12.09)	10.79 - 13.53
75+	61546	467 (16.51)	14.72 - 18.47
<b>EMPLOYMENT STATUS</b>			
Employed / Homemaker / Student	107368	512 (7.4)	6.62 - 8.26
Out Of Work / Unable To Work	159918	745 (30.97)	28.37 - 33.69
Retired	117421	816 (13.17)	12.07 - 14.35
<b>HEALTH COVERAGE STATUS</b>			
Has Insurance	322,788	1816 (12.88)	12.12 - 13.67
No Insurance	61722	256 (17.24)	14.71 - 20.11
<b>HEALTH STATUS</b>			
Excellent / Very Good / Good	173826	957 (8.08)	7.43 - 8.78
Fair / Poor	211476	1121 (29.76)	27.72 - 31.89
<b>HAD ANNUAL DR. VISIT WITHIN PAST 12 MONTHS</b>			
Yes	299418	1677 (13.09)	12.29 - 13.94
No	76558	347 (14.36)	12.51 - 16.44
<b>BMI</b>			
Underweight / Normal	106544	592 (13.09)	11.76 - 14.54
Overweight	123726	683 (11.84)	10.71 - 13.07
Obese	142835	744 (15.84)	14.44 - 17.33

**TABLE 1.** *(continued)***Characteristics of Georgia Adults 45 Years and Older Who Reported Perceived Cognitive Impairment (PCI), Georgia BRFSS, 2011-2013, 2015****NUMBER OF CHRONIC DISEASES**

None	58031	307 (4.79)	4.15 - 5.52
1	93701	494 (11.3)	10.04 - 12.71
2	84571	460 (20.55)	18.25 - 23.06
3 or more	119345	667 (37.18)	34.19 - 40.27

**STRESSED ABOUT BEING ABLE TO PAY RENT**

Sometimes, Usually, Always	106026	481 (22.32)	19.96 - 24.88
Rarely, Never	80617	412 (7.81)	6.89 - 8.84

**STRESSED ABOUT BEING ABLE TO BUY FOOD**

Sometimes, Usually, Always	104086	480 (29.16)	26.16 - 32.36
Rarely, Never	96800	506 (7.95)	7.12 - 8.87

**RACE/ETHNICITY AND SEX****Male**

Non-Hispanic White	118740	532 (13.62)	12.22 - 15.13
Non-Hispanic Black	40163	136 (12.54)	10.17 - 15.36
Hispanic	7255	13 (15.18)	8.38 - 25.93

**Female**

Non-Hispanic White	132708	917 (12.97)	11.96 - 14.06
Non-Hispanic Black	427946	330 (13.19)	11.45 - 15.16
Hispanic	6658	22 (14.05)	7.57 - 24.59

**SEX AND AGE GROUP (YEARS)****Male**

45 - 54	59237	162 (12.20)	10.07 - 14.71
55 - 64	61385	250 (14.64)	12.62 - 16.93
65 - 74	31592	172 (11.93)	9.93 - 14.27
75+	25256	149 (17.81)	14.65 - 21.48

**Female**

45 - 54	67477	301 (12.31)	10.69 - 14.14
55 - 64	65418	415 (14.19)	12.56 - 16.01
65 - 74	38837	312 (12.23)	10.59 - 14.09
75+	36290	318 (15.71)	13.66 - 18.02

**RACE/ETHNICITY, AND AGE GROUP (YEARS)****Non-Hispanic White**

45 - 54	74179	293 (11.87)	10.26 - 13.69
55 - 64	83641	444 (14.55)	12.99 - 16.27
65 - 74	48312	352 (12.05)	10.58 - 13.70
75+	45317	360 (15.38)	13.53 - 17.44

**TABLE 1. (continued)****Characteristics of Georgia Adults 45 Years and Older Who Reported Perceived Cognitive Impairment (PCI), Georgia BRFSS, 2011-2013, 2015****RACE/ETHNICITY, AND AGE GROUP (YEARS) Continued**

<b>Non-Hispanic Black</b>			
45 - 54	32977	114 (10.99)	8.74 - 13.74
55 - 64	32709	175 (12.31)	10.84 - 15.98
65 - 74	18391	98 (12.95)	9.99 - 16.62
75+	12553	79 (21.55)	16.21 - 28.05
<b>Hispanic</b>			
45 - 54	7266	10 (13.96)	7.00 - 25.91 <sup>b</sup>
55 - 64	4390	14 (18.02)	9.74 - 30.92 <sup>b</sup>
65 - 74	888	7 (7.51)	3.01 - 17.51
75+ <sup>a</sup>			
<b>TALKED TO A HEALTH CARE PROVIDER ABOUT PCI</b>			
Yes	117753	555 (30.8)	27.98 - 33.78
No	262262	1490 (69.2)	66.22 - 72.02
<b>HAVE NOT DISCUSSED PCI WITH A HEALTH CARE PROVIDER (HCP)</b>			
<b>By Age</b>			
45 - 54	83085	302 (66.89)	60.84 - 72.43
55 - 64	81103	443 (64.58)	59.34 - 69.49 <sup>b</sup>
65 - 74	50701	371 (72.85)	66.73 - 78.22
75+	47373	374 (79.45)	73.44 - 84.39
<b>By Sex</b>			
Male	118598	512 (68.2)	63.22 - 72.80
Female	143664	978 (70.04)	66.45 - 73.40
<b>By Race</b>			
Non-Hispanic White	166386	1038 (67.44)	63.85 - 70.83
Non-Hispanic Black	70557	347 (74.04)	67.87 - 79.39
Hispanic <sup>a</sup>			

**TABLE 1.** *(continued)***Characteristics of Georgia Adults 45 Years and Older Who Reported Perceived Cognitive Impairment (PCI), Georgia BRFSS, 2011-2013, 2015****RECEIVED TREATMENT AMONG GEORGIANS WHO DISCUSSED PCI WITH HCP**

Yes	24938	168 (37.17)	31.19 - 56.43 <sup>b</sup>
No	42153	221 (62.83)	56.43 - 68.81

**HAVE NOT RECEIVED TREATMENT AMONG GEORGIANS WHO DISCUSSED PCI WITH HCP****By Age Group (Years)**

45 - 54	17752	76 (64.49)	53.69 - 74.00 <sup>b</sup>
55 - 64	13037	73 (56.31)	45.07 - 66.93 <sup>b</sup>
65 - 74	6430	42 (72.38)	57.49 - 83.54 <sup>b</sup>
75+	4933	30 (65.54)	49.16 - 78.90 <sup>b</sup>

**By Sex**

Male	19113	81 (63.27)	52.64 - 72.75 <sup>b</sup>
Female	23039	140 (62.47)	54.58 - 69.75

**By Race**

Non-Hispanic White	29362	158 (63.61)	56.09 - 70.53
Non-Hispanic Black	7746	40 (56.54)	41.63 - 70.36 <sup>b</sup>
Hispanic <sup>a</sup>			

<sup>a</sup> Not available if the unweighted sample size for the denominator is less than 50<sup>b</sup> Estimates with 95% Confidence Intervals greater than 20 are unreliable

\* The BRFSS employs a complex survey design to account for overrepresentation or underrepresentation of various population subgroups within the final sample of respondents. Responses to the survey are then weighted to adjust for the distribution of the sample data. The weighted frequency represents the estimated number of adult Georgians who responded to a particular question.

**TABLE 2.**

**Prevalence of PCI among Adults Aged 45 years or more, by Health District, and Area Agencies of Aging (AAA) Planning and Service Areas (PSAs). Georgia BRFSS, 2011-2013, 2015**

	<b>WEIGHTED FREQUENCY*</b>	<b>N (%)</b>	<b>95% CI</b>
<b>BY HEALTH DISTRICT</b>			
Northwest (Rome)	31314	136 (16.07)	13.19 - 19.44
North Georgia (Dalton)	18213	103 (12.88)	9.95 - 16.52
North (Gainesville)	31427	133 (15.25)	12.36 - 18.67
Cobb-Douglas	21449	89 (11.73)	9.08 - 15.02
Fulton	22823	91 (11.17)	8.71 - 14.23
Clayton (Jonesboro)	3661	52 (8.05)	5.70 - 11.26
East Metro (Lawrenceville)	25147	87 (10.17)	7.80 - 13.15
DeKalb	20871	96 (12.56)	9.54 - 16.38
District 4 (LaGrange)	33087	136 (13.65)	11.09 - 16.69
South Central (Dublin)	8150	129 (14.82)	11.26 - 19.25
North Central (Macon)	27281	132 (15.61)	12.74 - 18.99
East Central (Augusta)	23201	115 (13.62)	10.71 - 17.17
West Central (Columbus)	15977	135 (14.05)	11.31 - 17.33
South (Valdosta)	14403	120 (16.22)	12.00 - 21.55
Southwest (Albany)	19274	123 (13.82)	10.89 - 17.39
Coastal (Savannah)	19099	94 (11.38)	8.80 - 14.60
Southeast (Waycross)	22387	151 (16.89)	13.84 - 20.46
Northeast (Athens)	20866	114 (14.35)	11.41 - 17.89
<b>BY AREA AGENCIES OF AGING (AAA) PLANNING AND SERVICE AREAS (PSA)</b>			
Northwest Georgia	422250	198 (14.89)	12.60 – 17.52
Georgia Mountains	206090	133 (15.25)	12.36 – 18.67
Atlanta Region	107519	491 (11.29)	10.05 – 12.66
Southern Crescent	24140	91 (15.79)	12.26 – 20.10
Northeast Georgia	24780	130 (13.32)	10.74 – 16.42
Lower Chattahoochee	15980	135 (14.05)	11.31 – 17.33
Middle Georgia	25210	129 (16.21)	13.15 – 19.82
Central Savannah River	23220	113 (12.87)	10.12 – 16.22
Heart of Georgia Altamaha	18680	190 (16.88)	13.64 – 20.71
Southwest Georgia	19270	123 (13.82)	10.89 – 17.89
Southeast Georgia	23960	188 (16.15)	13.05 – 19.82
Coastal Georgia	22220	115 (11.70)	9.26 – 14.68

\* The BRFSS employs a complex survey design to account for overrepresentation or underrepresentation of various population subgroups within the final sample of respondents. Responses to the survey are then weighted to adjust for the distribution of the sample data. The weighted frequency represents the estimated number of adult Georgians who responded to a particular question.

**Table 3.**

**Percentage of Adults with PCI Stratified by Discussion with HCP and Treatment Status, Georgia BRFSS, 2011- 2013, 2015**

	DISCUSSED CONDITION, RECEIVED TREATMENT			DISCUSSED CONDITION, DID NOT RECEIVE TREATMENT			DID NOT DISCUSS CONDITION OR RECEIVE TREATMENT		
	N	%	95% CI	N	%	95% CI	N	%	95% CI
<b>GENERAL SAMPLE</b>	168	7.57	6.21 - 9.20	221	12.80	10.85 - 15.03	1490	79.63	77.07 - 81.97
<b>BY AGE GROUP (YEARS)</b>									
45 - 54	48	8.84	6.18 - 12.47	76	16.05	12.37 - 20.57	302	16.05	12.37 - 20.57
55 - 64	70	9.70	7.19 - 12.98	73	12.51	9.14 - 16.87	443	77.79	72.96 - 81.97
65 - 74	25	4.12	2.48 - 6.77	42	10.79	7.21 - 15.84	371	85.09	79.88 - 89.14
75+	25	4.73	2.89 - 7.62	30	8.99	5.74 - 13.80	374	86.29	81.23 - 90.15
<b>BY SEX</b>									
Male	62	7.46	5.39 - 10.24	81	12.84	9.76 - 16.72	512	79.70	75.38 - 83.43
Female	106	7.67	6.01 - 9.74	140	12.76	10.44 - 15.51	978	79.57	79.41 - 82.40
<b>BY RACE</b>									
Non-Hispanic White	111	7.90	6.25 - 9.95	158	13.81	11.43 - 16.60	1038	78.28	75.13 - 81.14
Non-Hispanic Black	38	7.07	4.52 - 10.87	40	9.19	6.24 - 13.34	347	83.74	78.72 - 87.76
Hispanic <sup>a</sup>									
<b>BY NUMBER OF DIAGNOSED CHRONIC CONDITIONS</b>									
None	9	2.96	1.30 - 6.58	35	11.07	7.63 - 15.80	246	85.97	80.70 - 89.97
One	25	5.30	3.15 - 8.80	42	10.33	6.94 - 15.10	397	84.37	79.09 - 88.51
Two	48	9.53	6.49 - 13.79	43	9.93	6.79 - 14.30	324	80.54	75.07 - 85.05
Three or More	74	11.16	8.37 - 14.72	81	16.26	12.36 - 21.09	417	72.58	67.33 - 77.27

<sup>a</sup> Not available if the unweighted sample size for the denominator is less than 50

<sup>b</sup> Estimates with 95% Confidence Intervals greater than 20 are unreliable

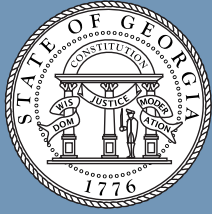
**TABLE 4.****Percentage of Adults with PCI Who Had Given Up On Household Activities/Chores, Georgia  
BRFSS, 2011-2013, 2015**

	<b>SOMETIMES, USUALLY, ALWAYS</b>			<b>RARELY, NEVER</b>		
	<b>N</b>	<b>%</b>	<b>95% CI</b>	<b>N</b>	<b>%</b>	<b>95% CI</b>
<b>General Sample</b>	701	37.51	34.53 - 40.59	1345	62.49	59.41 - 65.47
<b>BY AGE GROUP (YEARS)</b>						
45 - 54	198	45.23	39.09 - 51.51	260	54.77	48.49 - 60.91
55 - 64	255	40.25	35.19 - 45.51	397	59.75	54.49 - 64.81 <sup>b</sup>
65 - 74	137	29.23	23.78 - 35.34	342	70.77	64.66 - 76.22
75+	111	25.47	20.53 - 31.13	346	74.53	68.87 - 79.47
<b>By Sex</b>						
Male	249	39.12	34.28 - 44.19	473	60.88	55.81 - 65.72
Female	452	36.14	32.54 - 39.90	872	63.86	60.10 - 67.46
<b>By Race</b>						
Non-Hispanic White	426	33.34	29.94 - 36.64	1003	66.66	63.08 - 70.06
Non-Hispanic Black	202	45.50	39.26 - 51.89	256	54.50	48.11 - 60.74
Hispanic <sup>a</sup>						

<sup>a</sup> Not available if the unweighted sample size for the denominator is less than 50<sup>b</sup> Estimates with 95% Confidence Intervals greater than 20 are unreliable

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Division of Aging Services

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