

University of North Carolina at Charlotte

Policy Report No. 19

End of an Era for Community Managed Care of NC Medicaid Adults

Report of a 2018 CAHPS Survey of Adult Enrollees in CCNC Networks

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Maria Diaz, a UNCC MPH student, provided excellent assistance in preparation of Spanish language versions of the surveys. James Parker and Debbie Bolick of UNCC provided valuable help in the pre-contract phase.

Finally, we also express our gratitude for the expert work of Angel Uglow and George Uribe and their team of interviewers at Contract Research International, which fielded the survey. Their close attention to early responses helped us tweak the survey slightly to increase response rates.

However, it goes without saying that any misunderstanding of Medicaid and its rules or operation reflected in this document are due to our failure to ask the right questions or to understand the information patiently provided by LaRhonda.

We should explicitly acknowledge that *Policy Report 18* draws from material in the “Introduction” and “Methods” sections of *Policy Report 16*, which presents the results of a comparable survey administered in 2015 (Carnes, Farrow-Chestnut, Sagui-Henson, and Mbugua, 2017).

The authors also gratefully acknowledge funding from the NC Department of Health and Human Services, NC Medicaid. However, the views expressed in this report are those of the authors; they do not represent the views of the State of North Carolina or the University of North Carolina at Charlotte.

GUIDE FOR THE BUSY READER

The authors recognize that the length of this final report of the Survey of Adult Medicaid recipients may be daunting for readers with many other demands on their time. The Executive Summary provides an overview of the report. In addition, busy readers who want a more complete synopsis of the content may find that Chapter 4 (Interpreting the Results of the 2018 Survey), which focuses on significant results from pre-selected key-indicator questions, provides the amount of detail that they desire.

In our analyses, we often use shortened versions of the questions to help the flow and for space management in figure titles, etc. Note the exact wording of each question is shown in Appendix A (The 2018 Survey Instrument) and Appendix C (Frequency Distributions of Responses to the 2018 Survey).

Further, Appendix D (2018 Bivariate Relationship Summary and Question Mapping) shows the sequential figure numbers for all univariate and bivariate graphs for all questions if someone wants to find the complete details of any given question or questions.

EXECUTIVE SUMMARY

Background and Research Description (Chapters 1 and 2)

In 2001, the NC Department of Health and Human Services (NC DHHS) requested that the Community Care of North Carolina (CCNC) expand the 10-county Medicaid primary care case management (PCCM) pilot to provide efficient and effective care to its managed care beneficiaries across the state. CCNC is a physician-led not-for-profit organization that provides central guidance and support for what would eventually become 14 CCNC networks and cover all 100 counties in the state by May of 2011.

In the PCCM form of managed care, a primary care provider receives a per-member/per-month fee to manage the health care of enrolled patients in addition to the standard fee-for-service for direct services rendered. This includes referrals for specialty care, diagnostic testing, hospitalization as needed, as well as management of pharmacy utilization. Accordingly, each participant has access to a medical home led by a personal health provider (PHP). These medical homes include virtually all ambulatory Medicaid patients.

The NC DHHS funds independent research every 3 years to determine patient perceptions of this large health care program; in effect, a customer satisfaction survey. In December 2017, NC DHHS contracted with the University of North Carolina at Charlotte (UNCC) to survey a representative sample of the adult managed Medicaid beneficiaries served by CCNC. Our objective was to quantify how adults regarded satisfaction with, access to, and utilization of health care services provided by CCNC and referral providers, respondent-reported health status, and trust in providers. We call these the 5 domains of care on which we report throughout the balance of this report. We used the standard instrument for Medicaid managed care surveys, the Consumer Assessment of Health Providers and Systems survey (CAHPS v5.0).

Policy Report No. 19 End of an Era for Community-Managed Care of NC Medicaid Adults reports the findings of the adult survey. Representative samples of the target adult Medicaid population were surveyed. Next, the answers were analyzed by univariate statistics to determine aggregated experiences and attitudes of the adult respondents from which population results were inferred. Then, bivariate analysis of each question was conducted using what the authors call demographic and contextual variables to determine whether there are subpopulations that differed from the aggregated responses. When observed, these differences denote potential disparities in the subpopulations in whatever health or health care feature the question is asking about. Important features of the population, survey administration, and analysis follow:

- The 2018 eligible population consisted of 421,778 adults who had been enrolled in a CCHC network for 6 months or longer as of 15 May 2018 (Table 3-1):
 - Adult defined as ≥ 19 years old as of 30 September 2018
 - 51.0% White, 42.9% Black, 6.1% Multi/Other
 - 26.2% dual-eligible (eligible for both Medicaid and Medicare)
 - 64.7% female
 - 6.2% Hispanic/Latino ethnicity (deemed too low to create a race-ethnicity variable as was done in the children's report)
 - 70.9% live in urban counties.

- Survey excluded institutionalized adults and women eligible under the Medicaid for Pregnant Women category. It is presumed the latter's care during pregnancy is primarily coming from an obstetrician and not from a PHP.
- Stratified random samples were drawn to ensure sufficient numbers of enrollees in each of 14 CCNC networks to afford comparison across networks.
 - Target of 160 adult interviews in each CCNC network.
 - Total sample size of 54,476 was drawn across the 14 networks as needed to feed the phone survey process.
 - Recalling that dual-eligibility response rate was much higher than non-duals in 2015, we modified the sampling protocol to sample fewer duals, resulting in a similar proportion of dual-eligibles in the population and in the respondents.
- Contract Research International (CRI) of Austin, TX conducted the survey using computer-assisted telephone interview methodology.
 - 2,323 successful interviews of adult respondents were collected between 15 August 2018 and 20 January 2019.
 - Problems: Hurricanes and Florence cause major disruptions in our survey process in September and October, followed by the presidential election on 6 November 2018.
 - As in previous surveys, a large number of unanswered calls, non-working phone numbers, and wrong phone numbers significantly reduced the response rate.
 - The unadjusted response rate was 6.31% using American Association for Public Opinion Research measurement standards (method 2).
 - Demographic descriptions were similar in the population and respondents except for:
 - Respondents were older than population members.
 - White respondents had greater prevalence in the respondents than in the population while Blacks had lower prevalence.
- For analysis and reporting, responses from all questions were grouped under content areas that aligned with CAHPS headings in their survey documents (Ch 3, Appendices A and C).
 - Demographic variables age, sex, race, and respondent education were taken from the survey responses; completed using population data when survey responses were missing, and data was available.
 - Contextual variables include CCNC network and an urbanicity variable constructed based on the respondent's county of residence (provided by NC DHHS).
 - The bivariate analysis of each question using the 5 demographic variables and the 2 contextual variables was conducted to discover differences among the population sub-groups, with differences defined as $p < 0.05$ level of significance in Chi-square tests.
 - 23 key indicator questions were chosen to give a workable list for more focused study. These discussions (Ch 4) grouped questions under the broad domains of satisfaction, access, utilization, health status, and trust, then were broken down by the demographic and contextual variables.

Adult Survey Results (Chapters 3 and 4)

Here we summarize in broad strokes the results of the 71 “content” questions in the 2018 Adult survey that are related to satisfaction, access, health care utilization, health status, and

trust; focusing primarily on the key indicators. We also note results to 2 additional questions prepared for NC Medicaid on smoking and tobacco use and briefly discuss results across the 2012, 2015, and 2018 survey cycles. The “lookback” period on these questions is 6 months prior to the date of the survey.

Satisfaction

- 57% of respondents rated their PHP the best possible and the 56% rated the specialist they saw most often as the best possible.
- Only 40% described their overall health care as the best possible.
- 83% said their PHP always listens carefully and 82% said the PHP always explains things in an easily understood manner.
- Only 50% of respondents indicated they always discussed illness prevention with a provider.

Access

- 72% reported it always easy to get prescriptions.
- 67% and 64%, respectively, always got urgent as quickly as needed and got routine care or check-ups soon enough.
- Only 55% found it easy to get treatment or counseling through the health plan.

Health Care Utilization

- Of the respondents that indicated they have a PHP, 12% did not visit their PHP at all in the previous 6 months while 28% visited their PHP 4 or more times.
- Of those that had scheduled a specialist appointment in the previous 6 months, 22% reported 1 visit while 36% reported 4 or more visits.
- 58% indicated they had no ER visits in the previous 6 months, 20% had 1, and 7% visited an ER 4 or more times.

Health Status

- 51% rated their overall health as excellent/very good/good while 63% gave the same rating to their mental/emotional health.
- 38% needed help with IADLs due to a medical condition.
- 51% got health care ≥ 3 times in the previous 6 months for the same condition or problem while 88% currently take prescribed medication. Both are indicators of a chronic condition.

Trust

- 80% trust that their providers are not performing unnecessary tests or procedures.

The following discussions note possible trends and disparities according to the demographic and contextual variables. As in past surveys, age, race and education had significant differences across the most questions.

Age

- As respondent age increased, overall health care ratings and Medicaid plan ratings increased while PHP ratings decreased.

- As respondent age increased, it was easier to get urgent care, to get care, tests and treatment, and to get prescription medicine.
- Respondents aged 45-64 yo reported the most PHP visits and visits to the ER in the previous 6 months.
- Respondents aged <45 yo reported the best overall health and the poorest mental/emotional health.
- Respondents 45-64 yo most often reported needing help with an IADL and getting health care ≥ 3 times for the same condition (indications of chronic illness).
- As age increased, so did trust that providers do not perform unnecessary tests or procedures.

Sex

- In the previous 6 months, females visited the ER more often in the previous 6 months and more often got care ≥ 3 times for the same condition.
- Males more often got urgent care quickly enough.

Race

- Blacks and Multi/Other respondents generally reported higher satisfaction with care than Whites.
- Blacks most often found it easy to get care, tests or treatment while also finding it easier to get prescriptions. Multi/Other respondents least often found it easy to get prescriptions filled.
- Blacks reported the most ER visits in the previous 6 months while Multi/Other respondents reported the fewest.
- Multi/Other respondents reported the best overall and mental/emotional health while Whites reported the poorest health in both these categories.
- Whites most often used prescription medications while Blacks least often did so.
- White respondents most often trusted their providers to only perform necessary tests and procedures.

Education

- As respondent education increased, overall health care ratings, PHP ratings, and Medicaid plan ratings all decreased.
- As education increased, it was harder to get care, tests and treatment and to get prescriptions through the health plan.
- Respondents with <HS Grad/GED and HS Grad/GED least often found it easy to get treatment or counseling.
- Respondents with <HS Grad/GED had the most PHP visits.
- As education increased, overall health ratings and mental/emotional health ratings improved.
- As education increased, need for help with IADLS and need for prescribed medication decreased.

Dual Eligibility Status

- Dual-eligibles rated their overall health care higher, their Medicaid plan higher, and more often reported that the PHP always explained things in a way that was easy to understand.
- Duals more often got urgent care quickly enough, found it easy to get care, tests or treatment, and to get prescriptions.

- Duals reported fewer ER visits.
- Duals reported better mental/emotional health and greater need for prescribed medications.
- Many of these better results for duals align with what is seen in increased age on the same questions. Duals are generally older as well, and may have more wisdom that offsets frequently poorer actual health in many ways.

CCNC Network

- Community Care of Wake and Johnston Counties (1011) had some superlatives in 2018 related to health status:
 - Best overall health
 - Best mental/emotional health
 - Respondents least often needed help with IADLs
 - Least often needed prescribed medications
- Community Health Partners (1003) had some issues related to health status:
 - Poorest overall health
 - Poorest mental health
 - Respondents most often needed help to manage IADLs.

Rurality

- Rural respondents most often rated Medicaid the best health plan and most often found it easy to get prescriptions filled.
- Urban respondents reported better overall health.

New Questions for 2018

- In preparing the 2018 survey, NC Medicaid asked that we include questions on smoking and tobacco use and cessation. 33% of respondents indicated that they currently smoke or use tobacco products.
 - Significantly fewer of those 45-64 yo, female, and Multi/Other race reporting smoking. Higher educational attainment was associated with less use of tobacco. Respondents in Carolina Community Health Partnership (1010) most often reported tobacco use while those in Community Care of Wake/Johnston Counties (1011) least often did so.
- 84% of tobacco users reported that health providers suggested methods or strategies to reduce tobacco use.
 - Significantly fewer of those <45 yo reported getting counseled on cessation.

Comparisons Across Time

- Across the years 2012, 2015 and 2018, survey respondent demographics evolved as follows:
 - Males are growing in prevalence, the population is getting younger, more Hispanic/Latino, more educated, and more urban.
- Appendix F shows the top box analysis where 2012, 2015, and 2018 survey responses on key questions (chosen by AHRQ) are compared to those of 54,362 US managed Medicaid adults in 146 plans. In almost all cases, NC Medicaid's values are above the median value and frequently at or above the 90th percentile. An exception is considerably lower proportions of respondents than the national median reported having conversations with providers about illness prevention.

1 INTRODUCTION

Medicaid, a federal entitlement program jointly funded by the federal and state governments, pays for medical assistance to individuals and families with low incomes and low resources (Paradise, 2015). Although not directly relevant to this study, we should note that North Carolina is one of 12 states that have currently chosen not to expand Medicaid eligibility under the Affordable Care Act (Kaiser Family Foundation, 2020). The general relevance of this observation is that the low-income NC population must also still meet some categorical requirement to be eligible (primarily being pregnant, a child, parent of an eligible child, or having certain categories of disability).

Since its inception in 1965 the Medicaid program has provided high-quality medical care to a steadily increasing number of eligible beneficiaries, despite the difficulties of constrained public budgets, conflicting values, and shifting public priorities. Nationally, 76.5 million Americans were enrolled in state Medicaid programs in August 2020 (Centers for Medicare and Medicaid Services, 2020). NC DHHS records indicate that approximately 2.23 million adults and children in North Carolina (22.2% of the NC population) were enrolled in the state's Medicaid and SCHIP programs in December 2020 (NC Department of Health and Human Services (DHHS), NC Medicaid, Division of Health Benefits, 2020).

Managed care promotes accountability for cost and quality through utilization measurement and management of health resources. It has been widely adopted to address the challenges of increasing numbers of Medicaid enrollees, expanding benefits and services, and constrained public budgets. North Carolina has chosen to organize its *primary care case management* (PCCM) model around community-organized providers (at the county-based network and statewide level). Kongstvedt (2007, p. 813) defines PCCM as the arrangement

“...designating PCPs [primary care providers] as case managers to function as ‘gatekeepers,’ but reimbursing those PCPs using traditional Medicaid fee-for-service, as well as paying the PCP a nominal management fee such as \$2 to \$5 PMPM [per member per month].”

The Medicaid-relevant subsection (Subtitle H, Section 4701, (a), (t)(1)) of the Balanced Budget Act of 1997 (P.L. 105-33) defines PCCMs and their activities to include the “locating, coordinating, and monitoring of health care services provided by a primary care case manager,” and explicitly permits nurse practitioners, physician assistants, and certified nurse mid-wives to serve as primary care providers. Although popular perceptions of the “gatekeeping” function in managed care commonly emphasize the negative role of denying care (hopefully unnecessary care), the primary care case manager (aka primary care provider) should also play a critical role in securing specialty referrals for his or her patients. In light of past problems faced by Medicaid beneficiaries in securing access to specialty care under pure fee-for-service Medicaid, this facilitating role that makes a physician or other health provider an advocate for patient access may be the most important aspect of the PCCM form of managed medical care (Hurley and Somers, 2007). This gatekeeper role also includes optimizing access to pharmaceutical interventions and hospital admissions. In North Carolina, the networks are structured to be the focus of disease management for those patients.

In 2017, NC Medicaid folded the last 2 of the original Carolina ACCESS care sites into

CCNC networks; thus, they are no longer displayed on the CCNC network map. The North Carolina Department of Health and Human Services provides resources, information, and technical support to personnel at the level of the local networks. Capitated reimbursement mechanisms are used to pay providers who participate as care managers in the PCCM organizational structure, over and above the standard fee-for-service arrangement.

The CCNC networks proactively address the overall health status of enrollees by using such tools as risk stratification, disease management, and case management. Accountability is achieved by defining, tracking, and reporting performance measures that gauge the effectiveness of participating networks, practices and physicians in achieving quality, utilization, and cost objectives (NC DHHS, DMA, 2007). Providers that wish to align with a CCNC network must agree to the above activities by communicating clinical and other information to the central CCNC management function and to operate inside the statewide guidelines developed from analysis of practice- and patient-level data. NC Medicaid also monitors and evaluates the success of its programs through periodic surveys of beneficiaries who receive Medicaid services. One survey instrument, the Consumer Assessment of Health Providers and Systems (CAHPS) Survey has become the standard instrument that is used in evaluations of Medicaid managed care programs throughout the nation and is used in this project. This survey elicits the opinions of Medicaid beneficiaries on their access to, utilization of, and satisfaction with health care. The CAHPS instrument does not directly measure the clinical quality of services delivered to patients, but the areas of access, utilization of needed care, satisfaction in the health care system are considered to be important indicators of the quality of a health care delivery system (Donabedian, 1980 and 1985). Previous officials in the Office of Rural Health and Community Care asked the UNC Charlotte researcher team to add questions to the basic CAHPS survey instrument about beneficiaries' trust. These questions have been utilized since the 2006/2007 statewide Medicaid survey. Evaluation of the questions in these areas vs. chosen respondent demographic and contextual variables is done to help assess any disparities in care delivery.

In December 2017, UNC Charlotte entered into a contract with the NC DHHS, NC Medicaid that funded UNC Charlotte researchers to conduct two statewide surveys of Medicaid beneficiaries in specific program categories who participated in Community Care of North Carolina. One survey asked adults on Medicaid about the care that they received; the other asked a responsible and knowledgeable adult about the care of a child on Medicaid.

The second chapter provides the relevant details of the conduct and analysis of the survey of the adults enrolled in North Carolina's primary care case management programs. It explains the definitions adopted, the sampling plan used, and the variables employed in the extensive analysis that constitutes the bulk of this report. The variables describing the demographics of the individuals surveyed are the usual categories used to analyze large populations into subpopulations. We continued using respondent highest education level to see if it demonstrated any unique associations with survey questions. CCNC network is an essential context variable as this is the organizing basis for delivering Medicaid managed care in North Carolina. Rurality is a context variable selected by the authors to characterize the population density/proximity to urban centers of the counties in which the respondents live.

2 METHODS

This document reports on the experience of adult Medicaid beneficiaries in North Carolina in 2018. Community Care of North Carolina (CCNC) is the structural entity that manages health care delivery in the state's Medicaid program. The primary goal of this survey is to assess the primary care case management (PCCM) model practiced by CCNC networks. Our univariate analyses report on general statewide performance of the system. We also analyzed the relationship between questions associated with five domains of care (access, satisfaction, health status, utilization, and trust) and patient and caregiver demographic and contextual variables to uncover disparities in health and health care across these demographic and contextual variables.

In a competitive bidding process, Contract Research International (CRI), a survey firm headquartered in Austin, TX, was awarded a contract to conduct a survey of the adult population using computer assisted telephone interviewing (CATI) methodology. The North Carolina Medicaid Division of Health Benefits provided eligibility file data for all survey-eligible clients. The adult survey was put into the field on 15 August 2018 and completed on 20 January 2019.

Survey Population

Inclusion/Exclusion Criteria Eligibility data provided by NC Medicaid included all NC Medicaid beneficiaries that had been enrolled in one of the following programs as well as being in a CCNC network for at least 6 months as of 15 May 2018:

- AAF (Work First for Family Assistance),
- TANF (Temporary Assistance to Needy Families),
- M-AF (Medicaid to Families with Dependent Children),
- M-AB (Medicaid to the Blind),
- M-AD (Medicaid to the Disabled)
- MAA (Medicaid for the Aged, or the dual-eligibles),
- MSB (Aid to the Blind Medicaid Assistance),
- SSI (Supplemental Security Income, the federal cash assistance program for the blind, aged, and disabled) under age 65,
- M-IC (Medicaid to Infants and Children)
- SSI (Supplemental Security Income, under age 19), and
- Children under the age of 19 with Title V block grant assistance (the health services safety net for all women and children enacted as part of the Social Security Act of 1935).

Individuals enrolled in the following programs were excluded from the study population:

- CAP (Community Alternative Program, including CAP-enrolled children eligible for hospital or nursing facility levels of care, disabled adults, persons with mental retardation and/or developmental disabilities and persons with AIDS),
- MPW (Medicaid for Pregnant Women) enrollees,
- MQB (Qualified Medicare Beneficiaries – those who are partially eligible because they only receive Medicare premium support benefits as opposed to the “full duals” who are eligible for both Medicare and Medicaid payment of Medicare co-pays),

- Institutionalized enrollees receiving long-term care, nursing home, or adult care home services,
- MAFD (Medicaid for family planning), and
- Health Choice (State Children’s Health Insurance Program (SCHIP)) enrollees.

Survey Population Each enrollee’s age as of 30 September 2018 was calculated from the birth dates provided in the eligibility file provided by the NC Department of Health and Human Services (DHHS). For the purpose of this study, individuals that were 19 years of age and older were deemed adults and those under 19 years were deemed children.* Based on the above criteria, the survey population included 421,778 adults and 950,645 children.

The 2018 eligibility file information included a sufficient sampling frame with “workable” 10-digit phone numbers:† 375,804 adults (89.1%) had phone numbers while 886,001 children (93.2%) had phone numbers, respectively, in the NC DHHS database.

CCNC Care Management and Organizational Structure

Managed care networks are the structural units by which CCNC delivers primary care to Medicaid managed care beneficiaries in North Carolina. Further, these 14 networks are the organizing units for active case management of the population outside the scope of visits to the medical practice. The providers in these networks also refer patients for diagnostic testing, specialist care, and hospitalizations when needed, as well as actively participating in management of pharmaceutical care. Each CCNC network is a contiguous, multi-county area except for the 4 non-contiguous sections of counties in CCNC Clinical Operations (1006) and Carolina Collaborative Community Care (1013) which is made up of only Cumberland County. Note that the 7 westernmost Community Care of Western North Carolina (1007) network counties, Cherokee, Clay, Graham, Haywood, Jackson, Macon, and Swain, had previously been part of CCNC Clinical Operations (1006) until July 2018. This most recent configuration is the basis for our project and is displayed in Figure 2-1. Table 2-1 tabulates the counties in each network in this most recent configuration.

Consumer Assessment of Healthcare Providers and Systems (CAHPS) Survey

The CAHPS project originated in 1995 in the Agency for Healthcare Research and Quality (AHRQ) (US DHHS, AHRQ, 2002). The Centers for Medicare and Medicaid Services (CMS) has deemed the CAHPS survey instruments suitable for mandated surveys of Medicaid managed care populations.

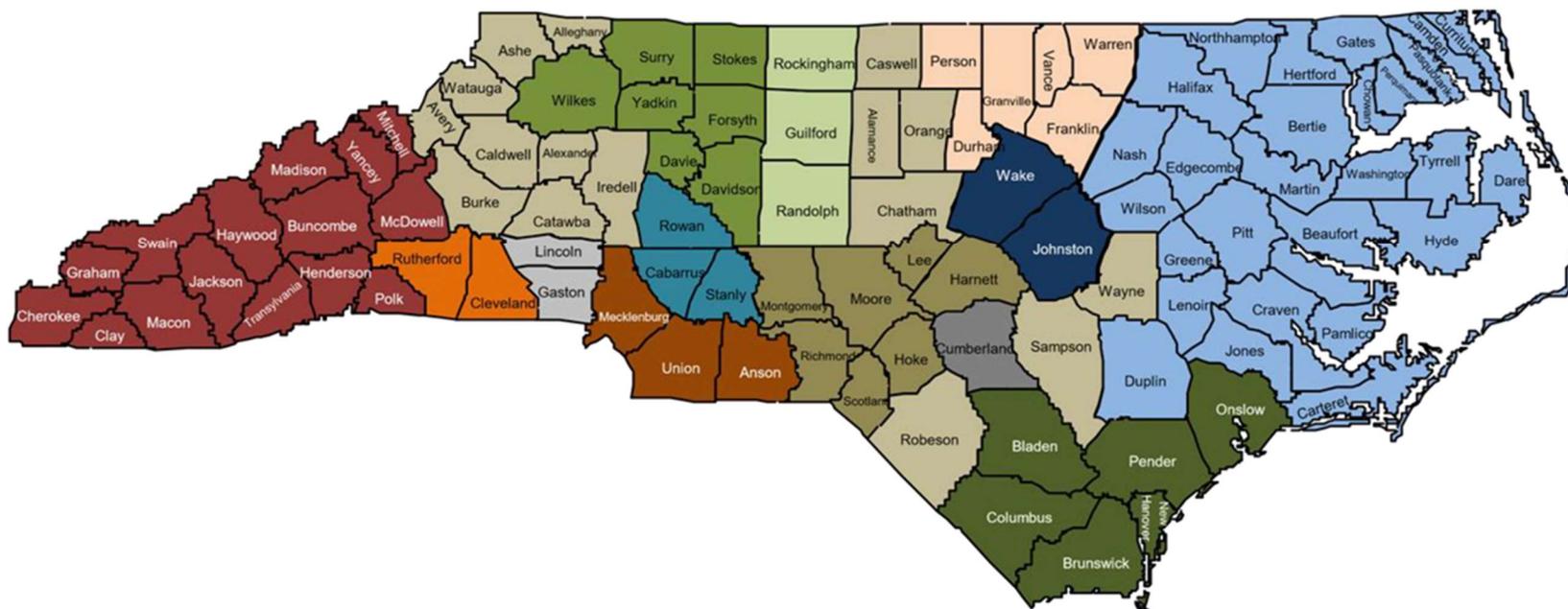
The *CAHPS Health Plan Survey 5.0, Adult Medicaid Questionnaire* (US DHHS, 2016) served as a template for the survey document created by the UNC Charlotte research team and administered to adult program enrollees. Our survey is compliant with CAHPS® guidelines to use all core questions as well as following suggestions on the placement of optional supplemental survey questions‡ in relation to these core questions.

* Agreement with LaRhonda Cain of NC Medicaid, and consistent with previous surveys.

† “Workable” phone numbers exclude “placeholder” numbers such as 000-000-0000, etc. or numbers with other than 10 digits. They also do not include any type of symbols as CATI systems require numeric values only.

‡ The *CAHPS Health Plan Survey 5.0, Supplemental Items for the Adult Questionnaire* was the source for supplemental questions supplied by AHRQ.

Figure 2-1 Community Care of North Carolina Network Map



- | | | | |
|------|--|------|---|
| 1006 | ■ CCNC Clinical Operations | 2000 | ■ Community Care Plan of Eastern Carolina |
| 1007 | ■ Community Care of Western North Carolina | 1003 | ■ Community Health Partners |
| 2004 | ■ Community Care of the Lower Cape Fear | 2007 | ■ Northern Piedmont Community Care |
| 1013 | ■ Carolina Collaborative Community Care | 2006 | ■ Northwest Community Care |
| 1011 | ■ Community Care of Wake and Johnston Counties | 1012 | ■ Partnership for Community Care |
| 1009 | ■ Community Care Partners of Greater Mecklenburg | 2005 | ■ Community Care of the Sandhills |
| 1010 | ■ Carolina Community Health Partnership | 2003 | ■ Community Care of Southern Piedmont |

Source: CCNC, North Carolina Geodetic Survey, North Carolina Department of Transportation. Map prepared by David Barbato, UNC Charlotte, 6/2020

Table 2-1 Community Care of North Carolina Networks and Counties		
Network Number	Network Name	Counties
1003	Community Health Partners	Gaston, Lincoln
1006	CCNC Clinical Operations	Alamance, Alexander, Alleghany, Ashe, Avery, Burke, Caldwell, Caswell, Catawba, Chatham, Iredell, Orange, Robeson, Sampson, Watauga, Wayne
1007	Community Care of Western North Carolina	Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Swain, Transylvania, Yancey
1009	Community Care Partners of Greater Mecklenburg	Anson, Mecklenburg, Union
1010	Carolina Community Health Partnership	Rutherford, Cleveland
1011	Community Care of Wake/Johnston Counties	Wake, Johnston
1012	Partnership for Community Care	Guilford, Randolph, Rockingham
1013	Carolina Collaborative Community Care	Cumberland
2000	Community Care Plan of Eastern Carolina	Beaufort, Bertie, Camden, Carteret, Chowan, Craven, Currituck, Dare, Duplin, Edgecombe, Gates, Greene, Halifax, Hertford, Hyde, Jones, Lenoir, Martin, Nash, Northampton, Pamlico, Pasquotank, Perquimans, Pitt, Tyrrell, Washington, Wilson
2003	Community Care of Southern Piedmont	Cabarrus, Rowan, Stanly
2004	Community Care of the Lower Cape Fear	Bladen, Brunswick, Columbus, New Hanover, Onslow, Pender
2005	Community Care of the Sandhills	Harnett, Hoke, Lee, Montgomery, Moore, Richmond, Scotland
2006	Northwest Community Care Network	Davidson, Davie, Forsyth, Stokes, Surry, Wilkes, Yadkin
2007	Northern Piedmont Community Care	Durham, Vance, Warren, Person, Franklin, Granville

The UNC Charlotte research team worked with NC Medicaid staff members to ensure that any unique features pertinent to the experience of North Carolina Medicaid beneficiaries enrolled in CCNC networks were integrated into the survey. Accordingly, several questions were slightly rephrased. For example, the term “health provider” often replaced “doctor” due to the large prevalence of physician extenders as de facto personal health provider (PHP). Accordingly, “nurse practitioner” and “physician assistant” were added as options to questions about the type of provider an individual’s PHP was.

Other modifications include a slight change to the trust questions (q72-76) in response to some early, pre-testing pushback from respondents. As a significant number of respondents had

not seen their personal health provider in the survey’s 6-month lookback period, some respondents struggled with how to answer these questions about the PHP relationship. Thus, the broader “health providers” replaced “personal health provider” in these questions. Also, a response was added, “no recent health care experience,” which was then regarded as missing in reporting results. Finally, the skip pattern was changed on health care utilization questions with “count value” responses; across these questions, a “0” response resulted in skipping between 2 and 19 follow-up questions. We decided that this likely missed some respondents with useful information that did not remember how many times they had utilized the respective health care modes. Thus, responses of “unsure” on questions 6, 23, and 41 were treated in the skip pattern logic as if a non-zero value had been provided.

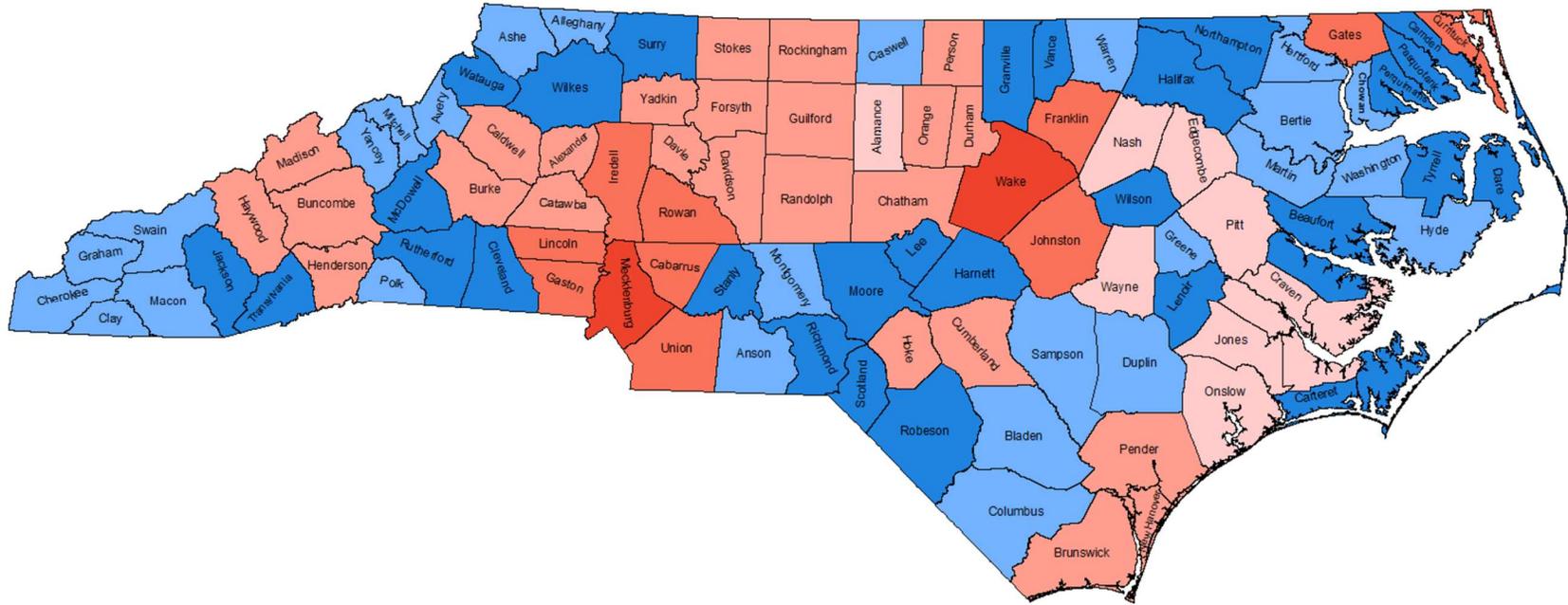
Appendix A shows the English language version of the survey used for adults in 2018. To accommodate households where English is not the primary language spoken, a Spanish version of the adult survey was created from the Spanish version of the *CAHPS Adult Health Plan Survey 5.0*. Questions that had been modified in the English version of the survey by the UNC Charlotte research team were also modified in the Spanish versions. Translations were performed by a Spanish-fluent graduate assistant assigned to the project and later confirmed by the survey vendor, CRI.

Demographic and Contextual Variables

In addition to names and phone numbers, the provided eligibility file also included sex, race, ethnicity, client CCNC network, county of residence for each population member, and birth date (from which client age was calculated). UNC Charlotte researchers used the Centers for Disease Control (CDC)/National Center for Health Statistics (NCHS) 6-level classification system of urbanicity at the county level to create a variable to describe the urbanicity of each respondent’s county of residence (Ingram and Franco, 2014). Table 2-2 depicts the 6 levels of urbanicity from the 2013 NCHS schemes (based on the 2010 census) along with the frequency distribution of counties and the 2015 adult survey population count in each level. For detailed analysis and reporting, levels 1-4 were collapsed to “urban” and levels 5-6 were collapsed to “rural.” Figure 2-2 shows a North Carolina map in which all 6 levels of the NCHS urbanicity classification system are noted by color for each of the 100 counties.

Table 2-2 Frequency Distribution of NC Counties and Adult Population Members in the 6-Level NCHS Classifications of Urbanicity		
Code	Defining Criteria	# of NC Counties; # of Population Members
1	Central counties within metropolitan statistical areas (MSAs) of ≥ 1 million population	2 counties; 58,720 members
2	Fringe counties near MSAs of ≥ 1 million population	10 counties; 47,827 members
3	Counties within MSAs of 250,000-999,999 population	25 counties; 145,978 members
4	Counties within MSAs of 50,000-249,999 population	9 counties; 46,548 members
5	Counties in micropolitan statistical areas (with a city of 10,000-49,999)	28 counties; 84,317 members
6	Counties not within micropolitan statistical areas (without a city of 10,000 or more)	26 counties; 38,388 members

Figure 2-2 North Carolina County Urbanicity Map



Urban

- Central counties within metropolitan statistical areas (MSAs) of ≥ 1 million population
- Fringe counties near MSAs of ≥ 1 million population
- Counties within MSAs of 250,000-999,999 population
- Counties within MSAs of 50,000-249,999 population

Rural

- Counties in micropolitan statistical areas (with a city of 10,000-49,999)
- Counties not within micropolitan statistical areas (without a city of 10,000 or more)

Source: CDC/NCHS, North Carolina Geodetic Survey, North Carolina Department of Transportation. Map prepared by David Barbato, UNC Charlotte, 6/2020

Sample

Babbie (2004) and Bowling (2002) note the preference of random sampling as the preferred probability sampling method to minimize sample error and ensure representativeness of the population. Further, Babbie suggests stratification to select adequate numbers of homogenous groups that facilitate group comparison. Thus, the CCNC network structure has always driven the stratification strategy to draw random samples within each of the 14 networks to facilitate making statistically valid cross-network comparisons on all survey questions.

Survey Process

Human Subjects Research This report describes research that was approved for expedited review by UNC Charlotte's Institutional Review Board under protocol #17-0477. Approval was conditioned upon the researchers establishing that participants were clearly notified that participation in the survey was completely voluntary and confidential; thus, participating was providing consent. Further, they could withdraw consent at any time by simply hanging up the phone. This consent was obtained by the targeted respondent indicating their willingness to complete the telephone survey. No financial incentives were offered in exchange for participation in the survey.

Fielding the Survey Contract Research International (CRI) was provided respondent names, phone numbers, and CCNC network numbers for sample stratification. They coded the survey into their CATI system with the skip logic verified by the UNCC research team. The survey was put into the field for testing on 15 August 2018. After a small number of calls, CRI made suggestions on ways to streamline the survey administration (to help keep respondents on the line once they have agreed to take the call), which were considered acceptable and approved by the research team. We also noted in some preliminary results that dual-eligible clients were disproportionately represented in the samples being collected. CRI was able to adjust their sampling methodology to correct and bring the respondent proportion in line with that of the population.

Beginning with the 2015 survey project, the combination of inaccurate phone numbers, continued growth of respondents having only cell phones, and the general population's growing unwillingness to take phone calls from unknown inbound numbers, many more phone attempts have been required than in earlier surveys to get the targeted number of responses. The problems associated with continued growth of cell phones is twofold. First, many people will not/cannot participate in a survey using a cellphone because of where they are or what they doing when they receive a call. This is exacerbated by the "identifying" nature of the incoming caller, with increasing frequency of people ignoring calls from unknown numbers. Of potential equal importance is that landlines afforded the possibility of someone answering a survey call that was not the targeted adult but was able to hand the phone over to the appropriate individual. These factors will remain in effect for the foreseeable future when conducting telephone surveys that target specific households and individuals.

The 2018 survey fielding process was also hampered by the impact of hurricanes Florence and Michael. The hurricanes caused damage, unrest, and legitimate disinterest in our survey as we began to get pushback from respondents in affected areas. In response to Florence (NC landfall 14 September 2018), we shut down calling in all but 2 of 14 networks. We had gotten back up to calling 10 networks when Michael hit (20 October 2018) and we had to pull back from 3 more. By 31 October 2014, we had gotten back up to 12 networks. In response to heavy political polling in advance of the 6 November 2018 election, CRI was not yet applying

full resources but this changed the following week when we were able to start calling all 14 networks. Survey collection was completed on 20 January 2019.

Survey Responses and Response Rates CRI completed a total of 2,323 adult surveys and 2,282 child surveys, with a minimum of 160 in each of the adult and child networks; 160 conforms to pre-study power and sample size calculations to make inter-network comparisons and to detect relatively small effect sizes (US DHHS, 2008). The unadjusted response rates calculated per American Association of Public Opinion Research (AAPOR, 2015) response rate 2, were 6.31% for adults and 8.35% for children. Incidence of eligibility among contacted households (eligible/(eligible + ineligible)) was 29.2% for adults and 43.6% for children. This indicates that households of adult respondents were less likely to have accurate phone numbers or that adults were less likely to be truthful about their identity when they answer a surveyor’s call (and thus be offered a chance to take the survey).

To fine-tune the response rate determination to account for large volumes of inaccurate phone numbers, the AAPOR allows for the calculation of *e*, an estimate of the proportion of cases of unknown eligibility (bad phone numbers/no answer) that are actually eligible, based on the cases of known eligibility status. CRI conservatively estimated these values to be 0.156 and 0.223, respectively, for adults and children. When applying these *e* values to AAPOR response rate 4, adjusted response rates of 27.3% and 27.4% for adults and children, respectively. Details of the response and cooperation rate calculations are shown in Appendix B.

CRI’s CATI methodology draws from individual CCNC networks as needed, based on response rates, to advance toward collecting the required number of completed surveys in each network. The respondents we attempted to reach in each network become the de facto stratified network samples. Table 2-3 shows counts of the eligible population, the stratified network samples, and the total completed surveys, in each of the adult networks.

CCNC Network	Eligible Population	Sample	Survey Responses
1003	15,871	4,390	164
1006	53,375	3,720	176
1007	26,698	3,204	171
1009	45,455	4,520	171
1010	8,785	4,248	162
1011	28,407	3,819	166
1012	27,814	3,220	166
1013	21,245	3,779	163
2000	64,625	4,205	166
2003	16,087	4,097	162
2004	30,574	3,420	165
2005	21,648	4,744	162
2006	36,402	2,820	164
2007	20,792	4,290	165
Total	421,778	54,476	2,323

Data Analysis

Analysis of the data was conducted using the IBM Statistical Package for the Social Sciences (SPSS) Statistics version 26 PC software. Graphical depictions of the data were created using SAS version 9.4 PC software. Most of the survey questions are formulated to generate nominal or ordinal level data, but several questions produced interval/ratio-level responses. Examples of interval/ratio-level questions are ones that ask about the number of doctor or emergency room visits.

Univariate proportions were tabulated for responses to each survey question and are shown in Appendix C. These descriptions report the survey responses for all adult respondents, with count variables (e.g., number of doctor visits) and age collapsed into standard CAHPS groupings.

A primary objective of the results presented in Chapter 3 is to draw and report inferences about potential disparities in the domains of access, satisfaction, health status, utilization, and trust across the following demographic and contextual variables: enrollee age, sex, race, education level, dual-eligibility status, CCNC network, and rurality of the county of enrollee residence. Cross-tabulations of each of the survey “content” questions with each of the demographic and contextual variables was the analytical method used to find potential disparities. Dichotomizing the outcome variables allows for cleaner interpretation of results when looking for disparities across these demographic/contextual variables. Thus, for bivariate analyses except those involving count data, we collapsed all survey question dependent variable responses into 2 values, shown below:

- Questions with “always/usually/sometimes/never” responses were collapsed to “always” and “less than always.”
- Questions with 0-10 responses were collapsed to 10 and less than 10.
- Health status questions with responses of “poor/fair/good/very good/excellent” were collapsed to “fair/poor” and “excellent/very good/good.”
- Trust questions with “strongly agree/agree/neither/disagree/strongly disagree” responses were collapsed to agree and disagree; responses of neither were converted to missing.

The Chi-square test was used to detect the overall statistical significance of cross-tabulations between each content question and each of the demographic and contextual variables. A p-value of 0.05 was used to determine statistical association between responses and independent variables after all “refusals” and “don’t know” answers were eliminated from the data.⁴ The adjusted residual value was used to evaluate the statistical significance of a specific cell within a table. Values of the adjusted residual can be interpreted “roughly as z-scores (look for values below -2 or above +2) to identify cells that depart markedly from the model of independence,” commonly called the expected value (SPSS Inc., 1999, p. 70-71).

In reporting results in sections 3.1-3.7, we begin by showing the demographic and contextual distributions for the adult population, sample, and respondents (Table 3-1). Then we report on individual questions by stating the question and providing a univariate figure displaying the frequencies for each of its possible multiple-choice answers. Following the univariate graph, we present only those bivariate analyses that show significant Chi-square table

⁴ A 0.05 significance level means that in 95 out of 100 times, reported differences are most likely due to genuine differences in objective reality rather than random because a sample is used to generalize to a much larger population.

relationships at the 0.05 level. In each case of a significant bivariate relationship, a brief paragraph discusses the details of the relationship observed followed by a graph that depicts the result.

Cross-year Comparisons For this survey cycle, we significantly expanded our effort comparing results across survey cycles. CAHPS survey versions 4.0 (2012) and 5.0 (2015 and 2018) are virtually identical with very minor wording differences on only a few questions. This allowed us to use the CAHPS “top box” methodology to compare the results across years for a set of pre-established CAHPS questions (CAHPS, 2019). This useful methodology uses the % of survey respondents who chose the most positive score for a given item response scale (always on Never/Sometimes/ Usually/Always, 9 or 10 on 0-10 scale) as the sole indicator of performance. CAHPS provides national comparison group top box values for the Medicaid Managed Care Population to which we compared our results. In this case, we show graphical displays of top box values for survey years 2012, 2015, and 2018 and compare to national comparison data across Medicaid managed care plans (50th and 90th percentile values for 2018 (54,362 adults in 146 plans and 79,346 children in 150 plans, respectively)). Appendix F graphically displays these top box comparisons preceded by a brief summary of the results.

Key Indicators Key indicator questions, selected by the research team, allow us to quickly get a grasp of the most important concepts across the access, satisfaction, health status, and utilization domains. These indicators are shown in Table 2-4 and will be the primary source for our broad assessments of results and disparities.

Domain	Question
Satisfaction	q7 Discussed illness prevention with a health provider q8 Overall health care rating q24 PHP explained things in a way that was easy to understand q25 PHP listened carefully q28 PHP spent enough time q36 PHP rating q43 Rating of specialist seen most often q49 Rating of Medicaid plan
Access	q3 Got urgent care as soon as needed q5 Got routine care or check-ups as soon as needed q09 Easy to get care, tests, or treatment q17 Easy to get treatment or counseling through the health plan q40 Got appointments to see a specialist as soon as needed q62 Easy to get prescription medicines through health plan
Utilization	q23 Number of visits to the PHP q42 Number of visits to specialists q57 Number of emergency room (ER) visits
Health Status	q51 Overall health rating q52 Overall mental/emotional health rating q54 Needs help with ≥ 1 instrumental ADL due to a health problem q58 Got health care ≥ 3 times for the same condition or problem q60 Currently needs or uses prescribed medication
Trust	q74 Health providers might perform unnecessary tests or procedures

3 RESULTS OF THE 2018 ADULT SURVEY

Chapter 3 starts with a description of the demographic and contextual characterizations of the 2018 population, sample, and the respondents followed by the tabulated results. The chapter then details the results of each content question asked of the individual Medicaid CCNC population members. We asked demographic questions to learn about characteristics of the respondents. Content questions asked for an opinion or observation on one of the five content domains noted below:

- Satisfaction
- Access
- Utilization
- Health Status
- Trust

For each question, the univariate responses are described in a brief paragraph that is followed by a figure depicting the results. We also performed chi-square analyses to assess bivariate associations between responses to each of the content questions and each of the following six demographic/contextual questions/analysis variables:

- Age of the respondent (asked in the survey)
- Sex of the respondent (asked in the survey)
- Race of the respondent (asked in the survey)
- Highest level of education attained by the respondent (asked in the survey)
- CCNC network that manages the respondent's health care (provided by NC DHHS)
- Rurality of the county of residence (determined from county provided by NC DHHS)

Where we observed a statistically significant chi-square table relationship ($p < 0.05$) between a given survey question and an analysis variable, a brief paragraph highlights the results followed by a figure depicting same. Except when predicted table cell sizes were too small to draw inferences, we reported on individual cell proportion results that were also statistically significant ($p < 0.05$). We also make general statements about overall differences in count variables. We generated these results by analyzing the sample of completed responses drawn from each of the Community Care of North Carolina networks (as described in chapter 2 Methods).

To help provide context, major headings briefly describe the broad intent of eight groupings of consecutive questions. These headings are nominally taken from the CAHPS core survey organizational structure. Preceding each question write-up is a sub-heading that gives the specific intent of the question and which of the five content domains (satisfaction, access, utilization, health status, or trust) the question addresses.

At the request of NC Medicaid, we also included a question on tobacco use, followed by a question to those that indicated current tobacco use as to whether providers had discussed smoking cessation with them.

Results Chapter Organization

3.0 Demographic and Contextual Descriptions

3.1 Your Health Care in the Last 6 Months (q2-q9)

3.2 Meeting Special Health Care Needs (q10-q17)

3.3 Your Personal Health Provider (q18-q38)

3.4 Getting Health Care from Specialists (q39-q44)

3.5 Interactions with your Health Plan and Doctor's Office Staff (q45-q50)

3.6 Your Health Status (q51-q62, q70-q71)

3.7 Trust in Your Health Providers (q72-q76)

3.0 Demographic and Contextual Descriptions

Table 3-1 provides descriptions of the survey-eligible adult population, the drawn samples, and the survey respondents. There are some notable observations:

- Sex proportions were quite steady across the 3 stages of collecting data.
- <45 yo age group had considerably lower representation in the survey respondents while those 45-64 had considerably greater than in the population. This could be related to the youngest group being more likely to bear the load of childcare as well as often a job.
- The proportion of Hispanics continues to grow across time (see Appendix E) but is still not large enough to draw meaningful inferences across the population; thus, we use White, Black, and Multi/Other as the possible values for race.
- No data are missing from the adult sex and age variables because the provided NC DHHS data has 100% populated values for these; thus, we can substitute population values for values missing in survey responses.
- Dual eligible respondent proportion closely mirrors the population proportion. We learned from the 2015 survey project (Carnes, Farrow-Chestnut, Sagui-Henson, and Mbugua, 2017), where higher response rate in this sub-group gave a disproportionately large proportion in the survey responses. In the 2018 cycle, we tasked CRI to modify their sampling procedures to drive the dual eligible population surveyed toward the population proportion.
- CCNC network and rurality variables are populated entirely from data provided in the NC DHHS incoming data, where no values are missing
- The NC DHHS data contains no information for respondent education; thus, it cannot help populate missing survey values.

Table 3-1 2018 Demographic and Contextual Characteristics

		Eligible Population	Sample	Respondents
Sex	Male	35.3%	34.6%	37.9%
	Female	64.7%	65.4%	62.1%
	N/n =	421,778	54,476	2,323
Age	< 45 years	54.9%	61.7%	39.7%
	45 - 64 years	29.6%	29.0%	42.5%
	≥ 65 years	15.6%	9.3%	17.8%
	N/n =	421,778	54,476	2,323
Ethnicity	Hispanic/Latino	6.2%	5.2%	7.8%
	Not Hispanic/Latino	93.8%	94.8%	92.2%
	N/n =	356,756*	47,375*	2,319
Race	White	51.0%	53.4%	57.3%
	Black	42.9%	41.3%	37.7%
	Other/Multi	6.1%	5.3%	5.0%
	N/n =	421,778	54,476	2,323
Education	<HS Grad/GED			29.6%
	HS Grad/GED	N/A	N/A	36.1%
	>HS Grad/GED			34.3%
	N/n =			2,278
Dual Eligible	Not Dual	73.8%	86.5%	76.4%
	Dual	26.2%	13.5%	23.6%
	N/n =	421,778	54,476	2,323
Rurality	Urban	70.9%	68.3%	69.6%
	Rural	29.1%	31.7%	30.4%
	N/n =	421,778	54,476	2,323
CCNC Network	1003	3.8%	8.1%	7.1%
	1006	13.1%	6.8%	7.6%
	1007	6.8%	5.9%	7.4%
	1009	10.8%	8.3%	7.4%
	1010	2.1%	7.8%	7.0%
	1011	6.7%	7.0%	7.1%
	1012	6.6%	5.9%	7.1%
	1013	5.0%	6.9%	7.0%
	2000	15.3%	7.7%	7.1%
	2003	3.8%	7.5%	7.0%
	2004	7.2%	6.3%	7.1%
	2005	5.1%	8.7%	7.0%
	2006	8.6%	5.2%	7.1%
	2007	4.9%	7.9%	7.1%
	N/n =	421,778	54,476	2,323

*Large amounts of data missing in ethnicity field in NC DHHS population data.

3.1 Your Health Care in the Last 6 months (q2-q9)

Urgent health care need (q2; health status)

Question 2 asked the respondents if, in the previous 6 months, they had an illness, injury, or condition that needed care right away in a clinic, emergency room, or doctor's office. Figure R-1 shows that 43.4% had a condition **needing care right away** in the previous 6 months.

Figure R-1 Had an illness, injury or condition that needed care right (q2; n=2,296)

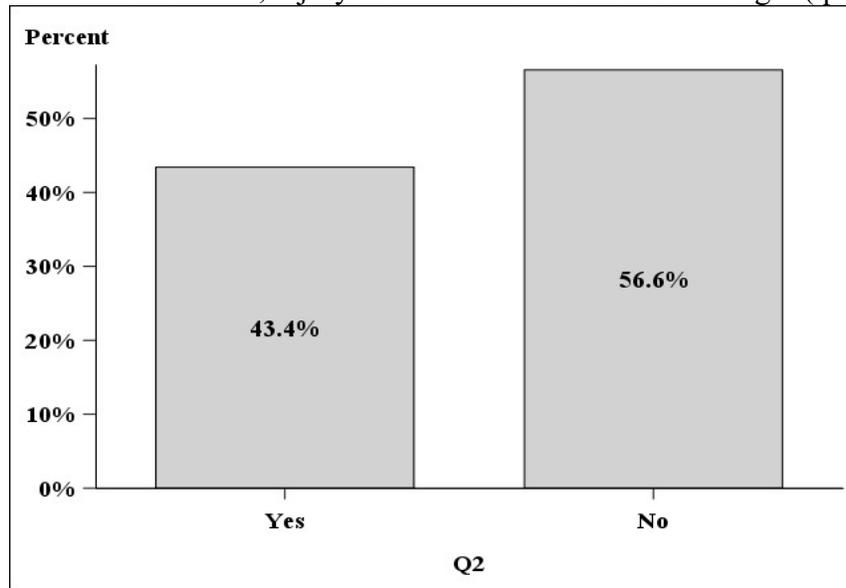


Figure R-2 shows the relationship between responses to q2 and age. Forty-seven point one percent (47.1%) of respondents 45-64 yo had a condition that needed care right away while only 38.1% of respondents 65 and older needed care right away.

Figure R-2 Had an illness, injury or condition that needed care right vs. age (q2; n=2,296)

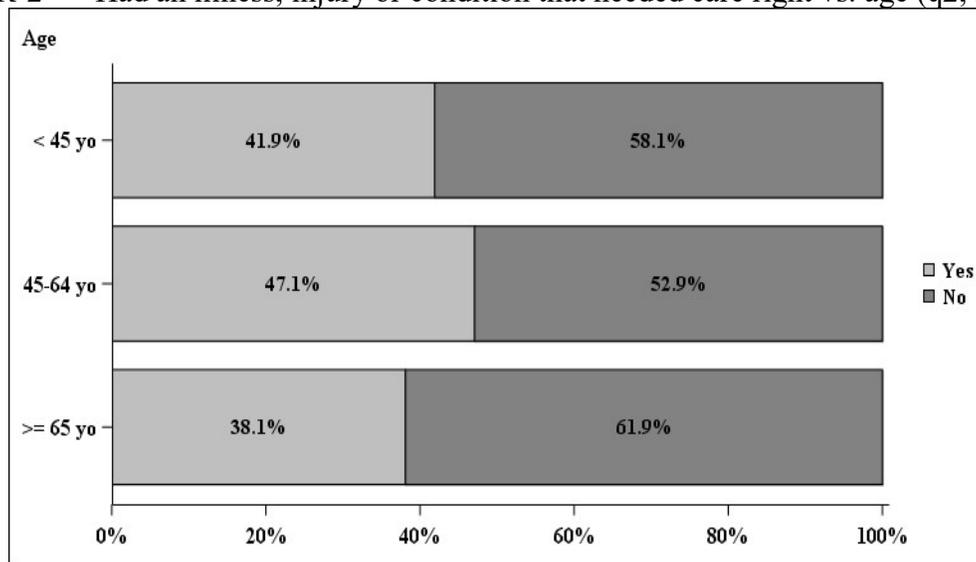


Figure R-3 shows how q2 responses varied with the respondent's sex. Female respondents reported a greater need for urgent care at 46.3% whereas only 38.6% of males needed care right away.

Figure R-3 Had an illness, injury or condition that needed care right vs. sex (q2; n=2,296)

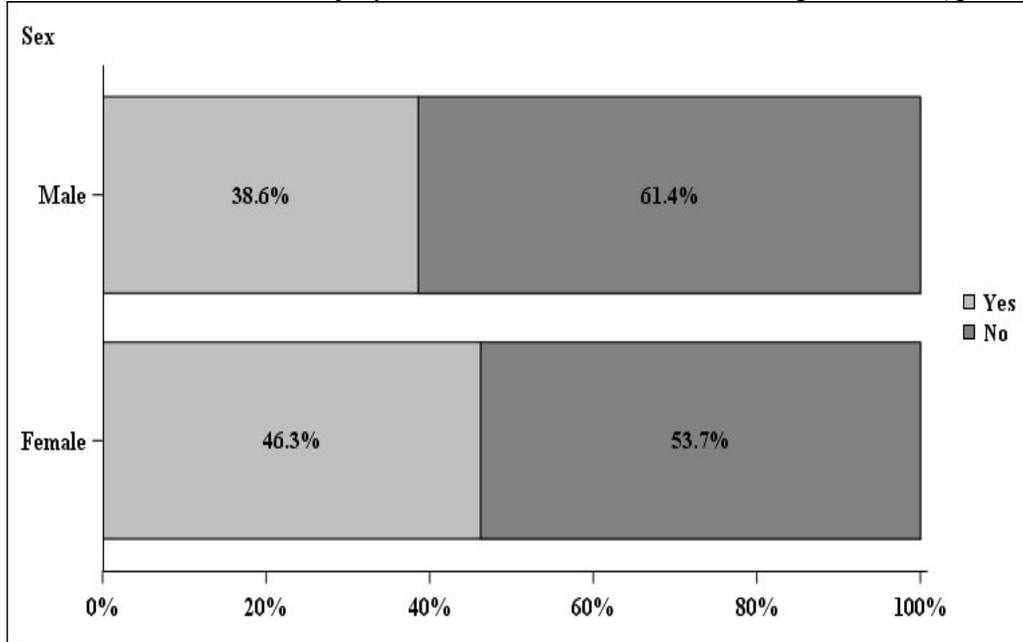


Figure R-4 shows the variation in q2 responses based on respondent's education. Respondents that pursued education beyond high school (>HS Grad/GED) had the greatest proportion that needed care right away at 47.5% compared to 39.8% of HS Grad/GED respondents.

Figure R-4 Had an illness, injury or condition that needed care right vs. education (q2; n=2,253)

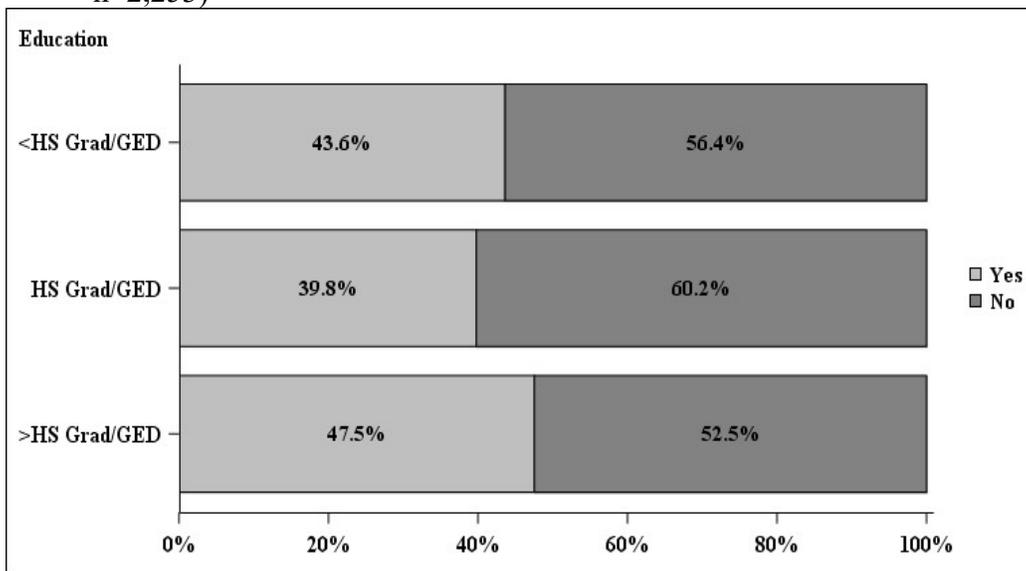
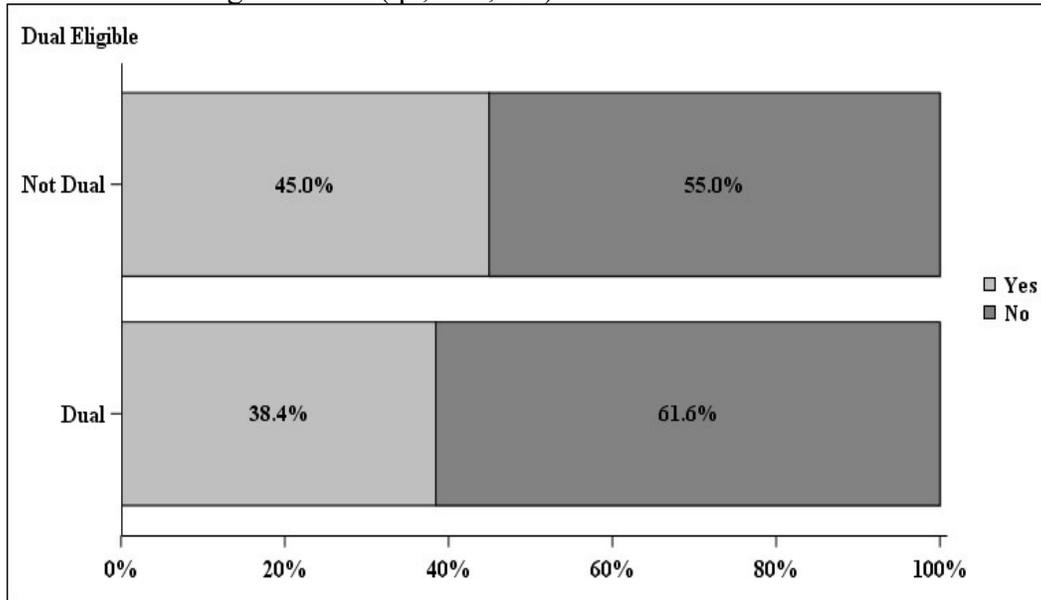


Figure R-5 shows how q2 responses varied according to respondent’s dual eligibility status (i.e., eligibility for both Medicare and Medicaid is referred to as dual while Medicaid only is not dual). Not dual respondents reported the greater need for urgent care at 45.0% compared to 38.4% for dual-eligibles.

Figure R-5 Had an illness, injury or condition that needed care right away vs. dual eligible status (q2; n=2,296)



Urgent care received as soon as needed (q3; access)

Question 3 asked respondents that responded ‘yes’ to q2 how often they **received urgent care as soon as needed** in the previous 6 months. Figure R-6 shows that 66.7% of respondents always received urgent care as soon as needed, 14.1% responded usually, followed by 16.6% sometimes, and 2.7% reported never soon enough.

Figure R-6 Got urgent care as soon as needed (q3; n=966)

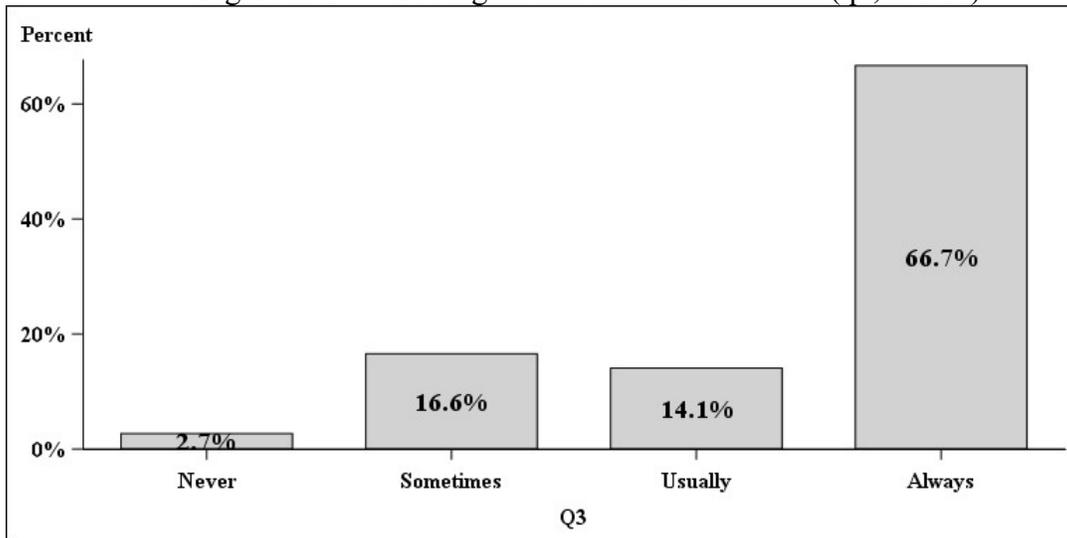


Figure R-7 shows how responses to q3 varied with age. Thirty-eight point six percent (38.6%) of <45 yo respondents always received urgent care as soon as needed compared to 28.4% among those ≥ 65 yo.

Figure R-7 Got urgent care as soon as needed vs. age (q3; n=966)

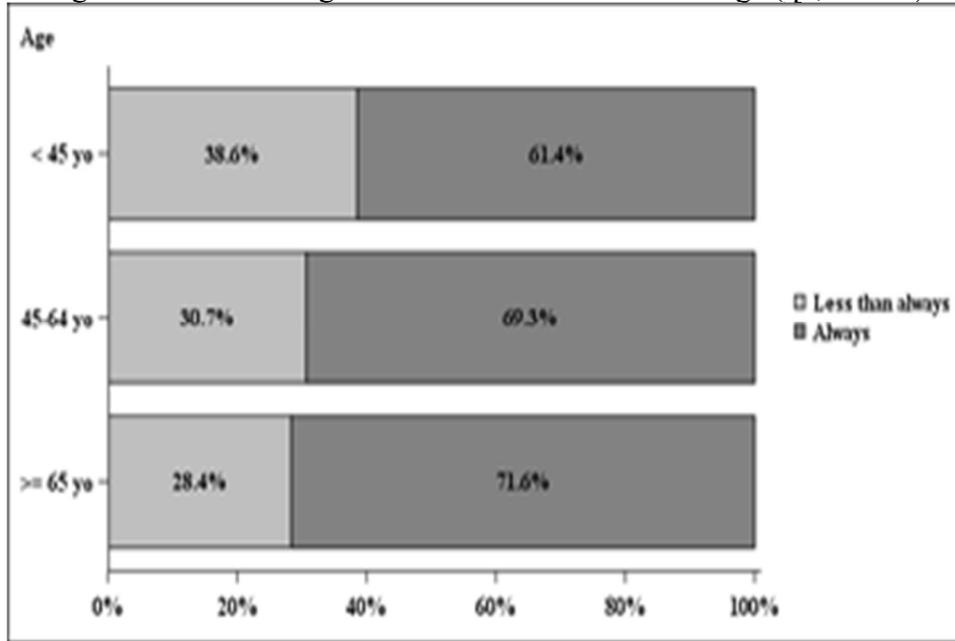


Figure R-8 shows how q3 responses varied with sex. Female respondents reported they always got urgent care needs met fast enough at 36.0% whereas only 27.7% of males reported getting the care fast enough.

Figure R-8 Got urgent care as soon as needed vs. sex (q3; n=966)

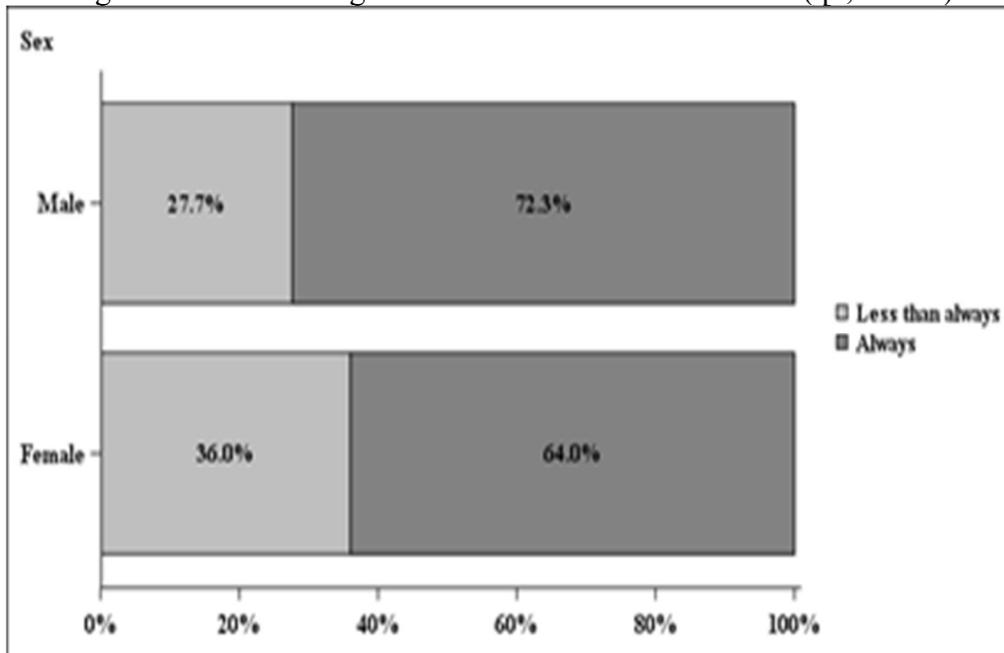
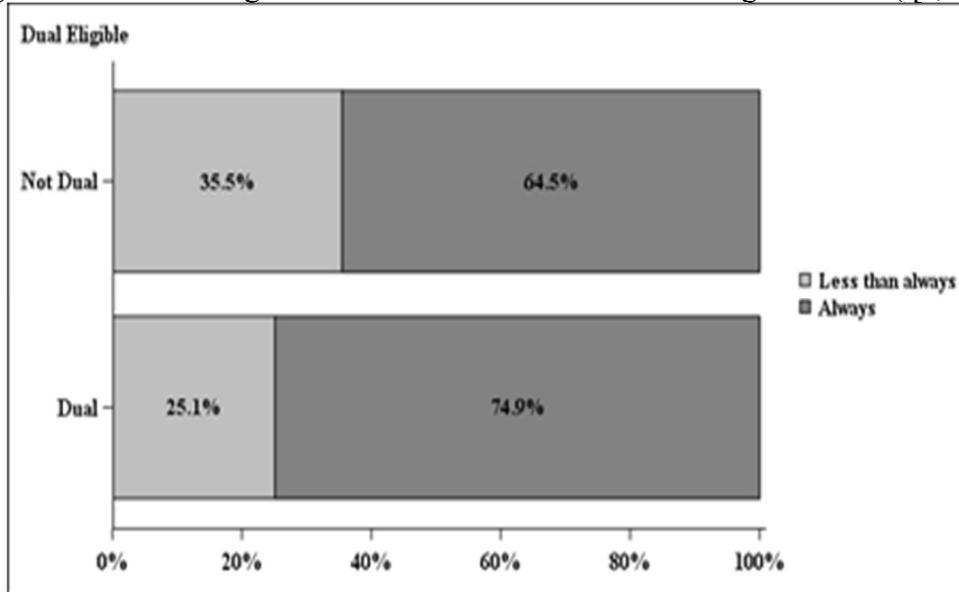


Figure R-9 shows how q3 responses varied according to dual eligibility status. Seventy-four point eight percent (74.8%) of dual-eligible respondents got urgent care as soon as needed while only 64.5% of not dual respondents reported the same outcome.

Figure R-9 Got urgent care as soon as needed vs. dual eligible status (q3; n=966)



Making appointments for routine health care (q4; access)

Question 4 asked respondents if they made any appointments in the previous 6 months for **check-up or routine care** at a doctor’s office or clinic. Figure R-10 shows that 74.3% of respondents made appointments for routine care.

Figure R-10 Made appointments for check-up or routine care at MD office or clinic in the previous 6 months (q4; n=2,299)

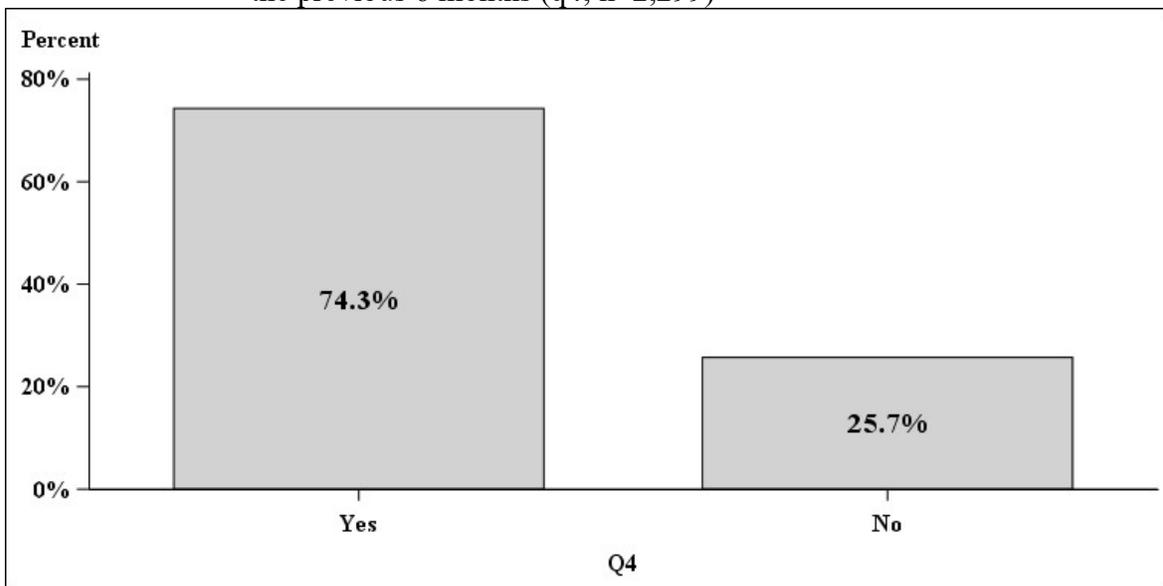


Figure R-11 shows how responses to q4 varied with age. Eighty point two percent (80.2%) of 45-64 yo respondents made appointments for a check-up or routine care compared to 68.2% of those <45 yo.

Figure R-11 Made appointments for check-up or routine care at MD office or clinic vs. age (q4; n=2,299)

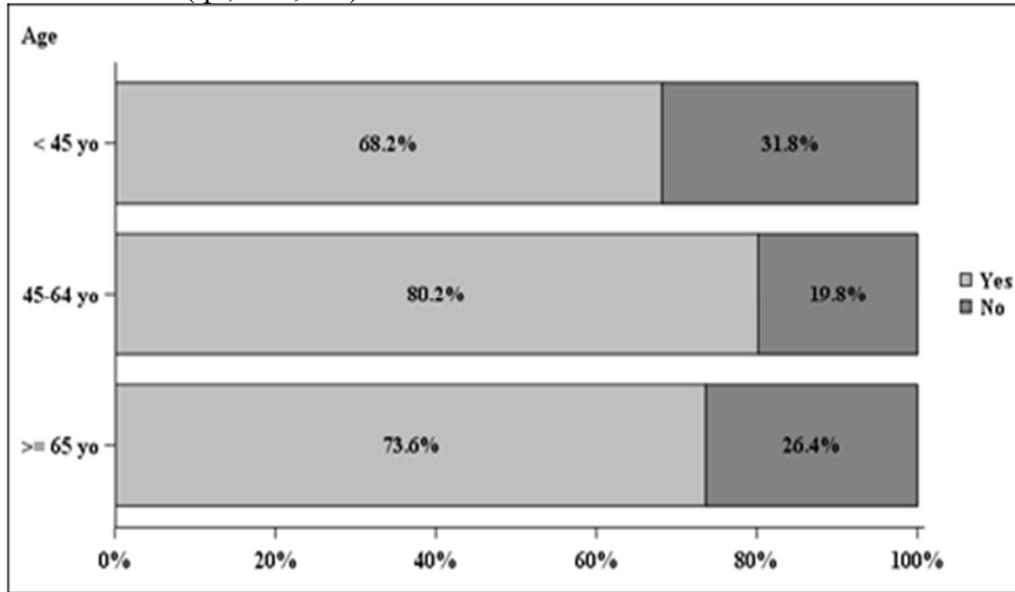


Figure R-12 shows how responses to q4 varied with respondent's sex. Female respondents reported the higher proportion that made appointments for routine care at 76.9% while only 69.8% of males reported the same.

Figure R-12 Made appointments for a check-up or routine care at MD office or clinic vs. sex (q4; n=2,299)

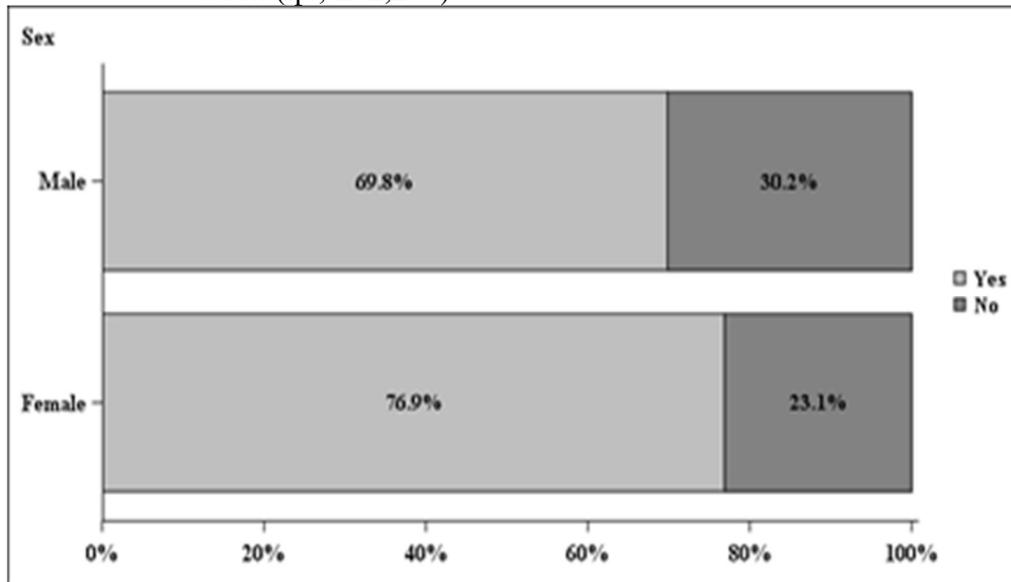


Figure R-13 shows how responses to q4 varied with respondent race. Seventy six point nine percent (76.9%) of Whites made appointments for a check-up or routine care. Fewer appointments at 71.7% and 71.3% were reported by Blacks and Multi/Other races, respectively.

Figure R-13 Made appointments for check-up or routine care at MD office or clinic vs. race (q4; n=2,299)

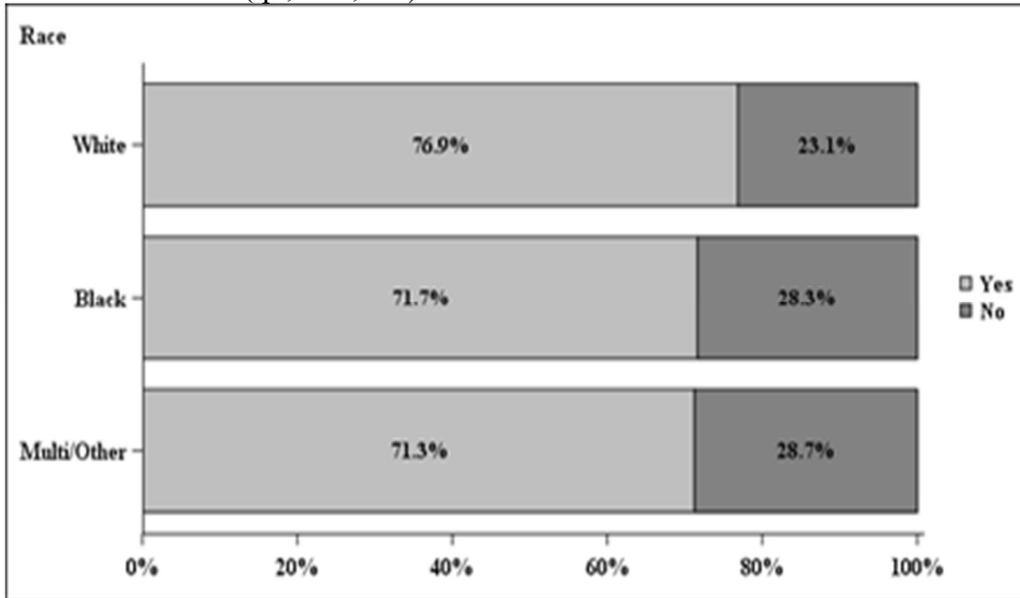
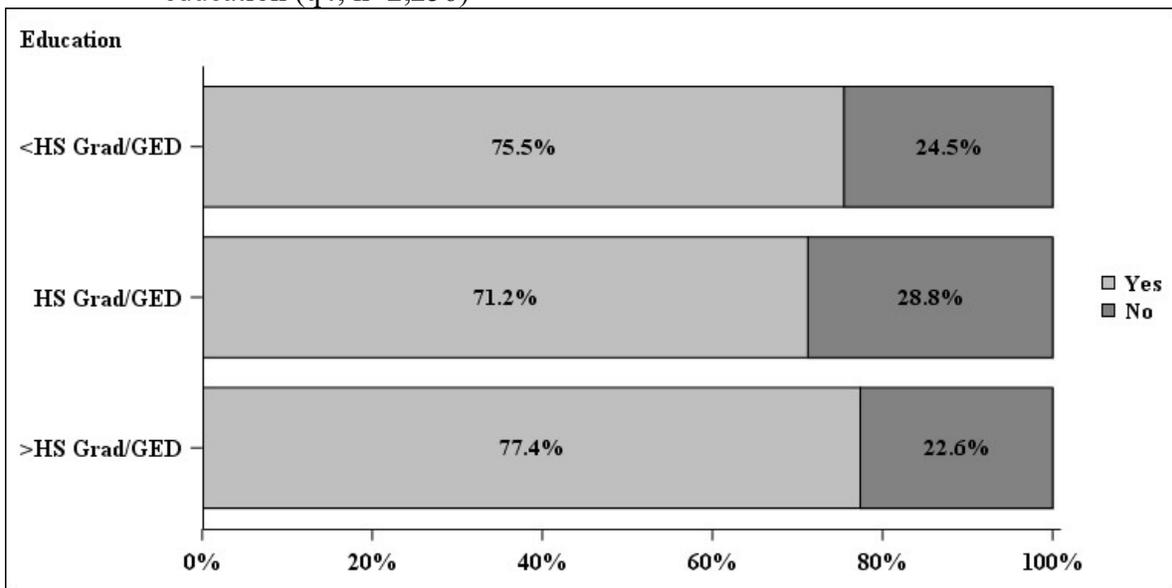


Figure R-14 shows how responses to q4 varied with education. Seventy-seven point four percent (77.4%) of respondents with >HS Grad/GED made appointments for a check-up or routine care while only 71.2% of HS Grad/GED respondents reported the same.

Figure R-14 Made appointments for check-up or routine care at MD office or clinic vs. education (q4; n=2,256)



Routine appointments available soon enough (q5; access)

Question 5 asked respondents that responded ‘yes’ to q4 how often they got routine care or check-ups **as soon as needed** in the previous six months. Figure R-15 shows that 64.0% always got routine care or check-up quickly enough while only 2.0% responded never.

Figure R-15 Got routine care or check-up as soon as needed in the previous 6 months (q5; n=1,649)

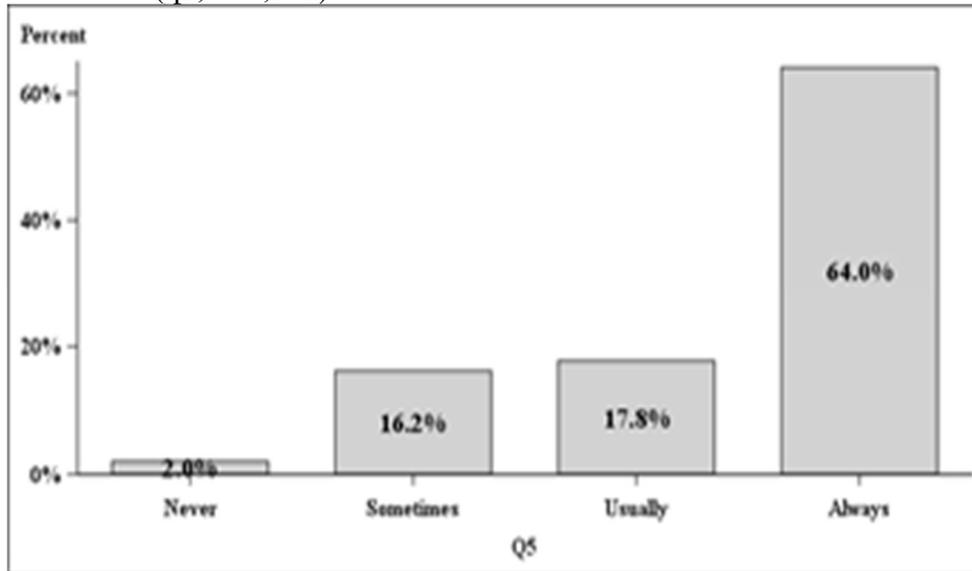


Figure R-16 shows the variation in q5 responses according to age. Respondents aged 45-64 yo had the greatest proportion that always got routine care as soon as needed at 67.7% while only 58.6% of those < 45 yo reported the same.

Figure R-16 Got routine care or check-up as soon as needed vs. age (q5; n=1,649)

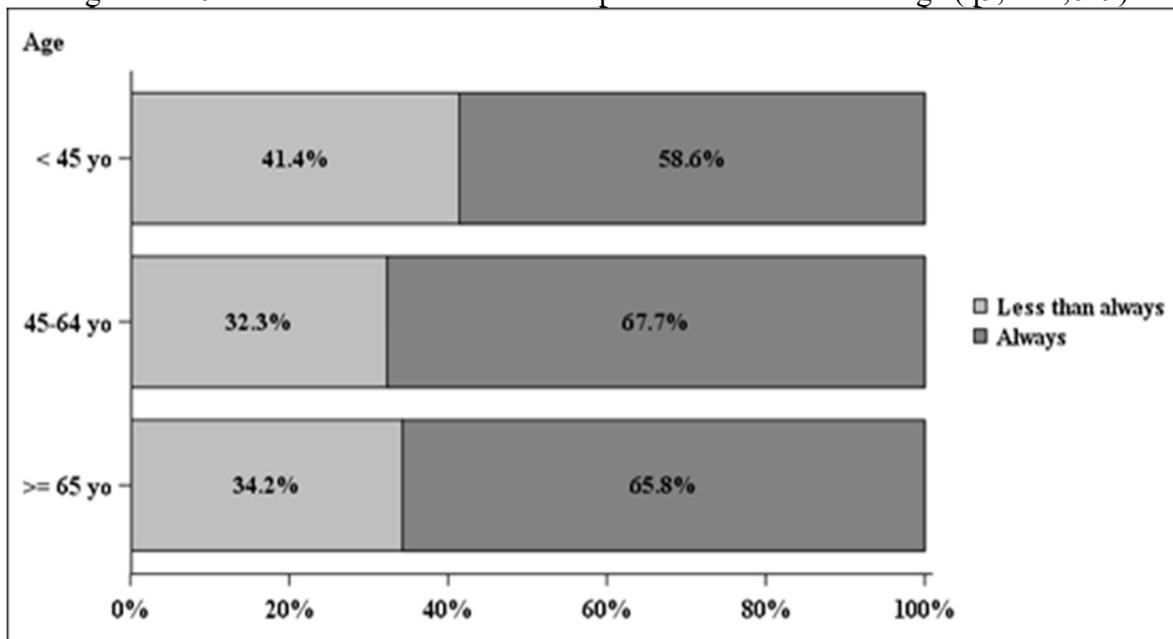
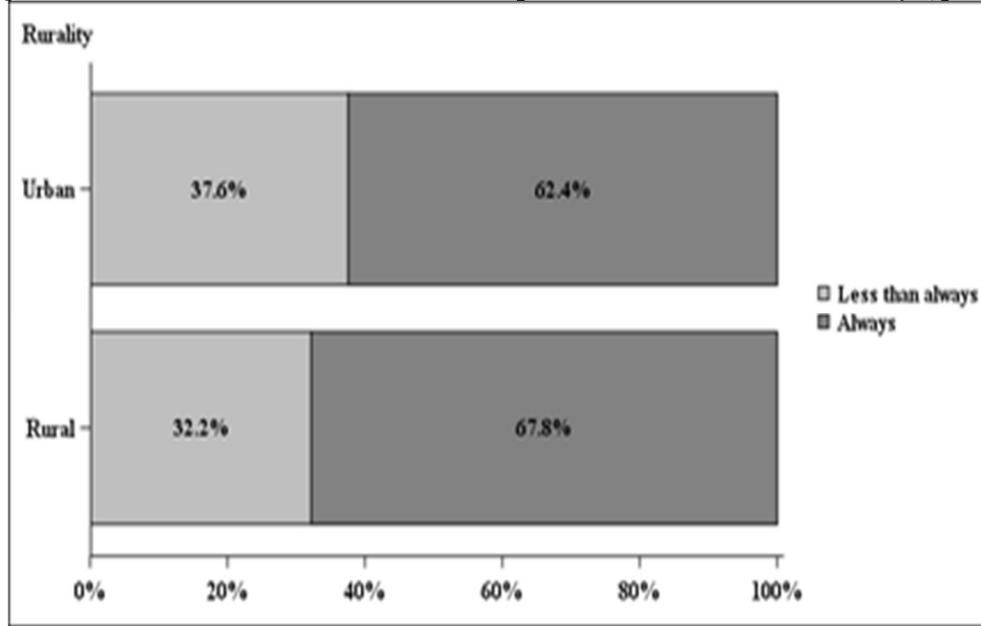


Figure R-17 shows the variations in responses to q5 with rurality. While 67.8% of rural residents always got routine care or check-ups as soon as needed, only 62.4% of urban residents said the same.

Figure R-17 Got routine care or check-up as soon as needed vs. rurality (q5; n=1,649)



Number of visits to doctor’s office or clinic (q6; utilization)

Question 6 asked how many times in the previous 6 months the respondents went to the doctor’s office or clinic for health care, **excluding** emergency room visits. Figure R-18 shows that 17.8% of respondents did not visit the doctor’s office at all, while 15.1%, 32.8% and 34.3 % had 1, 2-3, and 4 or more visits, respectively.

Figure R-18 Number of visits to the doctor's office or clinic in the previous 6 months (q6; n=2,129)

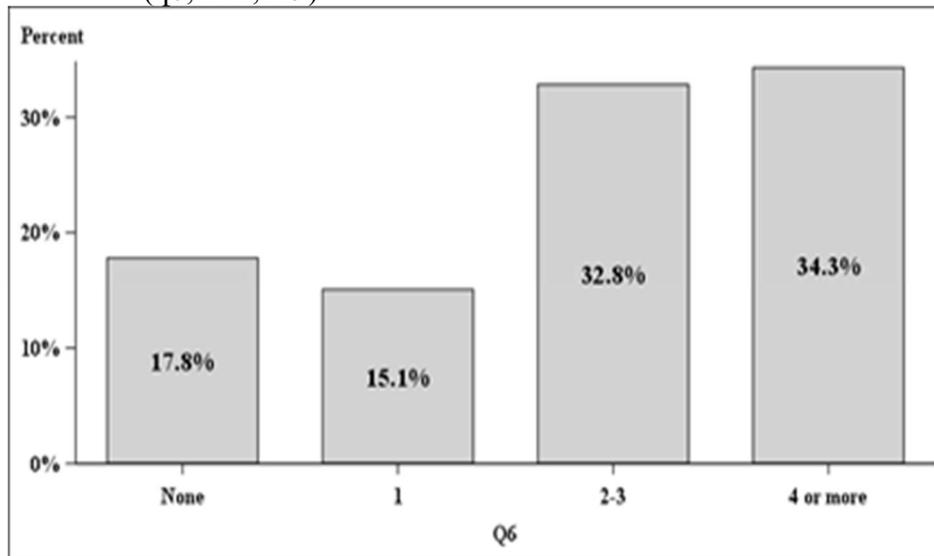


Figure R-19 indicates that 45-64 yo respondents had generally the most visits as well as 41.8% with 4 or more and 11.5% with none. Respondents <45 yo had the fewest overall visits and the smallest proportion with 2 or more visits.

Figure R-19 Number of visits to the doctor's office or clinic vs. age (q6; n=2,129)

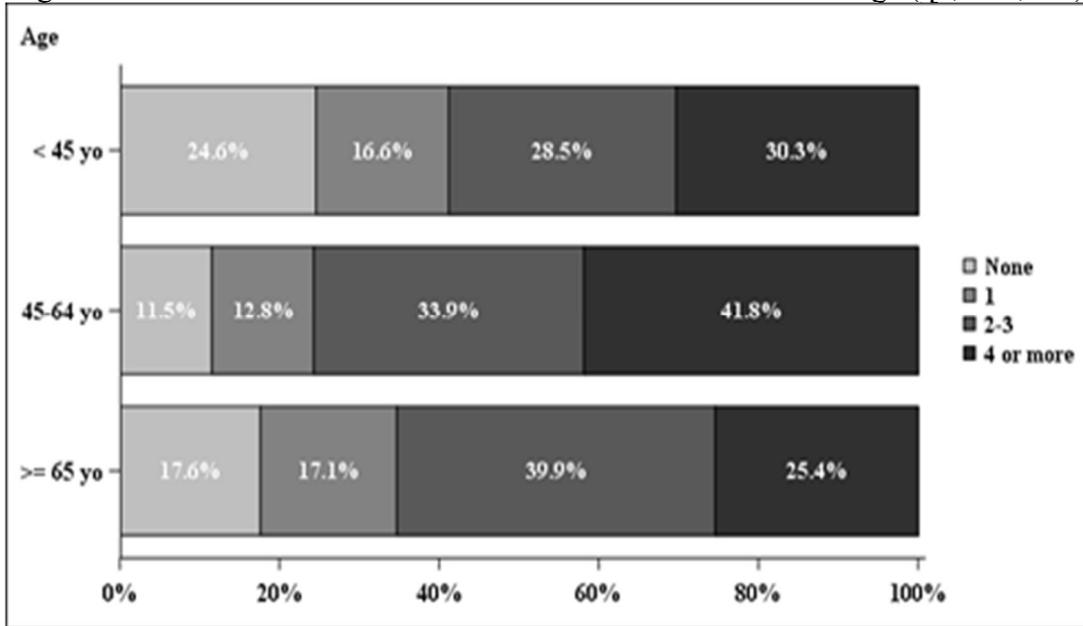


Figure R-20 shows how responses to q6 varied with sex. Females generally reported more visits to a doctor's office with 37.1% reporting 4 or more visits. Twenty point seven percent (20.7%) of males reported no doctor office visits during the previous 6 months.

Figure R-20 Number of visits to the doctor's office or clinic vs. sex (q6; n=2,129)

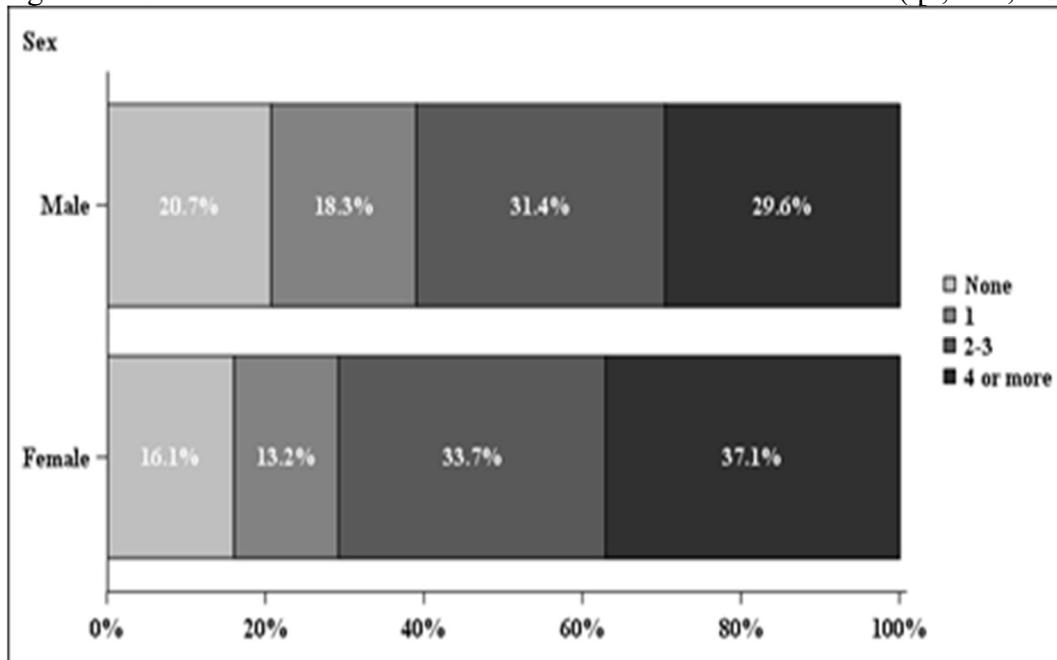


Figure R-21 shows how q6 responses varied with race. White respondents generally reported the most doctor/clinic visits with 38.7% reporting 4 or more. Black and Multi/Other respondents reported fewer visits with 24.1% of Multi/Other respondents reporting none.

Figure R-21 Number of visits to the doctor's office or clinic vs. race (q6; n=2,129)

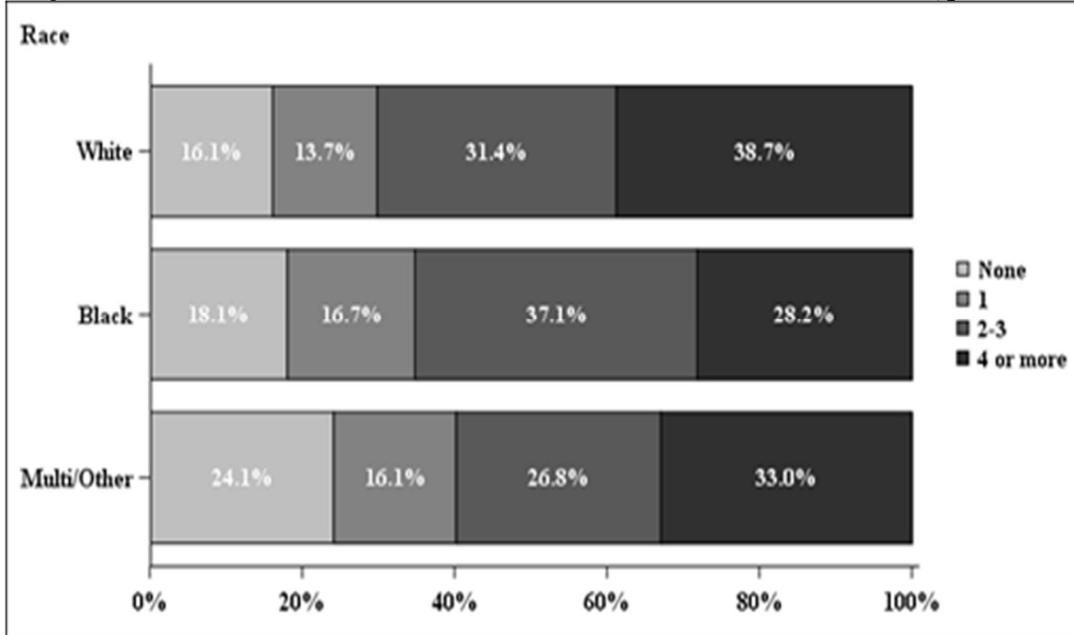
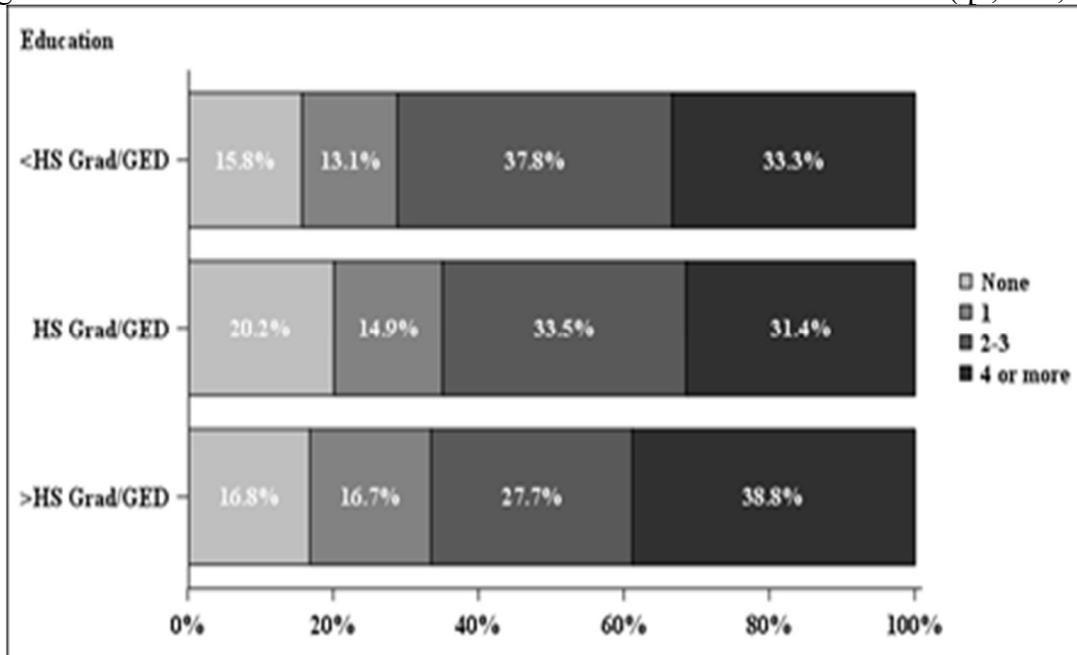


Figure R-22 indicates that respondents with HS Grad/GED education generally reported the fewest doctor office visits with 20.2% reporting none at all. Those with >HS Grad/GED most often reported 4 or more visits at 38.8%.

Figure R-22 Number of visits to the doctor's office or clinic vs. education (q6; n=2,093)



Discussed specific things to prevent illness with a health provider (q7; satisfaction)

Question 7 asked how often in the previous 6 months the respondent discussed specific things to **prevent illness** with a health provider. Figure R-23 shows that 49.6% of respondents always discussed illness prevention with a health care provider, while 15.6%, 24.9% and 9.9% had these discussions usually, sometimes and never, respectively.

Figure R-23 Discussed specific things to prevent illness with a health provider in previous 6 months (q7; n=1,870)

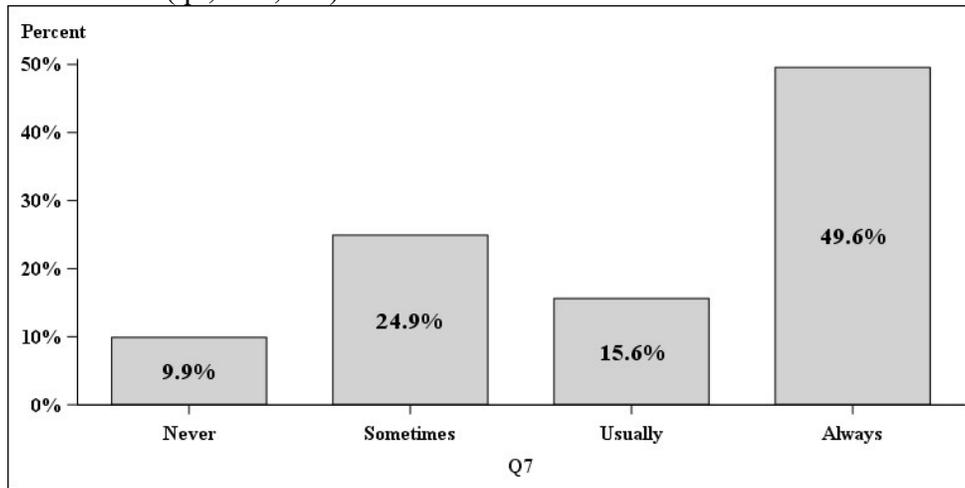


Figure R-24 shows how variation in q7 responses varied with age. Respondents aged 45-64 yo most often (54.2%) reported always having discussion about illness prevention with a provider while only 43.0% of those <45 yo reported always having these discussions.

Figure R-24 Discussed specific things to prevent illness with health provider vs. age (q7; n=1,870)

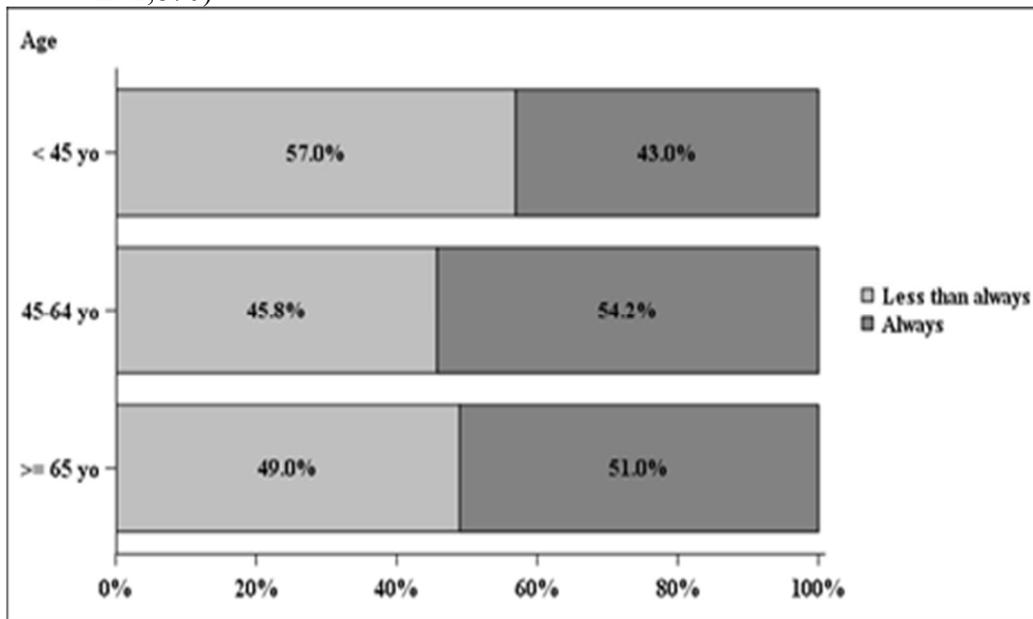


Figure R-25 shows how responses to q7 varied with race. Black and Multi/Other respondents more frequently reporting always having prevention discussions at 53.5% and 52.4%, respectively while only 46.3% of White respondents indicated the same.

Figure R-25 Discussed specific things to prevent illness with health provider vs. race (q7; n=1,870)

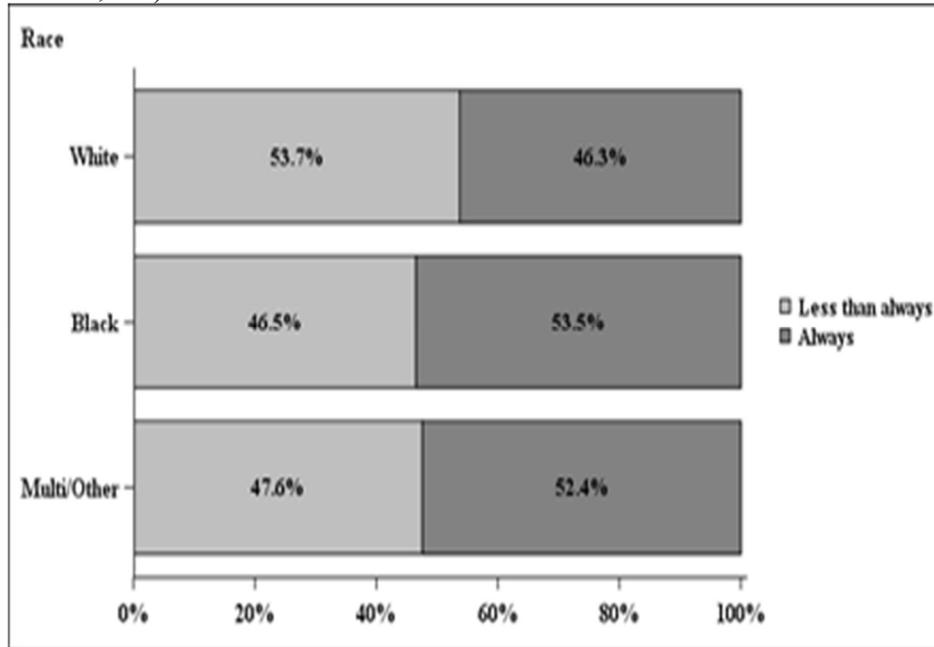
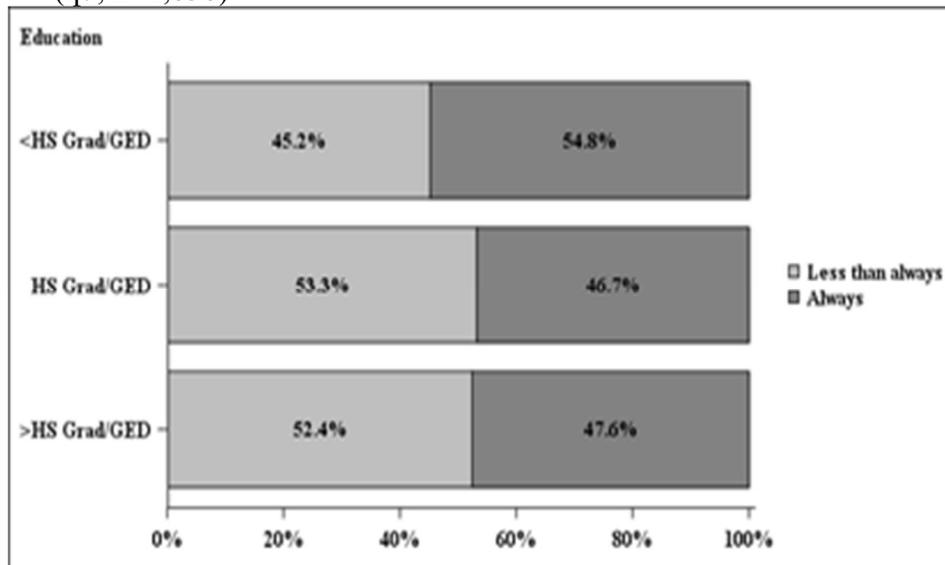


Figure R-26 shows the relationship between responses to q7 and education. Fifty four point eight (54.8%) of respondents with <HS Grad/GED always discussed illness prevention with a provider.

Figure R-26 Discussed specific things to prevent illness with health provider vs. education (q7; n=1,838)



Rating the respondent's total health care (q8; satisfaction)

Question 8 asked respondents to **rate their health care** in the previous 6 months on a scale of 0 (worst overall health care possible) to 10 (best overall health care possible). Figure R-27 shows that 40.5% rated their health care as the best possible (10) while 33.2% and 26.3% rated it 8-9 and 0-7, respectively.

Figure R-27 Overall health care rating in the previous 6 months (q8; n=1,887)

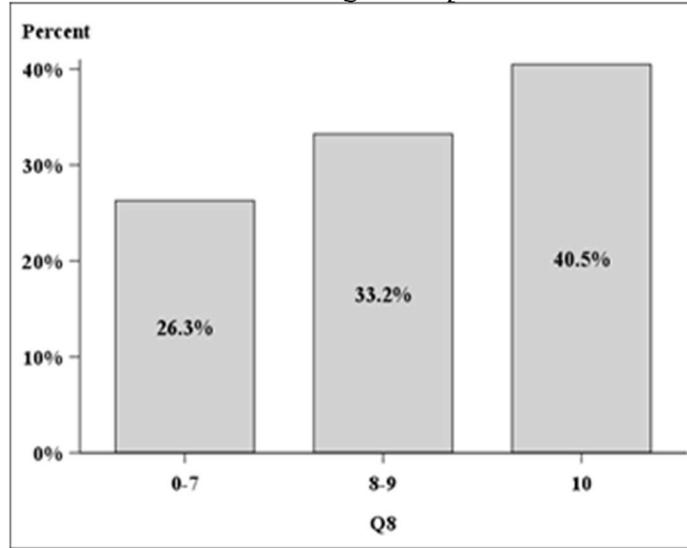


Figure R-28 shows how q8 responses vary across respondent age. Respondents ≥ 65 yo had the greatest proportion reporting the best overall health care possible (10) at 49.1% while only 36.5% of those under 45 yo gave the same rating.

Figure R-28 Overall health care rating vs. age (q8; n=1,887)

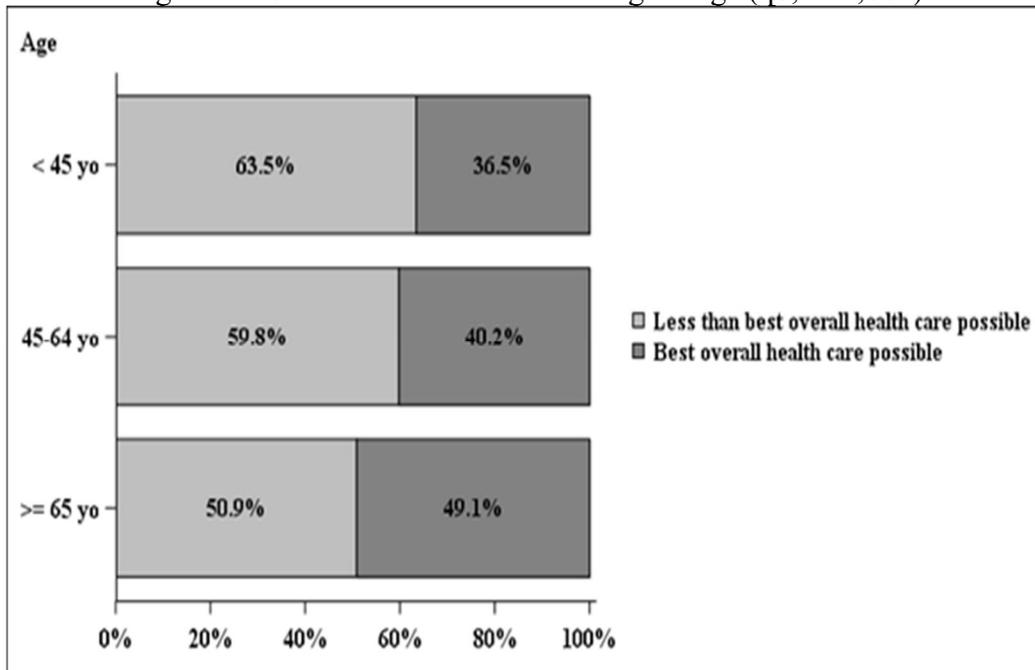


Figure R-29 denotes variation in q8 responses with respondent education. Only 35.0% of those with >HS Grad/GED reported the best overall health care possible in the previous 6 months.

Figure R-29 Overall health care rating vs. education (q8; n=1,856)

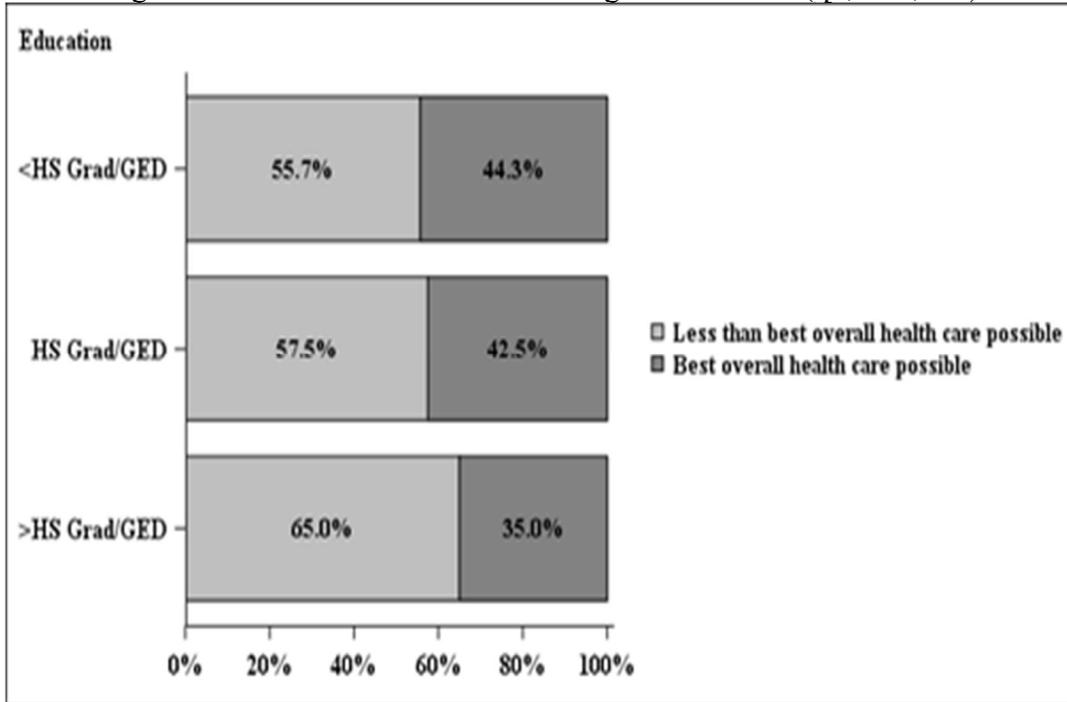
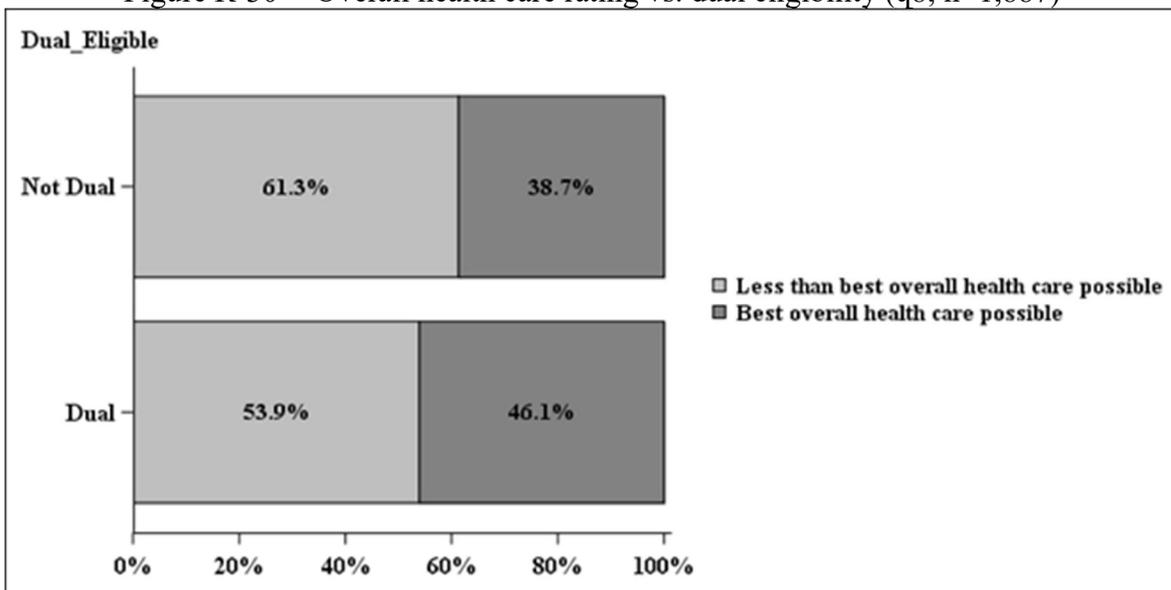


Figure R-30 describes q8 responses according to respondent dual-eligibility status. Forty-six point one percent (46.1%) of dual respondents rated their overall health care as a 10 (best possible) while only 38.7% of not dual respondents said the same.

Figure R-30 Overall health care rating vs. dual eligibility (q8; n=1,887)



Easy to get care, tests, or treatment (q9; access)

Question 9 asked respondents how often in the previous 6 months it was **easy to get care, tests, or treatment** they needed. Figure R-31 shows that 61.4% responded always easy, 18.7% responded usually, 17.4% responded sometimes, and 2.5% indicated it was never easy.

Figure R-31 Easy to get care, tests, or treatment in the previous 6 months (q9; n=1,892)

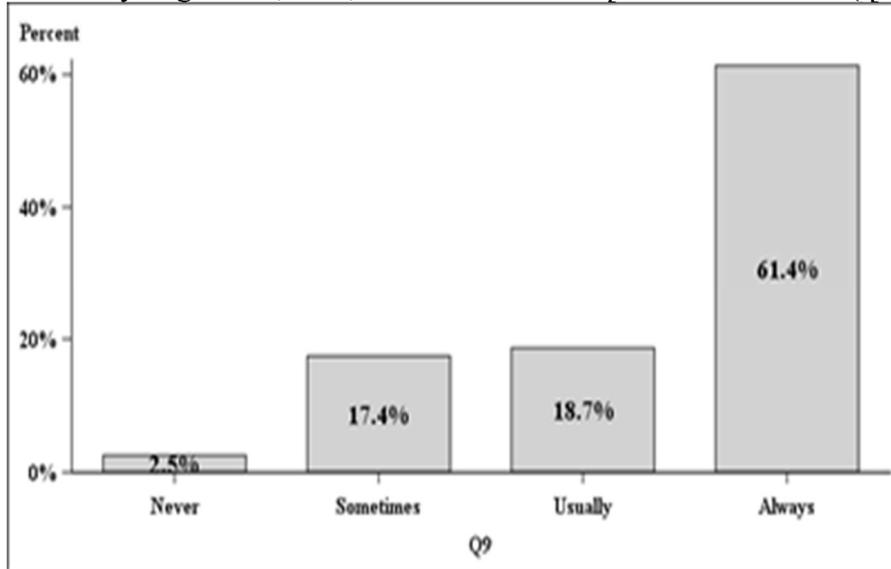


Figure R-32 shows variation in responses to q9 with respondent age. Seventy-two point six percent (72.6%) of respondents with age ≥ 65 yo reported it was always easy while only 54.8% of those < 45 yo reported it was always easy to get care, tests or treatment needed.

Figure R-32 Easy to get care, tests, or treatment vs. age (q9; n=1,892)

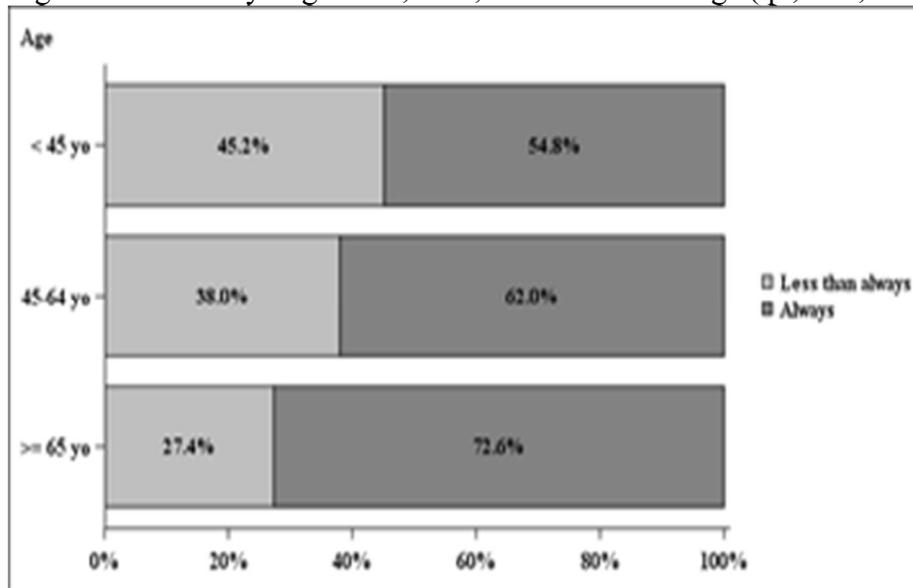


Figure R-33 shows the relationship between responses to q9 with respondent race. Sixty-six percent point two percent (66.2%) of blacks reported it was always easy to get care, tests, or treatment.

Figure R-33 Easy to get care, tests, or treatment vs. race (q9; n=1,892)

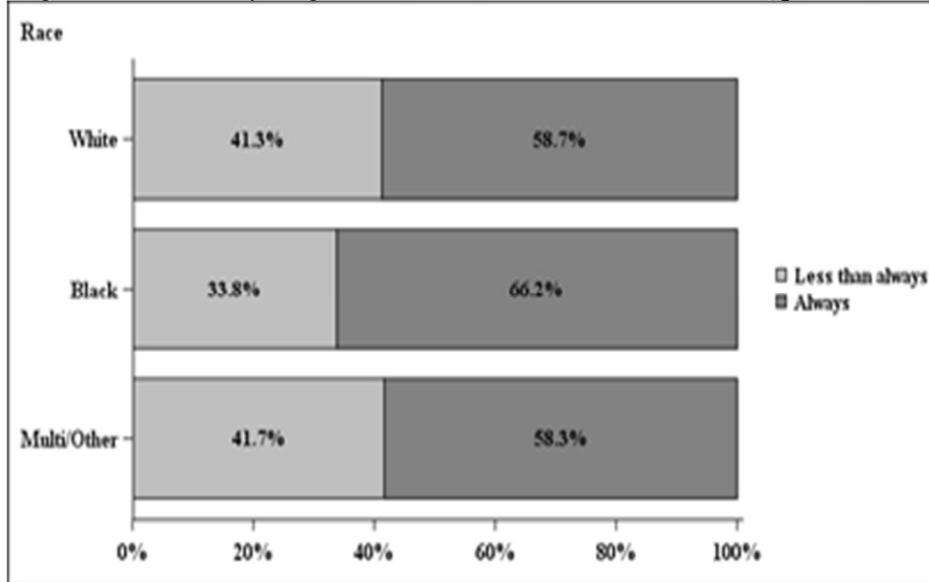


Figure R-34 shows the relationship between responses to q9 and respondent education. Sixty eight point six percent (68.6%) of respondents with <HS Grad/GED reported it was always easy to get care, tests, or treatment while only 53.8% of respondents with >HS Grad/GED reported it was always easy.

Figure R-34 Easy to get care, tests, or treatment vs. education (q9; n=1,859)

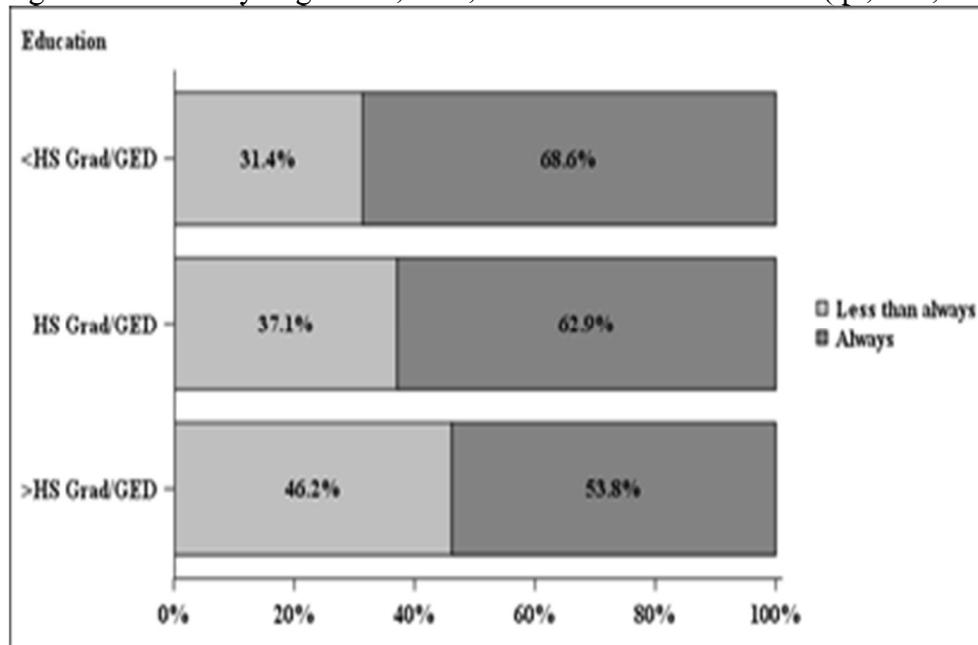
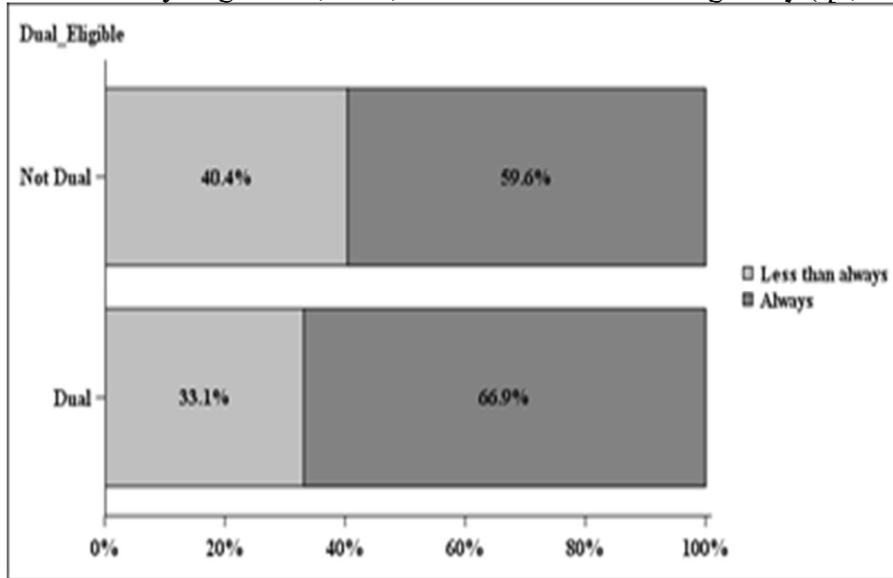


Figure R-35 shows how q2 responses varied according to respondent's dual eligibility status. Sixty-six point nine percent (66.9%) of dual-eligible respondents reported it always easy to get care, test or treatment while only 59.6% of non-dual respondents said the same.

Figure R-35 Easy to get care, tests, or treatment vs. dual eligibility (q9; n=1,892)



3.2 Meeting Special Health Care Needs (q10-q17)

Had a health problem requiring special medical equipment (q10; health status)

Question 10 asked the respondent if, in the previous 6 months, they had a health problem for which special medical equipment such as a cane, a wheelchair, or oxygen was needed. Figure R-36 illustrate that 28.1% of respondents had a health problem for which special medical equipment was needed.

Figure R-36 Had a health problem for which special medical equipment was needed (q10; n= 1,908)

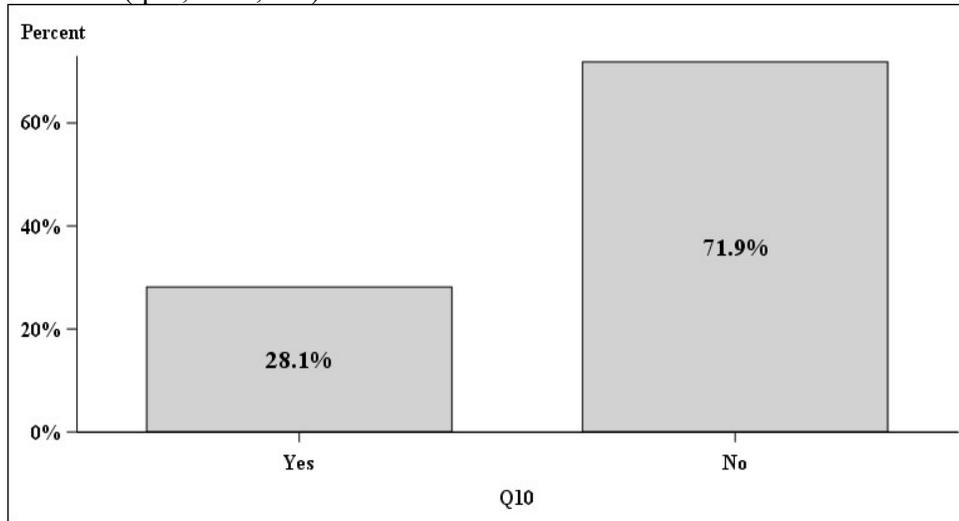
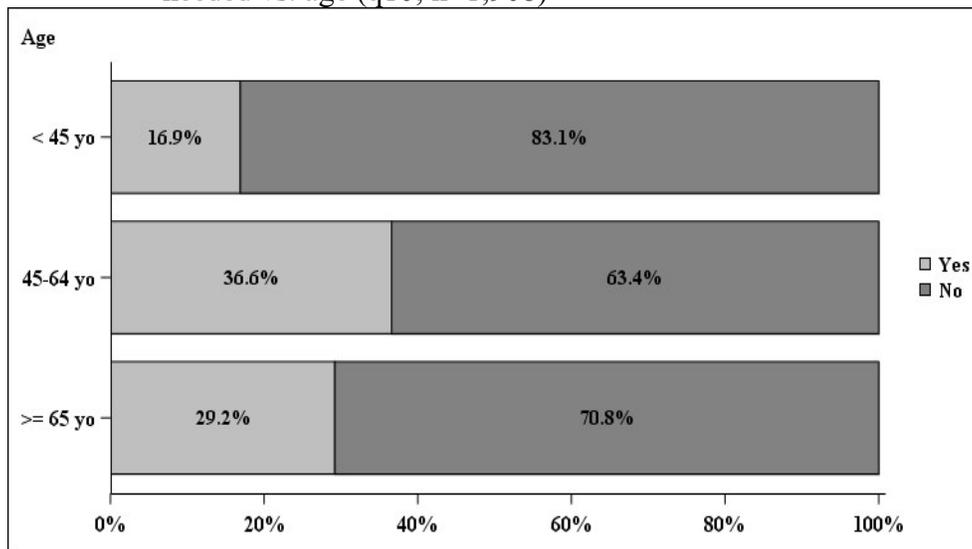


Figure R-37 depicts variation in q10 responses based on respondent's age. Thirty-six point six percent (36.6%) of respondents aged 45-64 yo had a health problem that required special medical equipment while only 16.9% of respondents <45 yo needed the same.

Figure R-37 Had a health problem for which special medical equipment was needed vs. age (q10; n=1,908)



Easy to get special medical equipment (q11; access)

Question 11 asked respondents that responded yes to q10, **how easy it was to get special medical equipment through their health plan**. Figure R-38 shows that 56.9% of respondents responded it was always easy, 16.6% usually, 16.8% sometimes, and 9.7% of respondents reported it was never easy to get special medical equipment.

Figure R-38: Easy to get special medical equipment (q11; n=518)

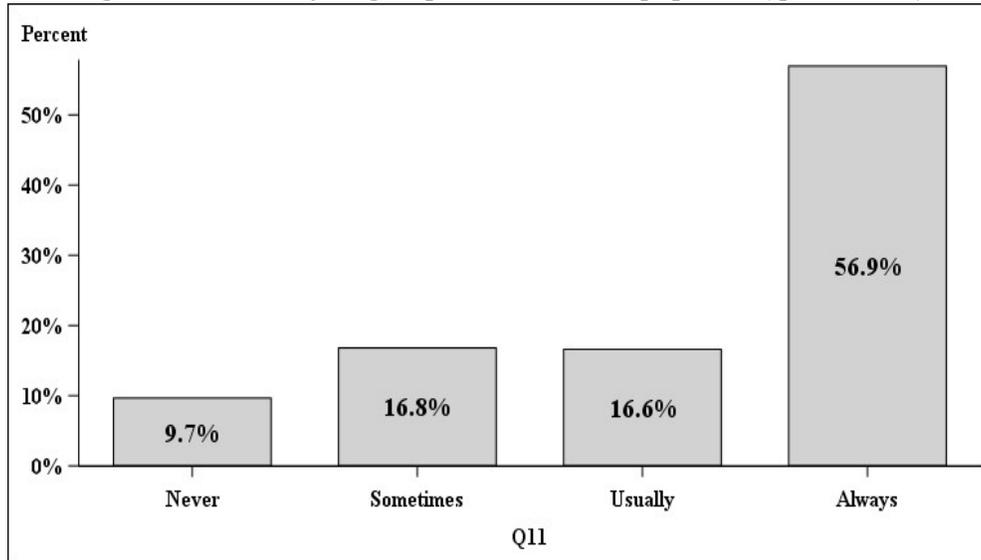


Figure R-39 displays the variation in q11 with respondent's age. Seventy-two point four percent (72.4%) of respondents aged ≥ 65 yo always found it easy to get medical equipment while only 45.5% of respondents aged < 45 yo said the same.

Figure R-39: Easy to get special medical equipment vs. age (q11; n=518)

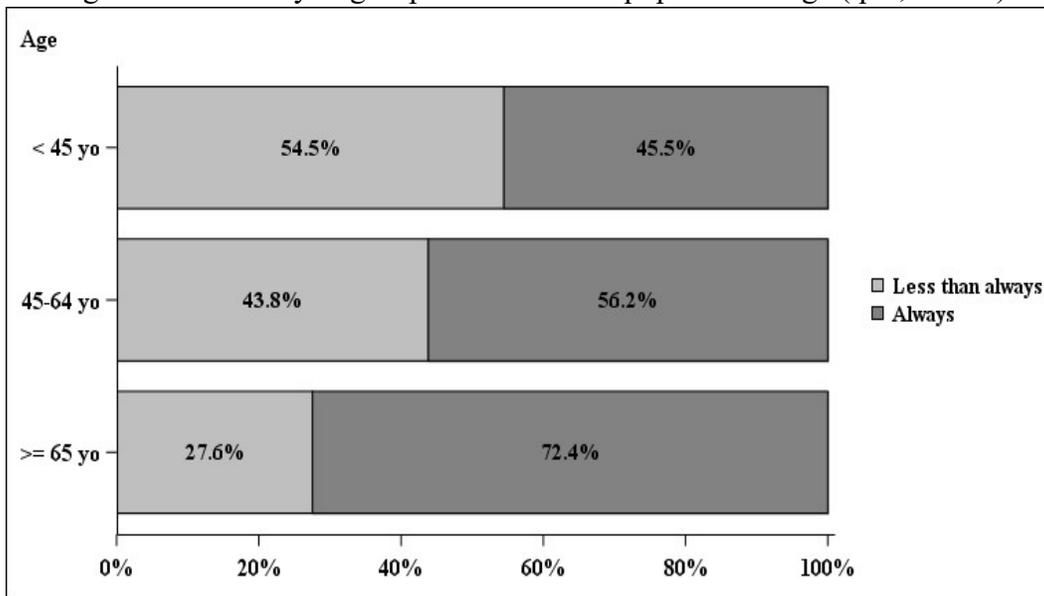
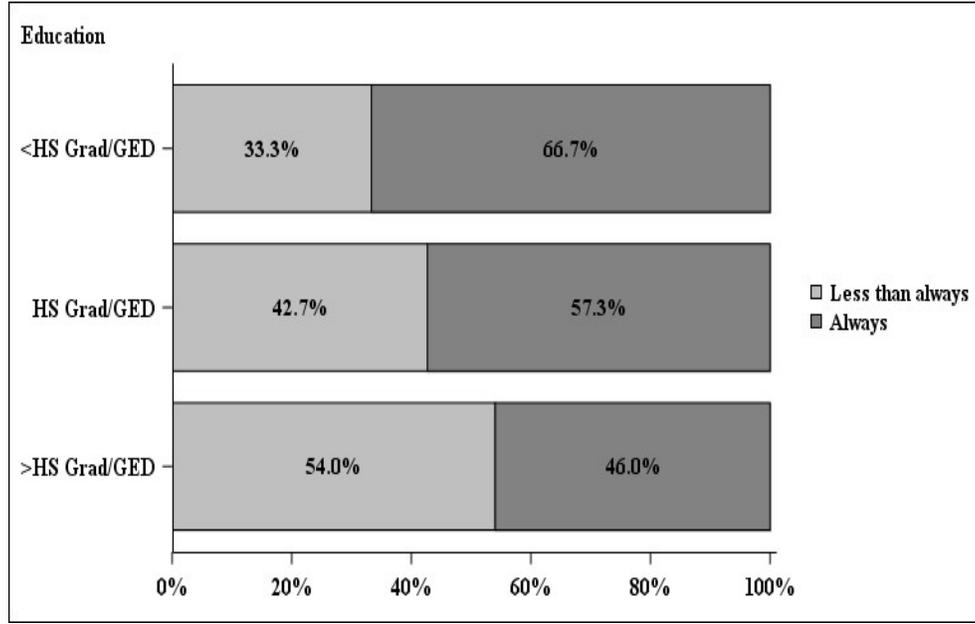


Figure R-40 demonstrates how q11 responses varied with the respondent's education. Respondents that did not complete high school (<HS Grad/GED) had the greatest proportion that always found it easy to get special medical equipment at 66.7% compared to 46.0% of >HS Grad/GED respondents.

Figure R-40 Easy to get special medical equipment vs. education (q11; n=510)



Had health problems requiring special therapy (q12; health status)

Question 12 asked respondents if in the past 6 months, they had a health problem that required special therapy such as physical, occupational or speech therapy. Figure R-41 indicates that 21.1% of respondents had a health problem that required special therapy.

Figure R-41 Had health problems requiring special therapy (q12; n=1,907)

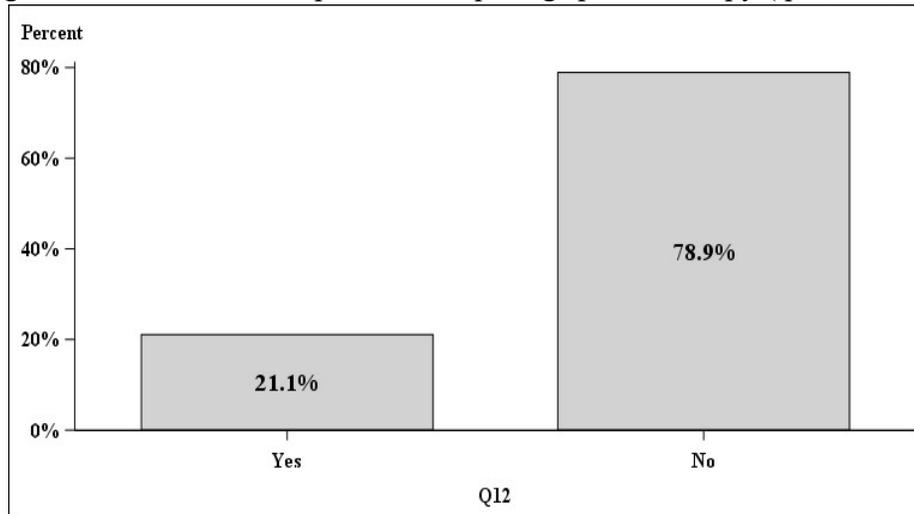


Figure R-42 exhibits the relationship between responses to q12 and age. Twenty-four point seven percent (24.7%) of respondents 45-64 yo had a health problem that required special therapy while only 15.2% of <45 yo of respondents had the same issue.

Figure R-42: Had health problems requiring special therapy vs. age (q12; n=1,907)

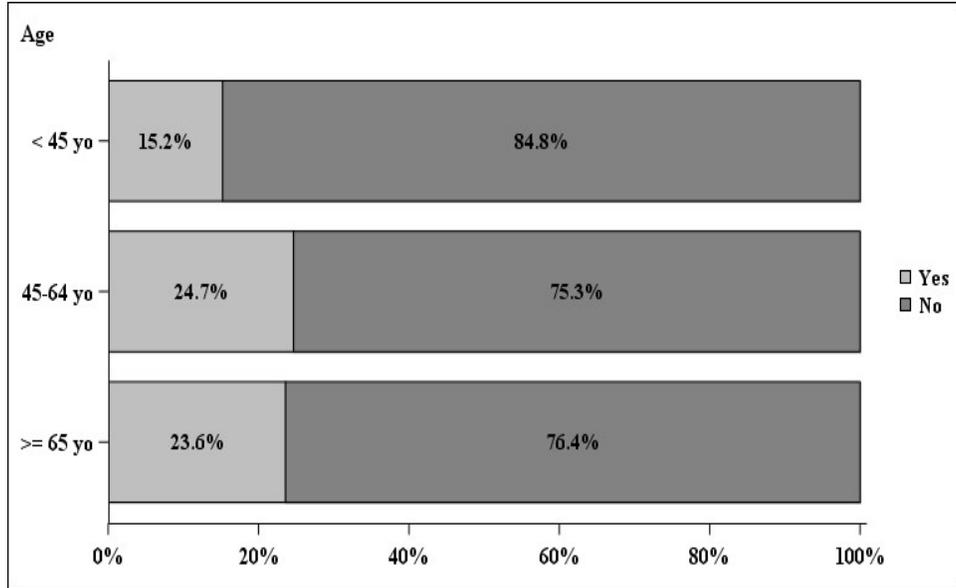


Figure R-43 shows how q12 responses varied with respondent's education. Respondents that pursued education beyond high school (>HS Grad/GED) reported the greatest proportion that had health problems that required therapy at 25.3% compared to 18.0% of HS Grad/GED respondents.

Figure R-43 Had health problems requiring special therapy vs. education (q12; n=1,873)

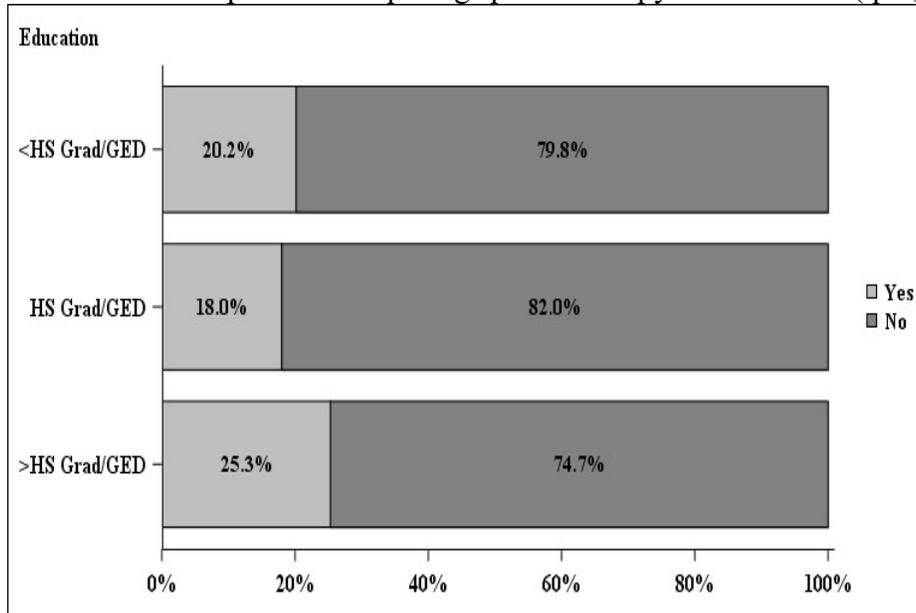


Figure R-44 illustrates how q12 responses varied with the CCNC network. Community Care Plan of Eastern Carolina (2004) and Community Care Partners of Greater Mecklenburg (1009) had the highest proportion of respondents that had health problems that required special therapy at 30.4% and 28.7% respectively. Although not statistically significant, Community Care of Wake/Johnston counties (1011) had the lowest proportion that had health problems requiring special therapy at 15.4%.

Figure R-44 Had health problems requiring special therapy vs. CCNC network (q12; n=1,907)

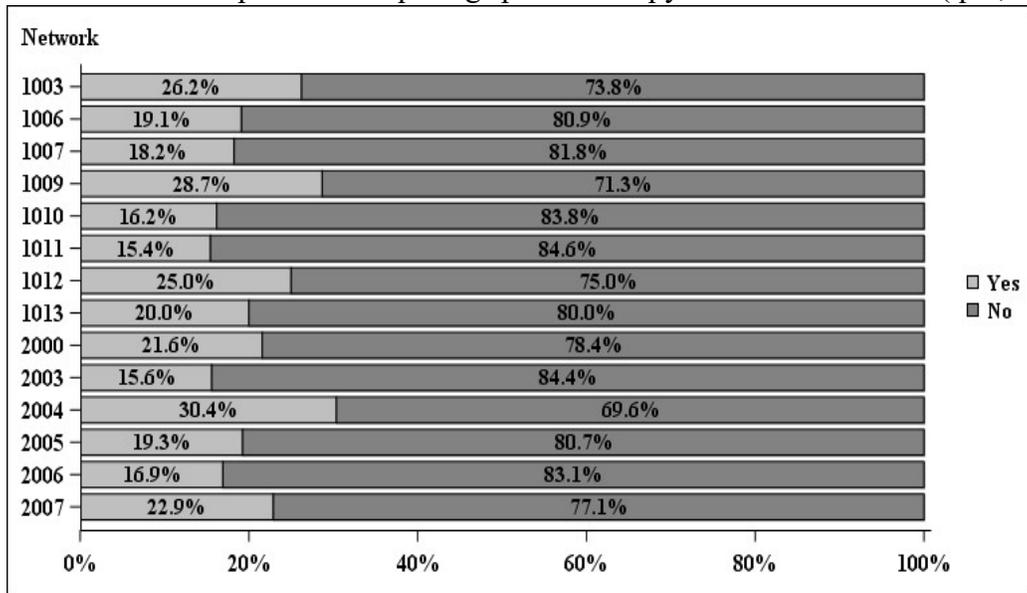
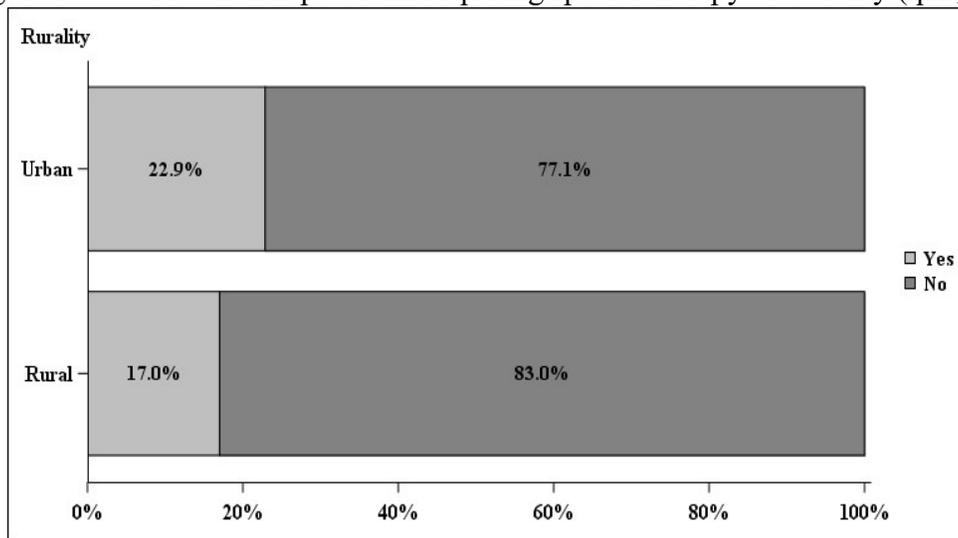


Figure R-45 exhibit how respondents to q12 differed with respondent rurality. More urban respondents reported health problems that required special therapy at 22.9% compared to 17.0% in rural counties.

Figure R-45 Had health problems requiring special therapy vs. rurality (q12; n=1,907)



Easy to get special therapy (q13; access)

Question 13 asked respondents how easy it was to get needed special therapy in the last 6 months. Figure R-46 shows that 46.1% of respondents always found it easy to get special therapy, while 14.8%, 23.9% and 15.3% usually, sometimes and never found it easy, respectively.

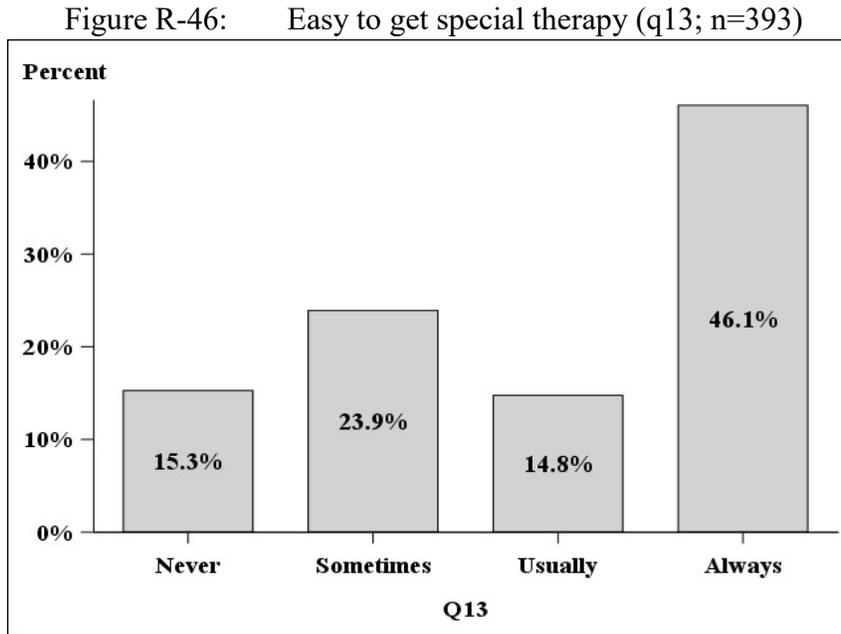


Figure R-47 demonstrate how q13 responses varied with age. Respondents aged ≥ 65 yo most often (72.0%) reported it was always easy to get special therapy while only 30.1% of those aged < 45 yo reported it always easy.

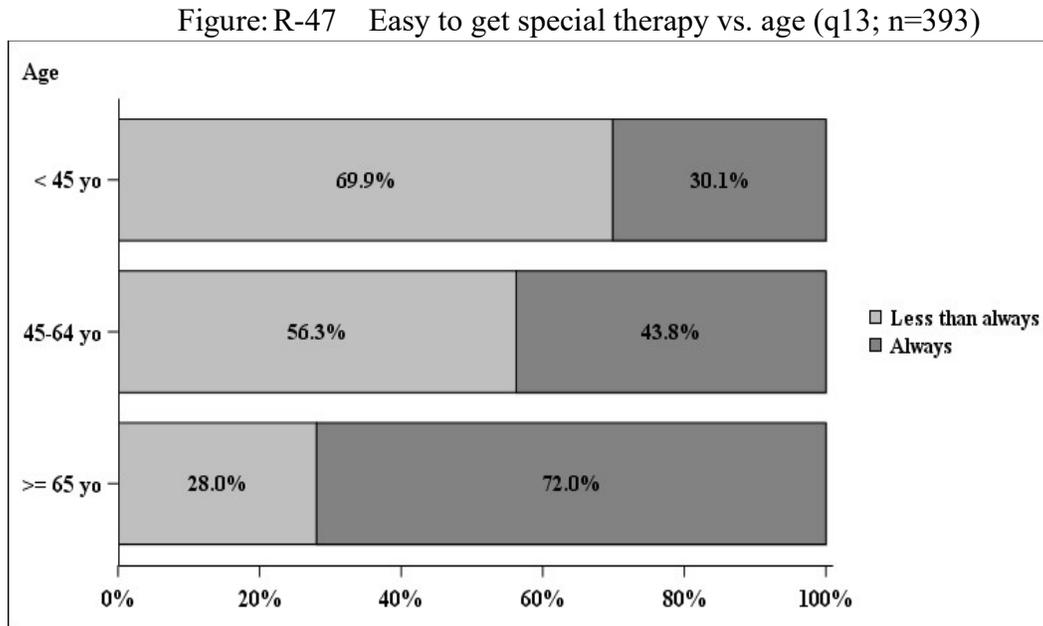
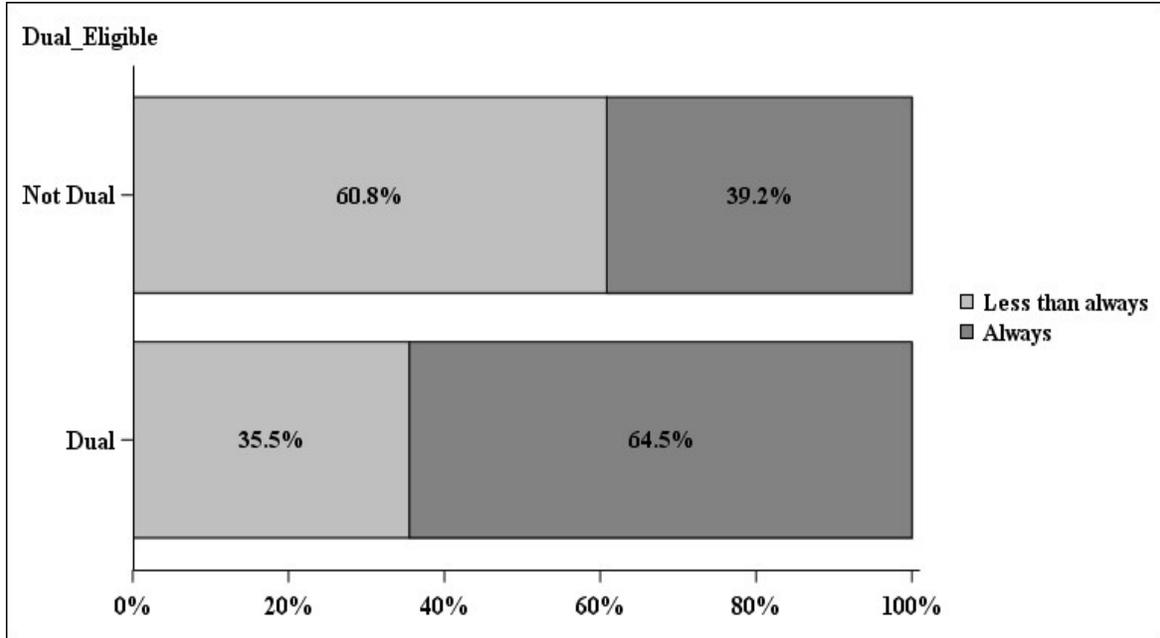


Figure R-48 illustrates the relationship between responses to q13 and dual eligibility status. Sixty-four point five percent (64.5%) of dual-eligible respondents always found it easy to get special therapy while only 39.2% of not dual respondents always found it easy.

Figure R-48 Easy to get special therapy vs. dual eligibility (q13; n=393)



Needed home health care or assistance with ADLs (q14; health status)

Question 14 asked respondents if, in the past 6 months, they needed someone to come into the home to provide health care or assistance with bathing, dressing, or basic household tasks (ADLs). Figure R-49 shows that 17.6% needed this type of assistance.

Figure R-49 Home health care or assistance was needed with ADLs (q14; n=1,913)

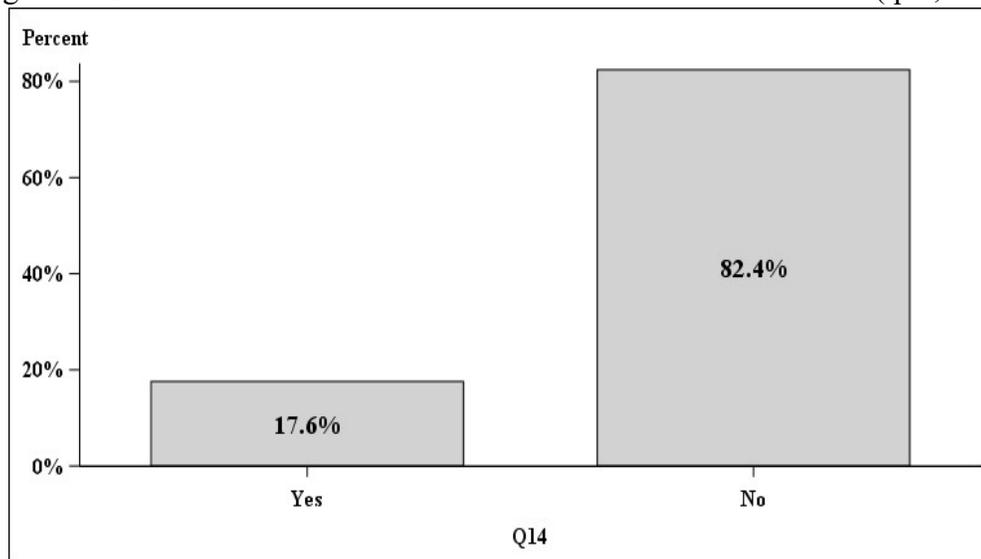


Figure R-50 illustrates the relationship between q14 responses and age. Twenty-four point two percent (24.2%) of respondents aged ≥ 65 yo needed home health care or assistance with ADLs while only 11.8% of respondents < 45 yo needed assistance.

Figure R-50 Home health care or assistance was needed with ADLs vs. age (q14; n=1,913)

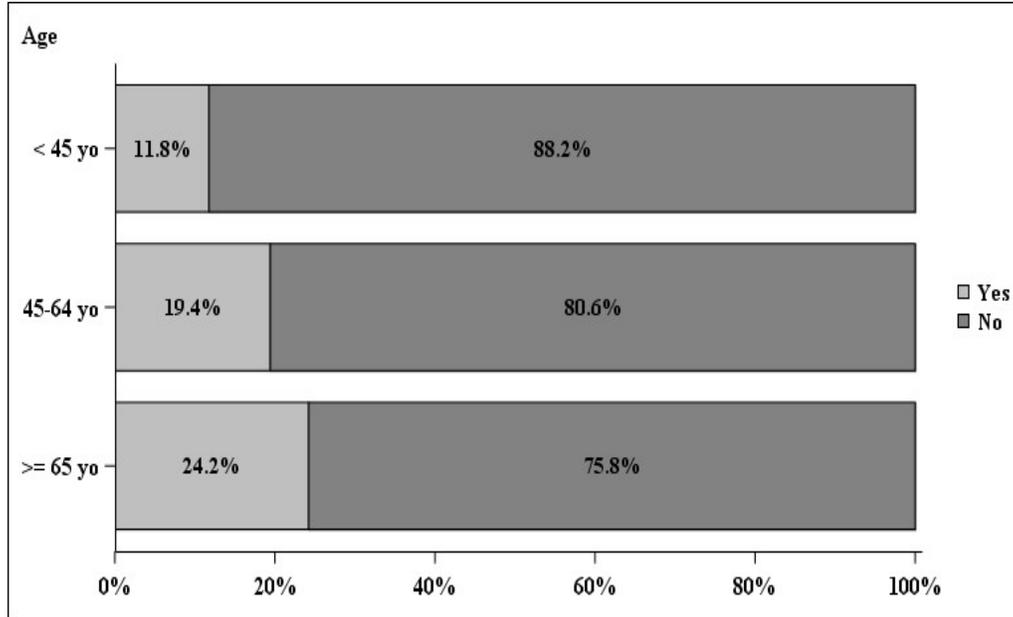


Figure R-51 demonstrates the relationship between responses to q14 with race. Blacks most often reported needing home health care or assistance with ADLs at 20.5% while only 13.9% of Multi/Other races needed this assistance.

Figure R-51 Home health care or assistance was needed with ADLs vs. race (q14; n=1,913)

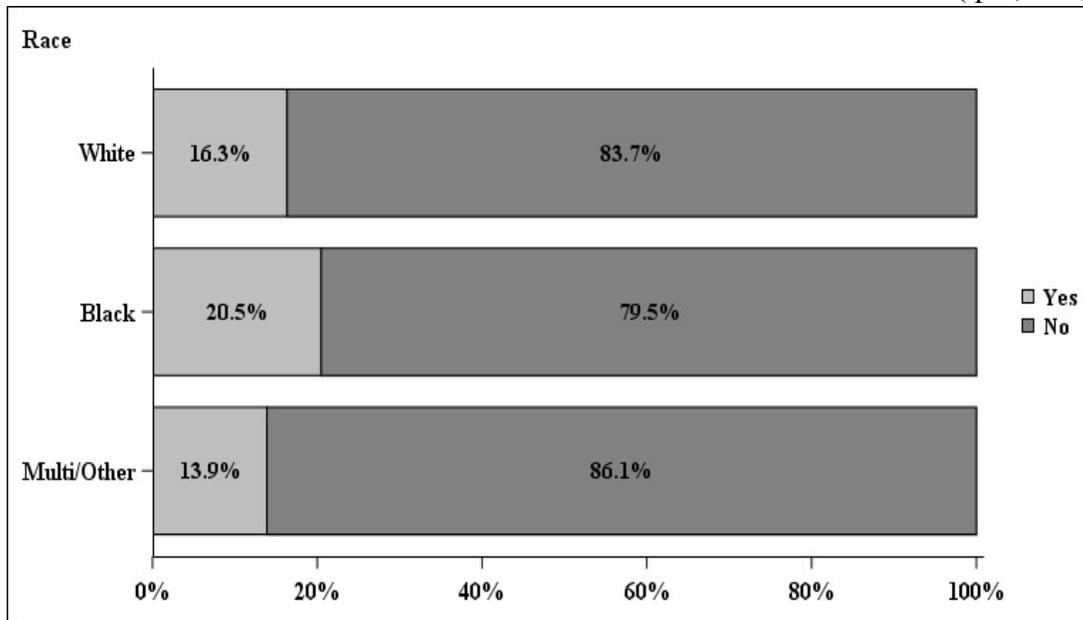


Figure R-52 describes how responses to q14 varied with education. Twenty-two point seven percent (22.7%) of respondents with <HS Grad/GED needed health care assistance with ADLs while only 11.7% of >HS Grad/GED reported the same.

Figure R-52: Home health care or assistance was needed with ADLs vs. education (q14; n=1,878)

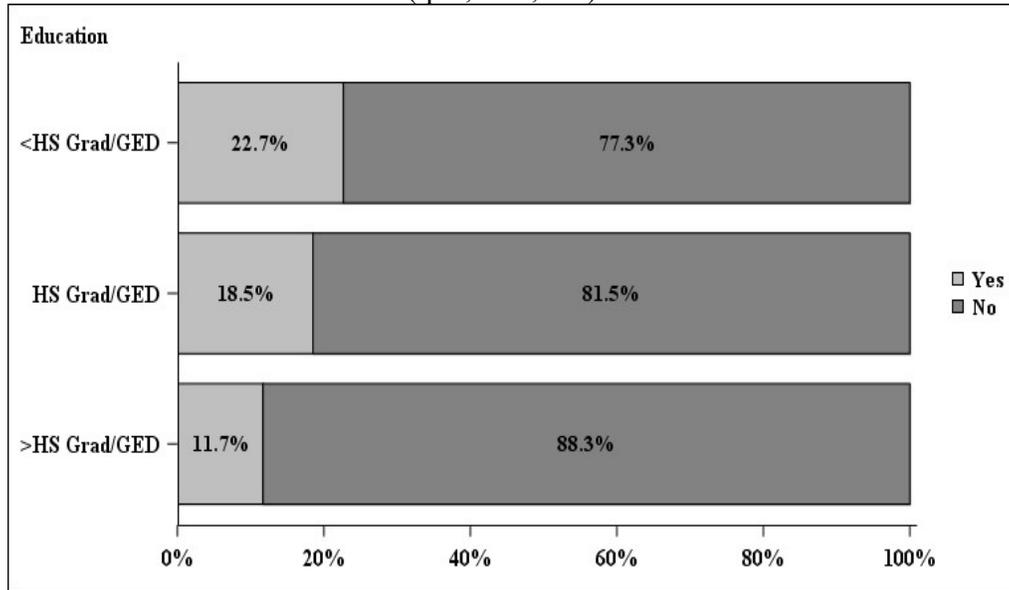
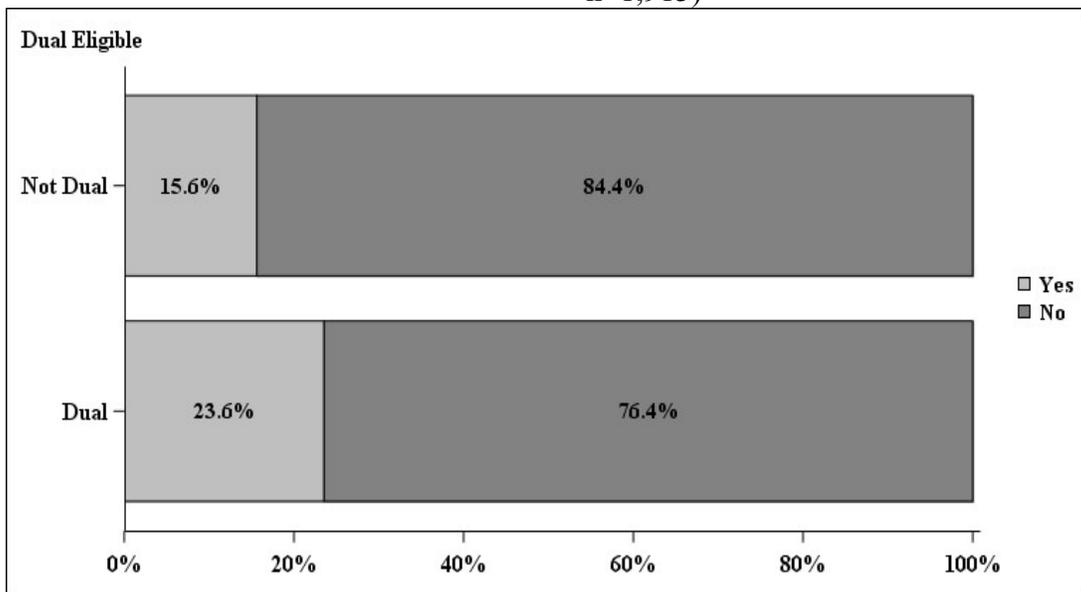


Figure R-53 shows how q14 responses varied according to respondent's dual eligibility status. Twenty-three point six percent (23.6%) of dual eligible respondents needed home health care assistance while only 15.6% of non-dual respondents reported the same.

Figure R-53 Home health care or assistance was needed with ADLs vs. dual-eligibility (q14: n=1,913)



Easy to get home health care or assistance with ADLs (q15; access)

Question 15 asked respondents how often in the previous 6 months it was easy to get the home assistance with bathing, dressing, or basic household tasks (ADLs) they needed. Figure R-54 illustrates that 60.1% responded always easy, 11.5% responded usually, 12.4% responded sometimes, and 16.2% indicated it was never easy.

Figure R-54: Easy to get home health care or assistance with ADLs (q15; n=323)

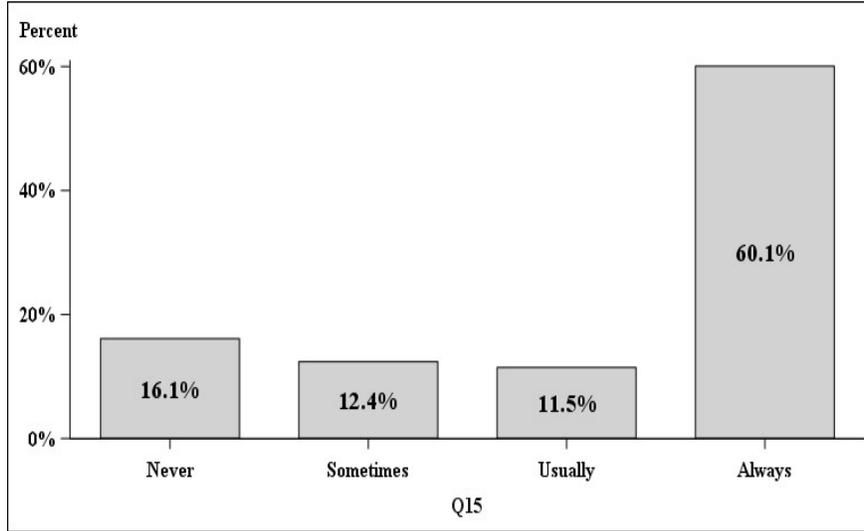
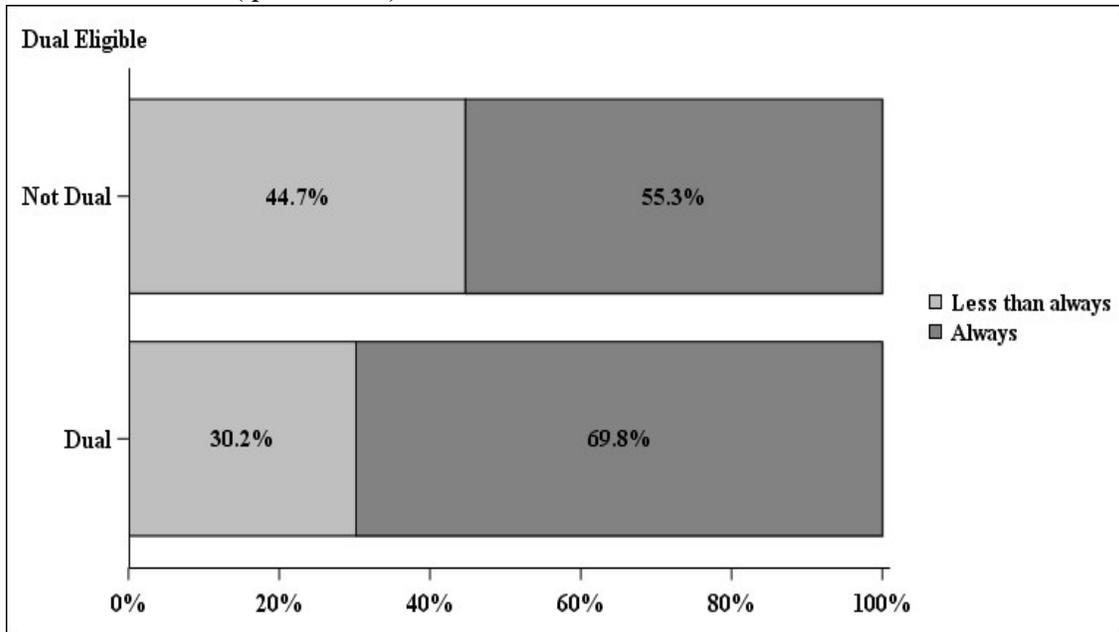


Figure R-55 depicts the relationship between responses to q15 and dual eligibility. Sixty-nine point eight percent (69.8%) of dual-eligible respondents reported it was always easy to get home health care assistance while only 55.3% of not dual respondents reported the same.

Figure R-55 Easy to get home health care or assistance with ADLs vs. dual-eligibility (q15; n=323)



Needed treatment or counseling for personal or family problems (q16; health status)

Question 16 asked respondents, if in the past 6 months, they needed treatment or counseling for a personal or family problem. Figure R-56 illustrates that 21.0% of respondents needed the services.

Figure R-56: Treatment or counseling needed for personal or family problem (q16; n=1,911)

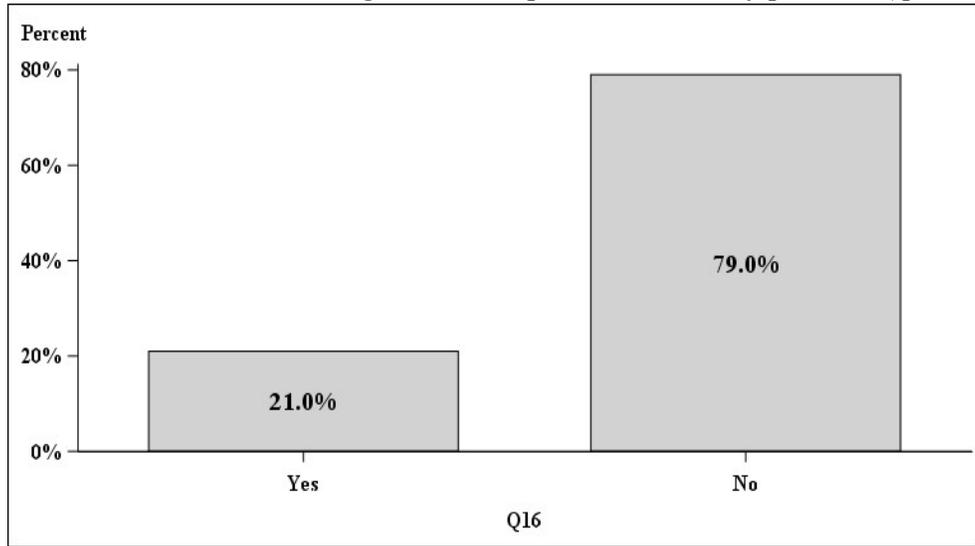


Figure R-57 represents the relationship between responses to q16 and age. Younger respondents aged <45 yo most often needed treatment or counseling at 25.7% while only 11.0% of older adults >=65 yo needed those services.

Figure R-57 Treatment or counseling needed for a personal or family problem vs. age (q16; n=1,911)

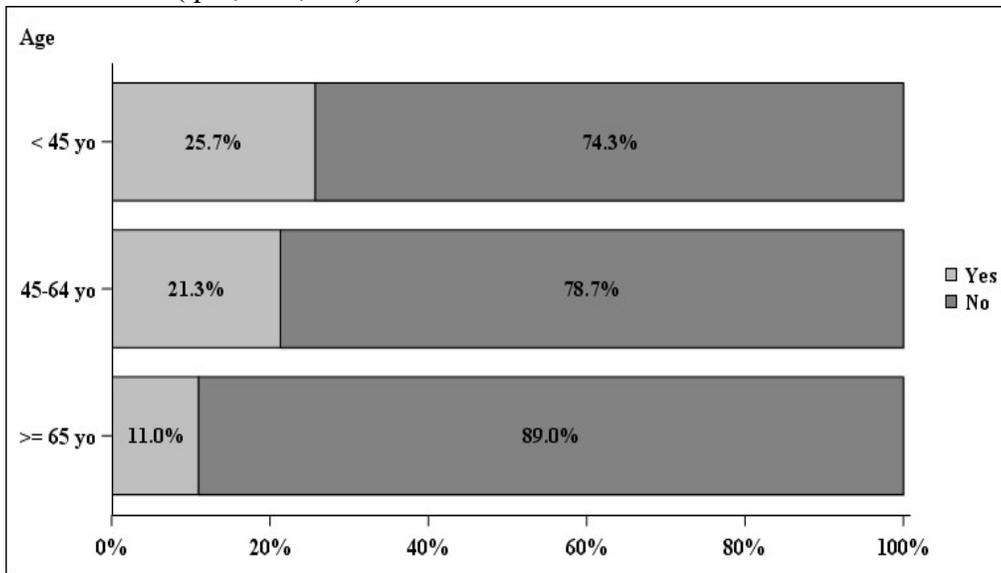


Figure 58 shows how q16 responses varied with the respondent's sex. Female respondents more often reported a need for treatment or counseling for a personal or family problems at 23.4% whereas only 16.7% of males reported the need.

Figure R-58 Treatment or counseling needed for a personal or family problem vs. sex (q16; n=1,911)

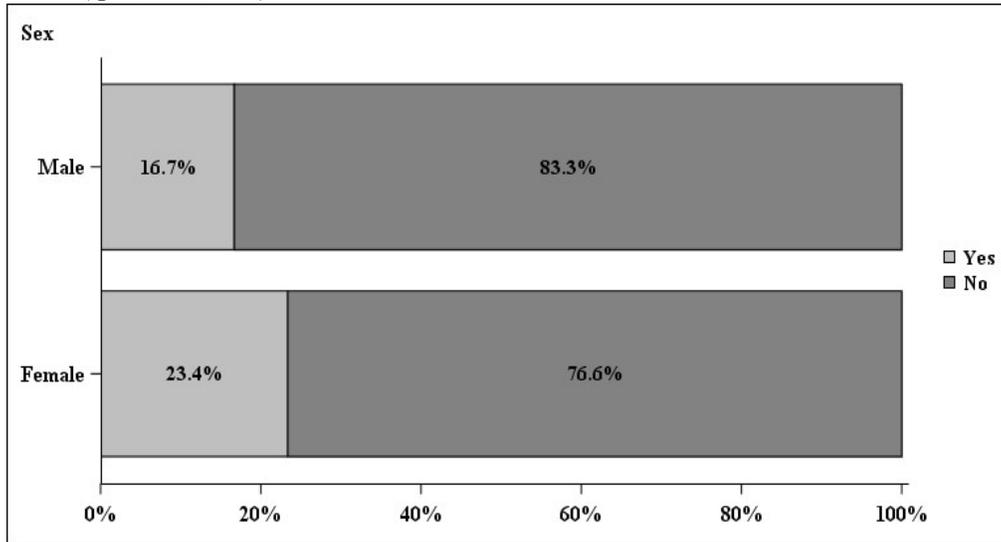


Figure R-59 shows how responses to q16 varied with respondent race. White respondents most often needed treatment or counseling services at 23.7%. Black respondents least often needed treatment or counseling for personal or family problems at 16.9%.

Figure R-59 Treatment or counseling needed for a personal or family problem vs. race (q16; n=1,911)

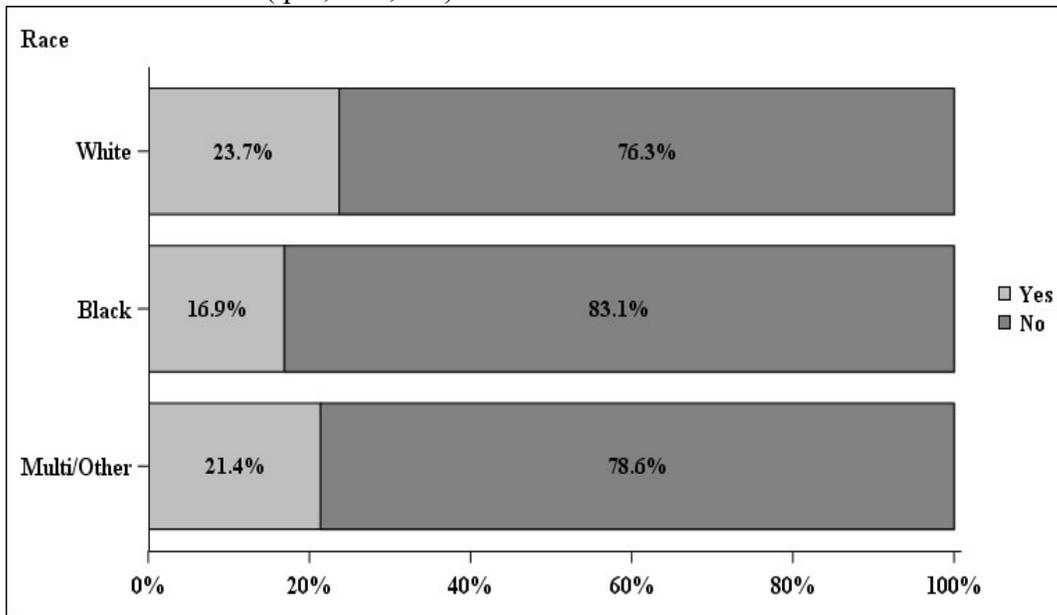


Figure R-60 shows how q16 responses varied with respondent education. Respondents with >HS Grad/GED education most often needed treatment or counseling for a personal or family problem at 28.0% whereas only 18.1% of HS Grad/GED respondents and 16.8% of <HS Grad/GED reported need for these services.

Figure R-60 Treatment or counseling needed for a personal or family problem vs. education (q16; n=1,876)

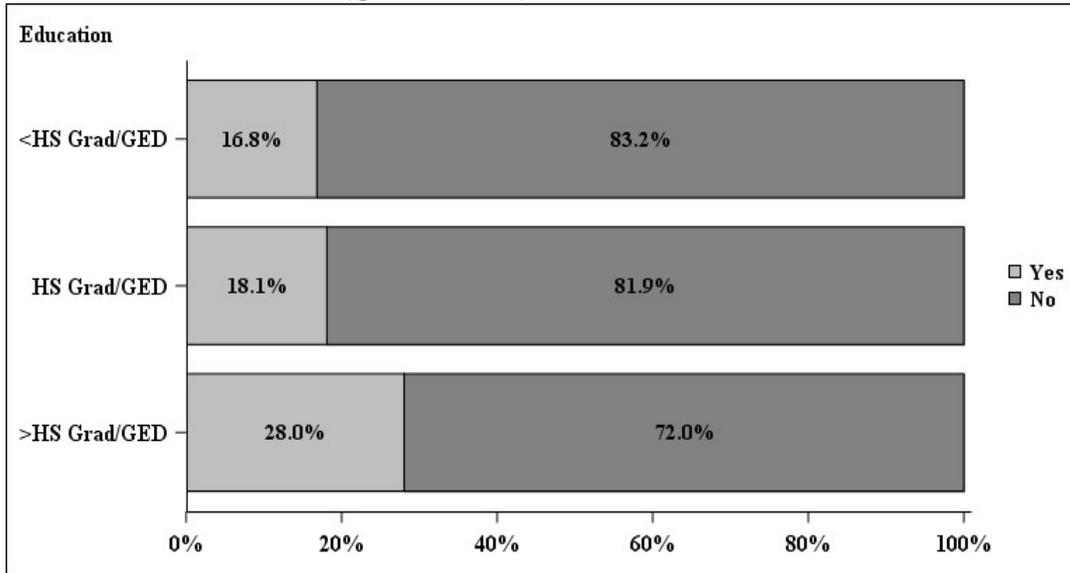
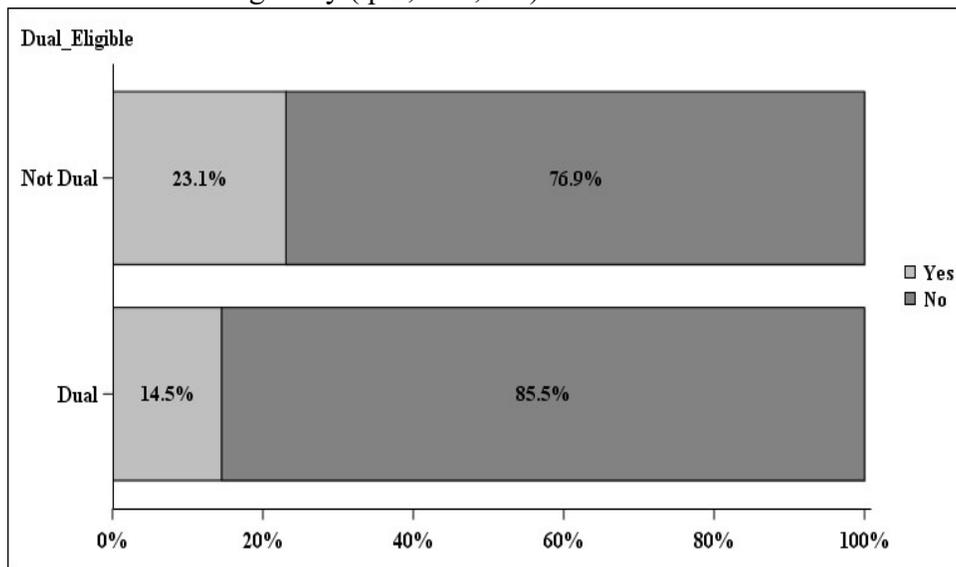


Figure R-61 depicts the relationship between responses to q16 and dual eligibility status. Twenty-three point one percent (23.1%) of not-dual respondents needed treatment or counseling for a personal or family problem while only 14.5% of dual-eligible respondents needed the same.

Figure R-61 Treatment or counseling needed for a personal or family problem vs. dual eligibility (q16; n=1,911)



Easy to get treatment or counseling (q17; access)

Question 17 asked respondents that responded yes to q16 how often in the previous 6 months it was easy to get treatment or counseling for a personal or family problem. Figure R-62 shows that 55.2% found it was always easy, 18.2% responded usually, 15.7% responded sometimes and 10.9% indicated it was never easy.

Figure R-62 Easy to get treatment or counseling (q17; n=395)

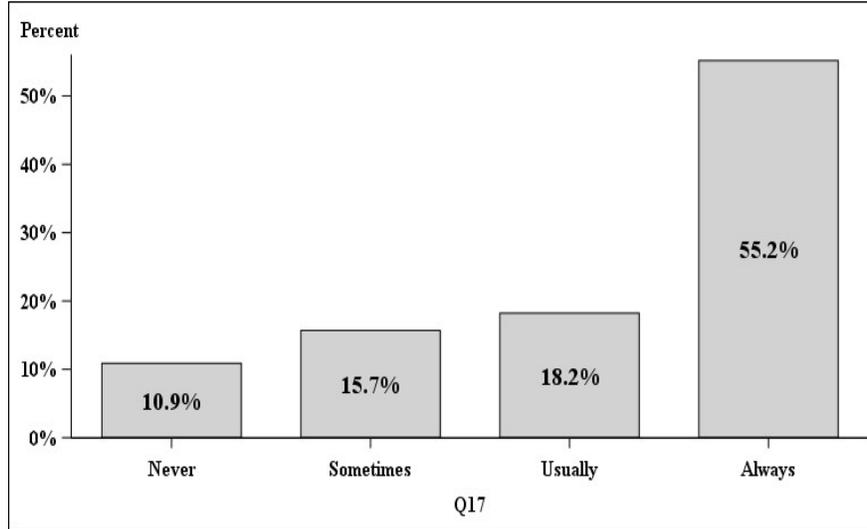
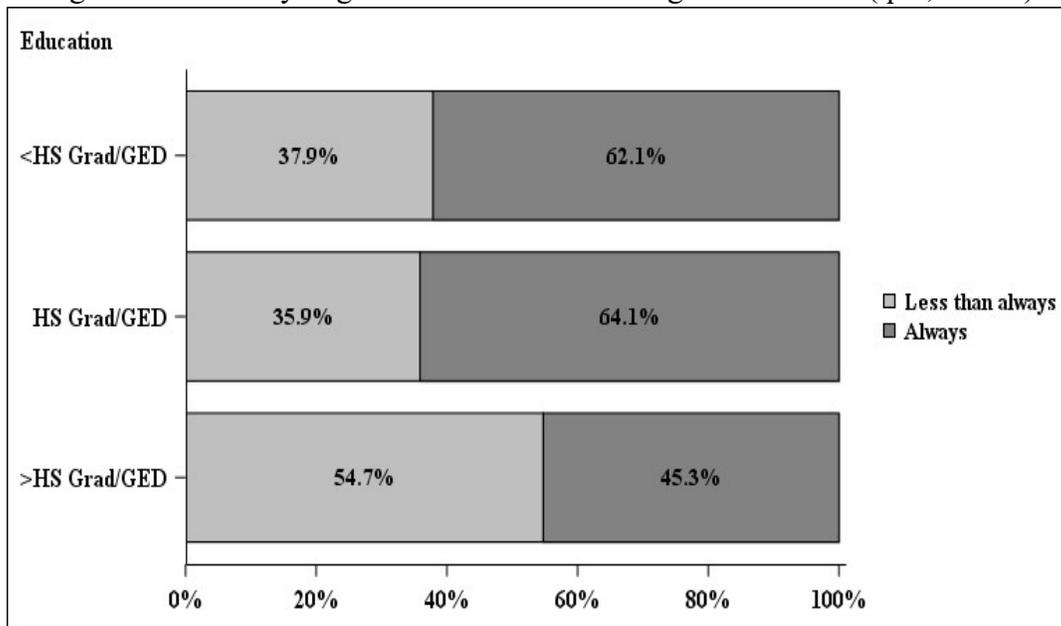


Figure R-63 shows the relationship between responses to q17 and respondent education. Only 45.3% of respondents with >HS Grad/GED reported it was always easy to get treatment or counseling while 64.1% and 62.1% of those with HS Grad/GED and with <HS Grad/GED reported the same, respectively.

Figure R-63 Easy to get treatment or counseling vs. education (q17; n=391)



3.3 Your Personal Health Provider (q18-q38)

Health provider status (q18; access)

Question 18 asked respondents if they have a personal health provider (PHP). Figure R-64 shows that the large majority of respondents (83.8%) indicated “yes” and only 16.2% of respondents indicated “no”.

Figure R-64 Has a personal health provider (PHP) (q18; n=2,303)

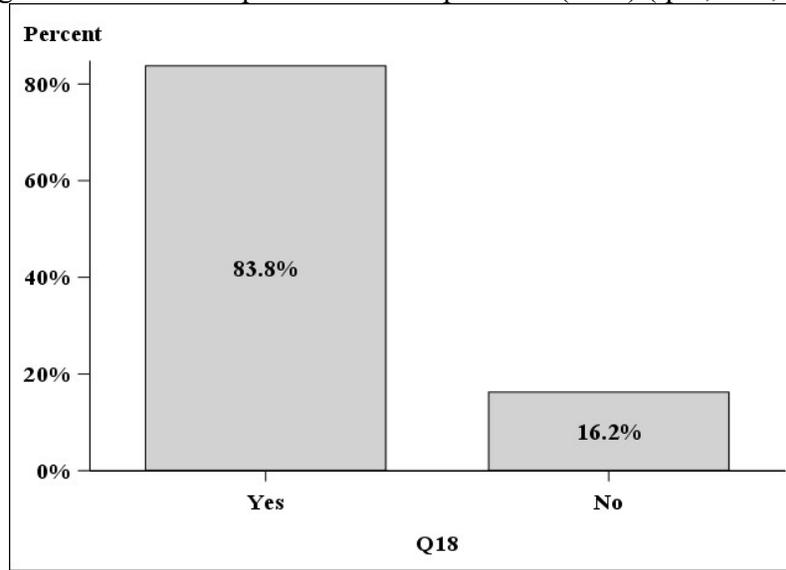


Figure R-65 indicates the relationship between responses to q18 and age. Eighty-seven point nine percent (87.9%) of respondents aged 45-64 reported that they had a PHP compared to 79.4% of respondents less than 45 years.

Figure R-65 Has a personal health provider vs. age (q18; n=2,303)

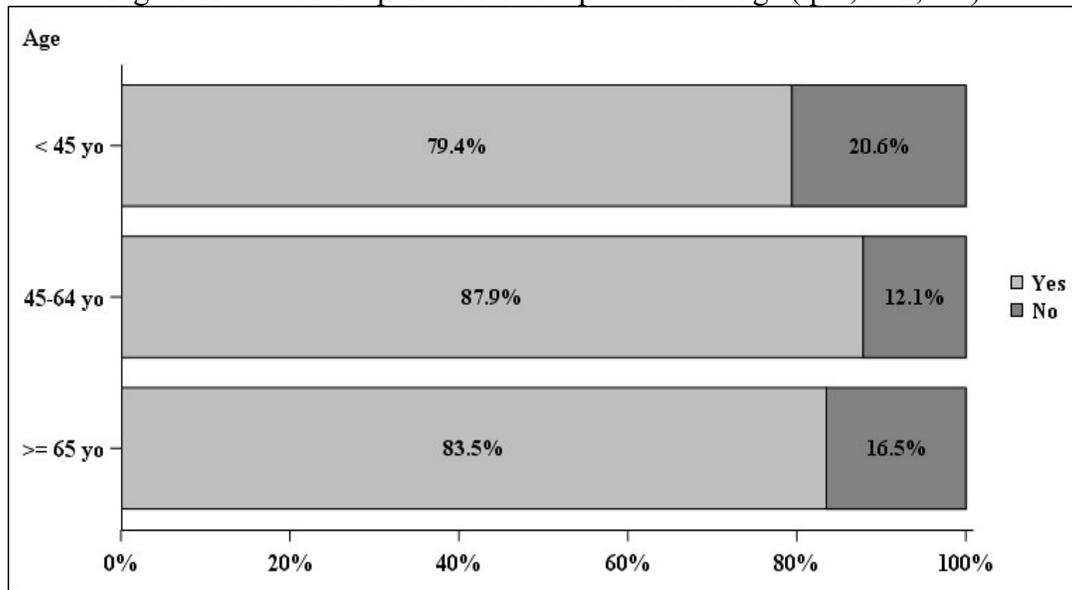


Figure R-66 shows how responses to q18 varied with the respondent's sex. A larger proportion of female respondents reported having a PHP at 85.2% whereas 81.3% of males reported having a PHP.

Figure R-66 Has a personal health provider vs. sex (q18; n=2,303)

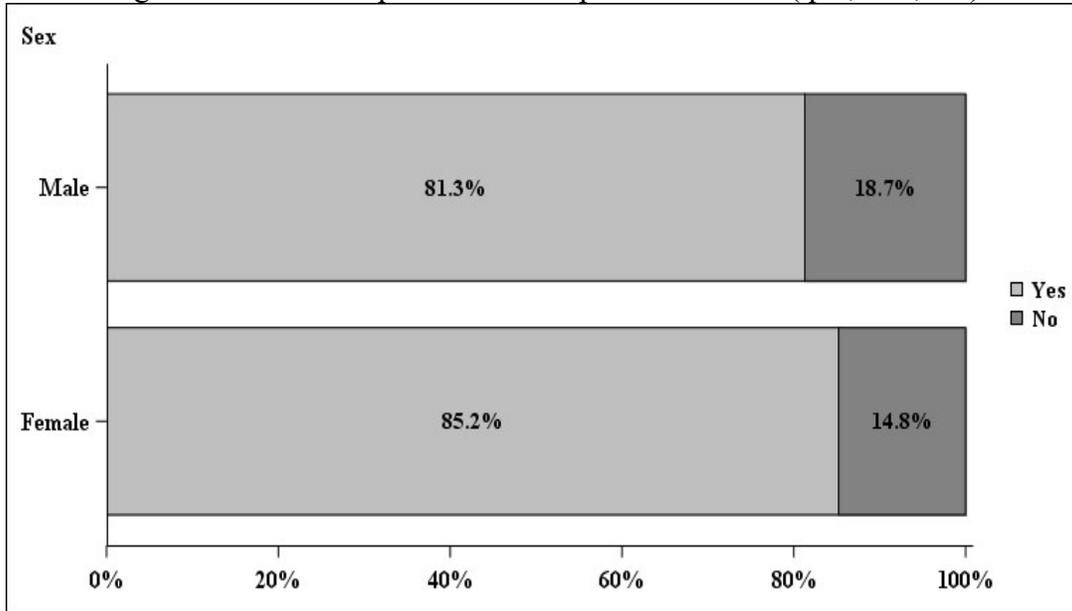
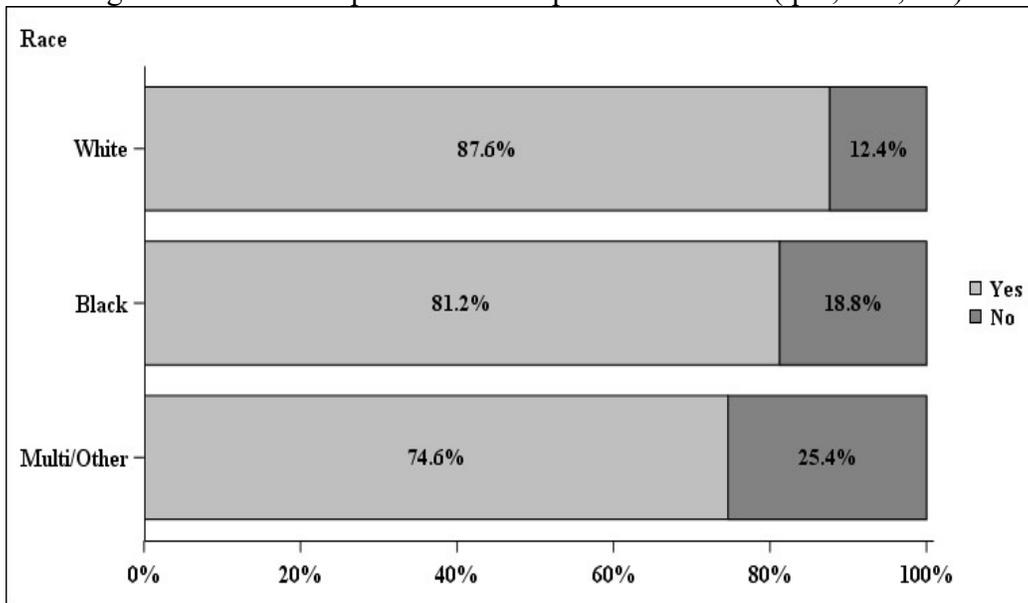


Figure R-67 depicts the variation in responses to q18 with respondent race. More white respondents reported having a PHP (87.6%) as compared to Blacks and Multi/Other races at 81.2% and 74.6%, respectively.

Figure R-67 Has a personal health provider vs. race (q18; n=2,303)



Characterization of personal health provider (q19; access)

Question 19 asked respondents who responded ‘yes’ to q18, if their personal health provider is a: general MD, specialist MD, nurse practitioner (NP) or physician’s assistant (PA). Figure R-68 illustrates that 65.4% of respondents indicated that their personal health provider (PHP) is a general MD, 9.6% indicated he/she is a specialist MD, while 11.6% and 13.3% indicated their PHP is a NP and PA, respectively.

Figure R-68 Characterization of personal health provider (q19, n=1,777)

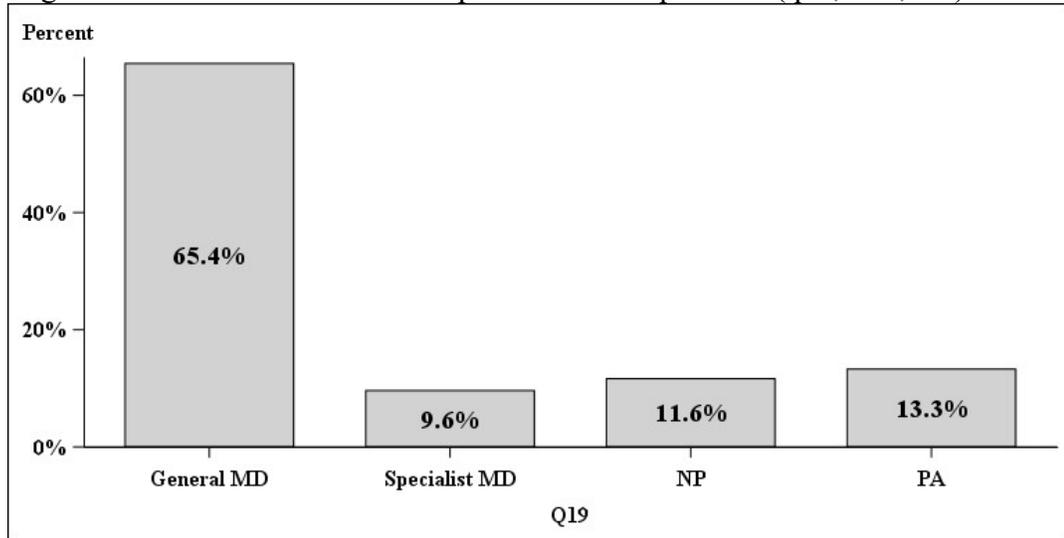


Figure R-69 represents the relationship between q19 and sex. A higher proportion of males reported their PHP’s training level as specialist MD compared to females at 11.9% and 8.4%, respectively. Females more often reported PAs as personal health providers (15.3%) compared to males (9.6%).

Figure R-69 Characterization of personal health provider vs. sex (q19, n=1,777)

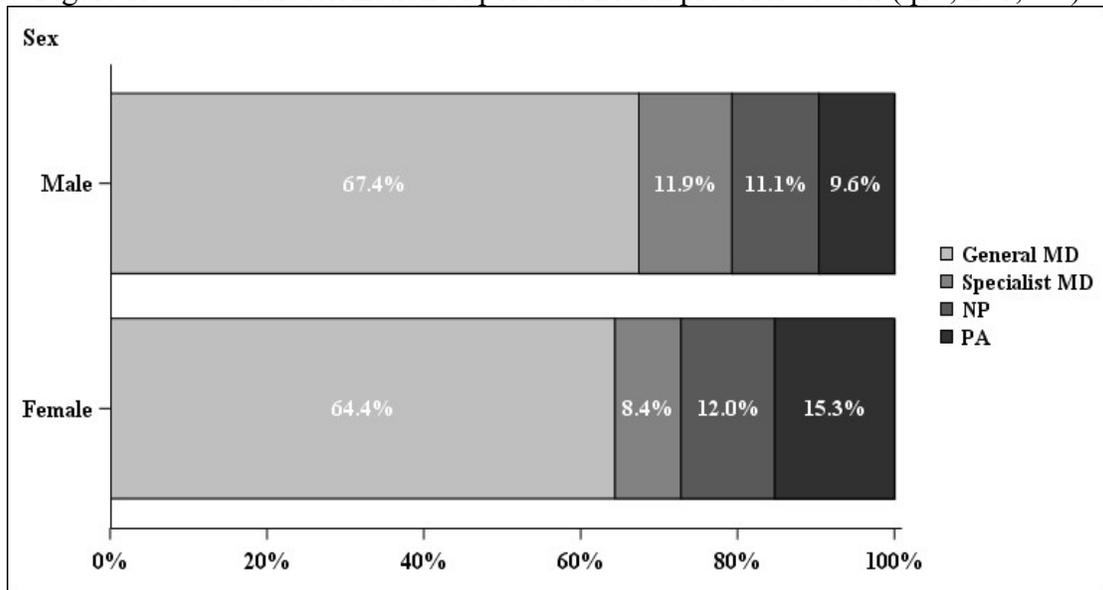


Figure R-70 depicts the relationship between q19 and race. Blacks and Multi/Other races more often reported their PHP as specialist MD at 11.7% and 12.0%, respectively, compared to Whites at 7.8%. Whites more often reported their PHP as a PA (15.4%) compared to Blacks (11.4%) and Multi/Other races (8.9%).

Figure R-70 Characterization of personal health provider vs. race (q19; n=1,777)

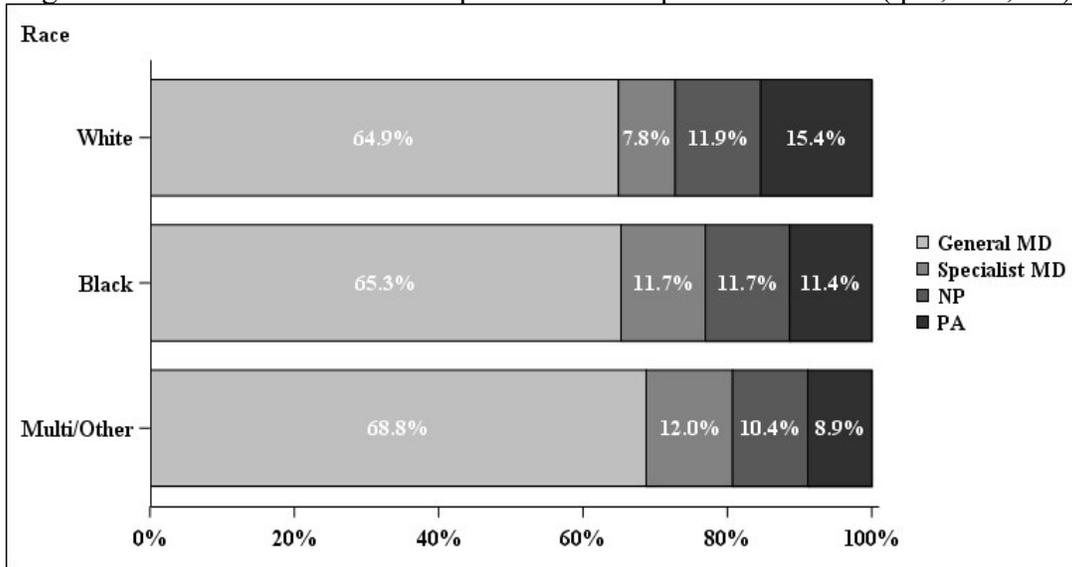


Figure R-71 describes q19 response variation across CNCC networks. Carolina Community Health Partnership (1010) had a significantly higher proportion of respondents who reported their PHP as a PA (23.3%) and the least proportion of respondents who reported their PHP as a general MD (47.3%).

Figure R-71 Characterization of personal health provider vs. CNCC network (q19; n=1,777)

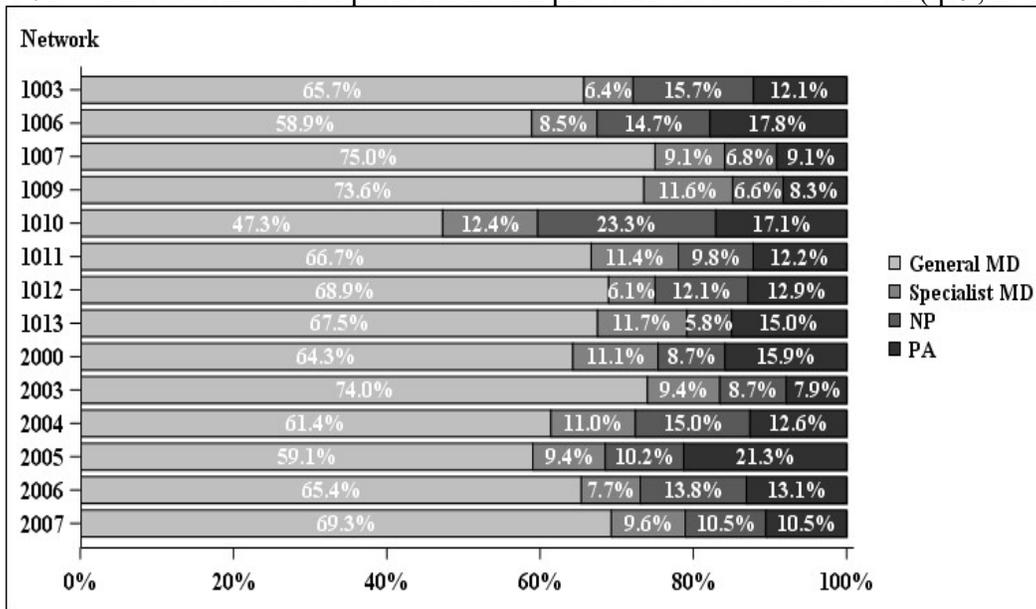
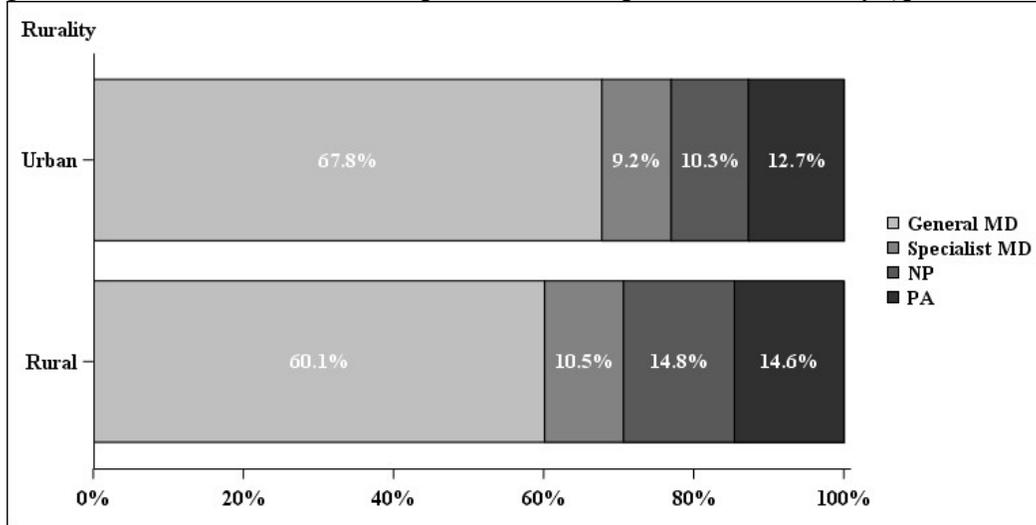


Figure R-72 shows how q19 responses varied with rurality. Rural respondents more often reported having a NP as their PHP (14.8%) while least often reporting having a general MD (60.1%).

Figure R-72 Characterization of personal health provider vs. rurality (q19; n=1,777)



Duration of relationship with personal health provider (q20, access)

Question 20 asked respondents who responded ‘yes’ to q18 how long they had been seeing their personal health provider (PHP). Figure R-73 indicates that 44.1% of respondents have had the same PHP for 5 years or more while 28.9% have been with the same PHP for 2 to 5 years. Twelve point eight percent (12.8%) of respondents indicated that they have been with their PHP for 1-2 years, while 7.8% and 6.4% of respondents have been with the same PHP for 6 months-1 year and <6 months, respectively.

Figure R-73 Duration of relationship with personal health provider (q20; n=1,873)

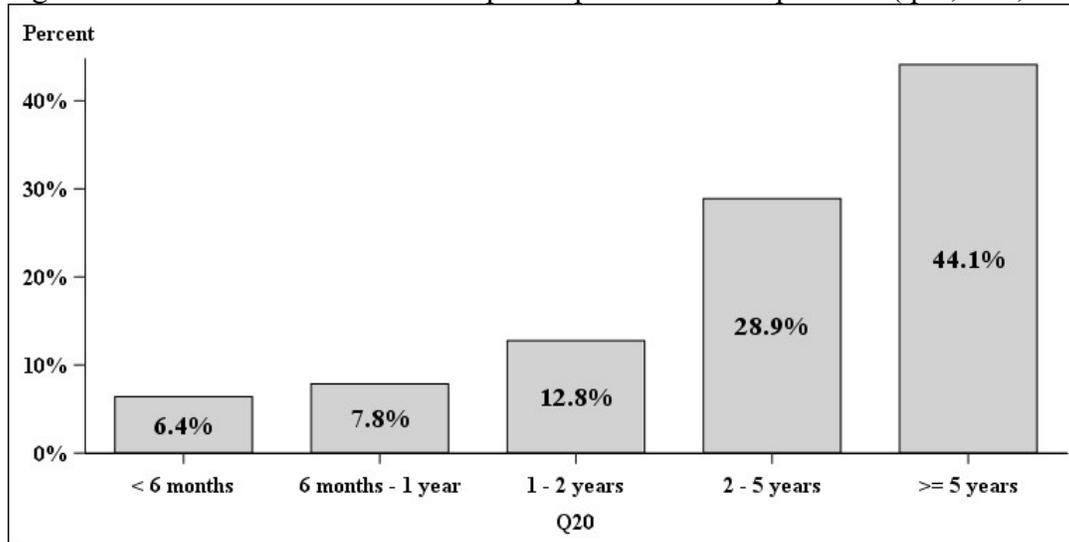


Figure R-74 shows how q20 responses varied with age. Respondents less than 45 yo had the highest proportion that indicated seeing their PHP for 1-2 years (15.7%) and lowest proportion that indicated seeing their PHP for 5 years or more (38.1%). Respondents 65 yo or greater had the lowest proportion (8.5%) who reported seeing their PHP for 1-2 years.

Figure R-74 Duration of relationship with personal healthcare provider vs. age (q20; n=1,873)

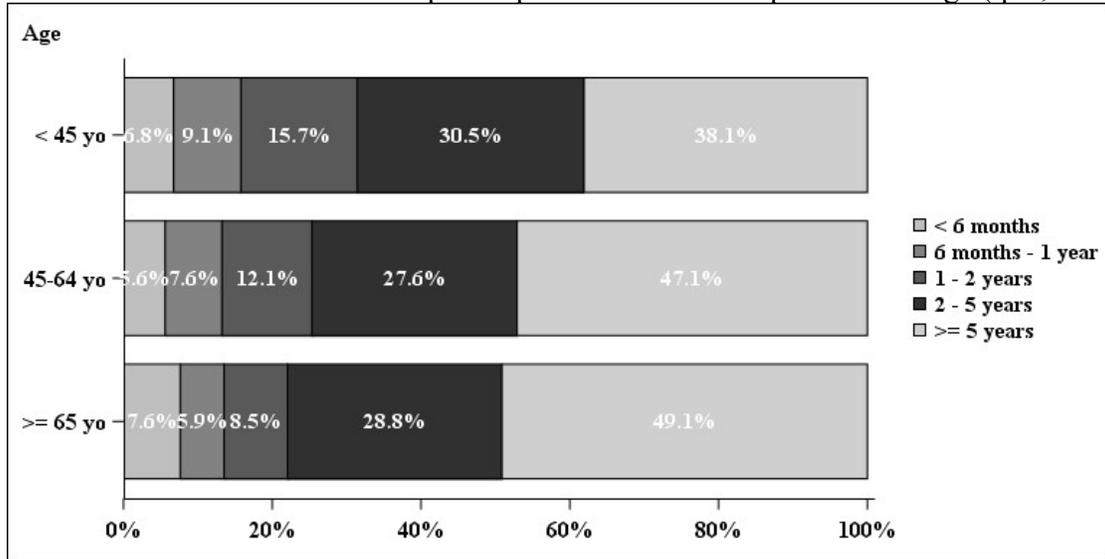


Figure R-75 depicts the relationship between q20 responses and dual-eligibility. The greatest proportion (51.8%) of dual-eligible respondents indicated that they had been with the same PHP for 5 years. Dual-eligible participants also least often reported being with the same PHP for 1-2 years at 9.3%. Dual-eligibles generally had the longest tenure with their PHP.

Figure R-75 Duration of relationship with personal healthcare provider vs. dual-eligibility (q20; n=1,873)

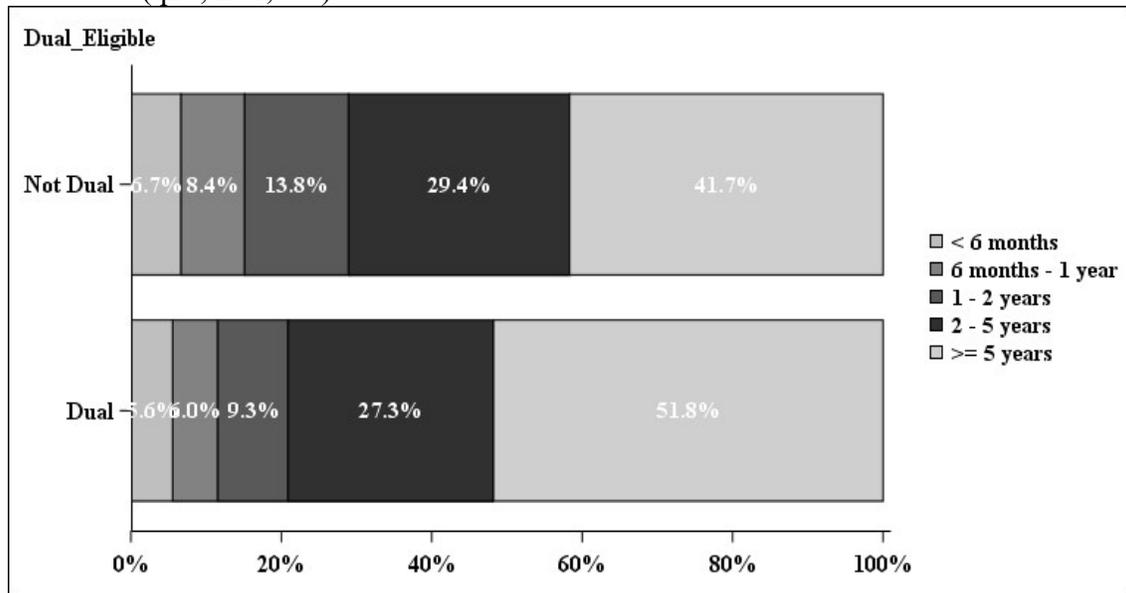
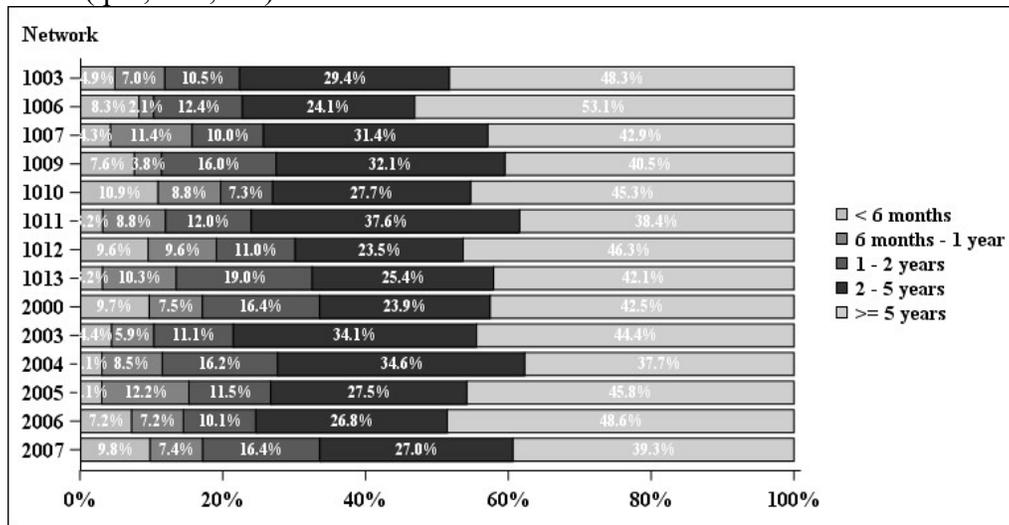


Figure R-76 shows the results of q20 responses across CCNC networks. Community Health Partnership (1010) had the highest proportion of respondents who indicated being with their PHP for <6 months (10.9%), CCNC Clinical Operations (1006) respondents had the lowest proportion of respondents who reported being with their PHP for 6 months-1 year (2.1%), and Carolina Collaborative Community Care (1013) respondents had the highest proportion who reported being with their PHP for 1-2 years (19.0%).

Figure R-76 Duration of relationship with personal healthcare provider vs. CCNC network (q20; n=1,873)



Has a medical condition that interferes with work, school, or day-to-day activities (IADLs) (q21, health status)

Question 21 asked respondents if they have a physical or medical condition that seriously interferes with work, school, or day-to-day activities. Figure R-77 shows that 70.6% of respondents indicated that they had such a condition.

Figure R-77 Medical condition that interferes with work, school, or day-to-day activities (q21, n=1,902)

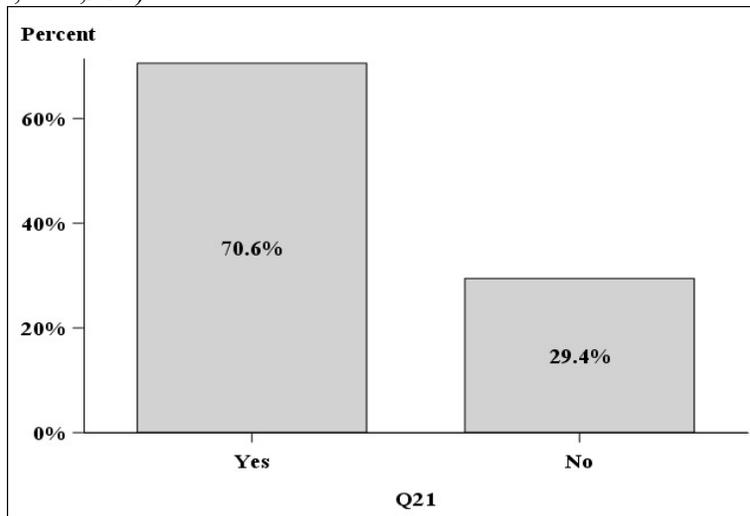


Figure R-78 describes the variation in responses to q21 with respondent age. Respondents aged 45-64 yo accounted for a significantly larger proportion that reported a medical condition that interferes with IADLs at 87.3%.

Figure R-78 Medical condition that interferes with work, school, or day-to-day activities vs. age (q21; n=1,902)

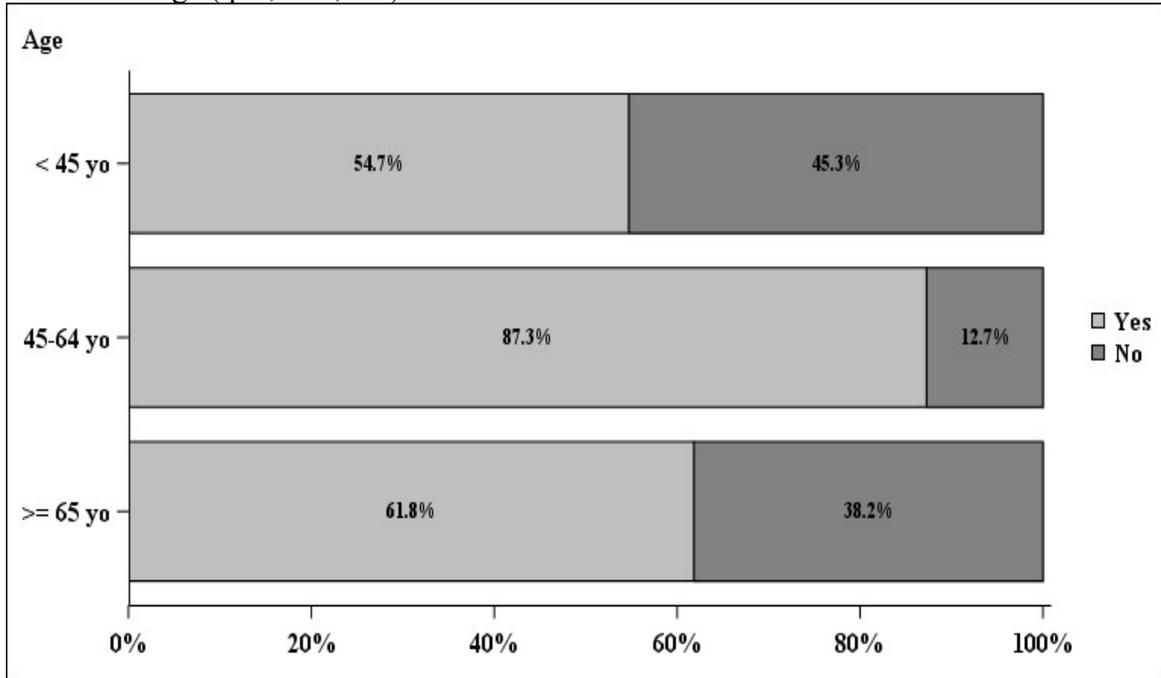


Figure R-79 shows how responses to q21 varied with sex. Males more often reported they had a medical condition that interferes with IADLs (76.5%). Conversely, females less often reported not having the same situation (74.2%).

Figure R79 Medical condition that interferes with work, school, or day-to-day activities vs. sex (q21; n=1,902)

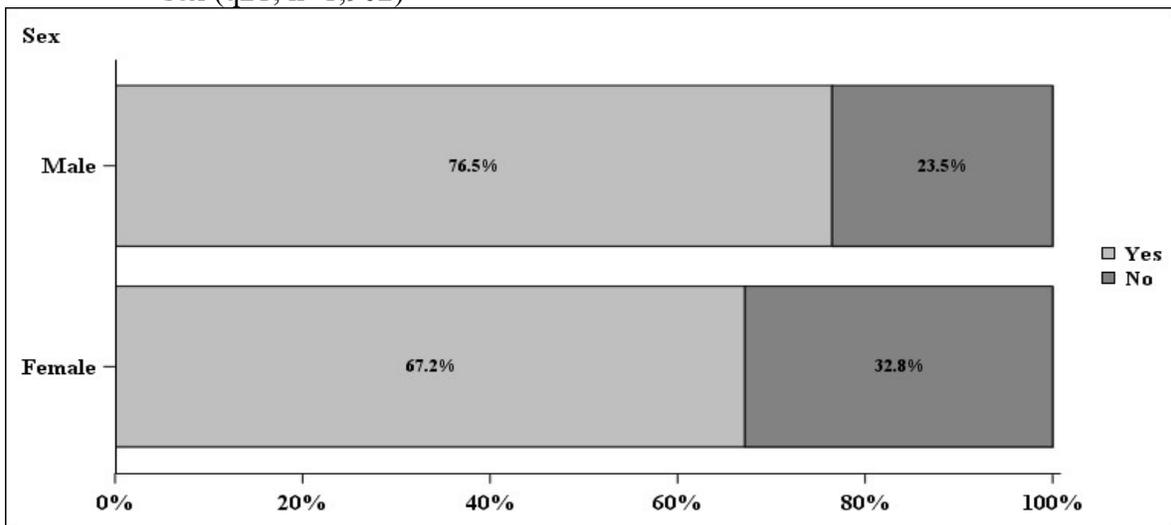


Figure R-80 depicts variation in responses to q21 with the respondent's race. A higher proportion of Whites reported having a medical condition that interferes with IADLs at 74.0% as opposed to Blacks, 66.2% of whom reported having similar health-related limitations.

Figure R-80 Medical condition that interferes with work, school, or day-to-day activities vs. race (q21, n=1,902)

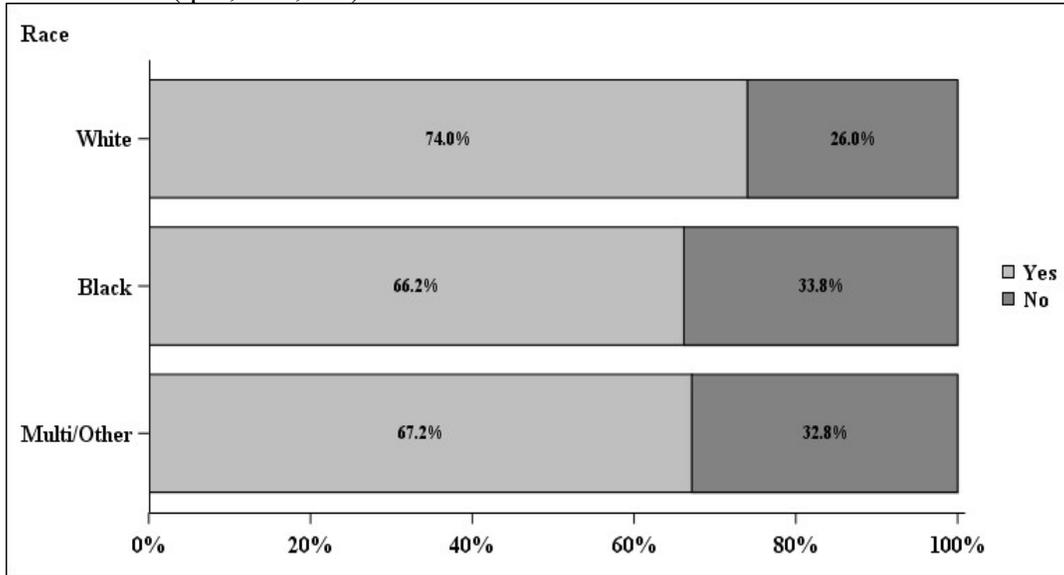


Figure R-81 describes how responses to q21 varied with respondent education level. Seventy-eight point six percent (78.6%) of those with <HS Grad/GED reported a medical condition that interferes with IADLs compared to 62.4% of those with >HS Grad/GED.

Figure R-81 Medical condition that interferes with work, school, or day-to-day activities vs. education (q21, n=1,872)

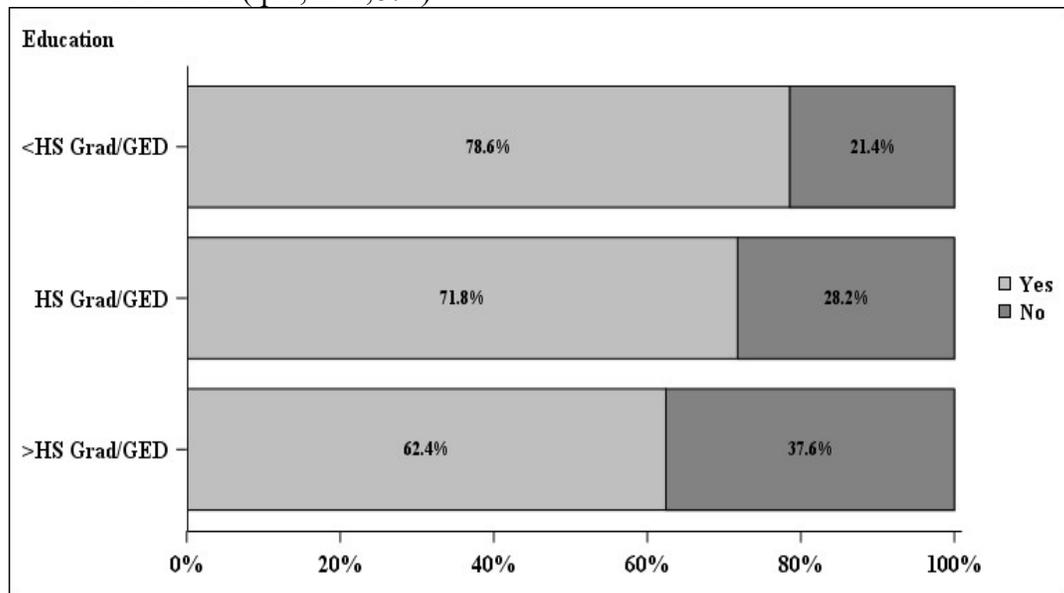


Figure R-82 shows how responses to q21 varied across CNCC network. Respondents in the Community Care Partners of Greater Mecklenburg network (1009) less often reported having a medical condition that interferes with IADLs (57.6%) as compared to the other networks.

Figure R-82 Medical condition that interferes with work, school, or day-to-day activities vs. CCNC network (q21; n=1,902)

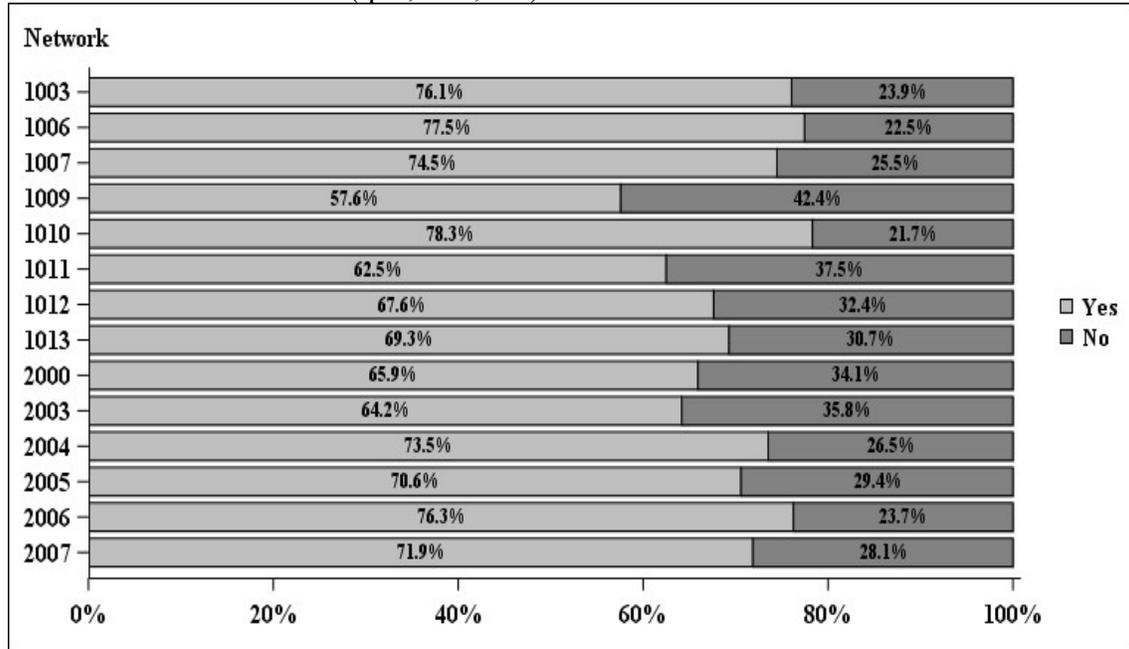
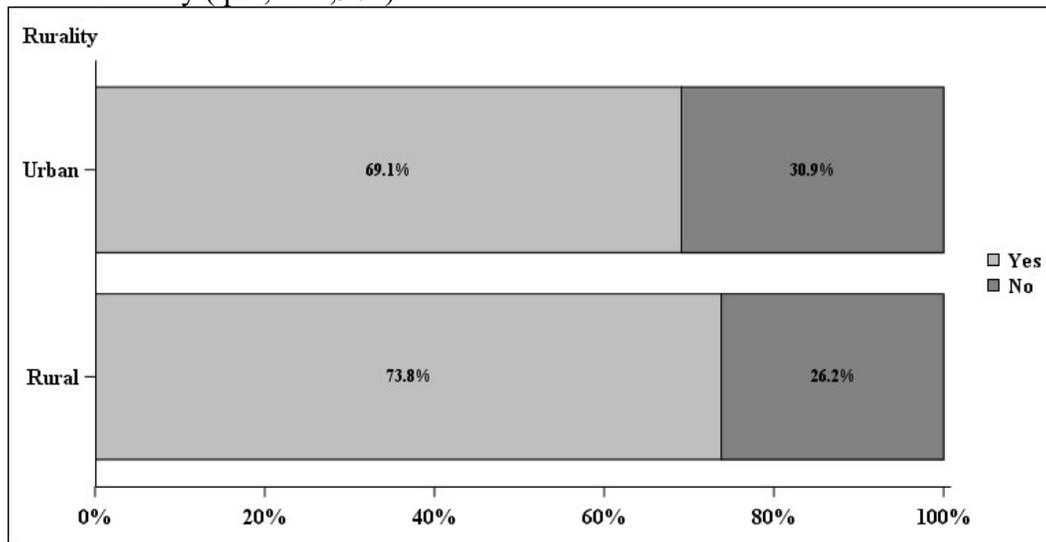


Figure R-83 describes variation in q21 responses across rurality. A greater proportion of rural respondents indicated that they had IADL limitations due to a medical condition compared to urban respondents, at 73.8% and 69.1%, respectively.

Figure R-83 Medical condition that interferes with work, school, or day-to-day activities vs. rurality (q21; n=1,902)



Personal health provider understands how problems affect day-to-day life (q22; satisfaction)

Question 22 asked if respondent’s personal health provider (PHP) understands how health problems affect day-to-day life. Figure R-84 indicates that the majority of respondents (94.7%) indicated “yes”.

Figure R-84 Personal health provider understands how problems affect day-to-day life (q22; n=1,309)

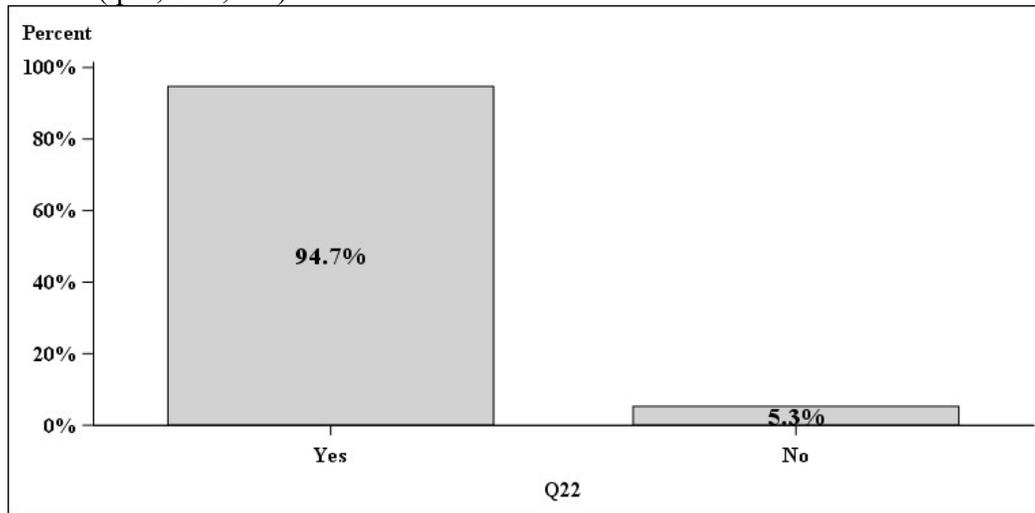
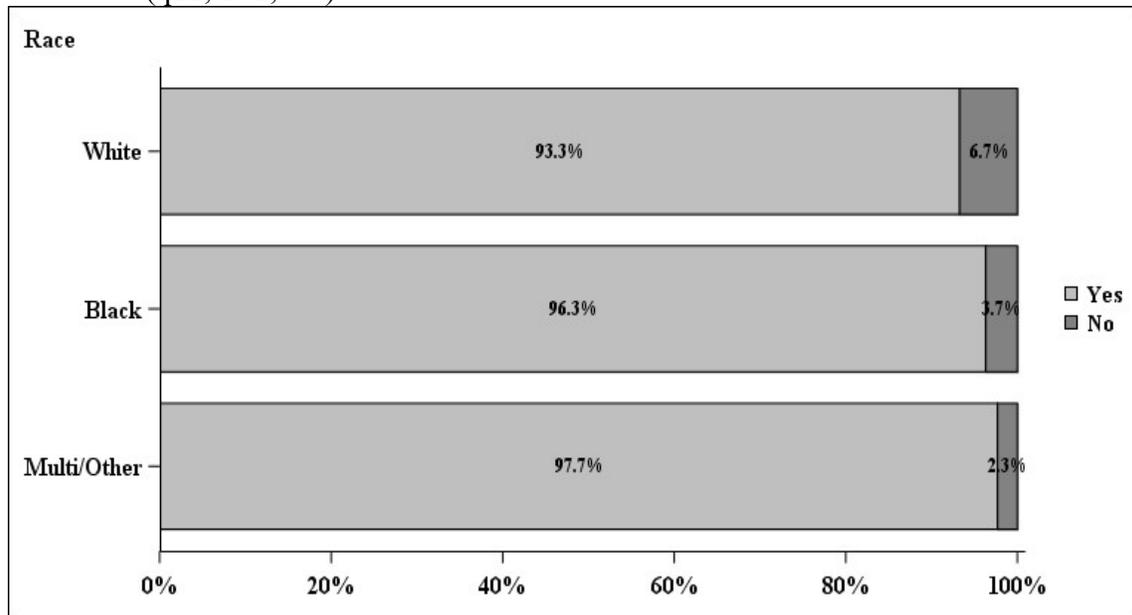


Figure R-85 shows the variation in responses to q22 across race. Compared to other races, Whites less often reported that their PHP understands how their problems affect day-to-day-life at 93.3%.

Figure R-85 Personal health provider understands how problems affect day-to-day life vs. race (q22; n=1,309)



Number of visits to personal health provider to get care (q23, utilization)

Question 23 asked respondents how many times, in the previous 6 months, they had visited their personal health provider (PHP) to get care for themselves. Figure R-86 shows that the greatest proportion of respondents (40.8%) visited their PHP 2-3 times in the last 6 months. Twenty-eight point two percent (28.2%) of respondents indicated that they visited their PHP 4 or more times, while 19.1% indicated 1 time and 11.9% indicated none.

Figure R-86 Number of visits to personal health provider to get care (q23; n=1,786)

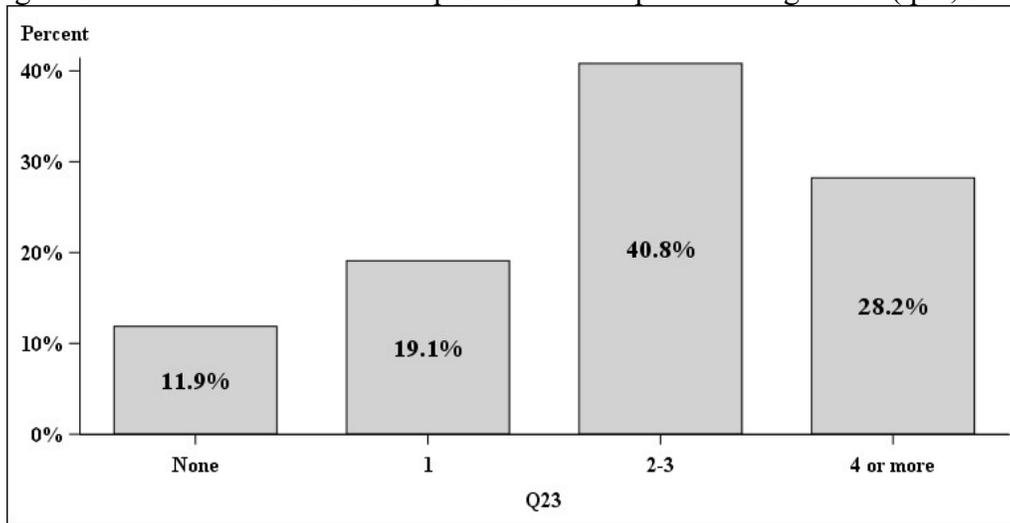


Figure R-87 shows variation in responses to q23 with respondent age. In addition to generally having the greatest number of PHP visits, respondents aged 45-64 also most often reported visiting their PHP ≥ 4 times at 33.5%. Respondents aged <45 most often reported no visits to their PHP (18.1%).

Figure R-87 Number of visits to personal health provider to get care vs. age (q23; n=1,786)

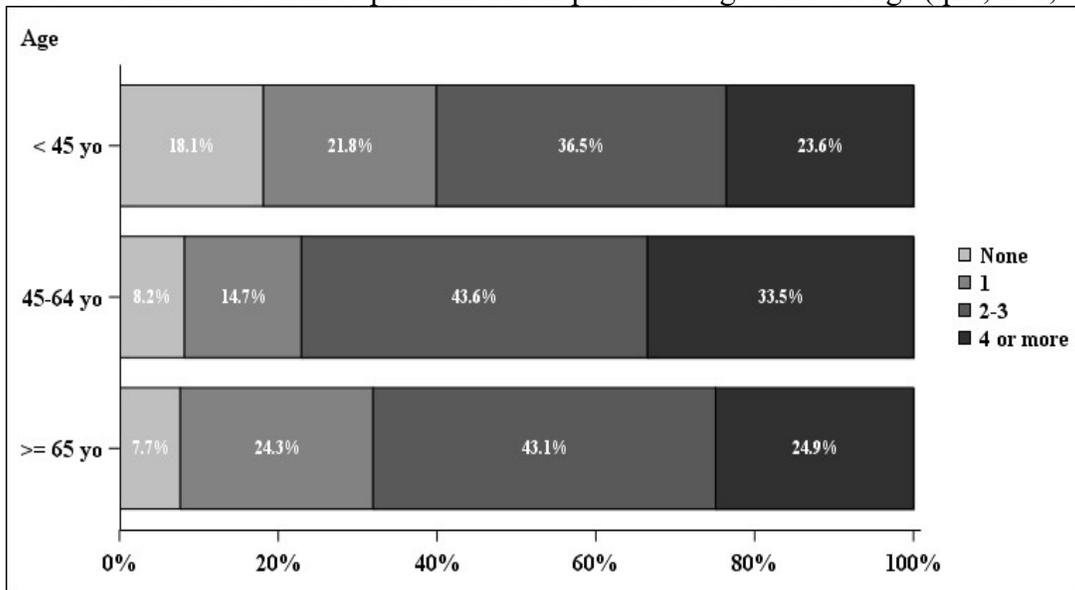


Figure R-88 shows how q23 responses varied with respondent education level. While generally reporting the most PHP visits, respondents with <HS Grad/GED also had the highest proportion that reported visiting their PHP 4 or more times at 31.6%. Respondents with >HS Grad/GED had the highest proportion that reported visiting their PHP once at 22.4%.

Figure R-88 Number of visits to personal health provider to get care vs. education (q23; n=1,761)

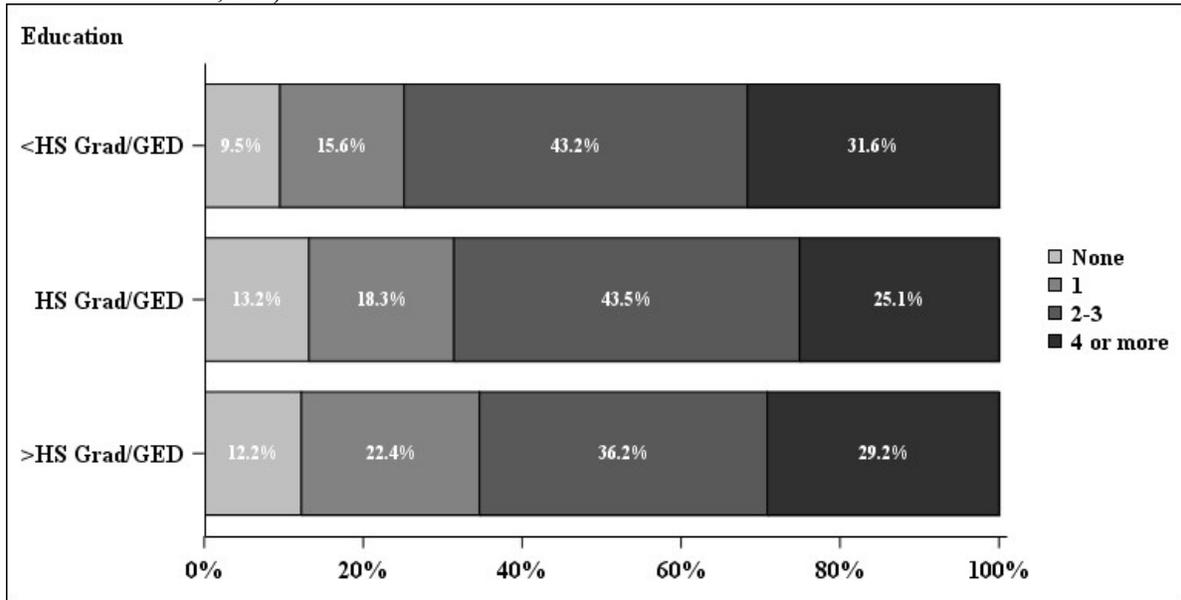
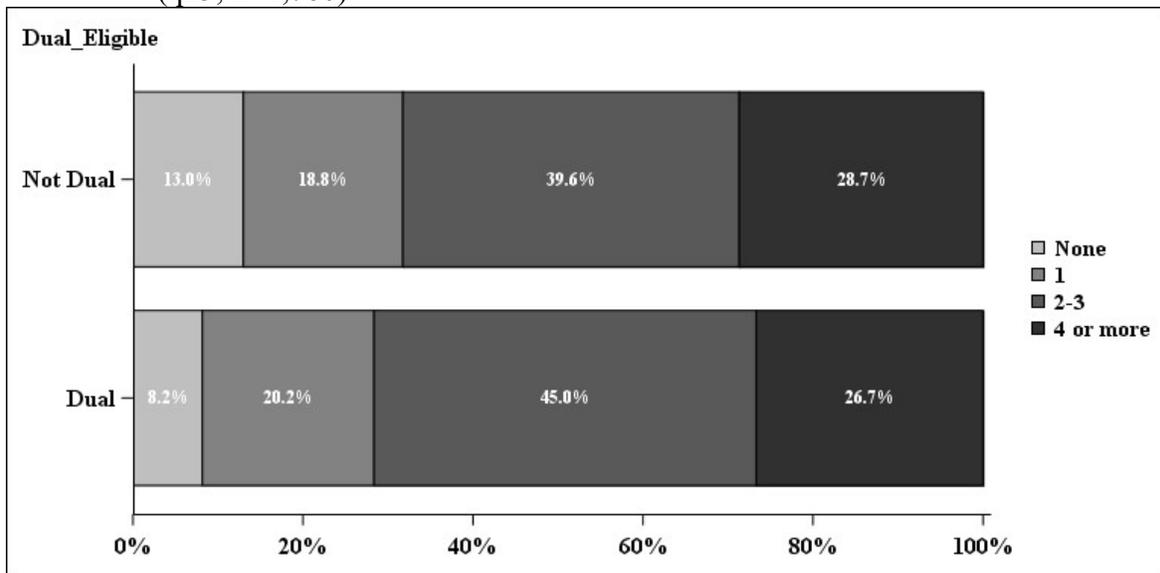


Figure R-89 shows the variation in q23 responses across dual-eligible status. Dual-eligible respondents least often indicated no visits to their PHP at 8.2%.

Figure R-89 Number of visits to personal health provider to get care vs. dual-eligible status (q23; n=1,786)



Personal health provider gives understandable explanations (q24, satisfaction)

Question 24 asked respondents how often, in the past 6 months, their personal health provider (PHP) provided explanations that were easy to understand. Figure R-90 indicates that the majority of respondents (82.1%) indicated their PHP “always” provided easily understandable explanations, 9.9% indicated usually, 6.9% and 2.0% reported that explanations were easy to understand sometimes and never, respectively.

Figure R-90 How often personal health provider gave understandable explanations (q24; n=1,691)

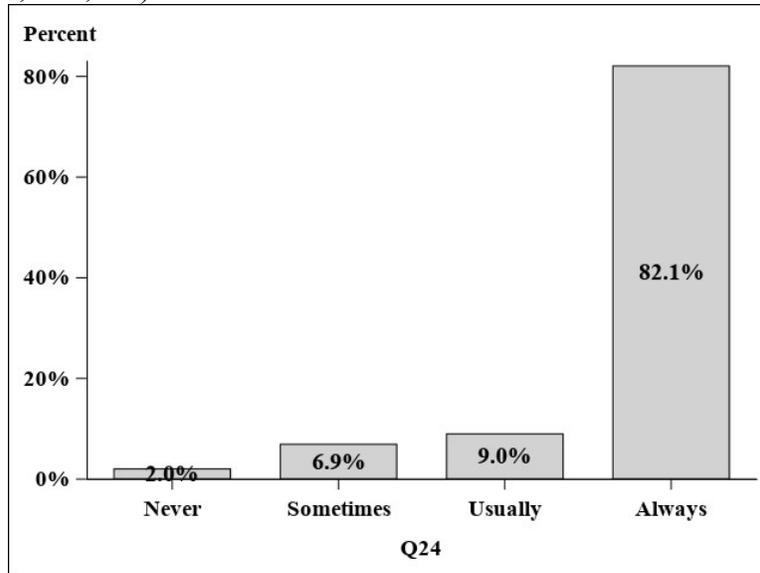
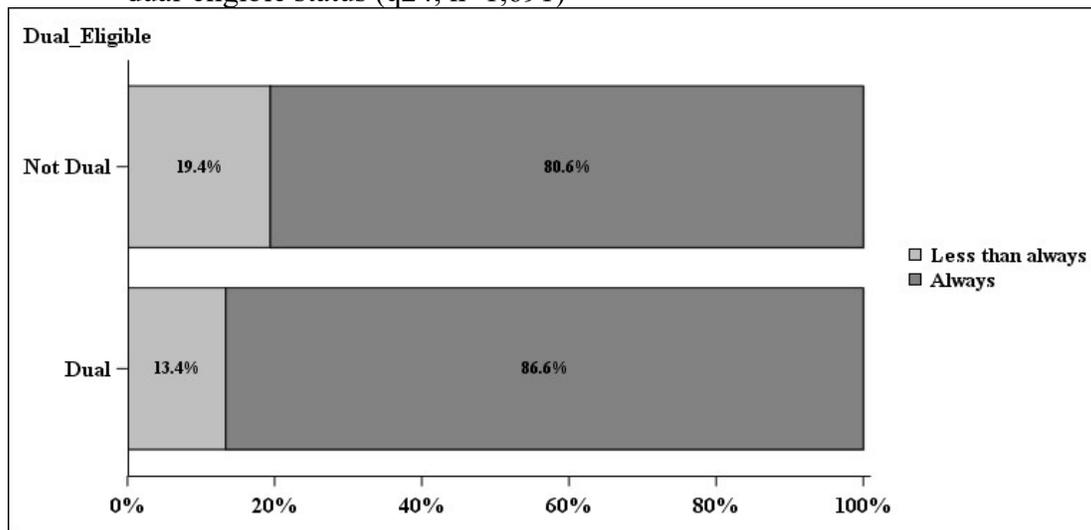


Figure R-91 shows the variation in q24 responses according to dual-eligible status. Non-dual eligible respondents more often reported their PHP’s explanations were not always easy to understand (19.4%).

Figure R-91 How often personal health provider gave understandable explanations vs. dual-eligible status (q24; n=1,691)



Provider listens carefully to respondent (q25, satisfaction)

Question 25 asked respondents how often, in the past 6 months, their personal health provider (PHP) listen carefully to them. Figure R-92 shows that 83.4% of respondents indicated that their PHP always listened carefully, 8.2%, 6.8% and 1.6% reported that the PHP listened carefully usually, sometimes and never, respectively.

Figure R-92 Provider listens carefully to respondent (q25; n=1,689)

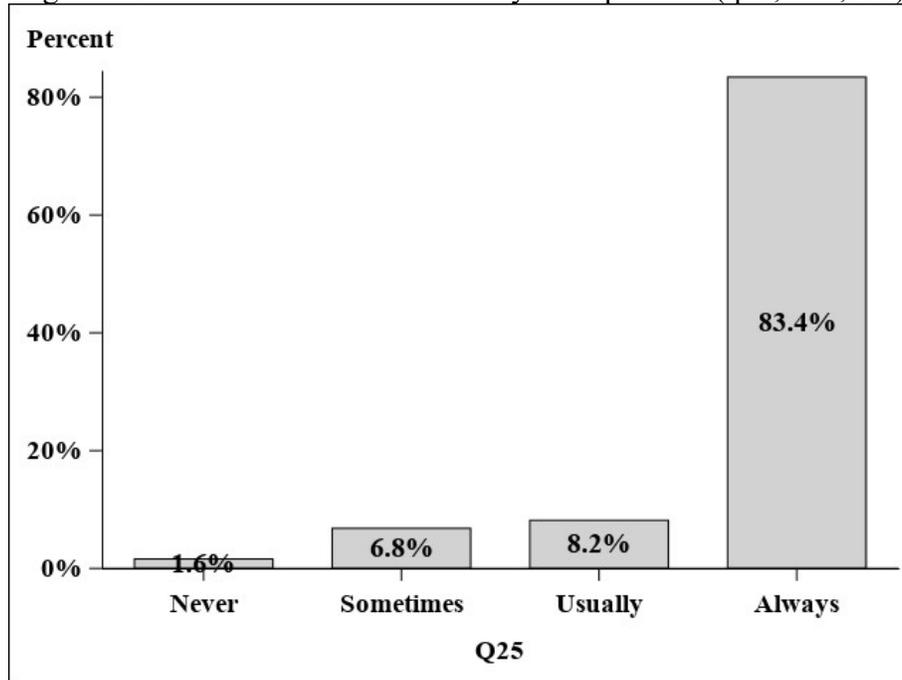


Figure R-93 demonstrates how q25 responses varied with respondent age. Respondents aged <45 years most often indicated that their PHP listened carefully “less than always” (19.6%), while older respondents aged ≥65 years least often indicated the same at 12.8%.

Figure R-93 Provider listens carefully to respondent vs. age (q25; n=1,689)

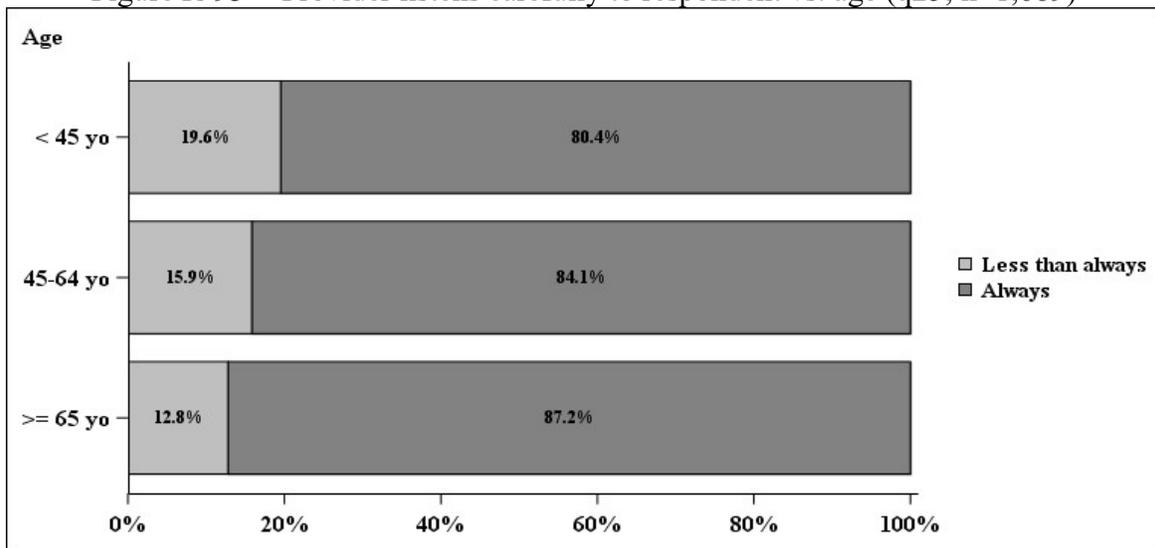


Figure R-94 shows how q25 responses varied with respondent race. Whites most often reported that their provider listened carefully “less than always” at 20.3%. Blacks least frequently reported the same at 12.1%.

Figure R-94 Provider listens carefully to respondent vs. race (q25; n=1,689)

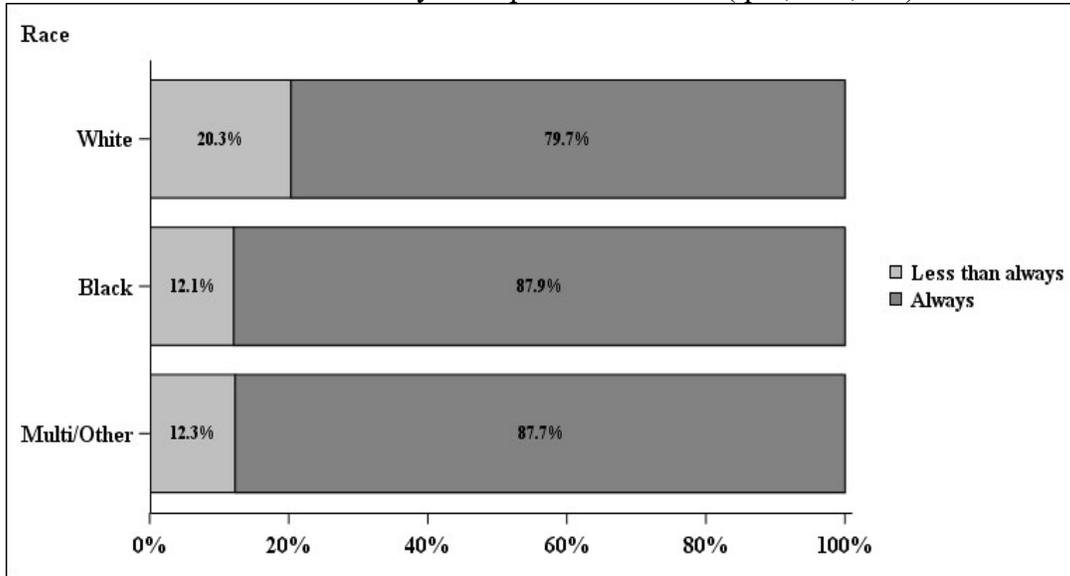
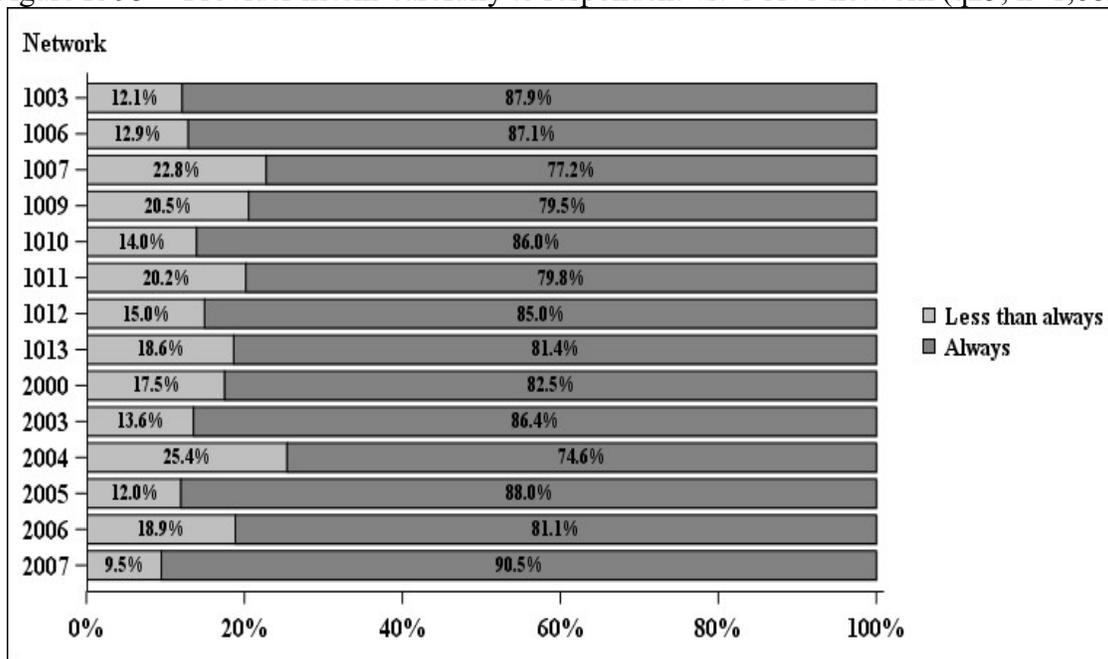


Figure R-95 exhibits how q25 responses varies with respondent CCNC network. While 90.5% of respondents in Northern Piedmont Community Care (2007) said their respondent always listened carefully, only 74.6% of those in Community Care of the Lower Cape Fear (2004) said the same.

Figure R-95 Provider listens carefully to respondent vs. CCNC network (q25; n=1,689)



Language barriers made understanding the personal health provider difficult (q26, satisfaction)

Question 26 asked respondents how often, in the past 6 months, they had a hard time speaking with or understand their personal health provider (PHP) because of a language barrier. Figure R-96 demonstrates that only 82.9% never had a language barrier when speaking with their PHP, while 8.8%, 1.3%, and 7.0% sometimes, usually, and always, respectively, had the same issue.

Figure R-96 Language barriers made understanding the personal health provider difficult (q26; n=1,664)

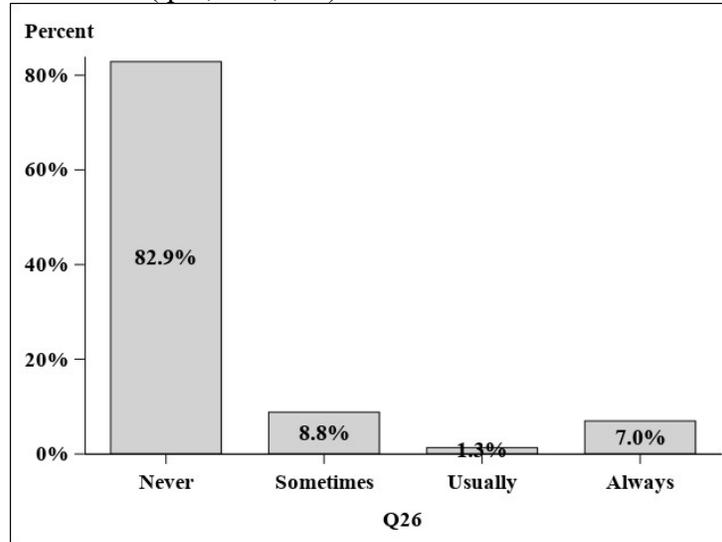


Figure R-97 exhibits the variation in responses to q26 and age. Respondents aged 65 or older more often had a language barrier with their PHP (12.2%) than those aged 45-64 and less than 45 years at 6.9% and 4.3%, respectively.

Figure R-97 Language barriers made understanding the personal health provider difficult vs. age (q26; n=1,664)

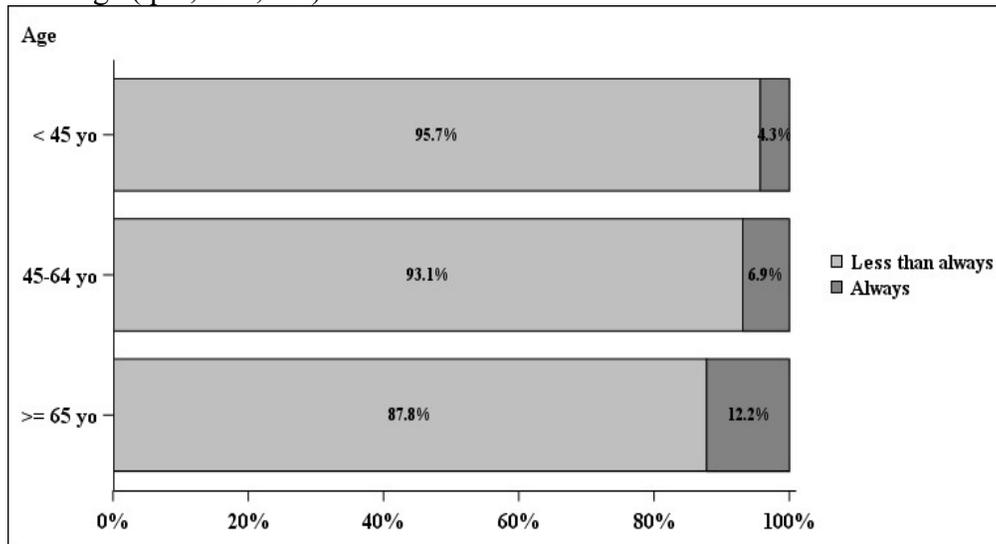


Figure R-98 shows how responses to q26 varied with race. A higher proportion of Black respondents indicated that they always had a language barrier with their PHP (9.9%) as compared to White respondents (4.9%).

Figure R-98 Language barriers made understanding the personal health provider difficult vs. race (q26; n=1,664)

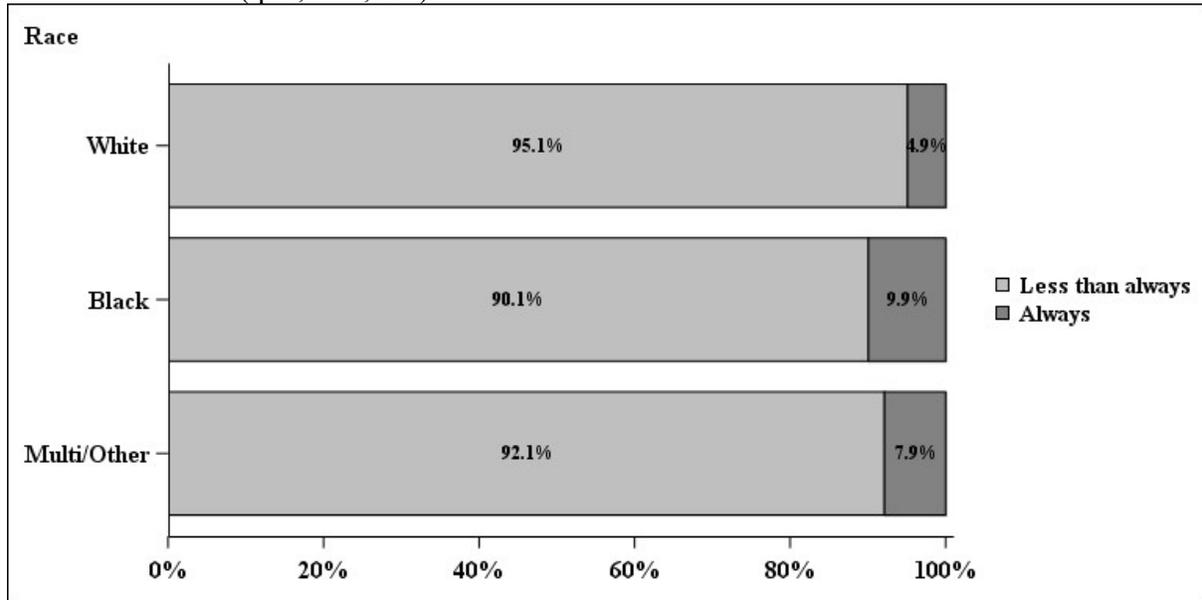
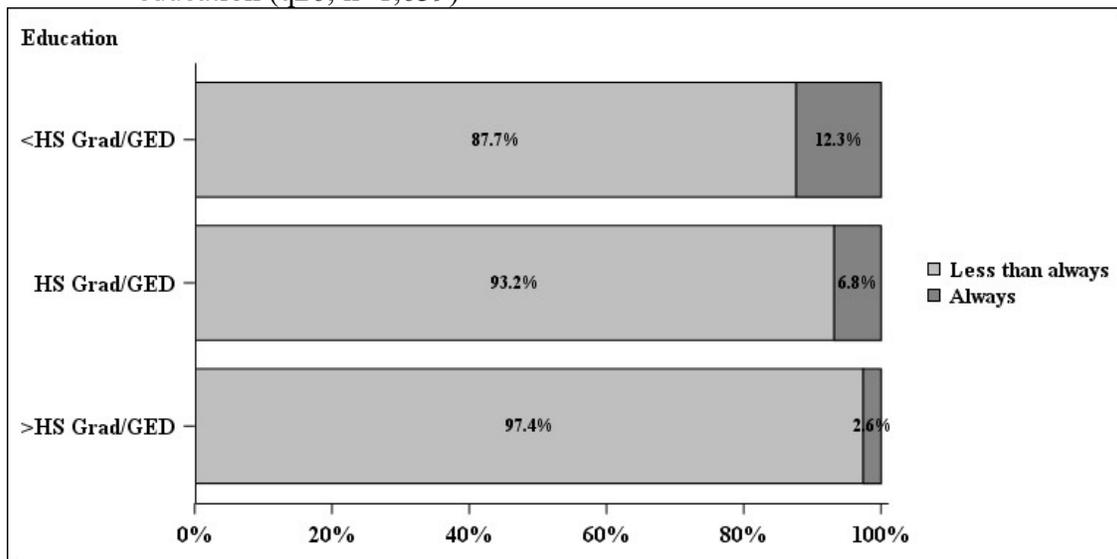


Figure R-99 demonstrates how responses to q26 varied across education levels. Twelve-point three percent (12.3%) of respondents with <HS Grad/GED reported always having a language barrier with their PHP while only 2.6% of those with >HS Grad/GED reported the same.

Figure R-99 Language barriers made understanding the personal health provider difficult vs. education (q26; n=1,639)



Personal health provider showed respect for respondent input (q27, satisfaction)

Question 27 asked respondents how often, in the past 6 months, their personal health provider (PHP) showed respect for what they had to say. Figure R-100 reveals that 86.4% of PHPs always showed respect for what the respondent had to say while 6.4%, 5.6%, and 1.6%, usually, sometimes, and never, showed respect for what the respondent had to say.

Figure R-100 Personal health provider showed respect for respondent input (q27; n=1,689)

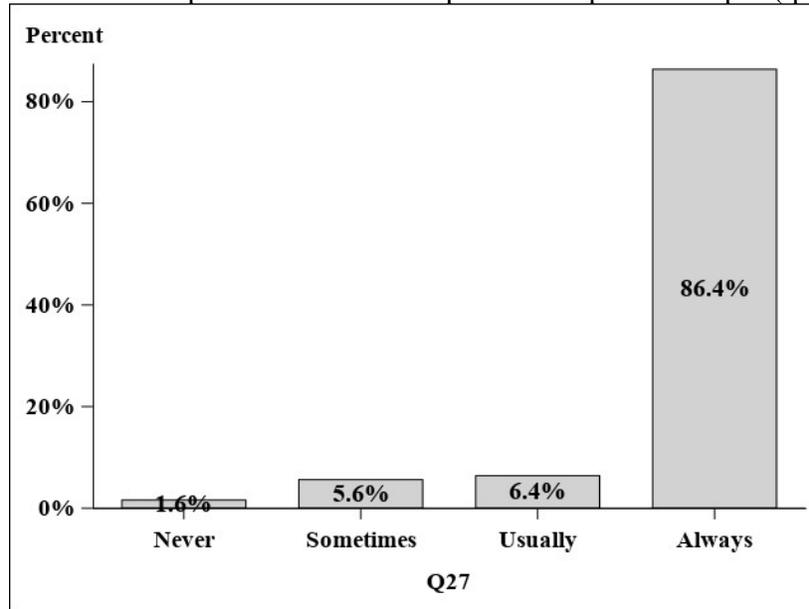
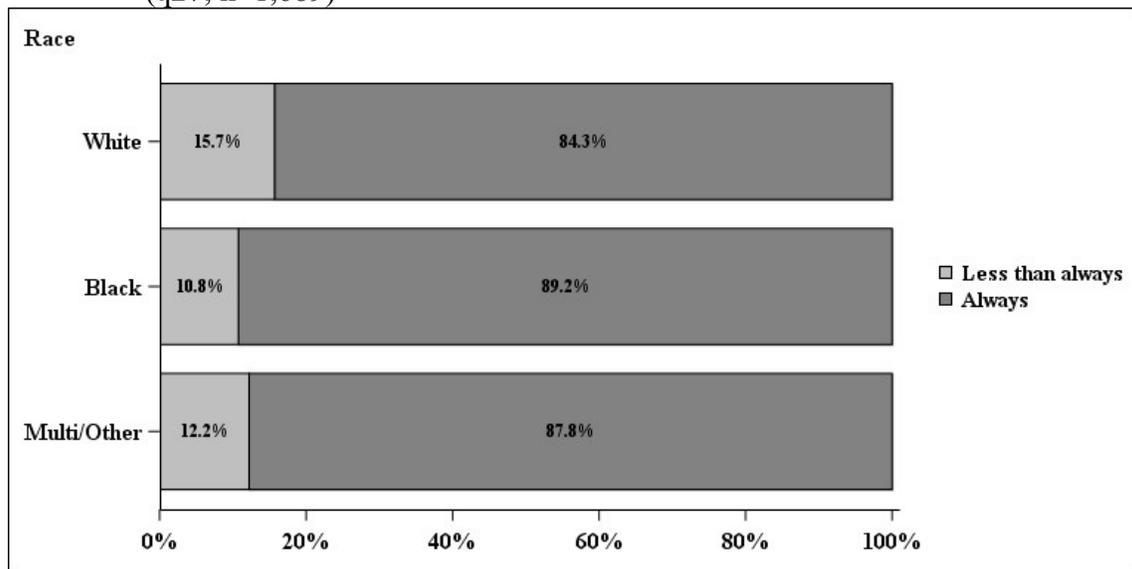


Figure R-101 shows how response to q27 varied with respondent race. While 15.7% of White respondents indicated their PHP showed respect for their input less than always, only 10.8% of Black respondents said the same.

Figure R-101 Personal health provider showed respect for respondent input vs. race (q27; n=1,689)



Personal health provider spent enough time with respondent (q28, satisfaction)

Question 28 asked respondents how often, in the past 6 months, their personal health provider spent enough time with them. Figure R-102 shows that 78.7% reported that their PHP spent enough time with them, while 10.9%, 8.7% and 1.6%, spent enough time with the respondents usually, sometimes, and never, respectively.

Figure R-102 Personal health provider spent enough time with respondent (q28; n=1,684)

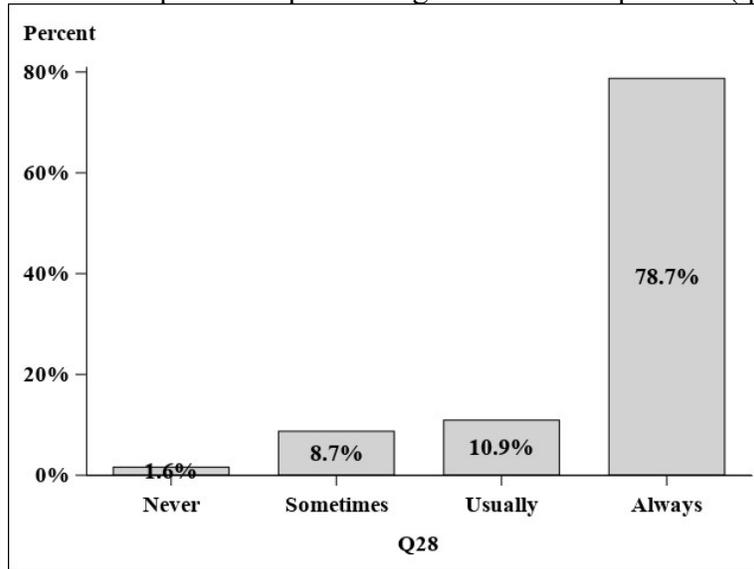
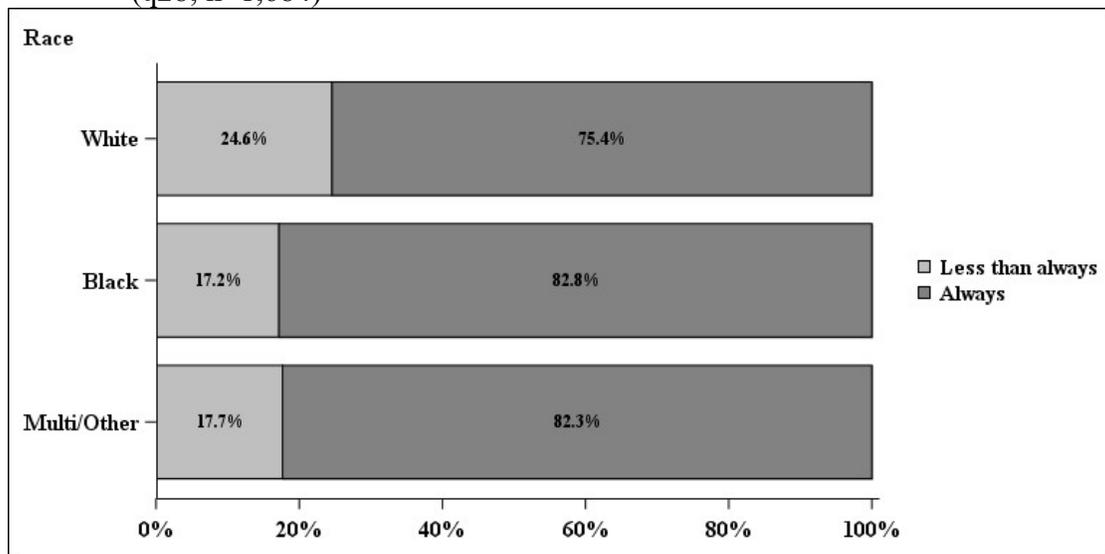


Figure R-103 shows how responses to q28 varied with race. White respondents more often reported that their PHP “less than always” spent enough time with them (24.6%), while Black respondents less often reported the same (17.2%).

Figure R-103 Personal health provider spent enough time with respondent vs. race (q28; n=1,684)



Decisions made about respondent's health care (q29, satisfaction)

Question 29 asked respondents if, in the past 6 months, any decisions were made about their health care. Figure R-104 demonstrates that 62.0% of respondents said that they made decisions about their health care with their PHP, while 38.0% said they did not.

Figure R-104 Decisions made about respondent's health care (q29; n=1,645)

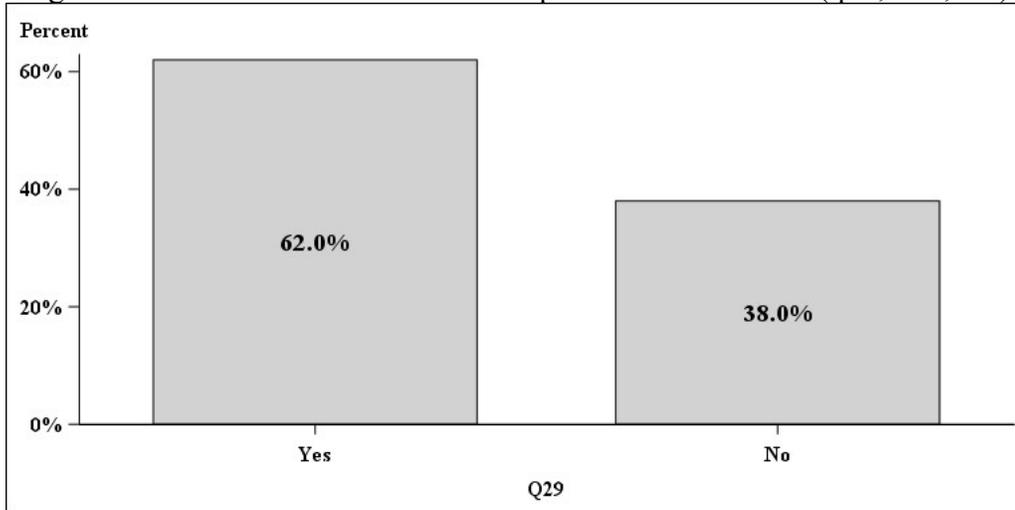


Figure R-105 shows how responses to q29 varied with age. The greatest proportion that reported decisions were made about their healthcare were those aged 45-64 (68.7%) while only 53.9% of those aged 65 and older provided the same response.

Figure R-105 Decisions made about respondent's health care vs. age (q29; n=1,645)

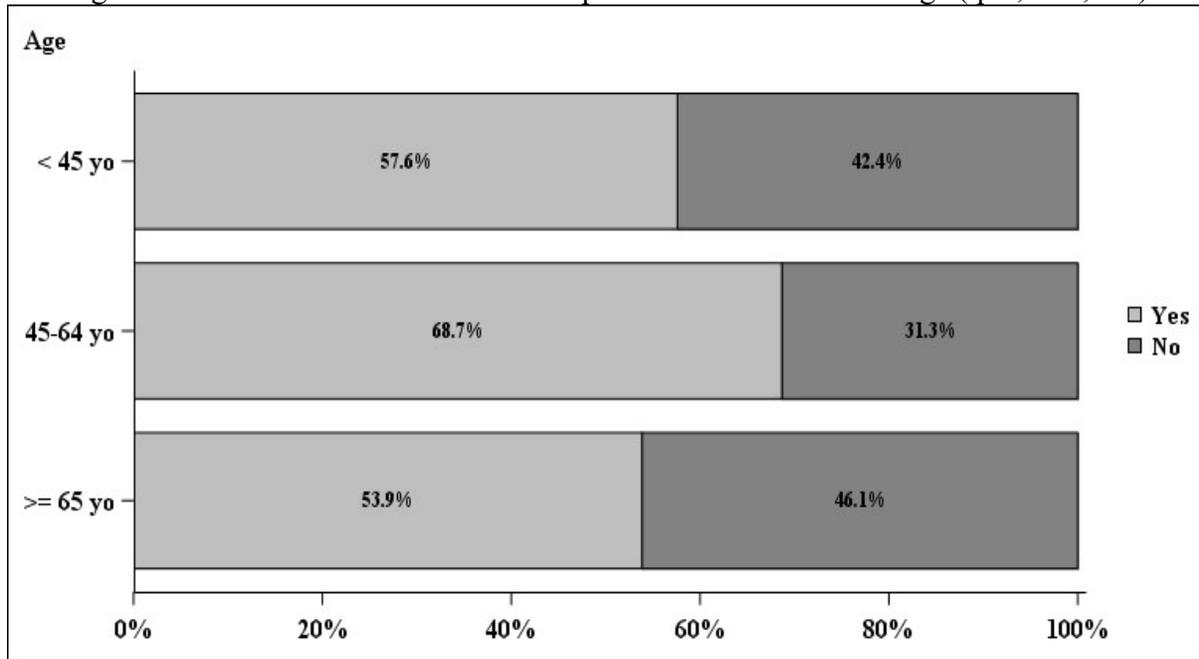


Figure R-106 reveals how responses to q29 varied with race. Blacks least often reported that decisions were made about their healthcare at 57.9%.

Figure R-106 Decisions made about respondent's health care vs. race (q29; n=1,645)

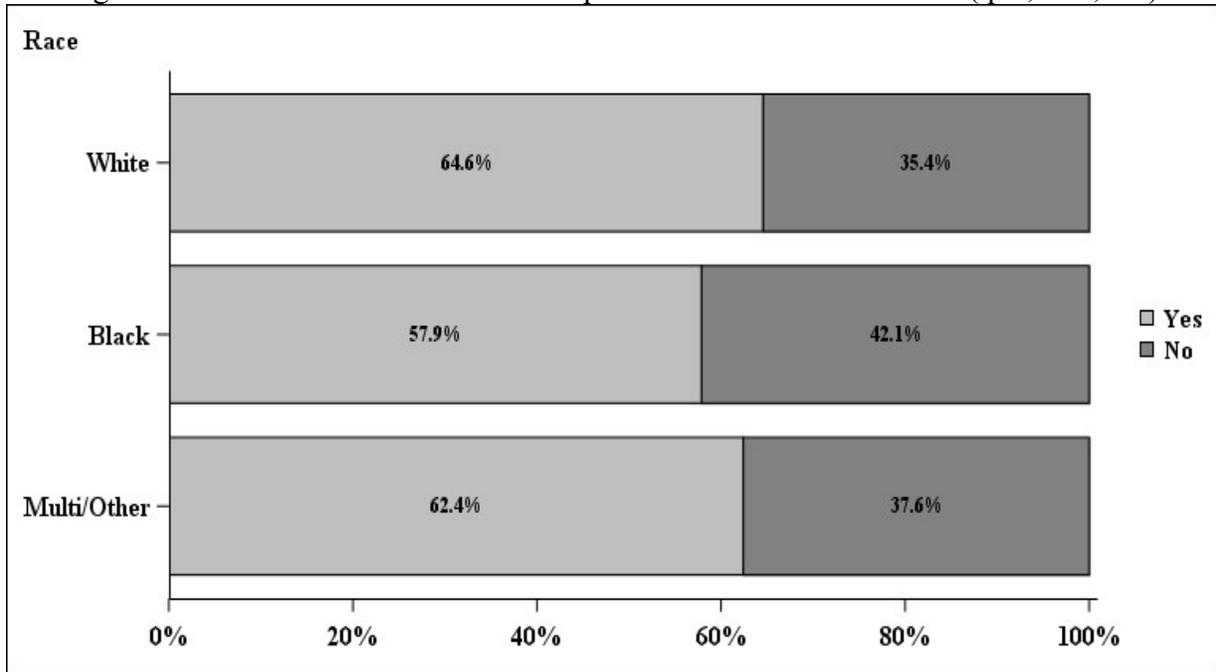
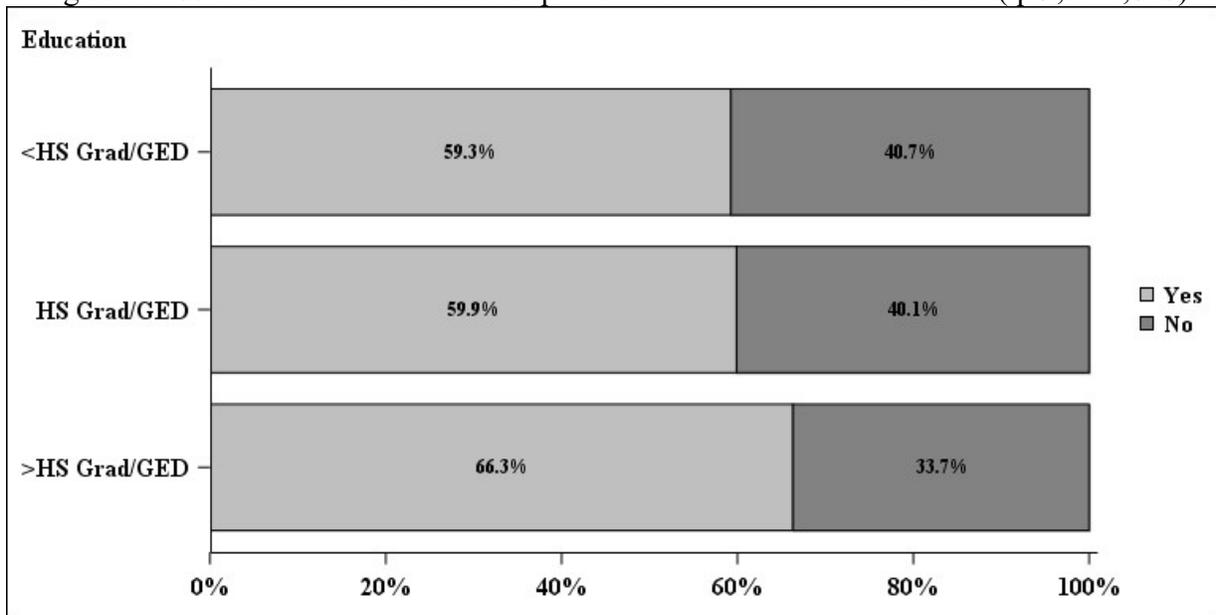


Figure R-107 shows how responses to q29 varied with education level. Respondents with >HS Grad/GED more often reported that decisions were made about their healthcare at 66.3%.

Figure R-107 Decisions made about respondent's health care vs. education (q29; n=1,620)



Respondent involved enough in decisions about health care (q30, satisfaction)

Question 30 asked respondents how often, in the past 6 months, they were involved as much as they wanted in decisions about their health care. Figure R-108 demonstrates that 79.2% of respondents indicated that they were always involved enough in decisions about their health care, while 11.3%, 7.8% and 1.7%, indicated they were usually, sometimes, and never, respectively, involved enough in these decisions.

Figure R-108 Respondent involved enough in decisions about health care (q30; n=1,015)

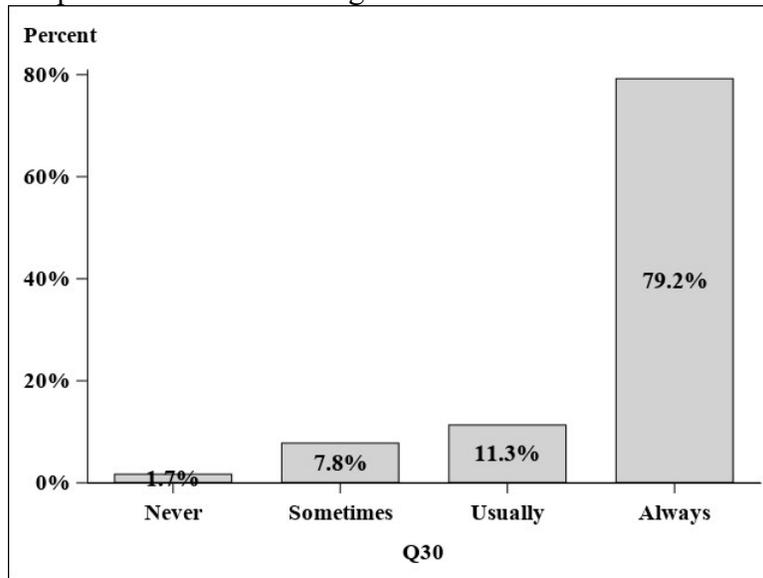
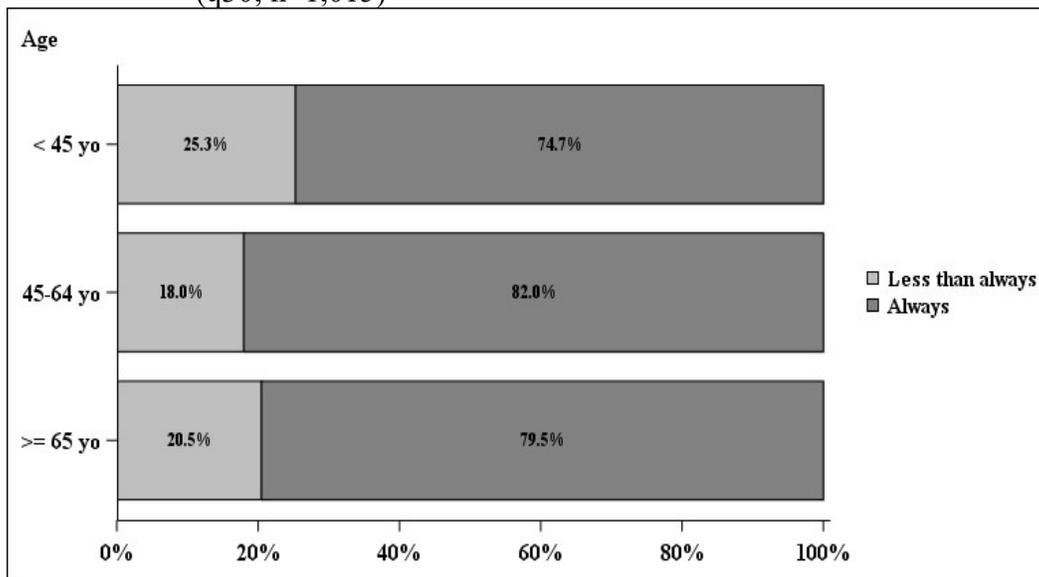


Figure R-109 shows how responses to q30 varied with age. Respondents aged less than 45 years least often indicated that they were always involved enough in health care decisions at 74.7%.

Figure R-109 Respondent involved enough in decisions about health care vs. age (q30; n=1,015)



Respondents and providers agreeing on health care management (q31, satisfaction)

Question 31 asked respondents how often, in the past 6 months, was it easy to get their personal health providers to agree with them on the best way to manage their health conditions or problems. Figure R-110 shows that 59.4% of respondents found it was always easy to come to an agreement, while 23.8%, 15.0%, and 1.8%, found it was usually, sometimes, and never easy, respectively, to come to an agreement on the best way to manage their health conditions.

Figure R-110 Respondents and providers agreeing on health care management (q31; n=1,005)

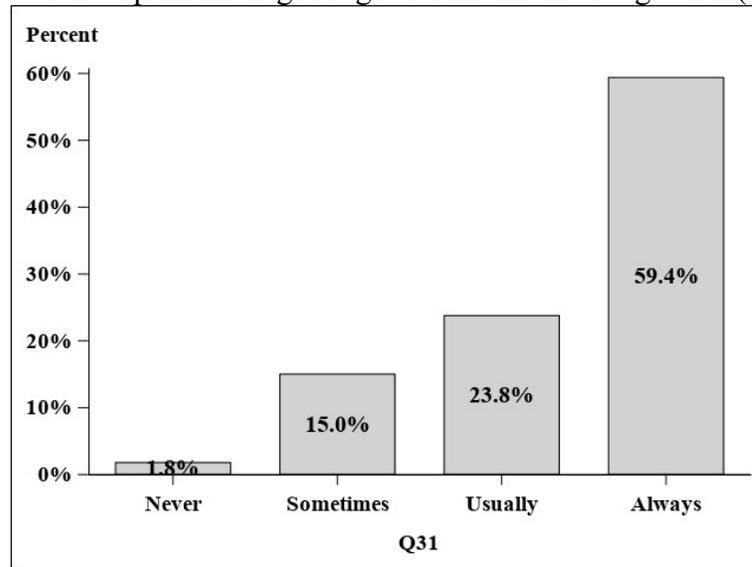
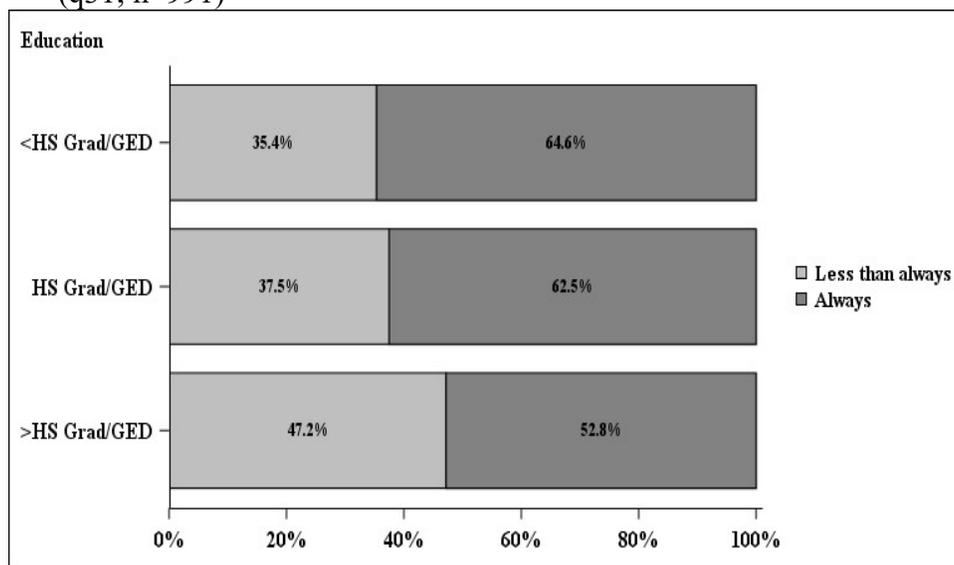


Figure R-111 shows how responses to q31 varied with education level. Only 52.8% of respondents with >HS Grad/GED found it always easy to come to agreement with their PHP on management of their health care.

Figure R-111 Respondents and providers agreeing on health care management vs. education (q31; n=991)



Utilizing providers other than personal health provider (q32, utilization)

Question 32 asked respondents if, in the past 6 months, they got care from a provider other than their personal health provider. Figure R-112 shows that 63.2% of respondents did get care from multiple providers, while 36.8% did not.

Figure R-112 Utilizing providers other than personal health provider (q32; n=1,685)

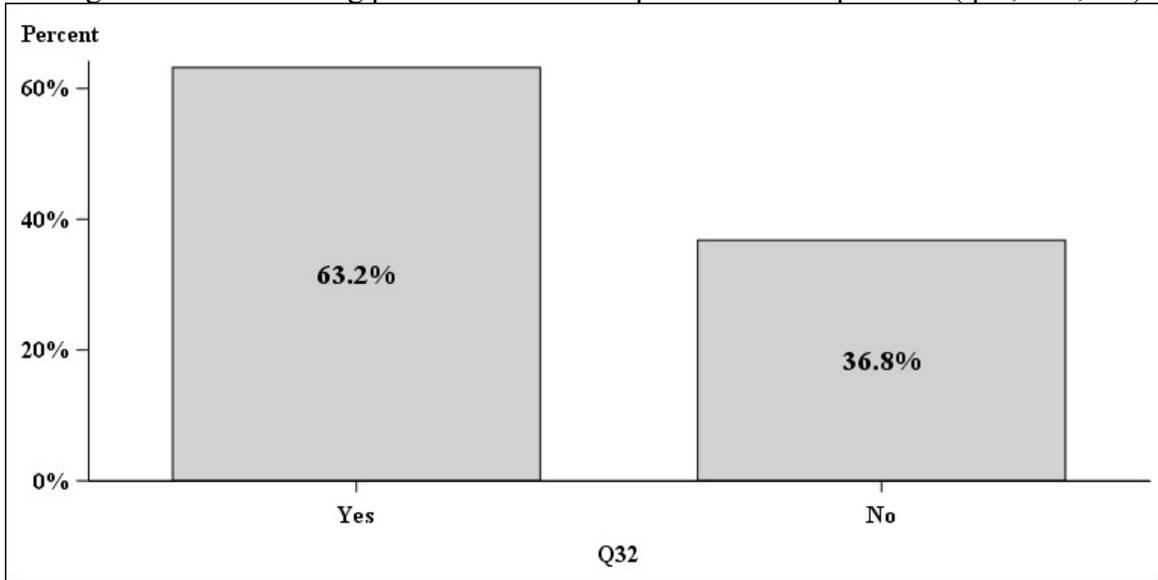


Figure R-113 describes the variation in responses to q32 across respondent age. Respondents aged 65 years and older had the lowest proportion that utilized multiple health providers at 54.7%.

Figure R-113 Utilizing providers other than personal health provider vs. age (q32; n=1,685)

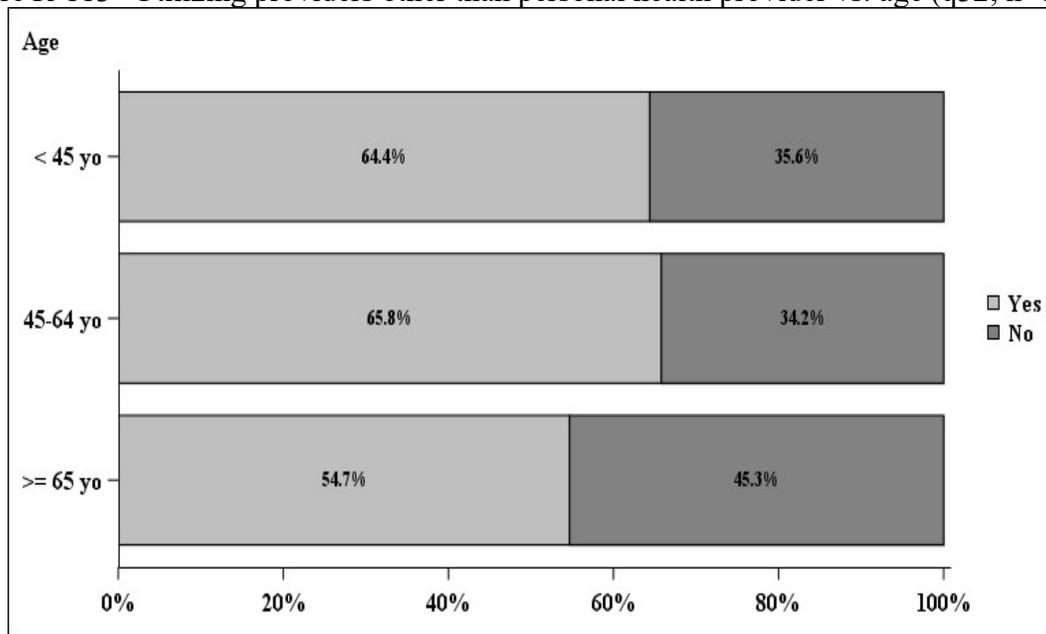


Figure R-114 reveals how responses to q32 varied with sex of the respondent. Females had the greater proportion that utilized multiple health providers (66.1%) while only 58.1% of males reported the same.

Figure R-114 Utilizing providers other than personal health provider vs. sex (q32, n=1,685)

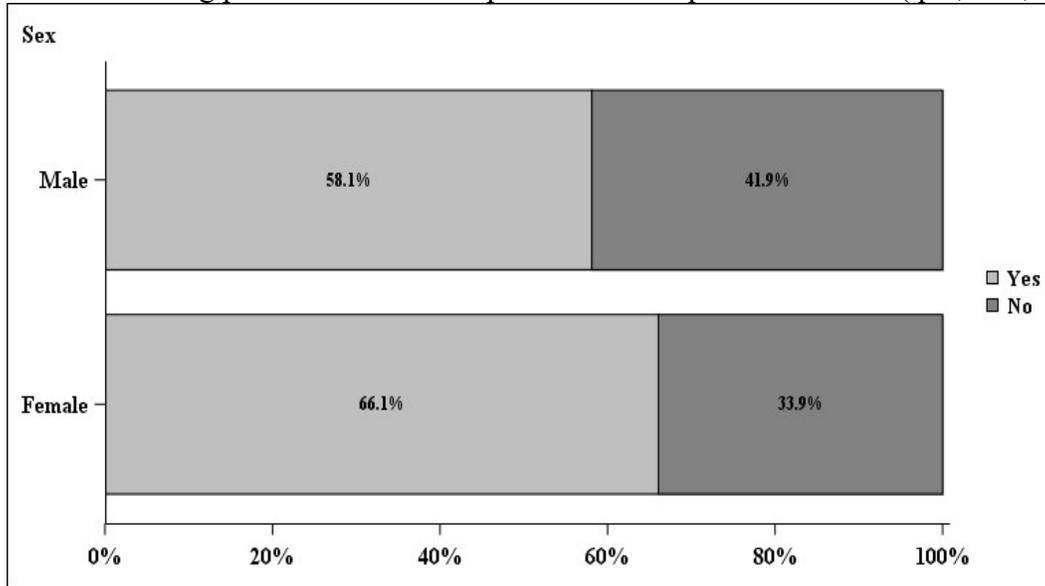


Figure R-115 reveals the variation in responses to q32 across race of the respondent. Whites more often indicated that they used multiple health providers (67.8% while Blacks less often reported the same at 56.9%.

Figure R-115 Utilizing providers other than personal health provider vs. race (q32; n=1,685)

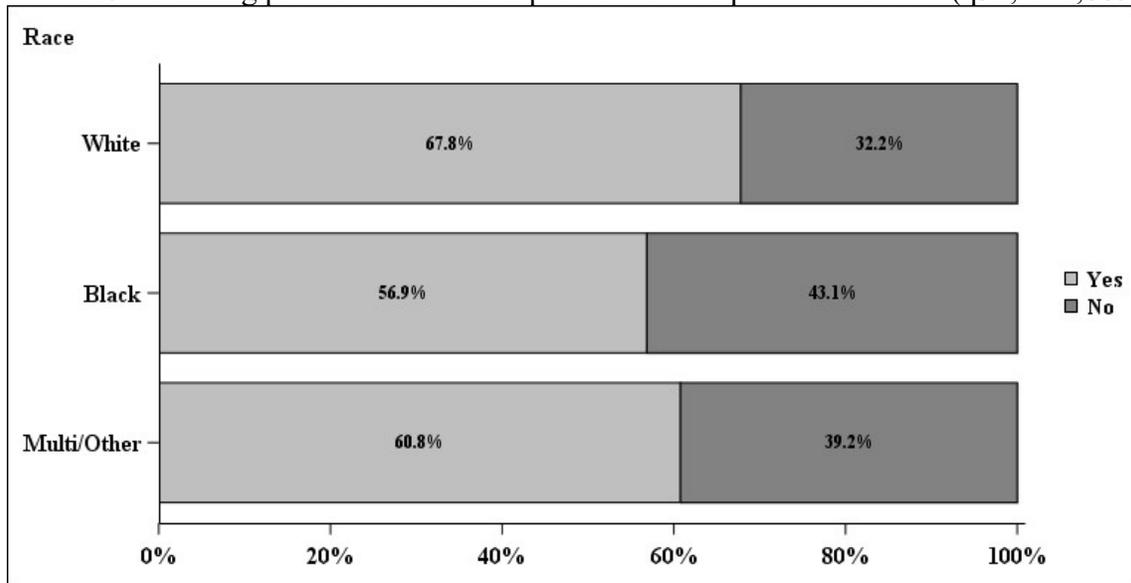
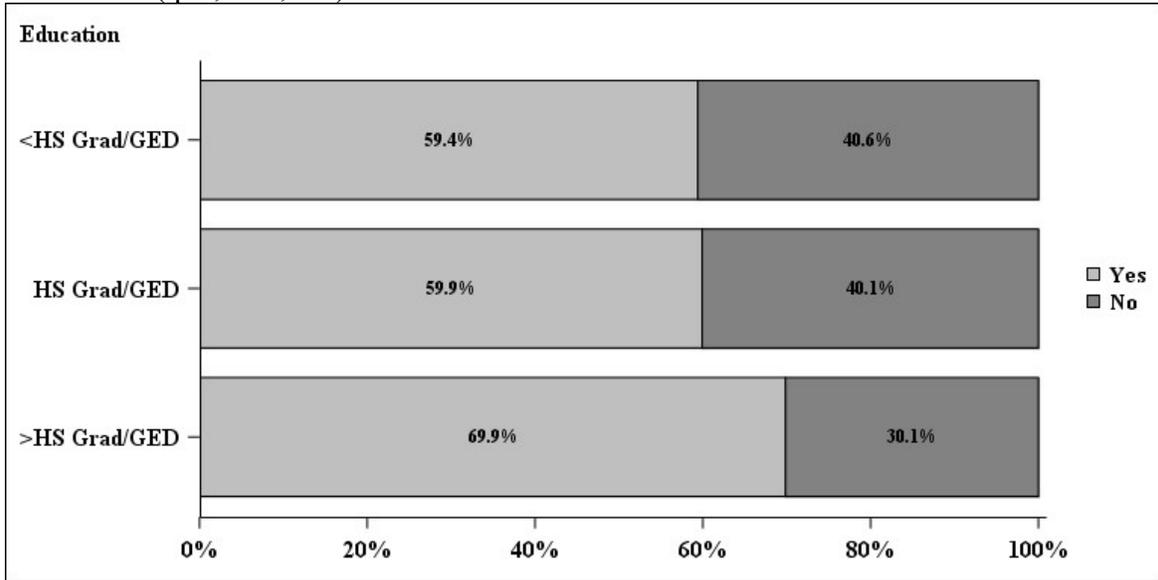


Figure R-116 shows the variation in q32 responses across education level. A higher proportion of respondents with >HS Grad/GED (69.9%) reported receiving care from multiple providers.

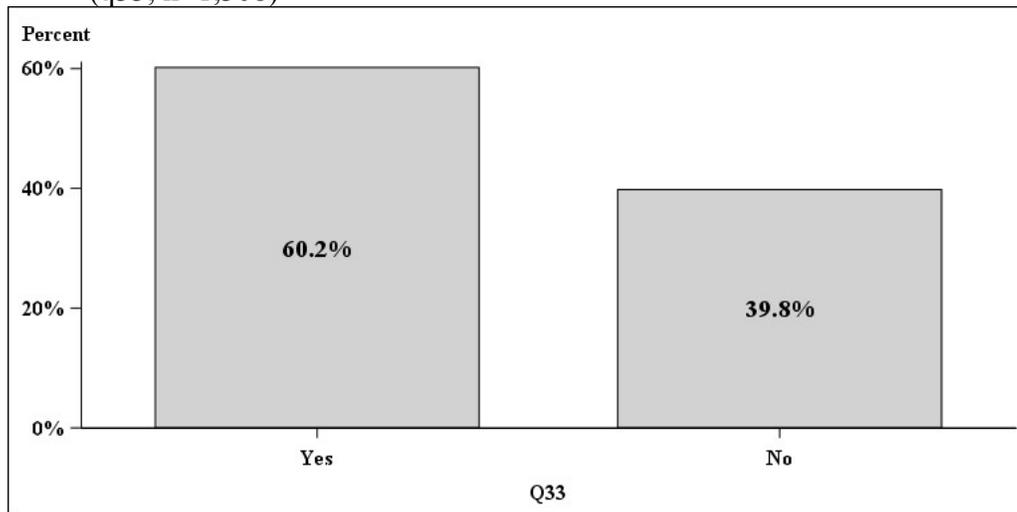
Figure R-116 Utilizing providers other than personal health provider vs. education (q32; n=1,658)



Help from personal health provider’s office or health plan to coordinate care (q33, access)

Question 33 asked respondents if, in the past 6 months, anyone from their doctor’s office, clinic, or Medicaid helped to coordinate care from other health providers who were not their own. Figure R-117 reveals that 60.2% of respondents indicated that they received help coordinating care, while 39.8% did not receive any help. We found no statistically significant relationships between q33 responses and any of the demographic or contextual variables.

Figure R-117 Help from personal health provider’s office or health plan to coordinate care (q33, n=1,308)



Satisfaction with help received to coordinate care (q34, satisfaction)

Question 34 asked respondents how satisfied they were, in the last 6 months, with the help they received to coordinate their care. Figure R-118 reveals that a large majority of respondents (92.8%) were satisfied with the help they received to coordinate their care.

Figure R-118 Satisfaction with help received to coordinate care (q34; n=602)

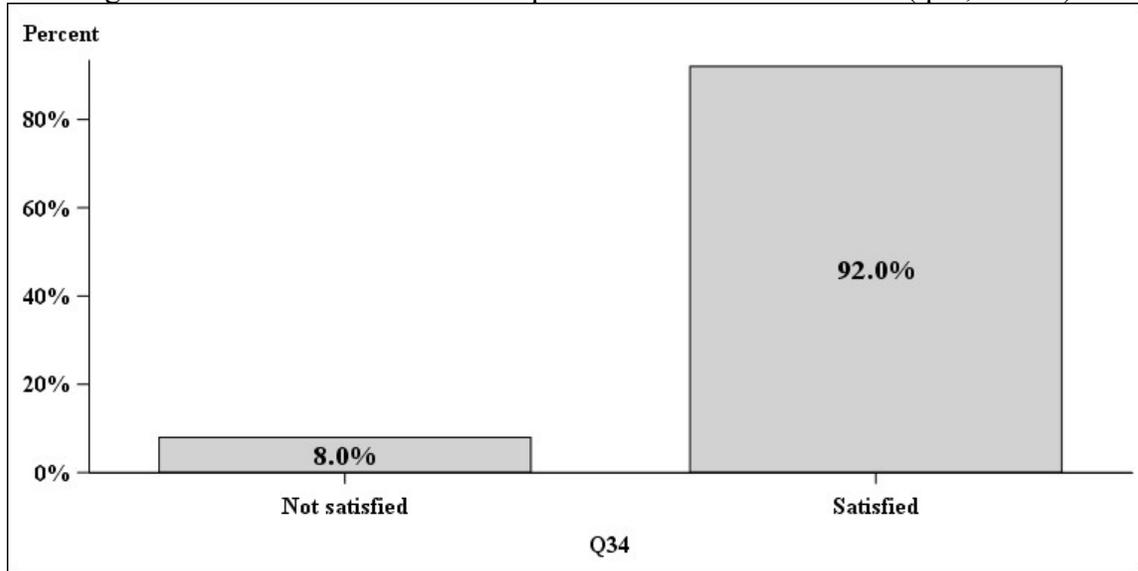
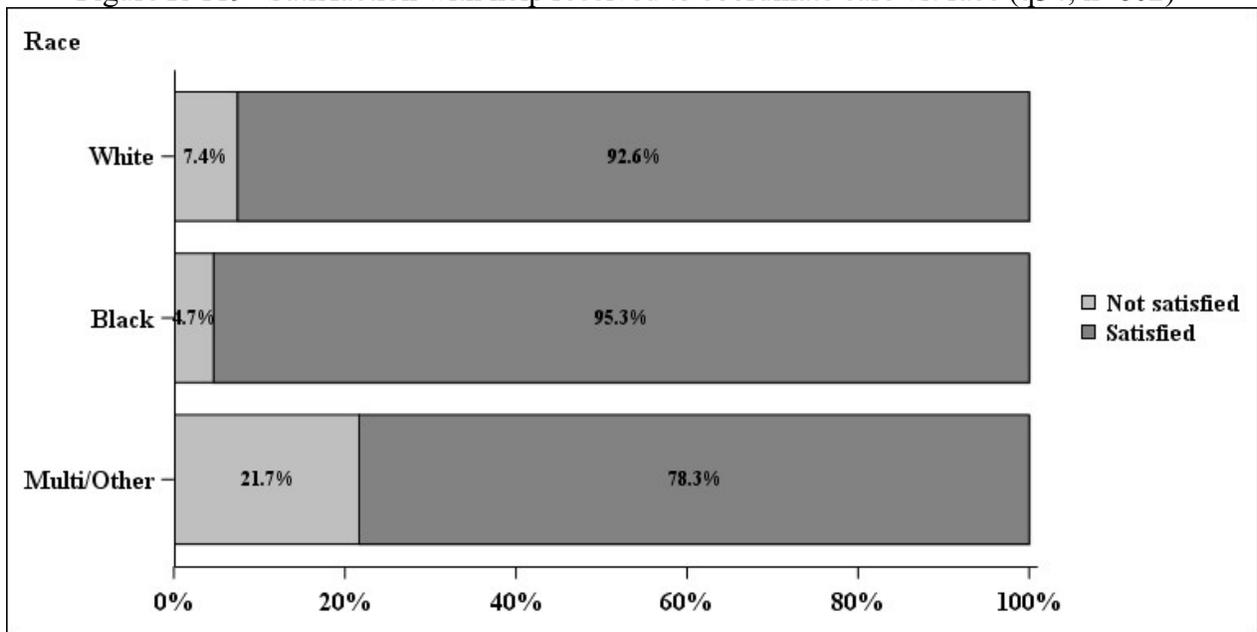


Figure R-119 demonstrates how responses to q34 varied across race. Multi/Other races had a significantly higher proportion of respondents (21.7%) who indicated that they were not satisfied with the help they received to coordinate their care.

Figure R-119 Satisfaction with help received to coordinate care vs. race (q34; n=602)



Needed help or advice from personal health provider's office after hours (q35A, utilization)

Question 35A asked respondents if, in the past 6 months, they needed help or advice and phoned their personal health providers office after regular hours. Figure R-120 reveals that 39.3% of respondents needed help from their PHP while 60.7% did not.

Figure R-120 Needed help or advice from personal health provider's office after hours (q35A; n=1,674)

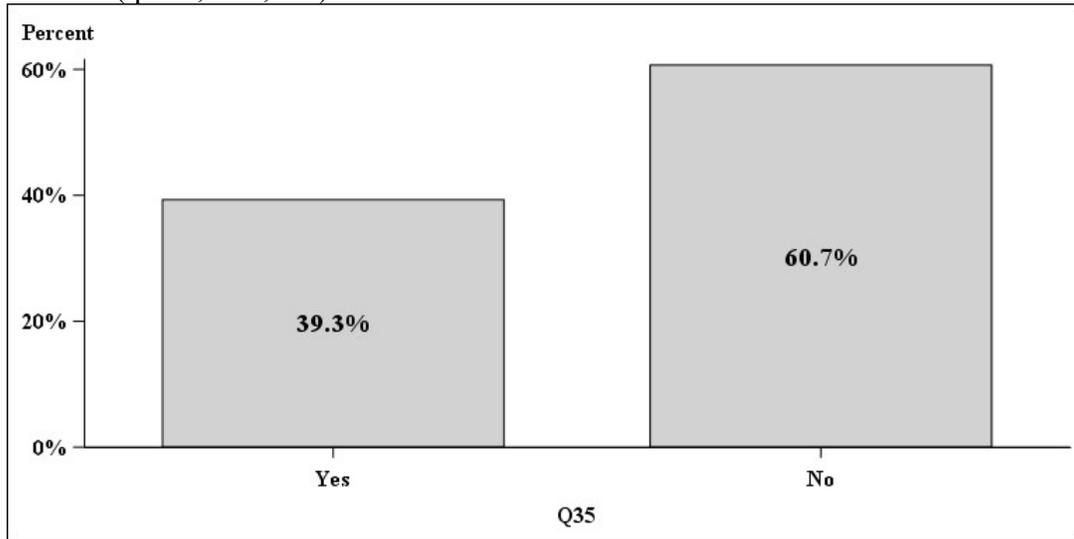


Figure R-121 shows how responses to q35A varied with age of the respondent. Respondents <45 years least often reported needing after hours help from their PHP at 35.2%.

Figure R-121 Needed help or advice from personal health provider's office after hours vs. age (q35A; n=1,674)

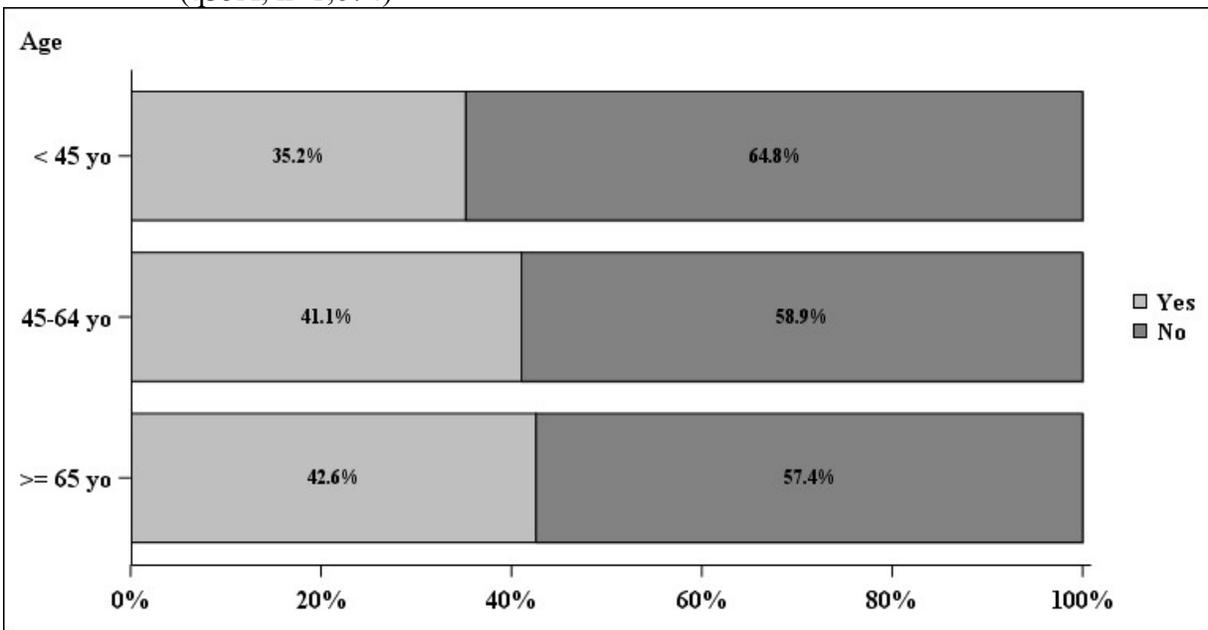
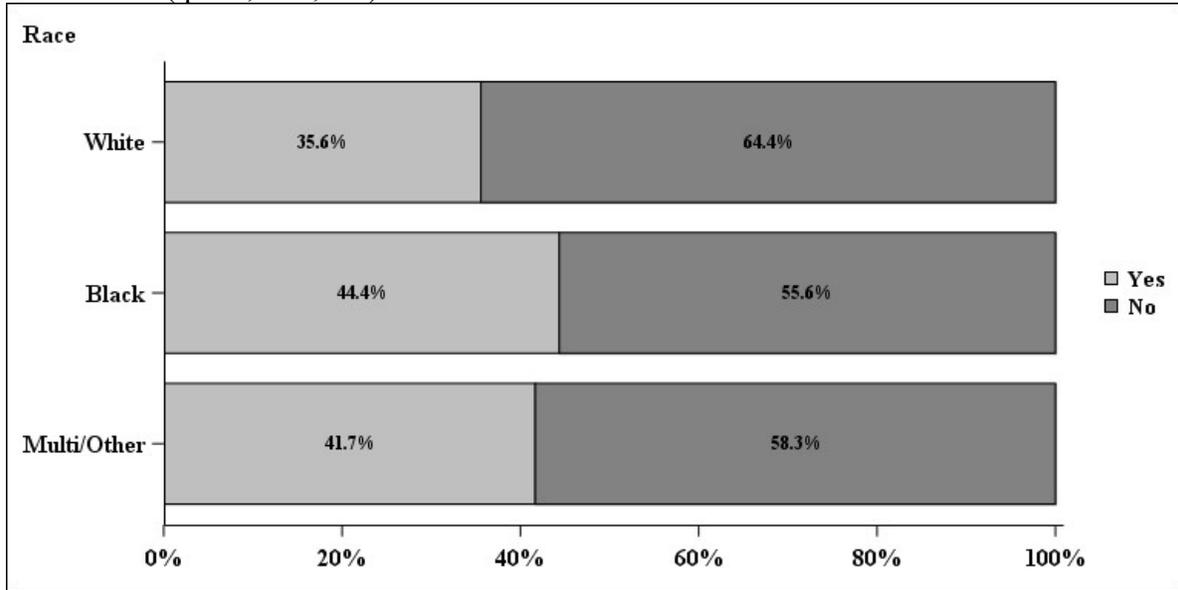


Figure R-122 shows how responses to q35A varied across race. A higher proportion of Blacks (44.4%) indicated they needed after hours help from their PHP while only 35.6% of Whites indicated the same.

Figure R-122 Needed after hours help or advice from personal health provider’s office vs. race (q35A; n=1,674)



Got help or advice from personal health provider’s office after hours (q35B, access)

Question 35B asked those respondents who phoned their PHPs in the past 6 months how often they got the help or advice they needed. Figure R-123 demonstrates that 54.4% of respondents reported that they always got after hours help when they needed it, while 17.8%, 16.3% and 11.6%, usually, sometimes and never, respectively, got the help when needed.

Figure R-123 Got after hours help or advice from personal health provider’s (q35B; n=658)

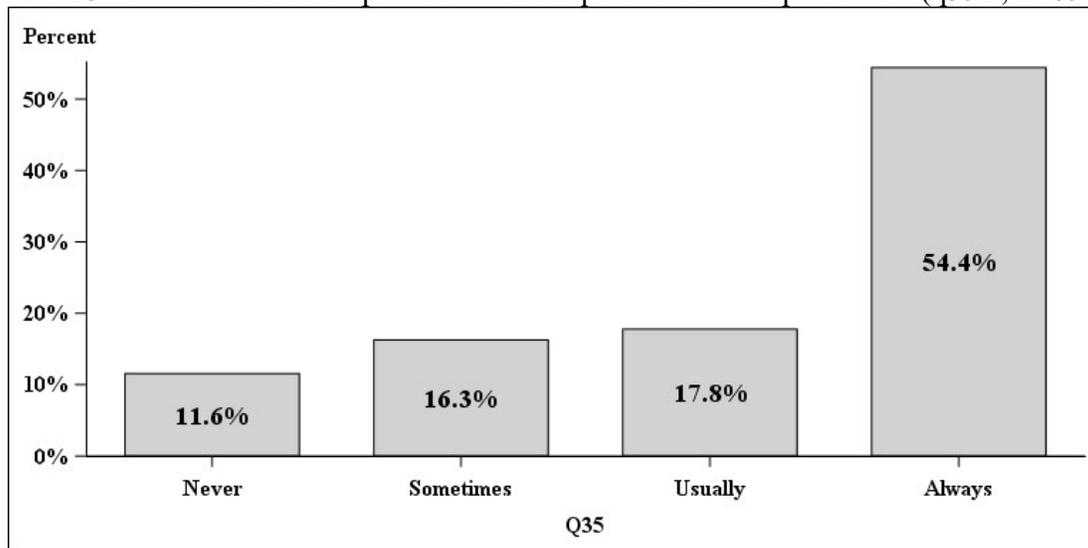
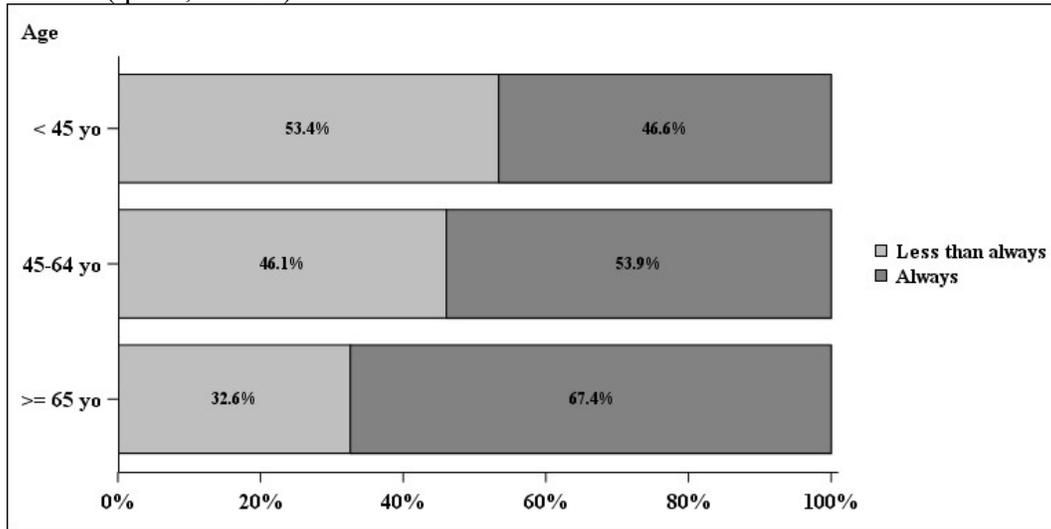


Figure R-124 shows how responses to q35B varied with age. A downward trend could be seen between respondent age and the frequency with which respondents got help, with younger respondents aged less than 45 years most often reporting “less than always” getting help after hours (53.4%) while only 32.6% of respondents aged 65 years or older reported the same.

Figure R-124 Got after hours help or advice from personal health provider’s office vs age (q35B; n=658)



Overall rating of the respondent’s personal health provider (q36, satisfaction)

Question 36 asked respondents to rate their personal health provider on a 0 to 10 scale, where 0 was the worst possible and 10 was the best possible. Figure R-125 reveals that 56.7% of respondents rated their PHP a 10, while 28.6% and 14.7% of respondents rated their PHP in the ranges of 8-9 and 0-7, respectively.

Figure R-125 Overall rating of the respondent’s personal health provider (q36, n=1,916)

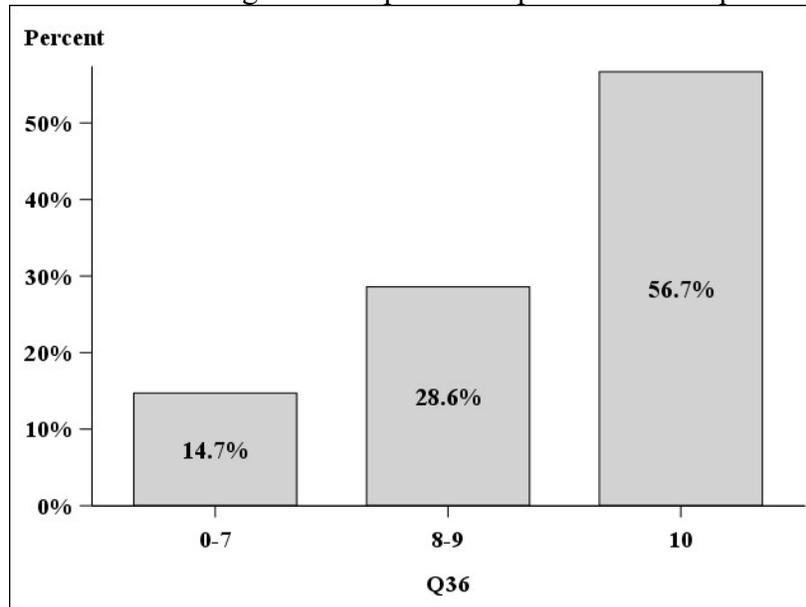


Figure R-126 demonstrates how responses to q36 varied with age of the respondent. A downward trend could be seen with respect to age and PHP rating, where younger respondents indicated less satisfaction with their providers compared to older respondents. Forty-seven point eight percent (47.8%) of those aged less than 45 years rated their PHPs less than a 10 (less than best possible), while only 38.3% of those aged 65 and older rated their PHPs the same.

Figure R-126 Overall rating of the respondent's personal health provider vs. age (q36; n=1,916)

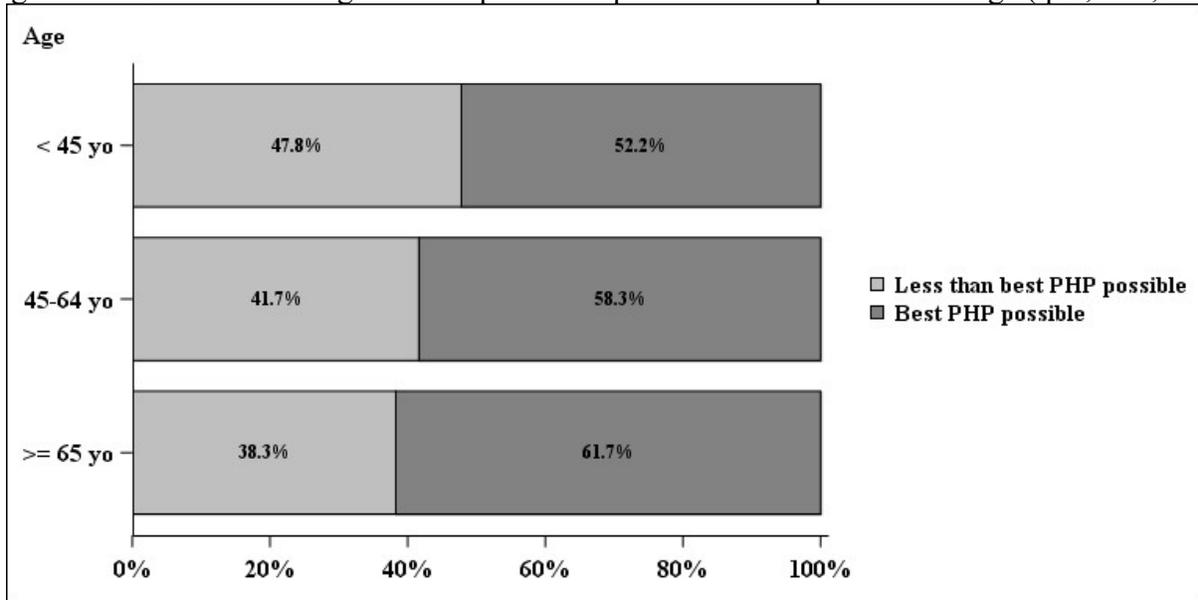


Figure R-127 indicates how responses to q36 varied with respondent education level. Only 38.8% of those with <HS Grad/GED rated their PHPs less than a 10 (less than best possible), while 46.5% of those with >HS Grad/GED indicated the same.

Figure R-127 Overall rating of the respondent's personal health provider vs. education (q36; n=1,885)

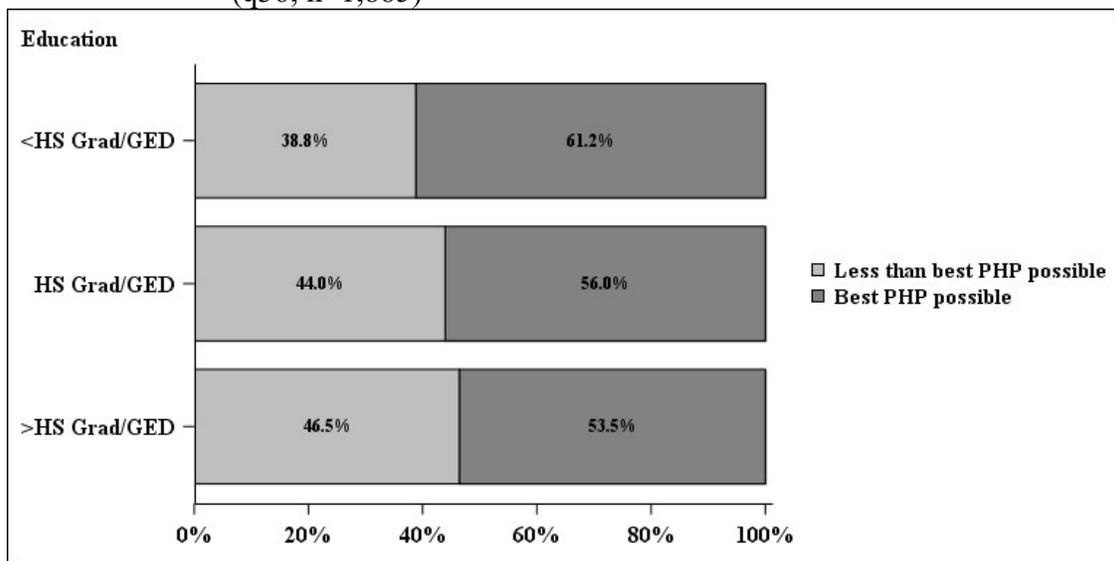


Figure R-128 shows how responses to q26 varied with dual-eligible status of the respondent. Dual-eligible respondents more often indicated PHP ratings of less than 10 (less than best possible) at 39.3% while 44.6% of non-duals indicated the same.

Figure R-128 Overall rating of the respondent’s personal health provider vs. dual-eligible status (q36; n=1,916)

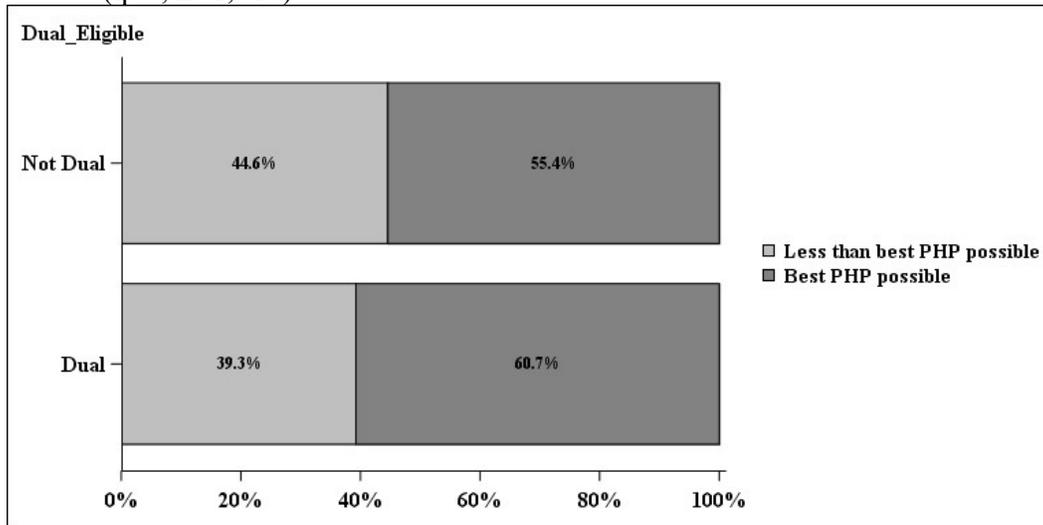
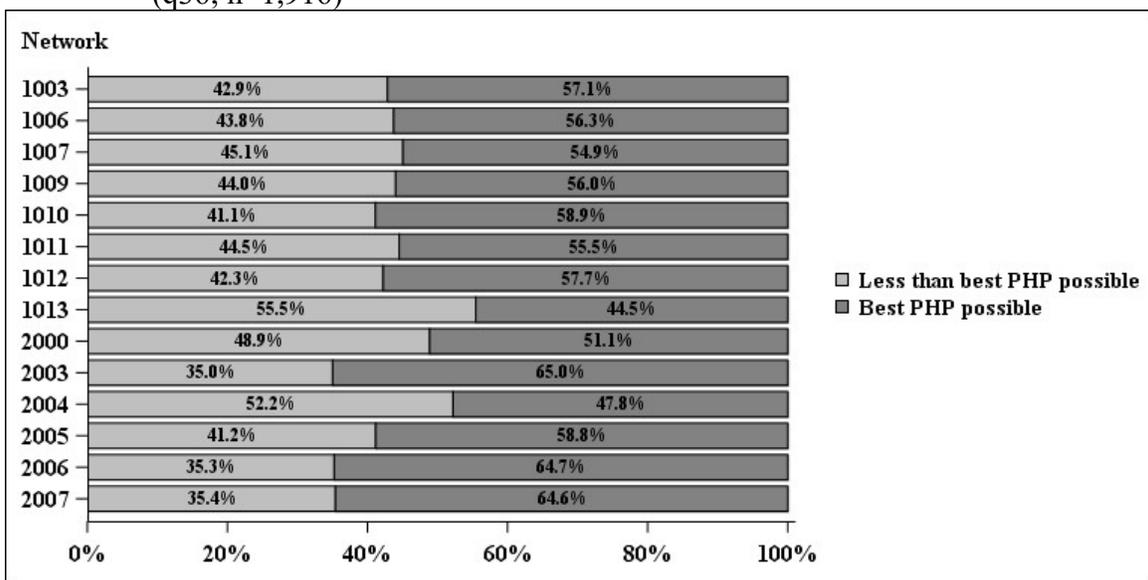


Figure R-129 reveals how responses to q36 varied across the respondent’s CCNC network. Carolina Collaborative Community Care (1013) had the lowest proportion of best possible PHP ratings at 44.5%. Northwest Community Care Network (2006) and Northern Piedmont Community Care (2007) had the highest proportion of best possible PHP ratings – almost equally at 64.7% and 64.6%, respectively – however the results for those individual networks were not statistically significant.

Figure R-129 Overall rating of the respondent’s personal health provider vs. CCNC network (q36; n=1,916)



Same personal health provider before joining Medicaid (q37, access)

Question 37 asked respondents if they had the same personal health provider before they joined CAROLINA ACCESS or MEDICAID. Figure R-130 demonstrates that 46.9% of respondents indicated that they had the same personal health provider while 53.1% indicated that they did not.

Figure R-130 Same personal health provider before joining Medicaid (q37; n=1,866)

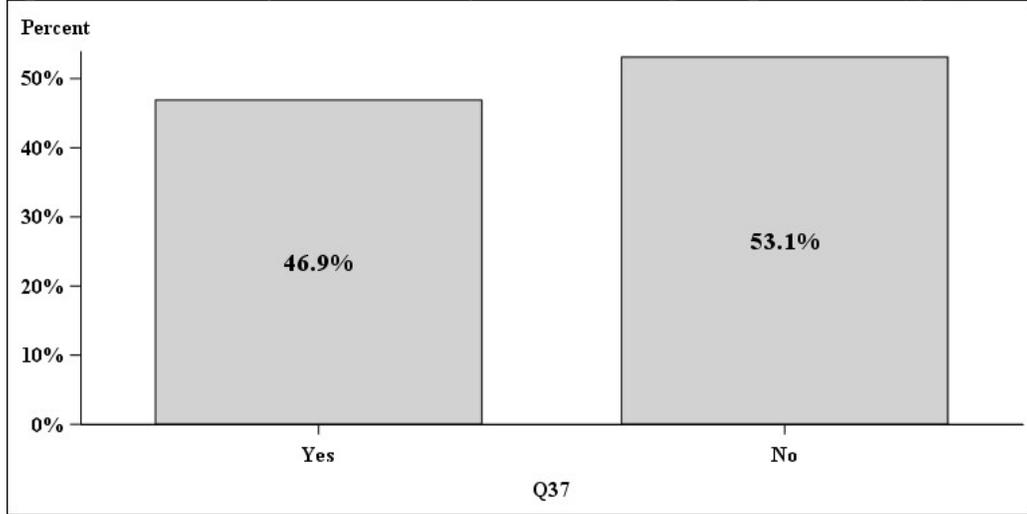


Figure R-131 shows how responses to q37 varied with age of the respondent. Figure R-131 indicates an upward trend with respect to age and PHP status, where younger respondents less often indicated having the same PHP prior to joining Medicaid compared to older respondents. Only 41.4% of those less than 45 years responded that they had the same PHP prior to joining Medicaid, while 54.5% of those aged 65 and older indicated the same.

Figure R-131 Same personal health provider before joining Medicaid vs. age (q37; n=1,866)

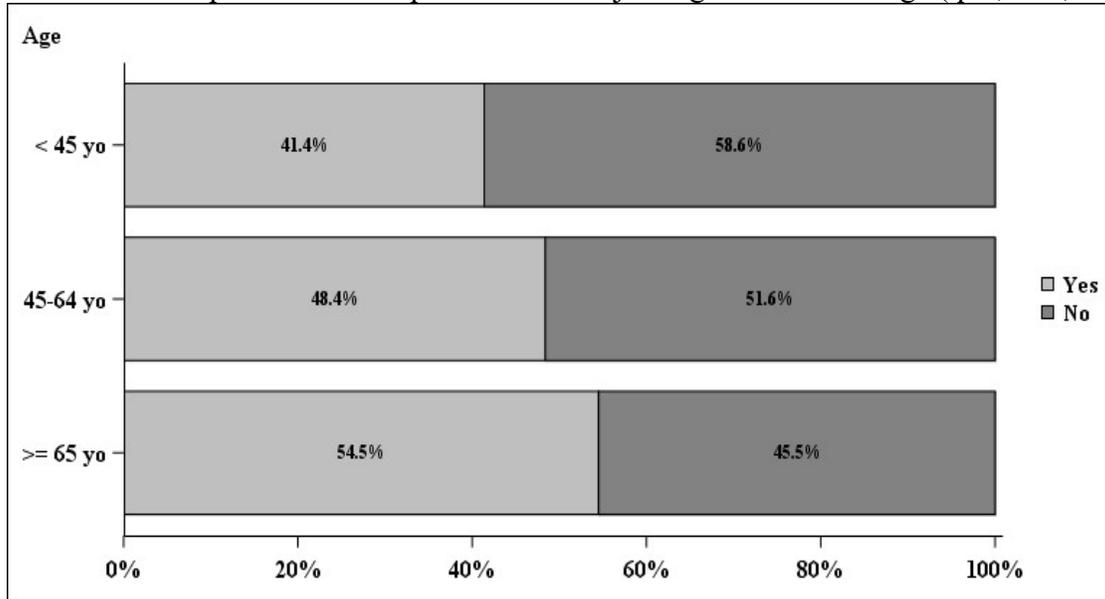
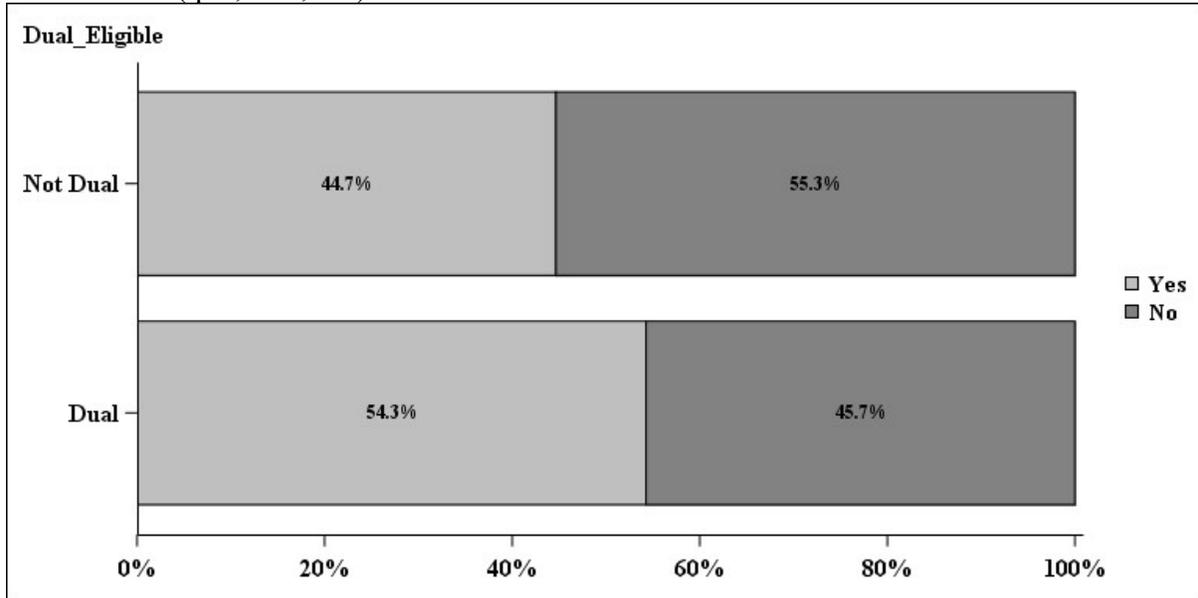


Figure R-132 demonstrates how responses to q37 varied with dual-eligible status. A greater proportion of dual-eligible respondents (54.3%) indicated that they had the same PHP prior to joining Medicaid while only 44.7% of non-dual eligible respondents indicated the same.

Figure R-132 Same personal health provider before joining Medicaid vs. dual-eligible status (q37; n=1,866)



Ease in finding a suitable personal health provider (q38, access)

Question 38 asked respondents how often, since they joined Medicaid, was it easy to get a personal health provider with whom they are happy. Figure R-133 shows that 51.4% of respondents indicated that they always found it easy to get a PHP with whom they were happy while 18.1%, 22.7% and 7.8%, usually, sometimes and never found it easy, respectively, to find a suitable PHP.

Figure R-133 Ease in finding a suitable personal health provider (q38; n=1,014)

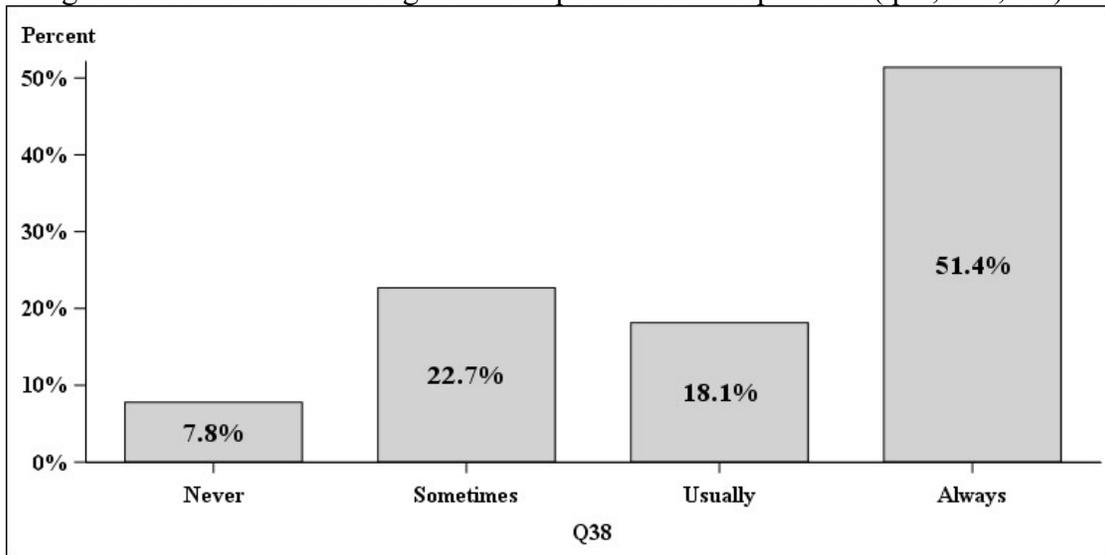


Figure R-134 shows how responses to q38 varied with age. An upward trend could be seen with respect to age and frequency of ease in finding a suitable health provider, with the lowest proportion of respondents aged <45 years found it always easy to get a suitable PHP (44%) and respondents aged 65 years or older representing the highest proportion at 63.2%.

Figure R-134 Ease in finding a suitable personal health provider vs. age (q38; n=1,014)

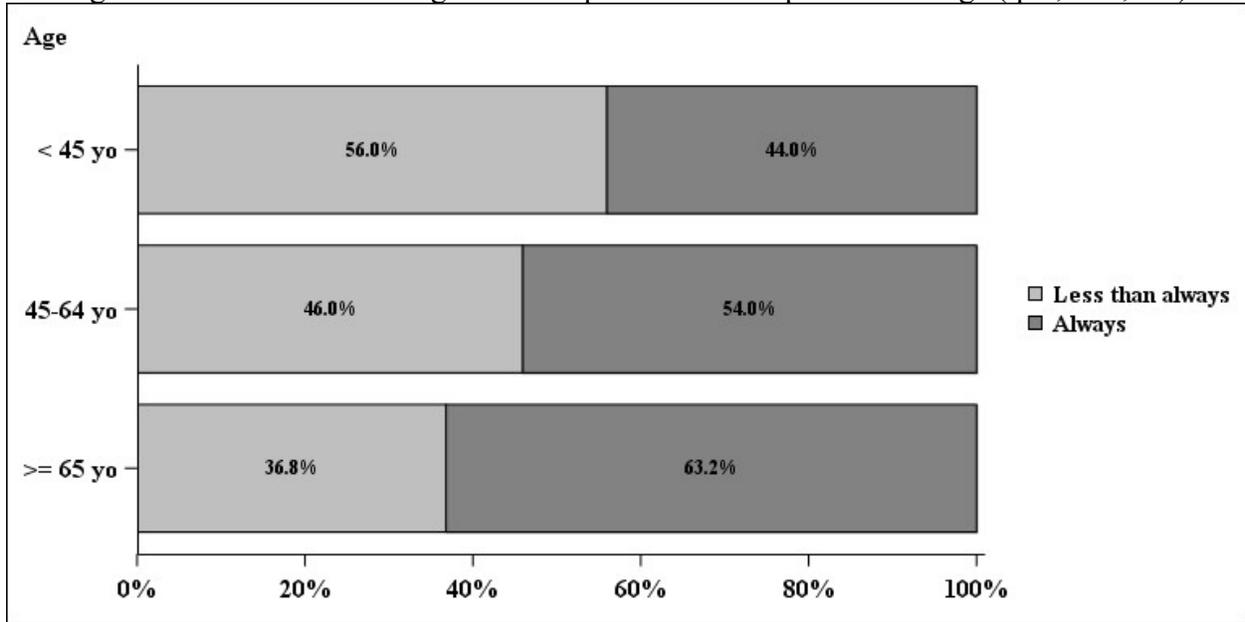


Figure R-135 shows how responses to q38 varied across race. A higher proportion of Black respondents indicated that they always found it easy to find a suitable PHP at 56.9%.

Figure R-135 Ease in finding a suitable personal health provider vs. race (q38; n=1,014)

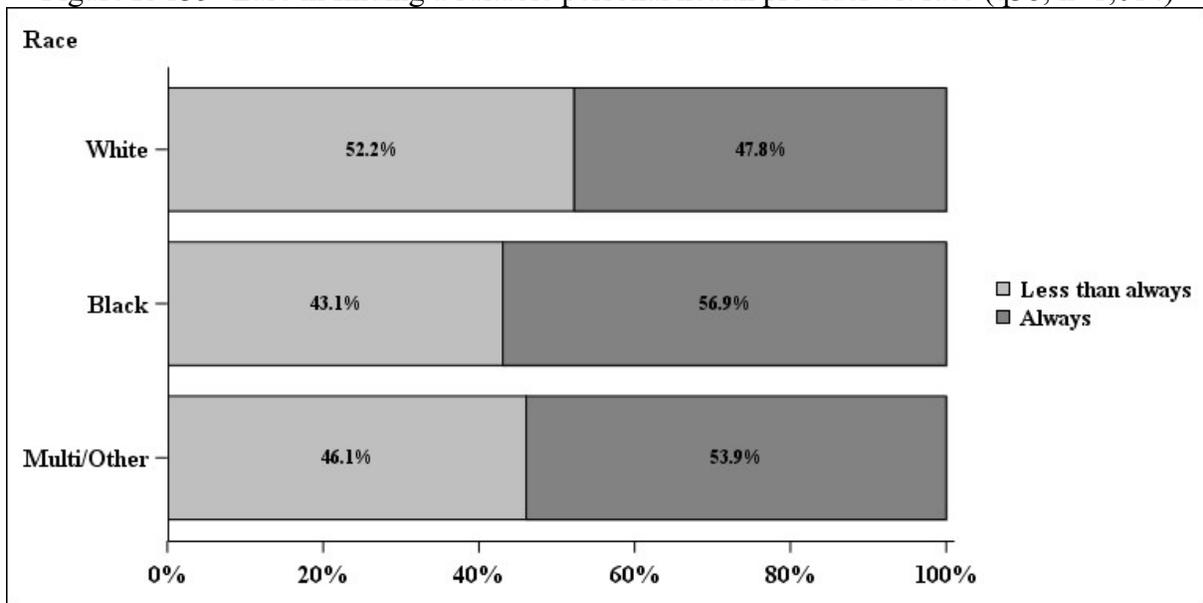


Figure R-136 shows the variation in q38 responses according to dual-eligible status. Dual respondents more often reported that it was always easy to get a PHP that pleased them compared to non-dual respondents, at 58.2% and 49.6%, respectively.

Figure R-136 Ease in finding a suitable personal health provider vs. dual-eligible status (q38; n=1,014)

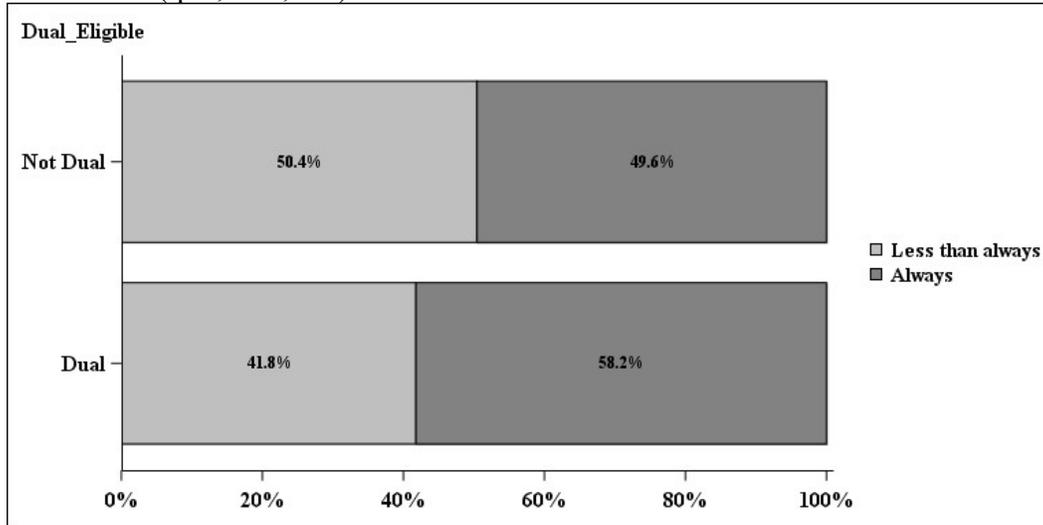
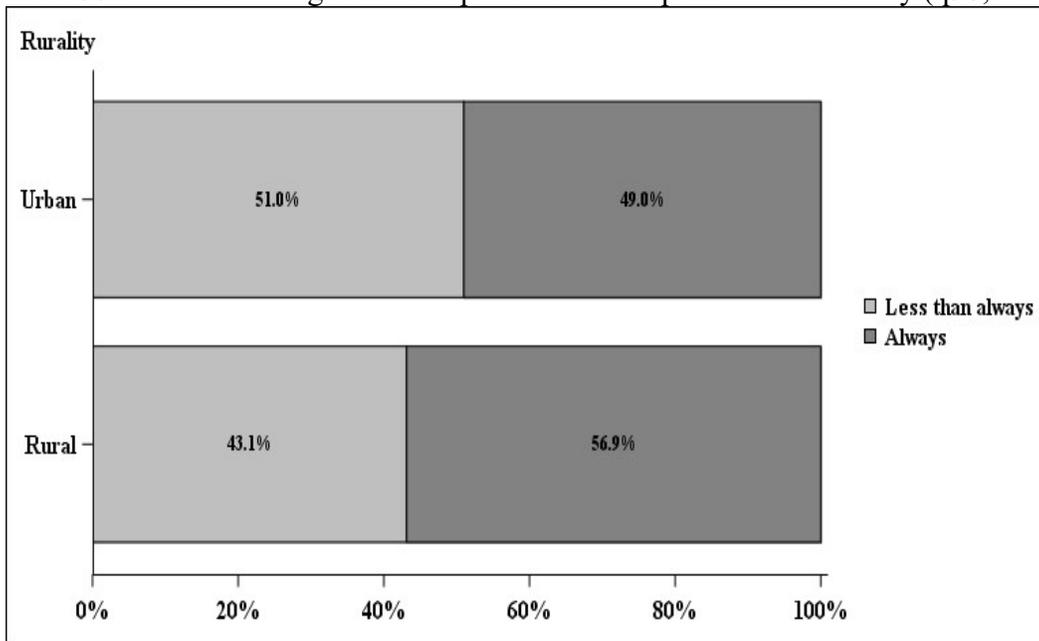


Figure R-137 demonstrates the variation in responses to q38 across rurality. Rural respondents more often reported that it was always easy to find a PHP that pleased them (56.9%) whereas only 49.0% of non-duals always found it easy.

Figure R-137 Ease in finding a suitable personal health provider vs. rurality (q38; n=1,014)



3.4 Getting Health Care from Specialists (q39-q44)

Appointments made to see a specialist (q39; health status)

Question 39 asked respondents if, in the previous 6 months, they had made any appointments to see a specialist. Figure R-138 indicates that 47.1% of respondents made at least one appointment to see a specialist.

Figure R-138 Appointments made to see a specialist (q39; n=2,300)

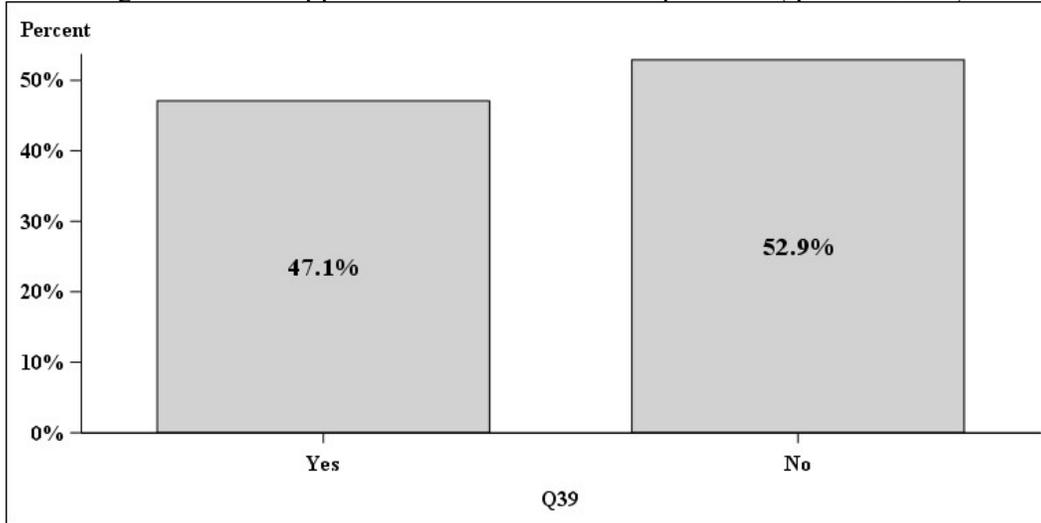


Figure R-139 describes the variation in q39 responses across respondent age. The greatest proportion of respondents that made an appointment to visit a specialist were those aged 45-64 years (52.7%) compared with those aged less than 45 years, who comprised the smallest proportion (42.3%).

Figure R-139 Appointments made to see a specialist vs. age (q39; n=2,300)

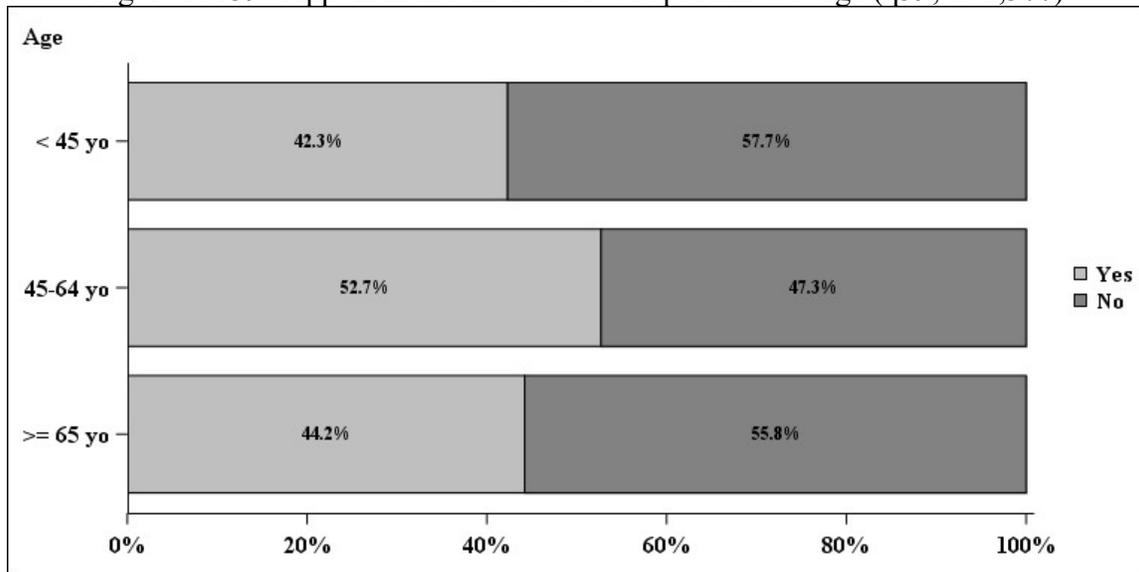


Figure R-140 shows how responses to q39 varied with respondent sex. A lower proportion of male respondents made an appointment to see a specialist at 44.2% while 48.8% of females made these appointments.

Figure R-140 Appointments made to see a specialist vs. sex (q39; n=2,300)

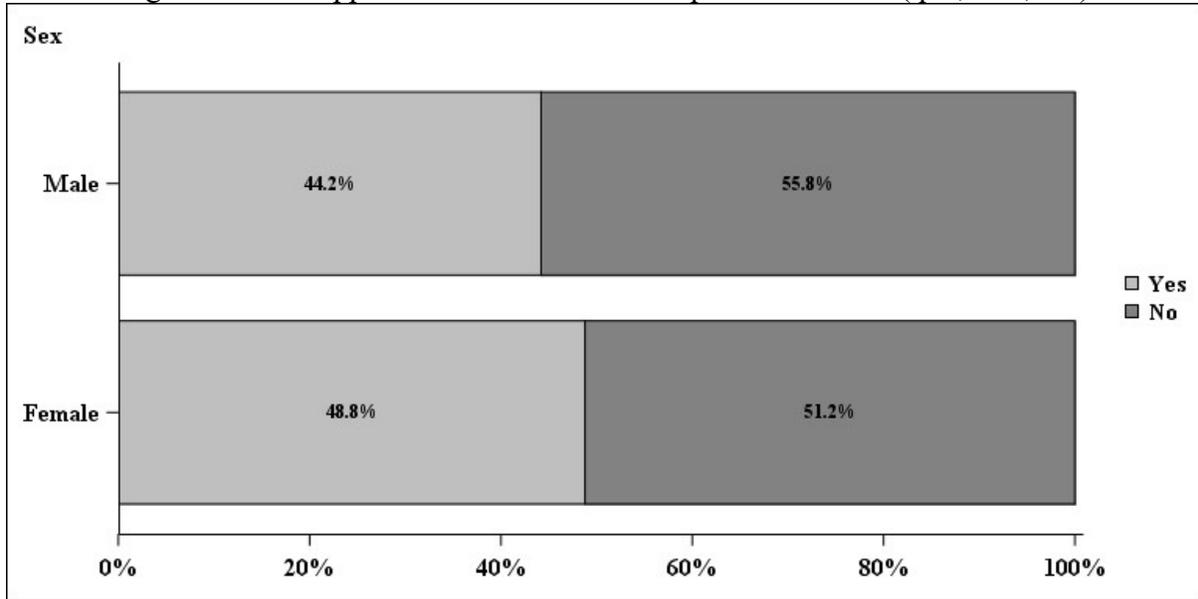


Figure R-141 shows how responses to q39 varied with respondent race. White respondents indicated most often that they made an appointment to see a specialist at 52.8% while Blacks indicated the same least often at 39.8%.

Figure R-141 Appointments made to see a specialist vs. race (q39; n=2,300)

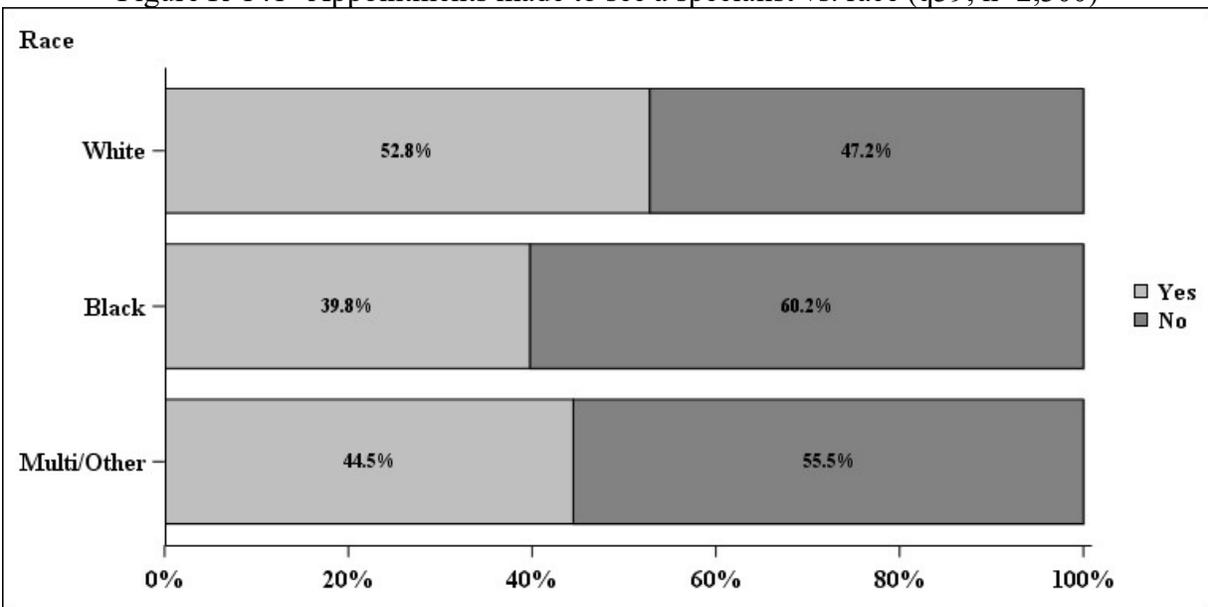
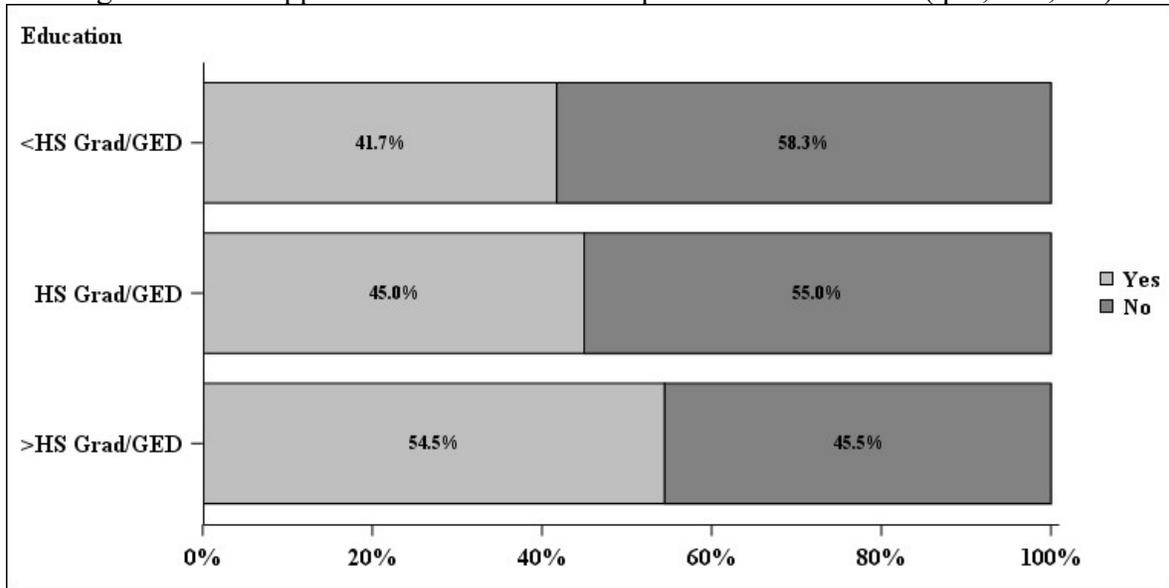


Figure R-142 shows how responses to q39 varied across education level. Respondents with >HS Grad/GED most often indicated they made an appointment to see a specialist (54.5%), as opposed to respondents with <HS Grad/GED who least often reported the same (41.7%).

Figure R-142 Appointments made to see a specialist vs education (q39; n=2,255)



Timeliness of specialist appointments (q40; access)

Question 40 asked respondents how often they got an appointment to see a specialist as soon as needed. Figure R-143 shows that 58.7% of respondents indicated that they always got an appointment as soon as needed, 20.7% indicated they usually got an appointment as soon as needed, 15.8% sometimes, and 4.9% never.

Figure R-143 Timeliness of specialist appointments (q40; n=1,065)

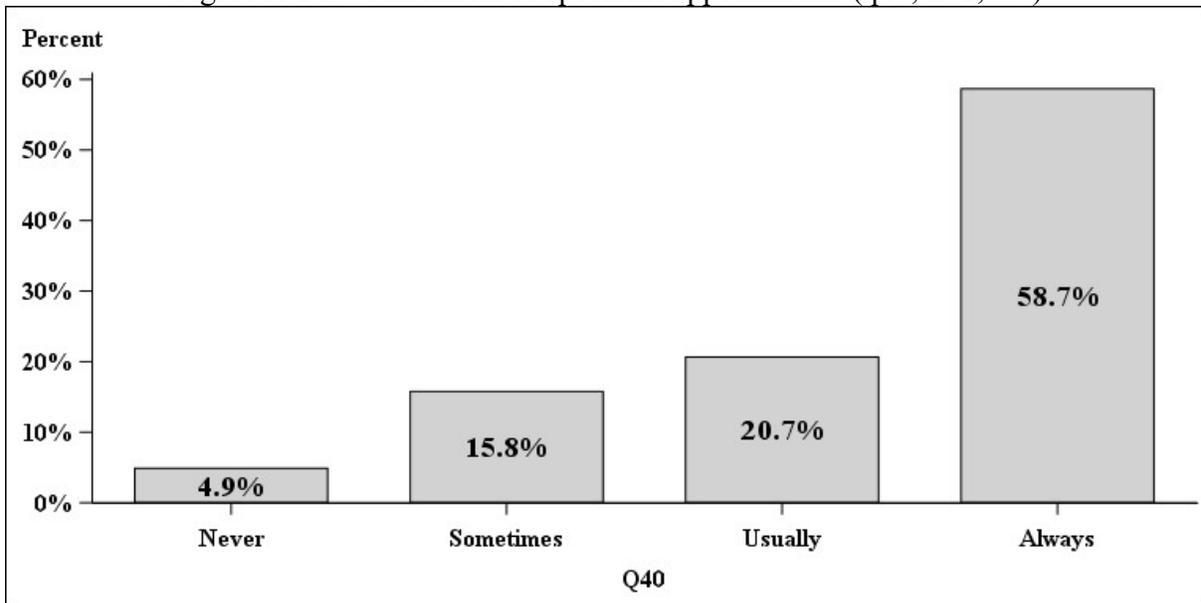
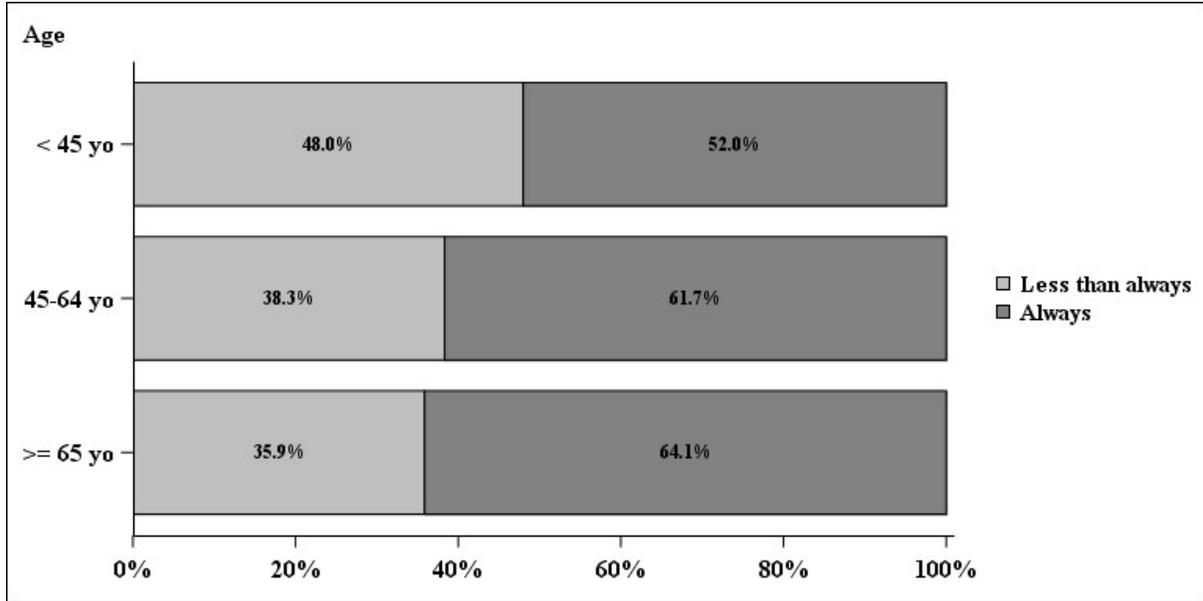


Figure R-144 shows how responses to q40 varied with respondent age. Respondents less than 45 years of age had the lowest proportion that reported always getting a specialist appointment as soon as needed at 52.0%.

Figure R-144 Timeliness of specialist appointments vs. age (q40; n=1,065)



Number of specialists seen (q41; utilization)

Question 45 asked respondents how many specialists they saw in the last 6 months. Figure R-145 shows the bulk of respondents saw 2-3 specialists (46.5%). Thirty-five point nine percent (35.9%) of respondents saw 1 specialist, 12.7% saw 4 or more, and 4.9% reported seeing none.

Figure R-145 Number of specialists seen (q41; n=1,057)

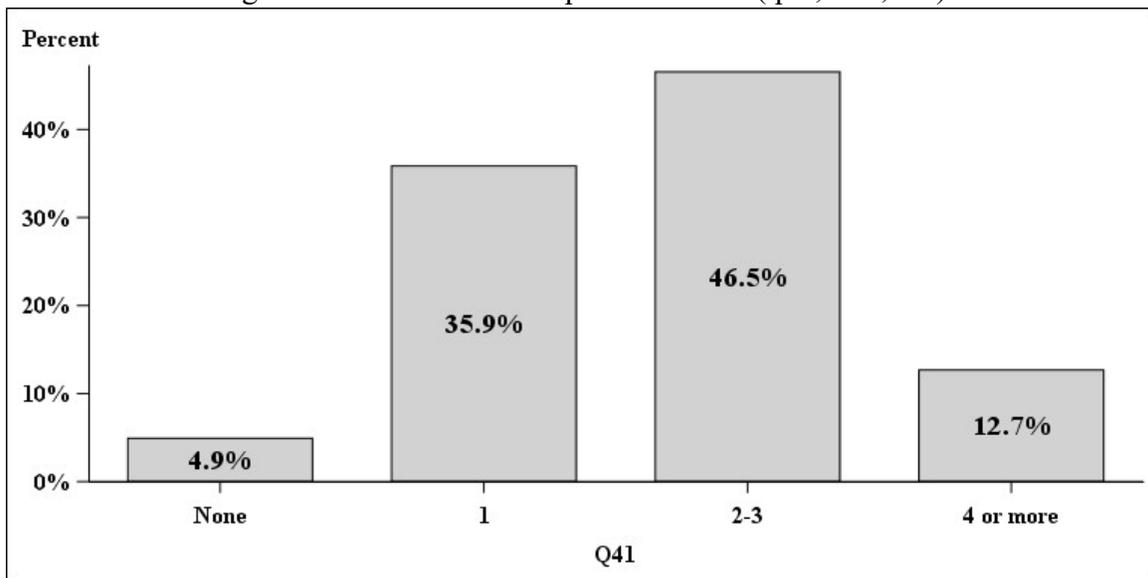


Figure R-146 shows how q41 responses varied with respondent age. Respondents aged 65 years and older represented the largest proportion that reported seeing no specialists (9.0%). Respondents aged 45-64 most often reported seeing 4 or more specialists (17.3%), followed by those aged less than 45 (8.9%) and those aged 65 or older (7.3%). Respondents aged 45-64 generally reported the greatest number of specialists seen.

Figure R-146 Number of specialists seen vs. age (q41; n=1,057)

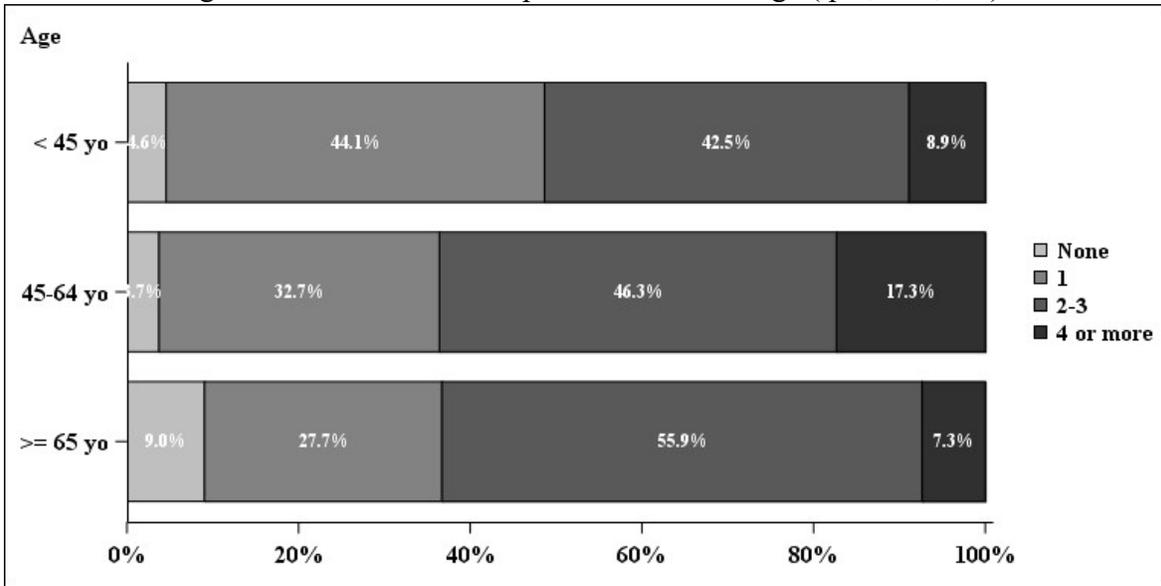
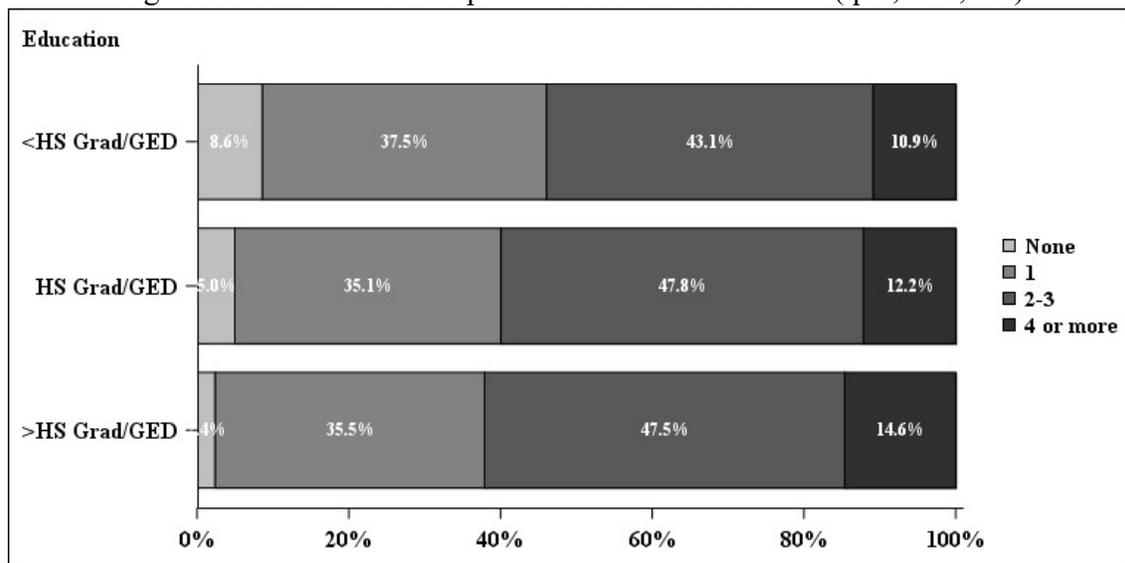


Figure R-147 depicts how q41 responses varied across respondent education level. Those with <HS Grad/GED most often reported seeing no specialists at 8.6%, while those with >HS Grad/GED least often reported the same at 2.4%.

Figure R-147 Number of specialists seen vs. education (q41; n=1,046)



Number of visits to specialists (q42; utilization)

Question 42 asked respondents how many times they visited specialists in the previous 6 months. Figure R-148 shows that 39.5% of respondents visited their specialist 2-3 times, 36.3% visited their specialist 4 or more times, 22.5% visited once, and 1.6% made no visits.

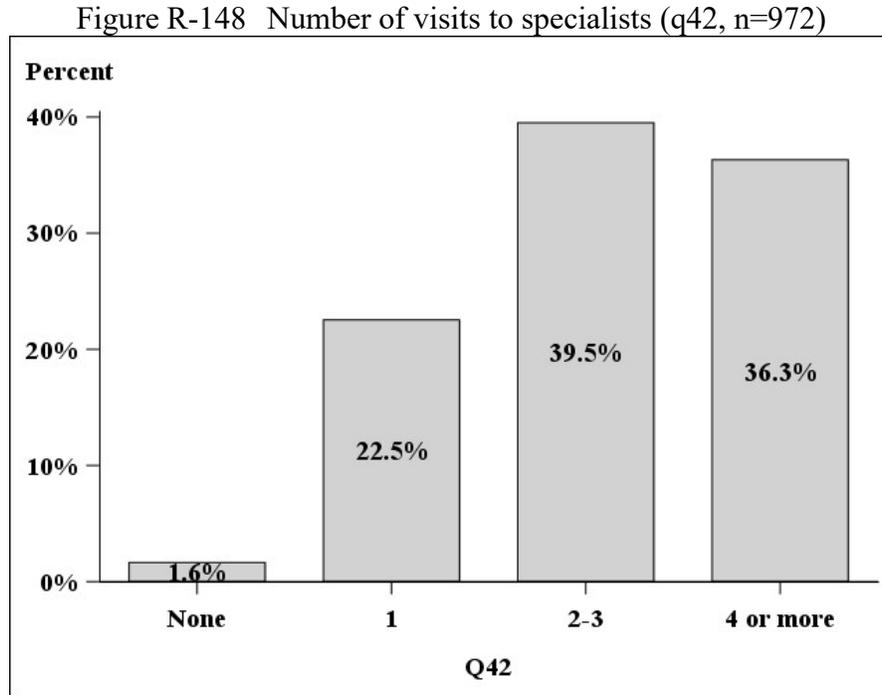
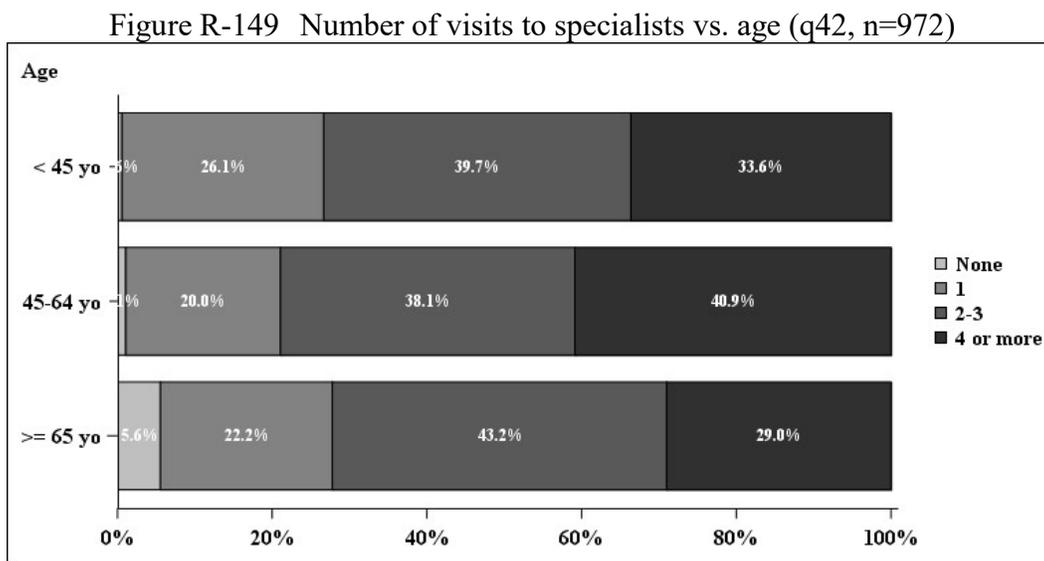


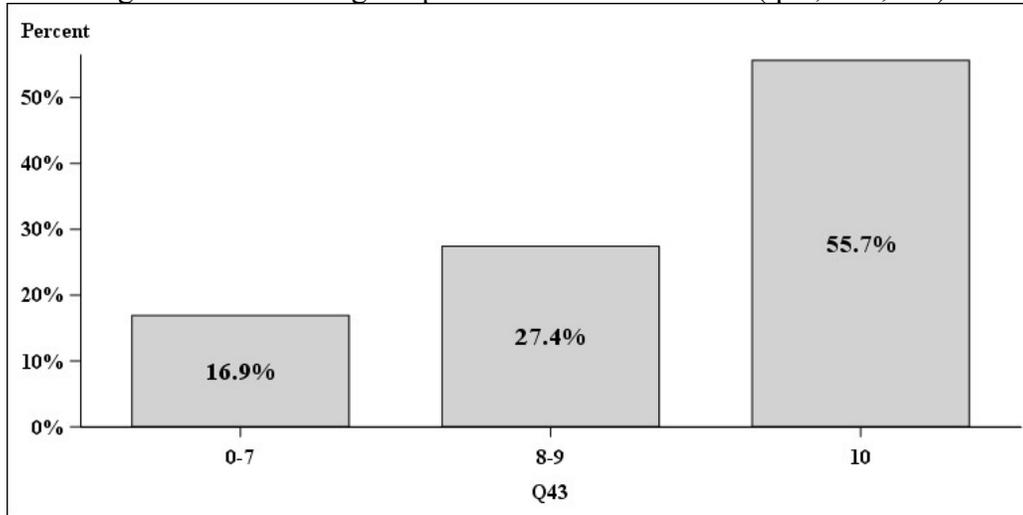
Figure R-149 demonstrates how q42 responses varied with respondent age. Forty point nine percent (40.9%) of respondents 45-64 yo represented the highest proportion with 4 or more visits to a specialist compared to only 29.0% of respondents aged 65 or older. Respondents aged 45-64 generally reported the most visits to specialists in the previous 6 months.



Rating of specialists seen most often (q43; satisfaction)

Question 43 asked respondents to rate the specialist they saw most often in the previous 6 months on a scale of 0 to 10, with 0 being the worst specialist possible and 10 being the best possible. Figure R-150 shows the majority of respondents (55.7%) rated their specialist a 10, followed by 27.4% of respondents who rated their specialist an 8 or 9. The remainder of respondents (16.9%) rated their specialist in the range of 0-7. We found no statistically significant relationships between q43 responses and any of the demographic or contextual variables.

Figure R-150 Rating of specialists seen most often (q43; n=1,017)



Specialist seen most often is also regarded as the personal health provider (PHP) (q44; access)

Question 44 asked respondents if the specialist they saw most often in the previous 6 months was also their personal health provider (PHP). Figure R-151 reveals that 24.8% of respondents also regarded their specialist as their PHP.

Figure R-151 Specialist seen most often is also regarded as PHP (q44; n=1,001)

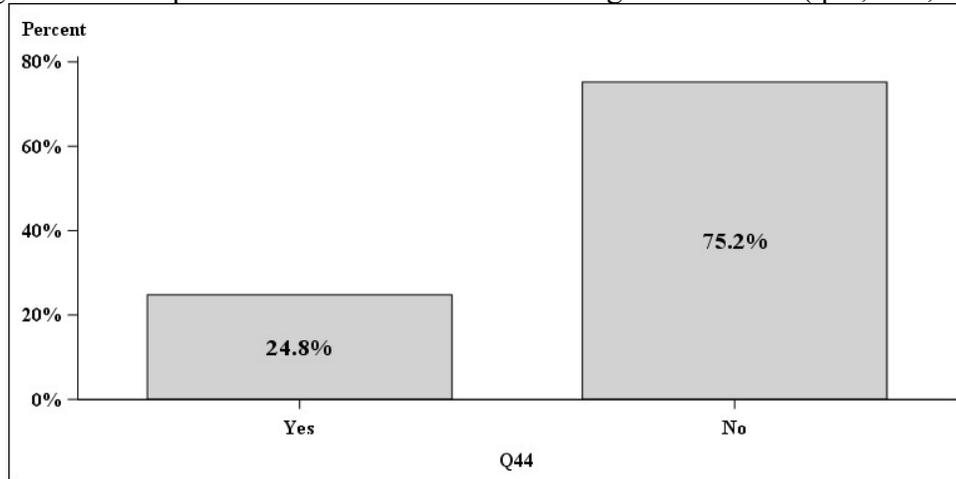


Figure R-152 demonstrates how q44 responses varied with respondent age. Respondents 65 years and older had the highest proportion (34.3%) indicating that the specialist they saw most often was also their PHP while those <45 years of age had the lowest proportion at 19.7%.

Figure R-152 Specialist seen most often is also regarded as PHP vs. age (q44; n=1,001)

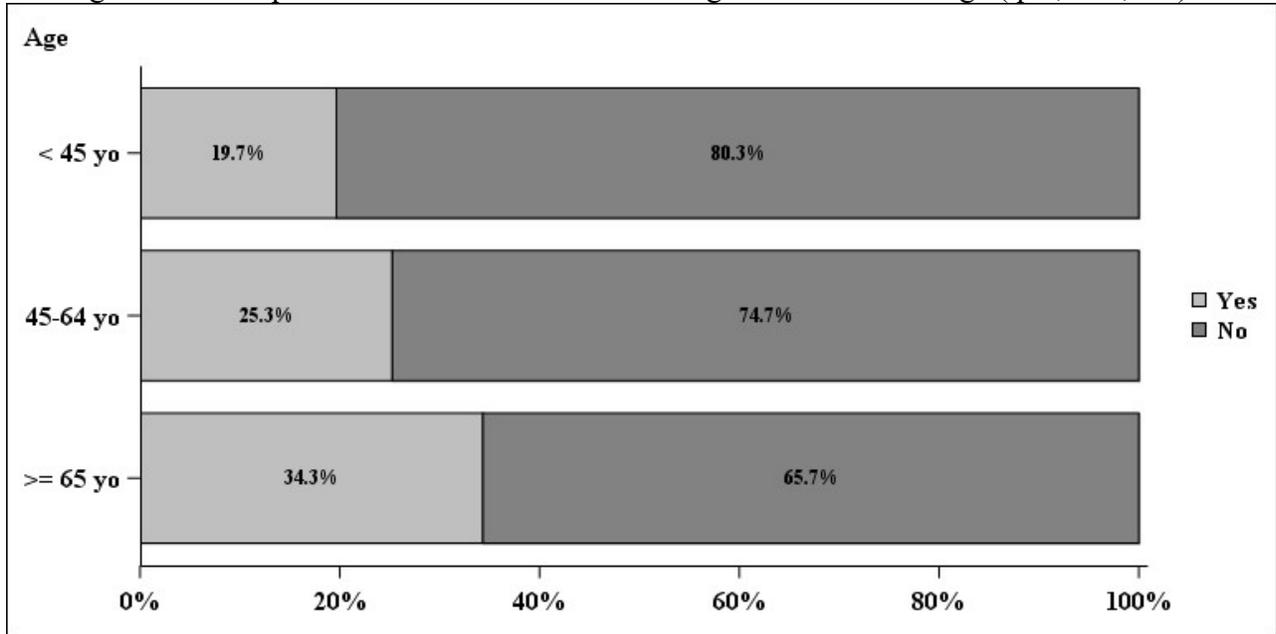


Figure R-153 shows how q44 responses varied with respondent race. Blacks had the greatest proportion that reported the specialist they saw most often was also their PHP (33.2%).

Figure R-153 Specialist seen most often is also regarded as PHP vs. race (q44; n=1,001)

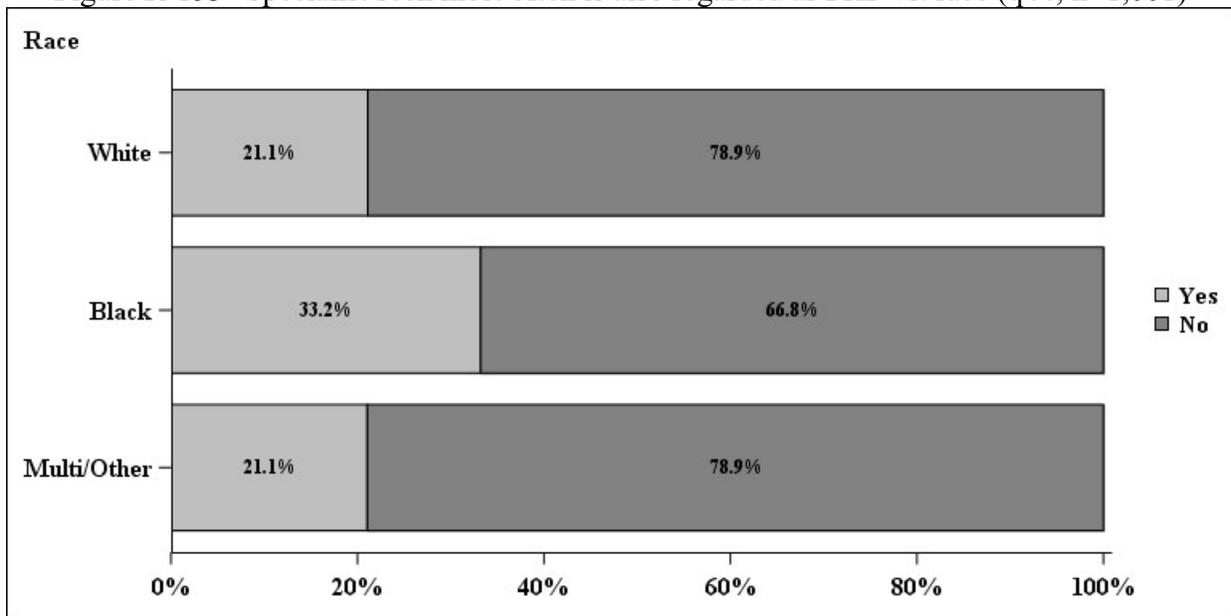
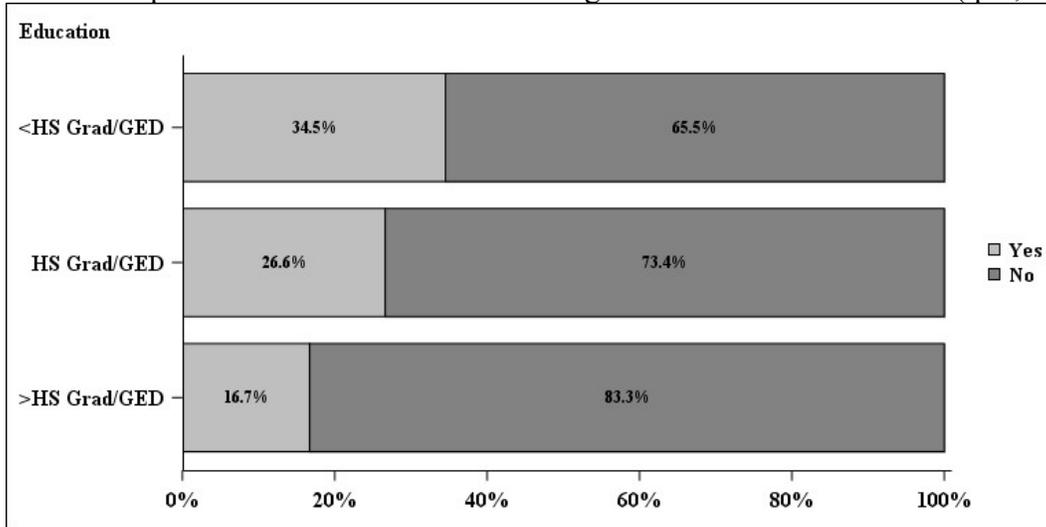


Figure R-154 shows how q44 response varied across respondent education level. A greater proportion (34.5%) of respondents with <HS Grad/GED reported that their specialist was also their PHP at 34.5%, while only 16.7% of respondents with >HS Grad/GED reported the same at 16.7%.

Figure R-154 Specialist seen most often is also regarded as PHP vs. education (q44; n=988)



3.5 Interactions with your Health Plan and Doctor's Office Staff (q45-q50)

Sought information from your health provider or health plan (q45; access)

Question 45 asked respondents if they sought information or help from office staff at their health plan or provider in the previous 6 months. Figure R-155 indicates that 49.2% of respondents did get information from office staff.

Figure R-155 Sought information or help from office staff at health provider or help plan (q45; n=2,244)

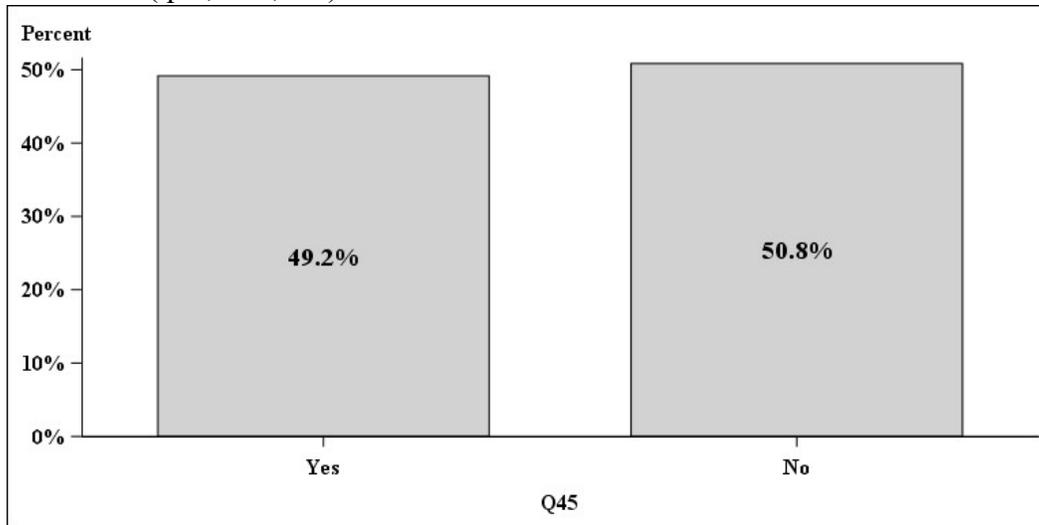
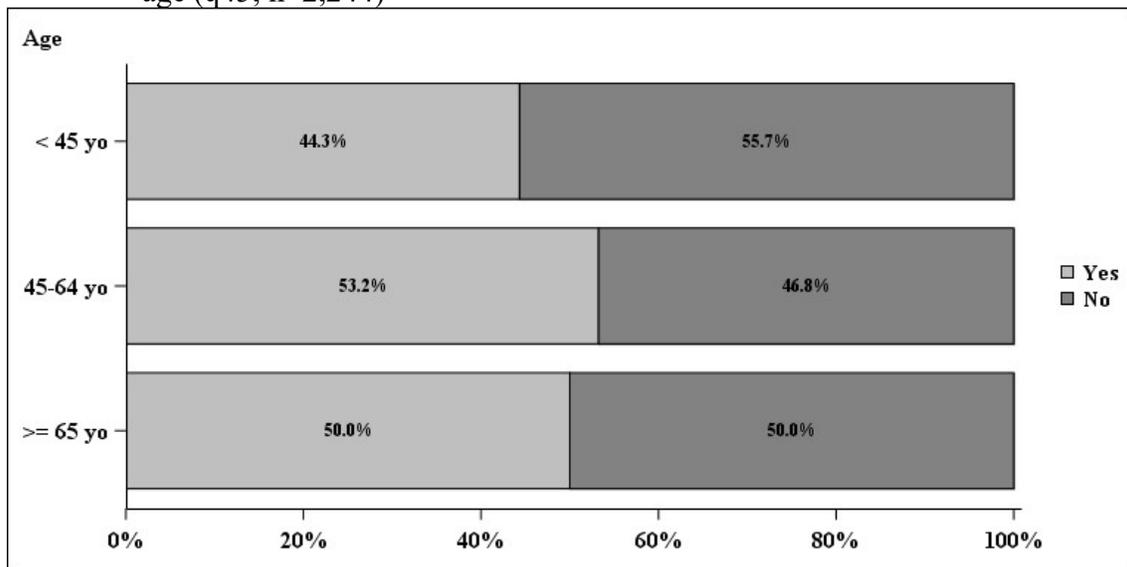


Figure R-156 describes q45 response variation across respondent age. Respondents aged 45-64 had the greatest proportion (53.2%) that got information from office staff at their health plan or health provider, while respondents aged less than 45 years had the lowest (44.3%).

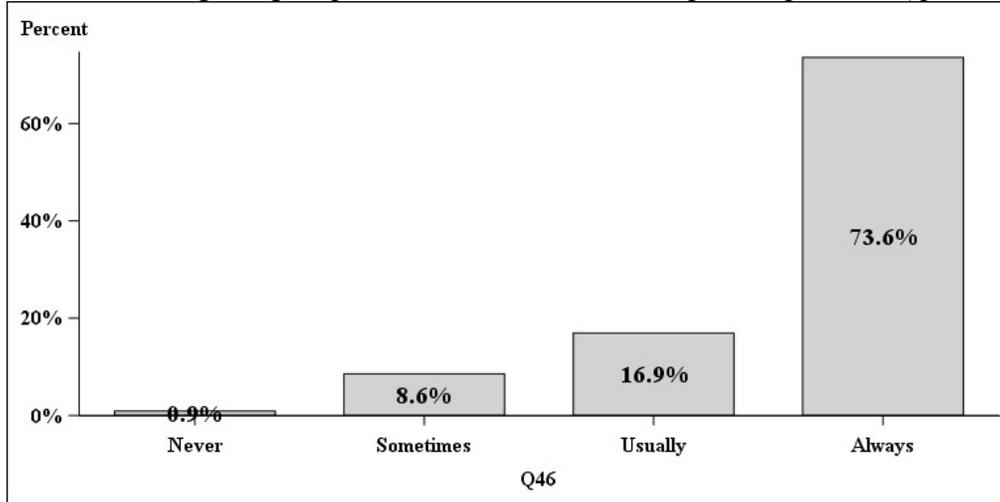
Figure R-156 Sought information or help from office staff at health provider or help plan vs. age (q45; n=2,244)



Success getting help from office staff at health plan or provider (q46; satisfaction)

Question 46 asked respondents how often, in the previous 6 months, they got needed help from office staff at their health plan or provider. Figure R-157a shows that 73.6% of respondents indicated they always got the help, 16.9% indicated usually, 8.6% sometimes, and 0.9% never. We found no statistically significant relationships between q46 responses and any of the demographic or contextual variables.

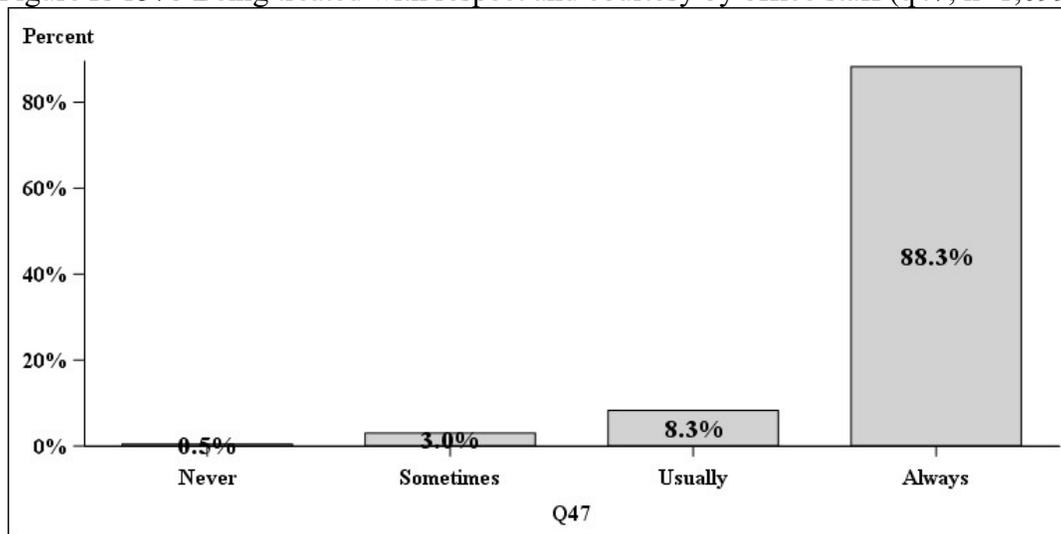
Figure R-157a Success getting help from office staff at health plan or provider (q46; n=1,098)



Being treated with respect and courtesy by office staff (q47; satisfaction)

Question 47 asked respondents how often they were treated with courtesy and respect by office staff. Figure R-157b indicates that 88.3% of respondents indicated they were always treated with courtesy and respect by office staff at the health provider, while only 8.3% indicated they were usually treated with courtesy and respect, 3.0% sometimes, and 0.5% never. We found no statistically significant relationships between q47 responses and any of the demographic or contextual variables.

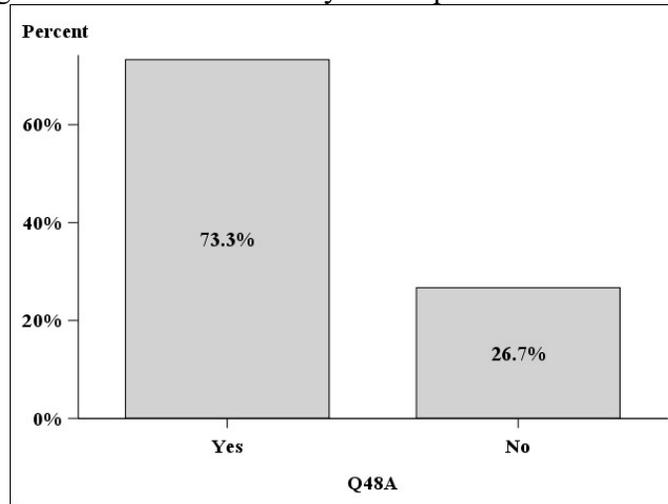
Figure R-157b Being treated with respect and courtesy by office staff (q47; n=1,099)



Being asked to fill out forms by health provider or health plan (q48A, satisfaction)

Question 48A asked respondents if their health plan or health provider asked them to fill out any forms in the previous 6 months. Figure R-158 shows that 73.3% of respondents were asked to fill out forms. We found no statistically significant relationships between q48A responses and any of the demographic or contextual variables.

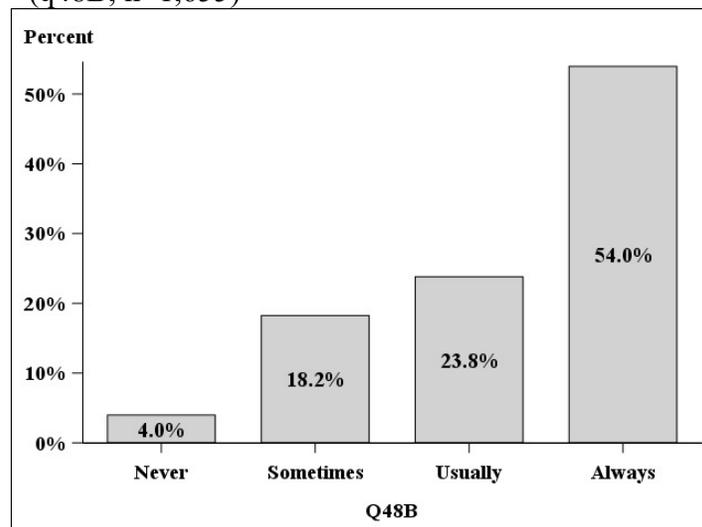
Figure R-158 Being asked to fill out forms by health provider or health plan (q48A, n=2,258)



Ease filling out forms requested by health plan or health care provider (q48B; satisfaction)

Question 48B asked respondents how often it was easy for respondents to fill out forms requested by their health plan or health care provider. Figure R-159 reveals that 54.0% of respondents indicated that it was always easy, 23.8% indicated that it was usually easy, 18.2% sometimes, and 4.0% never. We found no statistically significant relationships between q48B responses and any of the demographic or contextual variables.

Figure R-159 Ease filling out forms requested by health plan or health care provider (q48B; n=1,655)



Rating of Medicaid plan (q49; satisfaction)

Question 49 asked respondents to rate their Medicaid plan on a scale of 0-10, where 0 was the worst possible plan and 10 was the best. Figure R-160 shows that 52.4% of respondents rated their plan a 10, 26.7% of respondents rated their plan 8 or 9, and 21.0% of respondents rated their plan in the range of 0-7.

Figure R-160 Rating of Medicaid Plan (q49; n=2,265)

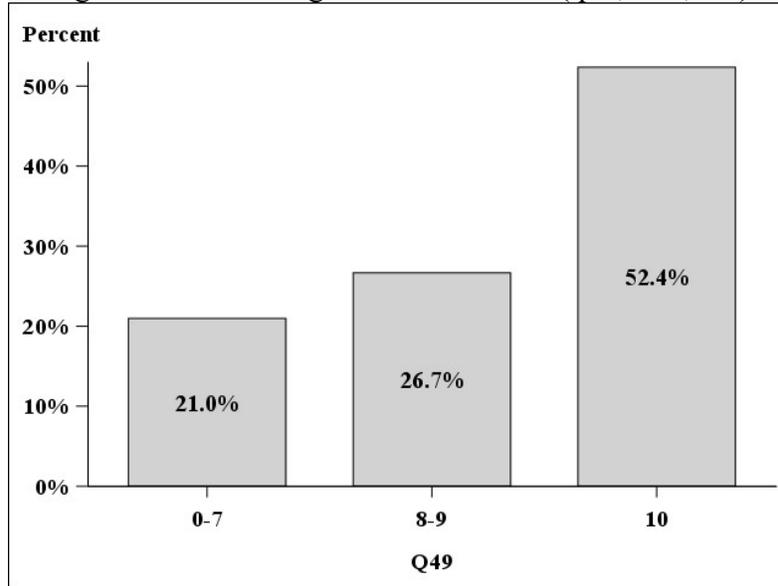


Figure R-161 demonstrates how q49 responses varied with respondent age. A positive trend could be seen with age, where respondents aged 65 years and older comprised the largest proportion that rated their health plan highest (67.8%), followed by respondents aged 45-64 (56.3%) and respondents aged less than 45 (40.9%).

Figure R-161 Rating of Medicaid plan vs. age (q49; n=2,265)

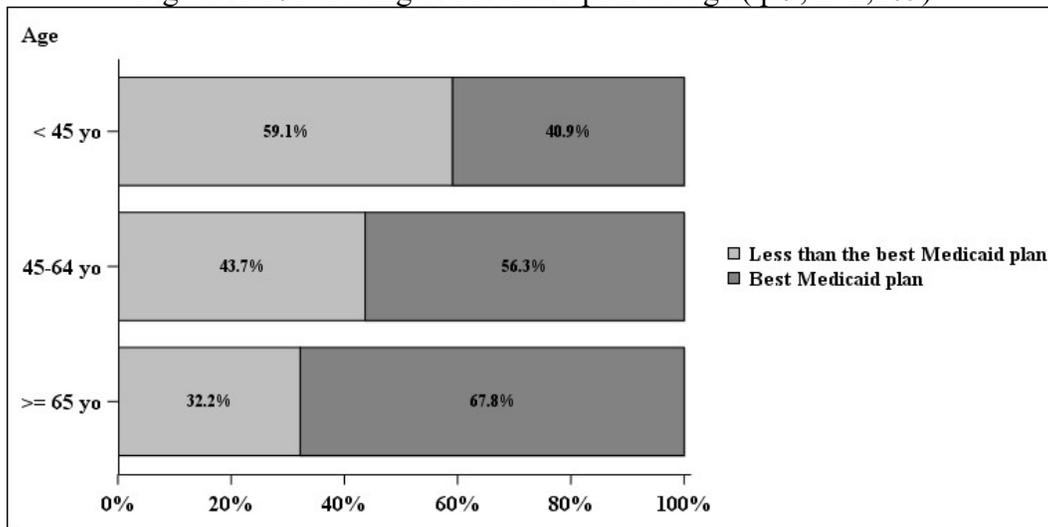


Figure R-162 shows how q49 responses varied across respondent race. Blacks most often rated their health plan the highest at 56.7%.

Figure R-162 Rating of Medicaid plan vs. race (q49; n=2,265)

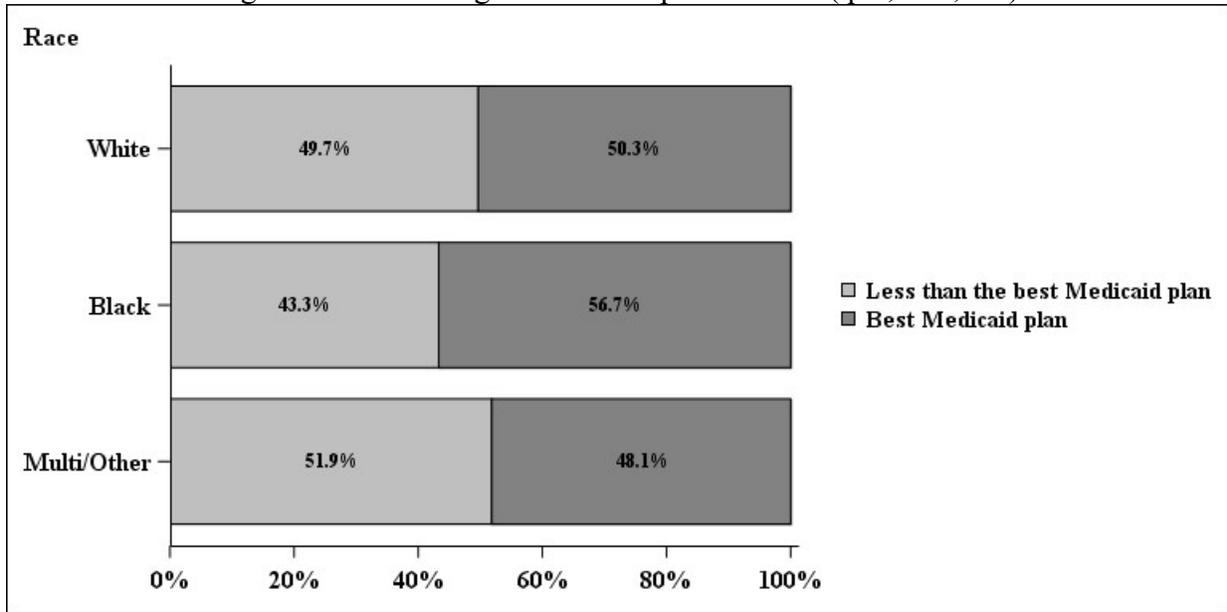


Figure R-163 describes the variation in q49 responses according to respondent education level. A negative trend could be seen with respect to health plan rating and education level, where respondents with <HS Grad/GED rated their plans the highest (61.1%), followed by those with HS Grad/GED (54.7%) and those with >HS Grad/GED (42.2%).

Figure R-163 Rating of Medicaid plan vs. education (q49; n=2,265)

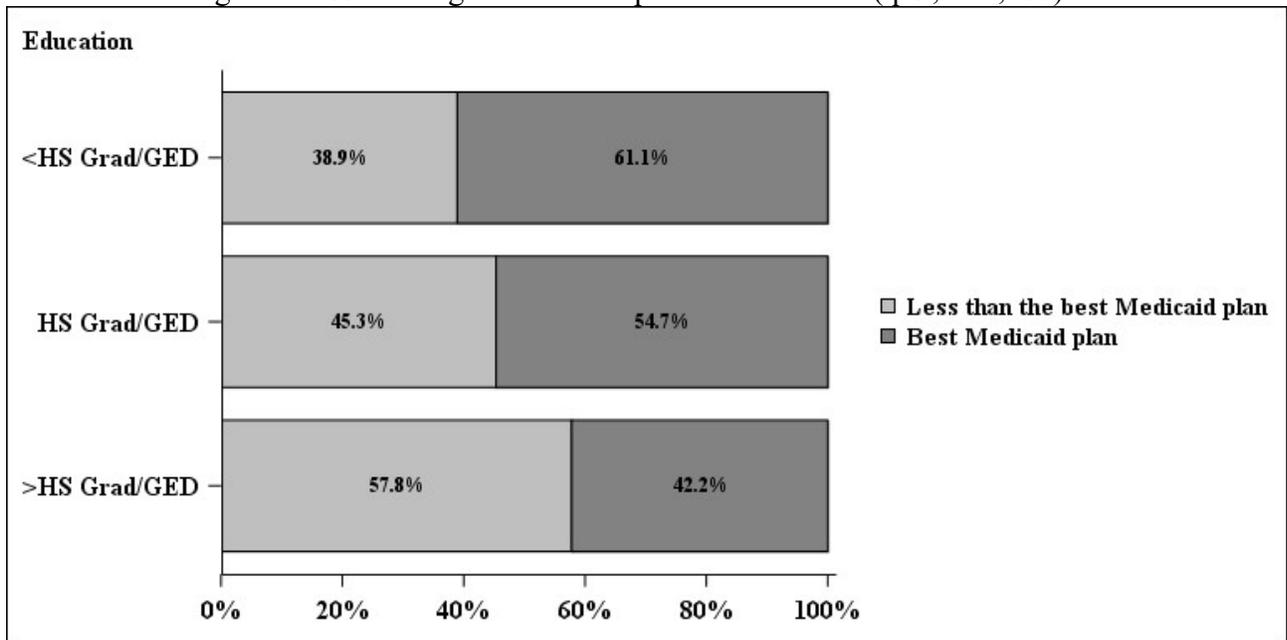


Figure R-164 depicts q49 response variation across dual-eligibility status. A significantly larger proportion of dual-eligible respondents rated their health plan highest (63.8%) compared to non-dual eligible respondents (48.8%).

Figure R-164 Rating of Medicaid plan vs. dual-eligible status (q49; n=2,265)

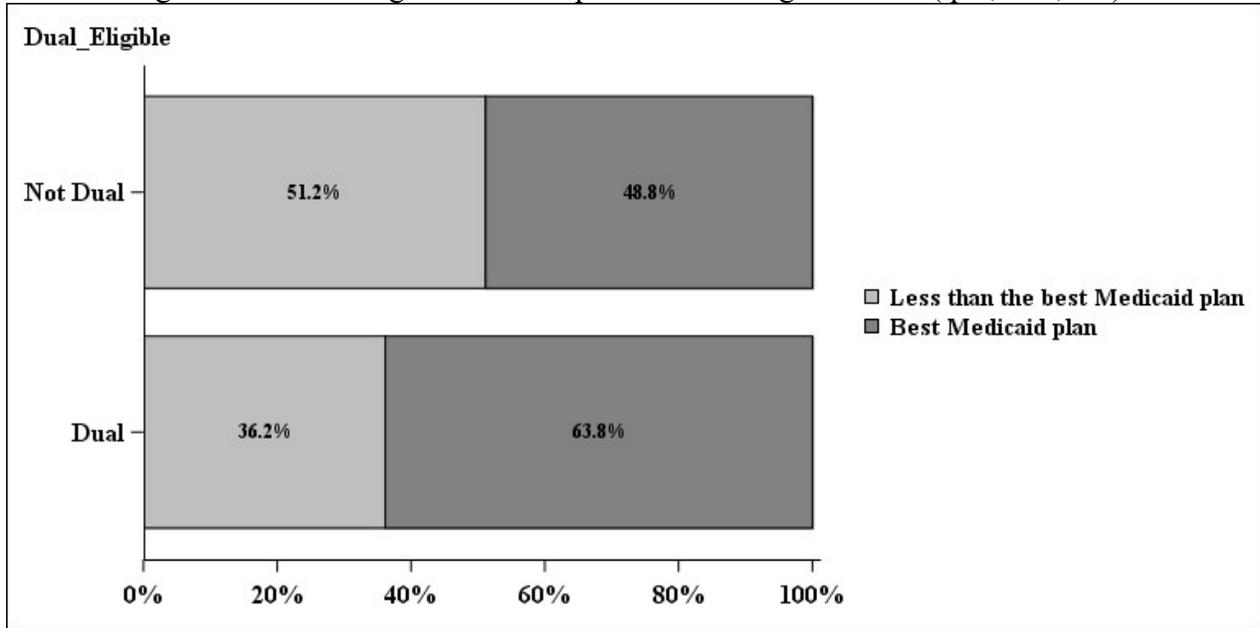
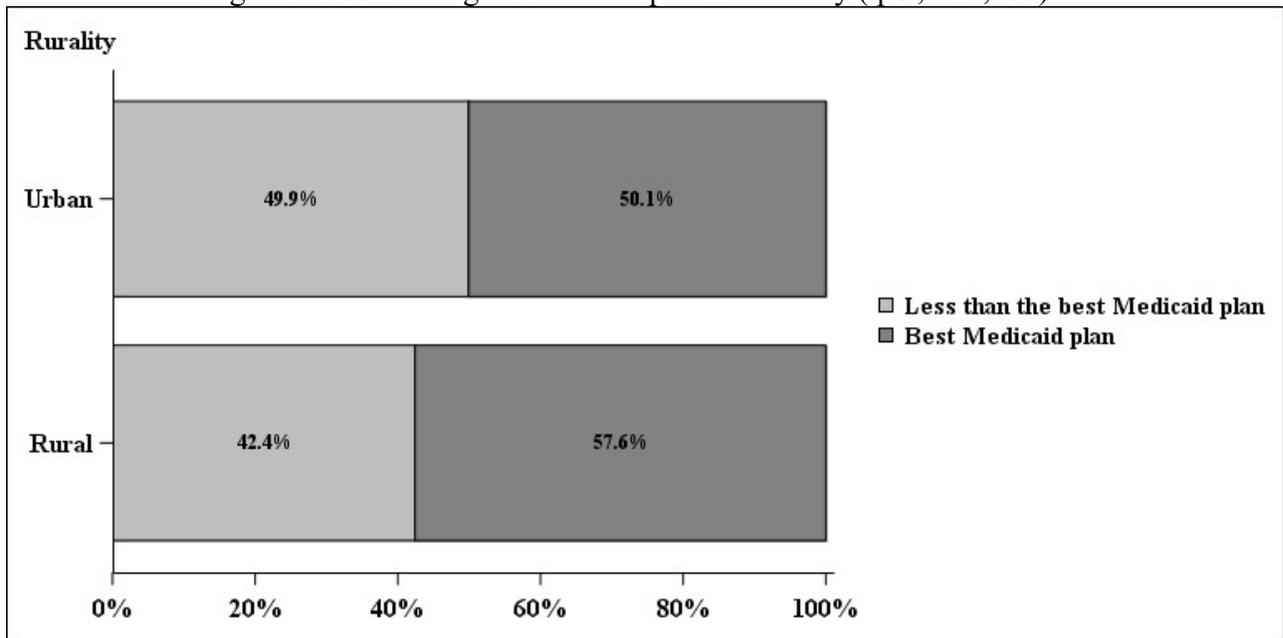


Figure R-165 shows how responses to q49 varied across rurality. Rural respondents had the greatest proportion that rated their health plan highest at 57.6%.

Figure R-165 Rating of Medicaid plan vs. rurality (q49; n=2,265)



Transportation help needed for a health care activity (q50a; access)

Question 50a asked respondents if, in the previous 6 months, they needed transportation help from a non-family member to get to a medical appointment or to fill a prescription. Figure R-166 indicates that 43.2% of respondents needed such help.

Figure R-166 Needed transportation assistance for a health need (q50a; n=2,280)

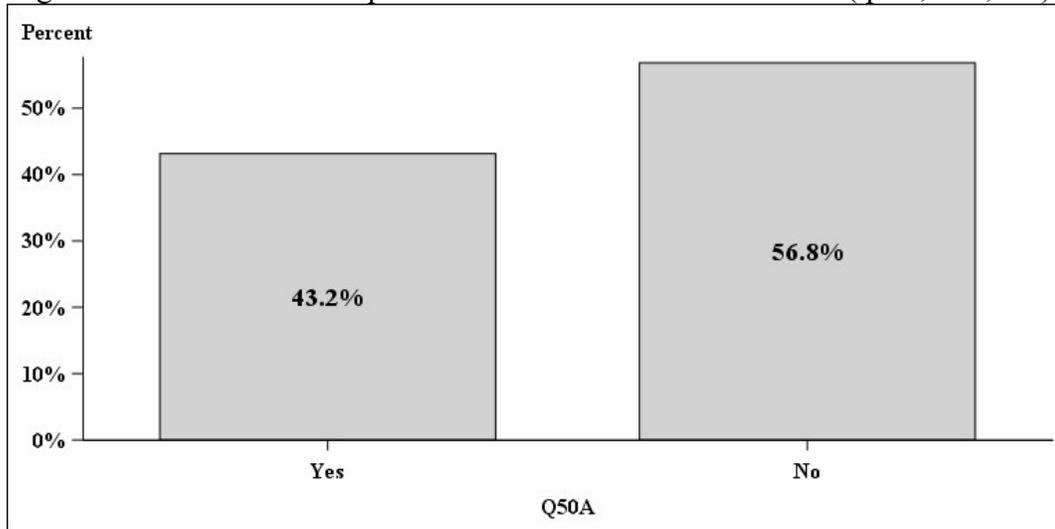


Figure R-167 describes the variation in q50a responses according to respondent age. Respondents aged 45-64 had the greatest proportion (51.7%) that needed transportation assistance, followed by respondents aged 65 and older (49.3%) and respondents aged less than 45 years (31.2%).

Figure R-167 Needed transportation assistance for a health need vs. age (q50a; n=2,280)

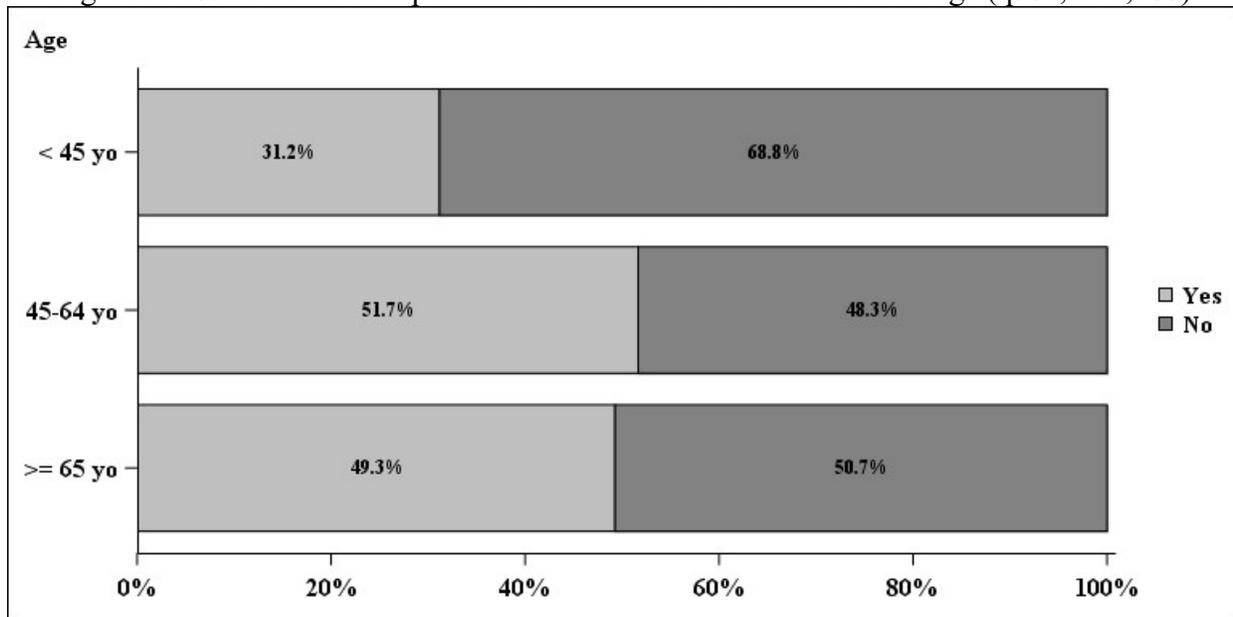


Figure R-168 shows how q50a responses varied across respondent race. Blacks had the highest proportion needing transportation assistance at 56.6%, while Whites and Multi/Other races had lower proportions at 35.8% and 34.5%, respectively.

Figure R-168 Needed transportation assistance for a health need vs. race (q50a; n=2,280)

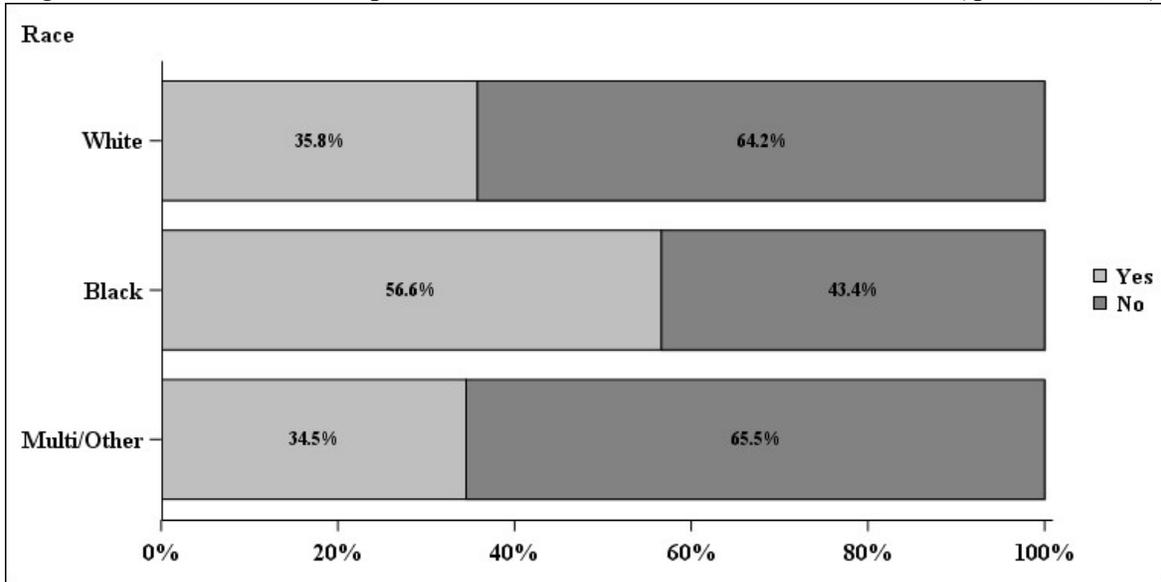


Figure R-169 shows how responses to q50a varied with respondent education level. A negative trend could be seen with respect to need for transportation assistance and education level. Respondents with <HS Grad/GED had the largest proportion needing assistance (53.3%), while only 32.0% of those with >HS Grad/GED had the same need.

Figure R-169 Needed transportation assistance for a health need vs. education (q50a; n=2,238)

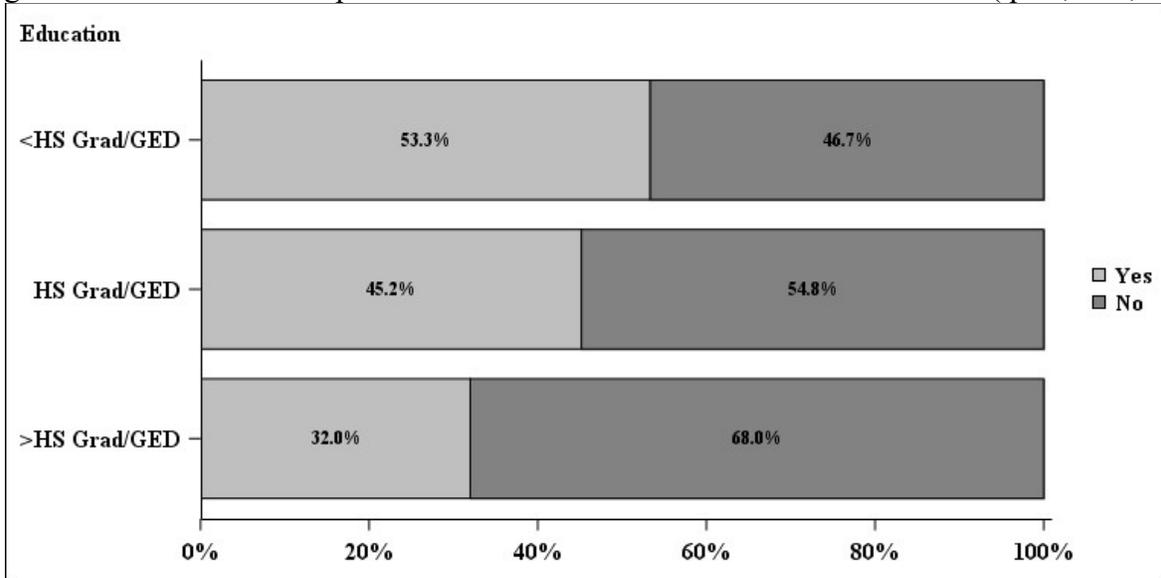


Figure R-170 describes variation in q50a responses across dual-eligibility status. A higher proportion (48.1%) of dual-eligible respondents needed transportation assistance.

Figure R-170 Needed transportation assistance for a health need vs. dual-eligible status (q50a; n=2,280)

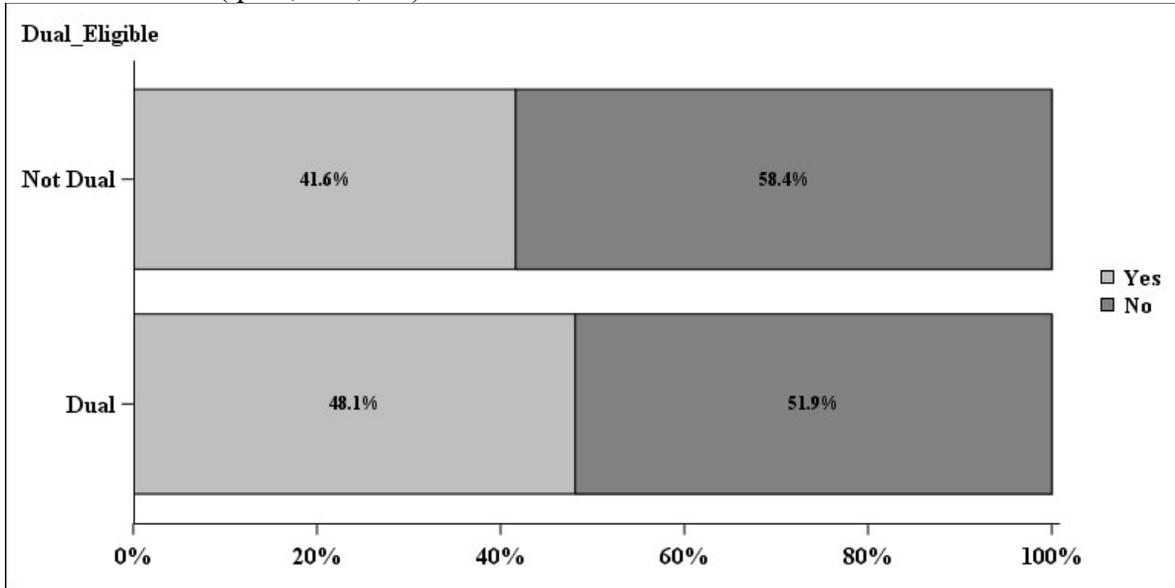
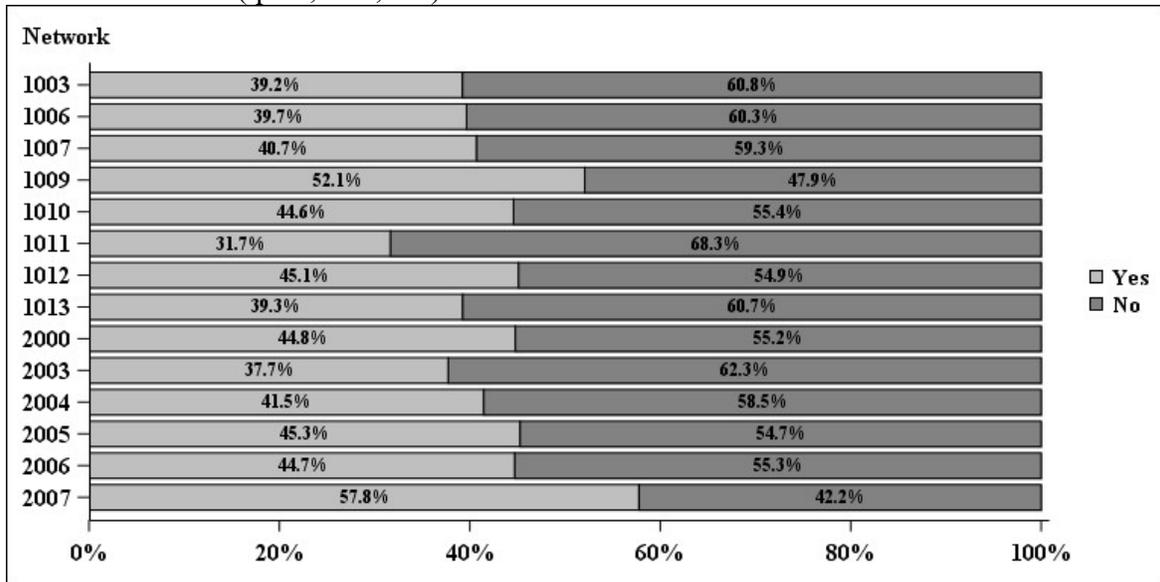


Figure R-171 shows how q50a responses varied across CCNC network. Northern Piedmont Community Care (2007) had the highest proportion of respondents that needed transportation assistance (57.8%) followed by 52.1% of Community Care Partners of Greater Mecklenburg (1009). Only 37.1% of Wake and Johnson Counties (1011) had the same need.

Figure R-171 Needed transportation assistance for a health need vs. CCNC network (q50a; n=2,280)



How often transportation assistance was provided (q50b; access)

Question 54b asked respondents (who indicated a need for transportation assistance in q54a) how often they received that assistance. Figure R-172 indicates that 52.1% of respondents always received assistance, 13.2% usually, 20.0% sometimes, and 14.6% never received assistance.

Figure R-172 How often transportation assistance was provided (q50b; n=984)

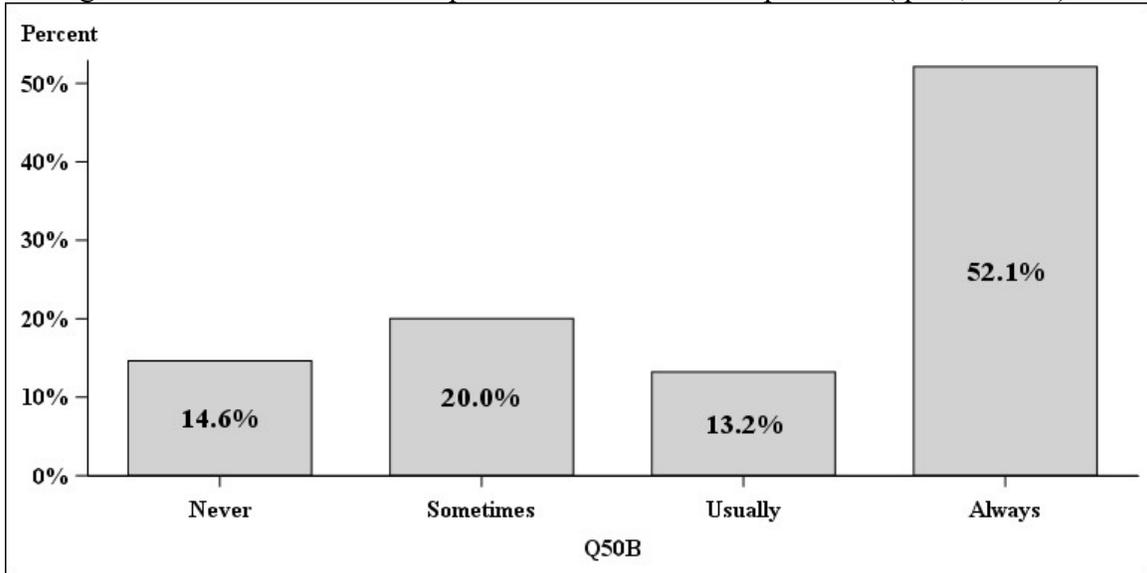


Figure R-173 shows how q50b responses varied across respondent age. Respondents aged 65 years and older most often indicated they always received transportation assistance when needed (63.9%).

Figure R-173 How often transportation assistance was provided vs. age (q50b; n=984)

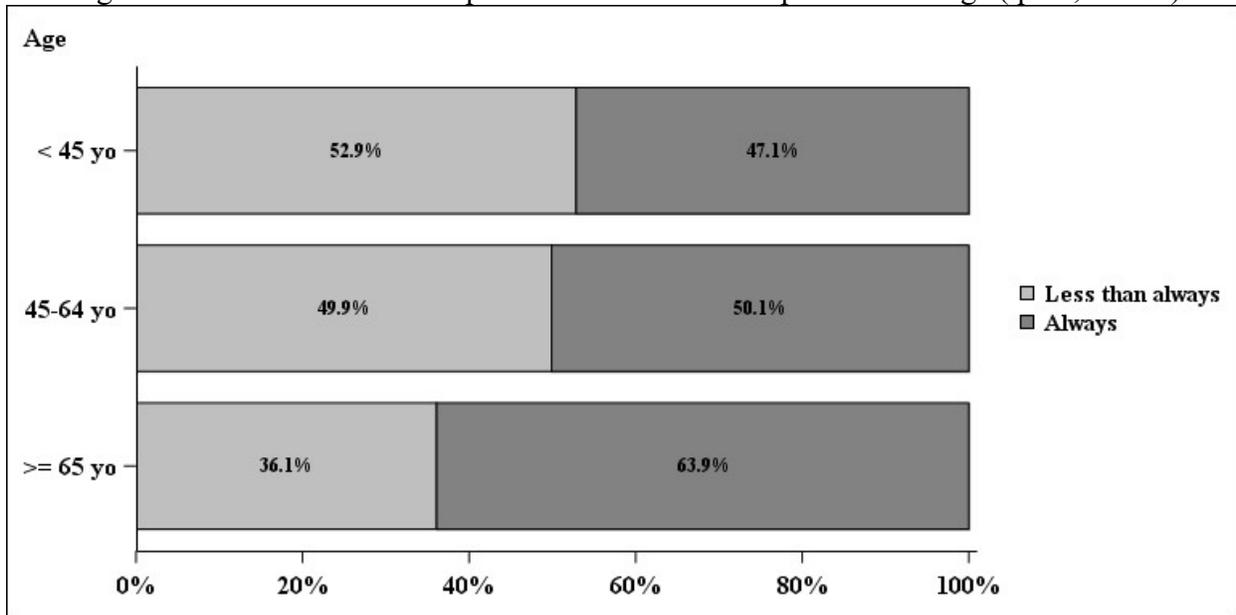


Figure R-174 depicts how q50b responses varied with respondent race. Black respondents most often indicated that they always received transportation assistance when needed (57.5%)

Figure R-174 How often transportation assistance was provided vs. race (q50b; n=984)

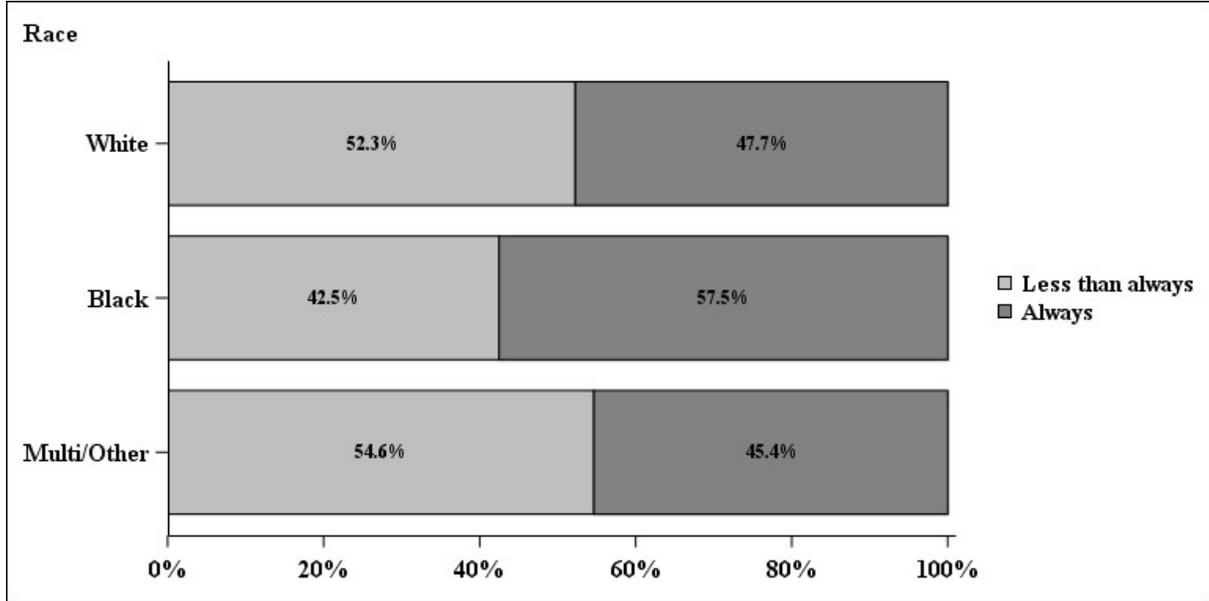
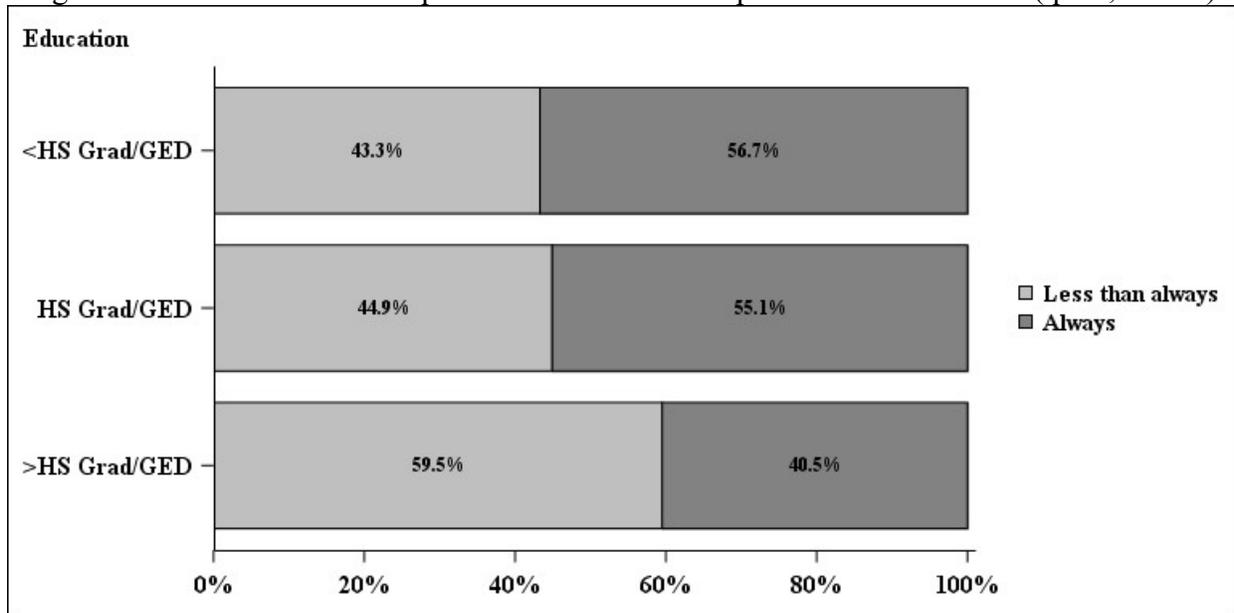


Figure R-175 describes variation in q50b across respondent education level. Respondents with >HS Grad/GED least often indicated that they always received transportation assistance when needed at 40.5%.

Figure R-175 How often transportation assistance was provided vs. education (q50b; n=963)



3.6 Your Health Status (q51-q62, q70-q71)

Your overall health rating (q51; health status)

Question 51 asked respondents to rate their overall health. Figure R-176 indicates that the majority of respondents rated their health as fair (32.1%) or good (29.2%). This was followed by those who rated their health as poor (17.1%) and very good (14.6%). Only 7.0% of respondents rated their health as excellent.

Figure R-176 Overall health rating (q51; n=2,299)

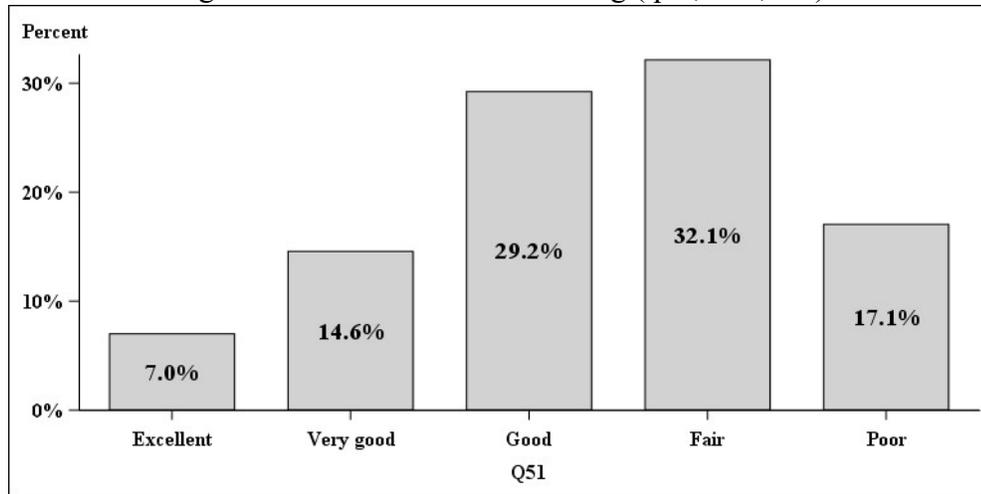


Figure R-177 shows the relationship between q51 responses and age. Respondents aged <45 rated themselves significantly healthier, with 68.0% indicating their health was excellent/very good/good. Conversely, only 34.0% of respondents aged 45-64 indicated the same.

Figure R-177 Overall health rating vs. age (q51; n=2,299)

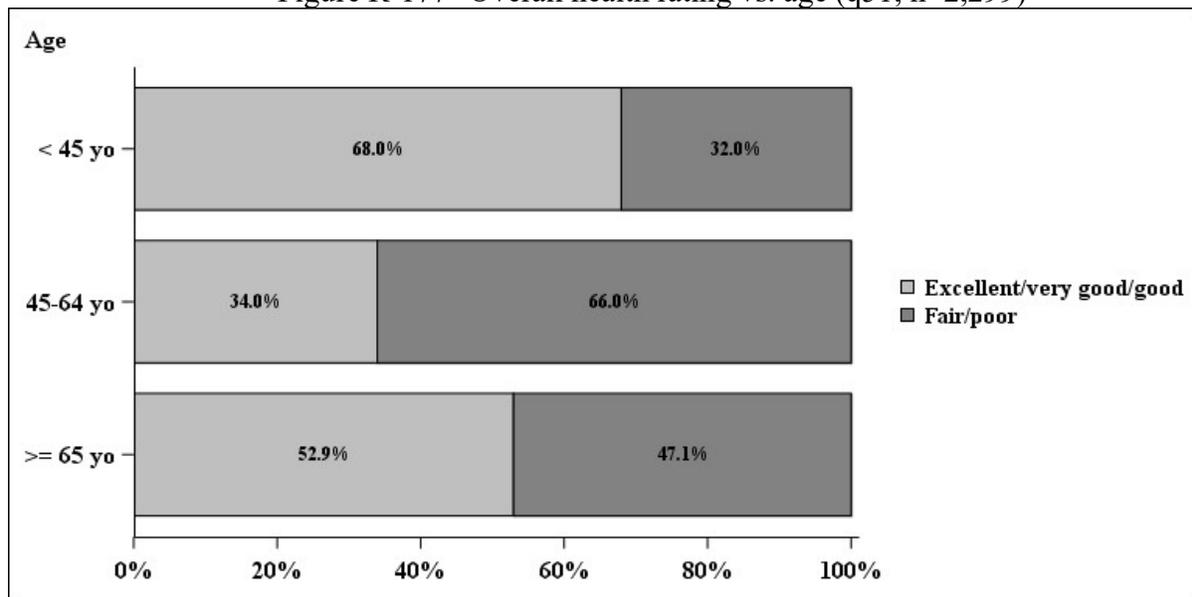


Figure R-178 demonstrates the variation in q51 responses with race. Multi/Other respondents had the greatest proportion that rated their health excellent/good/very good at 60.4%, while only 45.9% of White respondents indicated the same.

Figure R-178 Overall health rating vs. race (q51; n=2,299)

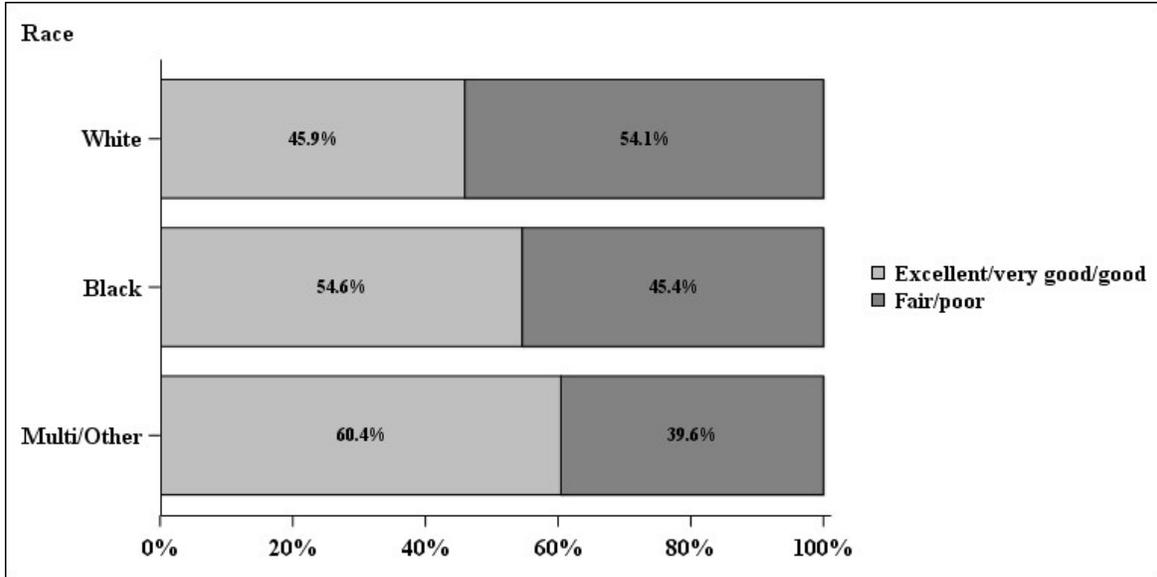


Figure R-179 describes q51 response variation across education level. Fifty-eight point eight percent (58.8%) of respondents with >HS Grad/GED rated their health excellent/very good/good while only 49.8% of respondents with <HS Grad/GED gave the same response.

Figure R-179 Overall health rating vs. education (q51; n=2,255)

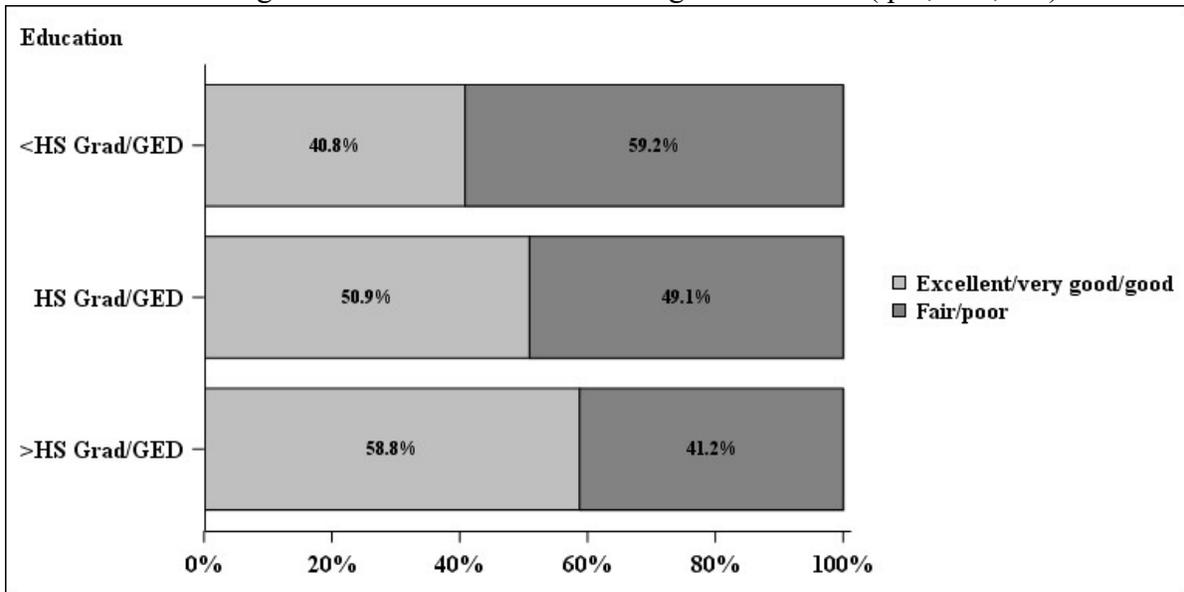


Figure R-180 shows the variation in q51 responses across CCNC network. CCNC networks 1011 (Community Care of Wake and Johnson Counties) and 1013 (Carolina Collaborative Community Care) had the highest proportion (58.5% and 58.4%, respectively) that indicated their health was excellent/very good/good. CCNC networks 1010 (Carolina Community Health Partnership) and 1003 (Community Health Partners) had the lowest proportion of respondents who indicated the same, at 41.3% and 40.7% respectively.

Figure R-180 Overall health rating vs. CCNC network (q51; n=2,299)

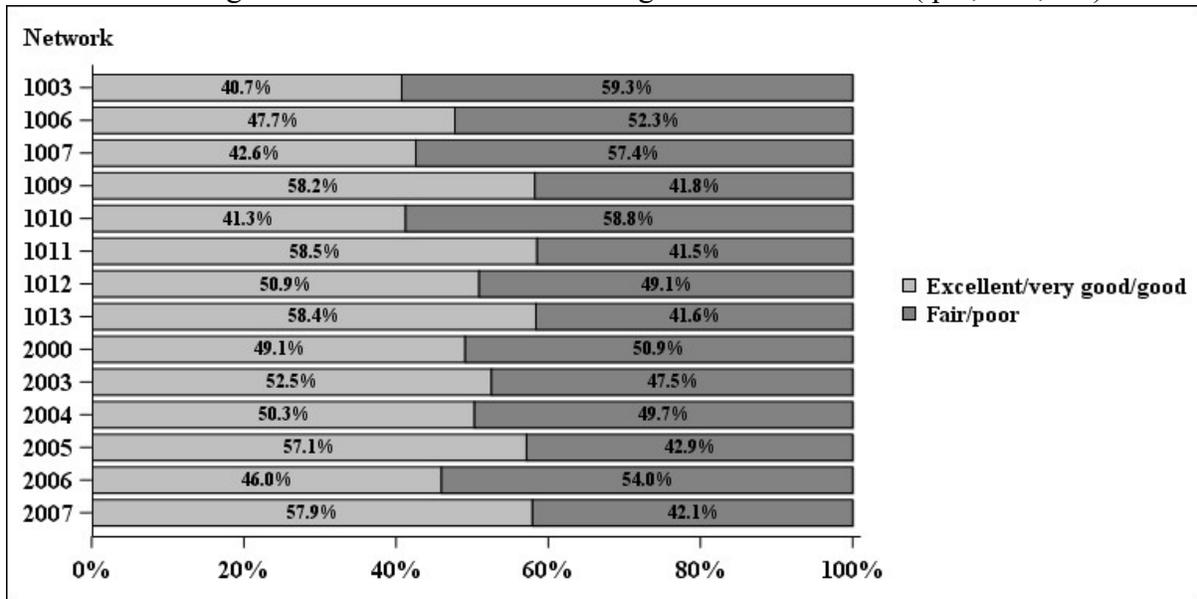
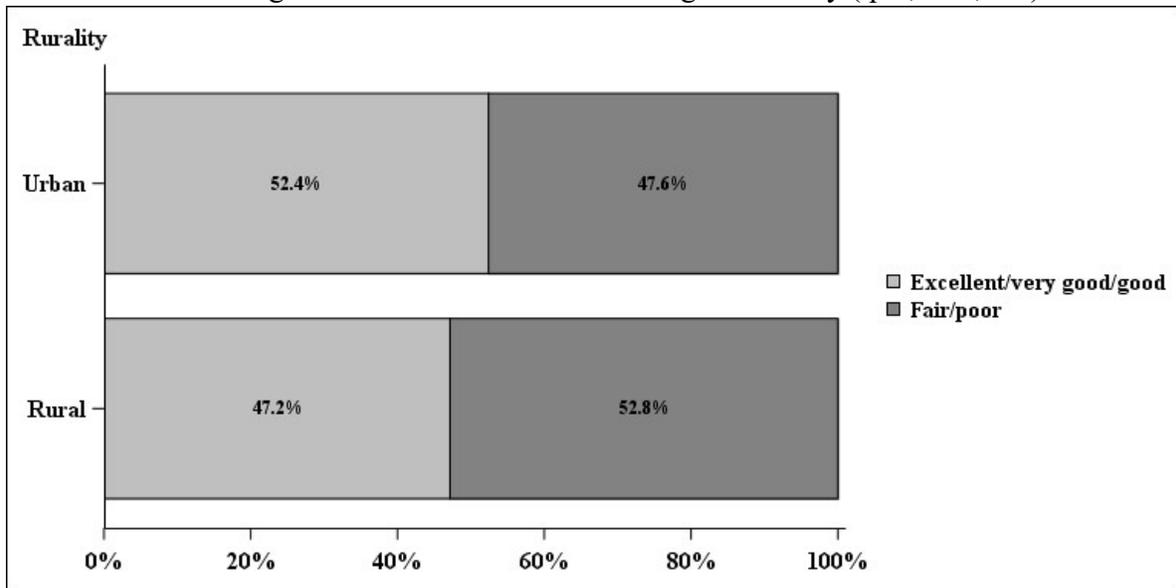


Figure R-181 demonstrates the variation in q51 responses across rurality. A greater proportion of urban respondents reported excellent/very good/good health (52.4%).

Figure R-181 Overall health rating vs. rurality (q51; n=2,299)



Your mental health rating (q52; health status)

Question 52 asked respondents to rate their overall mental or emotional health. Figure R-182 indicates that the majority of respondents rated their mental/emotional health as good (31.7%) or fair (26.7%). This was followed by respondents who rated their mental/emotional health as very good (17.0%) and excellent (14.0%). Only 10.6% of respondents rated their mental/emotional health as poor.

Figure R-182 Overall mental/emotional health rating (q52; n=2,290)

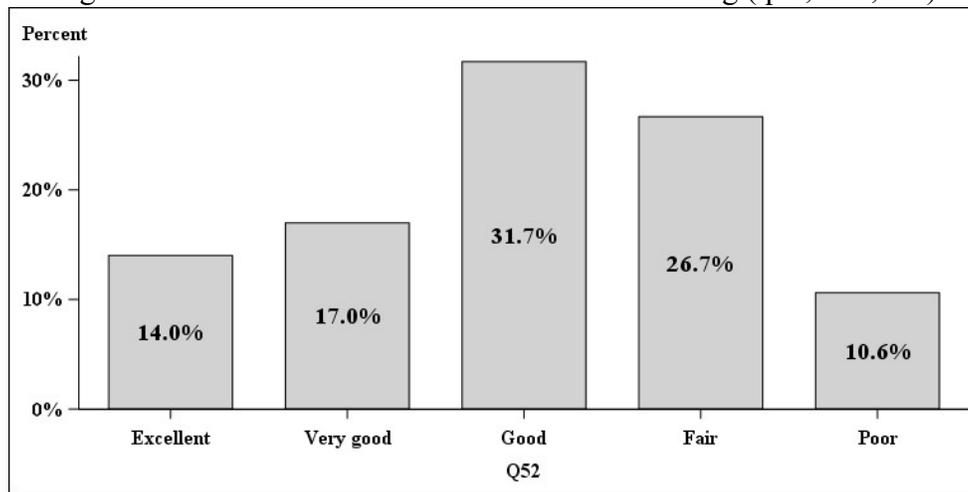


Figure R-183 describes variation in responses to q52 with age. Respondents ≥ 65 years old had the highest proportion that reported excellent/very good/good mental health at 71.6%, while respondents aged 45-64 reported the lowest at 56.6%.

Figure R-183 Overall mental/emotional health rating vs. age (q52; n=2,290)

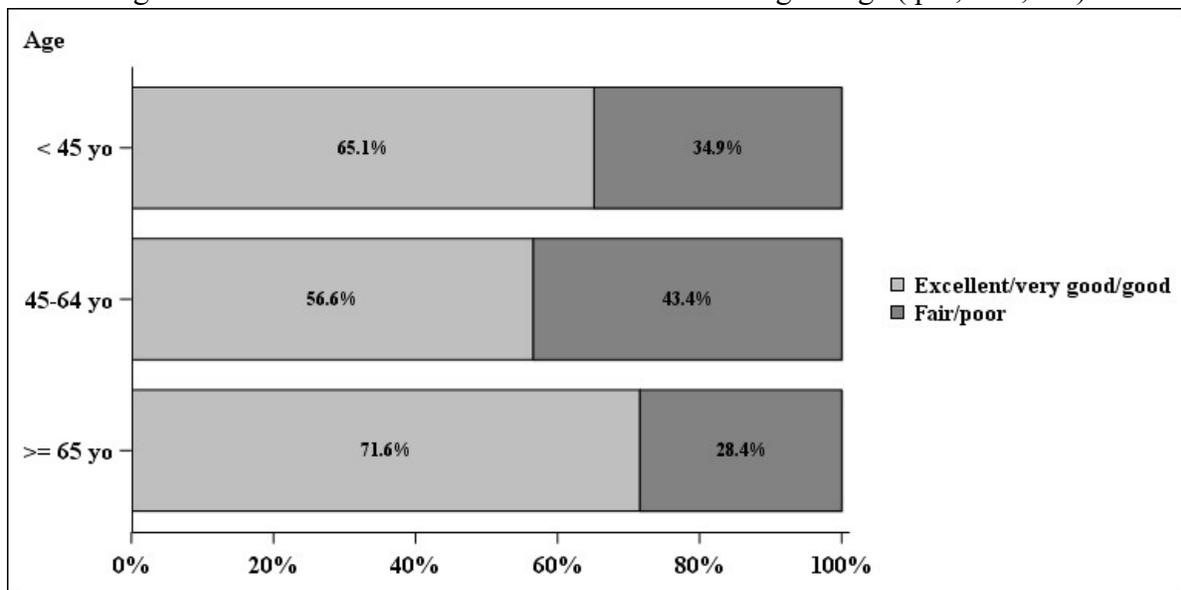


Figure R-184 shows how q52 responses varied with race. Multi/Other races had the greatest proportion that reported excellent/very good/good mental health at 69.3% while only 58.6% of Whites reported the same.

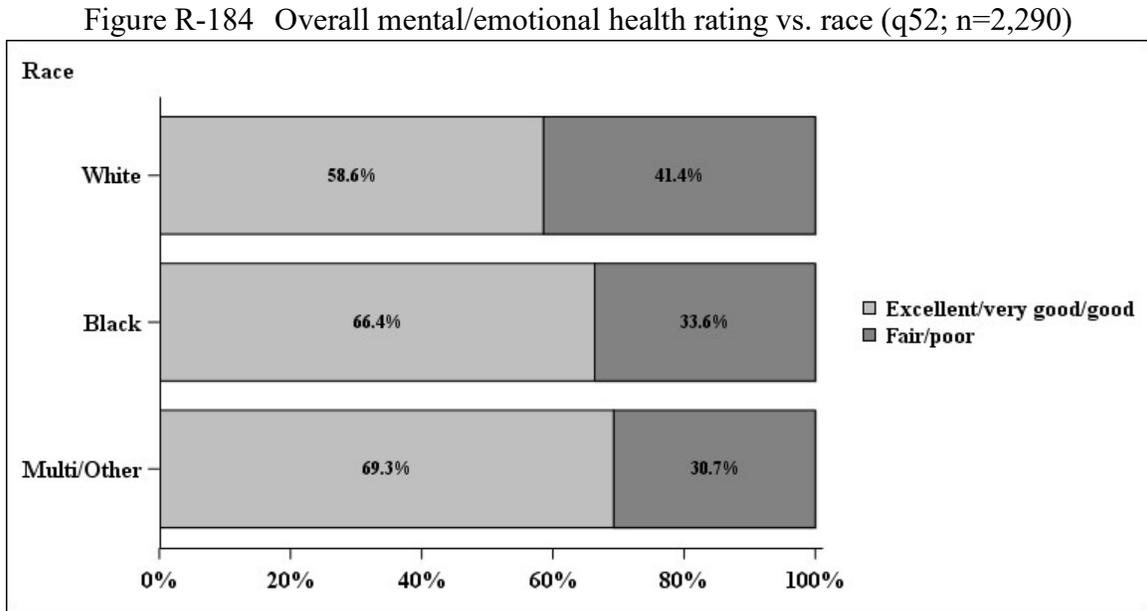


Figure R-185 shows q52 response variation across education level. Respondents with >HS Grad/GED had the greatest proportion that reported excellent/very good/good mental health (67.7%) while respondents with <HS Grad/GED reported the same (53.5%).

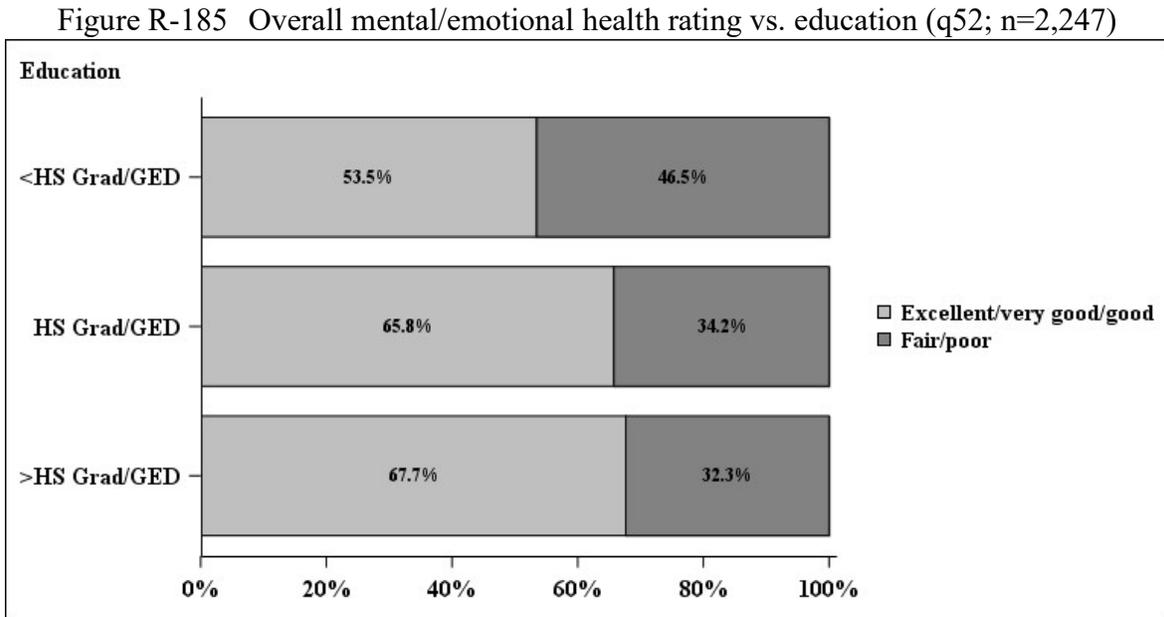


Figure R-186 describes how responses to q52 varied with dual-eligible status. Dual-eligible respondents had the greater proportion that reported excellent/very good/good mental health at 68.1%.

Figure R-186 Overall mental/emotional health rating vs. dual-eligible status (q52; n=2,290)

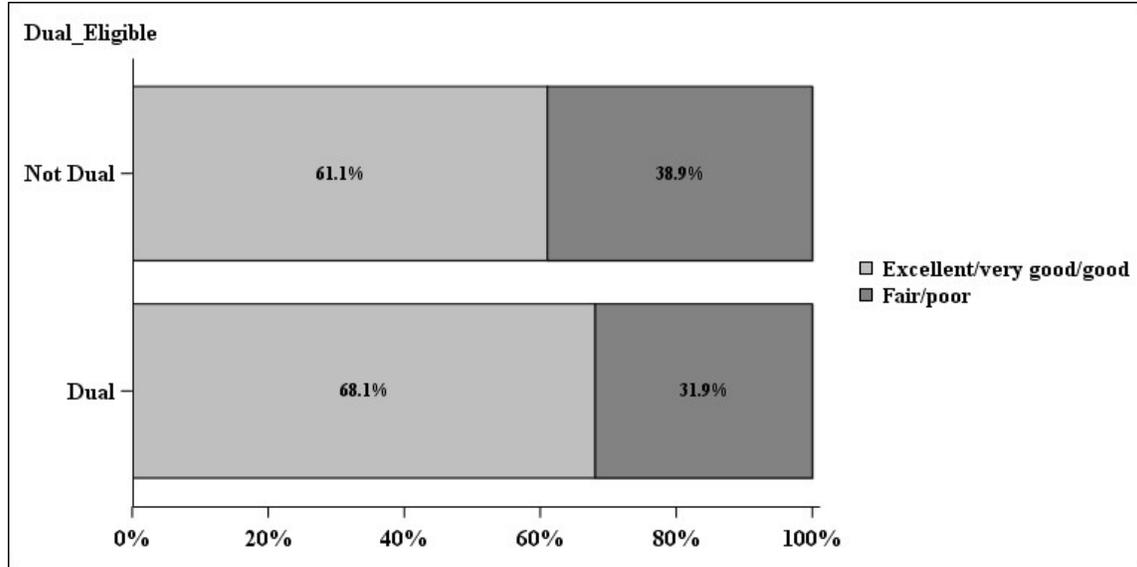
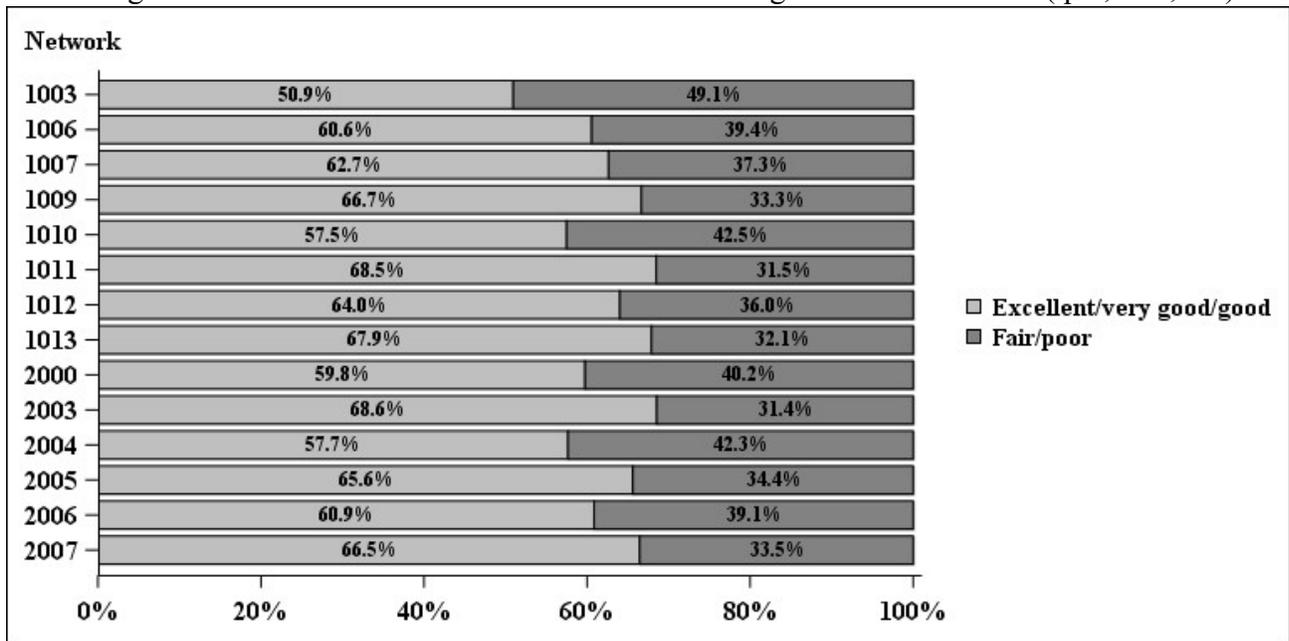


Figure R-187 describes variation in q52 responses across CCNC networks. Community Health Partners (1003) had the lowest proportion of respondents that reported excellent/very good/good mental health at 50.9%.

Figure R-187 Overall mental/emotional health rating vs. CCNC network (q52; n=2,290)



Help with activities of daily living (ADLs) (q53; health status)

Question 53 asked respondents if any impairment or health problem required the help of other persons to assist with their ADLs (personal care needs, such as eating, bathing, dressing, or getting around the house). Figure R-188 reveals that 21.0% of respondents reported that they need help from others in managing these household activities.

Figure R-188 Help with activities of daily living (ADLs) (q53; n=2,308)

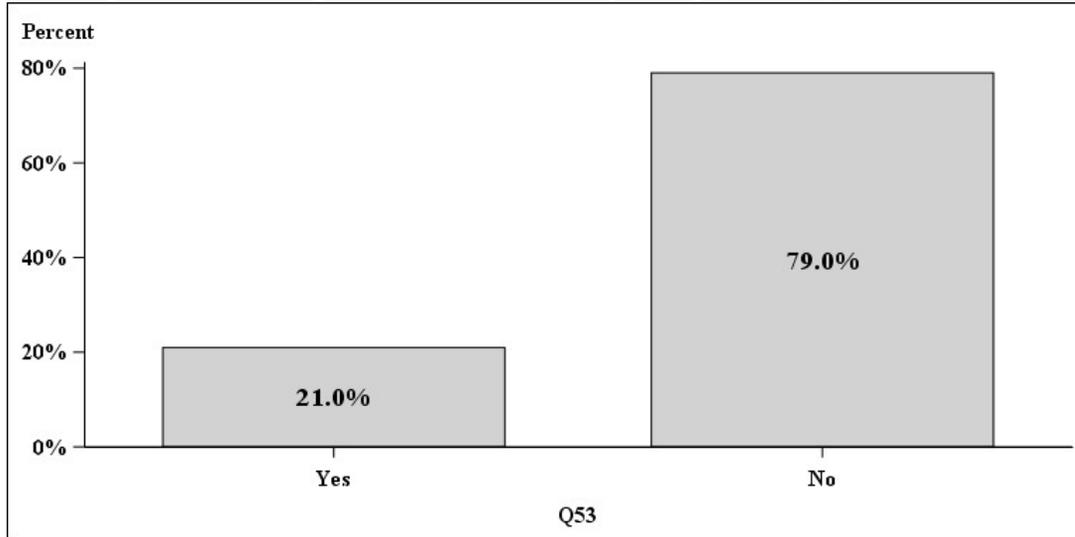


Figure R-189 shows variation in q53 responses across age. Respondents aged 45-64 had the highest proportion who indicated they needed help with ADLs (27.1%) while those aged less than 45 had the lowest proportion (14.5%).

Figure R-189 Help with activities of daily living (ADLs) vs. age (q53; n=2,308)

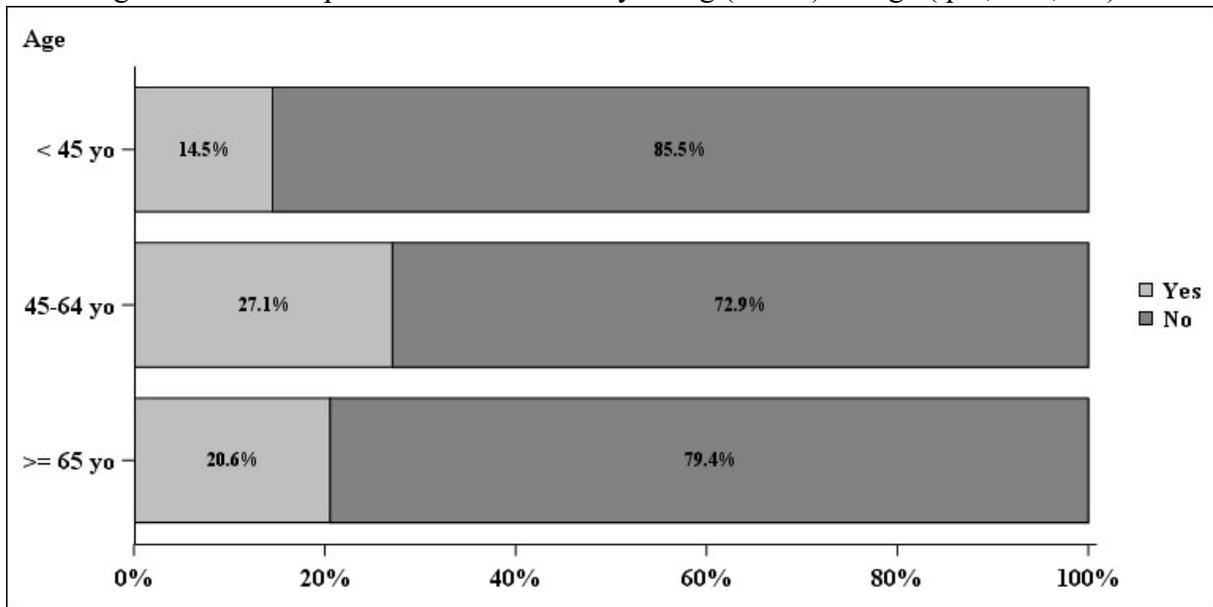


Figure R-190 depicts variation in q53 responses across race. Blacks most often indicated needing help with ADLs at 24.7%.

Figure R-190 Help with activities of daily living (ADLs) vs. race (q53; n=2,308)

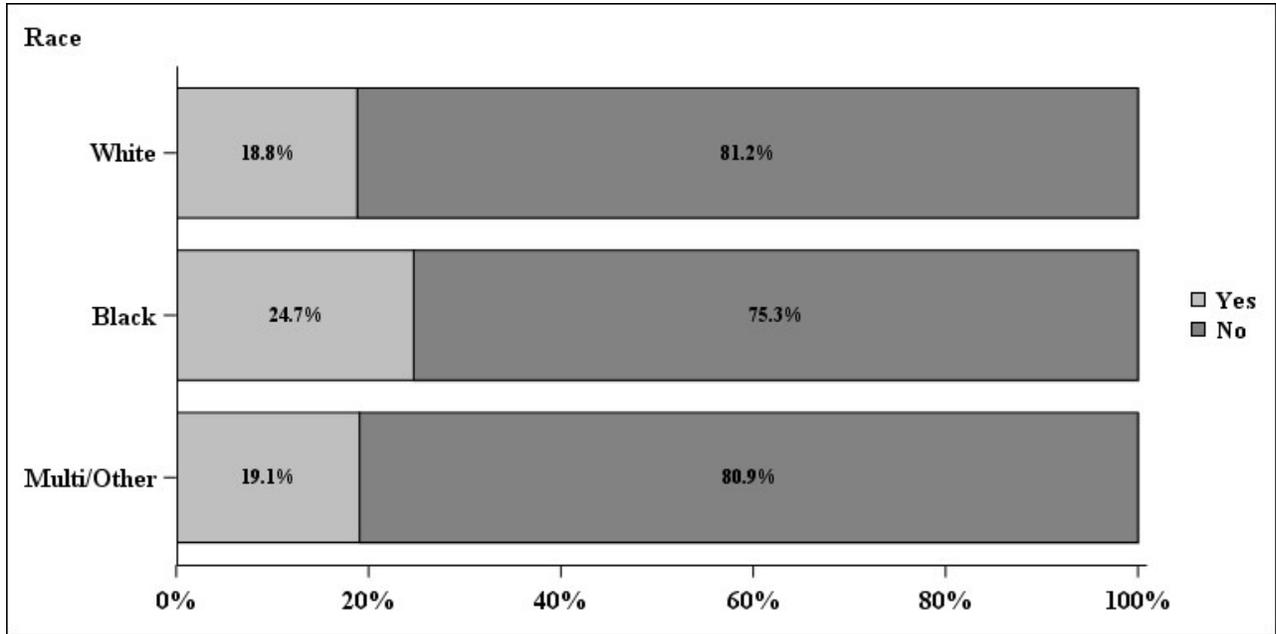
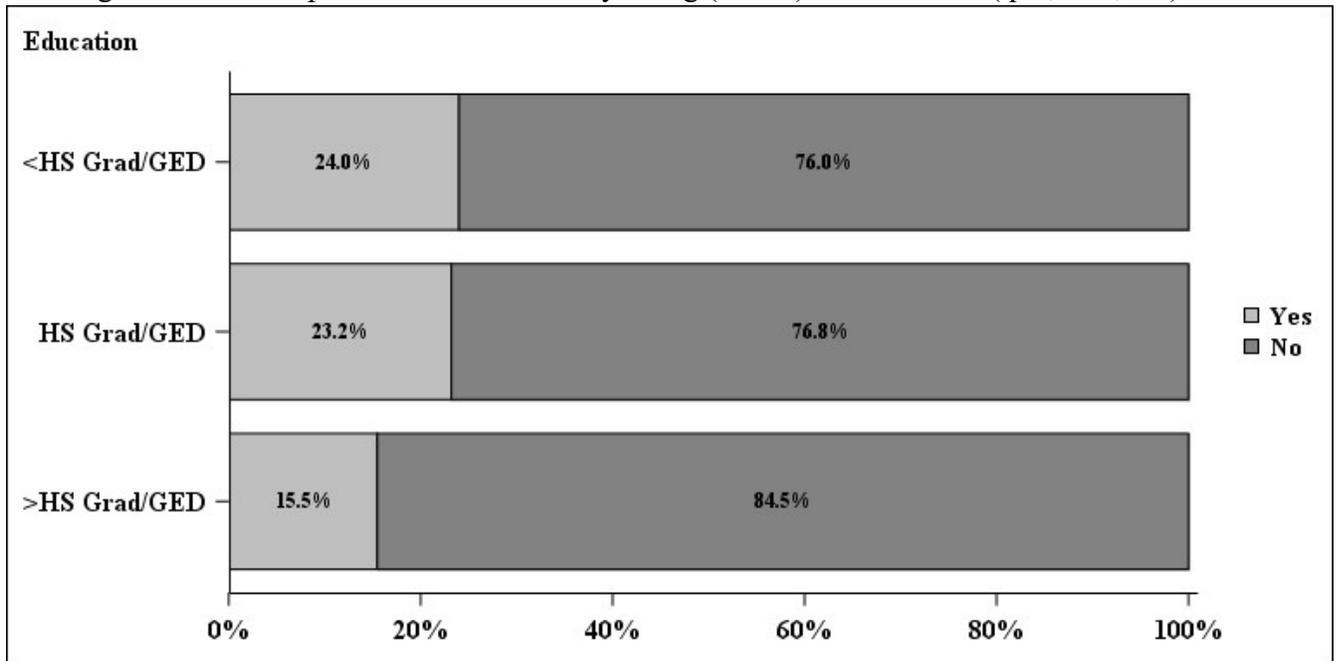


Figure R-191 shows q53 response variation across education level. Respondents with >HS Grad/GED least often reported needing help with ADLs at 15.5%.

Figure R-191 Help with activities of daily living (ADLs) vs. education (q53; n=2,265)



Help with instrumental activities of daily living (IADLs) (q54; health status)

Question 54 asked respondents if any impairment or health problem required help with routine needs like household chores, personal business, or shopping. Figure R-192 indicates that 37.8% of respondents have a health problem that requires assistance with IADLs.

Figure R-192 Help with instrumental activities of daily living (IADLs) (q54; n=2,290)

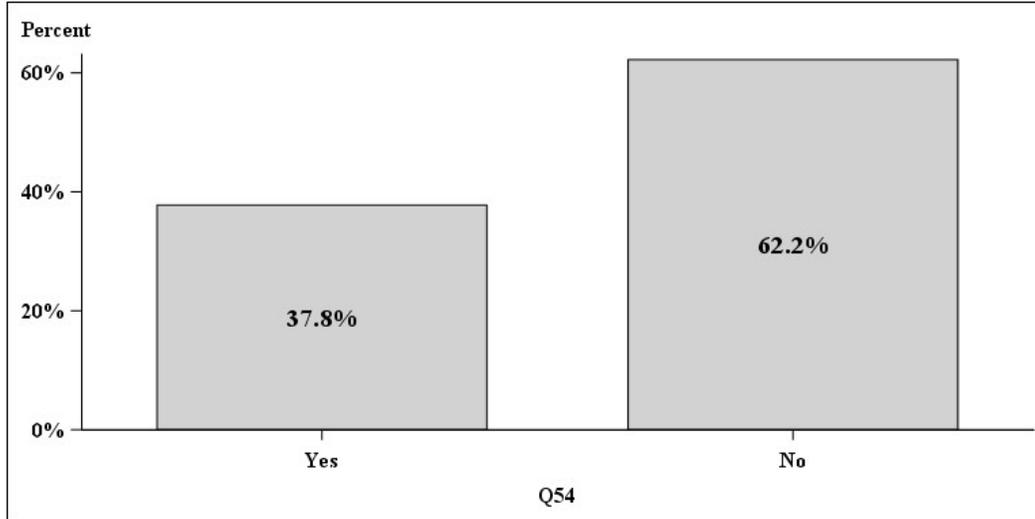


Figure R-193 describes the relationship between q54 responses and age. The highest proportion of respondents that indicated a need for help with IADLs were those aged 45-64 (46.4%), while the lowest proportion were those aged <45 (29.9%).

Figure R-193 Help with instrumental activities of daily living (IADLs) vs. age (q54; n=2,290)

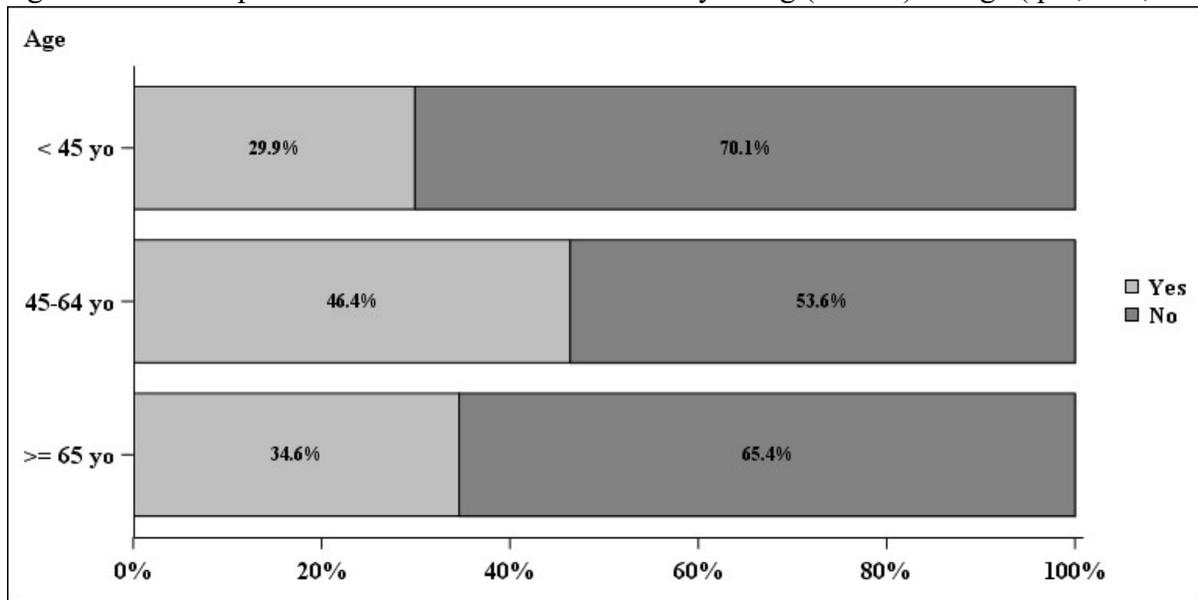


Figure R-194 shows variation in q54 responses across education level. Respondents with <HS Grad/GED comprised the largest proportion that indicated they needed help with IADLs (42.7%) while respondents with >HS Grad/GED comprised the lowest proportion (30.5%).

Figure R-194 Help with instrumental activities of daily living (IADLs) vs. education (q54; n=2,248)

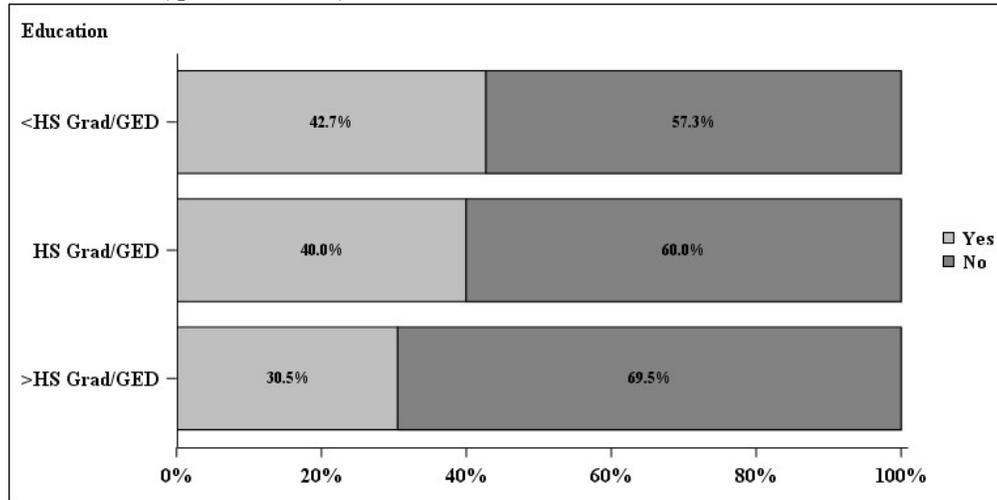
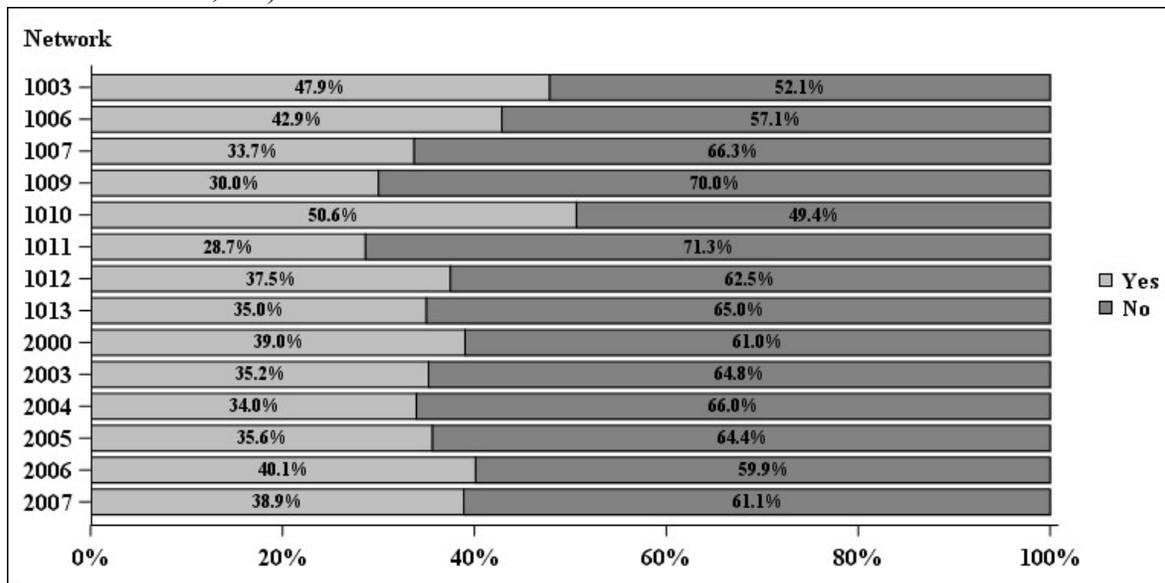


Figure R-195 depicts variation in q54 responses across CCNC network. Carolina Community Health Partnership (1010) and Community Health Partners (1003) had 50.6% and 47.9%, respectively, that indicated they needed help with IADs. Community Care of Wake and Johnston Counties (1011) had with the smallest proportion (28.7%).

Figure R-195 Help with instrumental activities of daily living (IADLs) vs. CCNC network (q54; n=2,290)



Condition that interferes with independence or quality of life (q55; health status)

Question 55 asked respondents if they have a physical or medical condition that seriously interferes with independence, participation in the community, or quality of life. Figure R-196 indicates that 52.8% have a condition that interferes with their independence or quality of life.

Figure R-196 Condition that interferes with independence or quality of life (q55; n=2,258)

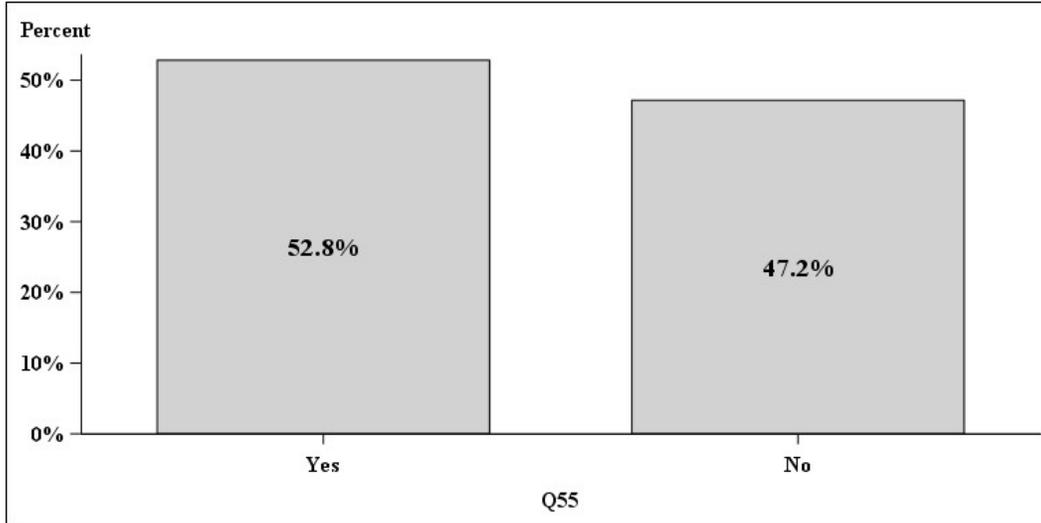


Figure R-197 shows variation in q55 responses across age. Respondents aged 45-64 most often indicated having a condition that seriously interferes with their independence (67.3%), followed by respondents aged 65 or greater (44.6%) and respondents less than 45 (41.1%).

Figure R-197 Condition that interferes with independence or quality of life vs. age (q55; n=2,258)

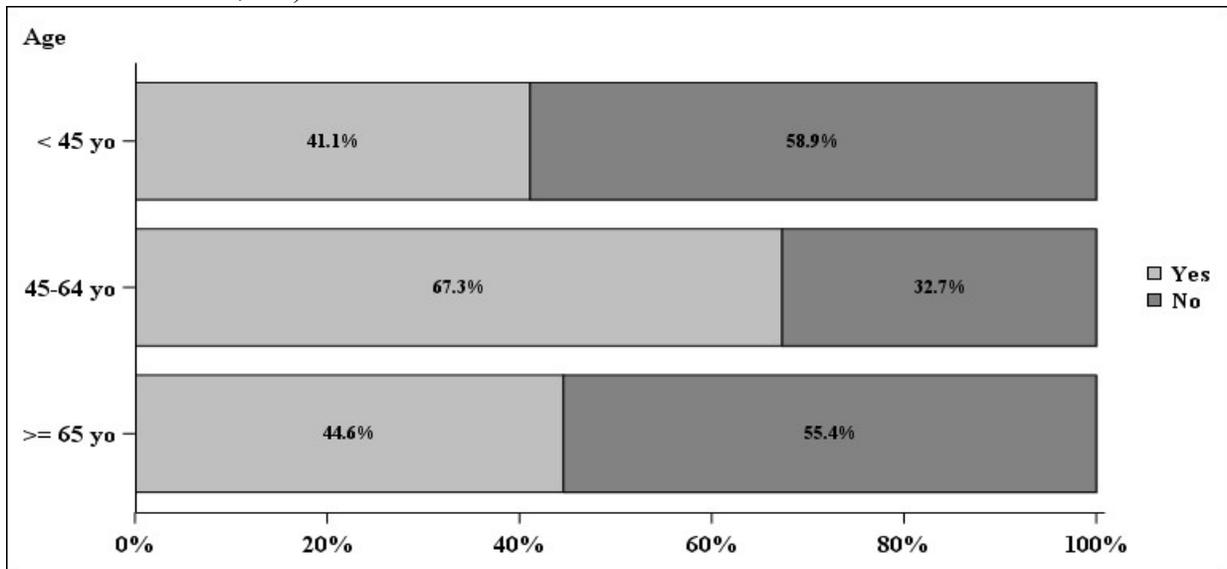


Figure R-198 describes variation in q55 responses by sex. Males more often indicated they had a condition that seriously interferes with independence at 59.1%, while females less often indicated the same at 49.2%.

Figure R-198 Condition that interferes with independence or quality of life vs. sex (q55; n=2,258)

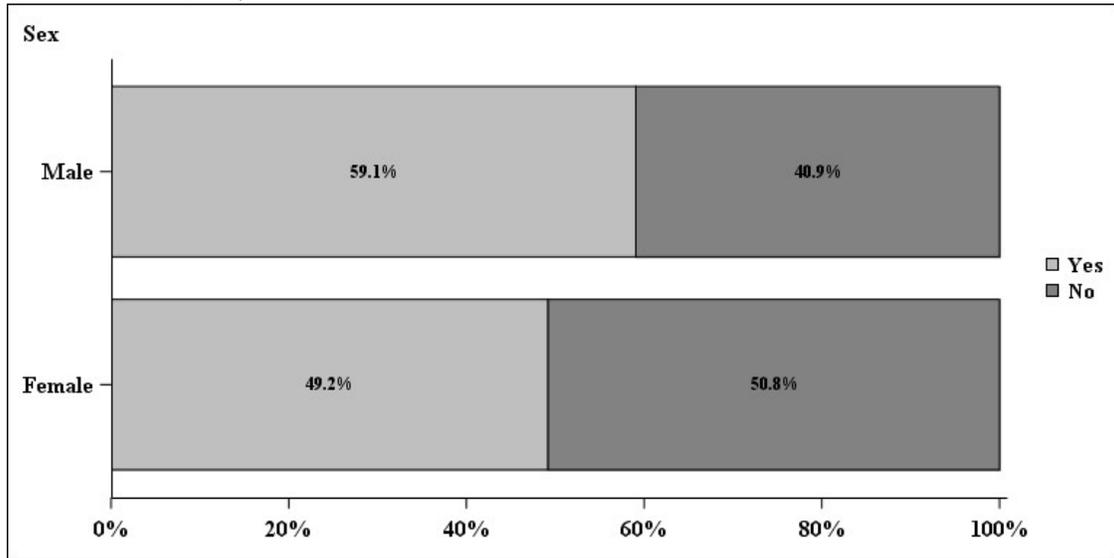


Figure R-199 shows how responses to q55 varied across race. Whites most often reported having a medical condition that interferes with their independence (57.5%) while Blacks least often reported the same (47.8%).

Figure R-199 Condition that interferes with independence or quality of life vs. race (q55; n=2,258)

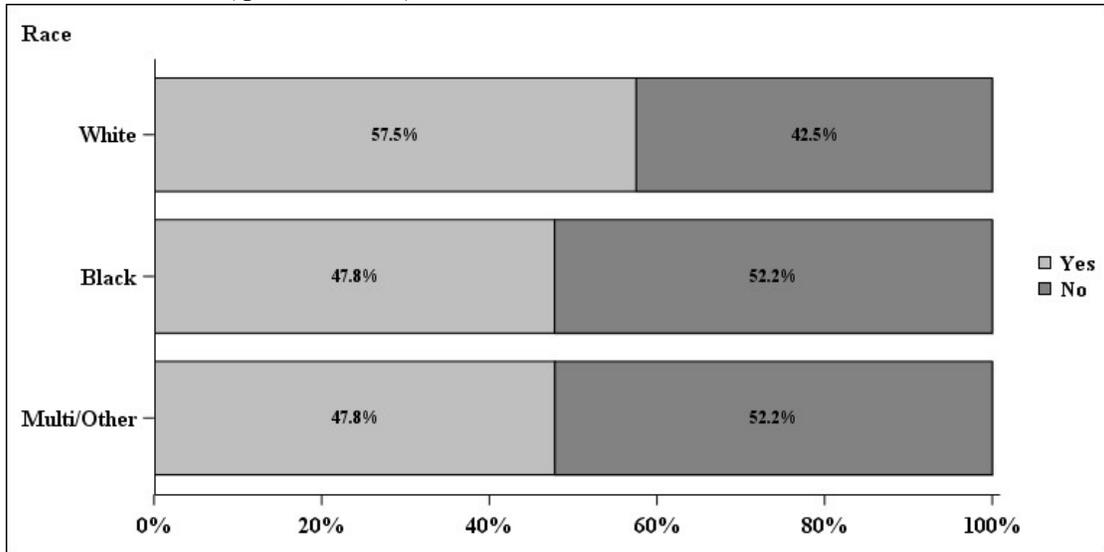


Figure R-200 describes how q55 responses varied across education level. Respondents with <HS Grad/GED most often reported having a condition that interferes with their independence at 57.4%. Respondents with >HS Grad/GED least often reported the same at 48.1%.

Figure R-200 Condition that interferes with independence or quality of life vs. education (q55; n=2,218)

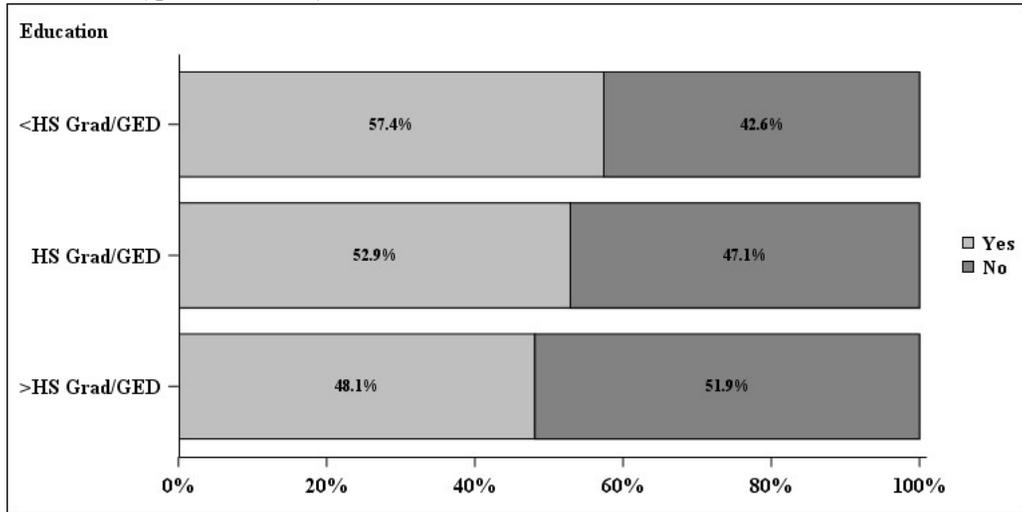
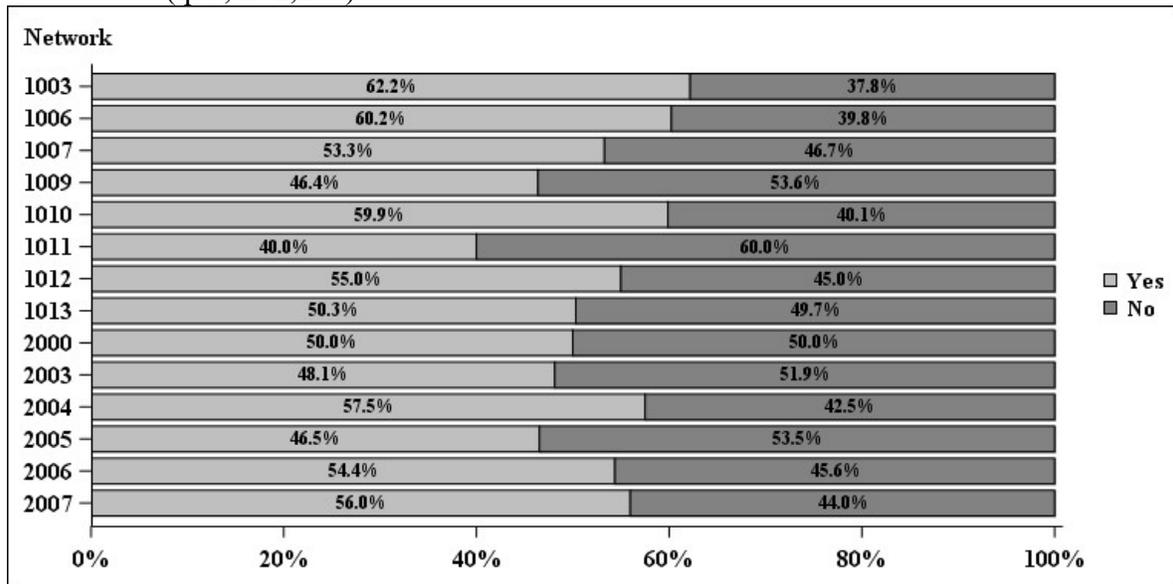


Figure R-201 describes the variation in q55 responses across CCNC network. Community Health Partners (1003) had the largest proportion of respondents who indicated they have a condition that interferes with their independence (62.2%). Community Care of Wake and Johnston Counties (1011) had the lowest proportion of respondents who indicated having an interfering condition (40.0%).

Figure R-201 Condition that interferes with independence or quality of life vs. CCNC network (q55; n=2,258)



Overnight or longer hospital stay (q56; utilization)

Question 56 asked respondents if they had been a patient in the hospital overnight or longer in the previous 6 months. Figure R-202 indicates that 19.2% of respondents reported an overnight hospitalization.

Figure R-202 Overnight or longer hospital stay (q56; n=2,323)

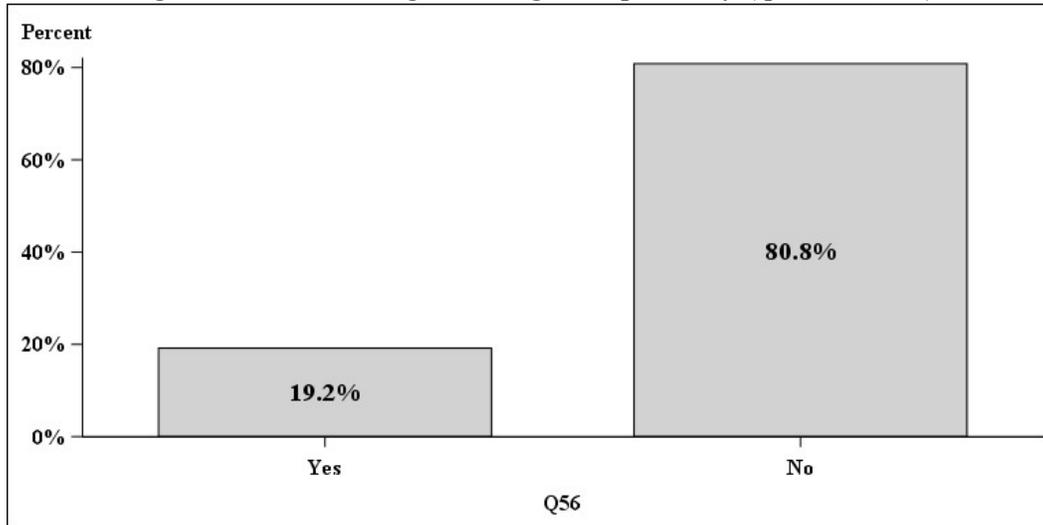
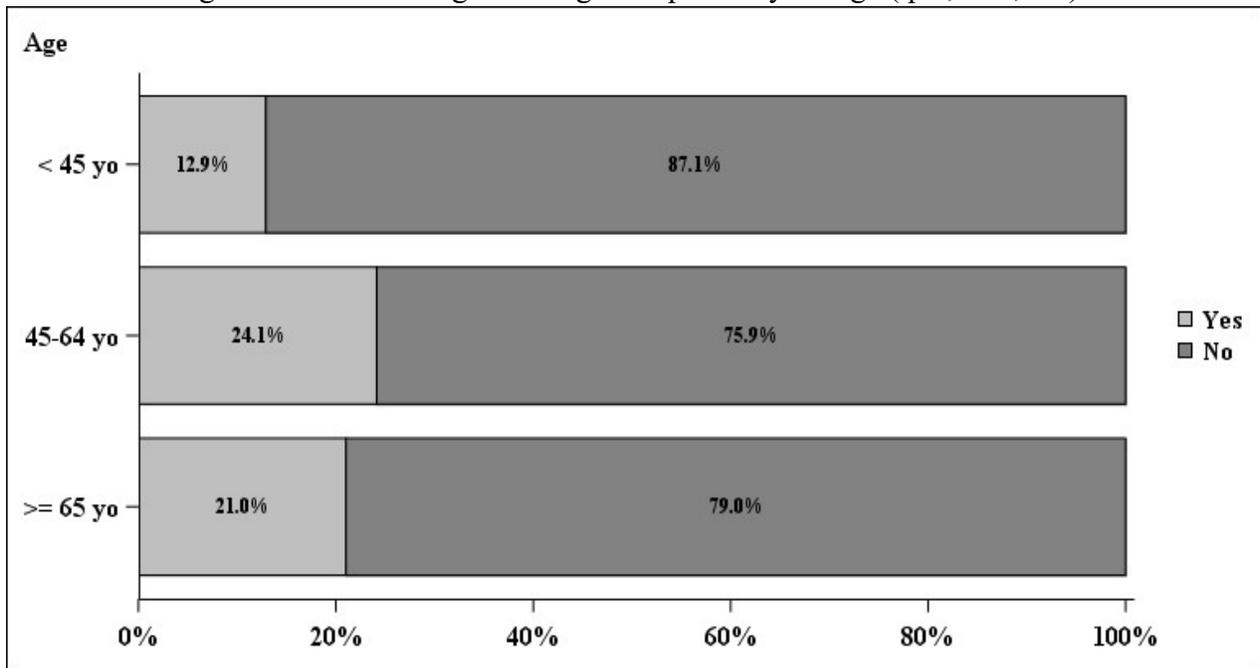


Figure R-203 shows the variation in q56 responses across age. Respondents aged 45-64 had the highest proportion (24.1%) that indicated they had an overnight hospital stay in the previous 6 months, while only 12.9% of respondents aged less than 45 indicated the same.

Figure R-203 Overnight or longer hospital stay vs. age (q56; n=2,316)



Number of visits to emergency room (q57; utilization)

Question 57 asked respondents how many times, in the previous 6 months, they visited the emergency room to get care for themselves. Figure R-204 reveals that the majority of respondents (58.4%) reported no visits. 20.2% of respondents reported that they made 1 visit, followed by 14.9% of respondents reporting that they made 2-3 visits. Only 6.6% of respondents reported 4 or more visits.

Figure R-204 Visits to the ER in previous 6 months (q57; n=2,323)

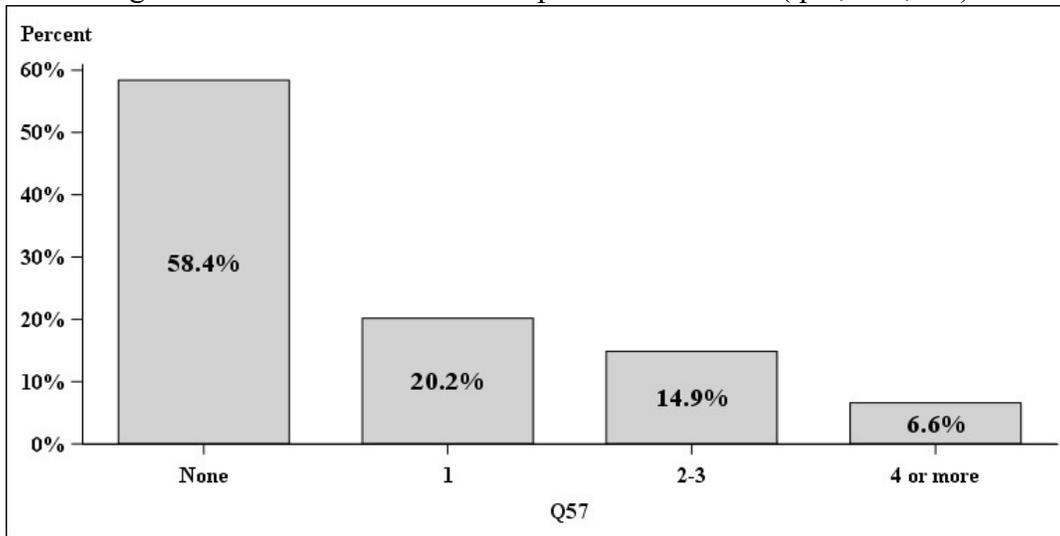


Figure R-205 shows how q57 responses varied with age. Respondents aged 65 and older and 45-64 reported no visits to the emergency room in the previous 6 months at 65.2% and 53.3%, respectively. Respondents aged 65 and older had the lowest proportion reporting 4 or more visits at 2.8%. Respondents aged 45-64 generally had the most ER visits while those ≥ 65 had the fewest.

Figure R-205 Visits to the ER in previous 6 months vs. age (q57; n=2,276)

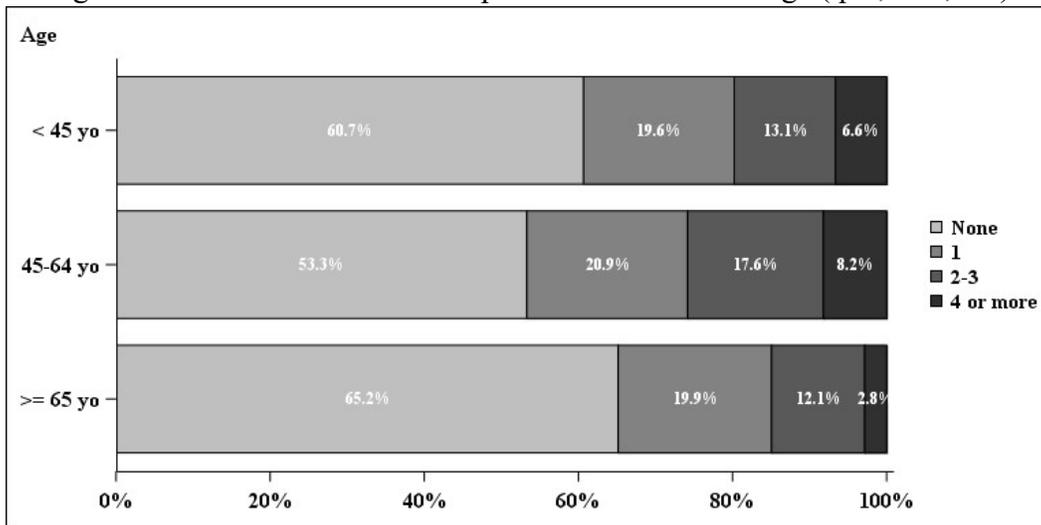


Figure R-206 depicts variation in q57 responses across sex. Females reported the highest proportion of 4 or more ER visits at 7.3% in the previous 6 months while also generally reporting more ER visits than males.

Figure R-206 Visits to the ER in previous 6 months vs. sex (q57; n=2,276)

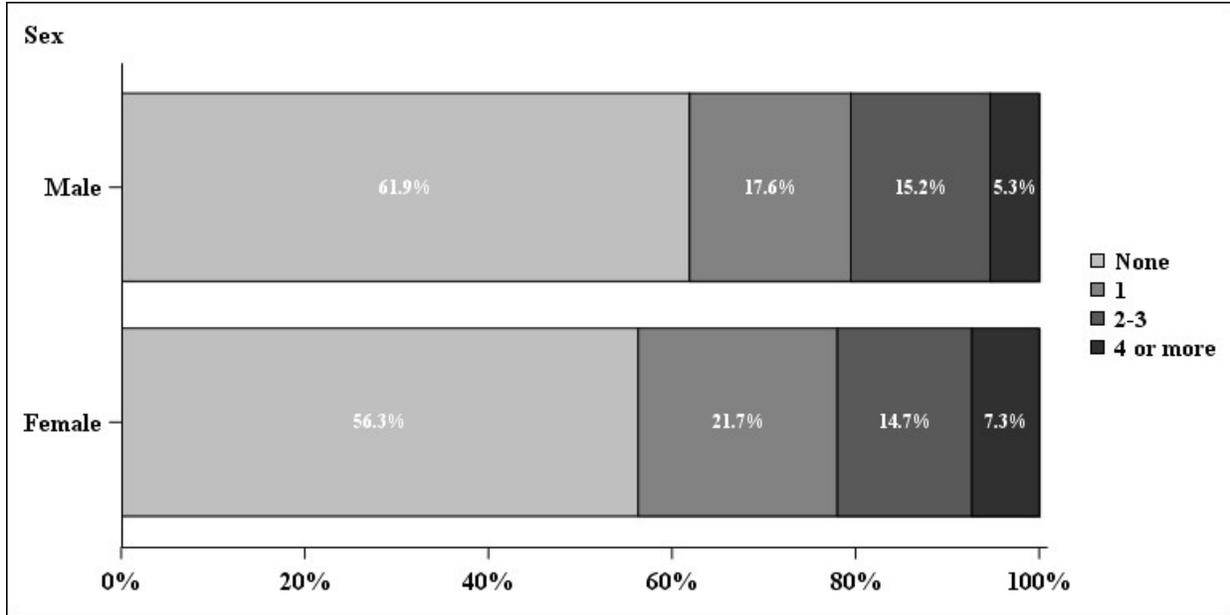


Figure R-207 reveals variation in q57 responses across race. Blacks had the most ER visits in general while Multi/other individuals had the fewest.

Figure R-207 Visits to the ER in previous 6 months vs. race (q57; n=2,276)

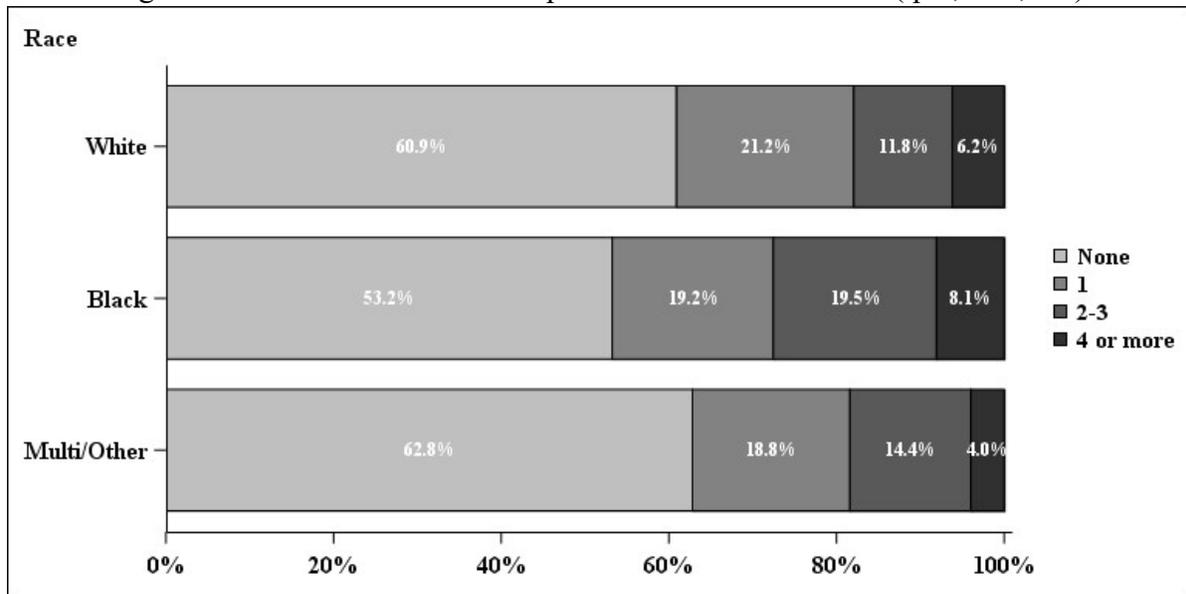
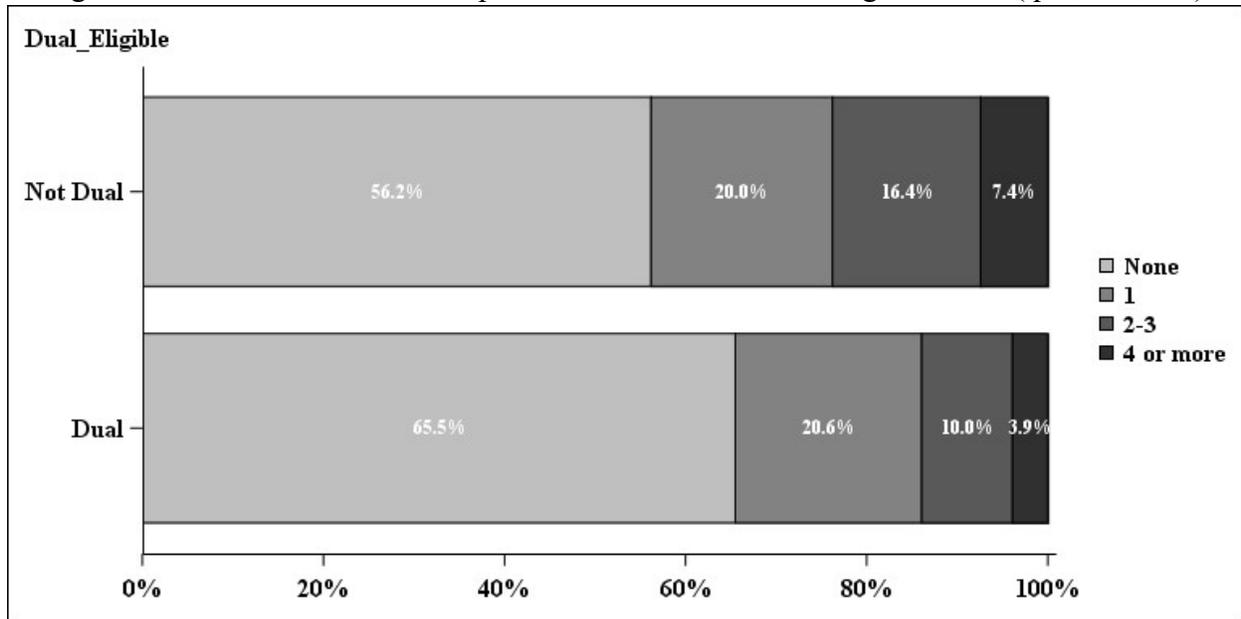


Figure R-208 demonstrates the variation in q57 responses with dual-eligibility status. Not dual respondents reported significantly more ER visits than dual-eligible respondents.

Figure R-208 Visits to the ER in previous 6 months vs. dual-eligible status (q57; n=2,276)



Getting care ≥ 3 times for the same condition or problem (q58; health status)

Question 58 asked respondents if, in the previous 6 months, they had gotten health care 3 or more times for the same condition. Figure R-209 reveals that 50.9% of respondents did receive health care 3 or more times for the same condition.

Figure R-209 Got care ≥ 3 times for the same health condition (q58; n=2,282)

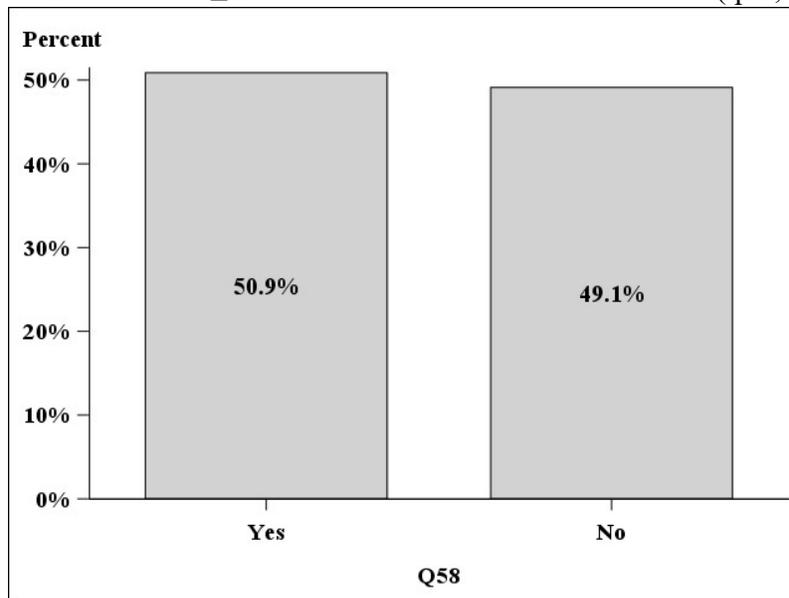


Figure R-210 describes q58 response variation across age. Respondents aged 45-64 had a significantly higher proportion that reported seeking health care 3 or more times at 60.2%. Respondents aged ≥ 65 and less than 45 sought care less often at 44.2% and 43.9%, respectively.

Figure R-210 Got care ≥ 3 times for the same health condition vs. age (q58; n=2,282)

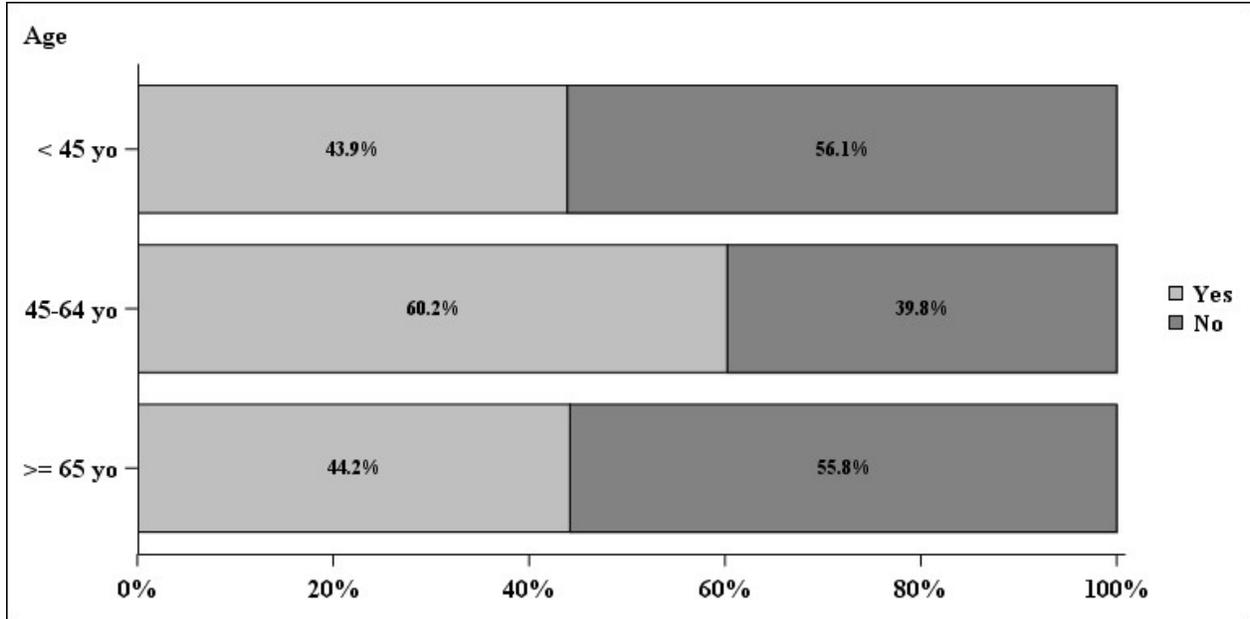
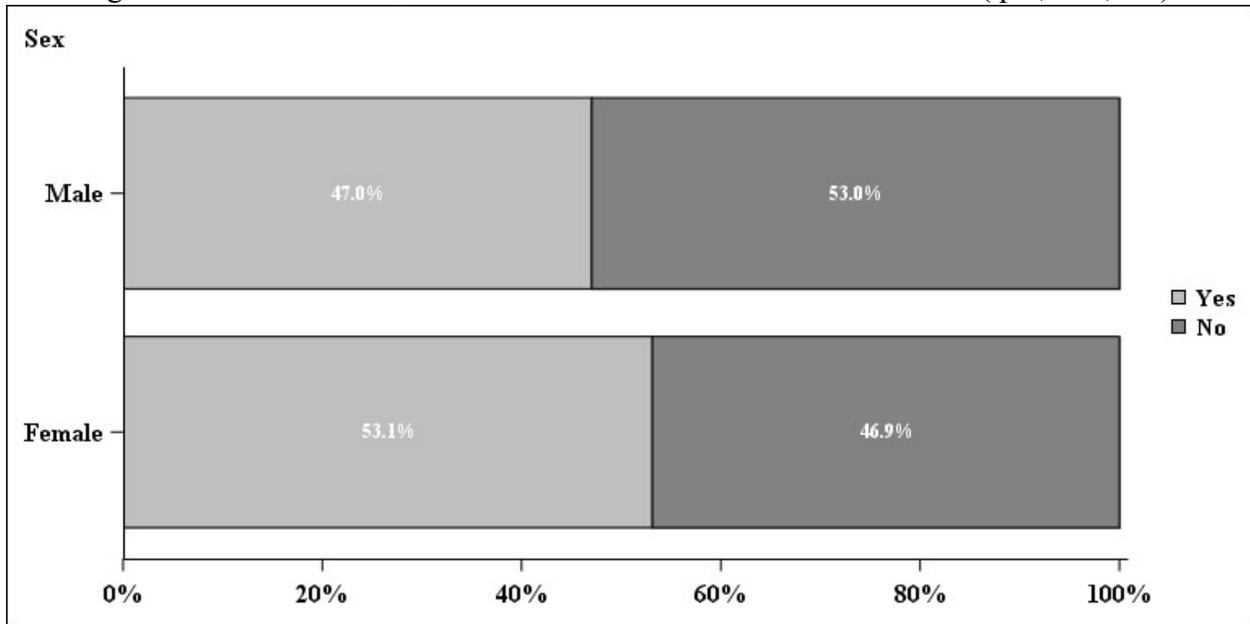


Figure R-211 shows how q58 responses varied across sex. Females more often (53.1%) reported seeking care 3 or more times for the same health condition compared to males, of which 47.0% reported the same.

Figure R-211 Got care ≥ 3 times for the same health condition vs. sex (q58; n=2,282)



Chronic health condition or problem lasting ≥ 3 months (q59; health status)

Question 59 asked respondents that had received care for the same (non-pregnancy or menopause) condition ≥ 3 times in the previous 6 months (yes to q58) if this care was for a condition that had lasted for 3 months or longer. Figure R-212 reveals that 87.5% of respondents indicated they were seeking care for a chronic condition or health problem.

Figure R-212 Medical condition treated for at least 3 months (q59; n=1,152)

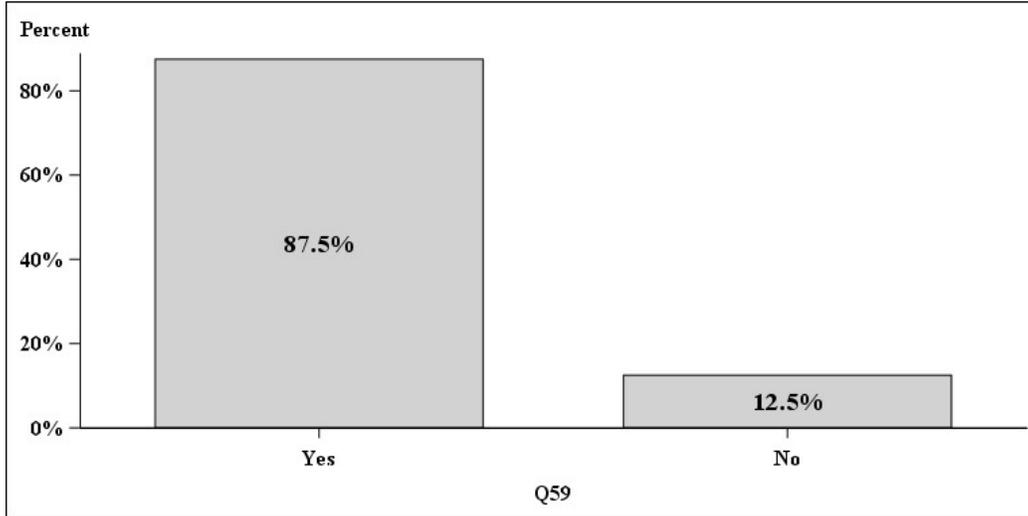


Figure R-213 shows how responses to q59 varied with age. Respondents aged 45-64 most often reported seeking care for a chronic condition (91.0%) while respondents aged less than 45 years least often reported the same (83.9%).

Figure R-213 Medical condition treated for at least 3 months vs. age (q59; n=1,152)

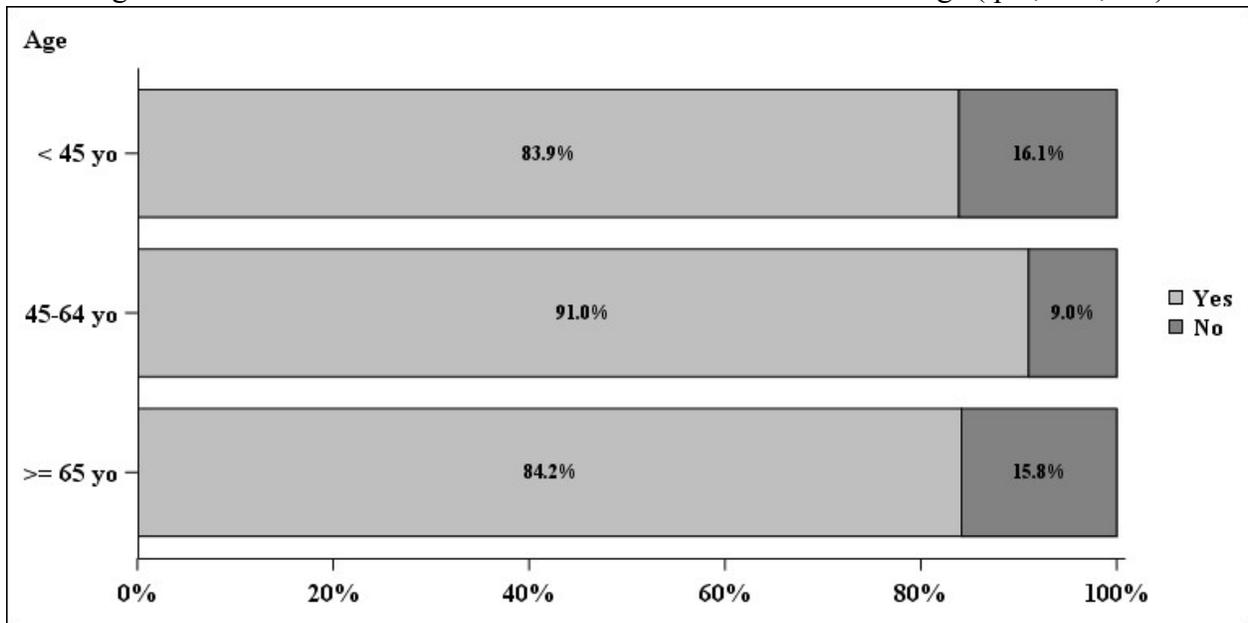


Figure R-214 reveals how q59 responses varied with sex. Males had the greater proportion (93.2%) that received care for a chronic condition while only 84.5% of females reported the same.

Figure R-214 Medical condition treated for at least 3 months vs. sex (q59; n=1,152)

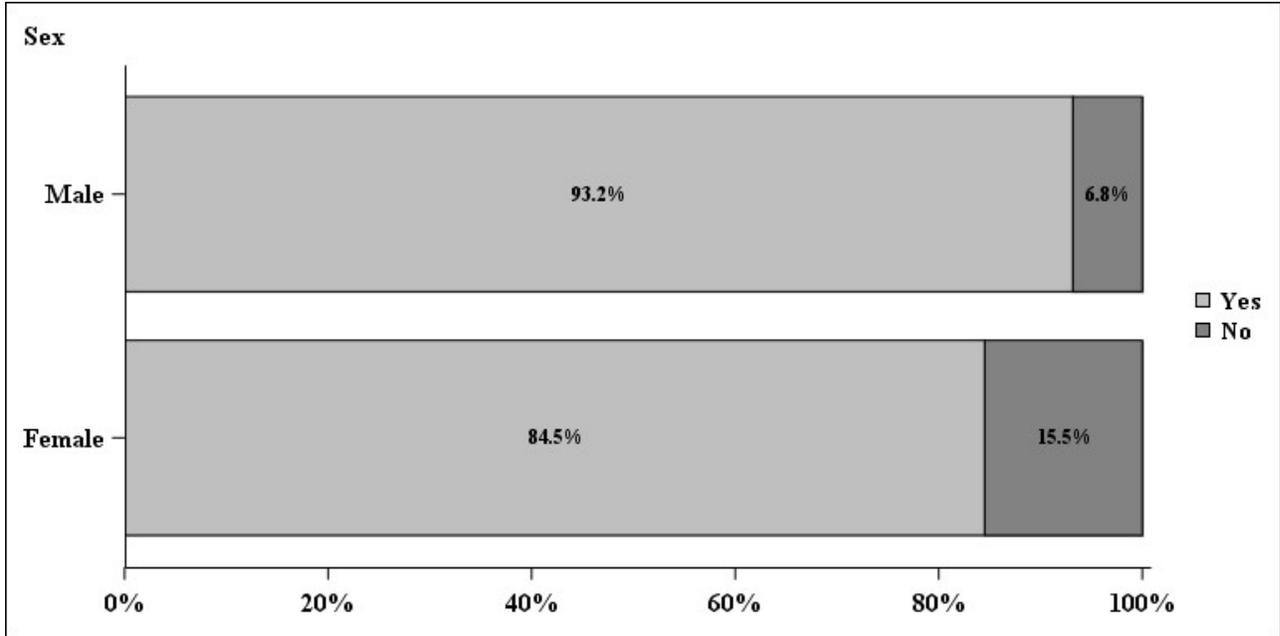
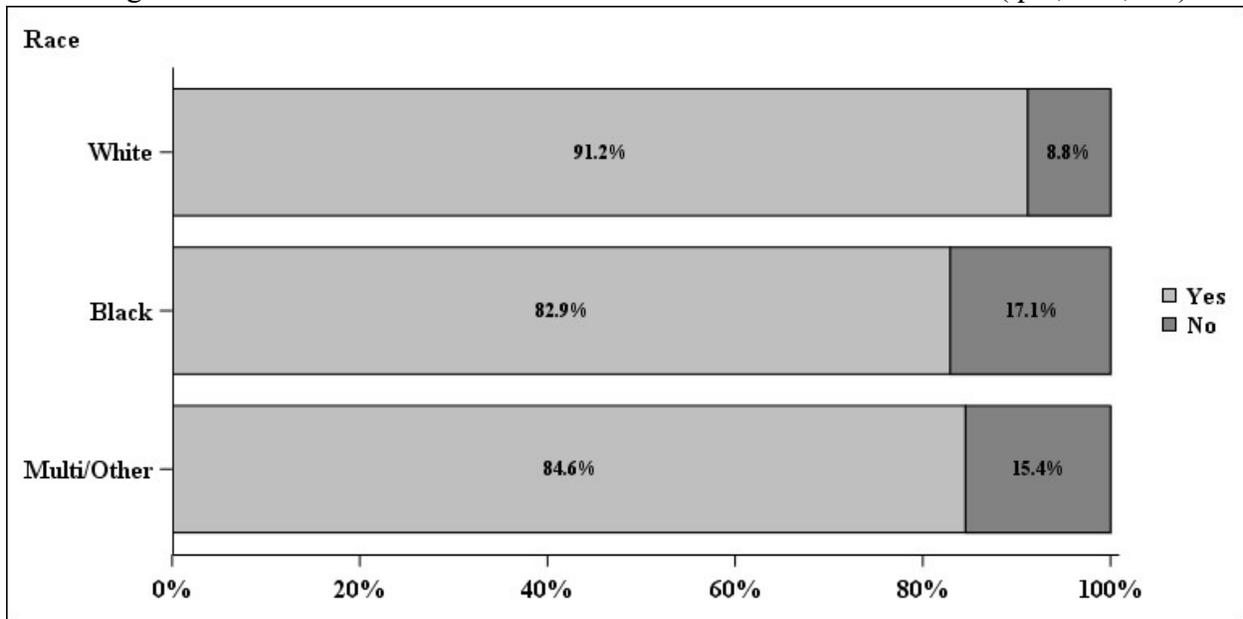


Figure R-215 shows how responses to q59 varied across race. Whites most often reported receiving care for a chronic condition at 91.2% while 82.9% of Blacks reported the same.

Figure R-215 Medical condition treated for at least 3 months vs. race (q59; n=1,152)



Currently taking medication prescribed by a doctor (q60; health status)

Question 60 asked respondents if they now need or take medicine prescribed by a doctor (excluding birth control). Figure R-216 indicates that 80.5% of respondents now need or take prescribed medication(s).

Figure R-216 Prescription medication use (q60; n=2,320)

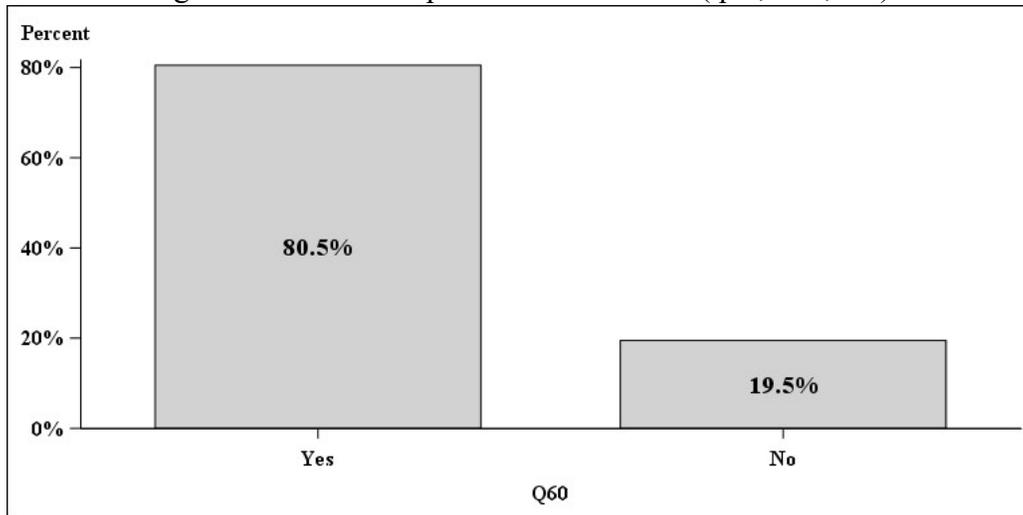


Figure R-217 describes the relationship between q60 responses and age. Respondents aged 45-64 (90.7%) and those aged 65 and older (88.1%) had the highest proportions that currently take non-birth control medication while respondents aged less than 45 had a much lower proportion (65.9%) that indicated prescription medication use.

Figure R-217 Prescription medication use vs. age (q60; n=2,320)

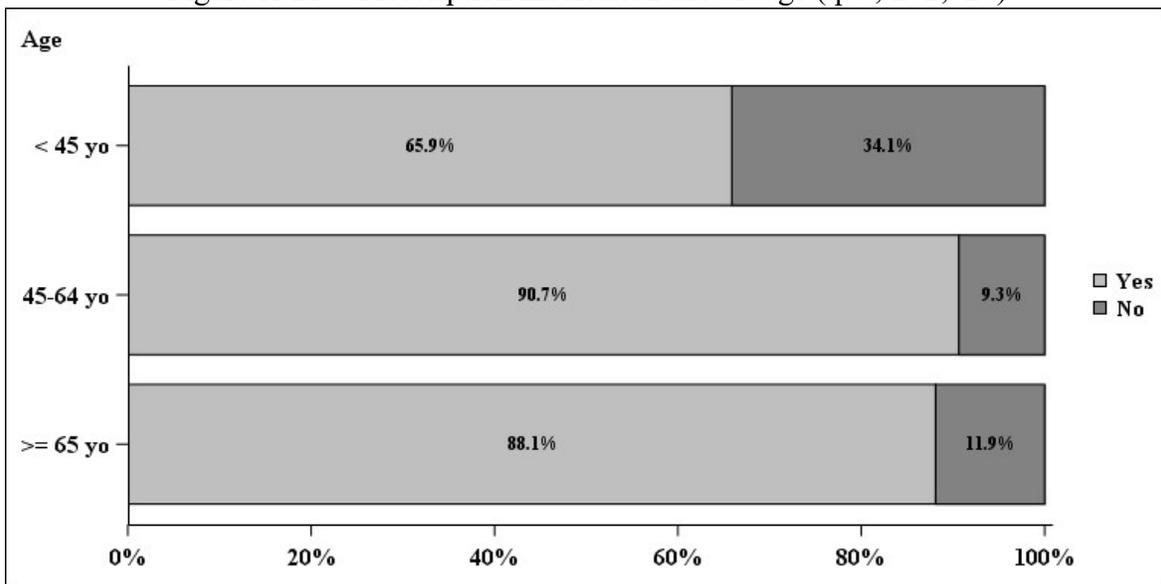


Figure R-218 shows how q60 responses varied across sex. 84.0% of males indicated prescription use while 78.5% of females provided the same response.

Figure R-218 Prescription medication use vs. sex (q60; n=2,320)

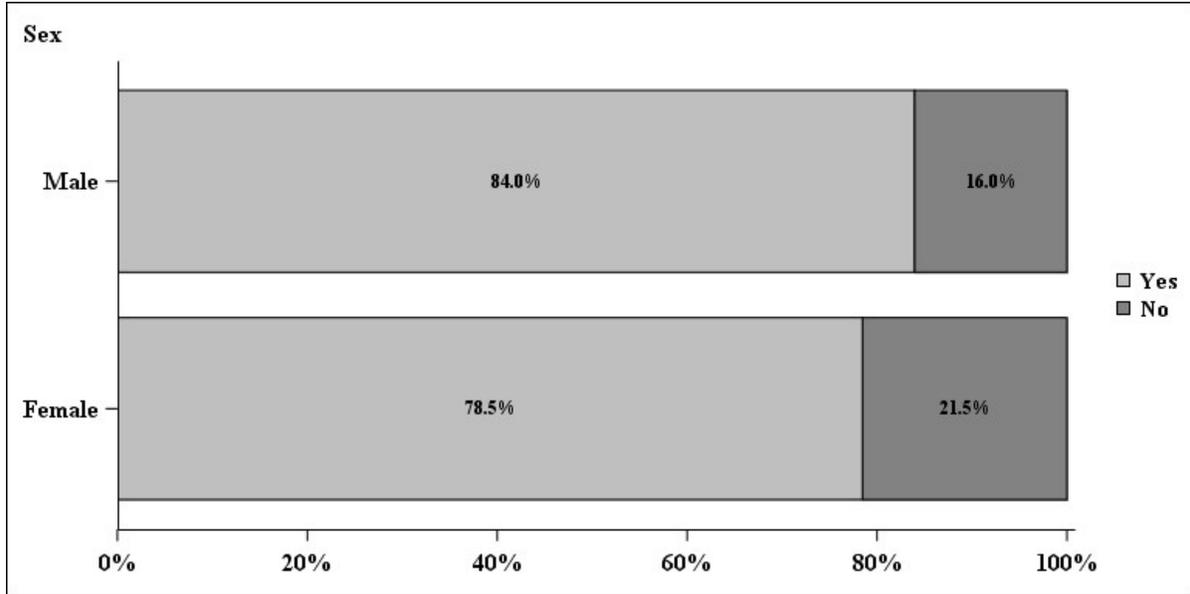


Figure R-219 depicts q60 response variation across race. The greatest proportion of respondents currently taking prescribed medication were Whites (83.4%) while only 70.0% of Multi/Other races reported taking prescription medications.

Figure R-219 Prescription medication use vs. race (q60; n=2,320)

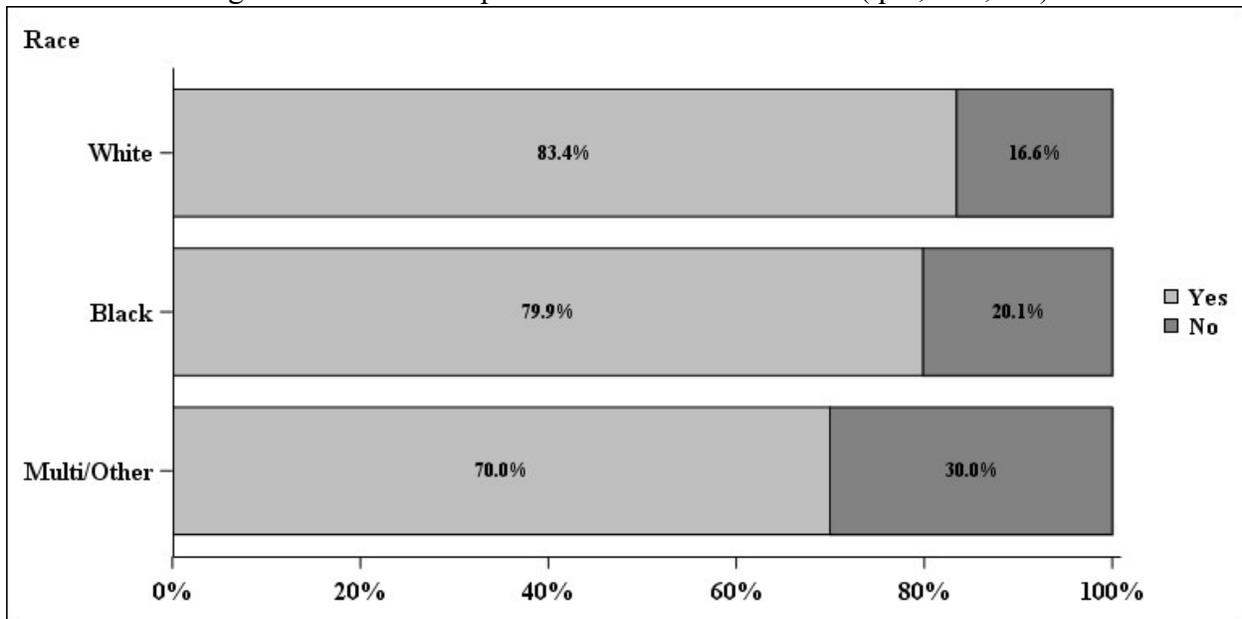


Figure R-220 shows q60 variation across education level. 86.5% of respondents with <HS Grad/GED reported taking prescription medication while 76.8% of those with >HS Grad/GED gave the same response.

Figure R-220 Prescription medication use vs. education (q60; n=2,276)

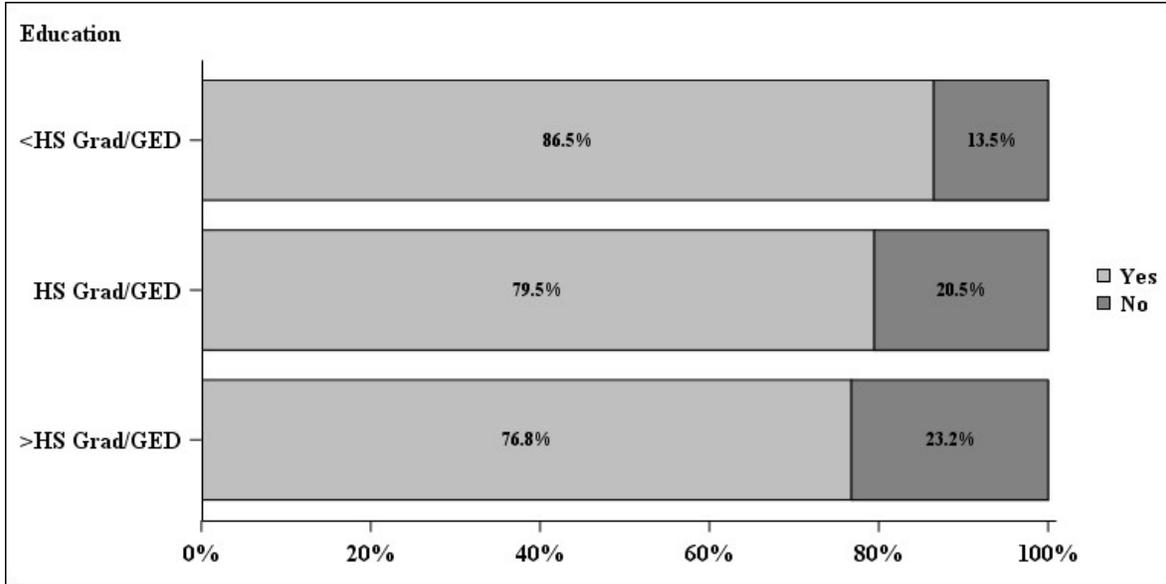


Figure R-221 describes variation in q60 responses by dual eligible status. Dual eligible respondents had the greater proportion that reported current prescription medication use (88.7%) while only 78.0% of non-dual eligible respondents reported the same.

Figure R-221 Prescription medication use vs. dual eligible status (q60; n=2,320)

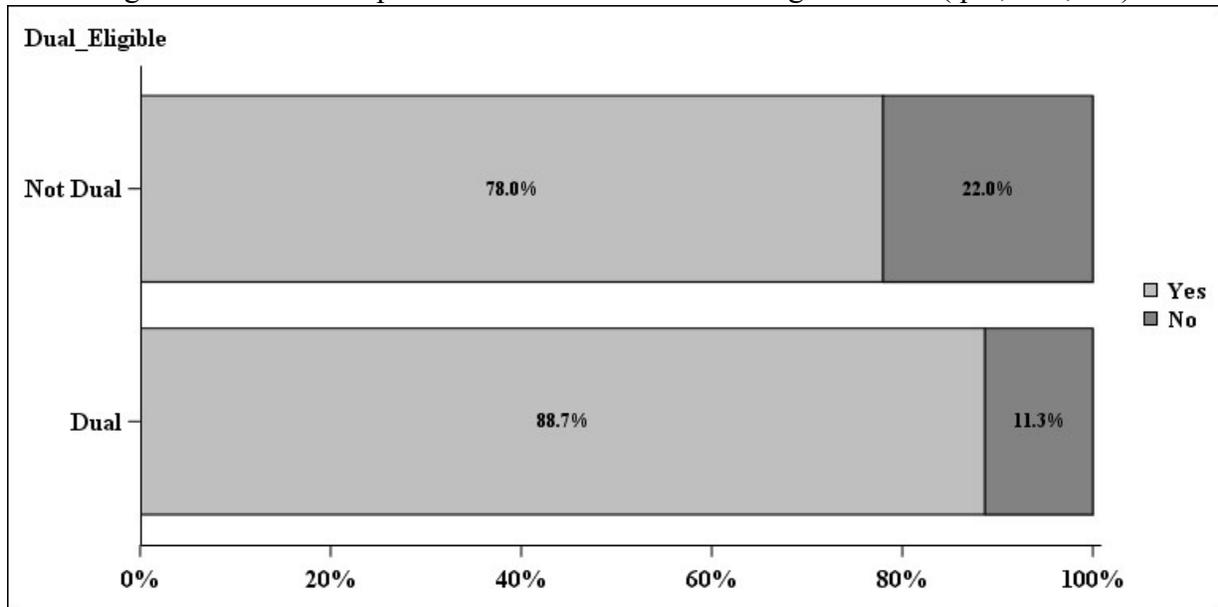
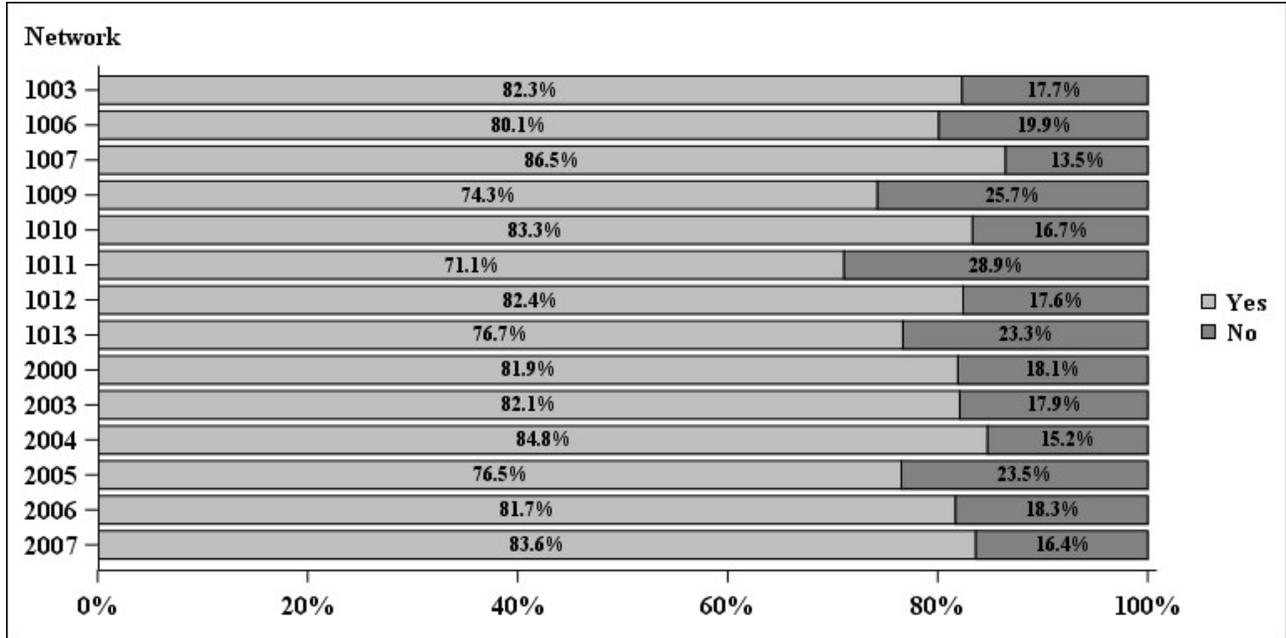


Figure R-222 shows how q65 responses varied across CCNC network. While 86.5% of Community Care of Western North Carolina (1007) indicated prescribed medication use, only 71.1% of Community Care of Wake and Johnston Counties (1011) respondents said the same.

Figure R-222 Prescription medication use vs. CCNC network (q60; n=2,320)



Medications for chronic illnesses or conditions (q61; health status)

Question 61 asked respondents currently taking prescribed medication (responded yes to q60) if the medication is for a condition that has lasted 3 months or longer. Figure R-223 reveals that 94.8% of respondents taking prescription medications were taking them for a chronic illness.

Figure R-223 Prescription medication for condition lasting at least 3 months (q61; n=1,841)

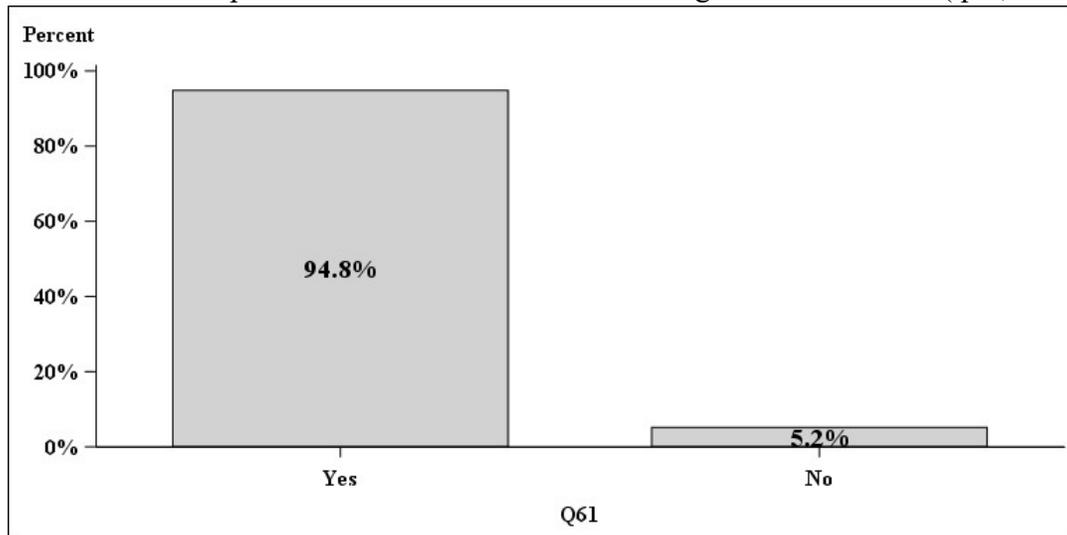


Figure R-224 describes variation in q61 responses with age. Respondents aged 45-64 had the highest proportion that indicated their prescription use was for a chronic condition (96.6%). Respondents aged 65 and older had the lowest at 89.9%.

Figure R-224 Prescription medication for condition lasting at least 3 months vs. age (q61; n=1,841)

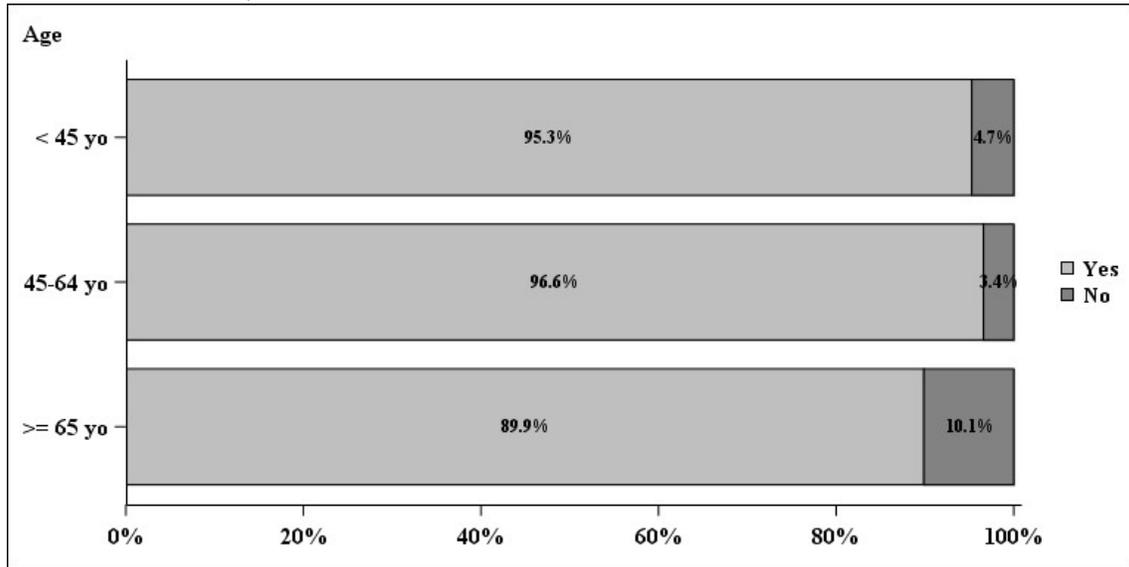


Figure R-225 shows how responses to q61 varied with race. Whites most often reported needing prescribed medicine to treat a chronic condition (96.7%), while Blacks least often reported the same (92.2%).

Figure R-225 Prescription medication for condition lasting at least 3 months vs. race (q61; n=1,841)

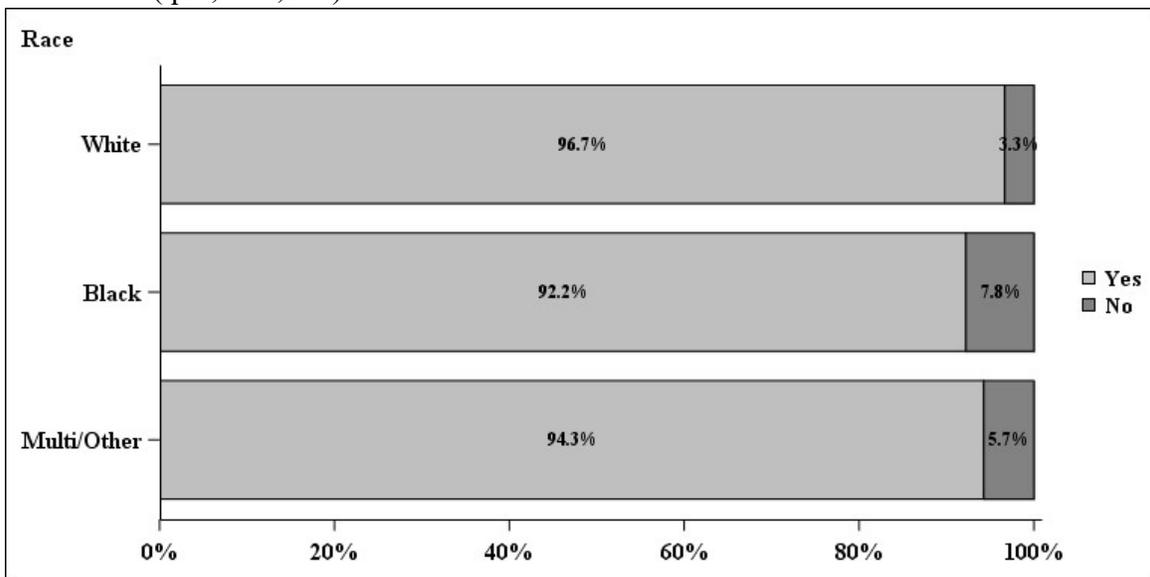
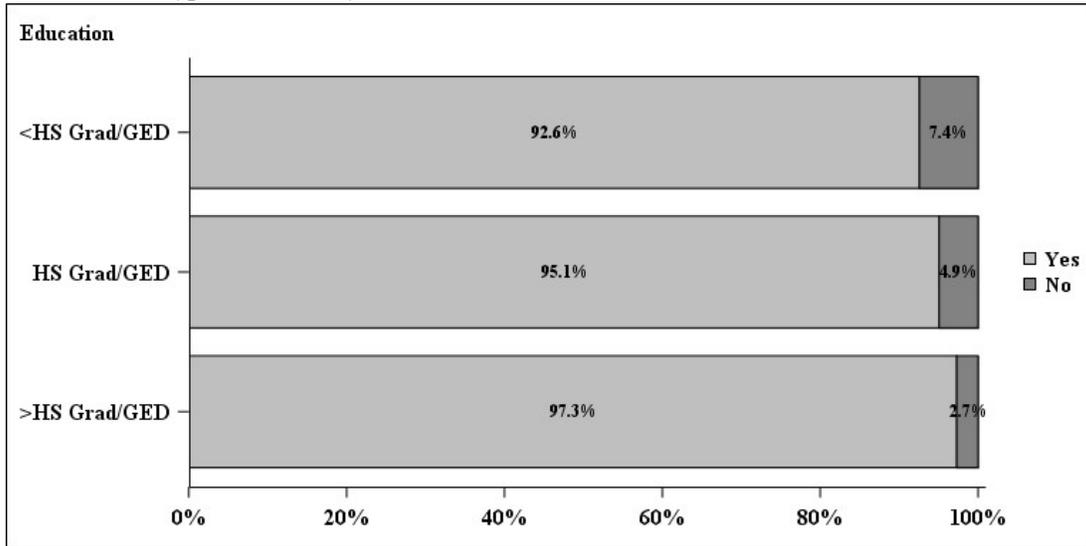


Figure R-226 describes variation in q61 responses by education level. Respondents with >HS Grad/GED had the highest proportion that reported needing prescription medication for a chronic condition (97.3%). 92.6 of respondents with <HS Grad/GED provided the same response.

Figure R-226 Prescription medication for condition lasting at least 3 months vs. education (q61; n=1,841)



Ease in getting prescription medications (q62; access)

Question 62 asked respondents how often, in the last 6 months, it was easy to get their prescription medicine from their health plan. Figure R-227 reveals that the majority of respondents (72.1%) indicated that it was always easy, 14.5%, 11.3% and 2.1%, usually, sometimes, and never, respectively, found it easy to get prescription medications.

Figure R-227 Ease in getting prescription medications (q62; n=1,838)

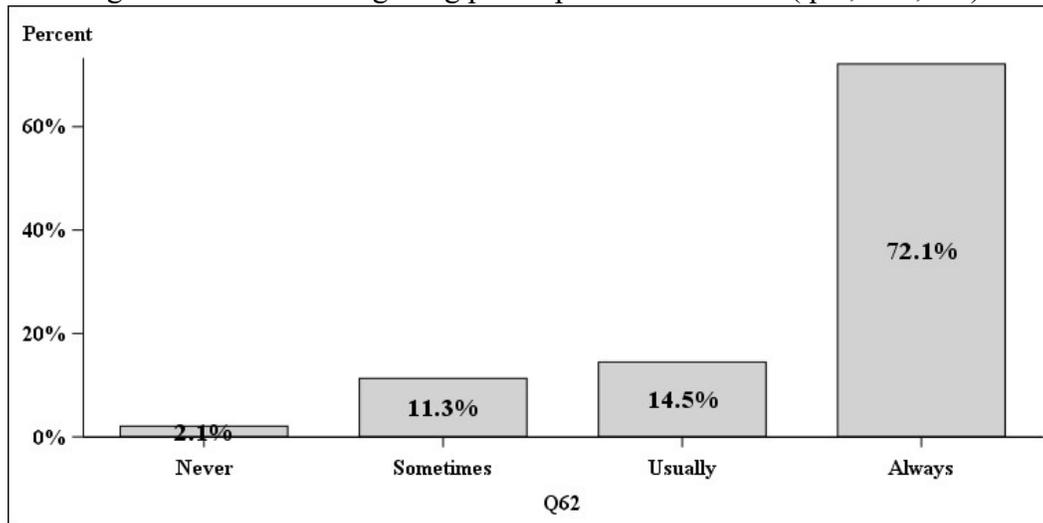


Figure R-228 shows variation in q62 responses by age. Respondents aged 65 and older most often indicated that it was always easy to get medication at 83.2%, while respondents aged less than 45 least often indicated the same at 64.9%.

Figure R-228 Ease in getting prescription medications vs. age (q62; n=1,838)

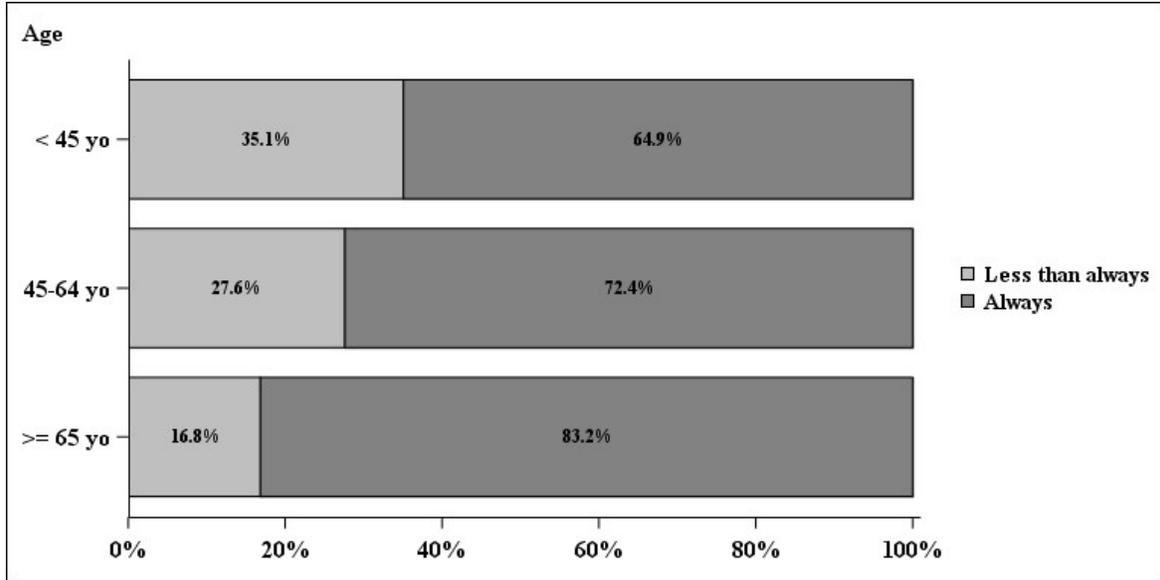


Figure R-229 demonstrates how q62 responses varied across race. Blacks most often reported it was always easy to obtain prescription medication (79.2%), while Whites least often reported the same (68.6%).

Figure R-229 Ease in getting prescription medications vs. race (q62; n=1,838)

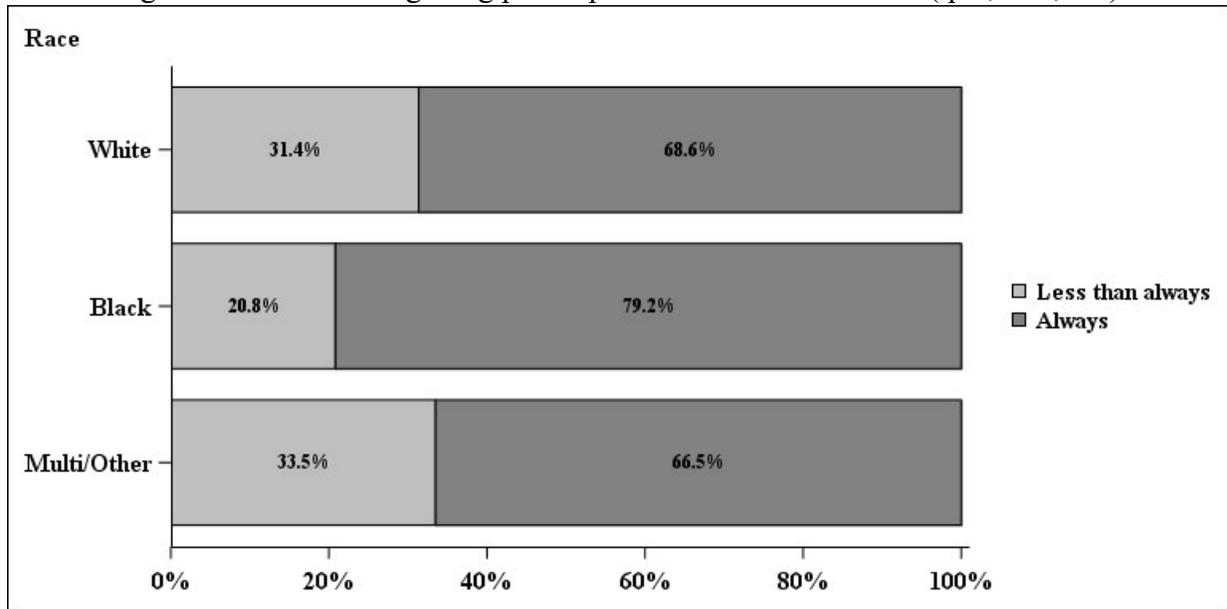


Figure R-230 shows how q62 responses varied across education level. Respondents with <HS Grad/GED (79.4%) had the highest proportion that reported it always easy to obtain medication while only 65.9% of those with >HS Grad/GED had the same response.

Figure R-230 Ease in getting prescription medications vs. education (q62; n=1,805)

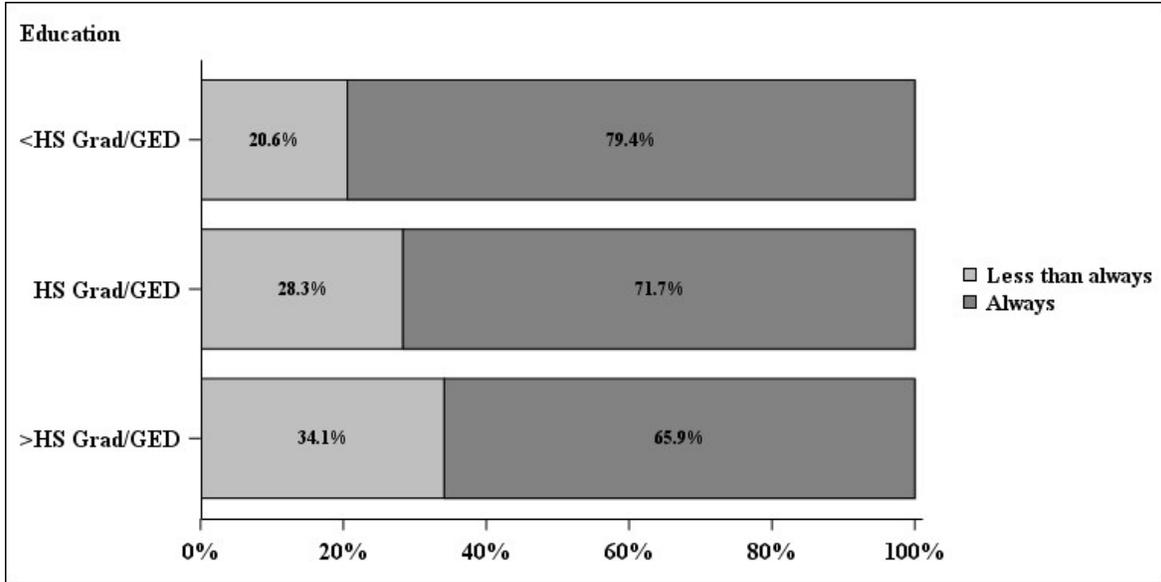


Figure R-231 demonstrates variation in q62 responses with dual-eligible status. While 82.3% of dual-eligible respondents indicated it was always easy to get medication from their health plan, only 68.6% of not dual respondents gave the same response.

Figure R-231 Ease in getting prescription medications vs. dual eligible status (q62; n=1,838)

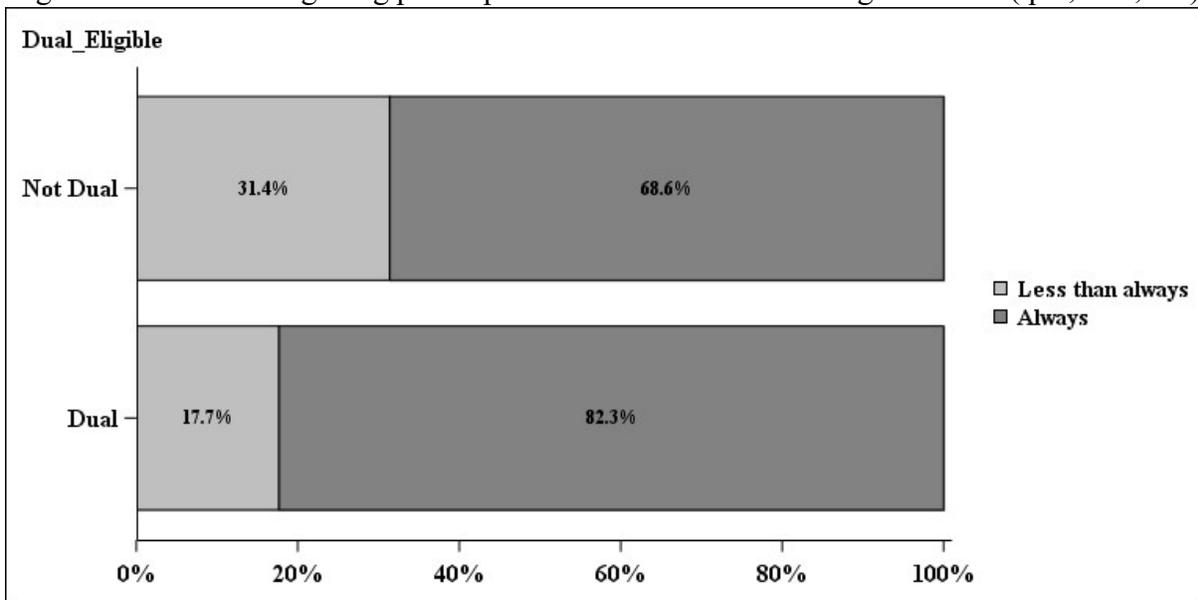
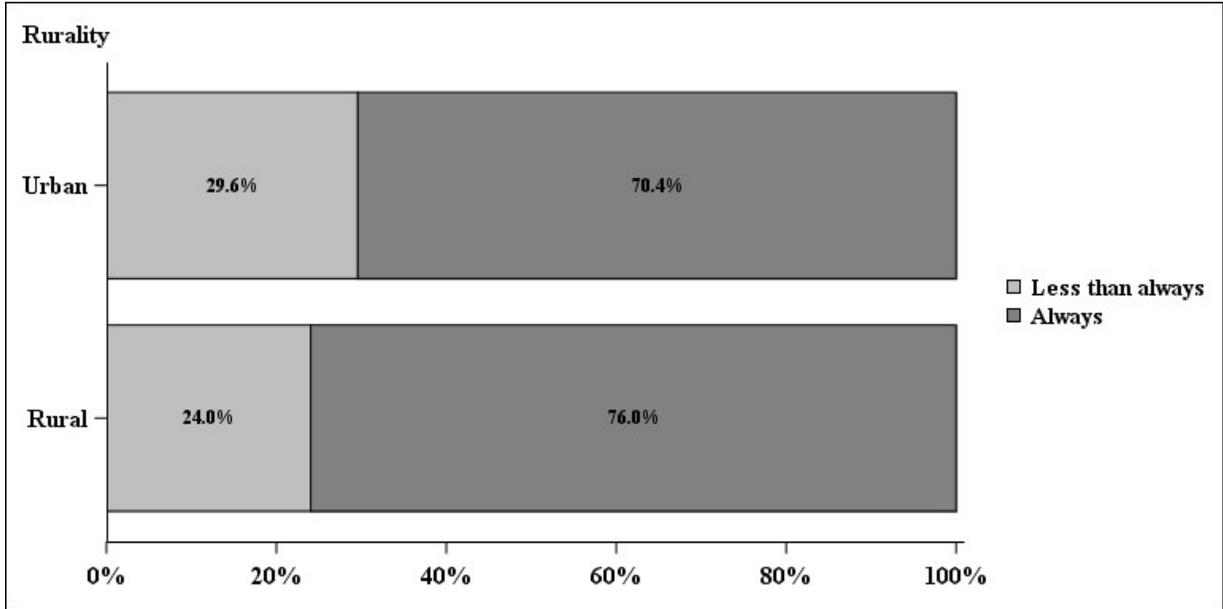


Figure R-232 reveals how q62 responses varied with rurality. Rural respondents more often reported that it was always easy to get prescription medications from their health plan at 76.0% while only 70.4% of urban respondents said the same.

Figure R-232 Ease in getting prescription medications vs. rurality (q62; n=1,838)



Current tobacco use (q70; Smoking)

Question 70 asked respondents if they currently smoke cigarettes or use tobacco. Figure R-233 reveals that 33.1% of respondents smoked cigarettes or used tobacco products.

Figure R-233 Currently smokes cigarettes or uses tobacco (q70; n=2,309)

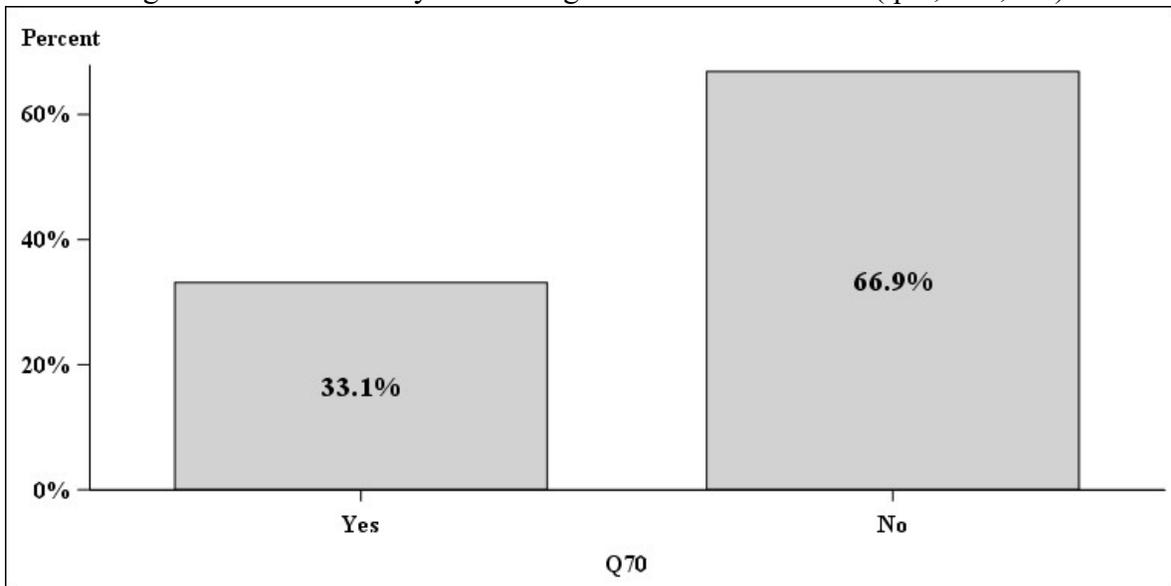


Figure R-234 shows how q70 responses varied with age. Respondents aged 45-64 had the highest proportion (41.6%) that reported current use of cigarettes or other tobacco products while 26.3% of those aged less than 45 reported the same.

Figure R-234 Currently smokes cigarettes or uses tobacco vs. age (q70; n=2,309)

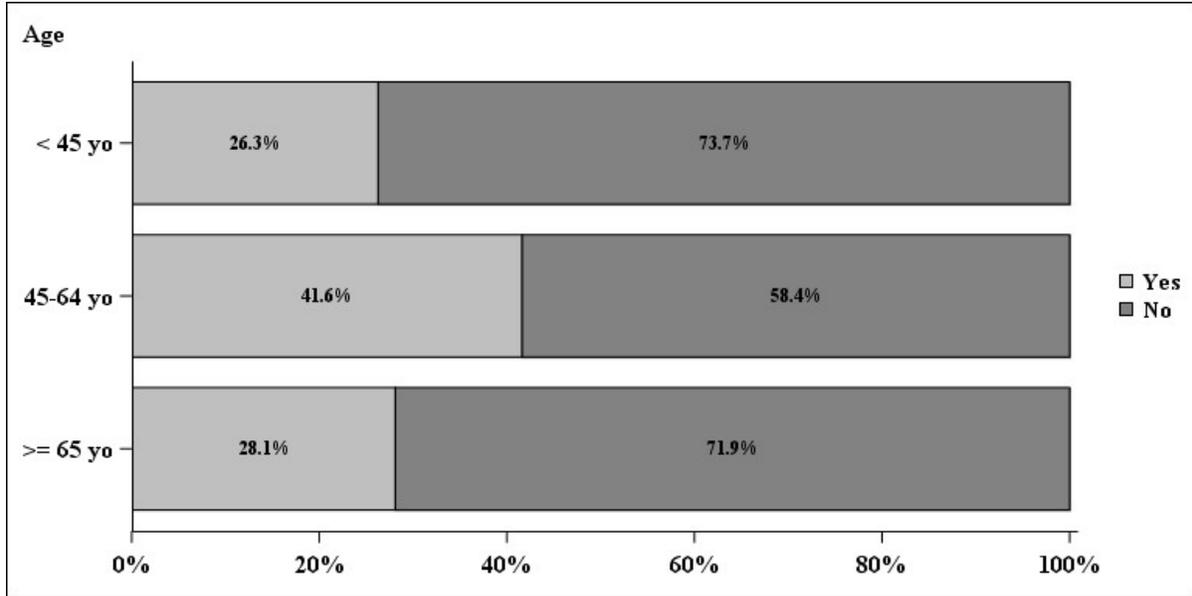


Figure R-235 describes the relationship between responses to q70 and sex. A higher proportion of male respondents (38.4%) reported currently smoking cigarettes or using tobacco while only 30.4% of female respondents reported the same.

Figure R-235 Currently smokes cigarettes or uses tobacco vs. sex (q70; n=2,309)

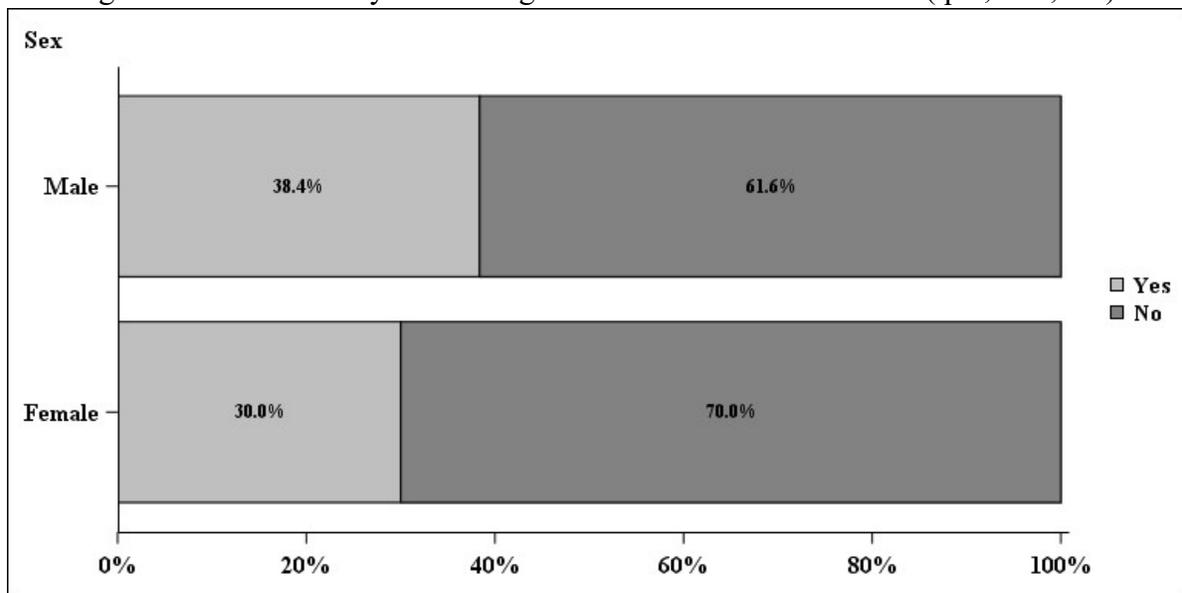


Figure R-236 shows how responses to q70 varied with race. White respondents had the highest proportion (36.8%) that reported current smoking of cigarettes or tobacco use. Blacks followed at 30.0% while Multi/Other had the lowest proportion reporting usage at only 27.0%.

Figure R-236 Currently smokes cigarettes or uses tobacco vs. race (q70; n=2,309)

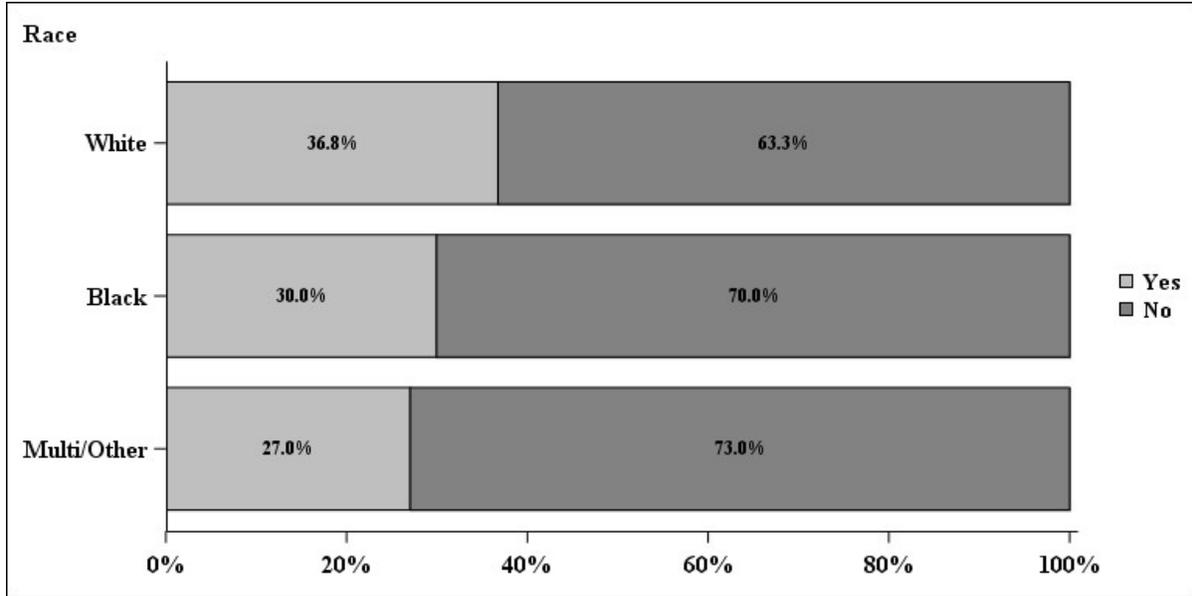


Figure R-237 illustrates the relationship between q70 responses and education. Respondents with <HS Grad/GED had the highest proportion (42.8%) reporting current smoking of cigarettes or tobacco use while only 25.8% of those with >HS Grad/GED reported same.

Figure R-237 Currently smokes cigarettes or uses tobacco vs. education (q70; n=2,269)

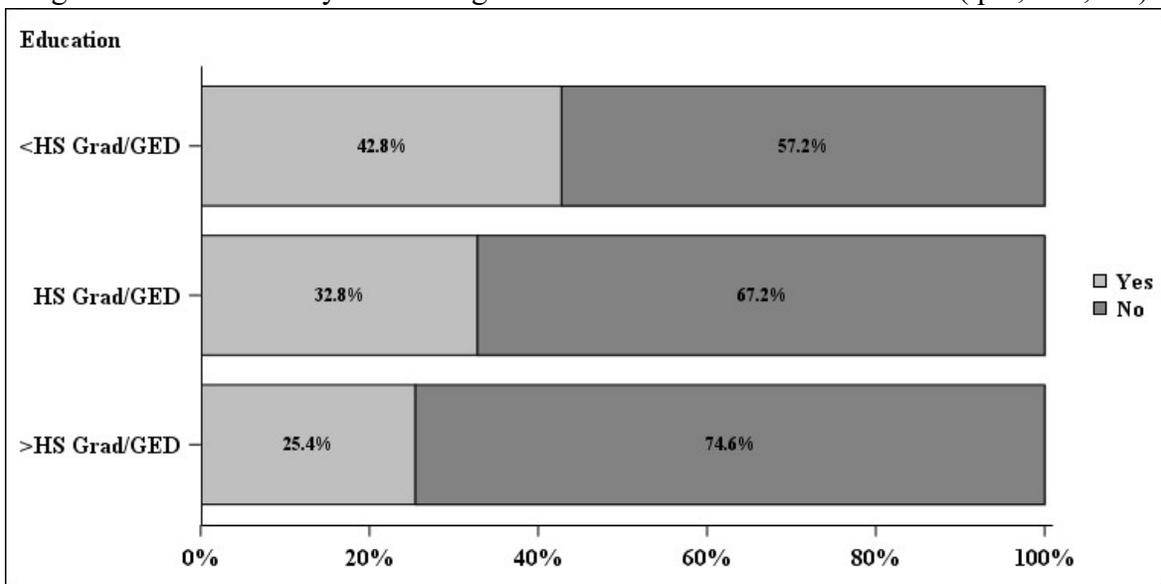


Figure R-238 shows variation in q70 responses across CCNC network. Respondents in Carolina Community Health Partnership (1010) had the highest proportion reporting current smoking of cigarettes or tobacco use at 44.1%, followed by those in Northwest Community Care (2006) at 41.7%. Community Care of Wake and Johnston Counties (1011) had the lowest proportion of respondents reporting the same at only 25.6%.

Figure R-238 Currently smokes cigarettes or uses tobacco vs. CCNC network (q70; n=2,309)

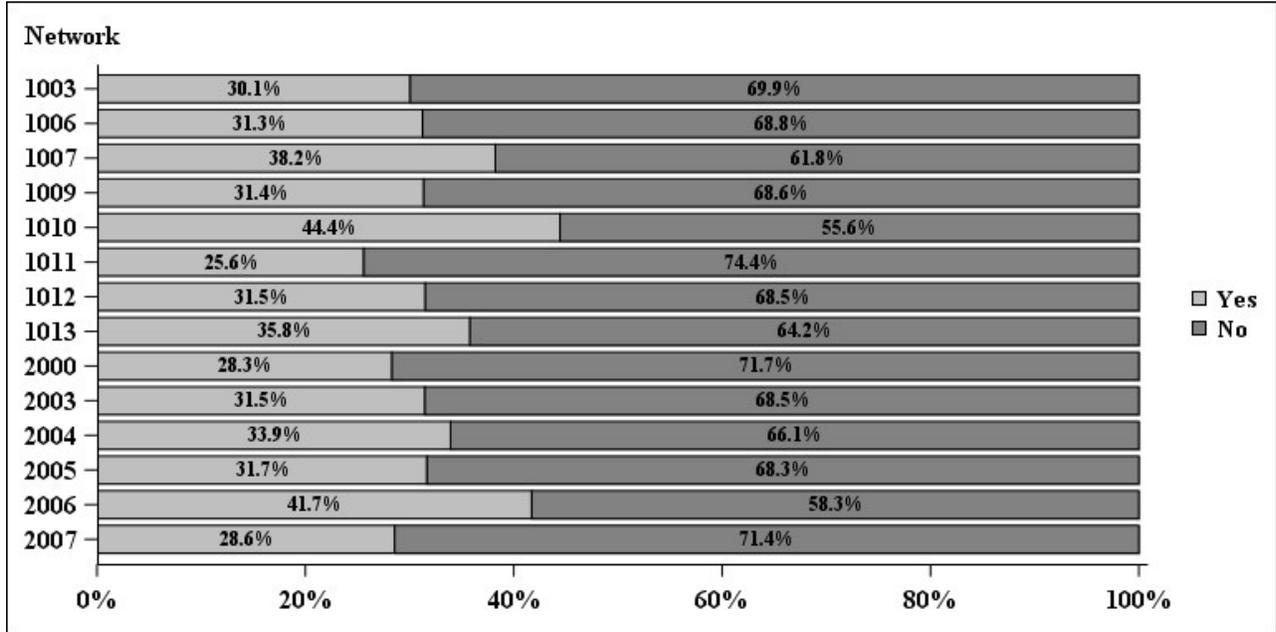
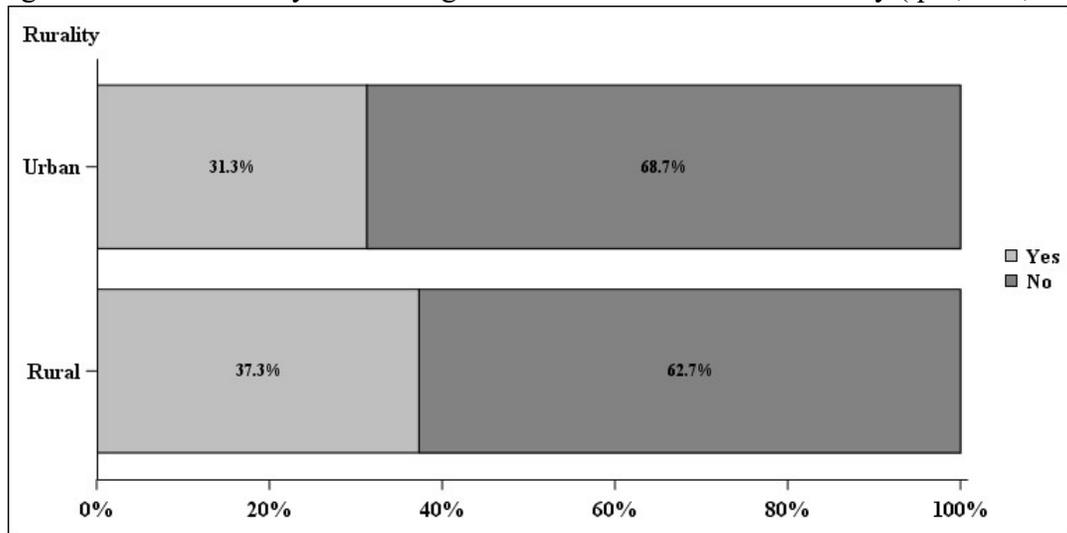


Figure R-239 describes the variation in q70 responses with rurality. A higher proportion of rural respondents reported currently smoking cigarettes or using tobacco at 37.3%.

Figure R-239 Currently smokes cigarettes or uses tobacco vs. rurality (q70; n=2,309)



Suggested methods or strategies for cessation of tobacco use (q71; Smoking)

Question 71 asked respondents if any of their health providers had suggested methods or strategies to assist with cessation of tobacco use. Figure R-240 reveals that 84.1% reported they received suggestions or strategies from their providers.

Figure R-240 Assistance with cessation of tobacco use (q71; n=748)

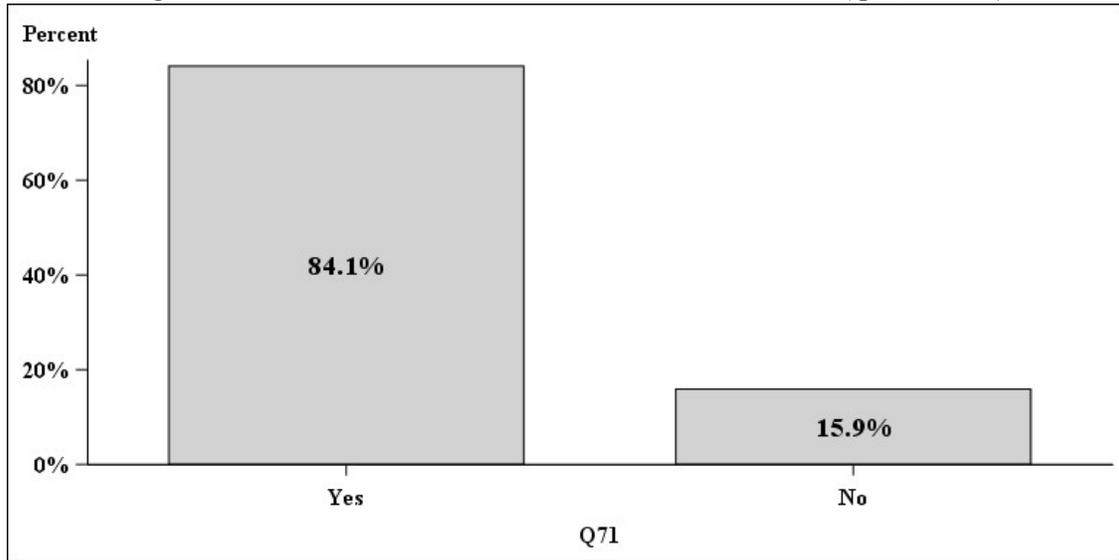


Figure R-241 demonstrates how responses to q71 varied with age. Respondents aged 45-64 most often reported receiving assistance with tobacco cessation (87.9%), while 76.2% of respondents aged less than 45 reported the same.

Figure R-241 Assistance with cessation of tobacco use vs. age (q71; n=748)

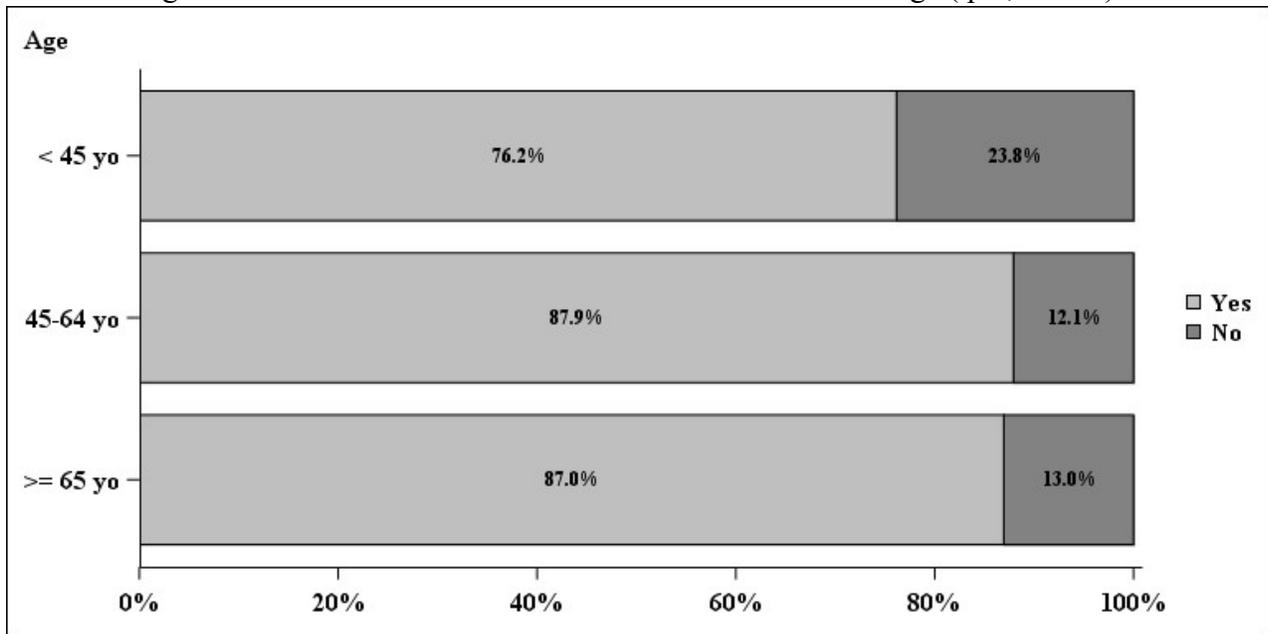
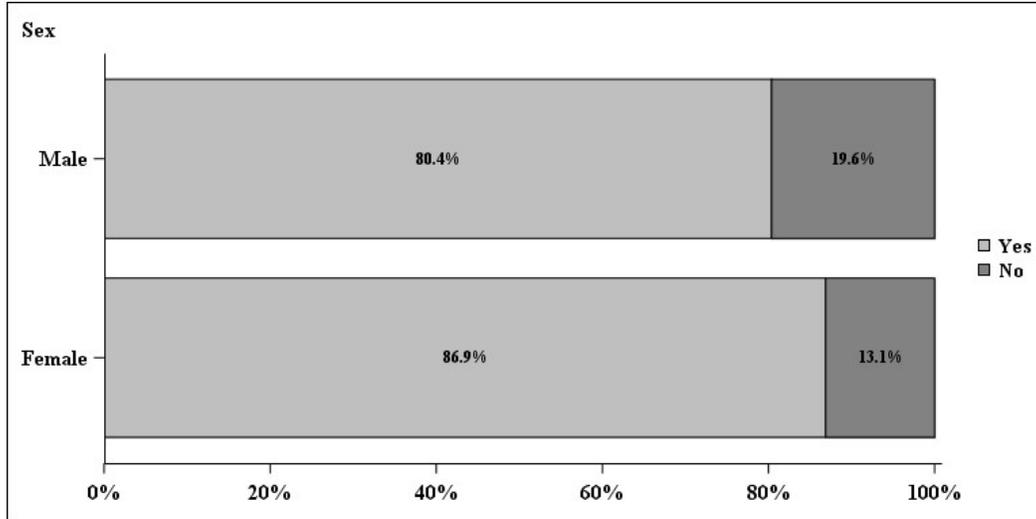


Figure R-242 shows variation in q71 responses according by sex. Females had the highest proportion that indicated receiving tobacco cessation assistance from their health provider at 86.9% while only 80.4% of males received the assistance.

Figure R-242 Assistance with cessation of tobacco use vs. sex (q71; n=748)



3.7 Trust in your Health Providers (q72-q76)

May not get a specialist referral when needed (q72; trust)

Question 72 asked respondents if they agreed with the statement that their personal health provider (PHP) might not refer them to a specialist when needed. Figure R-243 reveals that the majority of respondents (54.2%) strongly disagreed with this statement. Fourteen point six percent (14.6%) of respondents somewhat disagreed, 2.7% neither agreed/disagreed, 10.2% somewhat agreed, and 18.3% strongly agreed.

Figure R-243 May not refer to a specialist when needed (q72; n=2,096)

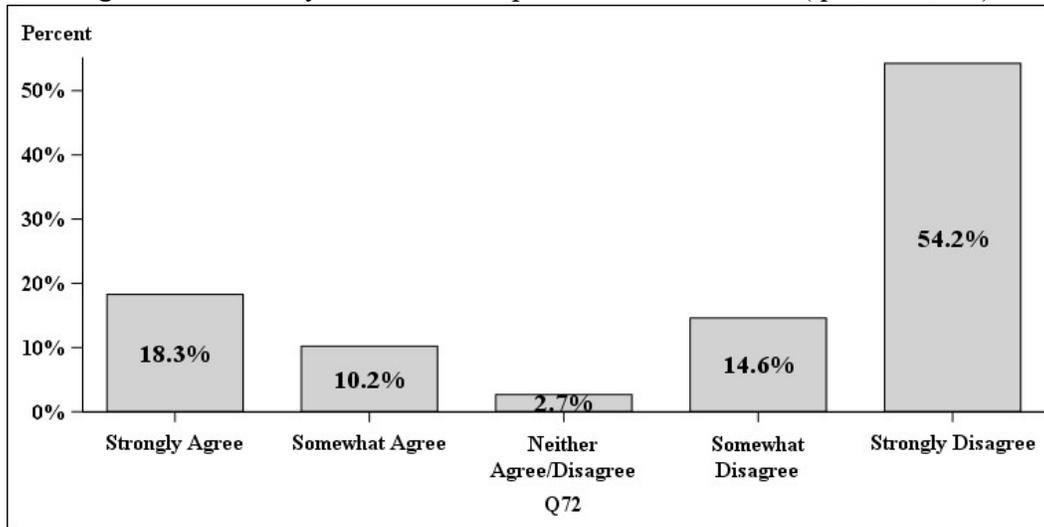


Figure R-244 displays the association between q72 response and age. Respondents aged <45 yo most often (78.4%) trusted that their providers did refer to specialists when while only 59.3% of those ≥ 65 indicated the same.

Figure R-244 May not refer to a specialist when needed vs. age (q72; n=2,040)

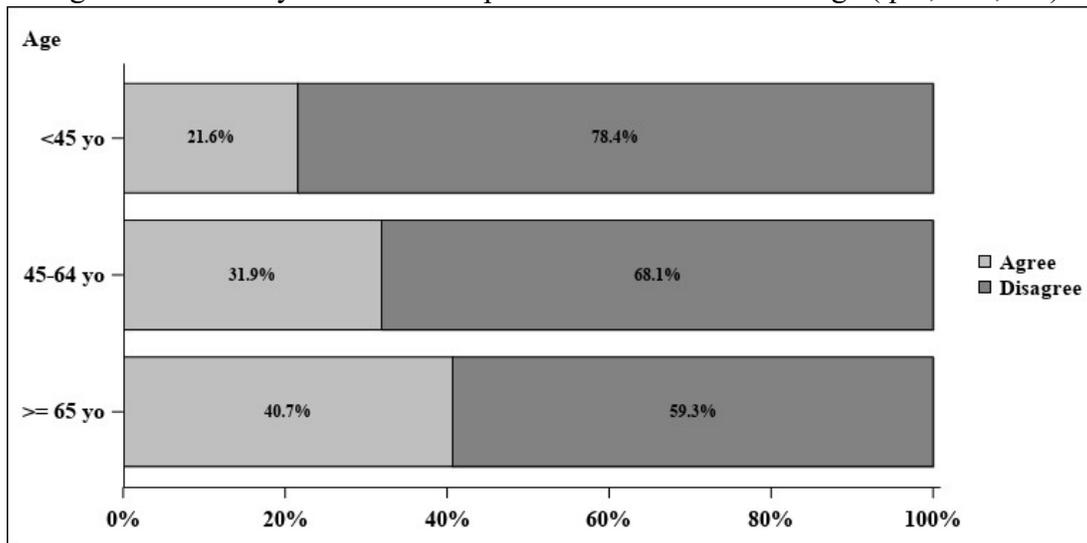


Figure R-245 depicts how responses to q72 varied across race. Whites trusted the most that their caregivers would refer them to a specialist if needed at 73.2%, while Blacks trusted the least at 67.6%.

Figure R-245 May not refer to a specialist when needed vs. race (q72; n=2,040)

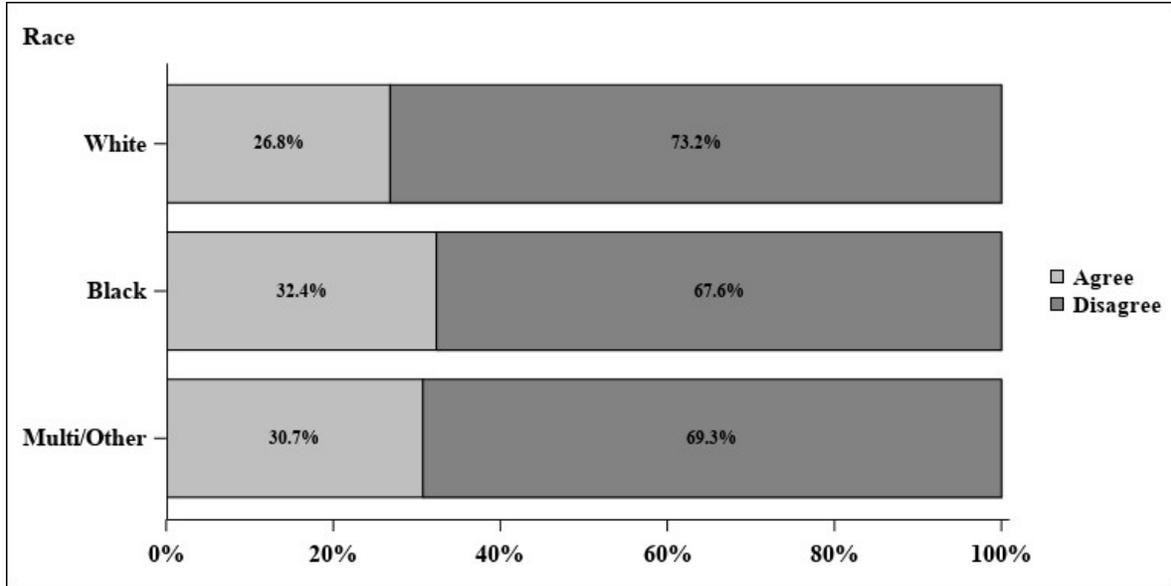


Figure R-246 demonstrates how responses to q72 varied across education level. Respondents with >HS Grad/GED trusted much more (81.1%) on being referred to specialist than respondents with <HS Grad/GED (62.1%).

Figure R-246 May not refer to a specialist when needed vs. education (q72; n=2,013)

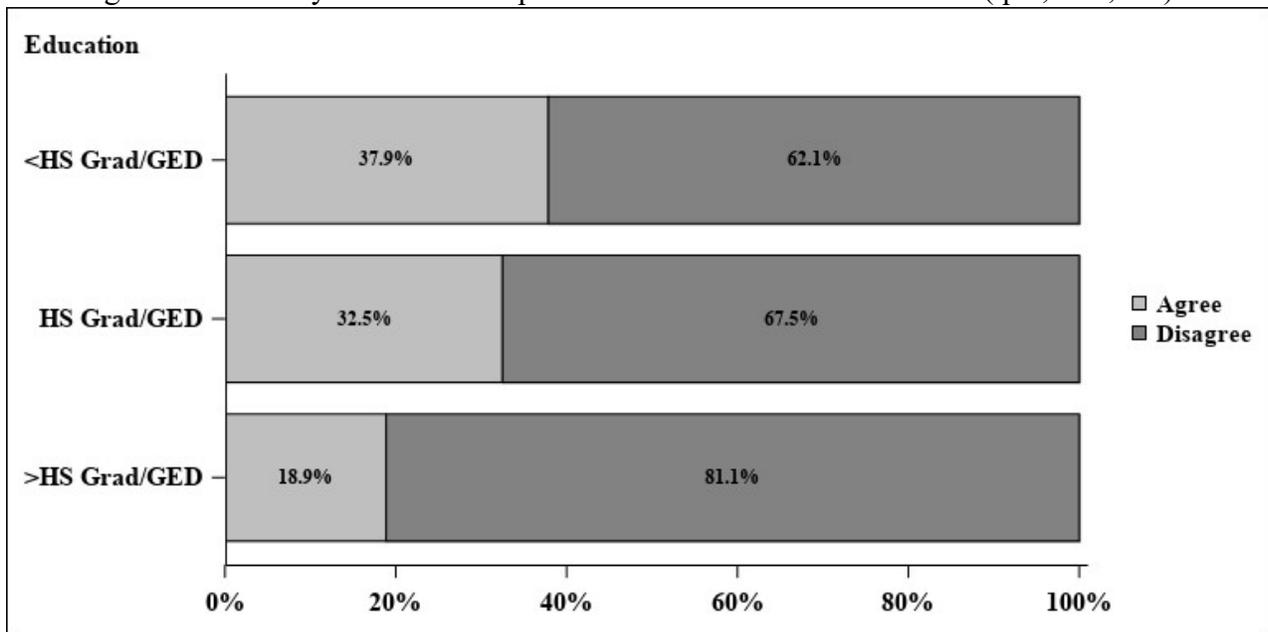


Figure R-247 shows how q72 varied with dual eligible status. Non-dual eligible respondents trusted most that their provider would refer them to a specialist when needed at 72.3%. while only 65.5% of dual-eligible respondents felt the same.

Figure R-247 May not refer to a specialist when needed vs. dual eligible status (q72; n=2,040)

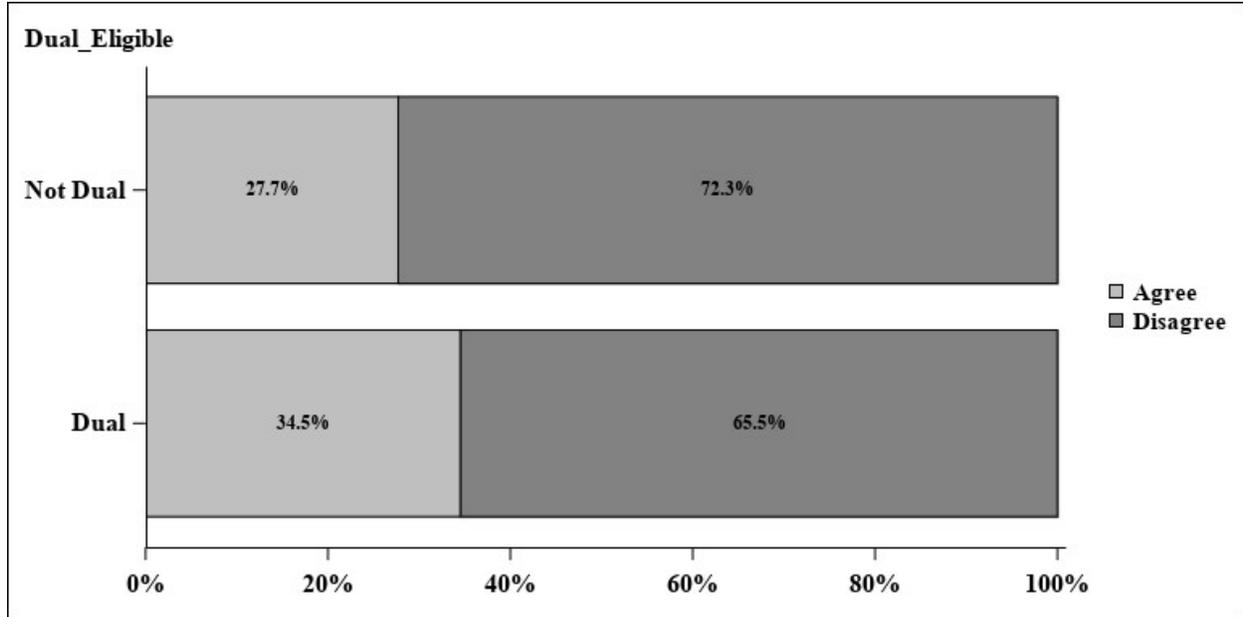
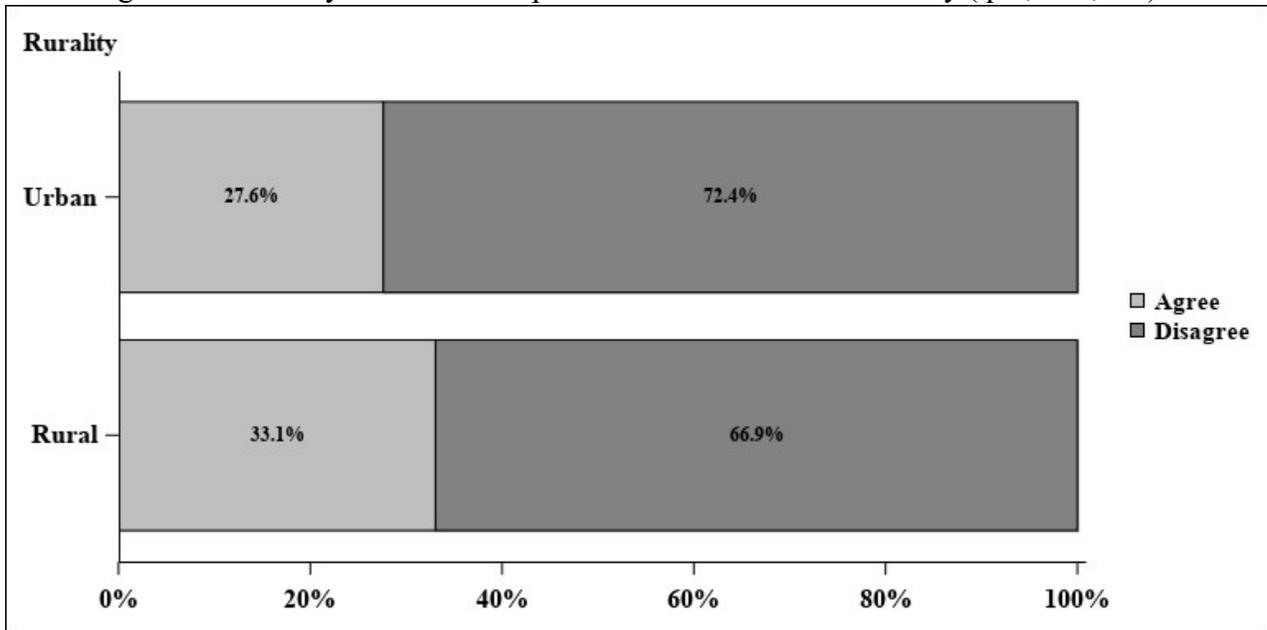


Figure 248 depicts how q72 responses varied with rurality. Urban respondents trusted most that their provider would refer them to a specialist when needed at 72.4% whereas only 66.9% of rural respondents indicated the same.

Figure 248 May not refer to a specialist when needed vs. rurality (q72; n=2,040)



Health providers put medical needs above all other considerations (q73; trust)

Question 73 asked respondents if they agreed that their providers put their medical needs above all other when treating their medical problems. Figure R-249 reveals that the majority of respondents (74.3%) strongly agreed with that statement. 16.5% of respondents somewhat agreed, 1.4% neither agreed/disagreed, 4.4% somewhat disagreed, and 3.3% strongly disagreed.

Figure R-249 Medical needs regarded above all other considerations (q73; n=2,211)

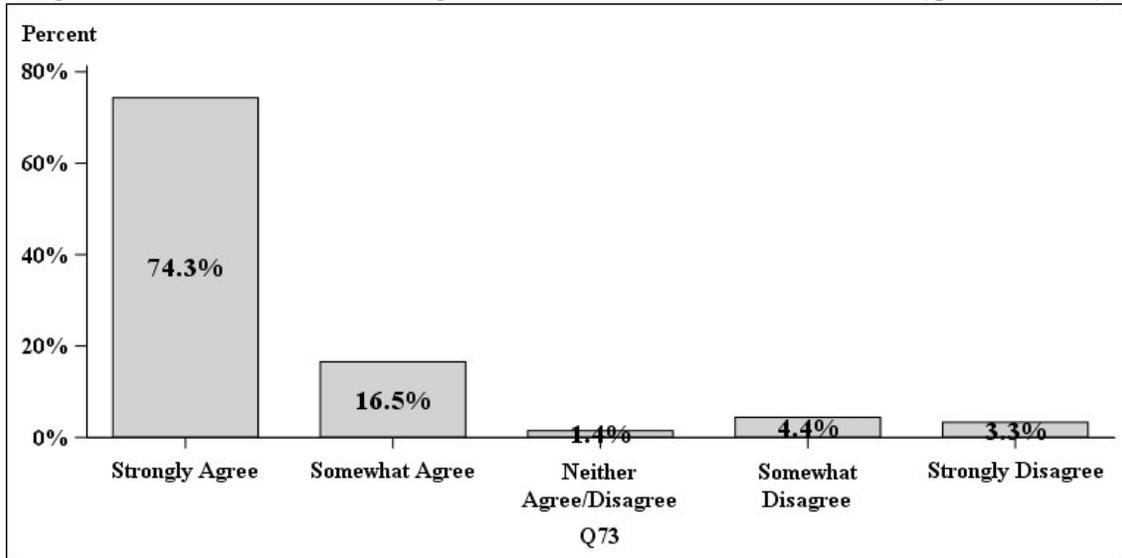
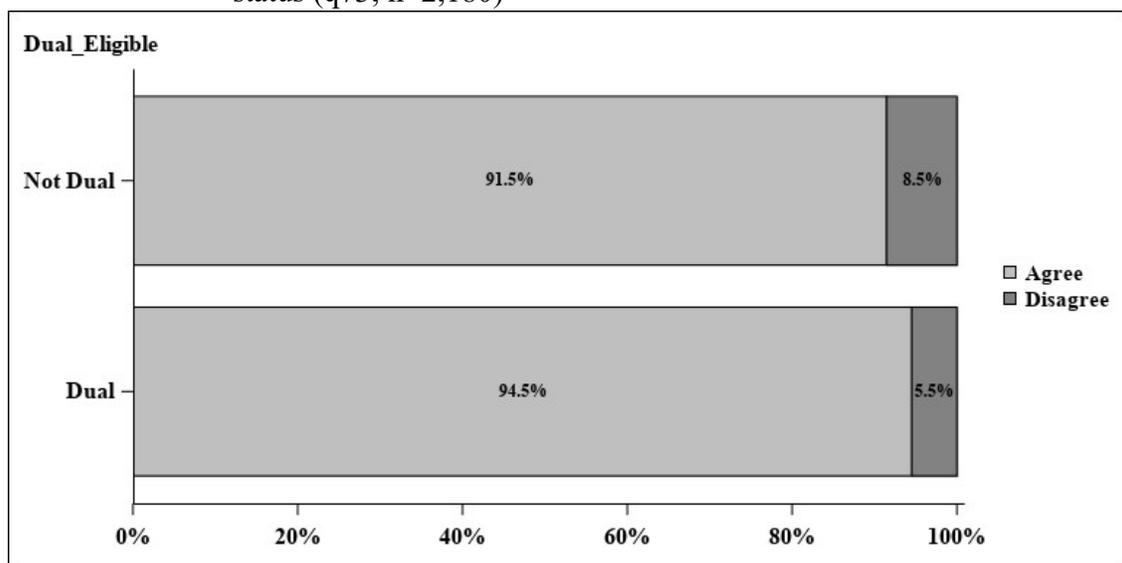


Figure R-250 demonstrates variation in q73 responses according to dual eligible status. Dual eligible respondents were the most trusting that their providers put their medical needs above all other considerations (94.5%) while 91.5% of not dual respondents felt the same.

Figure R-250 Medical needs regarded above all other considerations vs. dual eligible status (q73; n=2,180)



Health providers might perform unnecessary tests or procedures (q74; trust)

Question 74 asked respondents if they thought that their health providers might perform unnecessary tests or procedures. Figure R-251 indicates 63.9% of respondents strongly disagreed with that statement. Fourteen point five percent (14.5%) somewhat disagreed, 2.7% neither agreed/disagreed, 8.2% somewhat agreed and 10.8% strongly agreed.

Figure R-251 May perform unnecessary tests or procedures (q74; n=2,157)

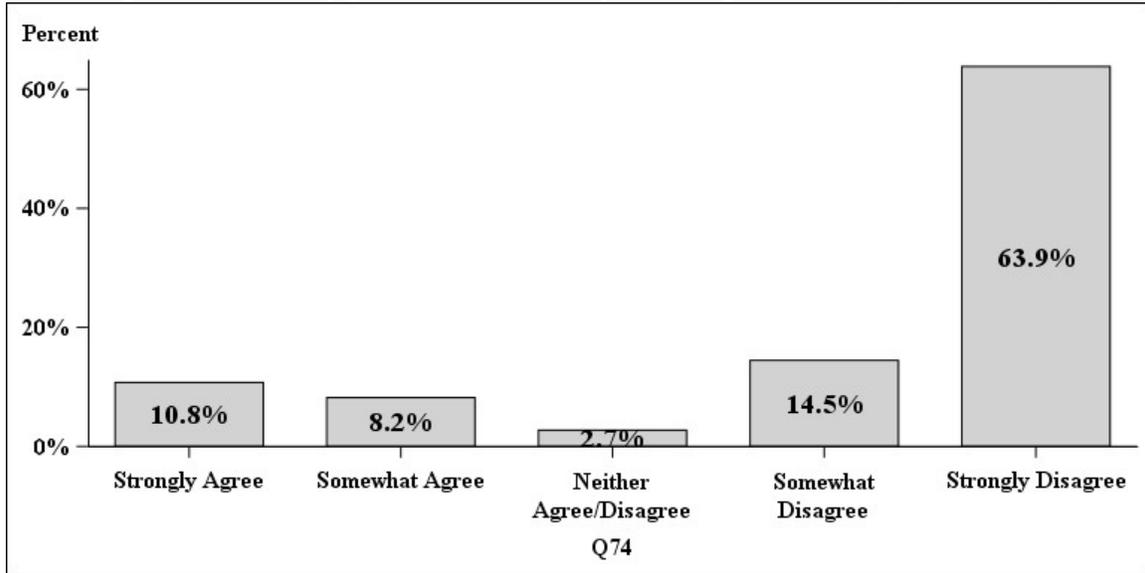


Figure R-252 shows how q74 responses varied with age. Respondents aged less than 45 were most trusting that their providers would not perform unnecessary tests or procedures at 84.4%. Respondents aged 65 and older were least trusting at 72.0%.

Figure R-252 May perform unnecessary tests or procedures vs. age (q74; n=2,099)

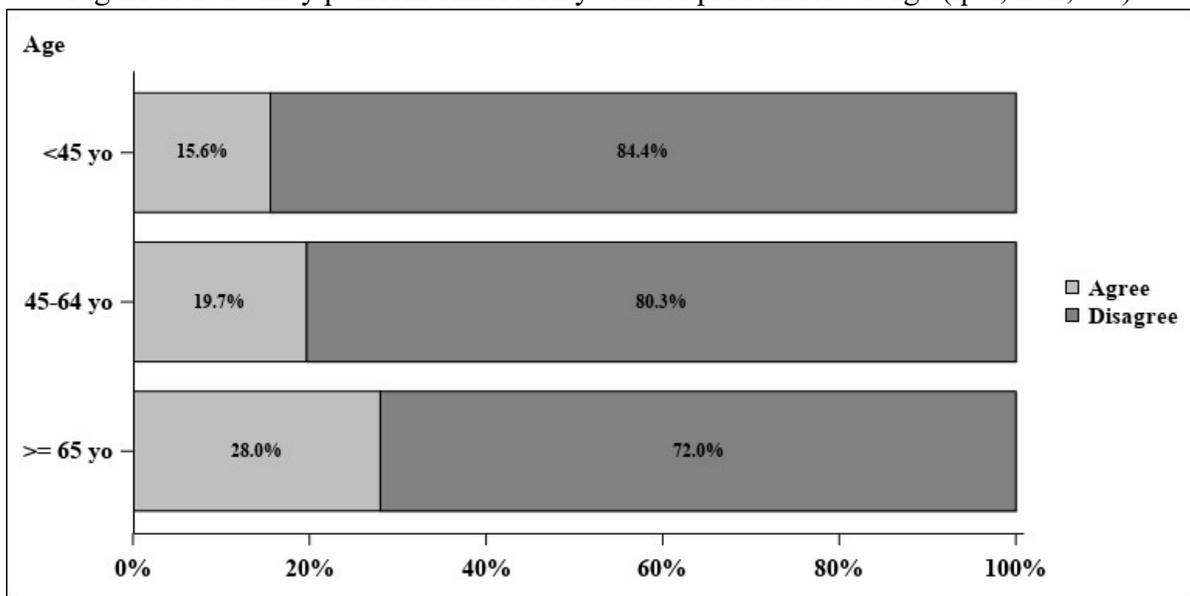


Figure R-253 demonstrates how q74 responses varied with sex. Females were the most trusting that their providers would not perform unnecessary tests or procedures (82.0%) while only 77.9% of males indicated the same trust level.

Figure R-253 May perform unnecessary tests or procedures vs. sex (q74; n=2,099)

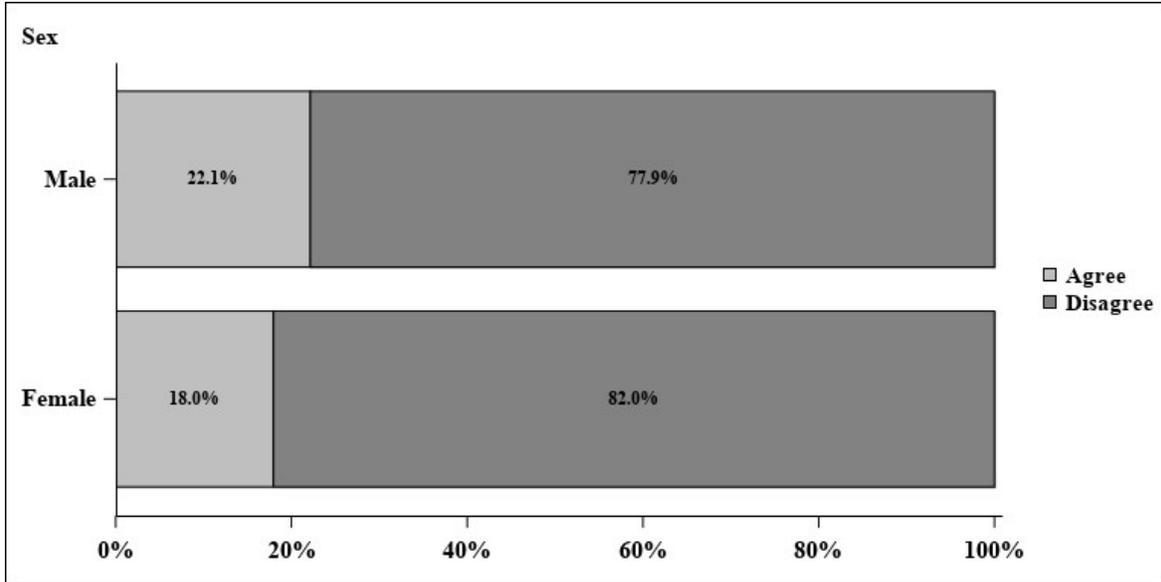


Figure R-254 depicts how responses to q74 varied across race. Whites had the most trust that their providers would not perform unnecessary tests or procedures (83.1%).

Figure R-254 May perform unnecessary tests or procedures vs. race (q74; n=2,099)

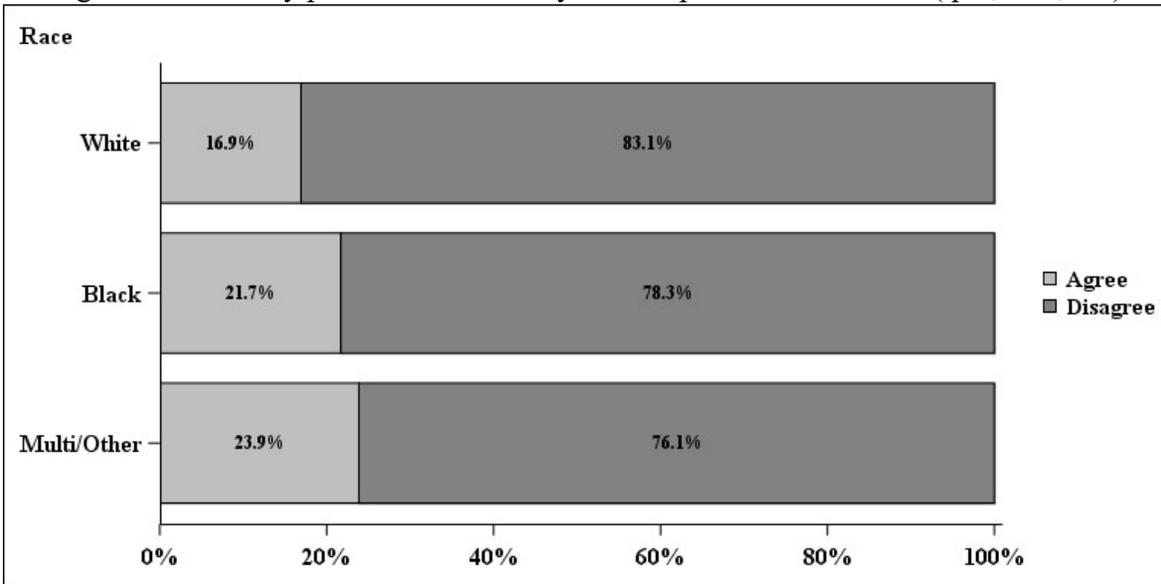
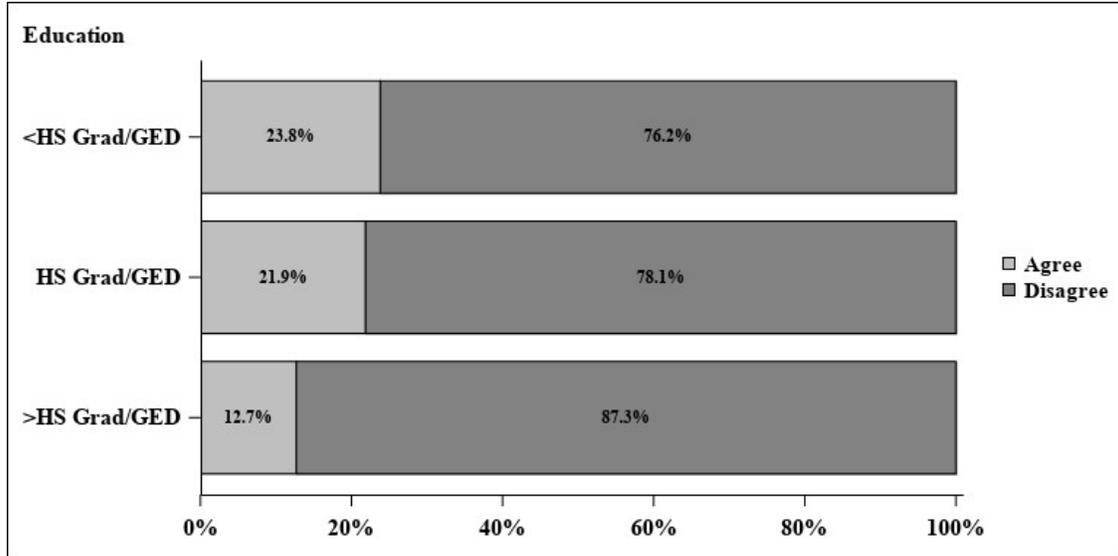


Figure R-255 shows how response to q74 varied across education level. Respondents with >HS Grad/GED were most trusting that their providers would not perform unnecessary tests or procedures at 87.3% while those with <HS Grad/GED were least trusting (76.2%).

Figure R-255 May perform unnecessary tests or procedures vs. education (q74; n=2,065)



Health providers’ medical skills not as good as they should be (q75; trust)

Question 75 asked respondents if their health providers’ medical skills are not as good as they should be. Figure R-256 reveals that 65.5% strongly disagreed with that statement. Eleven point nine percent (11.9%) of respondents somewhat disagreed, 2.3% neither agreed/disagreed, 7.8% somewhat agreed, and 12.5% strongly agreed.

Figure R-256 Medical skills are not as good as they should be (q75; n=2,151)

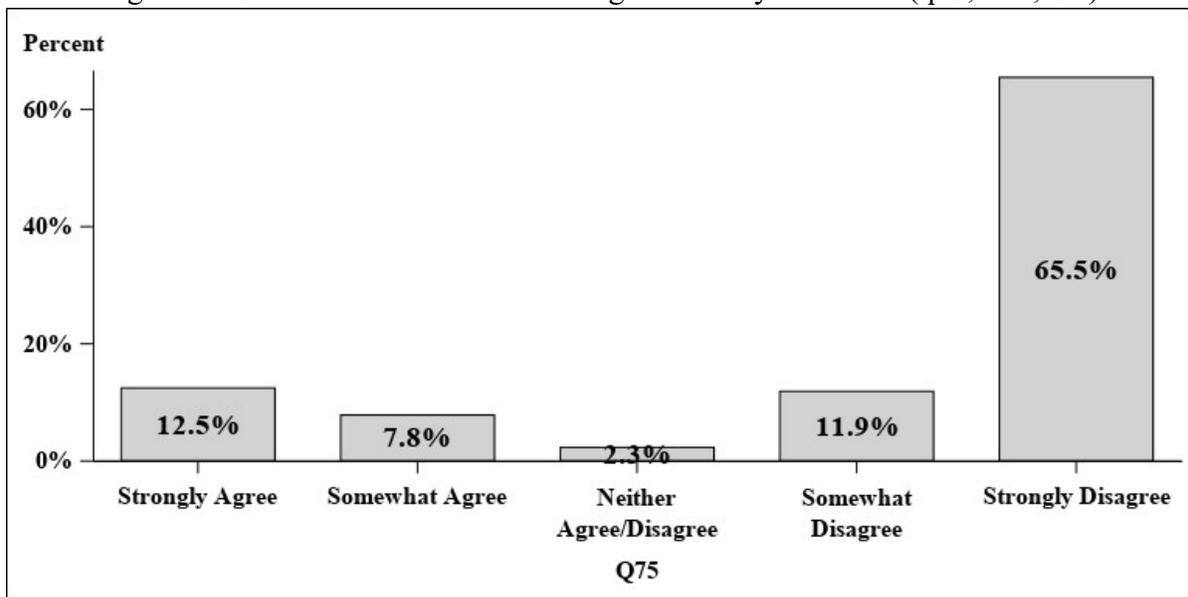


Figure R-257 shows how q75 responses varied with age. Respondents <45 yo most often trusted that their medical provider's skills are as good as they should be (85.2%) followed by respondents ≥65 years yo with the least trust at 67.2%.

Figure R-257 Medical skills are not as good as they should be vs. age (q75; n=2,093)

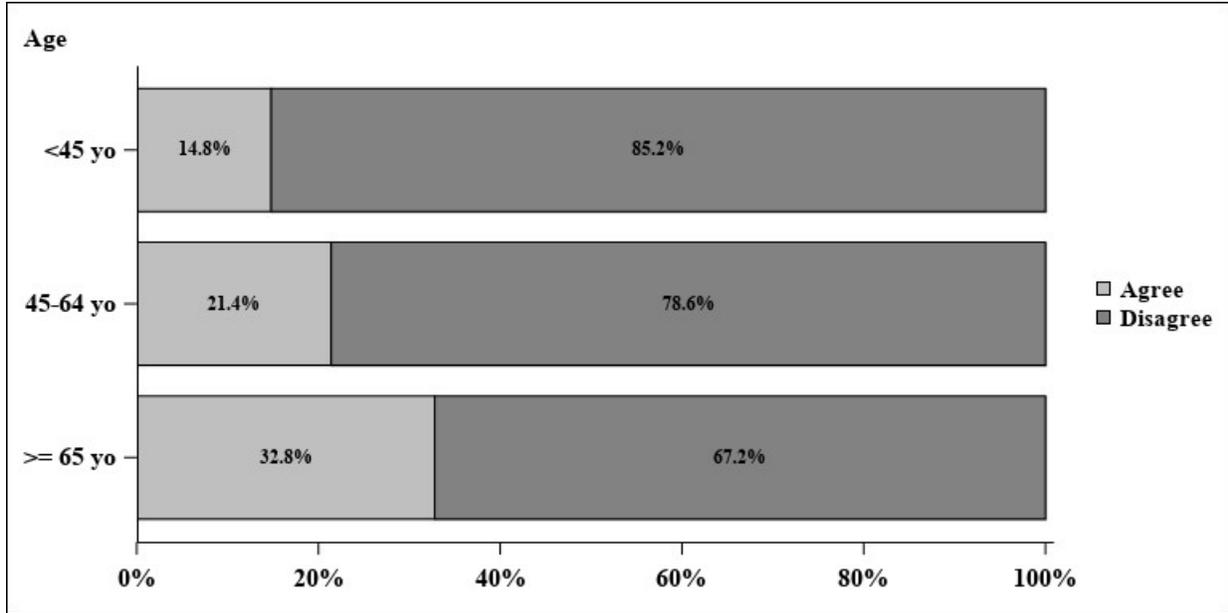


Figure R-258 reveals how responses to q75 varied across race. Whites most often trusted that their medical provider's skills are good as they should be at 81.2% whereas only 75.9% of Blacks felt the same way.

Figure R-258 Medical skills are not as good as they should be vs. race (q75; n=2,093)

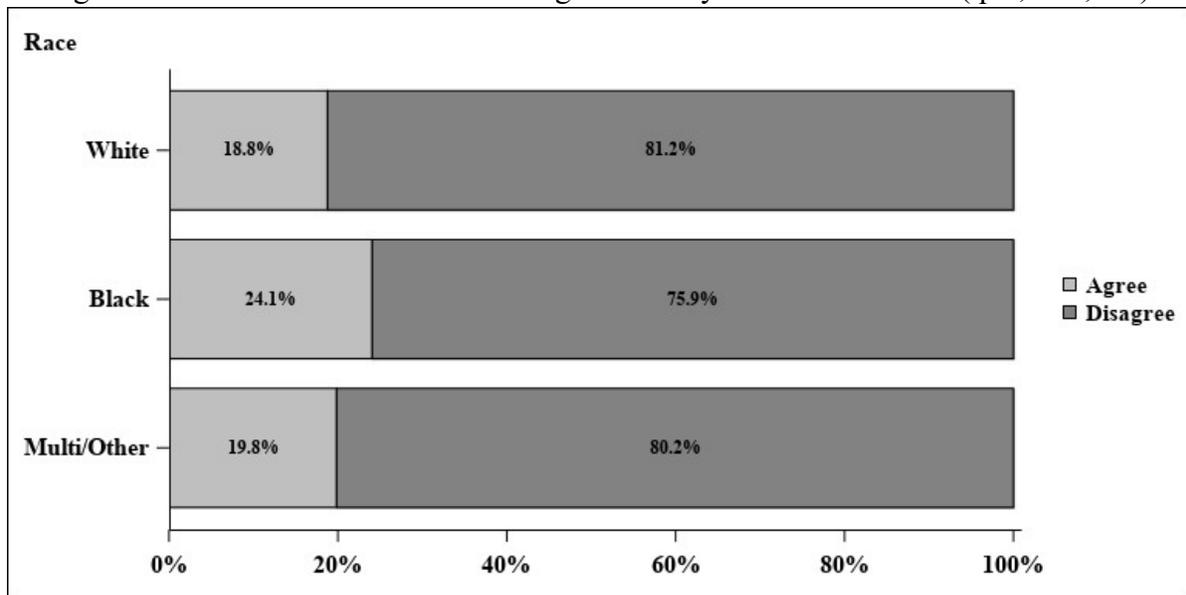


Figure R-259 demonstrates how responses to q75 varied across education level. Respondents with >HS Grad/GED had the most trust that their medical provider's skills are good enough (87.4%) while respondents with <HS Grad/GED who had the least trust in their providers' skills (71.3%).

Figure R-259 Medical skills are not as good as they should be vs. education (q75; n=2,059)

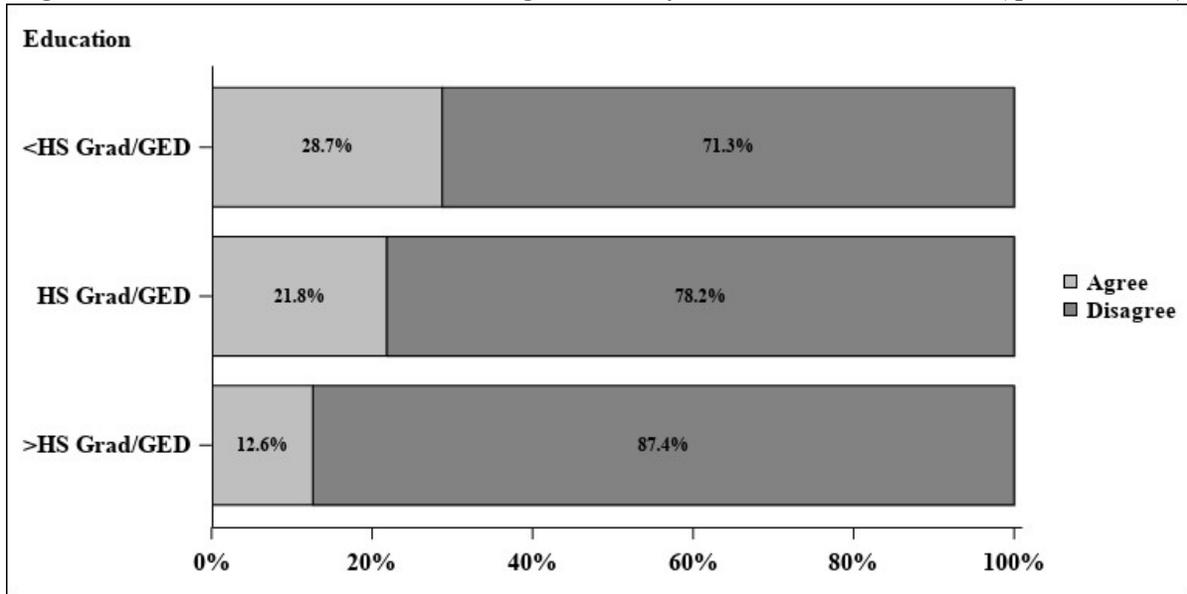
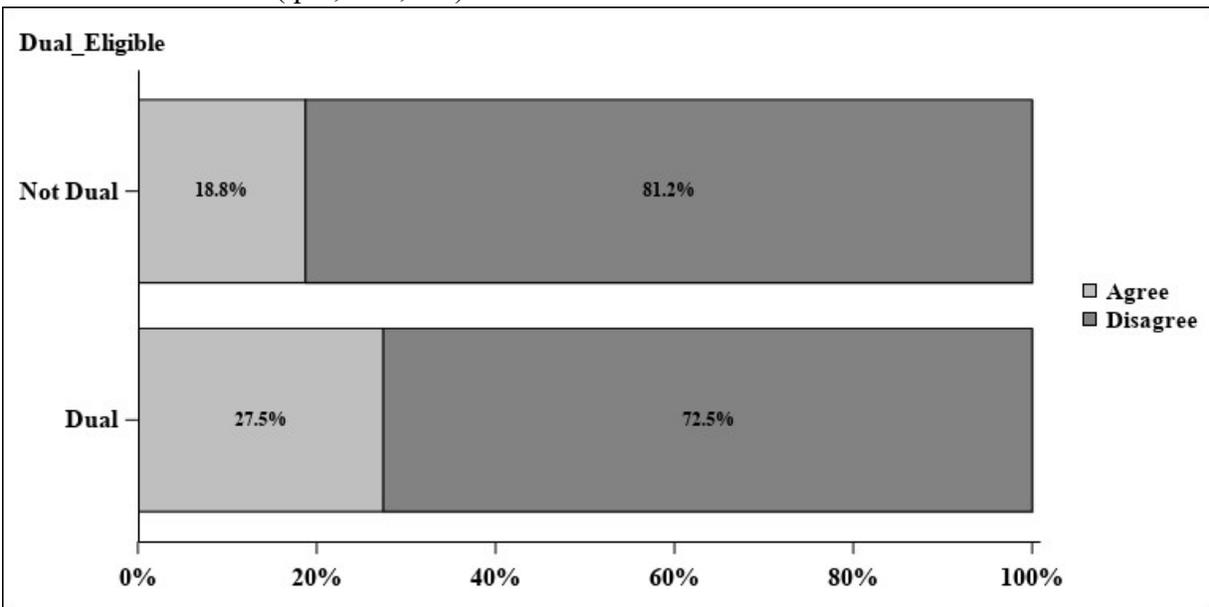


Figure R-260 shows how q75 responses varied by dual eligible status. Non-dual eligible respondents reported that they had the most trust that their medical provider's skills are as good as they should be at 81.2% while only 72.8% of dual eligible respondents indicate the same.

Figure R-260 Medical skills are not as good as they should be vs. dual eligible status (q75; n=2,093)



Health providers always pay full attention (q76; trust)

Question 76 asked respondents if they agreed that their providers always pay full attention to what the respondent is trying to tell him/her. Figure R-261 reveals that 76.7% of respondents strongly agreed with that statement. 13.1% of respondents somewhat agreed, 0.7% neither agreed/disagreed, 4.2% somewhat disagreed, and 5.2% strongly disagreed.

Figure R-261 Health provider always pays full attention (q76; n=2,219)

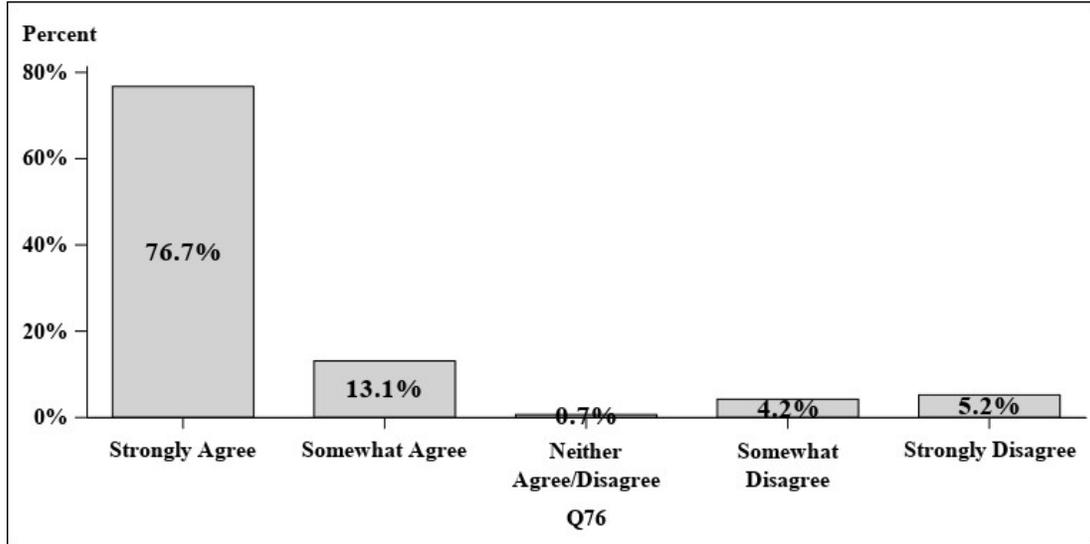
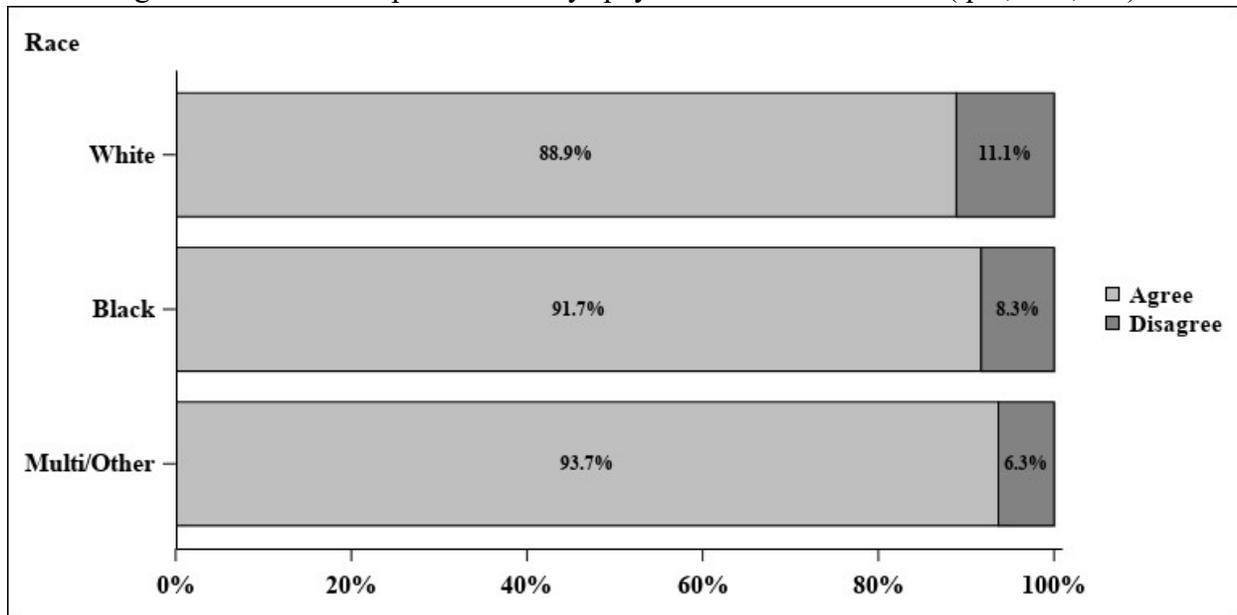


Figure R-262 shows how q76 responses varied with race. Ninety-three point seven percent (93.7%) of Multi/Other respondents indicated their health providers always pay full attention while only 88.9% of Whites indicated the same.

Figure R-262 Health provider always pays full attention vs. race (q76; n=2,203)



4 INTERPRETING THE RESULTS OF THE 2018 ADULT SURVEY

Sixty-nine survey questions across five domains – satisfaction with care, access to care, health care services utilization, health status, and trust in providers – were asked of eligible adult enrollees. We sought to learn about their experiences with North Carolina Medicaid’s Community Care of North Carolina (CCNC) primary care case management delivery system. Table 4-1 gives the number and proportion of questions from each domain asked of the respondent. As a reminder, respondents are generally limited to the previous 6 months of care in expressing their opinions and observations.

Table 4-1 Survey Questions Across the Domains

Domain	# Questions	Proportion
Satisfaction	19	27.5%
Access	21	30.4%
Utilization	8	11.6%
Health Status	16	23.2%
Trust	<u>5</u>	<u>7.3%</u>
	69	100.0%

In Chapter 3 Results, univariate statistics give general observations across all respondents on each question. Bivariate analysis was then conducted on each question attempting to find significant relationships between question responses and any or all of the following variables: age, sex, race, education level, dual eligibility (with Medicare) status, the CCNC network where the care is received, and the rurality of the county in which the respondent lives. These analyses were conducted to seek out possible disparities in whatever aspect each question addresses across these demographic and contextual variables. Across all adult survey questions, statistically significant relationships were most often found in the age, race, education, and dual eligibility status of the respondent.

The UNC Charlotte research team considered all survey questions and chose 23 key indicator questions (shown in Table 2-4 in Chapter 2 Methods) to afford a broad but digestible discussion of respondent opinions and observations across the 5 domains previously noted. The balance of this chapter will summarize the most noteworthy univariate results and significant bivariate relationships described in detail in Chapter 3, focusing on these key indicators.

Consistent with our use of binary level independent variables to improve our bivariate analyses, we will focus on responses of Always (compared to Usually, Sometimes, and Never responses) and 10 for the best possible (compared to 0-9) for satisfaction and access questions. Utilization questions involve count variables and thus are reported differently. Health status has two types of responses: Excellent/Very good/Good/Fair/Poor (analyzed as Exc/VG vs. G/F/P) and Yes/No. Finally, trust questions were collapsed from Strongly Agree/Agree/Neither/Disagree/Strongly disagree to Agree/Disagree.

Satisfaction with Health Care

Table 4-2 shows the 8 key indicator questions in the satisfaction domain. Generally, respondents gave good satisfaction ratings:

- 56.7% rated their Personal Health Provider (PHP) the best possible PHP (q36).

- 55.7% rated the specialist they saw most often the best possible (q43).
- 52.4% rated the Medicaid plan the best possible (q49).
- 40.5% rated their overall health care the best possible (q8). This lower rating for the overall vs. the individual components mirrors what was seen in the 2012 and 2015 adult surveys as well as the 2018 child survey.
- 83.4% indicated their PHP always listened carefully (q25).
- 82.1% said their PHP always explained things in a way that was easy to understand (q24).
- 78.7% reported their PHP always spent enough time (q28).
- Only 49.6% of respondents indicated they always discussed illness prevention with a provider (q7).

Table 4-2 Satisfaction Key Indicator Questions

Question Number	Question
7	Discussed illness prevention with a health provider
8	Overall health care rating
24	PHP explained things in a way that was easy to understand
25	PHP listened carefully
28	PHP spent enough time
36	PHP rating
43	Rating of specialist seen most often
49	Rating of Medicaid plan

Potential disparities in Satisfaction

Of the 8 key indicator questions in the satisfaction domain, 5 achieved statistical significance with age, while 4 questions achieved statistical significance with each of race, education, and dual-eligibility status. Areas of potential disparities will be identified from the bivariate analyses reported below.

Satisfaction and age

- Respondents aged 45-64 yo most often had prevention discussions with provider(s) while those <45 yo least often did so (q7).
- As respondent age increased, overall health care ratings increased (q8).
- As respondent age increased, PHP ratings decreased (q36).
- As respondent age increased, ratings of Medicaid as the best plan increased (q49).

Satisfaction and race

- Black respondents most often had prevention discussion(s) with providers while White respondents least often did so (q7).
- Black and Multi/Other respondents most often reported their PHP always listened carefully while White respondents least often did so (q25).
- Black and Multi/Other respondents most often reported their PHP always spent enough time while White respondents least often did so (q28).
- Black respondents most often rated Medicaid the best plan (q49).

Satisfaction and education

- Respondents with <HS Grad/GED most often had prevention discussions with providers (q7).
- As respondent education increased, overall health care ratings decreased (q8).
- As respondent education increased, PHP ratings decreased (q36).
- As respondent education increased, Medicaid plan ratings decreased (q49).

Satisfaction and dual-eligible status

- Dual-eligible respondents rated their overall health care significantly higher than did non-dual-eligibles (q8).
- Dual-eligible respondents more often reported that their PHP always explained things in a way that was easy to understand (q24).
- Dual-eligible respondents more often rated the Medicaid plan as the best possible (q49).

Satisfaction and CCNC Network

- Northern Piedmont Community Care (2007) respondents most often reported their PHP always listened carefully while those Community Care of the Lower Cape Fear (2004) least often reported the same (q25).
- Northwest Community Care (2006) respondents most often reported their PHP was the best possible while Carolina Collaborative Community Care (1013) least often reported the same (q36).

Satisfaction and rurality

- Rural respondents more often rated Medicaid the best plan possible (q49).

Access to Health Care

Table 4-3 shows the 6 key indicator questions in the access domain. Univariate access results are generally quite good as summarized below:

- 72.1% reported it always easy to get prescriptions from the health plan (q62).
- 66.7% always got urgent care as soon as needed (q3).
- 64.0% always got routine care or check-ups as soon as needed (q5).
- 61.4% always found it easy to get care, tests, or treatment (q9).
- 58.7% always got appointments to see a specialist as soon as needed (q40).
- 55.2% always found it easy to get treatment or counseling through the health plan (q17).

Table 4-3 Access Key Indicator Questions

Question Number	Question
3	Got urgent care as soon as needed
5	Got routine care or check-ups as soon as needed
9	Easy to get care, tests, or treatment
17	Easy to get treatment or counseling through the health plan
40	Got appointments to see a specialist as soon as needed
62	Easy to get prescription medicines through health plan

Potential Disparities in Access

Of the 6 key indicator questions in the access domain, 5 had statistically significant relationships with age while 3 had significant relations with each of education and dual-eligibility status. Specific discussions of potential disparities follow:

Access and age

- Respondents aged 45-64 yo and ≥ 65 yo most often got urgent care fast enough while those <45 least often got it quickly enough (q3).
- Respondents aged 45-64 yo and ≥ 65 most often got routine care or check-ups fast enough while those <45 least often got it quickly enough (q5).
- Respondents aged ≥ 65 yo most often found it easy to get care, tests or treatment while those <45 least often got those services quickly enough (q9).
- Respondents aged <45 yo least often got an appointment to see a specialist as soon as needed (q40).
- As respondent age increased, it became easier to get prescription medicine from the health plan (q62).

Access and sex

- Males more often got urgent care quickly enough (q3).

Access and race

- Black respondents most often found it easy to get care, tests or treatment while Multi/Other race respondents least often found it easy (q9).
- Black respondents most often found it easy to get prescription medicines from the health plan as did White respondents, although to a lesser degree. Multi/other respondents least often found it easy to get prescription medicine through the health plan (q62).

Access and education

- As respondent education increased, respondents less often found it easy to get care, tests or treatment fast enough (q9).
- Respondents with HS Grad/GED or $<HS$ Grad/GED most often found it easy to get treatment or counseling while those with $>HS$ Grade/GED least often found it easy (q17).
- As respondent education increased, respondents less often found it easy to get prescriptions through the health plan (q62).

Access and dual-eligibility status

- Dual-eligible respondents more often got urgent care quickly enough (q3).
- Dual-eligible respondents more often found it easy to get care, tests and treatment (q9).
- Dual-eligible respondents more often found it easy to get prescriptions through the health plan (q62).

Access and rurality

- Rural respondents more often found it easy to get prescriptions through the health plan (q62).

Utilization

Table 4-4 shows the 3 key indicator questions in the utilization domain. Summary of univariate results follows:

- Of the respondents that indicated that they had a PHP, 11.9% did not visit their PHP at all in the previous 6 months, 19.1% reported 1 visit, 40.8% reported 2 or 3 visits, while 28.2% reported 4 or more visits to their PHP (q23).
- Of those that indicated that they had scheduled a specialist appointment in the previous 6 months, 22.5% reported 1 visit to a specialist during that same time period, 39.5% reported 2-3 visits and 36.3% reported 4 or more visits (q42). Although a much smaller number of respondents visited a specialist at all than visited a PHP, the ones that did, visited much more often than those visiting PHPs.
- 58.4% of respondents indicated that they had no emergency room (ER) visits in the previous 6 months, 20.2% had 1 ER visit, 14.9% had 2-3 ER visits, while 6.6% visited the ER 4 or more times (q46).

Table 4-4 Utilization Key Indicator Questions

Question Number	Question
23	Number of visits to the PHP
42	Number of visits to specialists
57	Number of emergency room (ER) visits

Of the 3 key indicator questions in the utilization domain, all 3 had statistically significant relationships with age and 2 with dual-eligibility status. Potential disparities can be unearthed from the following discussions:

Potential Disparities in Utilization

Utilization and age

- Respondents aged 45-64 yo, in addition to generally having the most PHP visits in the previous 6 months, also most often reported 4 or more. Respondents aged <45 yo most often reported no PHP visits (q23).
- Respondents aged 45-64 yo generally had the most ER visits in the previous 6 months while those aged ≥ 65 yo had the fewest. Respondents aged ≤ 65 yo most often reported no ER visits and least often reported 4 or more ER visits while those 45-64 least often reported no ER visits (q57).

Utilization and sex

- Females generally reported more ER visits than males in the previous 6 months (q57).

Utilization and race

- Blacks reported the most ER visits in the previous 6 months while those of Multi/other race reported the fewest (q57).

Utilization and education

- Respondents with <HS Grad/GED, in addition to having the most PHP visits, also most often reported visiting their PHP 4 or more times (q23).

Utilization and dual-eligibility status

- Non-dual respondents generally reported the most ER visits as well as the largest proportions with 4 or more and the lowest proportion with no ER visits (q57).

Health Status

Table 4-5 shows the 5 key indicator questions in the health status domain. The key univariate results are summarized below:

- 50.7% of respondents rated their overall health as excellent, very good, or good (q51).
- 62.7% of respondents rated their overall mental or emotional health as excellent, very good, or good (q52).
- 37.8% of respondents needed help to meet routine needs, such as household chores, routine business shopping, or getting around for other purposes (IADLs, q54).
- 50.9% indicated that they got health care ≥ 3 times in the previous 6 months for the same condition or problem, an indicator of a chronic illness (q58).
- 87.5% currently take medication prescribed by a doctor for a non-pregnancy/menopause issue (q60).

Table 4-5 Health Status Key Indicator Questions

Question Number	Question
51	Overall health rating
52	Overall mental or emotional health rating
54	Needs help with ≥ 1 instrumental ADL (IADL) due to a health problem
58	Got health care ≥ 3 times for the same condition or problem
60	Currently needs or uses prescribed medication

Potential Disparities in Health Status

Of the 5 key indicators in the health status domain, all 5 had statistically significant relationships with age, 4 had significant relationships with each of education and CCNC network, while 3 had significant relationships with race.

Health status and age

- Respondents aged <45 yo most often reported the best overall health while those aged 45-64 yo most often reported the poorest overall health (q51).
- Respondents aged ≥ 65 yo reported the best mental health while those aged 45-64 yo reported the poorest mental health (q52).
- Respondents aged 45-64 yo most often reported needing help with ≥ 1 IADL, with those aged <45 yo least often reported the same situation (q54).
- Respondents aged 45-64 yo most often reported getting health care ≥ 3 times for the same condition while both those <45yo and ≥ 65 yo reported well below average proportions of the same situation (q58).

- Respondents aged 45-64 yo and those >65 yo posted well above average current need for prescribed medication while those <45 posted way below average use of prescribed medication (q60).

Health status and sex

- Female respondents had a greater proportion that got health care ≥ 3 times for the same condition (q58).
- Female respondents more often need prescribed medication (q60).

Health status and race

- Multi/other respondents most often reported the best overall health while White respondents reported the poorest overall health (q51).
- Multi/other respondents reported the best mental health, Black respondents reported 2nd best mental health, while White respondents reported the poorest mental health (q52).
- White respondents most often need prescribed medication while Black respondents least often need the same (q60).

Health status and education

- As respondent education increased, overall health rating sharply improved (q51).
- As respondent education increased, mental health rating improved (q52).
- As respondent education increased, the need for help with ≥ 1 IADL decreased (q54).
- As respondent education increased, the need for prescribed medication decreased (q60).

Health status and dual-eligibility status

- Dual-eligible respondents reported better mental health than non-dual respondents (q52).
- Dual-eligible respondents reported greater need for prescribed medications than non-duals (q60).

Health status and network

- Respondents in Community Care of Wake and Johnson Counties (1011) and in Carolina Collaborative Community Care (1013) reported the best overall health. Respondents in Community Health Partners (1003) and in Carolina Community Health Partnership (1010) reported the poorest overall health (q51).
- Respondents in Community Care of Wake and Johnson Counties (1011) and in Community Care of Southern Piedmont (2003) reported the best mental health. Respondents in Community Health Partners (1003) reported the poorest mental health (q52).
- Respondents in Carolina Community Health Partnership (1010) and in Community Health Partners (1003) most often needed help with ≥ 1 IADL. Respondents in Community Care of Wake and Johnson Counties (1011) least often needed help with ≥ 1 IADL (q54).
- Community Care of Western North Carolina (1007) most often reported need for prescribed medications while those in Community Care of Wake and Johnston Counties (1011) least often reported the same need (q60).

Health Status and rurality

- Urban respondents reported better overall health than rural respondents (q51).

Trust in Providers

Question 74, the trust key indicator question, asked whether “health providers might perform unnecessary tests or procedures.”

- 80.5% of respondents disagreed with the above statement, indicating that they trust providers are not performing unnecessary tests or procedures.

-

Potential Disparities in Trust

Question 74 had statistically significant relationships with age, sex, race, and education.

Trust and age

- As respondent age increased, trust that providers are only performing necessary tests or procedures decreased.

Trust and sex

- Female respondents more often trusted than males that providers are only performing necessary tests or procedures.

Trust and race

- White respondents more often than average (83.1%) trusted that providers are only performing necessary tests and procedures whereas Black respondents (78.3%) and Multi/Other respondents (76.1%) trusted less often.

Trust and education

- As education increased, so did trust level that providers are only performing necessary tests and procedures.

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Appendix A: The 2018 Adult Survey Instrument

Version: CAHPS 5.0 Adult Medicaid Questionnaire

Language: English

INTRODUCTION: “Hello, this is _____ and I am calling from Customer Research International and the University of North Carolina at Charlotte on behalf of North Carolina Medicaid in connection with an effort to improve health care.

Is this the home of _____?
target respondent

IF NOT, say, “Do you know the phone number where I might reach *target respondent*? (record new phone number and then call.

IF YES, say, “I’d like to talk with *target respondent* about his/her healthcare, is *he/she* available?”

IF PERSON AVAILABLE: When selected person answers, repeat introduction and continue.

IF PERSON NOT AVAILABLE: “Can you tell me a convenient time to call back to speak with (him/her)?” RECORD CALL BACK NOTES

Let me tell you a little about the study before we continue. This interview will last approximately 20 minutes. We want you to know that your answers are confidential. You are a volunteer and may stop at any time. Your Medicaid benefits will not be affected in any way by your participation in the survey. No one at the doctor’s office or Medicaid will see any names or know how you answered. May I continue with the interview?

1. YES – Start Interview
2. NO – “Thank you for your time.”

1. Our records show that you are now in Carolina Access or Medicaid? Is that right?
- ¹ Yes → **If Yes, go to question #2.**
- ² No → **If No, “Thank you.”**

Your Health Care in the Last 6 Months

These questions ask about your own health care. Do **not** include care you got when you stayed overnight in a hospital. Do **not** include the times you went for dental care visits.

2. In the last 6 months, did you have an illness, injury, or condition that **needed care right away** in a clinic, emergency room, or doctor’s office?
- ¹ Yes
- ² No → **If No, go to question #4**
3. In the last 6 months, when you **needed care right away**, how often did you get care as soon as you needed?
- ¹ Never
- ² Sometimes
- ³ Usually
- ⁴ Always
4. In the last 6 months, did you make any appointments for a **check-up or routine care** at a doctor’s office or clinic?
- ¹ Yes
- ² No → **If No, go to question #6**
5. In the last 6 months, how often did you get an appointment for a **check-up or routine care** at a doctor’s office or clinic as soon as you needed?
- ¹ Never
- ² Sometimes
- ³ Usually
- ⁴ Always
6. In the last 6 months, **not** counting the times you went to an emergency room, how many times did you go to a doctor’s office or clinic to get health care for yourself?
- Record the number.
- If None (0), go to question #18**
7. In the last 6 months, how often did you and a doctor or other health provider talk about specific things you could do to prevent illness?
- ¹ Never
- ² Sometimes
- ³ Usually
- ⁴ Always

8. Using any number from 0 to 10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate all your health care in the last 6 months?

- 00 0 Worst health care possible
- 01 1
- 02 2
- 03 3
- 04 4
- 05 5
- 06 6
- 07 7
- 08 8
- 09 9
- 10 10 Best health care possible

9. In the last 6 months, how often was it easy to get the care, tests, or treatment you needed?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

10. In the last 6 months, did you have a health problem for which you needed special medical equipment, such as a cane, a wheelchair, or oxygen equipment?

- 1 Yes
- 2 No → **If No, go to question #12**

11. In the last 6 months, how often was it easy to get the medical equipment you needed through your health plan?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

12. In the last 6 months, did you have any health problems that needed special **therapy**, such as physical, occupational, or speech therapy?

- 1 Yes
- 2 No → **If No, go to question #14**

13. In the last 6 months, how often was it easy to get the special therapy you needed through your health plan?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

14. Home health care or assistance means home nursing, help with bathing or dressing, and help with basic household tasks.

In the last 6 months, did you need someone to come into your home to give you home health care or assistance?

- 1 Yes
- 2 No → **If No, go to question #16**

15. In the last 6 months, how often was it easy to get home health care or assistance through your health plan?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

16. In the last 6 months, did you need any treatment or counseling for a personal or family problem?

- 1 Yes
- 2 No → **If No, go to question #18**

17. In the last 6 months, how often was it easy to get the treatment or counseling you needed through your health plan?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

Your Personal Health Provider

A personal health provider is the doctor or nurse who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. Your personal health provider is the one you would see if you need a check-up, want advice about a health problem, or get sick or hurt.

18. Do you have a personal health provider?
¹ Yes
² No → **If No, go to question #39**
19. Is this person a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant?
¹ General doctor (Family practice or internal medicine)
² Specialist doctor
³ Nurse Practitioner
⁴ Physician Assistant
20. How many months or years have you been going to your personal health provider?
¹ Less than 6 months
² At least 6 months but less than 1 year
³ At least 1 year but less than 2 years
⁴ At least 2 years but less than 5 years
⁵ 5 years or more
21. Do you have a physical or medical condition that seriously interferes with your ability to work, attend school, or manage your day-to-day activities?
¹ Yes
² No → **If No, go to question #23**
22. Does your personal health provider understand how any health problems you have affect your day-to-day life?
¹ Yes
² No
23. In the last 6 months, how many times did you visit your personal health provider to get care for yourself?
Record the number.
If None (0), go to question #36
24. In the last 6 months, how often did your personal health provider explain things in a way that was easy to understand?
¹ Never
² Sometimes
³ Usually
⁴ Always

25. In the last 6 months, how often did your personal health provider listen carefully to you?
- 1 Never
 - 2 Sometimes
 - 3 Usually
 - 4 Always
26. In the last 6 months, how often did you have a hard time speaking with or understanding your personal health provider because you spoke different languages?
- 1 Never
 - 2 Sometimes
 - 3 Usually
 - 4 Always
27. In the last 6 months, how often did your personal health provider show respect for what you had to say?
- 1 Never
 - 2 Sometimes
 - 3 Usually
 - 4 Always
28. In the last 6 months, how often did your personal health provider spend enough time with you?
- 1 Never
 - 2 Sometimes
 - 3 Usually
 - 4 Always
29. We want to know how you, your doctors, and other health providers make decisions about your health care.
- In the last 6 months, were any decisions made about your health care?
- 1 Yes
 - 2 No → **If No, go to question #32**
30. In the last 6 months, how often were you involved as much as you wanted in these decisions about your health care?
- 1 Never
 - 2 Sometimes
 - 3 Usually
 - 4 Always

31. In the last 6 months, how often was it easy to get your doctors or other health providers to agree with you on the best way to manage your health conditions or problems?
- ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always
32. In the last 6 months, did you get care from a doctor or other health provider besides your personal health provider?
- ¹ Yes
 - ² No → **If No, go to question #35**
33. In the last 6 months, did anyone from your doctor's office, clinic, or CAROLINA ACCESS/MEDICAID help coordinate your care from other health providers who were not your **personal** health provider?
- ¹ Yes
 - ² No → **If No, go to question #35**
34. How satisfied are you with the help you received to coordinate your care in the last 6 months?
- ¹ Very dissatisfied
 - ² Dissatisfied
 - ³ Neither dissatisfied nor satisfied
 - ⁴ Satisfied
 - ⁵ Very satisfied
35. In the last 6 months, if you phoned your personal health provider's office after regular office hours, how often did you get the help or advice you needed?
- ⁰ Did not need after hours help
 - ¹ Needed it and never got it
 - ² Needed it and sometimes got it
 - ³ Needed it and usually got it
 - ⁴ Needed it and always got it

36. Using any number from 0 to 10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate your personal health provider?

- 00 0 Worst personal health provider possible
- 01 1
- 02 2
- 03 3
- 04 4
- 05 5
- 06 6
- 07 7
- 08 8
- 09 9
- 10 10 Best personal health provider possible

37. Did you have the same personal health provider **before** you joined CAROLINA ACCESS or MEDICAID?

- 1 Yes → **If Yes, go to question #39**
- 2 No

38. Since you joined CAROLINA ACCESS or MEDICAID, how often was it easy to get a personal health provider you are happy with?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

Getting Health Care from Specialists

When you answer the next questions, do **not** include dental visits or care you got when you stayed overnight in a hospital.

39. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and other doctors who specialize in one area of health care. In the last 6 months, did you make any appointments to see a specialist?

- 1 Yes
- 2 No → **If No, go to question #45**

40. In the last 6 months, how often did you get an appointment to see a specialist as soon as you needed?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

41. How many specialists have you seen in the last 6 months?

Record the number.

If None (0), go to question #45

42. In the last 6 months, how many times did you go to specialists for care for yourself?

Record the number.

43. We want to know your rating of the specialist you saw most often in the last 6 months. Using any number from 0 to 10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate the specialist?

- 00 0 Worst specialist possible
- 01 1
- 02 2
- 03 3
- 04 4
- 05 5
- 06 6
- 07 7
- 08 8
- 09 9
- 10 10 Best specialist possible

44. In the last 6 months, was the specialist you saw most often the same as your personal health provider?

- 1 Yes
- 2 No

Interactions with Your Health Plan and Doctor's Office Staff

The next questions ask about your experience with your health plan.

45. In the last 6 months, did you get information or help from office staff at your health provider or health plan?

- 1 Yes
- 2 No → **If No, go to question #48**

46. In the last 6 months, how often did office staff at your health plan, doctor's office, or clinic give you the information or help that you needed?

- 1 Never
- 2 Sometimes
- 3 Usually
- 4 Always

47. In the last 6 months, how often did office staff at your health plan, doctor's office, or clinic treat you with courtesy and respect?
- ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always
48. In the last 6 months, how often were any forms from your health provider or health plan easy to fill out?
- ⁰ Did not fill out any forms
 - ¹ Filled out forms and it was never easy
 - ² Filled out forms and it was sometimes easy
 - ³ Filled out forms and it was usually easy
 - ⁴ Filled out forms and it was always easy
49. Using any number from 0 to 10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate Carolina Access or Medicaid now?
- ⁰⁰ 0 Worst Carolina Access or Medicaid now
 - ⁰¹ 1
 - ⁰² 2
 - ⁰³ 3
 - ⁰⁴ 4
 - ⁰⁵ 5
 - ⁰⁶ 6
 - ⁰⁷ 7
 - ⁰⁸ 8
 - ⁰⁹ 9
 - ¹⁰ 10 Best Carolina Access or Medicaid now
50. In the last 6 months, if you needed transportation help from a non-family member to get to a medical appointment or to get a prescription filled, how often did you get it?
- ¹ Did not need any assistance
 - ² Needed assistance and never received it
 - ³ Needed assistance and sometimes received it
 - ⁴ Needed assistance and usually received it
 - ⁵ Needed assistance and always received it

Your Health Status

51. In general, how would you rate your overall health?

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor

52. In general, how would you rate your overall **mental or emotional health**?

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor

53. Because of any impairment or health problem, do you need the help of other persons with your personal care needs, such as eating, bathing, dressing, or getting around the house?

- 1 Yes
- 2 No

54. Because of any impairment or health problem, do you need help with your routine needs, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes?

- 1 Yes
- 2 No

55. Do you have a physical or medical condition that seriously interferes with your independence, participation in the community, or quality of life?

- 1 Yes
- 2 No

56. In the last 6 months, have you been a patient in a hospital overnight or longer?

- 1 Yes
- 2 No

57. In the last 6 months, how many times did you go to an emergency room to get care for yourself?

Record the number.

58. In the past 6 months, did you get health care 3 or more times for the same condition or problem?
- ¹ Yes
² No → **If No, go to question #60**
59. Is this a condition or problem that has lasted for at least 3 months? Do **not** include pregnancy or menopause.
- ¹ Yes
² No
60. Do you now need or take medicine prescribed by a doctor? Do **not** include birth control.
- ¹ Yes
² No → **If No, go to question #63**
61. Is this medicine to treat a condition that has lasted for at least 3 months? Do not include pregnancy or menopause.
- ¹ Yes
² No
62. In the last 6 months, how often was it easy to get your prescription medicine from your health plan?
- ¹ Never
² Sometimes
³ Usually
⁴ Always

About You

63. What is your age?
- Record the number. (*rounded to nearest year*)
64. Are you male or female?
- ¹ Male
² Female
65. What is the highest grade or level of school that you have completed?
- ¹ 8th grade or less
² Some high school, but did not graduate
³ High school graduate or GED
⁴ Some college or 2-year degree
⁵ 4-year college graduate

⁶ More than 4-year college degree

66. Are you of Hispanic or Latino origin or descent?

¹ Yes, Hispanic or Latino

² No, Not Hispanic or Latino

67. What is your race? Please indicate one.

¹ White

² Black or African-American

³ Asian

⁴ Native Hawaiian or other Pacific Islander

⁵ American Indian or Alaska Native

⁶ Other/Multi

68. What language do you **mainly** speak at home?

¹ English

² Spanish

³ Some other language

69. What language do you **mainly** speak when talking with your personal doctor or health provider?

¹ English

² Spanish

³ Some other language

70. Do you now smoke cigarettes or use tobacco?

¹ Yes

² No → **If No, go to question #72**

71. Have any of your health providers suggested methods or strategies to assist you to quit smoking cigarettes or stop using tobacco?

¹ Yes

² No

Trust in Your Health Providers

Please think about the health provider you usually see when you are sick or need advice about your health.

72. I think my personal health provider may not refer me to a specialist when needed.
- 1 Strongly Agree
 - 2 Somewhat Agree
 - 3 Neither Agree/Disagree
 - 4 Somewhat Disagree
 - 5 Strongly Disagree
73. I trust my personal health provider to put my medical needs above all other considerations when treating my medical problems.
- 1 Strongly Agree
 - 2 Somewhat Agree
 - 3 Neither Agree/Disagree
 - 4 Somewhat Disagree
 - 5 Strongly Disagree
74. I sometimes think that my personal health provider might perform unnecessary tests or procedures.
- 1 Strongly Agree
 - 2 Somewhat Agree
 - 3 Neither Agree/Disagree
 - 4 Somewhat Disagree
 - 5 Strongly Disagree
75. My personal health provider's medical skills are not as good as they should be.
- 1 Strongly Agree
 - 2 Somewhat Agree
 - 3 Neither Agree/Disagree
 - 4 Somewhat Disagree
 - 5 Strongly Disagree
76. My personal health provider always pays full attention to what I am trying to tell him or her.
- 1 Strongly Agree
 - 2 Somewhat Agree
 - 3 Neither Agree/Disagree
 - 4 Somewhat Disagree
 - 5 Strongly Disagree

“Thank you for your participation.”

Appendix B: Survey Disposition Codes and Response Rates

	Adult	Child
Total sample used	54,479	37,348
Ineligible Category Descriptions		
Disconnected	10,831	6,297
Business/Government	867	599
Terminate-No one by that name	5,364	2,814
Terminate-Not with Medicaid	420	220
Computer tone/modem	160	76
Total	17,642	10,006
Eligible Category Descriptions (AAPOR Codes)		
I=Complete Interviews (1.1)	2,302	2,263
P=Partial Interviews (1.2)	21	19
R=Refusal and break off (2.1)	337	220
NC=Non-Contact (2.2)	459	233
O=Other (2.0, 2.3)	145	139
UH=Unknown Household (3.1)	29,251	21,593
UO=Unknown other (3.2-3.9)	4,322	2,875
e (proportion actually eligible)	0.156	0.223
Response Rate 2		
$(I+P)/((I+P) + (R+NC+O) + (UH+UO))$	6.31%	8.35%
Response Rate 4 (Adjusted)		
$(I+P)/((I+P) + (R+NC+O) + e(UH+UO))$	27.31%	27.38%

Appendix C: Frequency Distributions of Responses to the 2018 Survey

(Frequencies exclude “don’t know” responses and refusals)

Italics indicate variables that demonstrate statistically significant bivariate relationships at $p \leq 0.05$ with the survey question, where:

A = enrollee’s age

S = enrollee’s sex

Ra = enrollee’s race

Ed = enrollee’s level of education

D = enrollee’s dual eligibility status

N = enrollee’s CCNC network

R = degree of rurality of enrollee’s county of residence

Language of conducted survey (n = 2323)	
English	98.4%
Spanish	1.6%

Question 1: Our records show that you are now in Medicaid? Is that right? (n =2323)	
Yes (If Yes, go to Question 2)	100.0%
No (If No, “Thank you.”)	0.0%

Your Health Care in the Last 6 Months

Question 2: (Health Status) In the last 6 months, did you have an illness, injury, or condition that needed care right away in a clinic, emergency room, or doctor's office? (n = 2296) <i>A, S, Ed, D</i>	
Yes	43.4%
No (If No, go to Question 4)	56.6%

Question 3: (Utilization) When you needed care right away, how often did you get care as soon as needed? (n=966) <i>A, S, D</i>	
Never	2.7%
Sometimes	16.6%
Usually	14.1%
Always	66.7%

Question 4: (Access) In the last 6 months, not counting the times you needed care right away, did you make any appointments for your health care at a doctor’s office or clinic? (n = 2299) <i>A, S, Ra, Ed,</i>	
Yes	74.3%
No (If No, go to Question 6)	25.7%

Question 5: (Access) How often did you get an appointment for a check-up or routine care at a doctor's office or clinic as soon as you needed? (n = 1649) *A, Ru*

Never	2.0%
Sometimes	16.2%
Usually	17.8%
Always	64.0%

Question 6: (Utilization) In the last 6 months, not counting the times you went to an emergency room, how many times did you go to a doctor's office or clinic to get health care for yourself? (n = 2129) *A, S, Ra, Ed*

None (If None, go to question 18)	17.5%
1	15.1%
2-3	32.8%
4 or more	34.3%

Question 7: (Satisfaction) In the last 6 months, how often did you and a doctor or other health provider talk about specific things you could do to prevent illness? (n = 1870) *A, Ra, Ed,*

Never	9.9%
Sometimes	24.9%
Usually	15.6%
Always	49.6%

Question 8: (Satisfaction) Using any number from 0 to 10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate all your health care in the last 6 months? (n = 1887) *A, Ed, D*

0 Worst health care possible	1.2%
1	0.7%
2	0.7%
3	0.9%
4	1.6%
5	6.7%
6	4.9%
7	9.6%
8	20.9%
9	12.3%
10 Best health care possible	40.5%

Question 9: (Access) In the last 6 months, how often was it easy to get the care, tests or treatment you needed? (n = 1892) *A, S, Ed, D*

Never	2.5%
Sometimes	17.4%
Usually	18.7%
Always	61.4%

Meeting Special Health Care Needs

Question 10: (Health Status) In the last 6 months, did you have a health problem for which you needed special medical equipment, such as a cane, a wheelchair or oxygen equipment? (n = 1908) <i>A</i>	
Yes	28.1%
No (If No, go to question 12)	71.9%

Question 11: (Access) In the last 6 months, how often was it easy to get the medical equipment you needed through your health plan? (n = 518) <i>A, Ed</i>	
Never	9.7%
Sometimes	16.8%
Usually	16.6%
Always	56.9%

Question 12: (Health Status) In the last 6 months, did you have any health problems that need special therapy, such as physical, occupational or speech therapy? (n=1907) <i>A, Ed, N, R</i>	
Yes	21.1%
No (If No, go to question 14)	78.9%

Question 13: (Access) In the last 6 months, how often was it easy to get the special therapy you needed through your health plan? (n = 393) <i>A, D</i>	
Never	15.3%
Sometimes	23.9%
Usually	14.8%
Always	46.1%

Question 14: (Health Status) In the last 6 months, did you need someone to come into your home to give you home health care or assistance with basic household tasks? (n = 1913) <i>A, Ra, Ed, D</i>	
Yes	17.6%
No (If No, go to question 16)	82.4%

Question 15: (Access) In the last 6 months, how often was it easy to get home health care or assistance through your health plan? (n = 323) <i>D</i>	
Never	16.1%
Sometimes	12.4%
Usually	11.5%
Always	60.1%

Question 16: (Health Status) In the last 6 months, did you need any treatment or counseling for a personal or family problem? (n = 1911) <i>A, S, Ra, Ed, D</i>	
Yes	21.0%
No (If No, go to question 18)	79.0%

Question 17: (Access) In the last 6 months, how often was it easy to get the treatment or counseling you needed through your health plan? (n = 395)	
Never	10.9%
Sometimes	15.7%
Usually	11.6%
Always	55.2%

Your Personal Health Provider

Question 18: (Access) Do you have a personal health provider? (n = 2303) <i>A, S, R</i>	
Yes	83.8%
No (If No, go to question 39)	16.2%

Question 19: (Access) Is your PHP a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant? (n =1873) <i>S, Ra, N, R</i>	
General doctor	65.4%
Specialist doctor	9.6%
Nurse practitioner	11.6%
Physician assistant	13.3%

Question 20: (Access) How long have you been going to your PHP? (n = 1873) <i>A, D, N</i>	
Less than 6 months	6.4%
Between 6 months and 1 year	7.8%
Between 1 and 2 years	12.8%
Between 2 and 5 years	28.9%
5 years or more	44.1%

Question 21: (Health status) Do you have a physical or medical condition that seriously interferes with your ability to work, attend school, or manage your day-to-day activities? (n = 1902) <i>A, S, Ra, Ed, N, R</i>	
Yes	70.6%
No (If No, go to question 26)	29.4%

Question 22: (Satisfaction) Does your PHP understand how any health problems you have affect your day-to-day life? (n = 1309) <i>Ra</i>	
Yes	94.7%
No	5.3%

Question 23: (Utilization) In the last 6 months, how many times did you visit your PHP to get care for yourself? (n = 1786) <i>A, E, D</i>	
None (If None, go to question 39)	11.9%
1	19.1%
2-3	40.8%
4 or more	28.2%
Question 24: (Satisfaction) In the last 6 months, how often did your PHP explain things in a way that was easy to understand? (n = 1691) <i>D</i>	
Never	2.0%
Sometimes	6.9%
Usually	9.0%
Always	82.1%
Question 25: (Satisfaction) In the last 6 months, how often did your PHP listen carefully to you? (n = 1689) <i>A, Ra, N</i>	
Never	1.6%
Sometimes	6.8%
Usually	8.2%
Always	83.4%
Question 26: (Satisfaction) In the last 6 months, how often did you have a hard time speaking with or understanding your PHP because you spoke different languages? (n = 1664) <i>A, Ra, E</i>	
Never	82.9%
Sometimes	8.8%
Usually	1.3%
Always	7.0%
Question 27: (Satisfaction) In the last 6 months, how often did your PHP show respect for what you had to say? (n = 1689) <i>Ra</i>	
Never	1.6%
Sometimes	5.6%
Usually	6.4%
Always	86.4%
Question 28: (Satisfaction) In the last 6 months, how often did your PHP spend enough time with you? (n = 1684) <i>Ra</i>	
Never	1.6%
Sometimes	8.7%
Usually	10.9%
Always	78.7%

Question 29: In the last 6 months, were any decisions made about your health care? (n = 1645) <i>A, Ra, Ed</i>	
Yes	62.0%
No (If No, go to question 32)	38.0%
Question 30: (Satisfaction) In the last 6 months, how often were you involved as much as you wanted in decisions about your health care? (n = 1015) <i>A</i>	
Never	1.7%
Sometimes	7.8%
Usually	11.3%
Always	79.2%
Question 31: (Satisfaction) In the last 6 months, how often was it easy for your doctors or other health providers to agree with you on the best way to manage your health conditions or problems? (n = 1005) <i>Ed</i>	
Never	1.8%
Sometimes	15.0%
Usually	23.8%
Always	59.4%
Question 32: (Utilization) In the last 6 months, did you get care from a doctor or other health provider besides your PHP? (n = 1685) <i>A, S, Ra, Ed</i>	
Yes	63.2%
No (If No, go to question 35)	36.8%
Question 33: (Access) In the last 6 months, did anyone from your doctor's office, clinic, or Medicaid help coordinate your care from other health providers who were not your PHP? (n = 1015)	
Yes	60.2%
No (If No, go to question 35)	39.8%
Question 34: (Satisfaction) How satisfied are you with the help you received to coordinate your care in the last 6 months? (n = 602) <i>Ra</i>	
Very dissatisfied	1.8%
Dissatisfied	2.5%
Neither dissatisfied nor satisfied	3.7%
Satisfied	44.5%
Very satisfied	47.5%

Question 35: (Access) In the last 6 months, if you phoned your PHP after regular office hours, how often did you get the help of advice you needed? (n = 1674) *Ra*

Did not need after hours help	60.7%
Needed it and never got it	4.5%
Needed it and sometimes got it	6.4%
Needed it and usually got it	7.0%
Needed it and always got it	21.4%

Question 36: (Satisfaction) Using any number from 0-10, where 0 is the worst possible PHP and 10 is best possible, what number would you use to rate your PHP? (n = 1916) *A, Ed, D, N*

0 Worst possible PHP	0.7%
1	0.5%
2	0.4%
3	0.6%
4	0.9%
5	3.1%
6	3.3%
7	5.1%
8	14.5%
9	14.1%
10 Best possible PHP	56.7%

Question 37: (Access) Did you have the same PHP before you joined MEDICAID? (n = 1866) *A, D*

Yes (If Yes, go to question 39)	46.9%
No	53.1%

Question 38: (Access) Since you joined MEDICAID, how often was it easy to get a PHP you are happy with? (n = 1014) *A, Ra, D, R*

Never	7.8%
Sometimes	22.7%
Usually	18.1%
Always	51.4%

Getting Health Care from Specialists

Question 39: (Health Status) Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and other doctors who specialize in one area of health care. In the last 6 months, did you make any appointments to see a specialist? (n = 2300) *A, S, Ra, Ed*

Yes	47.1%
No (If No, go to question 45)	52.9%

Question 40: (Access) In the last 6 months, how often did you get an appointment to see a specialist as soon as you needed? (n = 1065)

Never	4.9%
Sometimes	15.8%
Usually	20.7%
Always	58.7%

Question 41: (Utilization) How many specialists have you seen in the last 6 months? (n = 1057) *A, Ed*

None (If None, go to question 45)	4.9%
1	35.9%
2-3	46.5%
4 or more	12.7%

Question 42: (Utilization) In the last 6 months, how many times did you go to specialists for care for yourself? (n = 972)

None	1.6%
1	22.5%
2-3	39.5%
4 or more	36.3%

Question 43: (Satisfaction) Using any number from 0-10 where 0 is the worst specialist possible and 10 is the best, how would you rate the specialist you saw most often in the last 6 months. (n = 1017)

0 Worst specialist possible	1.0%
1	0.6%
2	0.4%
3	1.0%
4	1.1%
5	3.4%
6	2.5%
7	7.0%
8	14.7%
9	12.8%
10 Best specialist possible	55.7%

Question 44: (Access) In the last 6 months, was the specialist you saw most often the same doctor as your PHP? (n = 1322) *A, R, Ed*

Yes	24.8%
No	75.2%

Interactions with your Health Plan and Doctor's Office Staff

Question 45: In the last 6 months, did you seek information or help from office staff at your health provider or health plan? (n = 2244)

Yes	49.2%
No (If no, go to question 48)	50.8%

Question 46: (Satisfaction) In the last 6 months, how often did office staff at your health plan, doctor's office or clinic give you the information or help that you needed? (n = 1098)

Never	0.9%
Sometimes	8.6%
Usually	16.9%
Always	73.6%

Question 47: (Satisfaction) In the last 6 months, how often did office staff at your health plan, doctor's office or clinic treat you with courtesy and respect? (n = 1099)

Never	0.5%
Sometimes	3.0%
Usually	8.3%
Always	88.3%

Question 48: (Satisfaction) In the last 6 months, how often were any forms from your providers or health plan easy to fill out? (n = 2258)

Did not fill out any forms	26.7%
Never	2.9%
Sometimes	13.4%
Usually	17.4%
Always	39.5%

Question 49: (Satisfaction) Using any number from 0-10, where 0 is worst possible plan and 10 is the best possible, what number would you use to rate your Medicaid now? (n = 2266) *A, Ra, Ed, D, R*

0 Worst Medicaid plan	1.4%
1	0.5%
2	0.8%
3	1.1%
4	1.2%
5	4.2%
6	3.7%
7	8.0%
8	14.0%
9	12.7%
10 Best Medicaid plan	52.4%

Question 50: (Access) In the last 6 months, if you needed transportation help from a non-family member to get to a medical appointment or to get a prescription filled, how often did you get it? (n = 2280) *Ra, Ed, D, N, R*

Did not need transportation help	56.8%
Never got it	6.3%
Sometimes got it	8.6%
Usually got it	5.7%
Always got it	22.5%

Your Health Status

Question 51: (Health Status) In general, how would you rate your overall health? (n = 2299) *A, Ra, Ed, N, R*

Excellent	7.0%
Very Good	14.5%
Good	29.2%
Fair	32.1%
Poor	17.1%

Question 52: (Health Status) In general, how would you rate your overall mental or emotional health? (n = 2290) *A, Ra, Ed, D, N*

Excellent	14.0%
Very Good	17.0%
Good	31.7%
Fair	32.1%
Poor	17.1%

Question 53: (Health Status) Because of any impairment or health problem, do you need the help of other persons with your personal care needs, such as eating, dressing, or getting around the house (activities of daily living (ADLs))? (n = 2308) *A, Ra, Ed*

Yes	21.0%
No	79.0%

Question 54: (Health Status) Because of any impairment or health problem, do you need help with your routine needs, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes (instrumental activities of daily living (IADLs))? (n = 2290) *Ed, N*

Yes	37.8%
No	62.2%

Question 55: (Health Status) Do you have a physical or medical condition that seriously interferes with your independence, participation in the community, or quality of life? (n = 2258) <i>A, S, Ra, Ed, N</i>	
Yes	52.8%
No	47.2%
Question 56: (Utilization) In the last 6 months, have you been a patient in a hospital overnight or longer? (n = 2316)	
Yes	50.9%
No	49.1%
Question 57: (Utilization) In the last 6 months, how many times did you go to an emergency room to get care for yourself? (n = 2276) <i>A, S, Ra, D</i>	
None	58.4%
1	20.2%
2-3	14.9%
4 or more	6.6%
Question 58: (Health Status) In the past 6 months, did you get health care 3 or more times for the same condition or problem? (n = 2282) <i>A, S</i>	
Yes	50.9%
No (If No, go to question 60)	49.1%
Question 59: (Health Status) Is this a condition or problem that has lasted for at least 3 months? Do not include pregnancy or menopause. (n = 1152) <i>A, S, Ra</i>	
Yes	87.5%
No	12.5%
Question 60: (Health Status) Do you now need or take medicine prescribed by a doctor? Do not include birth control. (n = 1171) <i>A, S, Ra, Ed, D, N</i>	
Yes	87.5%
No (If No, go to question 63)	12.5%
Question 61: (Health Status) Is this medicine to treat a condition that has lasted for at least 3 months? Do not include pregnancy or menopause. (n = 1841) <i>A, Ra, Ed</i>	
Yes	94.8%
No	5.2%
Question 62: (Access) In the last 6 months, how often was it easy to get your prescription medicine from your health plan? (n = 1838) <i>A, Ra, Ed, D, R</i>	
Never	2.1%
Sometimes	11.3%
Usually	14.5%
Always	72.1%

About You

Question 63: (Client Demographic) What is your age? (n = 2323)	
17-24	8.9%
25-34	14.6%
35-44	15.5%
45-54	16.7%
55-64	25.7%
65-74	11.7%
75 and older	6.9%

Question 64: (Client Demographic) Are you male or female? (n = 2323)	
Male	37.2%
Female	62.8%

Question 65: (Client Demographic) What is the highest grade or level of school that you completed? (n = 2278)	
8th grade or less	8.8%
Some high school, but did not graduate	20.8%
High school graduate or GED	36.1%
Some college or 2-year degree	26.4%
4-year college graduate	5.7%
More than 4-year college degree	2.2%

Question 66: (Client Demographic) Are you of Hispanic or Latino origin/descent? (n = 2319)	
Yes	7.8%
No	92.2%

Question 67: (Client Demographic) What is your race? (n = 2323)	
White	51.8%
Black or African-American	36.0%
Asian	1.4%
Native Hawaiian or other Pacific Islander	0.5%
American Indian or Alaska Native	2.8%
Multi/Other	7.5%

Question 68: (Client Demographic) What language do you mainly speak at home? (n = 2302)	
English	98.0%
Spanish	0.9%
Some other language	1.1%

Question 70: (Smoking) Do you now smoke cigarettes or use tobacco? (n =2309) <i>A, S, Ra, Ed, N, R</i>	
Yes	33.1%
No (If No, go to question 72)	66.9%
Question 71: (Smoking) Have any of your health providers suggested methods or strategies to assist you to quit smoking cigarettes or stop using tobacco? (n = 748) <i>A, S</i>	
Yes	84.1%
No	15.9%
Trust in Your Health Providers	
Question 72: I think my providers may not refer me to a specialist when needed. (n = 1575) <i>A, Ra, Ed, D, R</i>	
Strongly Agree	18.3%
Somewhat Agree	10.2%
Neither Agree/Disagree	2.7%
Somewhat Disagree	14.6%
Strongly Disagree	54.2%
Question 73: I trust my providers to put my medical needs above all other considerations when treating my medical problems. (n = 2212) <i>D</i>	
Strongly Agree	74.3%
Somewhat Agree	16.5%
Neither Agree/Disagree	1.4%
Somewhat Disagree	4.4%
Strongly Disagree	3.3%
Question 74: I sometimes think that my PHP might perform unnecessary tests or procedures. (n = 2158) <i>A, S, Ra, Ed</i>	
Strongly Agree	10.8%
Somewhat Agree	8.2%
Neither Agree/Disagree	2.7%
Somewhat Disagree	14.5%
Strongly Disagree	63.9%
Question 75: My PHP's medical skills are not as good as they should be. (n = 2143) <i>A, Ra, Ed, D</i>	
Strongly Agree	12.5%
Somewhat Agree	7.8%
Neither Agree/Disagree	2.3%
Somewhat Disagree	11.9%
Strongly Disagree	65.5%

Question 76: My PHP always pays full attention to what I am trying to tell him or her. (n = 2218) *Ra*

Strongly Agree	76.7%
Somewhat Agree	13.1%
Neither Agree/Disagree	0.7%
Somewhat Disagree	4.2%
Strongly Disagree	5.2%

Appendix D: Bivariate Relationship Summary and Question Maps

Q#	Univariate Figure	Age	Sex	Race	Education	Dual Eligible	CCNC Network	Rurality	Domain	CAHPS5.0 "Map"
2	R-1	R-2	R-3		R-4	R-5			Health Status	Core-03
3	R-6	R-7	R-8			R-9			Access	Core-04
4	R-10	R-11	R-12	R-13	R-14				Access	Core-05
5	R-15	R-16						R-17	Access	Core-06
6	R-18	R-19	R-20	R-21	R-22				Utilization	Core-07
7	R-23	R-24		R-25	R-26				Satisfaction	H-01
8	R-27	R-28			R-29	R-30			Satisfaction	Core-08
9	R-31	R-32		R-33	R-34	R-35			Access	Core-09
10	R-36	R-37							Health Status	CC-09
11	R-38	R-39			R-40				Access	CC-10
12	R-41	R-42			R-43		R-44	R-45	Health Status	CC-11
13	R-46	R-47				R-48			Access	CC-12
14	R-49	R-50		R-51	R-52	R-53			Health Status	CC-13
15	R-54					R-55			Access	CC-14
16	R-56	R-57	R-58	R-59	R-60	R-61			Health Status	MH-02
17	R-62				R-63				Access	MH-03
18	R-64	R-65	R-66	R-67					Access	Core-10
19	R-68		R-69	R-70			R-71	R-72	Access	CC-01
20	R-73	R-74				R-75	R-76		Access	CC-02
21	R-77	R-78	R-79	R-80	R-81		R-82	R-83	Health Status	CC-03
22	R-84			R-85					Satisfaction	CC-04
23	R-86	R-87			R-88	R-89			Utilization	Core-11
24	R-90					R-91			Satisfaction	Core-12
25	R-92	R-93		R-94			R-95		Satisfaction	Core-13
26	R-96	R-97		R-98	R-99				Satisfaction	C-01
27	R-100			R-101					Satisfaction	Core-14
28	R-102			R-103					Satisfaction	Core-15
29	R-104	R-105		R-106	R-107				Satisfaction	CC-06
30	R-108	R-109							Satisfaction	CC-07
31	R-110				R-111				Satisfaction	CC-08
32	R-112	R-113	R-114	R-115	R-116				Utilization	H-05
33	R-117								Access	OHP-03
34	R-118			R-119					Satisfaction	OHP-05
35a	R-120	R-121		R-122					Utilization	CO-03
35b	R-123	R-124							Access	CO-04
36	R-125	R-126			R-127	R-128	R-129		Satisfaction	Core-16
37	R-130	R-131				R-132			Access	PD-01
38	R-133	R-134		R-135		R-136		R-137	Access	PD-02
39	R-138	R-139	R-140	R-141	R-142				Health Status	Core-17
40	R-143	R-144							Access	Core-18
41	R-145	R-146			R-147				Utilization	Core-19
42	R-148	R-149							Utilization	CC-05
43	R-150								Satisfaction	Core-20
44	R-151	R-152		R-153	R-154				Access	UT-02
45	R-155	R-156							Access	Core-21
46	R-157a								Satisfaction	Core-22
47	R-157b								Satisfaction	Core-23
48a	R-158								Satisfaction	Core-24
48b	R-159								Satisfaction	Core-25
49	R-160	R-161		R-162	R-163	R-164		R-165	Satisfaction	Core-26
50a	R-166	R-167		R-168	R-169	R-170	R-171		Access	T-01
50b	R-172	R-173		R-174	R-175				Access	T-02
51	R-176	R-177		R-178	R-179		R-180	R-181	Health Status	Core-27
52	R-182	R-183		R-184	R-185	R-186	R-187		Health Status	Core-28
53	R-188	R-189		R-190	R-191				Health Status	CC-15

Q#	Univariate Figure	Age	Sex	Race	Education	Dual Eligible	CCNC Network	Rurality	Domain	CAHPS5.0 "Map"
54	R-192	R-193			R-194		R-195		Health Status	CC-16
55	R-196	R-197	R-198	R-199	R-200		R-201		Health Status	CC-17
56	R-202	R-203							Utilization	CC-18
57	R-204	R-205	R-206	R-207		R-208			Utilization	UT-01
58	R-209	R-210	R-211						Health Status	Core-29
59	R-212	R-213	R-214	R-215					Health Status	Core-30
60	R-216	R-217	R-218	R-219	R-220	R-221	R-222		Health Status	Core-31
61	R-223	R-224		R-225	R-226				Health Status	Core-32
62	R-227	R-228		R-229	R-230	R-231		R-232	Access	PM-02
70	R-233	R-234	R-235	R-236	R-237		R-238	R-239	Smoking	N/A
71	R-240	R-241	R-242						Smoking	N/A
72	R-243	R-244		R-245	R-246	R-247		R-248	Trust	N/A
73	R-249					R-250			Trust	N/A
74	R-251	R-252	R-253	R-254	R-255				Trust	N/A
75	R-256	R-257		R-258	R-259	R-260			Trust	N/A
76	R-261			R-262					Trust	N/A

Questions have designations to tell their CAHPS sourcing; these are noted in the last column in Appendix D and described below:

Core – core CAHPSv5.0

CAHPSv4.0 Supplemental

UT – Utilization

H – Hedis ® C – Communication

CC – Chronic conditions

I – Interpreter

C – Communication

PD – Personal doctor

OHP – Coordination with other health providers

T – Transportation

MH – Behavioral Health

CO – Calls to the PHP's office

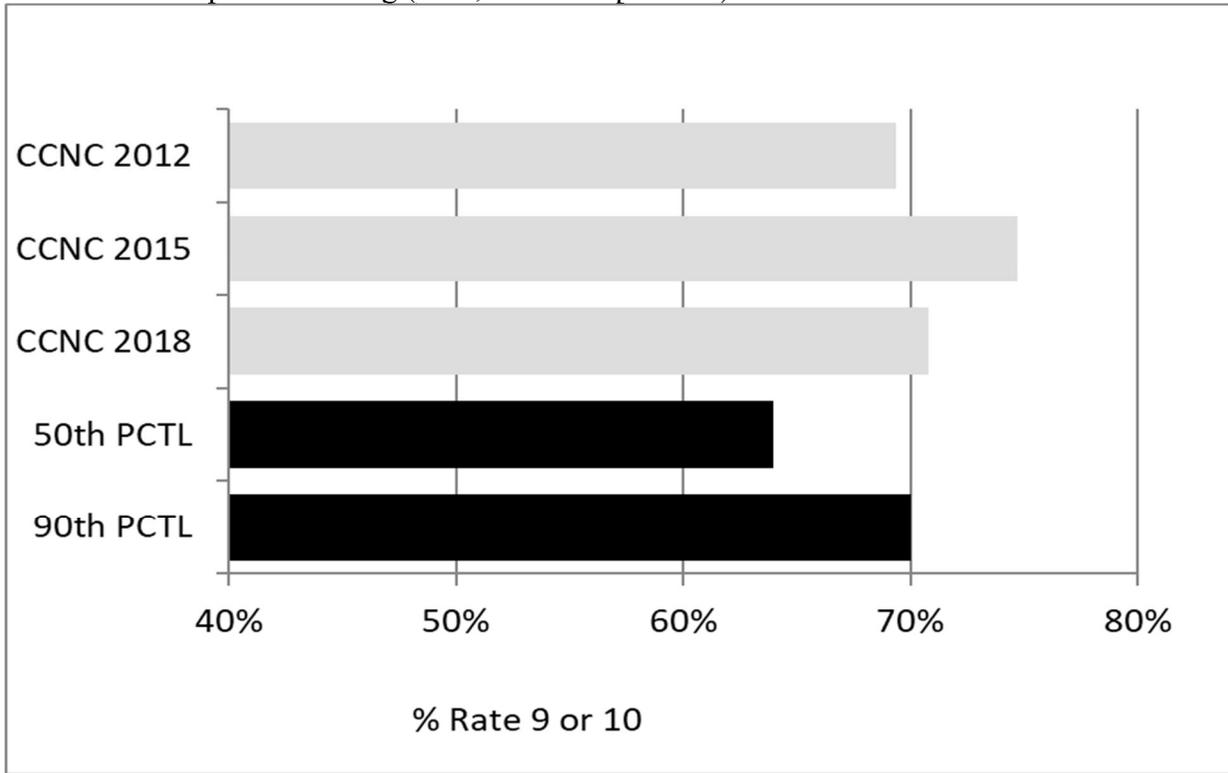
Appendix E: Respondent Demographic and Contextual Characteristics, 2012-2018

		2012	2015	2018
Gender/Sex	Male	30.7%	34.2%	37.9%
	Female	69.3%	65.8%	62.1%
	n =	3,202	4,188	2,323
Age	19 - 44 years	33.2%	28.1%	39.7%
	45 - 64 years	45.1%	42.1%	42.5%
	≥ 65 years	21.6%	29.8%	17.8%
	n =	3,202	4,188	2,323
Ethnicity	Hispanic/Latino	3.9%	4.7%	7.8%
	Not Hispanic/Latino	96.1%	95.3%	92.2%
	n =	3,202	4,188	2,319
Race	White	54.0%	51.2%	57.3%
	Black	39.1%	39.8%	37.7%
	Multi/Other	7.0%	9.0%	5.0%
	n =	3,191	4,188	2,323
Education	<HS Grad/GED	42.3%	43.4%	29.6%
	HS Grad/GED	33.7%	35.0%	36.1%
	>HS Grad/GED	24.0%	21.6%	34.2%
	n =	3,202	4,188	2,278
Dual Eligible	Not Dual	56.9%	49.2%	76.4%
	Dual	43.1%	50.8%	23.6%
	n =	3,202	4,188	2,323
Rurality	Urban	60.8%	64.5%	69.6%
	Rural	39.2%	35.5%	30.4%
	n =	3,202	4,188	2,323

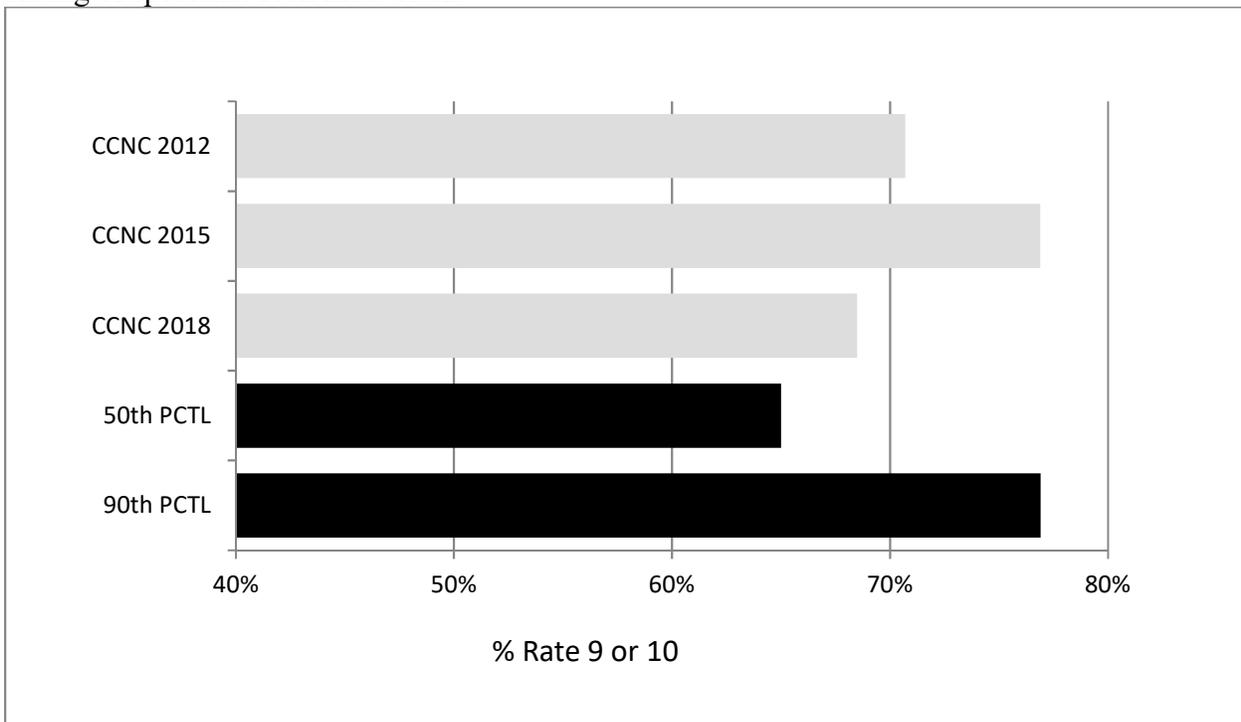
Appendix F: 2012-2018 Top-Box Analysis vs. National CAHPS Standards

- The following pages compare the results of 2012, 2015, and 2018 CAHPS satisfaction surveys of NC Medicaid ambulatory adult populations (only associated with CCNC) to 2018 US Medicaid adult managed care results (n=54,362 in 146 plans). These questions are intended to collect the respondent's input based on the previous 6 months of care (per CAHPS guidelines for Medicaid populations).
- Pages 197-198 describe questions asking respondents to rate various aspects of their health care and health plan on a 0-10 scale (0-10, 10 = best possible).
 - For each question, the graphs show the % that responded “9” or “10” in each survey year along with the 50th and 90th percentile values from the national Medicaid database reported in 2018.
- Pages 199-204 describe satisfaction questions about “how often something happened” or “happened soon enough” with possible responses of never, sometimes, usually, and always.
 - For each question, the graphs show the % that responded “always” in each year along with the 50th and 90th percentile values from the national managed Medicaid database reported in 2018.
- Page 205 shows the crosswalk between question numbers across the 3 surveys on each question as well as the number of respondents to each question in each survey year.
- In almost all cases, the NC Medicaid population reports satisfaction values above the median value (50th percentile), and frequently close to or exceeding the 90th percentile values for the US Medicaid managed care population.
 - A notable exception is the last question on specific illness prevention discussions where NC adults reported considerably lower prevalence of these discussions than the national database.
 - On page 198, the question on overall health care rating also produced poorer results for NC Medicaid.

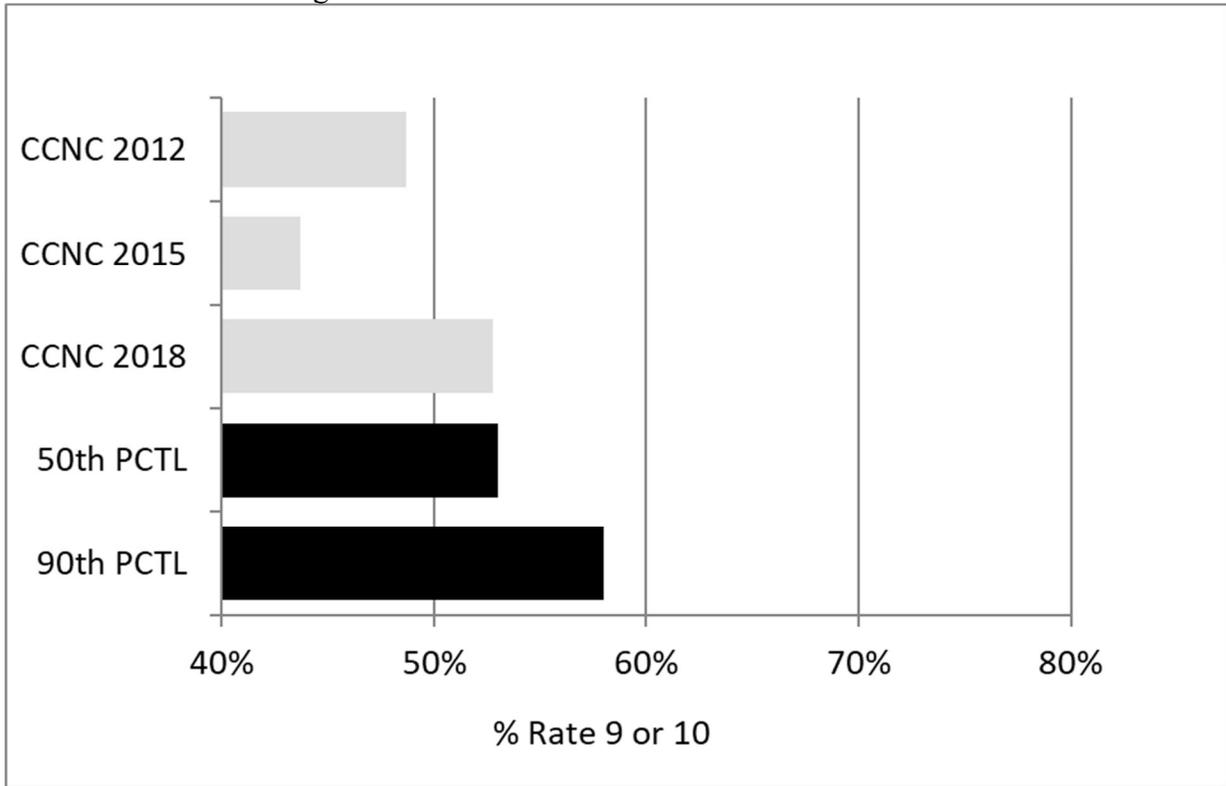
Personal health provider rating (0-10, 10 = best possible)



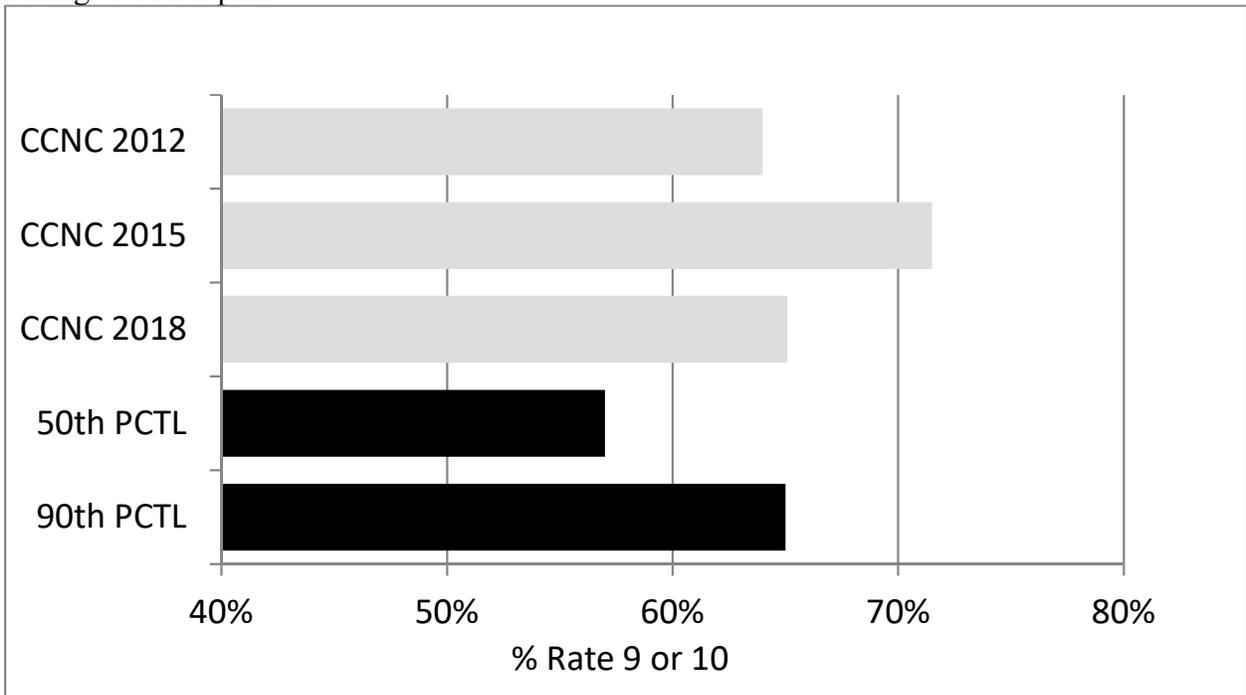
Rating of specialist seen most often



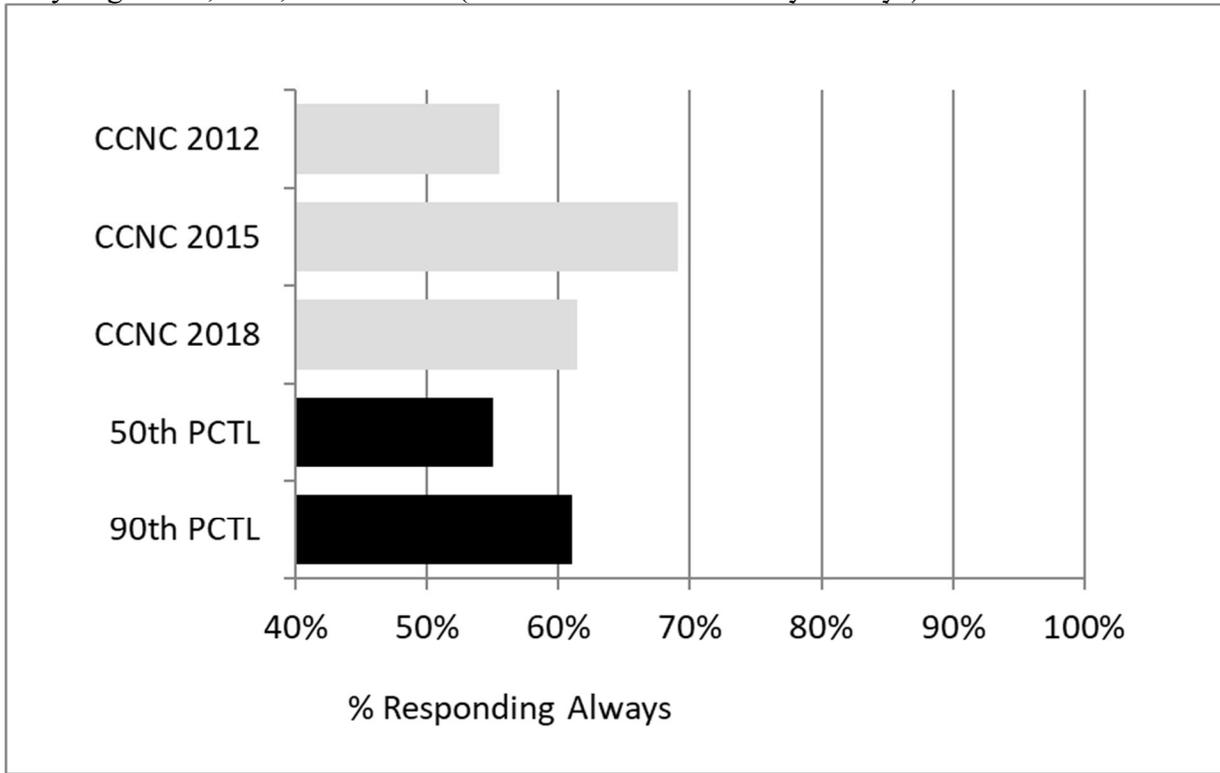
Overall health care rating



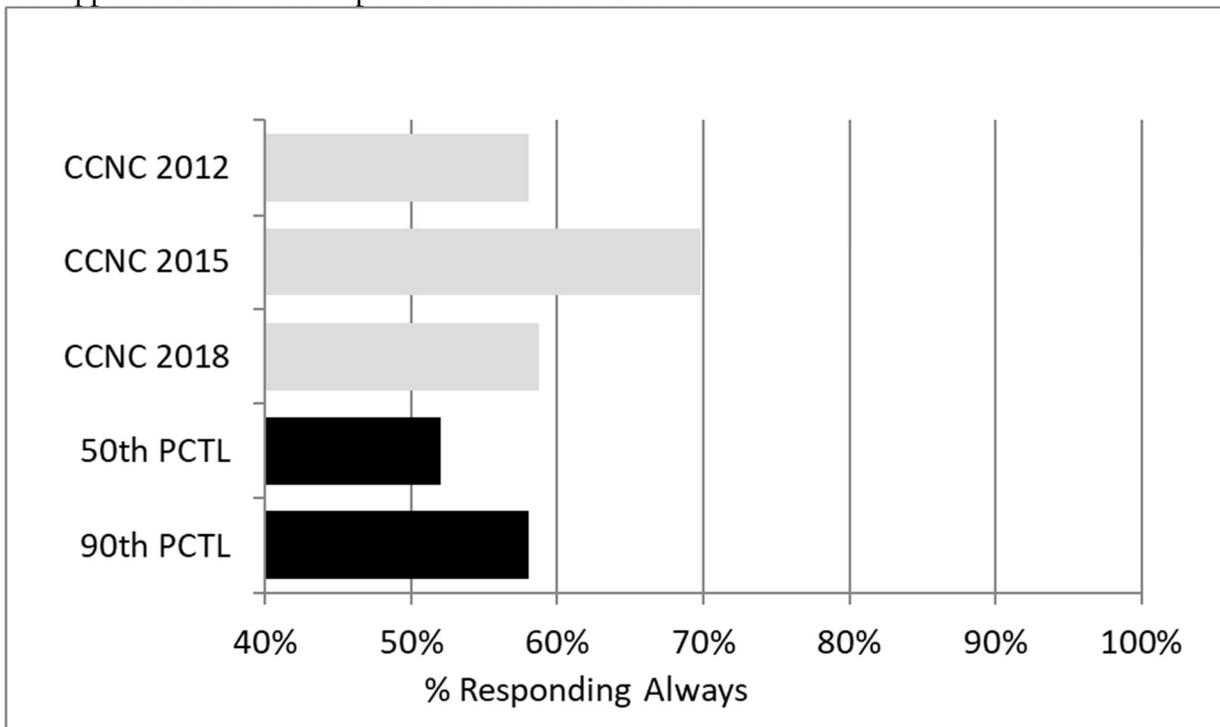
Rating of health plan



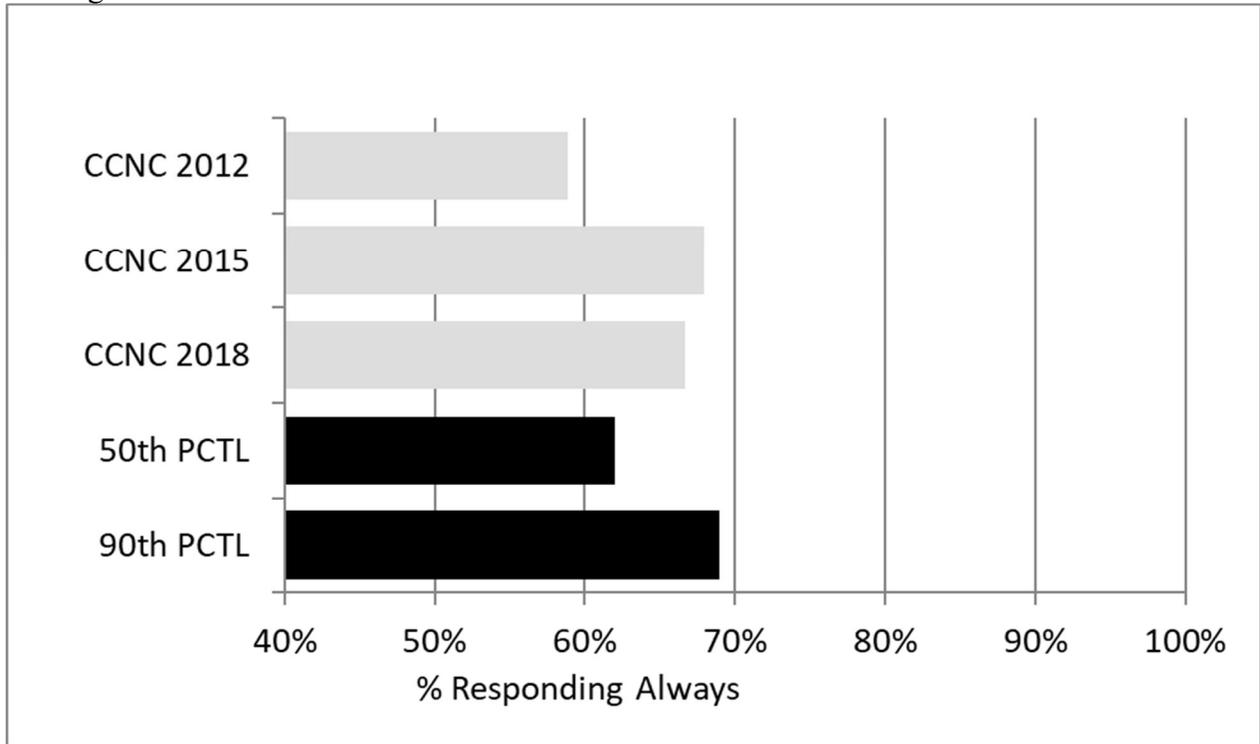
Easy to get care, tests, or treatment (Never/Sometimes/Usually/Always)



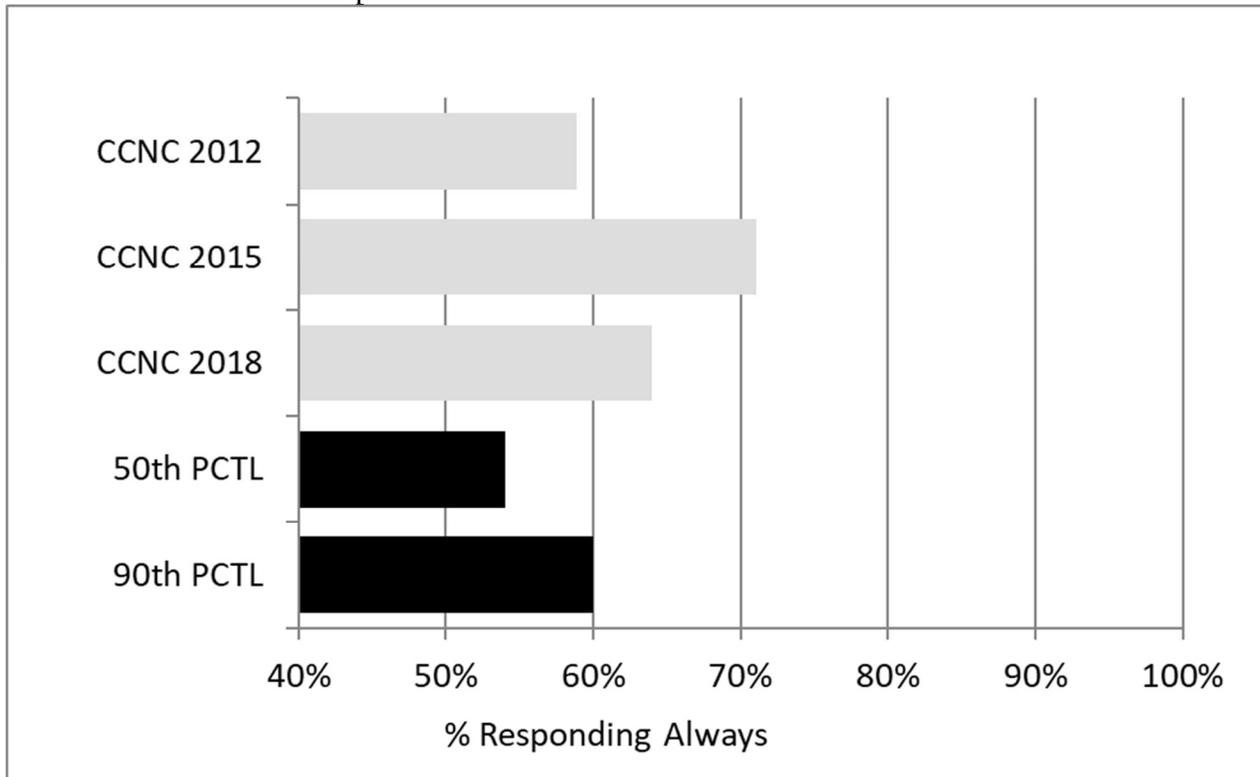
Got appointments to see a specialist as soon as needed



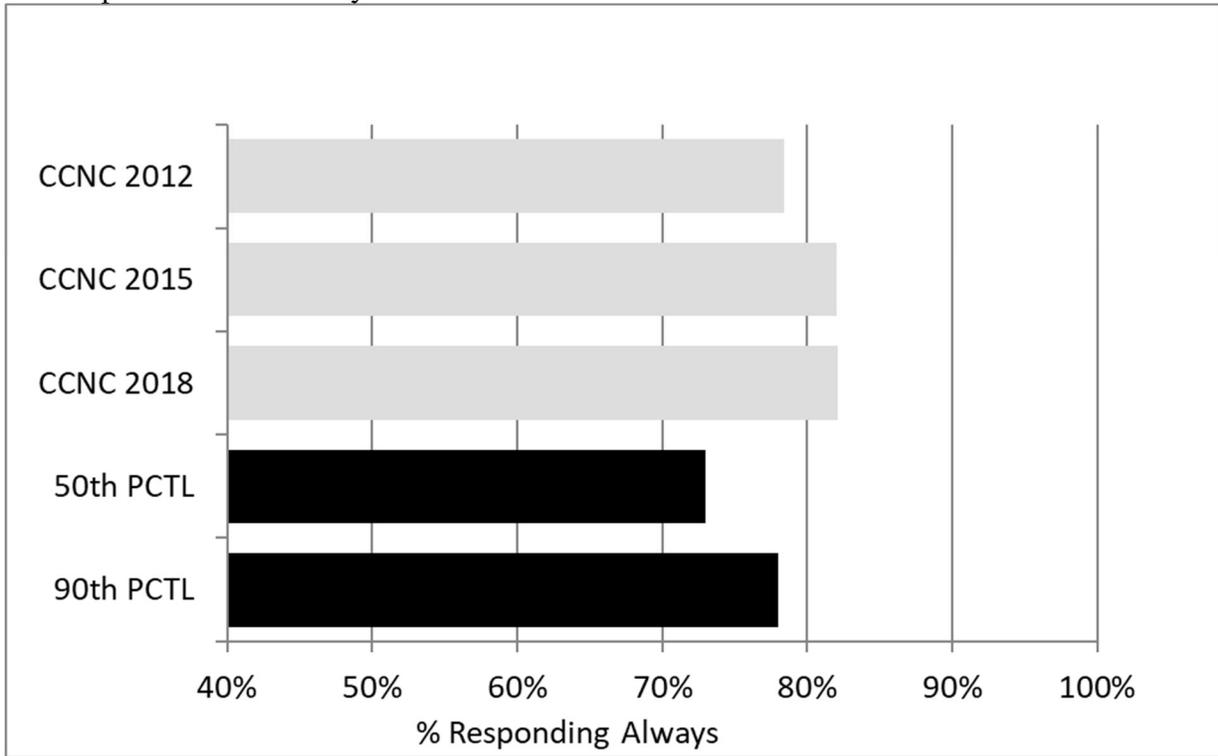
Got urgent care as soon as needed



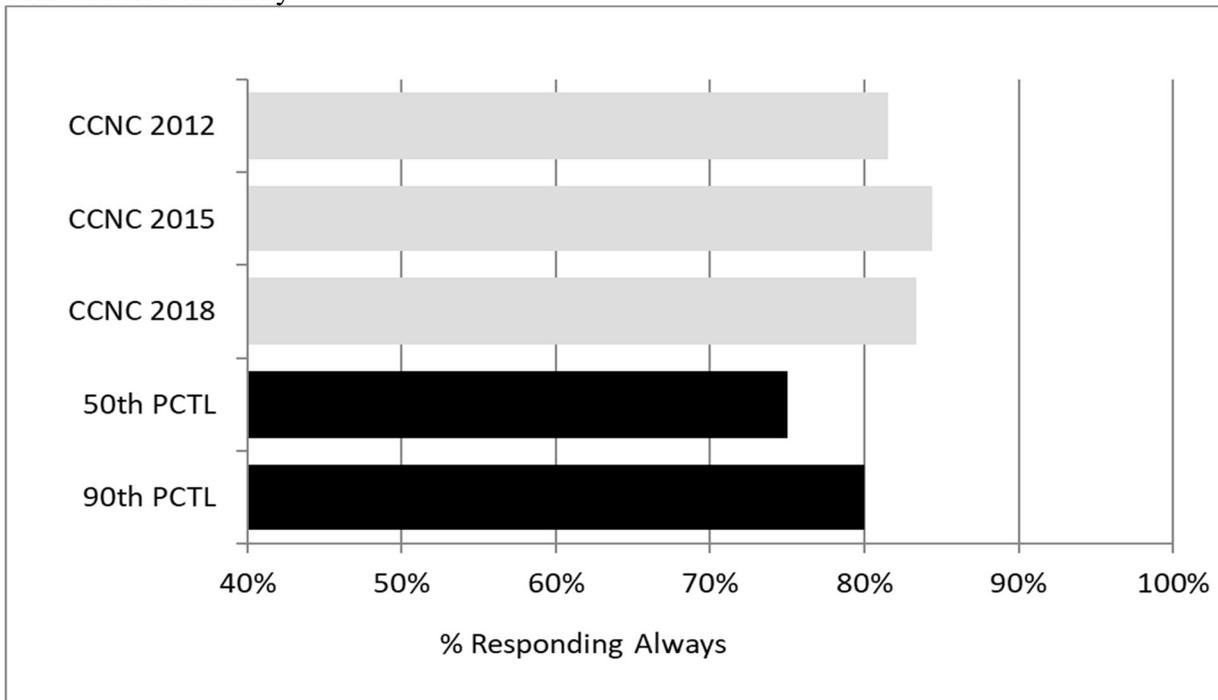
Got routine care or check-ups as soon as needed



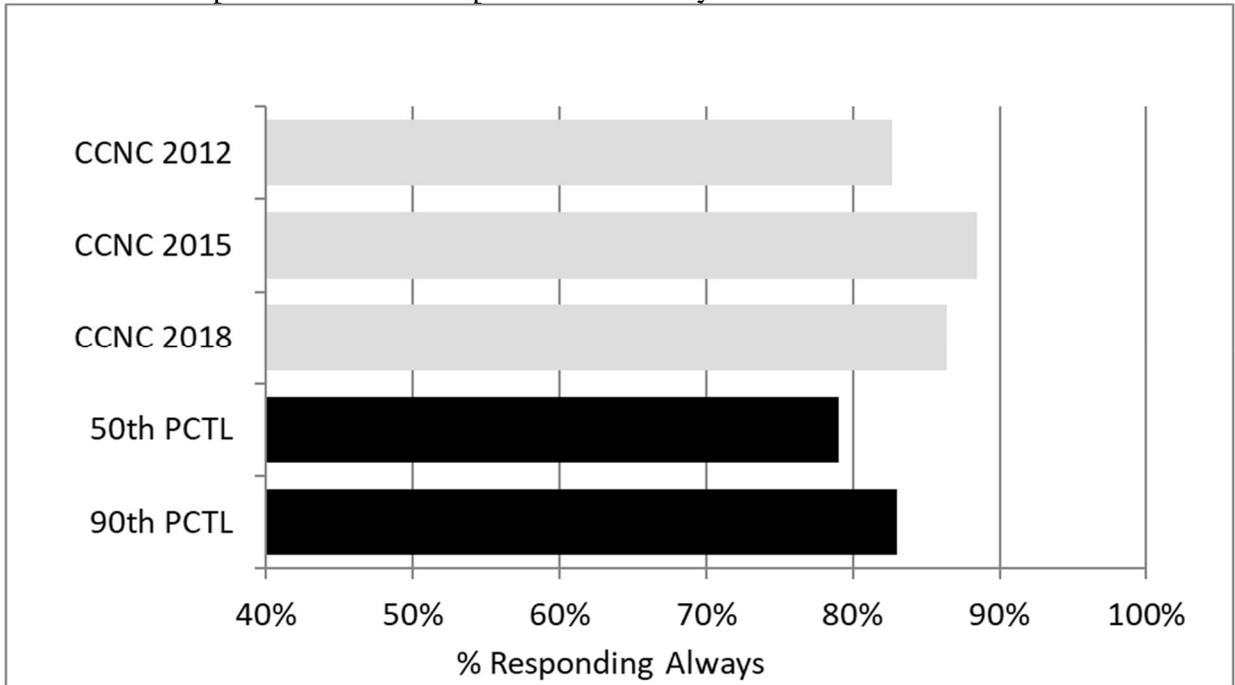
PHP explanations were easy to understand



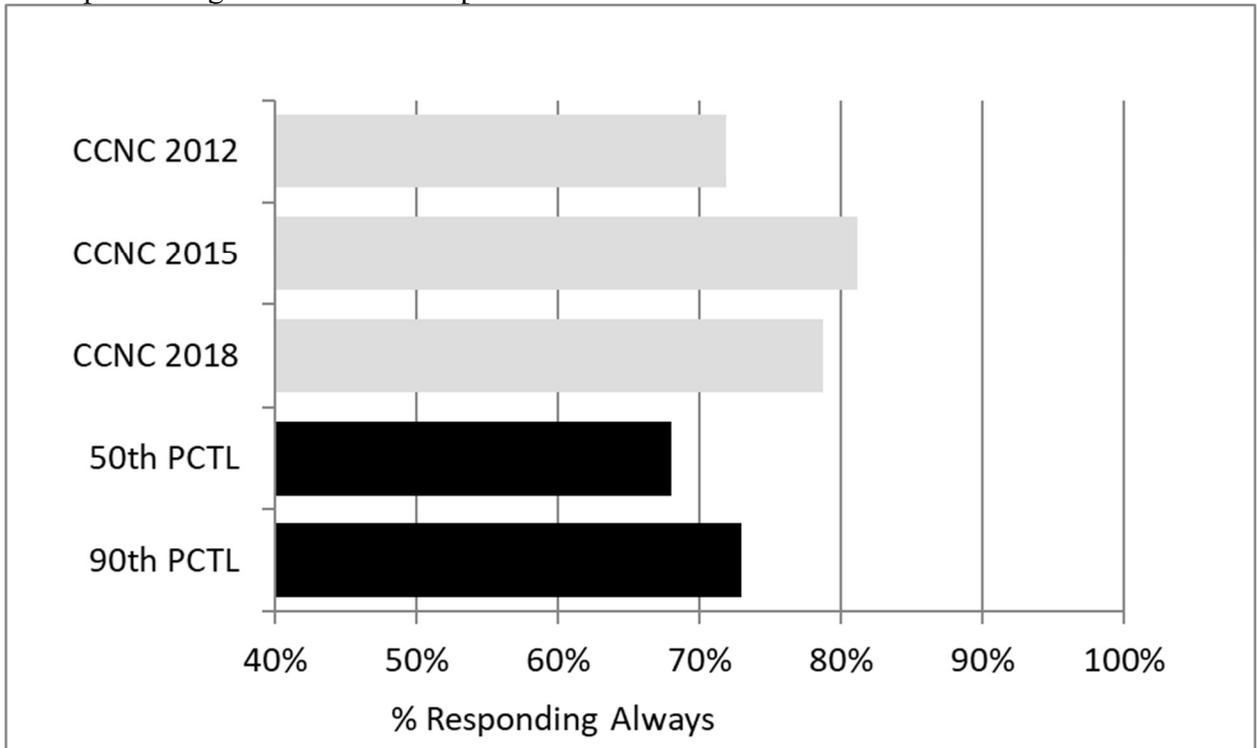
PHP listened carefully



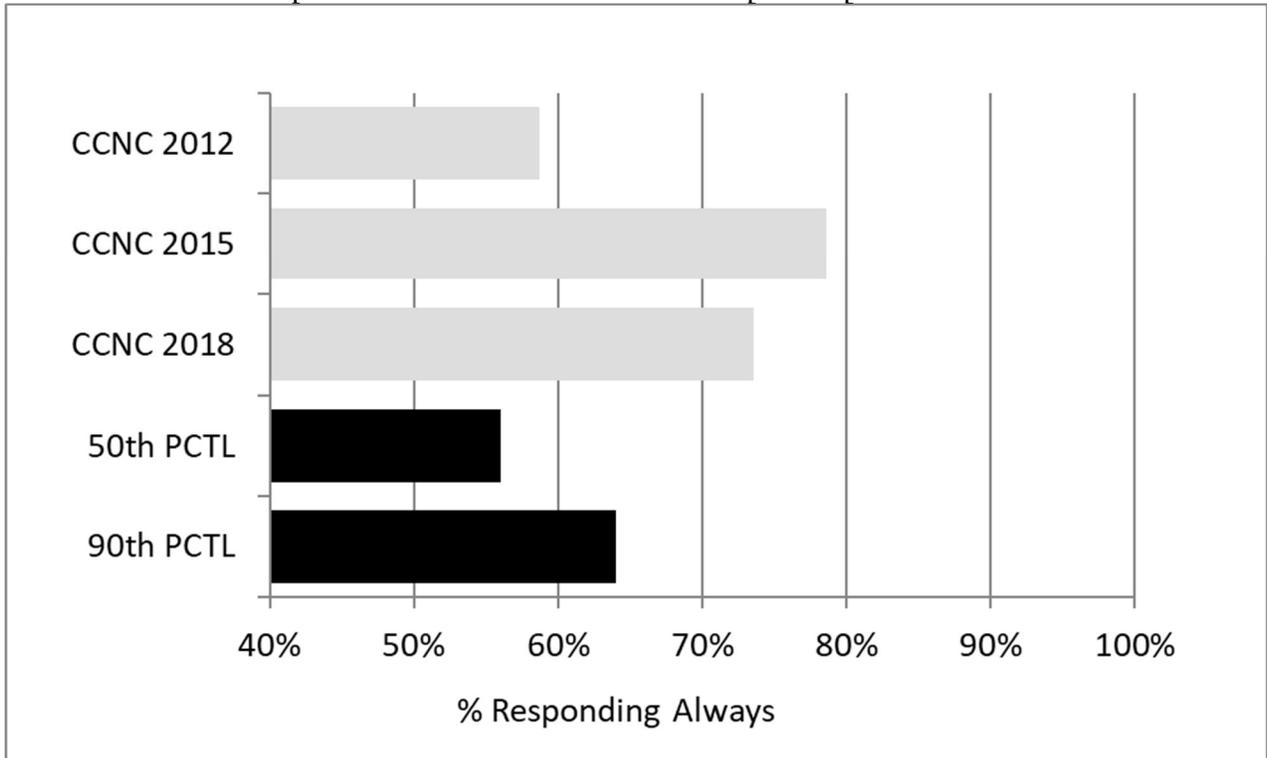
PHP showed respect for what the respondent had to say



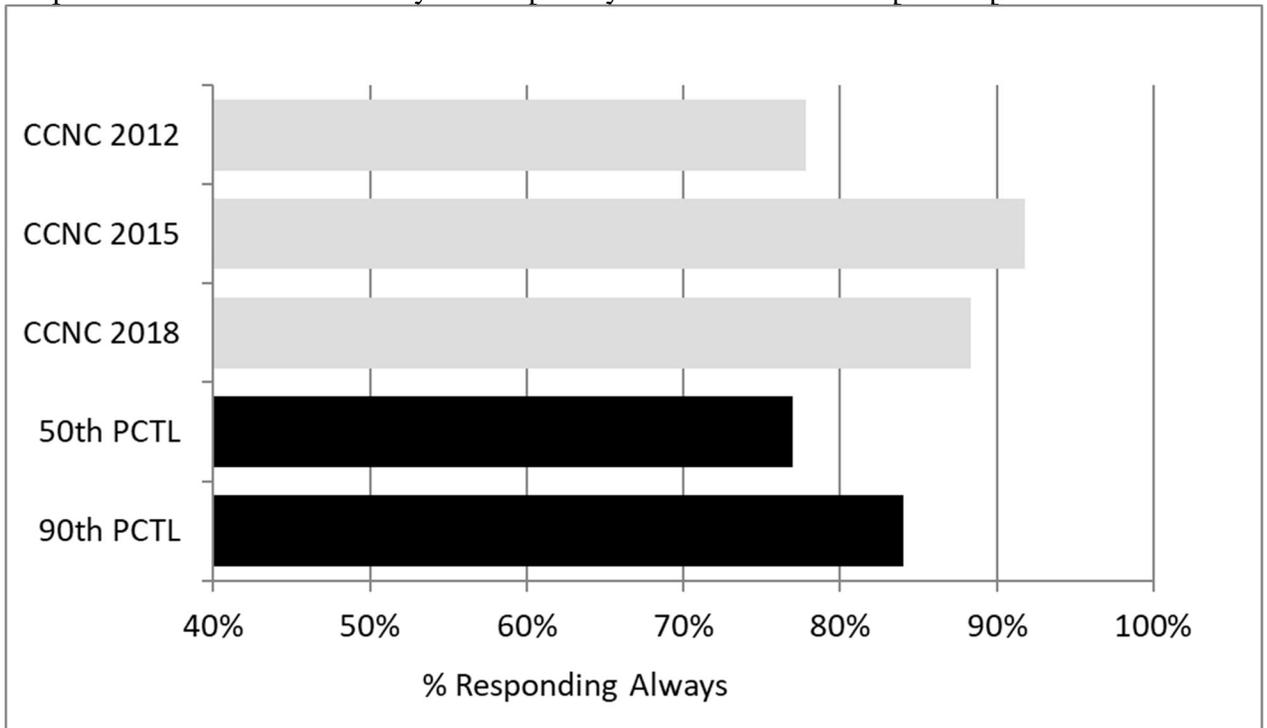
PHP spent enough time with the respondent



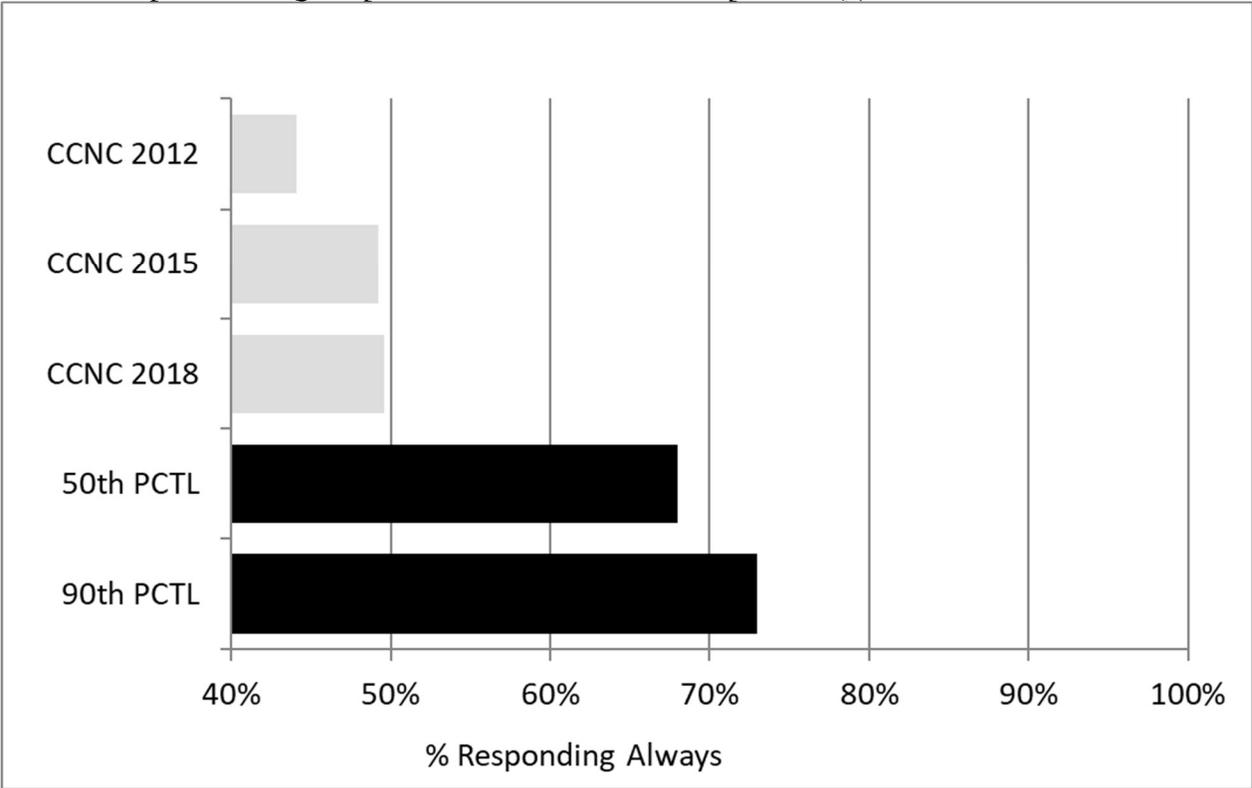
Got information or help needed from office staff at health plan or provider



Respondent treated with courtesy and respect by office staff at health plan or provider



Discussed specific things to prevent illness with a health provider(s)



NC Medicaid Top Box Scores-Crosswalk

2012 Q #(n)	2015 Q #(n)	2018 Q #(n)	Composite/Item
			Overall Ratings
40(n=2,707)	40(n=3,480)	36(n=1,916)	Personal health provider (PHP) rating
54(n=1,093)	47(n=1,631)	43(n=1,017)	Rating of specialist seen most often
9(n=2,549)	9(n=3,152)	8(n=1,887)	Overall health care rating
62(n=3,139)	53(n=4,110)	49(n=2,265)	Rating of health plan
			Getting Needed Care
57(n=1,264) ¹	10(n=3,123)	9(n=1,892)	Easy to get needed care, tests, or treatment
51(n=1,187)	44(n=1,713)	40(n=1,065)	Got appointments to see a specialist as soon as needed
4(n=1,466)	4(n=1,761)	3(n=966)	Got urgent care as soon as needed
6(n=2,344)	6(n=3,099)	5(n=1,649)	Got routine care or check-ups as soon as needed
			How Well Doctors Communicate
27(n=2,352)	27(n=2,935)	24(n=1,691)	PHP explanations were easy to understand
28(n=2,361)	28(n=2,937)	25(n=1,689)	PHP listened carefully
30(n=2,362)	30(n=2,946)	27(n=1,689)	PHP showed respect for what the respondent had to say
31(n=2,354)	31(n=2,942)	28(n=1,684)	PHP spent enough time with the respondent
			Health Plan Information and Customer Service
59(n=1,020)	50(n=1,766)	46(n=1,098)	Got information or help needed from office staff at health plan or provider
60(n=1,020)	51(n=1,791)	47(n=1,099)	Respondent treated with courtesy and respect by office staff at health plan or provider
			HEDIS Item Set
8(n=2,553)	8(n=3,056)	7(n=1,870)	Discussed specific things to prevent illness with health provider(s)
3,202	4,188	2,302	Total number of respondents in respective years
7/5/12-9/20/12	9/30/15-2/8/16	8/15/18-1/18/19	Time period each survey was in the field
Notes:			
1-This question was asked of all respondents that had been to a doctor in the previous 6 months in 2015 and 2018. In 2012, a screening question on seeking these specific services preceded this one, significantly reducing n.			