



Assessing the digital divide among older adults residing in an urban and suburban metropolitan area

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Presenter Disclosures

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- (1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose



PHMC's Community Health Data Base (CHDB)

- Public Health Management Corporation (PHMC) is a nonprofit public health institute that builds healthier communities through partnerships with government, foundations, businesses, and community-based organizations
- PHMC's Community Health Data Base (CHDB) provides population-based data through its Southeastern Pennsylvania Household Health Survey
- CHDB supported by the following:
 - Pew Charitable Trusts;
 - William Penn Foundation;
 - United Way of Southeastern Pennsylvania;
 - Green Tree Community Health Foundation;
 - United Way of North Penn;
 - CIGNA Foundation;
 - Philadelphia Foundation;
 - North Penn Community Health Foundation;
 - Thomas Scattergood Foundation; and
 - Over 400 health and human service providers in the region



Overview

- Internet can serve as a resource for older adults to access timely health information
 - Healthy People 2020 Health Communication and Health Information Technology Objectives
- Increasing percentage of older adults going online
 - However, research continues to identify internet use and access disparities by race/ethnicity, income, and educational attainment





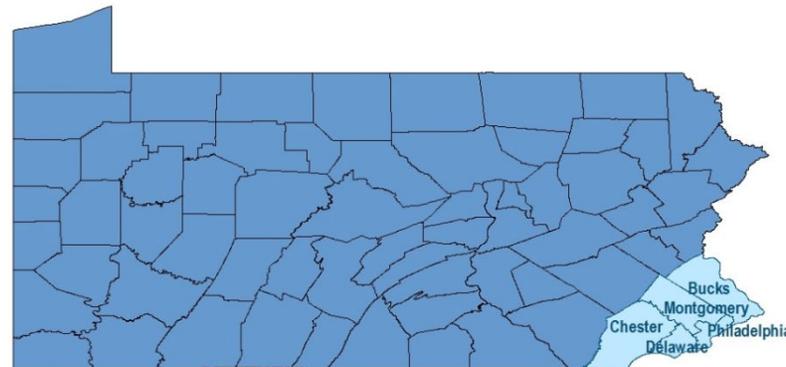
Presentation goals

- Using a local, population-based dataset in Southeastern Pennsylvania, goals of presentation are:
 - To assess characteristics of older adults who never use internet
 - To consider implications of findings for disseminating health information particularly relevant to older adults, via internet



Methodology: CHDB's Southeastern Pennsylvania (SEPA) Household Health Survey (HHS)

- Random Digit Dial (RDD) telephone survey of more than 10,000 households in SEPA
 - 9,000 interviews conducted by landline phones
 - 1,000 interviews conducted by cell phones
- Interviews conducted with adults 18 years of age or older
- Encompasses five-county SEPA region:
 - Bucks
 - Chester
 - Delaware
 - Montgomery
 - Philadelphia





Methodology: Continued

- Survey first conducted in 1983
 - Additional survey years include: 1987, 1991, 1994, 1996, 1998, 2000, 2002, 2004, 2006, 2008, 2010
- Oversample of adults 60-74 years and adults 75 years or older
- Respondents selected using Last Birthday Method
- Interviews in English and Spanish
 - Foreign-language proxy, if needed
- Survey data weighted using U.S. Census year-adjusted counts for race, age, sex, household size, and income to adjust for sampling bias
 - Survey data weighted to project results to U.S. Census counts to estimate total number of persons or households represented by survey data



Household Health Survey: Internet use question

How often do you use the internet?

Would you say...

- Several times a day
- Once a day
- Several times a week
- Once a week
- Once a month
- Less than one a month
- Never

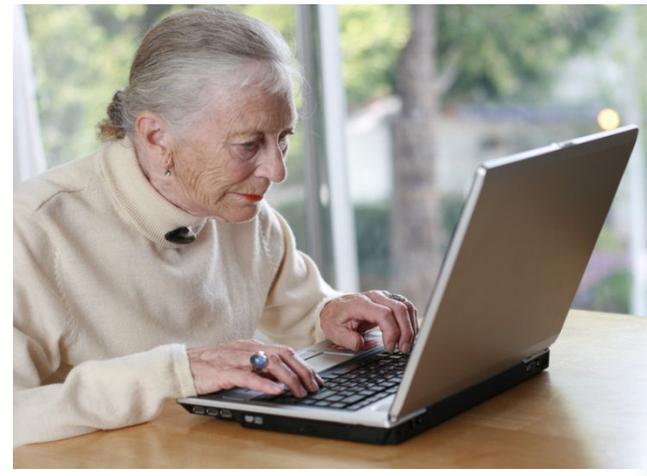




Figure 1. Internet use frequency distribution among older adults

Survey Respondents: Adults 60 years of age or older (n=3,209)

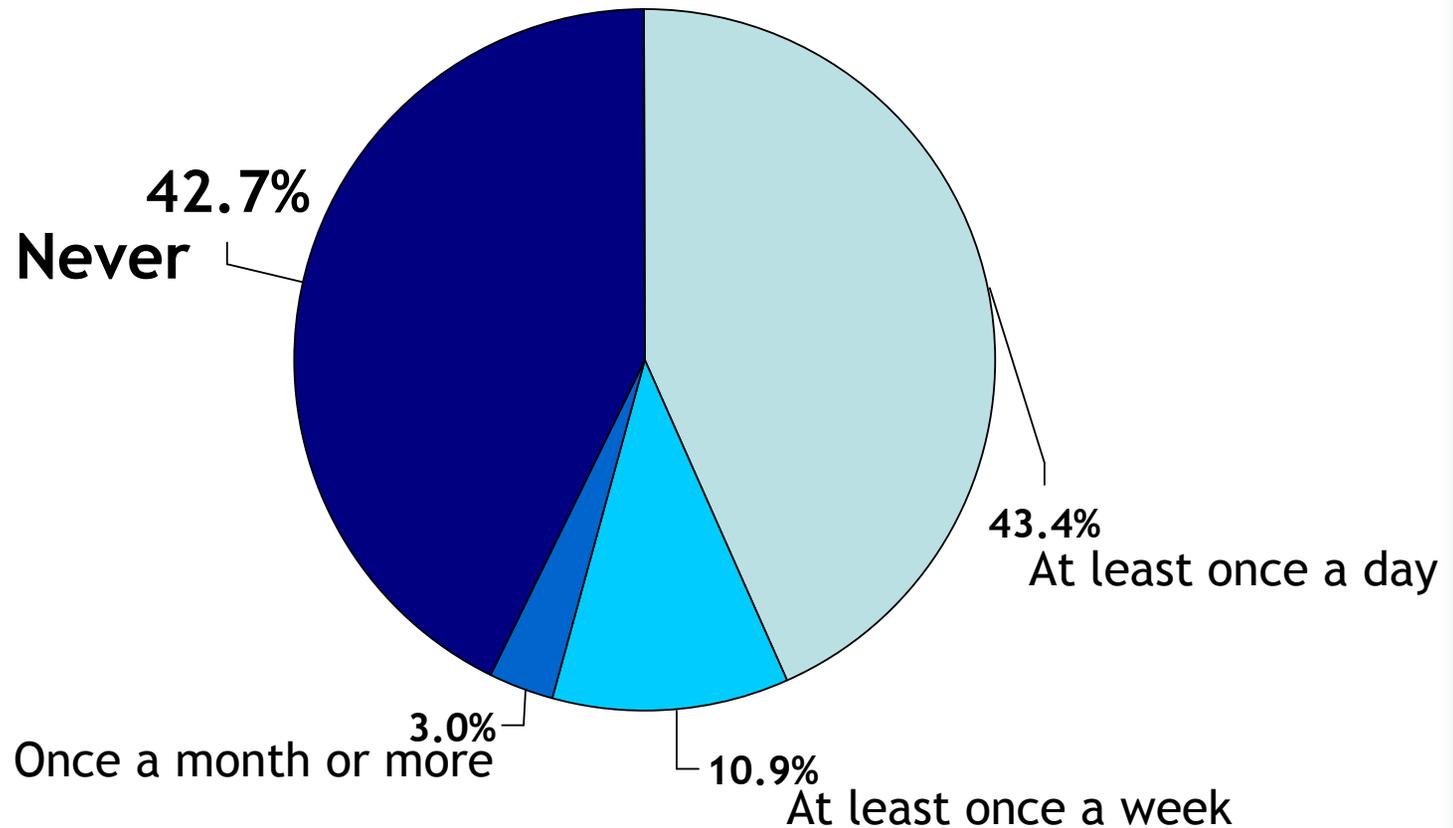




Figure 2. Never use internet among older adults by age group

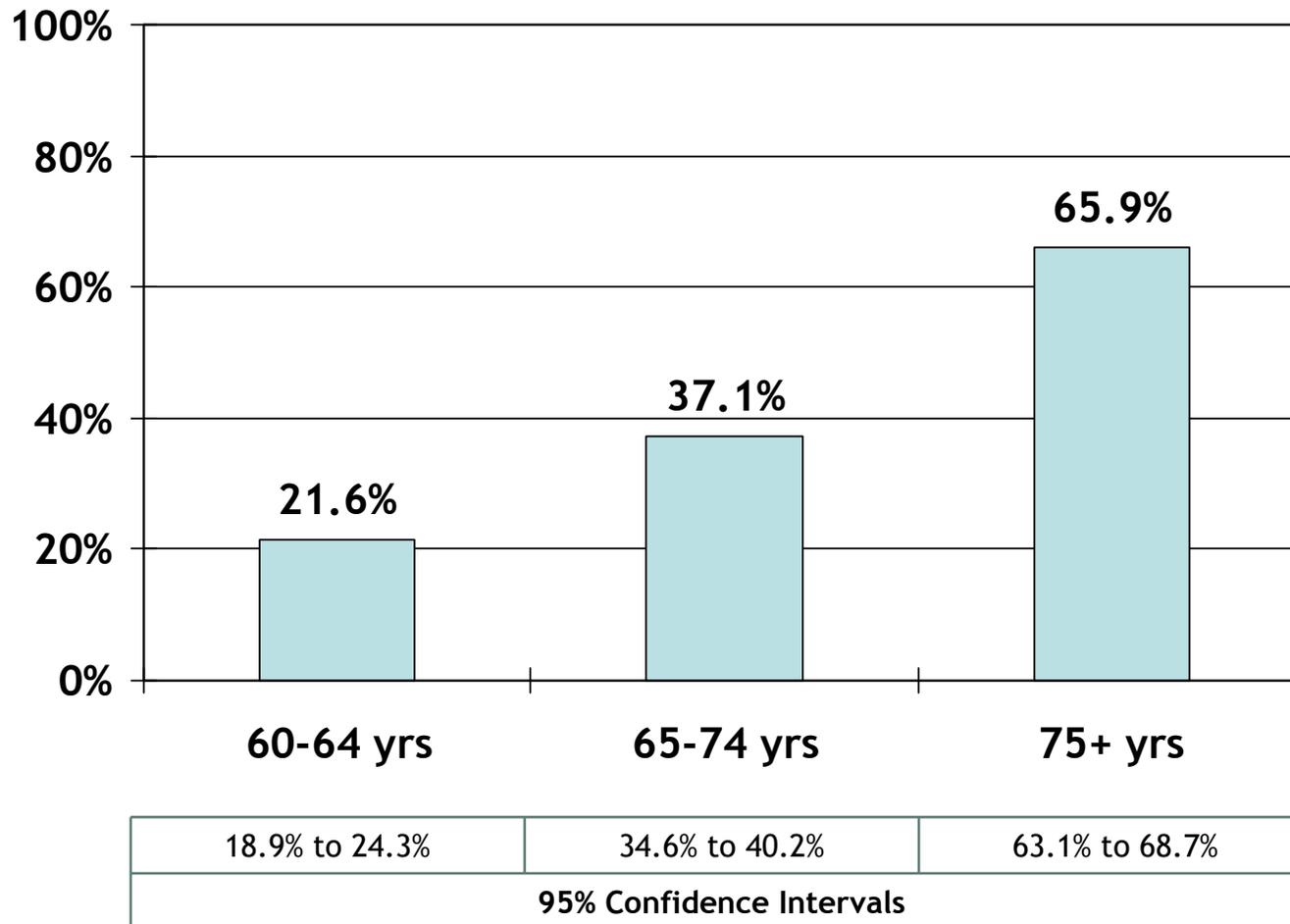




Figure 3. Never use internet among older adults by gender

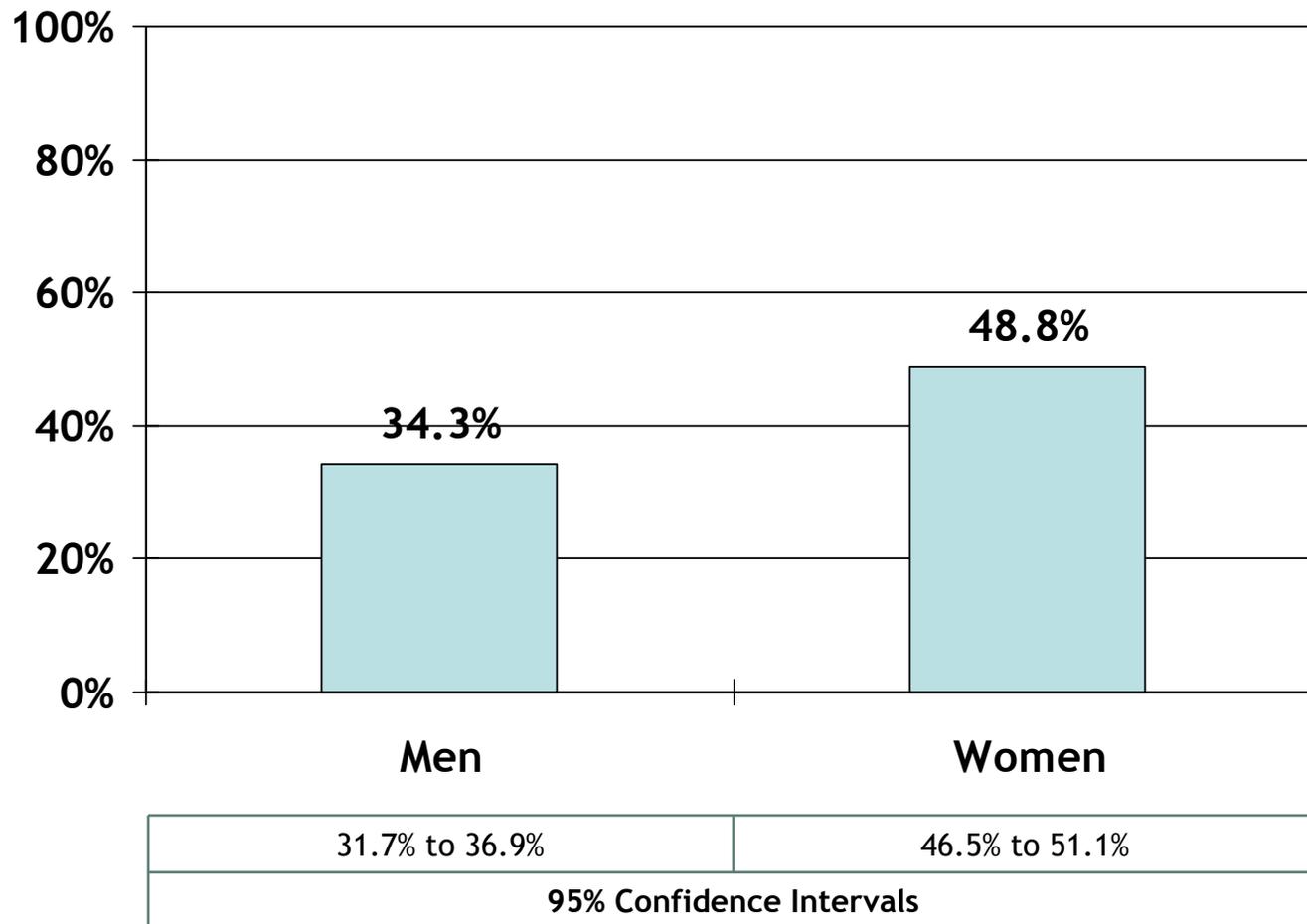




Figure 4. Never use internet among older adults by race/ethnicity

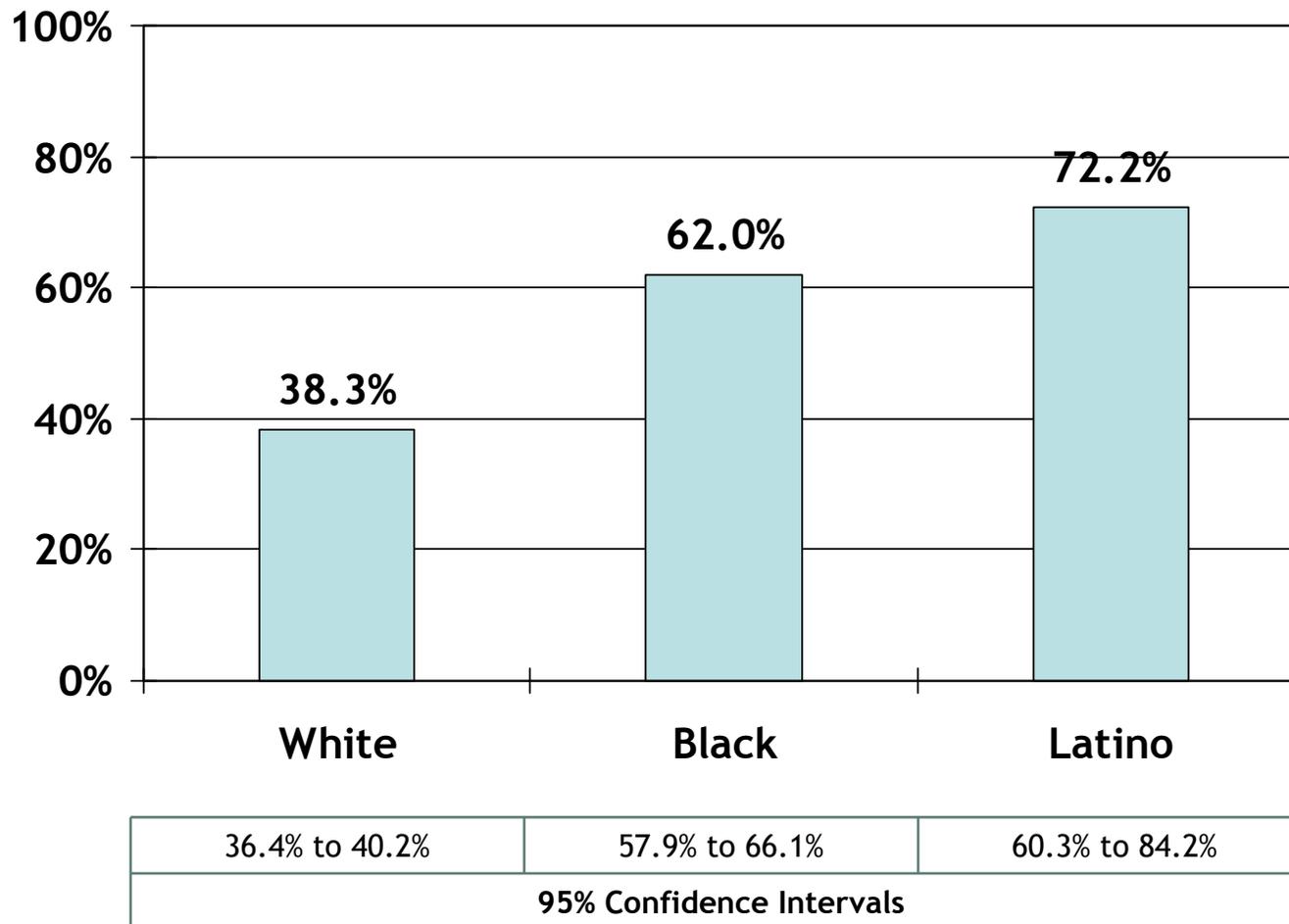
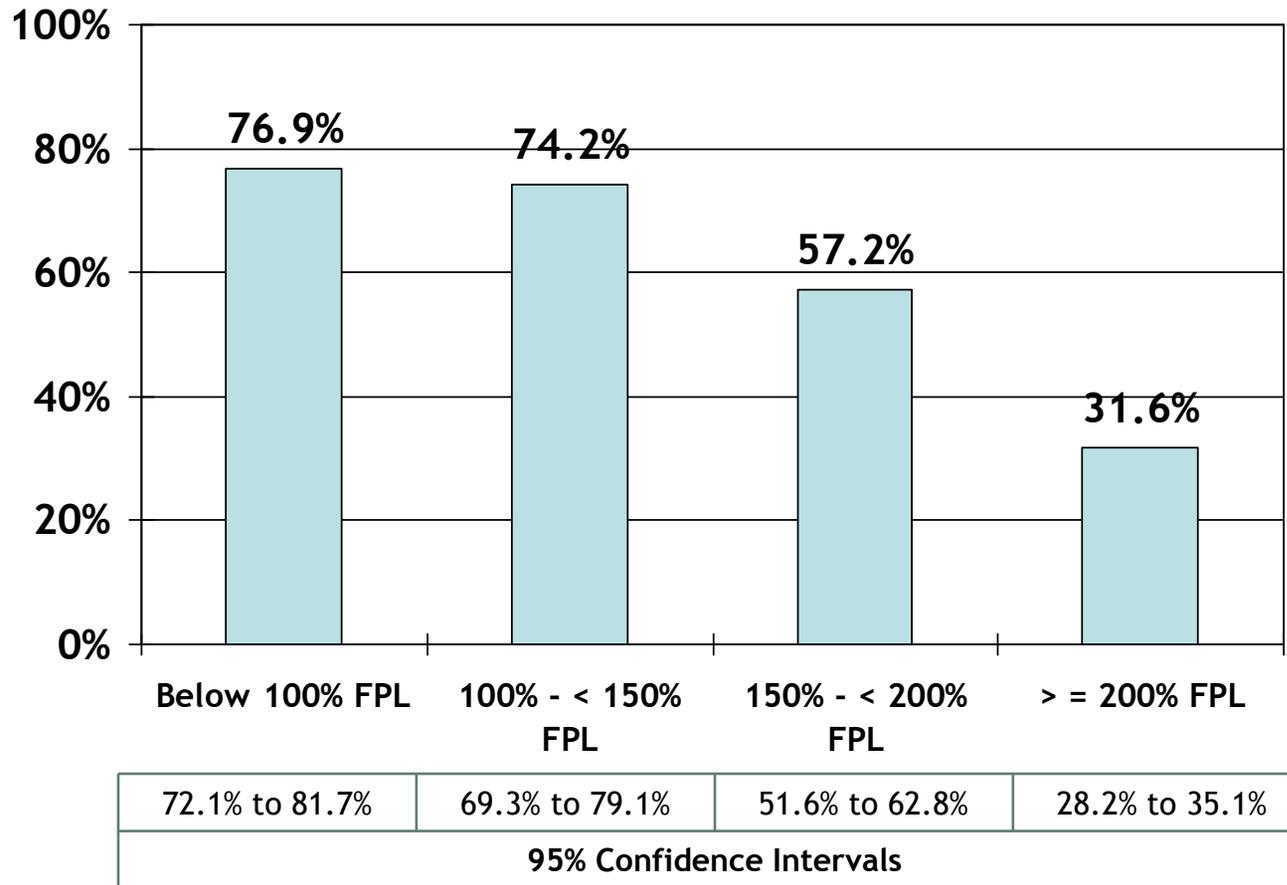




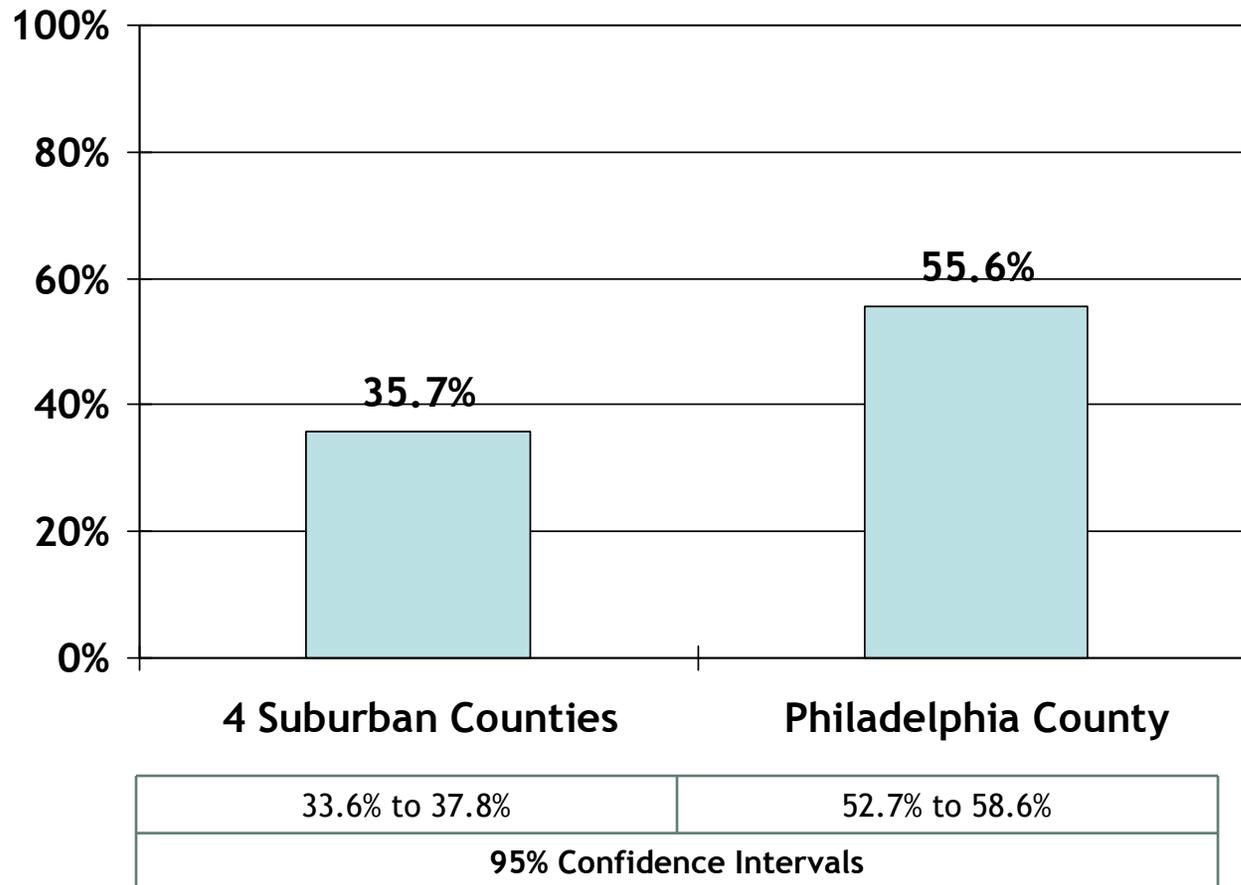
Figure 5. Never use internet among older adults by federal poverty level (FPL)



Note: Poverty level is calculated based on family size and income.



Figure 6. Never use internet among older adults by geographic location



Note: Four suburban counties include: Bucks, Chester, Delaware, and Montgomery Counties in Southeastern Pennsylvania.



Figure 7. Never use internet among older adults by employment status

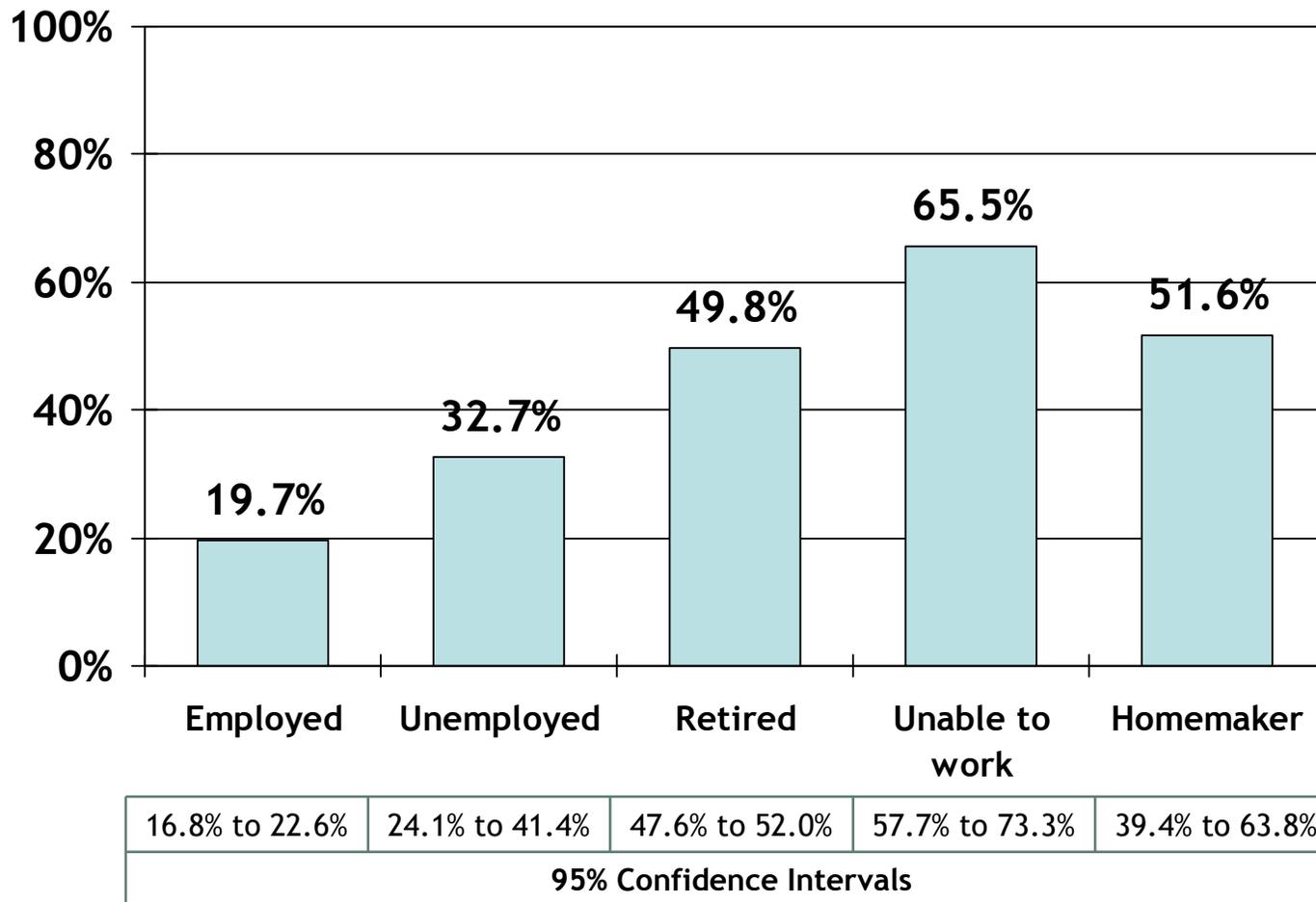




Figure 8. Never use internet among older adults by educational attainment

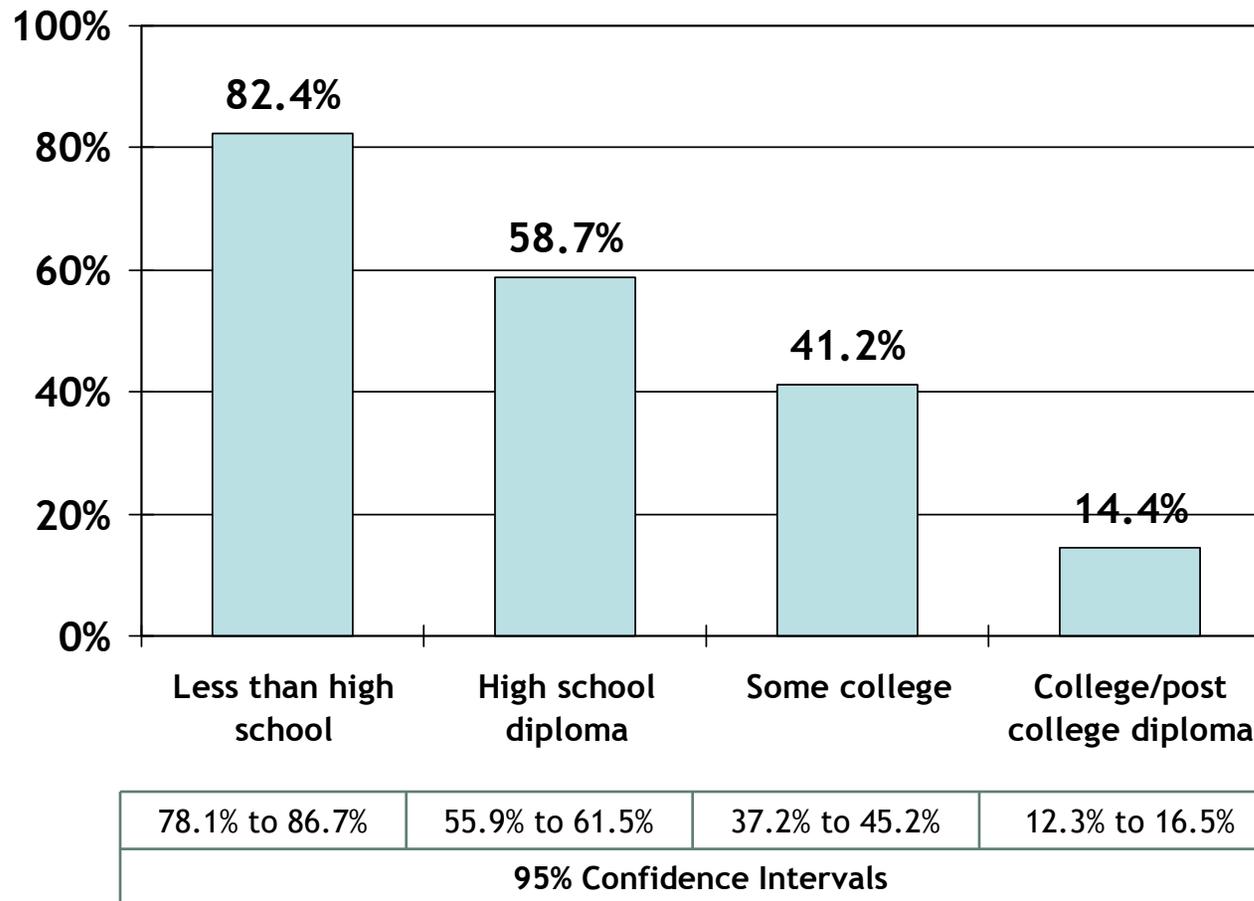




Figure 9. Never use internet among older adults by personal cell phone ownership

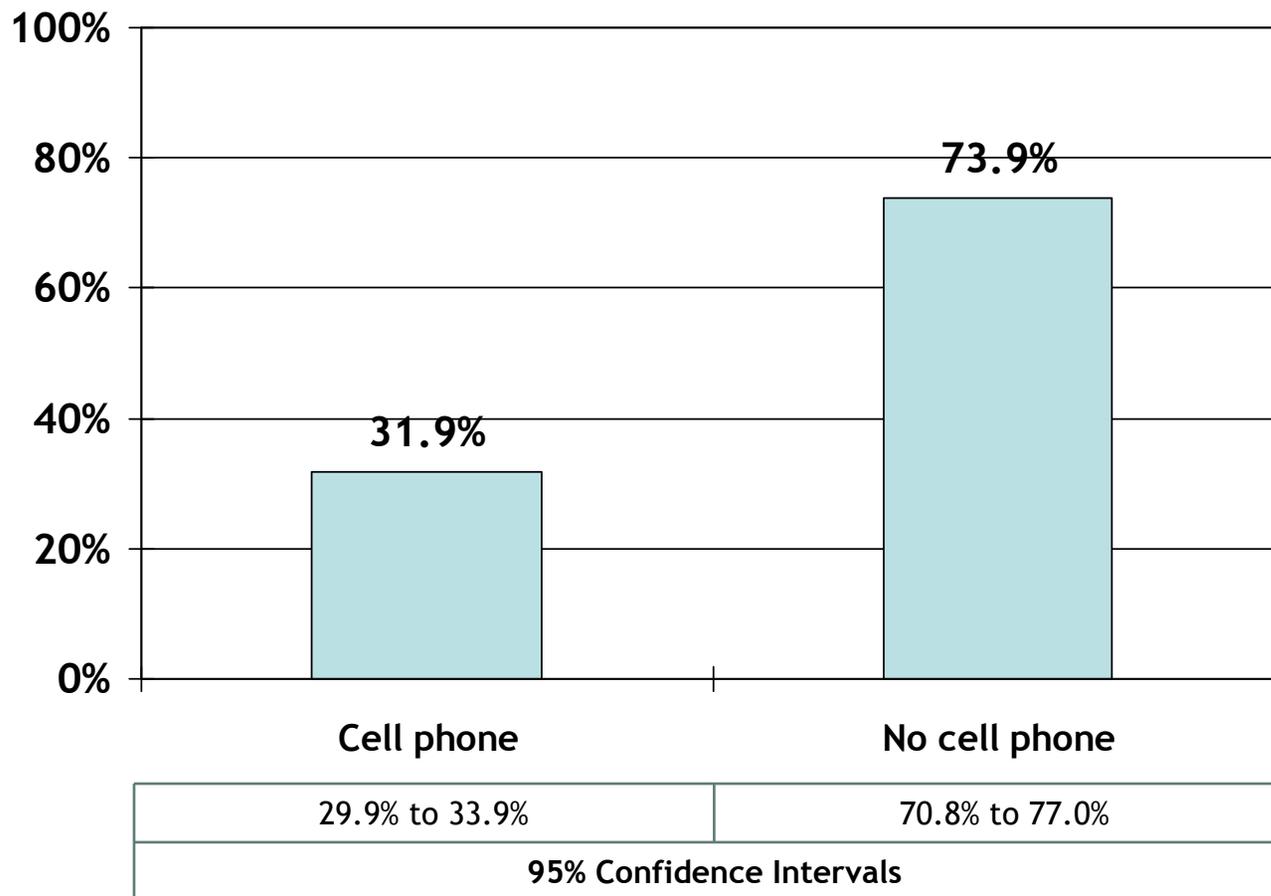


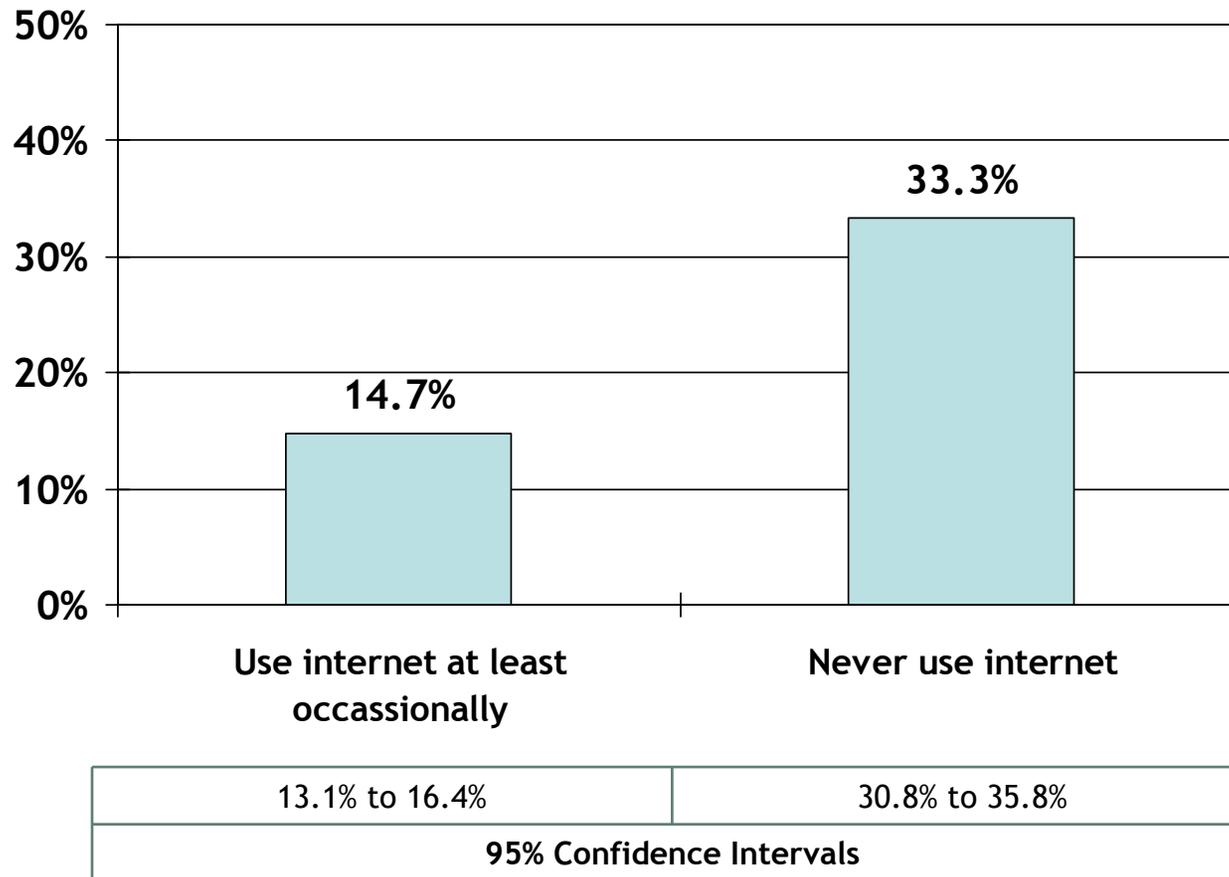


Table 1. Logistic regression: Odds of never using the internet among older adults (Nagelkerke R²=.497)

	Variables	Exp(B)
Education (Comparison: College/post-college)	LT high school degree	14.22***
	High school graduate	6.48***
	Some college	3.52***
Employment (Comparison: Employed)	Unemployed	1.30
	Retired	1.78***
	Disabled/Unable to work	2.89***
	Homemaker	1.78
Geographic region	Philadelphia County	1.24
Race/Ethnicity (Comparison: White)	Black	1.65**
	Latino	2.27**
Gender	Female	1.30*
Age (Comparison: 60-64 yrs)	65-74 yrs	2.02***
	75+ yrs	6.43***
Federal poverty level (Comparison: 200%+ FPL)	LT 100% FPL	2.13***
	100% - LT 150% FPL	1.70**
	150% - LT 200% FPL	1.05
Cell phone	No cell phone	3.74***



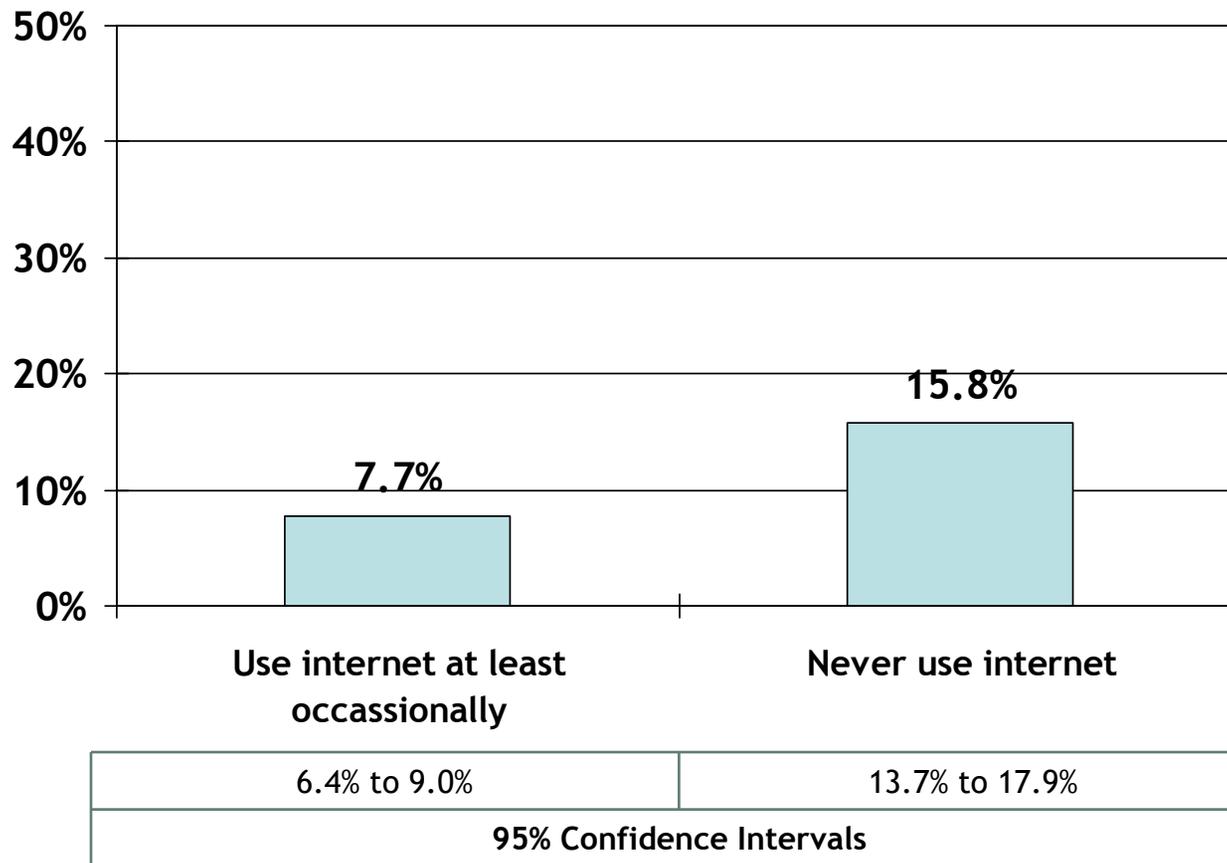
Figure 10. Fair or poor health among older adults by internet use frequency, 2010



Note: Use internet at least occasionally includes those older adults who use the internet at least once a day, at least once a week, or once a month or more.



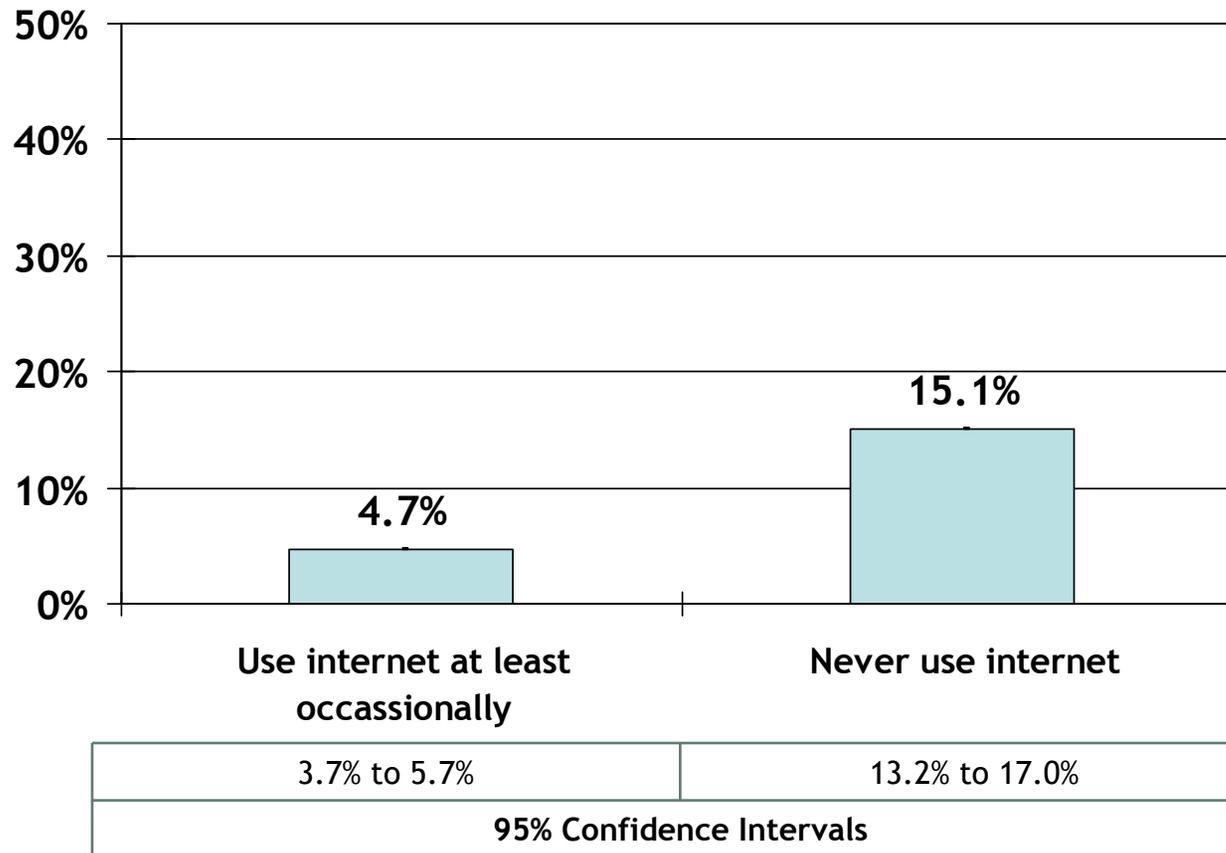
Figure 11. Depression among older adults by internet use frequency, 2010



Notes: Depression is created from the 10-item CES-D depression scale for older adults. Adults with four or more signs of depression are identified as having signs of depression. Use internet at least occasionally includes those older adults who use the internet at least once a day, at least once a week, or once a month or more.



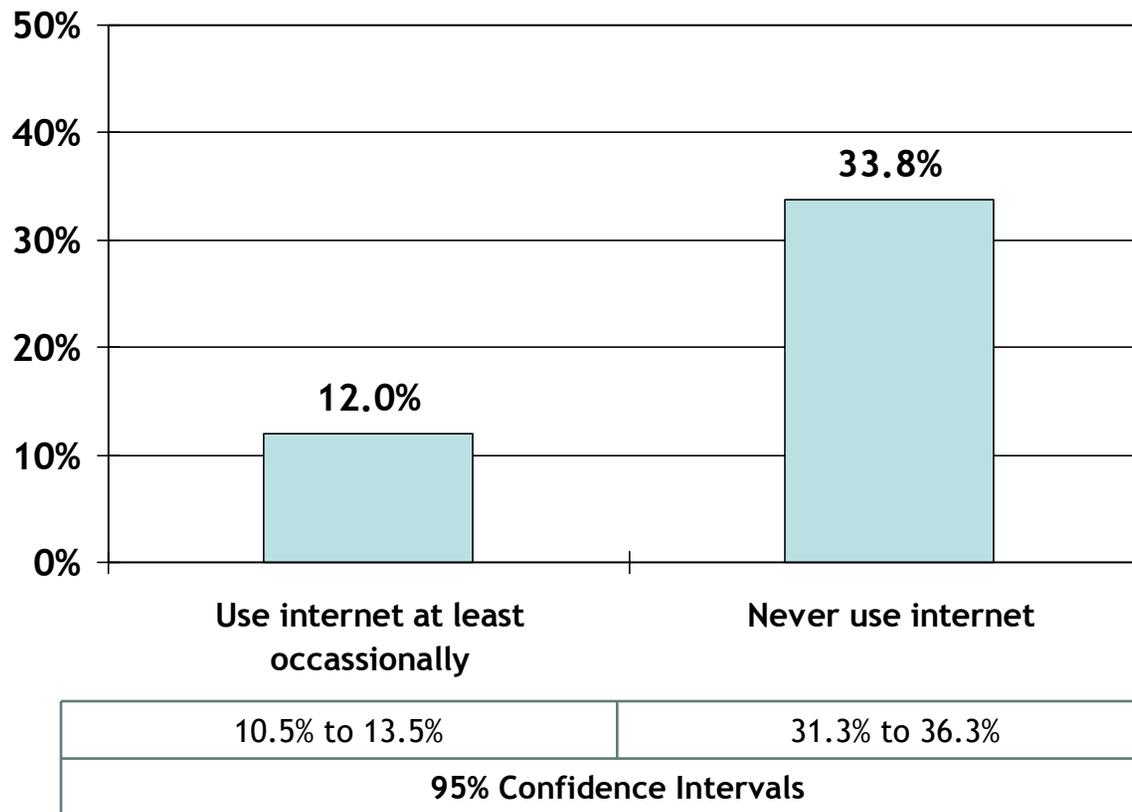
Figure 12. ADL limitations among older adults by internet use frequency, 2010



Notes: ADL (Activities of Daily Living) limitations assess the ability to engage in daily self-care activities such as bathing, dressing, eating, and getting in or out of bed. Percentages include older adults with one or more ADL limitation. Use internet at least occasionally includes those older adults who use the internet at least once a day, at least once a week, or once a month or more.



Figure 13. IADL limitations among older adults by internet use frequency, 2010



Notes: IADL (Instrumental Activities of Daily Living) limitations assess the ability to engage in everyday household chores, shopping for groceries, preparing meals, or getting around for other purposes. Percentages include older adults with one or more IADL limitation. Use internet at least occasionally includes those older adults who use the internet at least once a day, at least once a week, or once a month or more.



Summary & Conclusions

- Segment of older adult population in Southeastern Pennsylvania is technologically isolated
 - More than two in five older adults never use internet
 - Disparities by demographic and socio-economic characteristics
- Program planners and service personnel need to consider disparate internet access when crafting important health messages relevant to an older adult population
- Missed opportunities for older adults to have access to internet-based personal health information and communication with healthcare providers, as promoted by Healthy People 2020 initiative



Acknowledgments

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Contact Information

To find out more about PHMC's SEPA Household Health Survey and the data presented here, please contact Nicole Dreisbach (nicoled@phmc.org).