NATIONAL CORE INDICATORS

Data Brief

November 2013

What do NCI data tell us about the racial and ethnic disparities in healthcare utilization experienced by adults with intellectual and developmental disabilities?

Untimely and inadequate healthcare use can have a harmful impact on personal and population health status and is related to increased morbidity and mortality. As a result, extensive research has been dedicated to documenting the disparities in healthcare use faced by racial and ethnic minorities (Bonito, et al., 2005; Ashton, et al., 2003; Smedley, et al., 2002; Flores & Tomany-Korman, 2008). There is also existing research on disparities in healthcare utilization based on intellectual and developmental disability status (Havercamp, 2004; Szalda-Petree, 2000; Lennox, 1997; Wilson, 1990). However, the disparities in health care use experienced by individuals of different races and ethnicities who also have intellectual and developmental disabilities (ID/DD) are not well documented.

Using data from the National Core Indicators (NCI) project, this Data Brief aims to provide a snapshot of the differences in preventive healthcare utilization experienced by individuals with ID/DD who are Non-Hispanic African American, Non-Hispanic White and Hispanic (all races).

Description and Demographics of Sample

The data in this brief are from the 2011-2012 administration of the National Core Indicators (NCI) Adult Consumer Survey (ACS) of 12,236 individuals with ID/DD from 19 states and one regional council[1]. All individuals surveyed were aged 18 and over, and receiving at least one service in addition to case management. The questions analyzed for this data brief come from the Background Information Section of the Survey. The Background Information Section requests data that would most likely be found in agency records or information systems. In most states, this section is completed prior to the face-to-face interview.

For the purposes of these analyses, only individuals who were identified as Non-Hispanic African American, Hispanic and Non-Hispanic White were included in the sample. The final data set includes 11,199 people for whom this information could be determined. The results described below were obtained through chi-squared analyses. ***For the purpose of this Data Brief, only group differences that were significant at the p<.05 level are reported.***

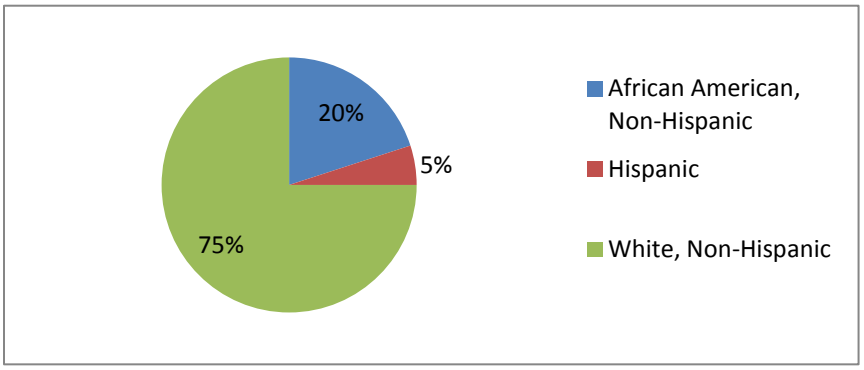
[1] The 2011-2012 NCI Adult Consumer Survey was administered in Alabama, Arkansas, Arizona, Connecticut, Georgia, Hawaii, Illinois, Kentucky, Louisiana, Massachusetts, Maine, Mid-East Ohio Regional Council (MEORC), Michigan, Missouri, North Carolina, New Jersey, New York, Ohio, Pennsylvania and South Carolina.

Results

NCI respondents of different races and ethnicities differ significantly by age, gender, level of disability, diagnosis, mobility level and residence type.

Figure 1 demonstrates the race/ethnicity of individuals. One fifth (20%) of the individuals in the sample were Non-Hispanic African American, three-quarters (75%) were Non-Hispanic White and five percent (5%) were Hispanic.

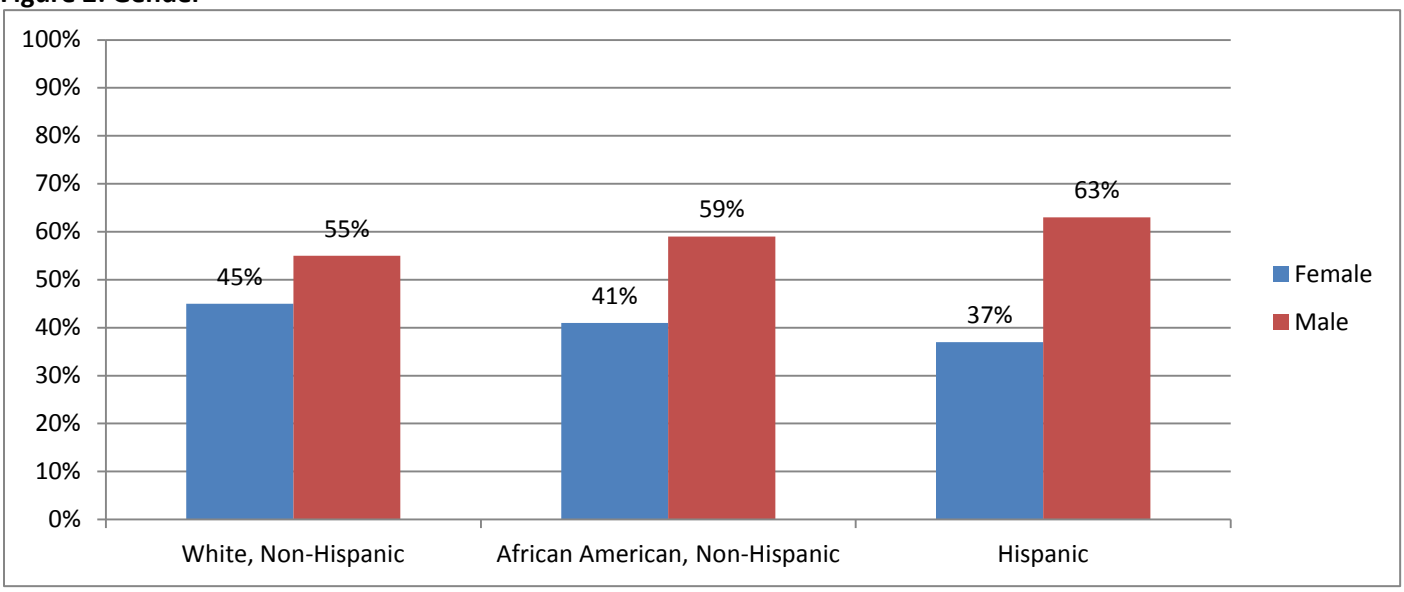
Figure 1: Race/Ethnicity of Sample



The average age was significantly different for White Non-Hispanic, African American Non-Hispanic and Hispanic individuals. White Non-Hispanic individuals were older than African American Non-Hispanic and Hispanic individuals (45 years old, 41 years old and 38 years old, respectively).

The sample of White Non-Hispanic individuals was composed of 55% males and 45% females. The gender split was slightly more dramatic for the population of African American Non-Hispanic individuals, with 59% male and 41% female. The proportion of Hispanic individuals who were male was even higher - 63% male, with only 37% female. Figure 2 illustrates the gender breakdown of the sample.

Figure 2: Gender



There was a significant difference in primary language among the racial/ethnic categories. Twenty-one percent (21%) of Hispanic individuals' primary language was not English.

As demonstrated in Figure 3, African American Non-Hispanic individuals and Hispanic individuals were slightly different with respect to their level of ID than individuals who were White Non-Hispanic. Compared with White Non-Hispanic individuals, African American Non-Hispanic and Hispanic individuals were slightly more likely to have a diagnosis of moderate ID (28% vs. 30% and 33%), while White Non-Hispanic individuals were more like likely to have a diagnosis of mild ID (38%).

Figure 3: Level of ID

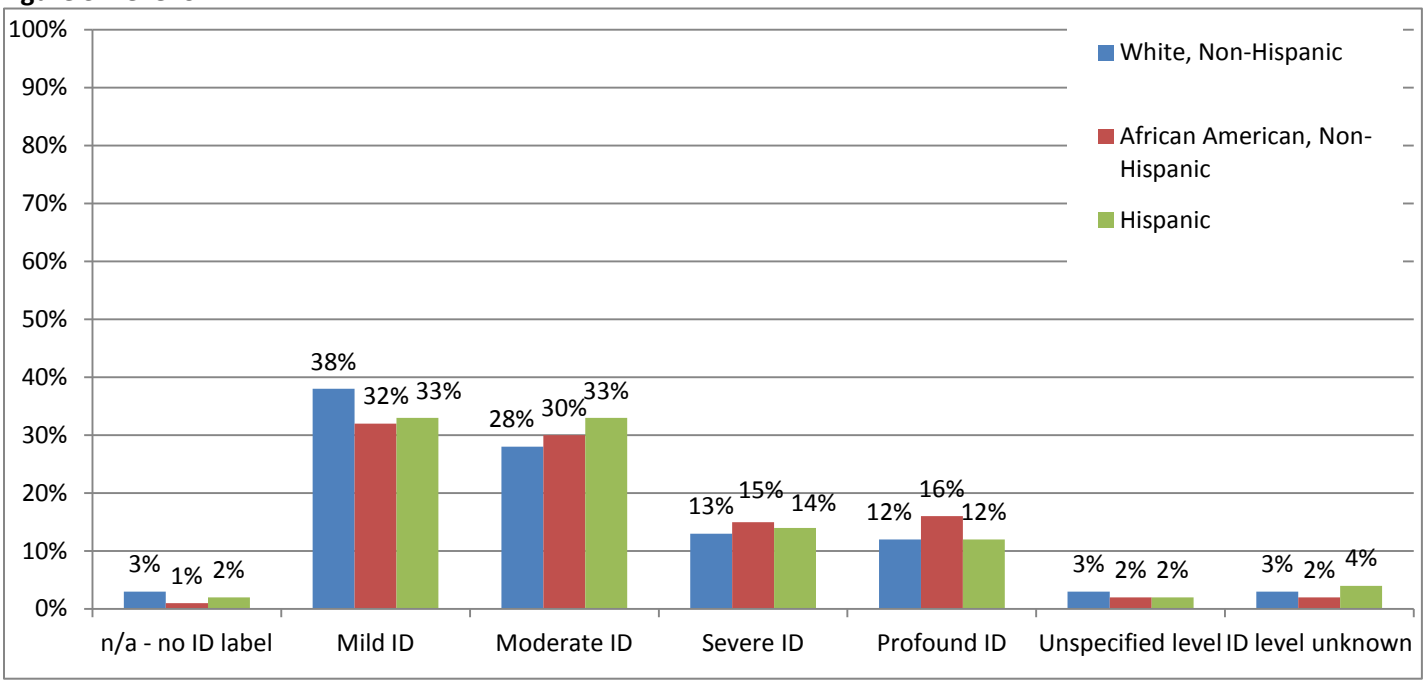
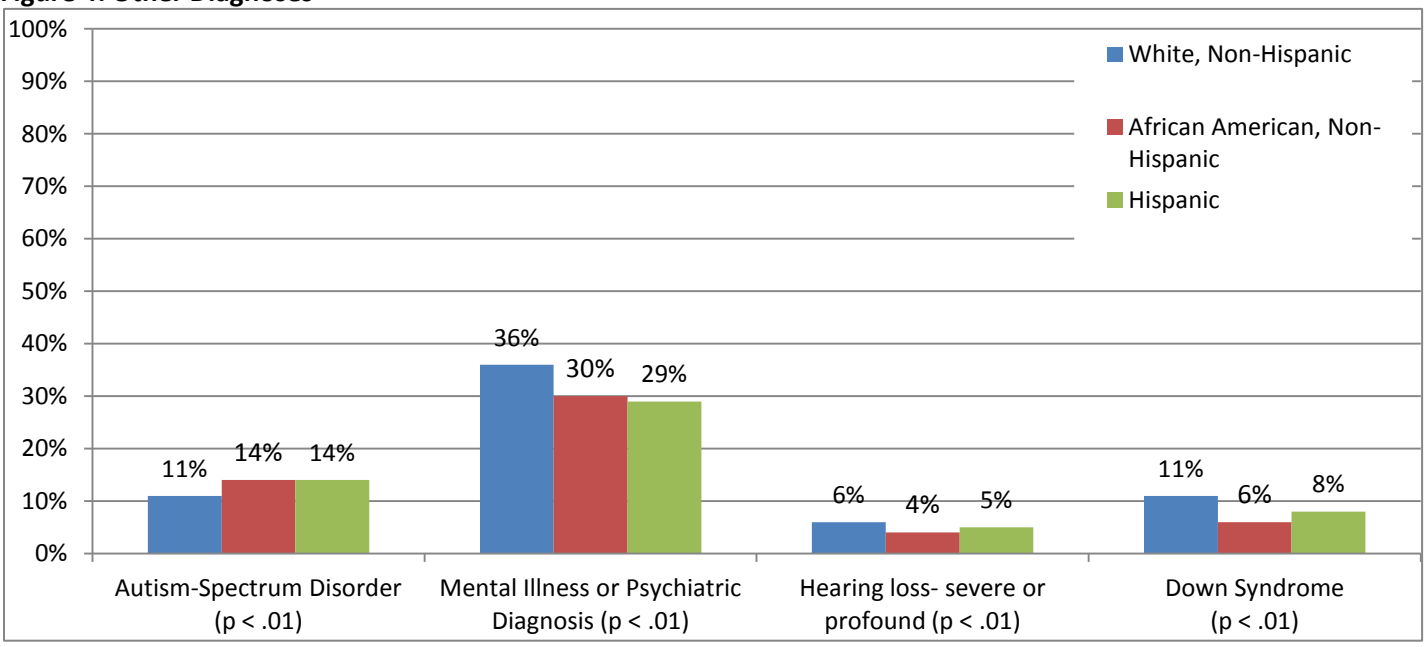


Figure 4 demonstrates that African American Non-Hispanic as well as Hispanic individuals were slightly more likely to be diagnosed with Autism Spectrum disorder (14%) than White Non-Hispanic people (11%). On the other hand, African American Non-Hispanic and Hispanic people were less likely to be diagnosed with a mental illness or psychiatric disorder than White Non-Hispanic individuals (30%, 29% and 36% respectively).

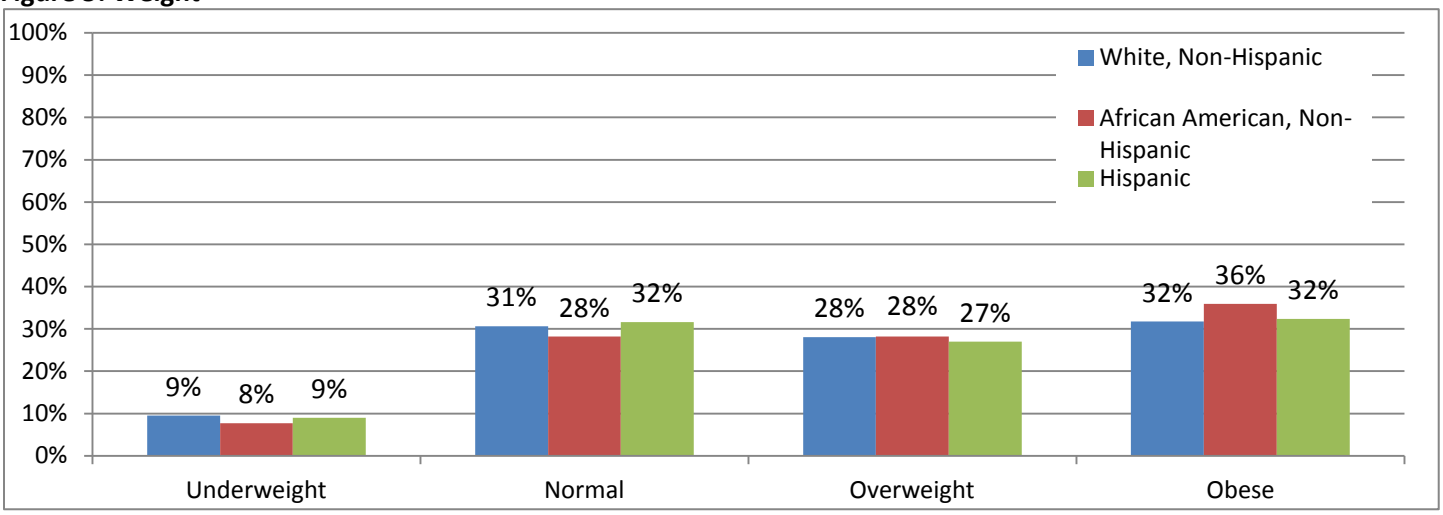
Figure 4: Other Diagnoses



African American Non-Hispanic and Hispanic individuals were also less likely to be diagnosed with Down Syndrome and less likely to have severe or profound hearing loss.

Figure 5 shows the proportion of people in different weight categories. African American Non-Hispanic individuals were slightly less likely to be underweight (8%) or of normal weight (28%) and more likely to be obese (36%) than Hispanic and White Non-Hispanic people.

Figure 5: Weight

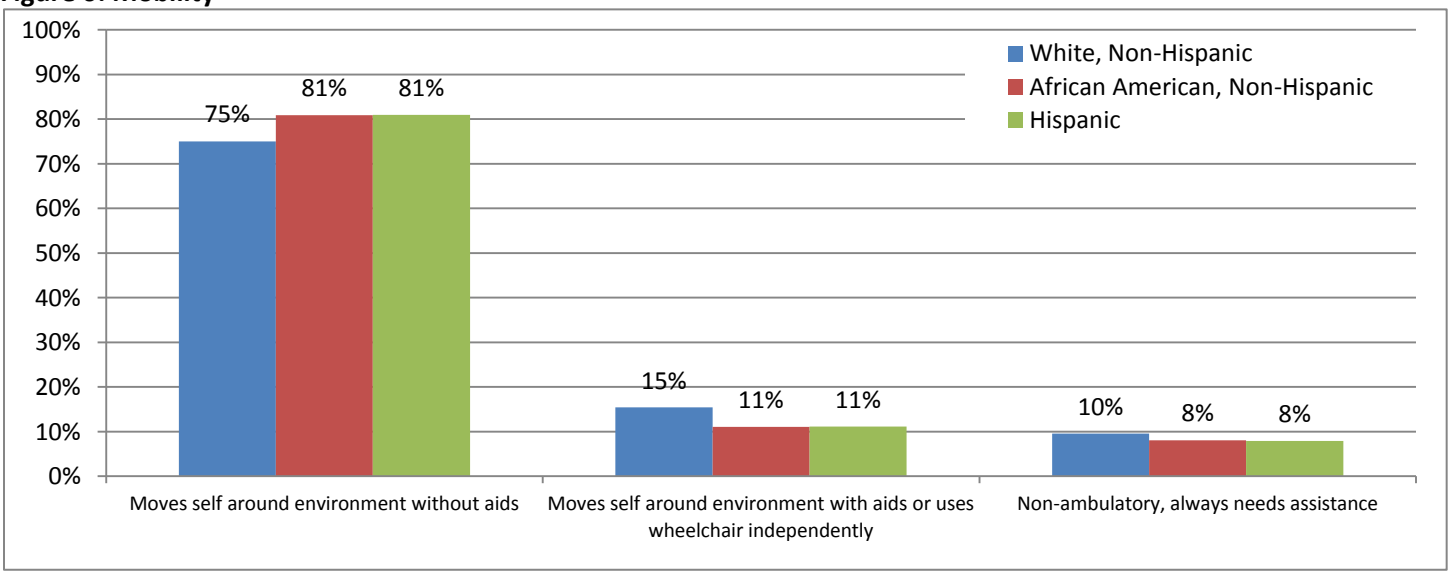


African American Non-Hispanic individuals were significantly more likely (8%) to use tobacco products than White Non-Hispanic and Hispanic individuals (6% of each group).

There were also significant differences among the race/ethnic groups regarding poor health status. White Non-Hispanic individuals were slightly more likely to be in poor health (5%) than African American Non-Hispanic (4%) and Hispanic individuals (3%).

Figure 6 shows that African American Non-Hispanic and Hispanic respondents were more likely to be independently mobile, while White Non-Hispanic respondents were more likely to use aids or be non-ambulatory.

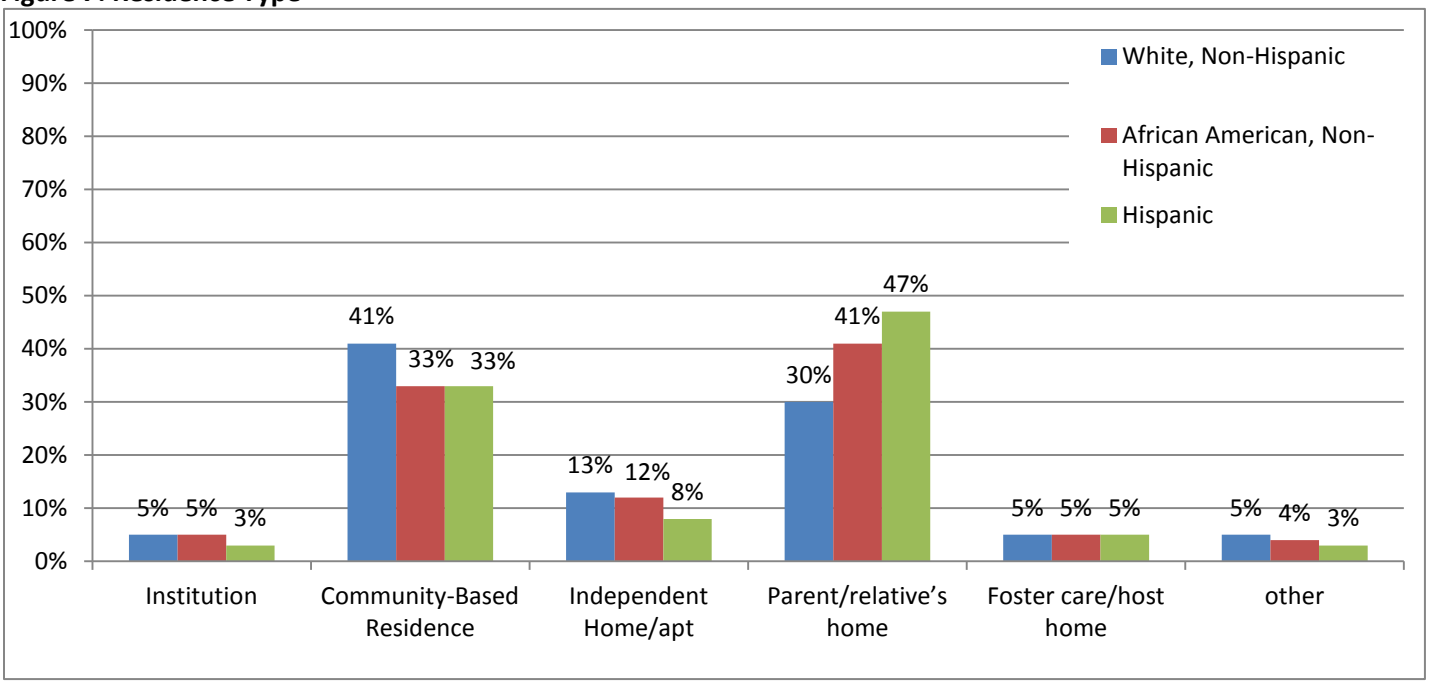
Figure 6: Mobility



The type of residential arrangement that people were living in also differed by race/ethnicity. White Non-Hispanic individuals were much less likely to live in a parent or relative's home (30%) than African American Non-Hispanic (41%)

or Hispanic individuals (47%) (Figure 7) but much more likely to be living in a community-based residence (41% vs. 33% and 33%). African American and White Non-Hispanic people were more likely to live in an independent home or apartment.

Figure 7: Residence Type

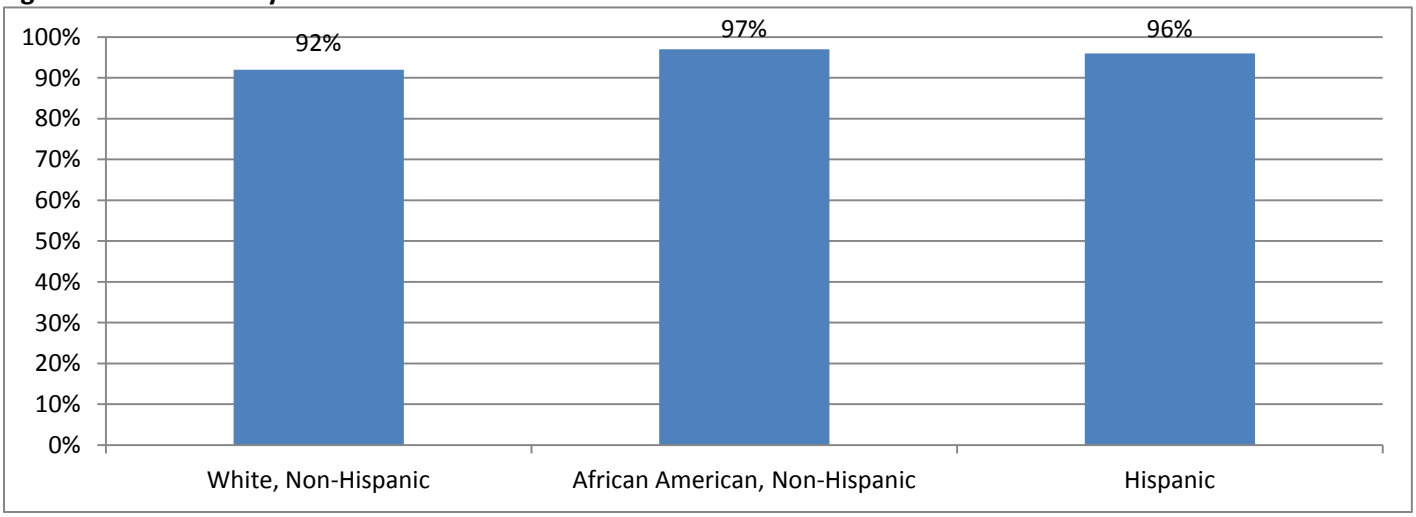


Preventative Care Utilization:

NCI data demonstrate significant differences among the racial and ethnic groups in use of certain preventive care.

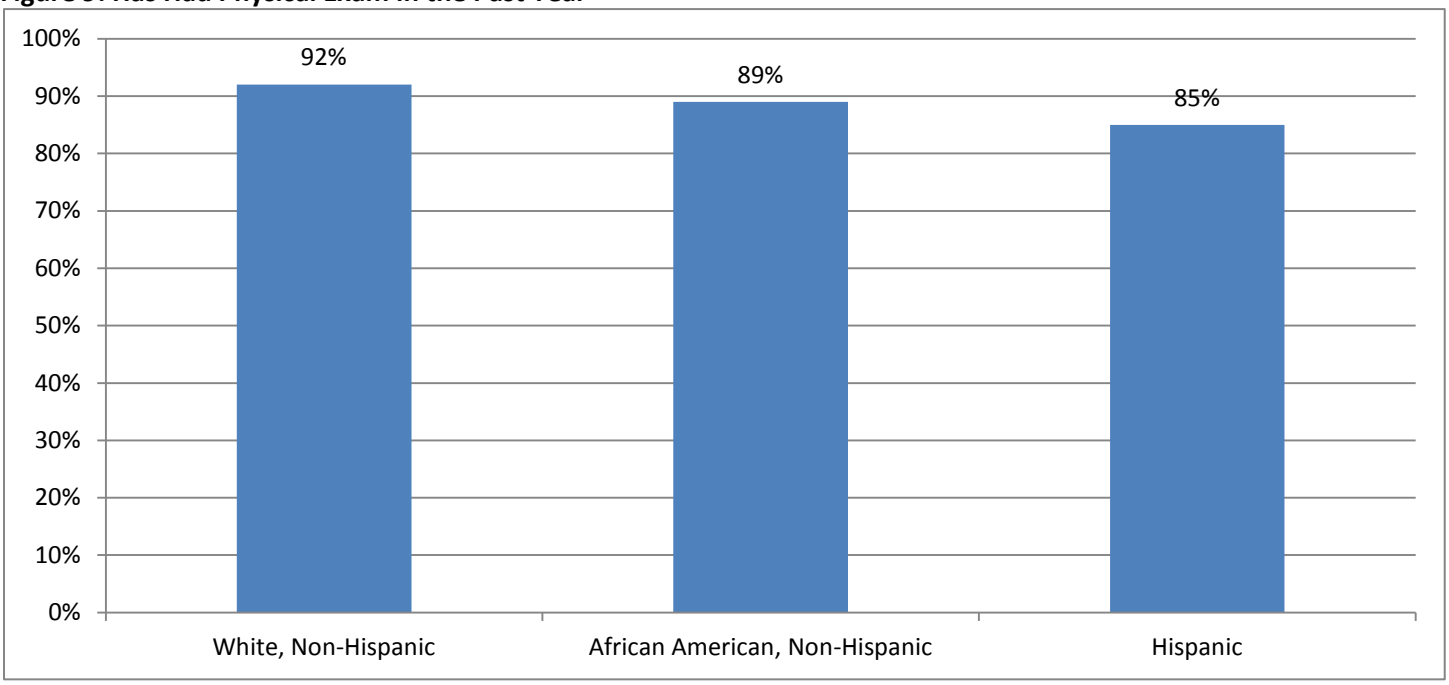
According to NCI data, a lower percentage of White Non-Hispanic individuals were reported to have a primary care doctor (92%) than African American Non-Hispanic (97%) and Hispanic individuals (96%). Figure 8 demonstrates these results.

Figure 8: Has a Primary Care Doctor



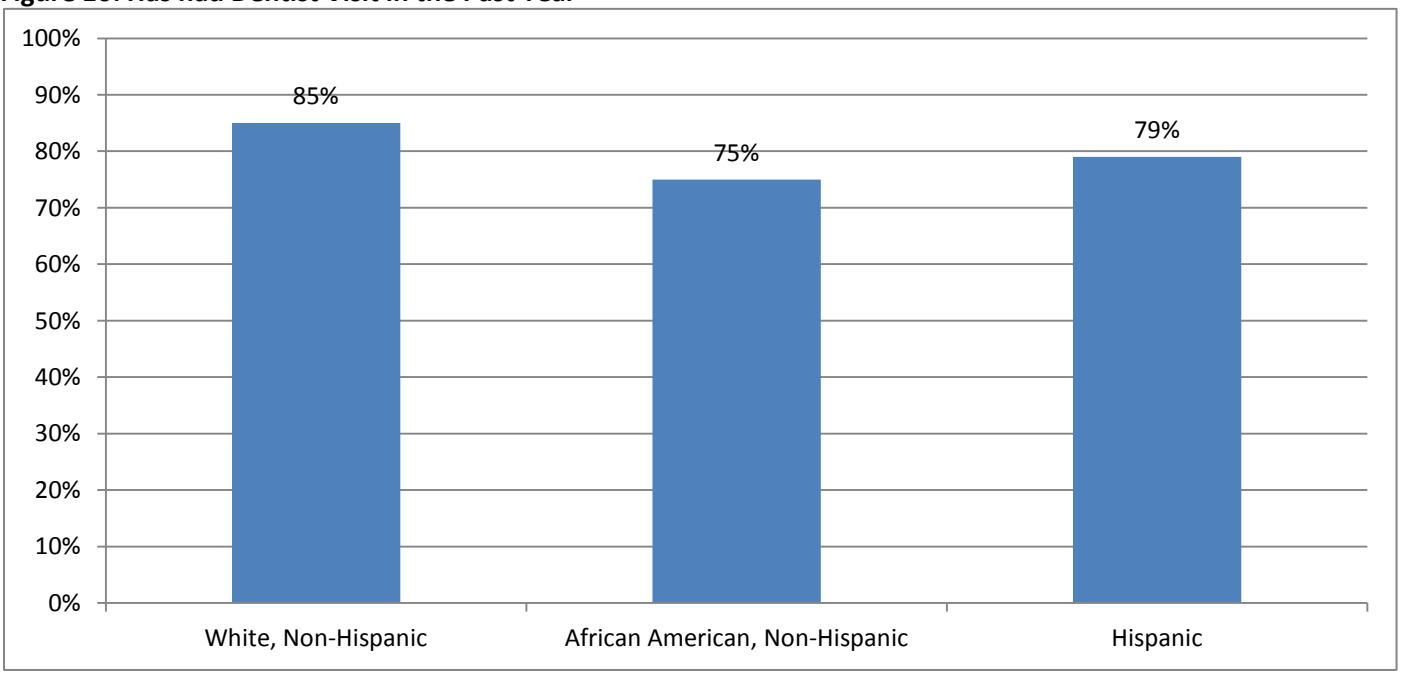
Hispanic and African American, Non-Hispanic individuals were less likely to have had a regular physical exam in the past year (85% and 89%, respectively) than White Non-Hispanics (92%) (Figure 9).

Figure 9: Has Had Physical Exam in the Past Year



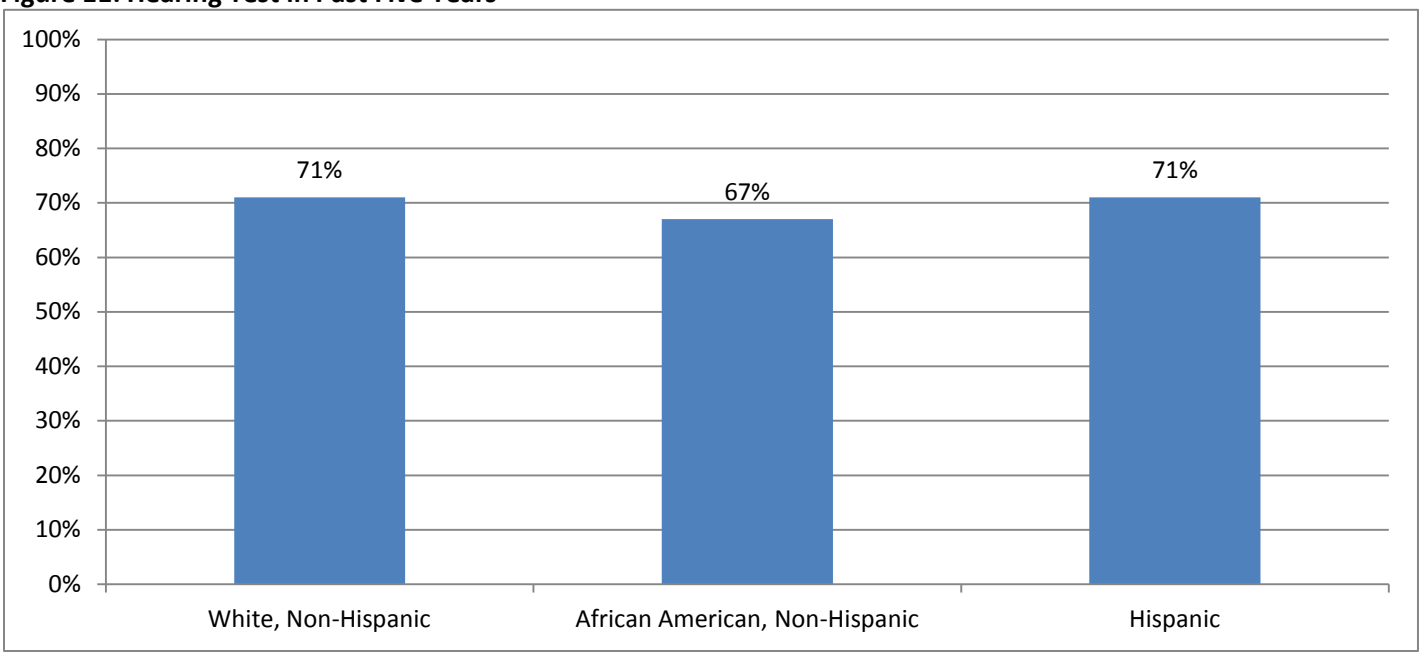
As shown in Figure 10, African American Non-Hispanic individuals were less likely to have had dentist visit in the past year (75%) compared to Hispanic individuals (79%) and White Non-Hispanics (85%).

Figure 10: Has had Dentist Visit in the Past Year



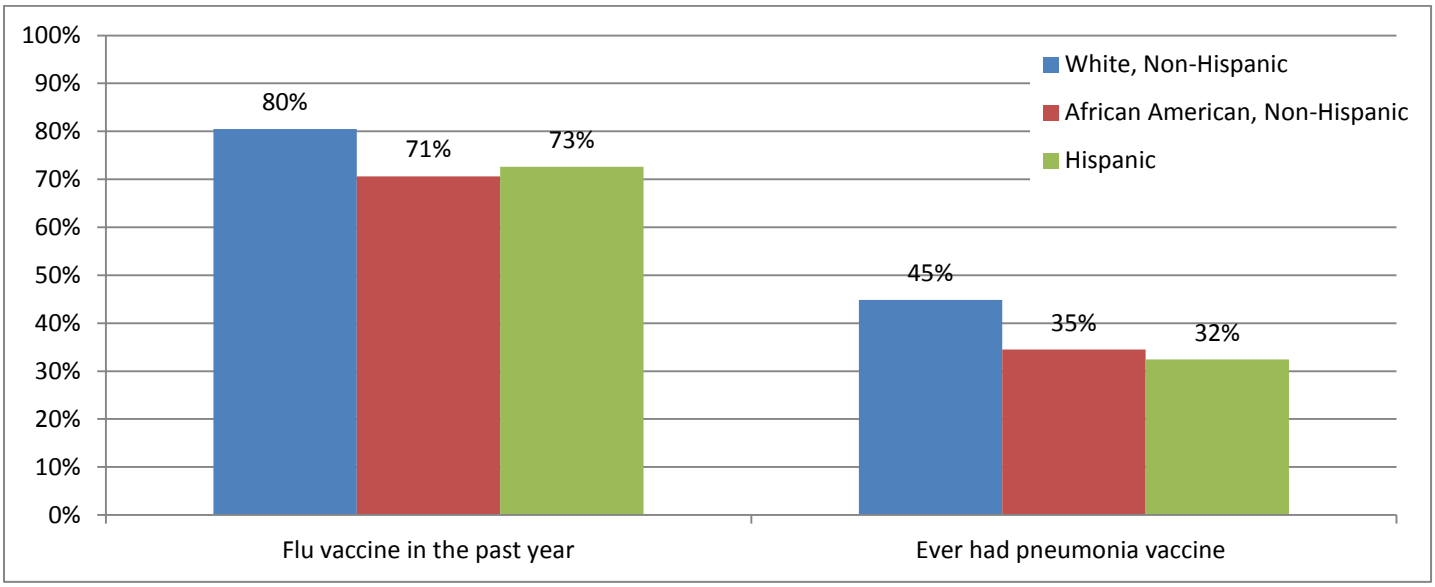
Deafness and hearing difficulties are more prevalent amongst the population of individuals with ID/DD than amongst the general population (Wilson & Haire, 1992; Crandell & Roeser, 1993). Figure 11 shows that African American Non-Hispanics were less likely to have had a hearing test in the past five years than White Non-Hispanic and Hispanic individuals.

Figure 11: Hearing Test in Past Five Years



The data also demonstrate racial/ethnic disparities in the rates of vaccinations. Figure 12 shows that African American Non-Hispanic and Hispanic individuals were less likely to have received a flu vaccine in the past year than White Non-Hispanic people (71% and 73% vs. 81% respectively). Furthermore, Hispanic (32%) and African American, Non-Hispanic (35%) individuals were also less likely to have received a pneumonia vaccine in their lifetimes than White Non-Hispanic individuals (45%).

Figure 12: Flu Vaccine in Past Year/Pneumonia Vaccine Ever



Summary of Findings:

Data collected in 2011-2012 by the National Core Indicators Adult Consumer Survey revealed differences in the rates of preventative health care utilization by race and ethnicity.

When compared to the White Non-Hispanic responders to the Adult Consumer Survey in 2011-2012, the data show that African American Non-Hispanic and Hispanic responders were:

- younger,
- more likely to be male,
- less likely to have been diagnosed with Mild ID,
- more likely to have been diagnosed with Autism Spectrum Disorder and less likely to have been diagnosed with Mental Illness/Psychiatric Diagnosis, Hearing Loss (severe or profound) or Down Syndrome,
- less likely to be in poor health,
- more likely to live in a parent or relative's home and less likely to live in an institution, community-based residence or independent home/apartment.

Additionally, African American, Non-Hispanic respondents are more likely to be obese and less likely to be underweight and African American, Non-Hispanic respondents were more likely to have used tobacco products,

In terms of preventative health care utilization, when compared to White Non-Hispanic respondents to the Adult Consumer Survey in 2011-2012, African American Non-Hispanic responders and Hispanic responders were:

- more likely to have a primary care doctor,
- less likely to have had a physical exam in the past year,
- less likely to have had a dentist visit in the past year,
- less likely to have had a flu vaccine in the past year,
- less likely to have ever had a pneumonia vaccine.

Furthermore, Hispanic individuals were less likely and African American Non-Hispanic individuals were more likely to have had an eye exam in the past year than White Non-Hispanic respondents. African American, Non-Hispanic respondents were less likely to have had a hearing test in the past five years,

Limitations:

Several limitations need to be kept in mind when considering the findings featured in this data brief. The major ones are highlighted below.

Prior research has demonstrated that individuals with ID/DD living in the community are less likely to receive preventative health care services than those living in institutional environments (Lewis, et al., 2002; Bershadsky & Kane, 2010; Krahn, et al., 2006). Additionally, prior research based on NCI data has shown that individuals with ID/DD who live at home with their families are less likely to receive several types of preventative health care such as physical exams, dentist visits, eye and hearing exams, flu and pneumonia vaccines, pap tests, mammograms and colorectal screenings (Bershadsky, et. al., 2012). It has been documented that individuals of differing races/ethnicities with ID/DD reside inside and outside the family home at different rates (Fujiura, et al. 1998). Therefore, it is important to consider the possibility that residence type may confound results pointing to racial and ethnic disparities in health care of individuals with ID/DD.

Additionally, the Adult Consumer Survey does not assess social class or household income. Research has posited that race often serves as a proxy for class and racial/ethnic disparities are confounded by disparities based on class (Kawachi, et al., 2005; Jones, 2000). However, because the Adult Consumer Survey does not collect class or income information, we were unable to assess the role of class in the data.

The "don't know" responses in the receipt of preventive health care exams were omitted from this analysis. Since the information in this brief comes from the Background Section of the Survey and is based on existing records, the "don't know" responses most likely reflect the absence of the particular exam or procedure.

References:

Ashton, C., Haidet, P., Paterniti, D., Collins, T., Gordon, H., O'Malley, K., Petersen, L., Sharf, B., Suarez-Almazor, M., Wray, N. & Street, R. (2003). Racial and ethnic disparities in the use of health services. *Journal of General Internal Medicine.* 18(2):146-152

Beange, H., McElduff, A., Baker, W. (1995) Medical disorders of adults with mental retardation: A population study. *American Journal on Mental Retardation.* (99)6: 595-604

Bershadsky, J. & Kane, R. (2010). Place of residence affects routine dental care in the intellectually and developmentally disabled adult population on Medicaid. *Health Services Res. 45(*5 pt 1: 1376-89

Bershadsky, J., Taub, S., Bradley, V., Engler, J., Moseley, C., Lakin, K. C., Stancliffe, R. J., Larson, S., Ticha , R. & Bailey, C. (2012). Place of residence and preventive health care for developmental disabilities services recipients in twenty states. *Public Health Reports, 127*, 475-485.

Bonito, A., Eicheldinger, C., Lenfestey, N. (2005). Health disparities: Measuring health care use and access for racial/ethnic populations. Final Report, Part 2. Retrieved on March 4, 2013 from http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Reports/downloads/bonito_part2.pdf

Crandell, C. & Roeser, R. (1993) Incidence of excessive impacted cerumen in individuals with mental retardation: A longitudinal investigation. *American Journal on Mental Retardation.* 97/: 568-574

Flores, G. & Tomany-Korman, S. (2008). Racial and ethnic disparities in medical and dental health, access to care and use of services in US children. *Pediatrics*. DOI: 10.1542/peds.2007-1243

Fujiura, G., Yamaki, K., Czechowicz, S. (1998) Disability among ethnic and racial minorities in the United States: A summary of economic status and family structure. *Journal of Disability Policy Studies*. 9(2):111-130

Havercamp, S., Scandlin, D., Roth, M. (2004). Health disparities among adults with developmental disabilities, adults with other disabilities, and adults not reporting disability in North Carolina. *Public Health Reports. 119* 418-426

Jones, C. (2000). Levels of racism; A theoretic framework and a gardener's tale. *American Journal of Public Health. 90(*8): 1212-1215

Kawachi, I., Daniels, N., Robinson, D. (2005). Health disparities by race and class: Why both matter. *Health Affairs.* 24(2):343-352

Krahn, G., Hammond, L., Turner, A. (2006). A cascade of disparities: Health and health care access for people with intellectual disabilities. *Mental Retard Dev Disabil Res Rev.* 12:70-82

Lennox, N., Kerr, M. (1997). Primary health care and people with an intellectual disability: The evidence base. *Journal of Intellectual Disability Res* 41: 365-72

Lewis, M., Lewis C., Leake, B., King, B., Lindemann, R. (2002). The quality of health care for adults with developmental disabilities. *Public Health Reports. 117:*174-84

McCulloch, D., Sludden, P., McKeon, K., Kerr, A. (1996). Vision care requirements among intellectually disabled adults: A residence based pilot study. *Journal of Intellectual Disability Research.* 40: 140-150

Parish, S., Magana, S., Rose, R., Timberlake, M., Swaine, J. (2012) Health care of Latino children with autism and other developmental disabilities: Quality of provider interaction mediates utilization. *American Journal on Intellectual and Developmental Disabilities.* 117(4):304-315

Scott, A., March, L., Stokes, M. (1998) A survey of oral health in a population of adults with developmental disabilities: Comparison with a national oral health survey of the general population. *Australian Dental Journal.* (43)4:257-61

Smedley, B., Stith, A. & Nelson, A. (eds.). (2002). *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington, DC: National Academy Press.

Szalda-Petree, A., Traci, M., Seekins, T., Spas, D. (2000). Life quality and health for adults with developmental disabilities: Executive Summary. Missoula (MT): RTC Rural: Research & Training Center on Rural Rehabilitation Services.

Warburg, M. (1994). Visual impairment among people with developmental delay. *Journal of Intellectual Disability Research,* 38: 423-432

Warburg, M. & Rattleff, J. (1992) Treatable visual impairment, A study of 778 consecutive patients with mental handicap placed in sheltered workshops. In (Ed) Roosendaal, J. *Mental Retardation and Medical Care: Proceedings of the First European Congress on Mental Retardation and Medical Care, Noordwijkerhout, the Netherlands, April 21st-24th 1991.* Uitgeverij Kerckebosch, Zeist, 350-356

Wilson, D., Haire, H. (1990). Health care screening for people with mental handicap living in the community. *BMJ* 301: 1379-81

Wilson, D., Haire, A. (1992) Health care screening for people with mental handicap in the United Kingdom. In (Ed) Roosendaal, J. *Mental Retardation and Medical Care: Proceedings of the First European Congress on Mental Retardation and Medical Care, Noordwijkerhout, the Netherlands, April 21st-24th 1991.* Uitgeverij Kerckebosch, Zeist, 58-67