University of North Carolina at Charlotte

Policy Report No. 18

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

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

By

Keith J. Carnes, PhD, MHA

Anne Mbugua, MBA

David Barbato, MPH

University of North Carolina at Charlotte

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Correspondence regarding this report should be addressed to:
Dr. Keith J. Carnes
Research Assistant Professor
Department of Public Health Sciences, UNC Charlotte
9201 University City Blvd, Charlotte, NC 28223
Telephone: 704-524-8407
Email: kjcarnes@uncc.edu

Table of Contents

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The authors of *End of an Era for Community Managed Care of NC Medicaid Children*, which documents the findings from statewide surveys of the child enrollees in the North Carolina Medicaid program, wish to express our great appreciation for the help of a number of individuals and institutions that have contributed to the success of the research and *Policy Report 18*. Many officials in NC Department of Health and Human Services (DHHS), NC Medicaid helped us conduct a better project. We wish in particular to thank LaRhonda Cain, Darryl Frazier, and Madge Cohen. LaRhonda took over the DHHS part of this project on the 2015 cycle and has continued onto this one, offering invaluable help to fashion the project to meet the needs of NC DHHS. Also central to the project was Ariana Lucido of NC DHHS, who assembled the data necessary for drawing our samples. We met and talked several times to describe the project needs and we had the best structured data set yet across 5 statewide cycles.

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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 rate.

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 Child 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 Appendice 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, 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 Medicaid 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. 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 child managed Medicaid beneficiaries served by CCNC. Our objective was to quantify how an adult responsible for a child respondent's care (hereafter called caregiver) 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 instrument (CAHPS v5.0).

Policy Report No. 18 End of an Era for Community-Managed Care of NC Medicaid Children reports the findings of the child survey. Representative samples of the target child Medicaid population were surveyed. Next, the answers were analyzed by univariate statistics to determine aggregated experiences and attitudes of the child 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 950,645 children who had been enrolled in a CCNC network for 6 months or longer as of 15 May 2018 (Table 3-1):
  - Child defined as <19 years old as of 30 September 2018.
  - 36.7% Non-Hispanic Black, 35.9% Non-Hispanic White, 23.7% Hispanic/Latino, and 3.7% Multi/Other
  - 49.0% female
  - 75.1% live in urban counties.
  - Excludes institutionalized children and those using Health Choice (NC's State Children's Health Insurance Plan (SCHIP)), which are not part of the networks.

- 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 child interviews in each CCNC network.
    - Total sample size of 37,348 was drawn across the 14 networks as needed to feed the phone survey process.
    - The ethnicity field is missing many values in the NC DHHS database, which our research team believes are dominated by Hispanics; thus, the lower proportion in the population than in the respondents.

- Contract Research International (CRI) of Austin, TX conducted the survey using computer-assisted telephone interview methodology.
    - 2,282 successful interviews of adult caregivers of child recipients 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 8.35% using American Association for Public Opinion Research measurement standards (method 2).
    - 35.8% Hispanic/Latino, 32.4% Non-Hispanic White (NHW), 20.5% Non-Hispanic Black (NHB), and 10.5% Multi/Other (M/O).
        - All other demographic/contextual proportions were similar to the population.

- 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/ethnicity (created from race and ethnicity questions), 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 (provided by NC DHHS) 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 4 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.
    - 24 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.

Child Survey Results (Chapters 3 and 4)

Here we summarize in broad strokes the results of the 84 "content" questions in the 2018 Child 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 an additional question on mental health requested by NC Medicaid 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

- 64% of caregivers rated their child's Medicaid plan the best possible and also rated their child's personal health provider (PHP) the same.
- 89% of caregivers indicated their child's PHP always listened carefully while only 76% said their child's PHP always spent enough time and only 71% said their questions were always answered by health providers.
- Only 52% of caregivers indicated they and the child's PHP always discussed ways to prevent illness.

Access

- 79% of children always got urgent care as quickly as needed and 77% of caregivers got assistance coordinating health care; a key component of the medical home care model.
- In a modest increase from 2015's response, 77% of caregivers indicated their child has someone they regard as a PHP. This remains concerning since all children have an assigned or chosen PHP.
- 68% of children always got specialist appointments as soon as needed and 63% of caregivers reported it was always easy to get treatment or counseling for their child's emotional/developmental/behavioral problem. It is not easy to say what an optimum value is for the caregiver's expectation of the ease of getting these types of appointments since the PHP is screening for need of these types of referrals.

Health Care Utilization

- Virtually identically to 2015, 1 in 5 children had at least 1 ER visit in the previous 6 months. Fewer than 1% visited the ER 4 or more times.
- Of the children that had a PHP, only 17% made no visits to the PHP in the previous 6 months.

Health Status

- 72% of caregivers indicated their child to be in excellent/very good overall health and 70% indicated the same about mental/emotional health, respectively.
- Consistent with the latter number, 22% of children have an emotional/development problem that needs treatment or counseling.

Trust

- 82% of caregivers trusted that their child's 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, child race-ethnicity and caregiver education had significant differences across the most questions.

Age

- General trends downward in overall health and emotional/mental health are seen as child age increases. One cannot dismiss the possibility that a contributor to the latter is increased expectations as the child grows up and develops: thus, problems are more often perceived.

- Even sharper trends were seen with increasing age in the need/use of prescribed medication, flattening out at 42% of the population with this need in the 9-12 and 13-18 yo age groups.
- Children aged 0-1 yo generally had the highest number of PHP visits as well as the highest number of ER visits.

Sex
- While there were considerably fewer disparities across sex than in 2015, 2018 female children were in better emotional/mental health than males.

Race-ethnicity
- There is a virtually identical relationship between almost all access and satisfaction questions and race-ethnicity and it is largely unchanged from 2015:
    - Caregivers of H/L children reported the worst access and satisfaction on all key indicator questions although they share the worst ratings with NHB children in 1 question.
    - Caregivers of NHW children usually report the highest satisfaction and easiest access.
    - NHB children are generally in the middle between the two, although frequently closer to NHW children in ratings.
    - A notable exception (in both years) is that caregivers of H/L children reported the greatest satisfaction with the Medicaid plan.
    - Of particular concern is that H/L children were much less often reported to have a PHP.
- NHW children were more often reported to have an emotional/development problem that needs treatment (2x as often as H/L children) while being of considerably above average overall general health.
- NHB children were more often reported as having poor mental/emotional health and had the greatest number of ER visits.
- Greater than average use of prescribed medication was seen in NHW, NHB, and M/O children while much lower use was reported in H/L children.
- Caregivers of NHW and HHB children reported very high trust levels that providers only performed necessary tests and procedures while H/L trust in this regard was much lower.

Caregiver education
- Across all 3 satisfaction measures where statistically significant differences were seen except one, greater satisfaction was reported as caregiver education increased.
    - The exception was Medicaid plan ratings, which got worse as caregiver education increased.
- Across all 4 access measures where statistically significant differences were seen, easier access was reported as caregiver education increased.
- Mixed results were seen in health status where higher caregiver education was associated with better overall and mental health but greater prevalence of an emotional/developmental problem requiring treatment.
- Greater caregiver education was associated with greater trust that providers only perform necessary tests and procedures.

    - ➢ It is the research team’s opinion that the above results are likely related to better educated caregivers having better health literacy and thus develop more productive relationships with providers and generally better attitudes about their child’s care.

CCNC Network

- Carolina Community Health Partnership (1010) had some superlatives in 2018:
    - PHPs most often spent enough time with patients.
    - Caregivers most often reported that their child had a PHP.
    - Caregivers most often trusted that providers only performed necessary tests and procedures on their children.
- Community Care of Wake/Johnston Counties (1011) had some issues:
    - Caregivers least often reported their child had a PHP.
    - Caregivers least often trusted that providers only performed necessary tests and procedures on their children.
- Community Health Partners (1003) had PHP communication issues:
    - PHPs least often explained things in a way that way that was easy understand.
    - PHPs least often spent enough time with the caregiver and child.

Rurality

- Although concerns are often expressed about access to care for rural Medicaid recipients, rural children more often got urgent care as soon as needed and more often had a PHP than urban children in 2018.

New Question for 2018

- In preparing the 2018 survey, NC Medicaid asked that we include a question that asked caregivers who had indicated their child had a mental/developmental/behavioral problem that needs treatment if they had discussed these issues with the child's PHP.
    - Although only 22% of the caregivers indicated their child had this type of issue, 93% of those caregivers said that they had discussed the problem with the child's PHP. This is clear evidence that PHPs are involved in treatment decisions of children's mental health issues.

Comparisons Across Time

- Appendix E describes the demographic and contextual characteristics of the respondents in the child across the 2012, 2015, and 2018 survey cycles with the following observations.
    - The Race/Ethnicity mix is getting more concentrated in H/L and M/O children with the proportion dropping in NHB.
    - The caregiver education level has increased considerably.
    - Urbanicity has increased significantly.

- 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 79,346 US managed Medicaid children in 150 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 below median proportions of caregivers reporting having conversations with health providers about illness prevention.

- ➢ Future surveys of this population should consider bivariate analyses of more caregiver variables as virtually all of the questions ask for his/her opinions and observations and thus, her demographics are equally likely associated with observed disparities than the child's.

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 children and adults 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 CNCC 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 a responsible and knowledgeable adult about the care of a child on Medicaid; the other asked adult respondents on Medicaid about the care they received.

The second chapter provides the relevant details of the conduct and analysis of the survey of the children 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 caregiver 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 y 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 child Medicaid beneficiaries in North Carolina in 2018. Community Care of North Carolina (CCNC) is the structural entity that manages 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. To uncover disparities in health and health care, we also analyzed the relationship between questions associated with 5 domains of care (access, satisfaction, health status, utilization, and trust) and patient and caregiver 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 child 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 child 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,
- Foster kids,
- 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 under 19 years of age were deemed children and those 19 and older were deemed adults.[*] Based on the above criteria, the survey population included 950,645 children and 421,778 adults.

The 2018 eligibility file information included a sufficient sampling frame with "workable" 10-digit phone numbers:[†] 886,001 children (93.2% had phone numbers) and 375,804 adults (89.1% had phone numbers).

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, Child Medicaid Questionnaire* (US DHHS, 2016) served as a template for the survey document created by the UNC Charlotte research team and administered to child 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.

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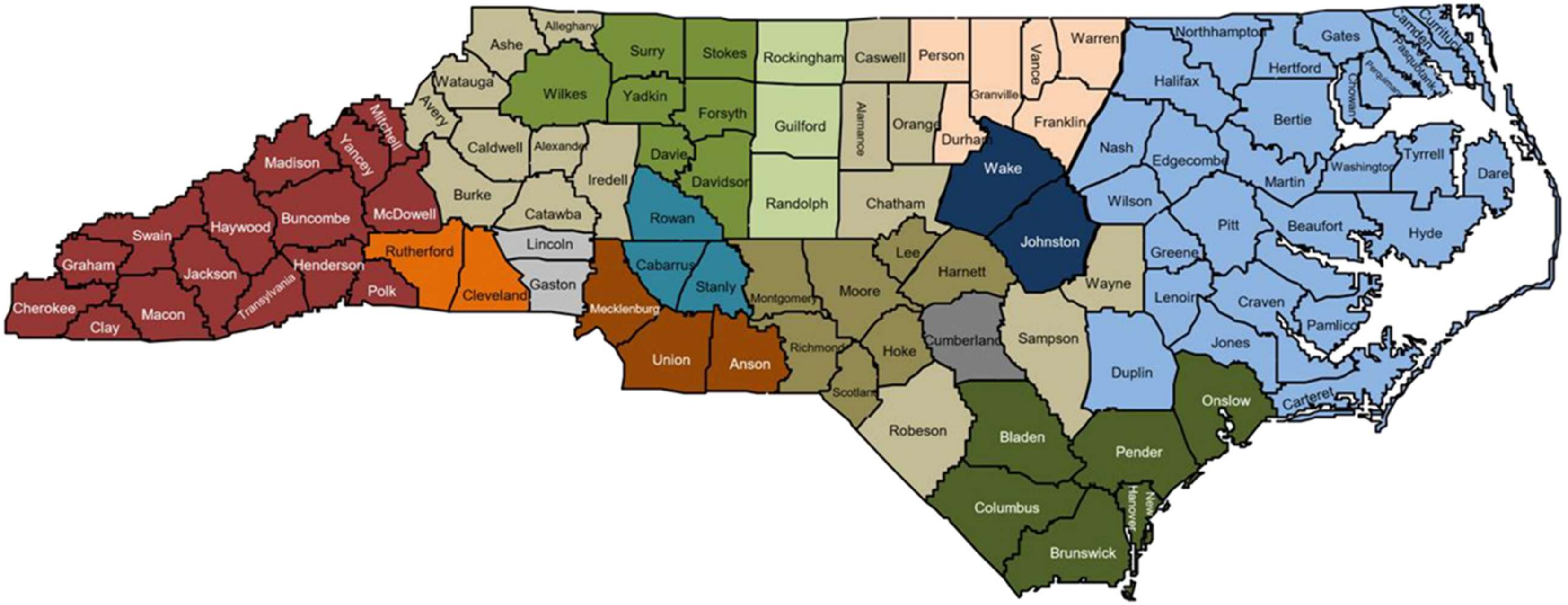
[*] Agreement with LaRhonda Cain of NC Medicaid, and consistent with previous surveys.

[†] "Workable" phone numbers exclude "placeholder" numbers such as 000-000-0000, etc. or numbers with other then 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 **Child** Questionnaire* was the source for supplemental questions supplied by AHRQ.

Figure 2-1 Community Care of North Carolina Network Map



1006 ■ CCNC Clinical Operations
1007 ■ Community Care of Western North Carolina
2004 ■ Community Care of the Lower Cape Fear
1013 ■ Carolina Collaborative Community Care
1011 ■ Community Care of Wake and Johnston Counties
1009 ■ Community Care Partners of Greater Mecklenburg
1010 ■ Carolina Community Health Partnership
2000 ■ Community Care Plan of Eastern Carolina
1003 ■ Community Health Partners
2007 ■ Northern Piedmont Community Care
2006 ■ Northwest Community Care
1012 ■ Partnership for Community Care
2005 ■ Community Care of the Sandhills
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 (q92-96) in response to some early, pre-testing pushback from respondents. As a significant number of respondents’ children had not seen their personal health provider in the survey's 6-month lookback period, some caregivers struggled with how to answer these questions about the PHP relationship. Thus, the broader "health providers" replaced "personal health provider" in the trust 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, 32, and 54 were treated in the skip pattern logic as if a non-zero number had been provided.

Appendix A shows the English language version of the survey used for children in 2018. To accommodate households where English is not the primary language spoken, a Spanish version of the child survey was created from the Spanish version of the *CAHPS Children's 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.

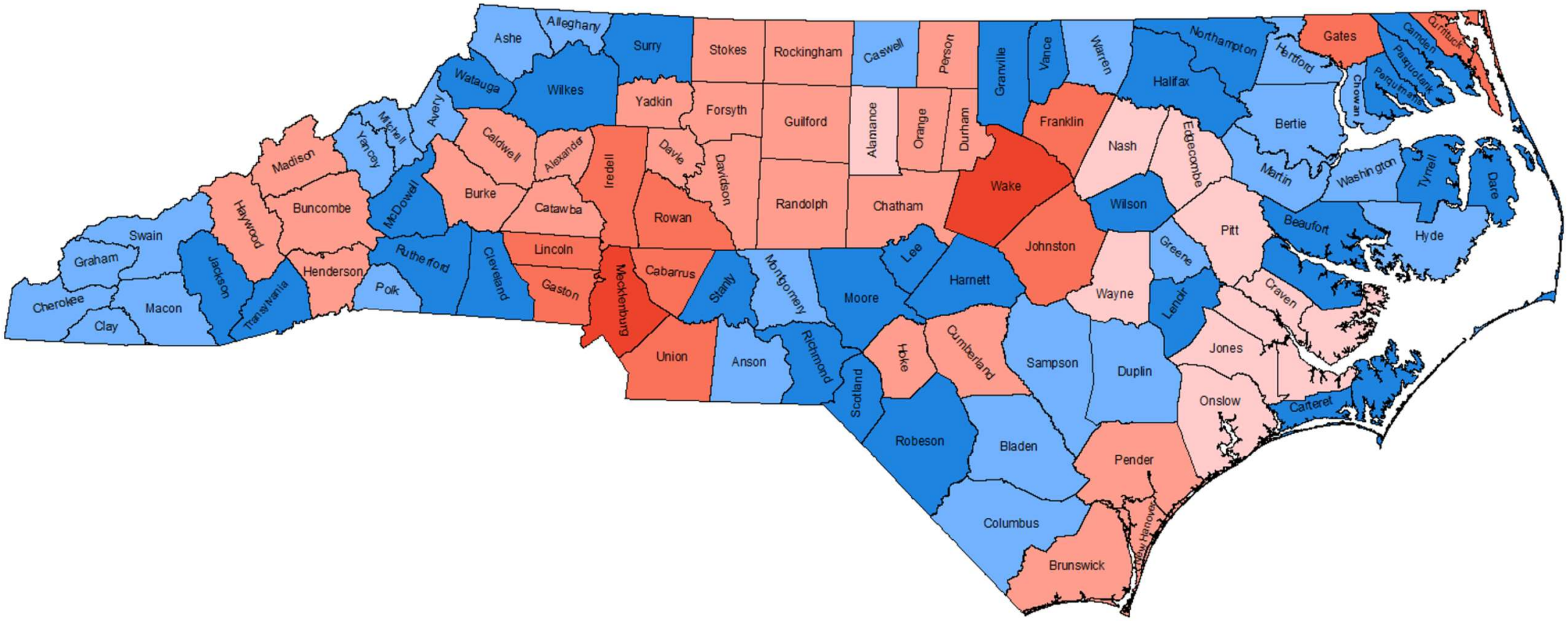
Demographic and Contextual Variables

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 child 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 Child 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; 164,930 members
2	Fringe counties near MSAs of ≥1 million population	10 counties; 120,863 members
3	Counties within MSAs of 250,000-999,999 population	25 counties; 332,140 members
4	Counties within MSAs of 50,000-249,999 population	9 counties; 96,258 members
5	Counties in micropolitan statistical areas (with a city of 10,000-49,999)	28 counties; 169,155 members
6	Counties not within micropolitan statistical areas (without a city of 10,000 or more)	26 counties; 67,299 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 as a means to select adequate numbers of homogenous groups that facilitate group comparison. Thus, since the CCNC network structure was put into place, it has always been the sampling 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 from a responsible adult (hereinafter called caregiver) that indicated they could speak on behalf of the child Medicaid recipient's health and health care and indicated 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.

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 a caregiver that could speak for the targeted child, but was able to hand the phone over to an 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 2,282 child surveys and 2,323 adult surveys, with a minimum of 160 in each of the child and adult 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 8.35% for children and 6.31% for adults. Incidence of eligibility among contacted households (eligible/(eligible + ineligible)) was 43.6% for children and 29.2% for adults. This indicates that households of child respondents were more likely to have accurate phone numbers or that caregivers were more likely to be truthful about presence of a targeted child respondent than adult respondents were to tell the truth about themselves (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 0.223 and 0.156, respectively, for children and adults. When applying these e values to AAPOR response rate 4, adjusted response rates of 27.4% and 27.3% for children and adults were observed, 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 child networks.

Table 2-3 Population, Sample, and Survey Response Counts by Network

CCNC Network	Eligible Population	Sample	Survey Responses
1003	30,748	3,250	161
1006	151,010	2,800	164
1007	56,180	2,099	161
1009	117,948	2,400	161
1010	18,857	3,200	160
1011	89,841	1,900	164
1012	74,385	2,800	165
1013	35,944	2,800	164
2000	101,700	3,250	165
2003	42,121	2,550	161
2004	54,838	3,099	165
2005	47,328	2,800	166
2006	85,226	2,200	162
2007	44,519	2,200	163
Total	950,645	37,348	2,282

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 question and are shown in Appendix C**.** These descriptions report the survey responses for all child 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 5 domains of access, satisfaction, health status, utilization, and trust across the following demographic and contextual variables: enrollee age, sex, race-ethnicity, caregiver education level, 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.

For count variables, as in visits to the emergency room, which could hold any integer value, we created 4 ordinal categories: 0, 1, 2-3 and 4 or more to also facilitate the bivariate analyses.

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 the results in sections 3.1-3.8, we begin by showing the demographic and contextual distributions for the child 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 bivariate analyses that show significant Chi-square table

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[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 ($p<0.05$). 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 lone 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 from Medicaid managed care plans (50th and 90th percentile values for 2018 (79,346 children in 150 plans and 54,362 adults in 146 plans, respectively)). Appendix F 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, utilization, and trust domains. These indicators are shown in Table 2-4 and will be the primary sources for our broad assessments of results and disparities.

Table 2-4 Survey Key Indicator Questions

Domain	Question
Satisfaction	q7 Discussed illness prevention with a health provider q10 Questions were answered by health providers q14 Overall health care rating q33 PHP explained things in a way that was easy to understand q35 Personal health provider (PHP) listened carefully q39 PHP spent enough time q42 PHP rating q55 Rating of specialist seen most often q62 Rating of Medicaid plan
Access	q3 Got urgent care as soon as needed q5 Got routine care or check-ups as soon as needed q15 Easy to get care, tests, or treatment q31 Has a personal health provider (PHP) q45 Easy to get treatment or counseling for an emotional/developmental problem q52 Got appointments to see a specialist as soon as needed q53 Doctor's office or health plan helped coordinate care among specialists q64 Easy to get prescription medicines through health plan
Utilization	q32 Number of visits to the PHP q68 Number of emergency room (ER) visits
Health Status	q43 Has an emotional/developmental problem that needs treatment or counseling q66 Overall health rating q67 Overall mental/emotional health rating q69 Currently needs or uses prescribed non-vitamin medication
Trust	q94 Health providers might perform unnecessary tests or procedures

3 RESULTS OF THE 2018 CHILD 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 individuals, hereafter called the caregiver, who responded on behalf of a NC Medicaid child recipient. Responding caregivers indicated they could speak responsibly for the child's health and health care. We asked demographic questions to learn about characteristics of the child and the caregiver. 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 child (asked in the survey)
- Sex of the child (asked in the survey)
- Race/ethnicity of the child (combination of race and ethnicity asked in the survey)
- Highest level of education attained by the caregiver (asked in the survey)
- CCNC network that manages the child'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.

Results Chapter Organization

3.0 Demographic and Contextual Descriptions

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

- Both the sex and age proportions were quite steady across the 3 stages of population data.
- The much lower proportion of observed Hispanic/Latino children in the population and the sample is due to very large amounts of missing data in the ethnicity variable as provided by NC DHHS vs. a much lower proportion missing in the survey responses. The shifts in the other race-ethnicity proportions are strongly influenced by this observation.
- As in the 2 previous survey cycles, Hispanic/Latino children make up the plurality of the respondent population. This is a better estimate of the actual NC Medicaid prevalence of Hispanic/Latino children in the population than the data available to NC DHHS.
- No data are missing from the sex and age variables because the provided NC DHHS data has 100% populated values for these variables; thus, we can substitute population values for values missing in survey responses.
- CCNC network and rurality variables are populated from data provided in the NC DHHS incoming data, where no values are missing.
- The NC DHHS data contains no information for caregiver education; thus, it cannot help populate missing survey values. Likewise, only partial substitution of NC DHHS data for survey responses can be done on the race-ethnicity variable, thus nonresponse to either the race or ethnicity question can result in missing values.

Table 3-1 2018 Demographic and Contextual Characteristics

		Eligible Population	Sample	Respondents
Gender/Sex	Male	51.0%	51.3%	52.4%
	Female	49.0%	48.7%	47.6%
	N/n =	**950,645**	**37,348**	**2,282**
Age Group	0-1 years	8.7%	8.6%	9.2%
	2-5 years	25.4%	24.2%	23.7%
	6-8 years	16.4%	16.7%	15.6%
	9-12 years	22.1%	22.4%	22.7%
	13-18 years	27.5%	28.0%	28.9%
	N/n =	**950,645**	**37,348**	**2,282**
Race/Ethnicity	Non-Hispanic White	35.9%	41.0%	32.4%
	Non-Hispanic Black	36.7%	38.2%	20.5%
	Hispanic/Latino	23.7%	17.7%	35.8%
	Multi/Other	3.7%	3.0%	11.4%
	N/n =	**848,901***	**33,209***	**2,271**
Caregiver Education	< HS Grad/GED	N/A	N/A	26.4%
	HS Grad/GED			29.3%
	> HS Grad/GED			44.3%
	N/n =			**2,255**
Rurality	Urban	75.1%	69.5%	72.0%
	Rural	24.9%	30.5%	28.0%
	N/n =	**950,645**	**37,348**	**2,282**
CCNC Network	1003	3.2%	8.7%	7.1%
	1006	15.9%	7.5%	7.2%
	1007	5.9%	5.6%	7.1%
	1009	12.4%	6.4%	7.1%
	1010	2.0%	8.6%	7.0%
	1011	9.5%	5.1%	7.2%
	1012	7.8%	7.5%	7.2%
	1013	3.8%	7.5%	7.2%
	2000	10.7%	8.7%	7.2%
	2003	4.4%	6.8%	7.1%
	2004	5.8%	8.3%	7.2%
	2005	5.0%	7.5%	7.3%
	2006	9.0%	5.9%	7.1%
	2007	4.7%	5.9%	7.1%
	N/n =	**950,645**	**37,348**	**2,282**

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

3.1 The Child's Health Care in the Last 6 Months (q2-q15)

Urgent health care needs (q2; health status)

Question 2 asked caregivers how often in the previous 6 months the child had a condition needing care right away in an emergency room, clinic, or doctor's office. Figure R-1 shows that 26.6% of caregivers reported that their child had a condition requiring urgent medical care in the previous 6 months.

Figure R-1 Needed urgent care in the previous 6 months (q2; n=2,258)

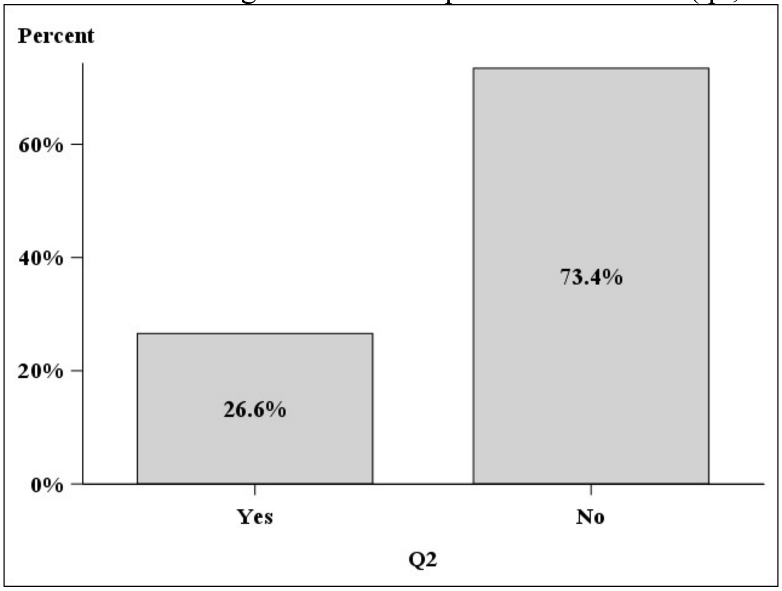


Figure R-2 shows the relationship between caregiver responses to q2 and the child's age. Thirty-two percent (32.0%) of children 0-1 yo needed urgent care while only 21.1% of children 9-12 yo needed urgent care.

Figure R-2 Needed urgent care vs. age (q2; n=2,258)

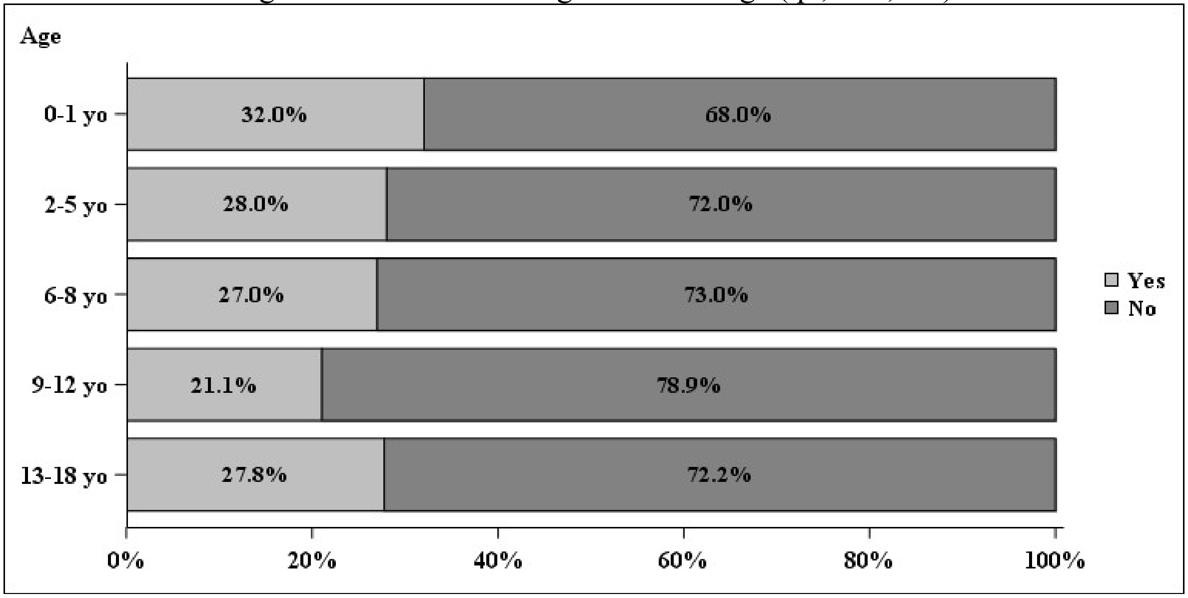


Figure R-3 shows variation in caregiver responses to q2 with race-ethnicity. Thirty-one point seven percent (31.7%) of Non-Hispanic White (NHW) children needed urgent care while only 21.3% of Hispanic-Latino (H/L) children had the same need.

Figure R-3 Needed urgent care vs. race-ethnicity (q2; n=2,247)

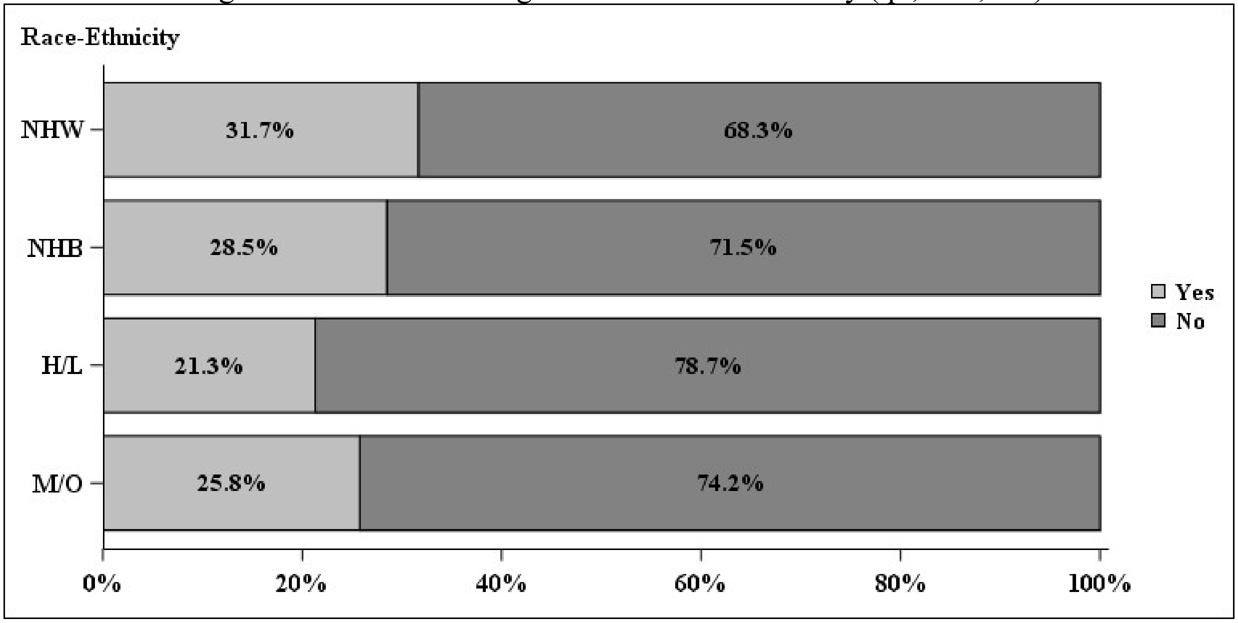
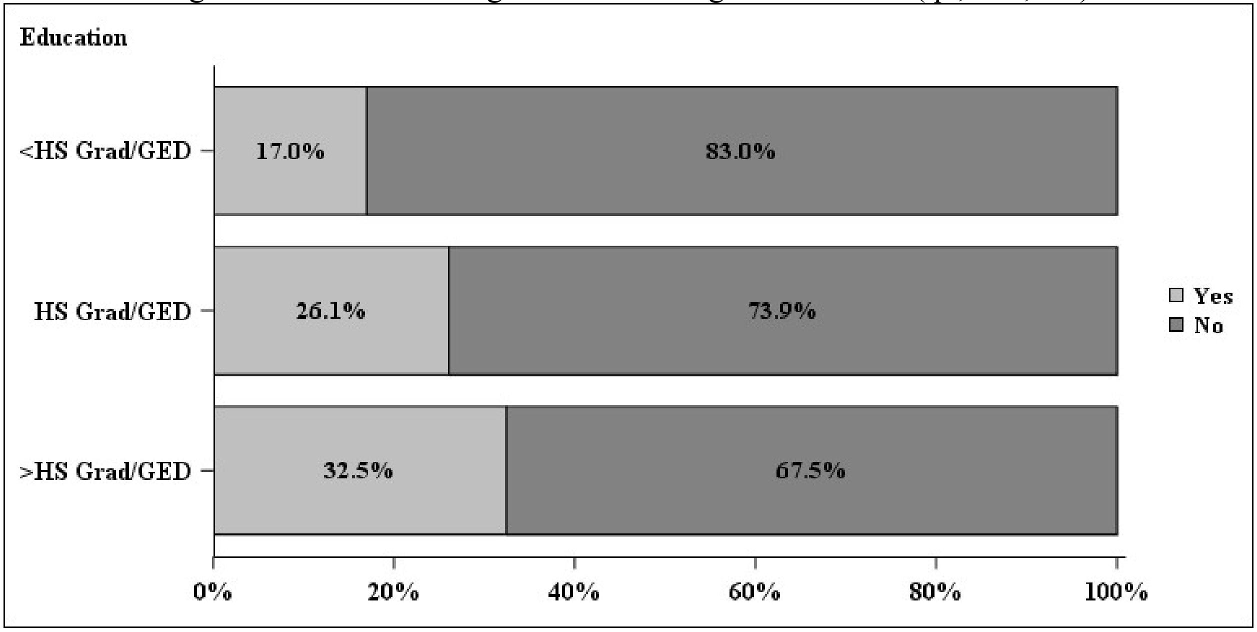


Figure R-4 indicates how caregiver responses to q2 varied with caregiver education. Thirty-two point five percent (32.5%) of caregivers with >HS Grad /GED reported their child needed urgent care compared to only 17.0% of caregivers with <HS Grad/GED.

Figure R-4 Needed urgent care vs. caregiver education (q2; n=2,232)



Urgent care received soon enough (q3; access)

Question 3 asked caregivers that responded 'yes' to q2 how often urgent care for the child was received as soon as needed in the previous 6 months. Figure R-5 indicates that 78.7% of caregivers reported their child always received urgent care in a timely manner. This was followed by 12.8%, 7.2% and 1.4% whose caregivers reported they received it usually, sometimes and never soon enough, respectively.

Figure R-5 Got urgent care as soon as needed in the previous 6 months (q3; n=587)

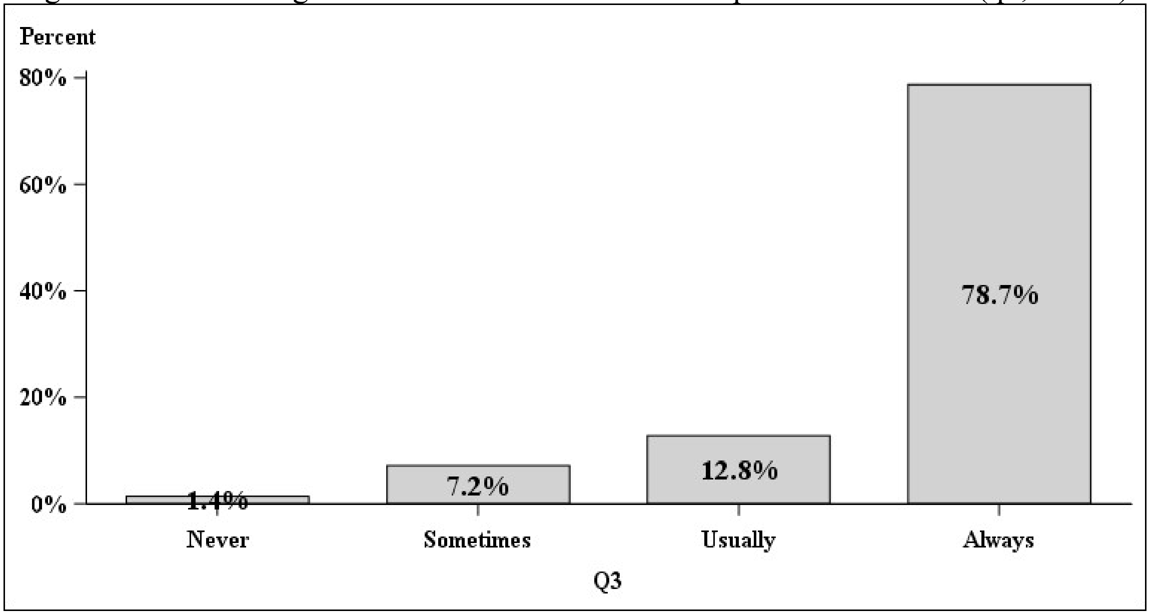


Figure R-6 illustrates how caregiver responses to q3 varied with race-ethnicity. Eighty-six point nine percent (86.9%) of NHW children always received urgent care soon enough compared to only 64.4% of H/L children.

Figure R-6 Got urgent care as soon as needed vs. race-ethnicity (q3; n=586)

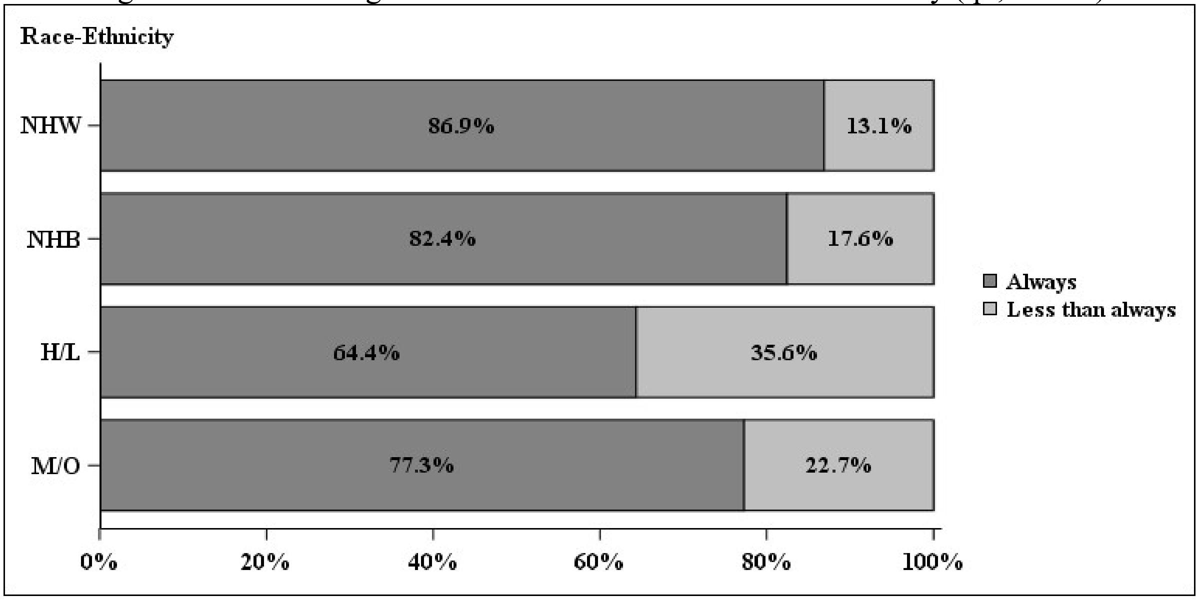


Figure R-7 shows how caregiver responses to q3 varied with caregiver education. Eighty-six point five percent (86.5%) of caregivers with >HS Grad/GED reported their children received urgent care soon enough compared to only 64.9% of caregivers with <HS Grad/GED.

Figure R-7 Got urgent care as soon as needed vs. caregiver education (q3; n=580

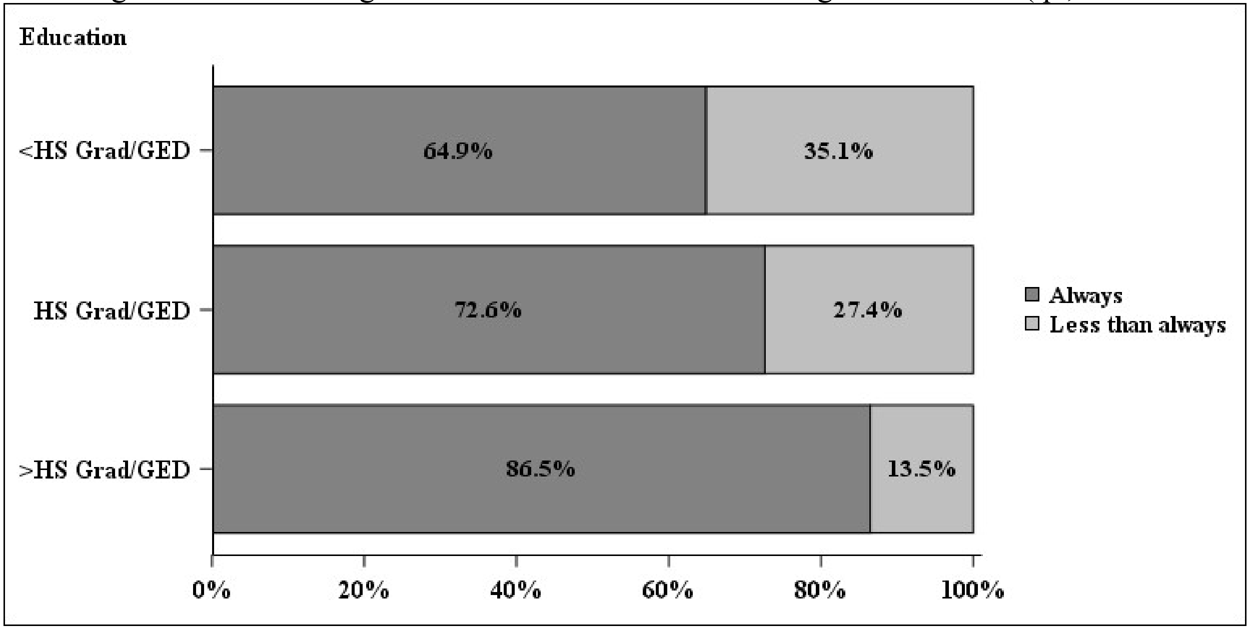
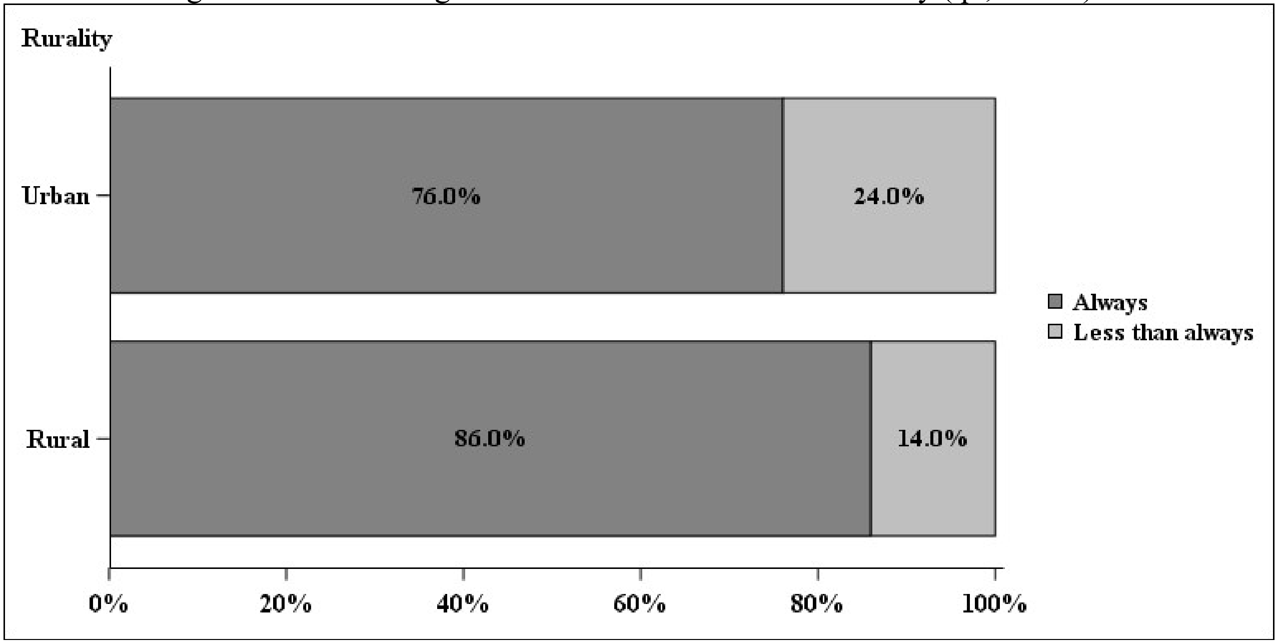


Figure R-8 shows how caregiver responses to q3 varied with rurality of the child's residence. Eighty-six percent (86.0%) of rural children always received urgent care soon enough compared to 76.0% of urban children.

Figure R-8 Got urgent care as soon as needed vs. rurality (q3; n=587)



Making appointments for routine health care (q4; access)

Question 4 asked all caregivers if any appointments had been made for the child in the previous 6 months for check-ups or routine care at a doctor's office or clinic. Figure R-9 indicates that appointments for a check-up or routine care were made for 74.0% of children in the previous 6 months.

Figure R-9 Made appointments for check-up or routine care in the previous 6 months (q4; n=2,258)

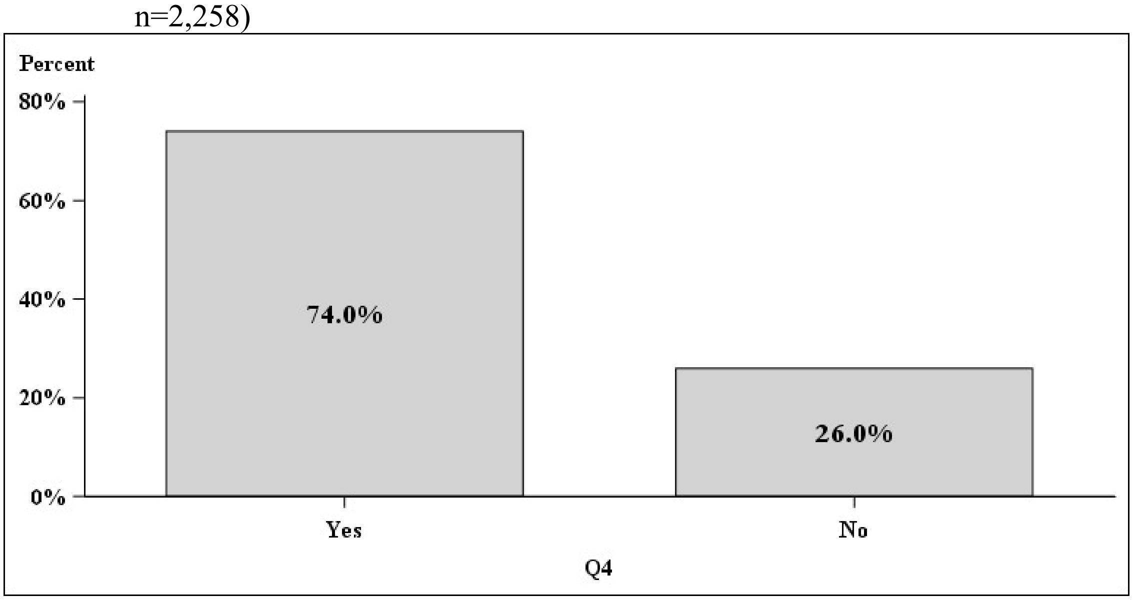


Figure R-10 shows how caregiver responses to q4 varied with age. Eighty-eight point five percent (88.5%) of 0-1 yo children had appointments for a check-up or routine care while only 68.5% of children 6-8 yo had routine visits.

Figure R-10 Made appointments for check-up or routine care vs. age (q4; n=2,258)

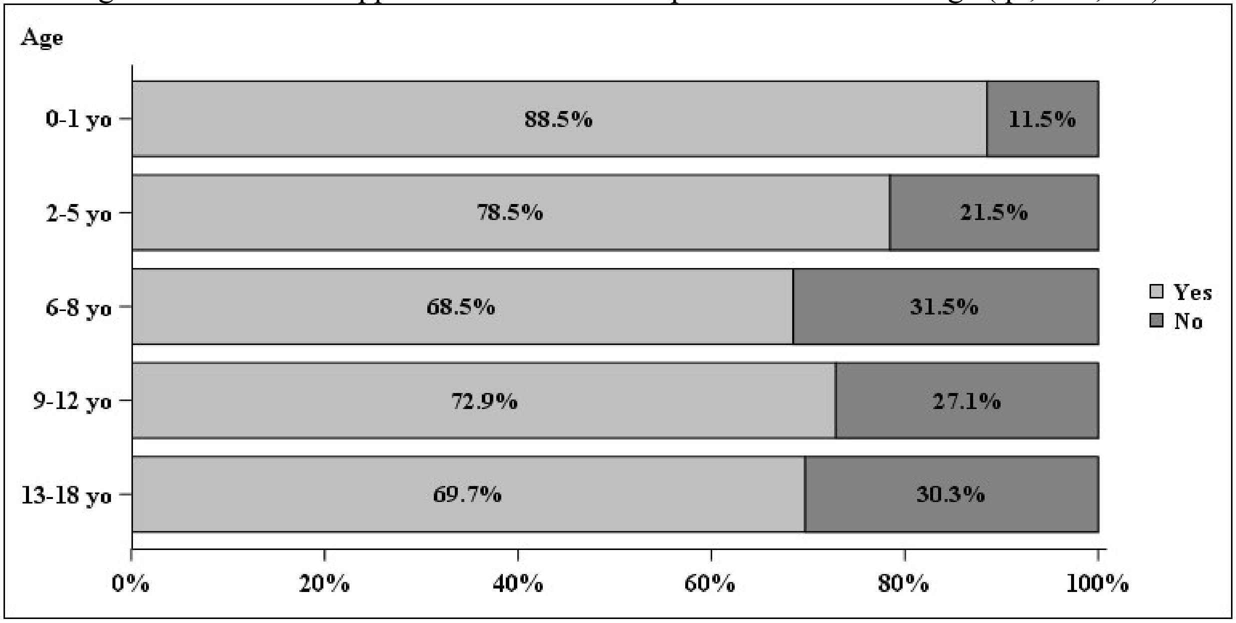


Figure R-11 shows how caregiver responses to q4 varied with race-ethnicity. NHW (78.3%) and Non-Hispanic Black (NHB, 78.7%) children, respectively, were reported to have had a check-up while the same can be said for only 67.6% of H/L children.

Figure R-11 Made appointments for check-up or routine care vs. race-ethnicity (q4; n=2,247)

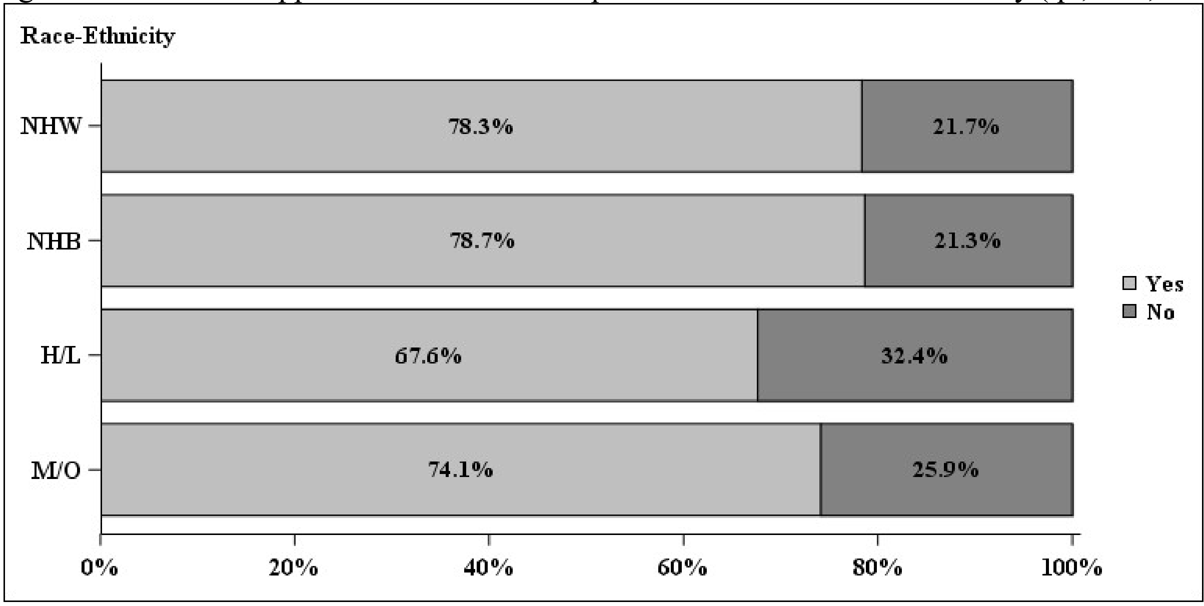
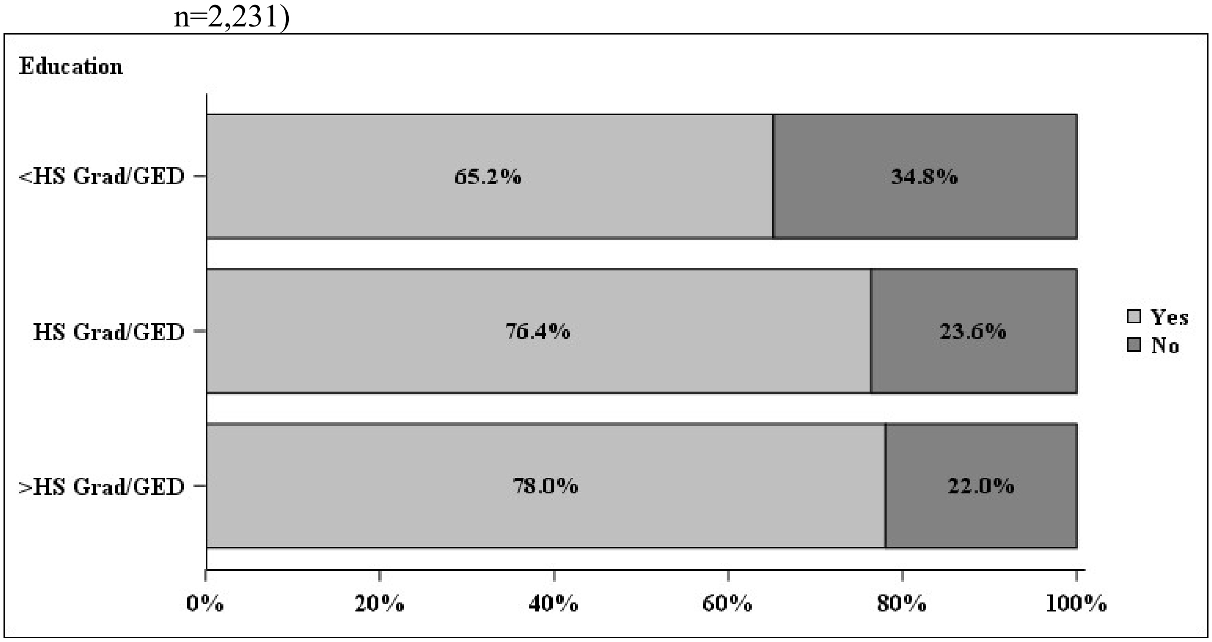


Figure R-12 shows how caregiver responses to q4 varied with caregiver education. Only 65.2% of caregivers with <HS Grad/GED made appointments for a check-up for the child while 78.0% caregivers with >HS Grad/GED made these appointments. ≤

Figure R-12 Made appointments for check-up or routine care vs. caregiver education (q4; n=2,231)



Routine appointments available soon enough (q5; access)

Question 5 asked caregivers that responded 'yes' to q4 how often they got appointments for routine care for the child as soon as needed in the previous 6 months. Figure R-13 shows that timely routine check-ups were always obtained for 71.4% of children while only 1.2% never got check-ups soon enough.

Figure R-13 Got routine care or check-up as soon as needed (q5; n=1,614)

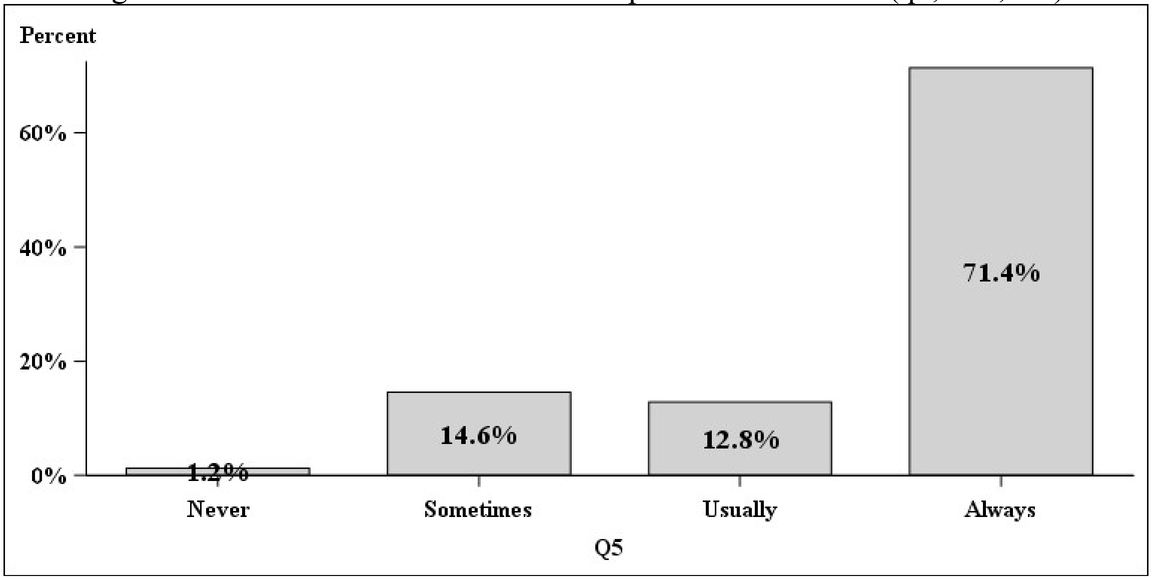


Figure R-14 indicates the relationship between caregiver responses to q5 varied with race-ethnicity. NHW children (79.6%) were reported to have always obtained routine check-ups soon enough while 77.9% of caregivers of NHB children said the same. Conversely, only 57.2% of H/L children received routine check-ups soon enough.

Figure R-14 Got routine care or check-up as soon as needed vs. race-ethnicity (q5; n=1,608)

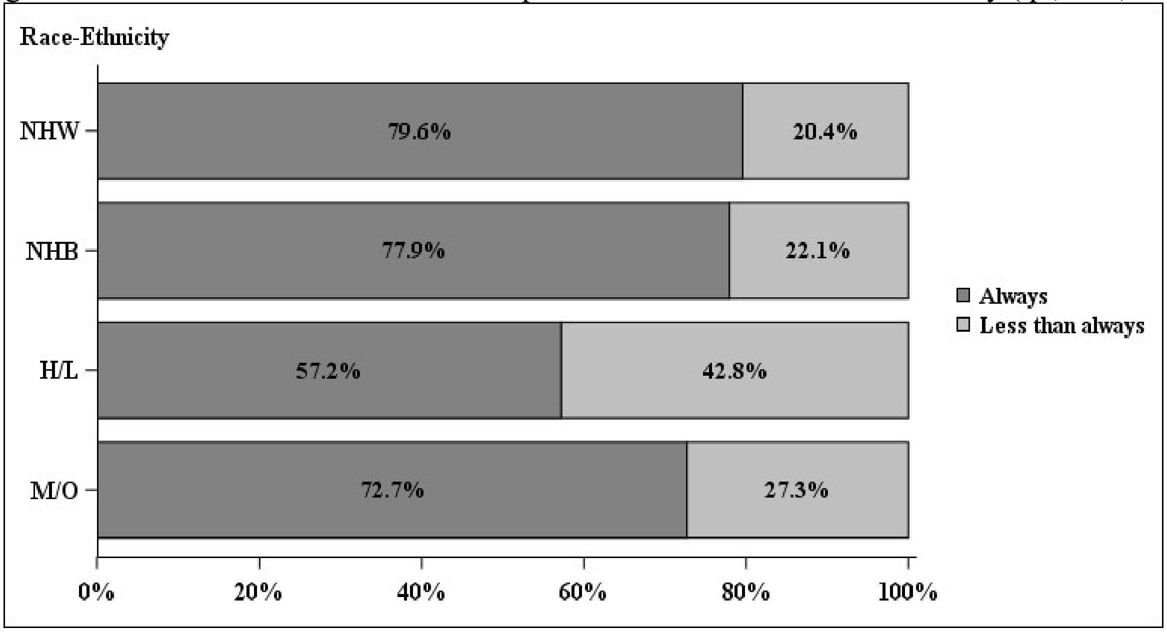
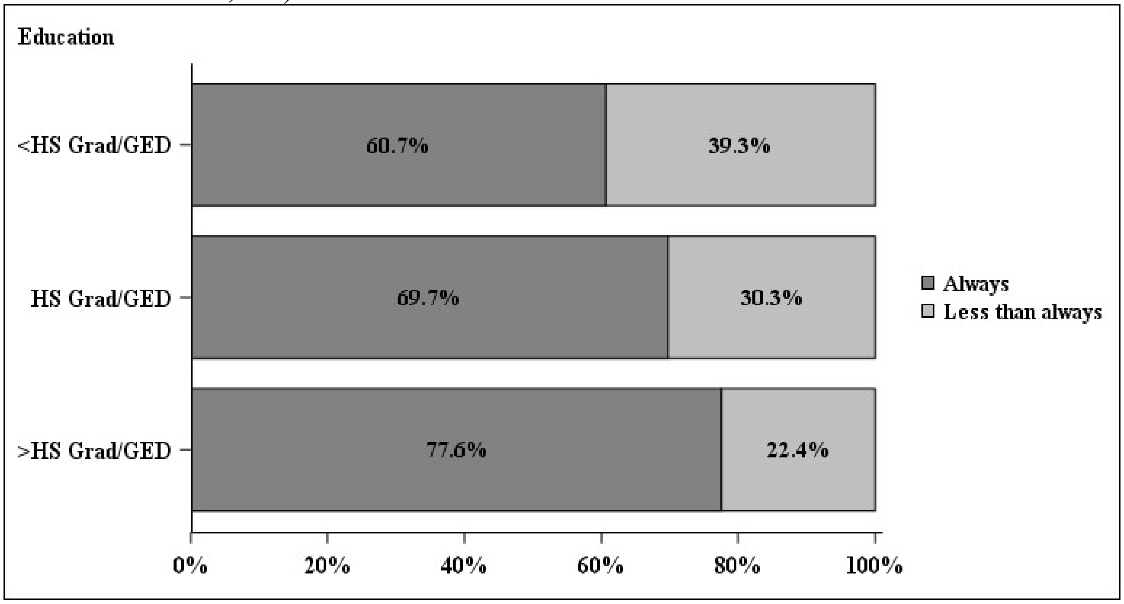


Figure R-15 indicates how caregiver responses to q5 varied with caregiver education. Seventy-seven point six percent (77.6%) of children of caregivers with >HS Grad/GED always obtained routine check-ups soon enough while only 60.7% of caregivers with <HS Grad/GED reported the same timely level of care.

Figure R-15 Got routine care or check-up as soon as needed vs. caregiver education (q5; n=1,598)



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

Question 6 asked all caregivers how many times the child went to a doctor's office or clinic for health care in the previous 6 months, excluding emergency room visits. Figure R-16 shows that 27.2% of children did not visit a doctor's office at all, while 26.0%, 33.9% and 12.9% of children had 1, 2-3 and 4 or more visits, respectively.

Figure R-16 Number of visits to doctor's office or clinic in the previous 6 months (q6;n=2,192)

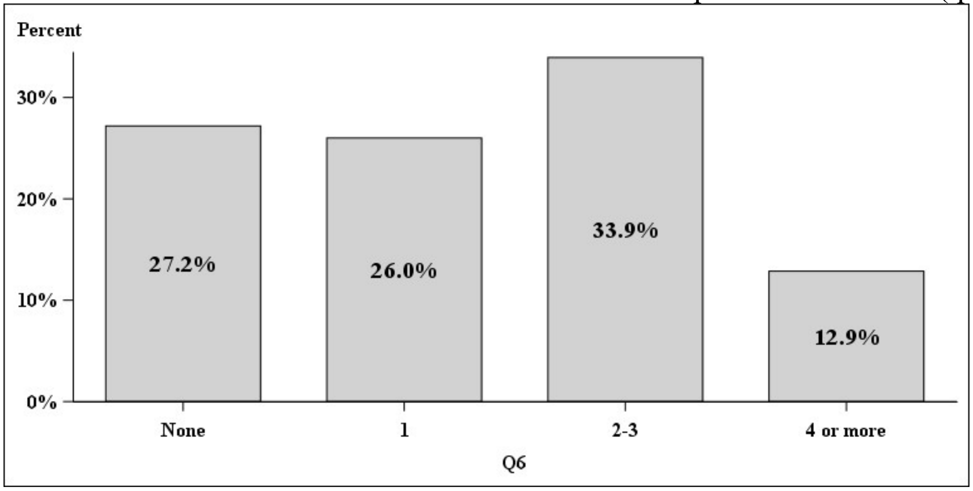


Figure R-17 illustrates how caregiver responses to q6 varied with age. Children 0-1 yo had the most visits in general, with the level stepping down at 2-5 yo, and then leveling off in children older than 5 yo. Around 30% of children over 5 yo had no visits at all.

Figure R-17 Number of visits to doctor's office or clinic vs. age (q6; n= 2,192)

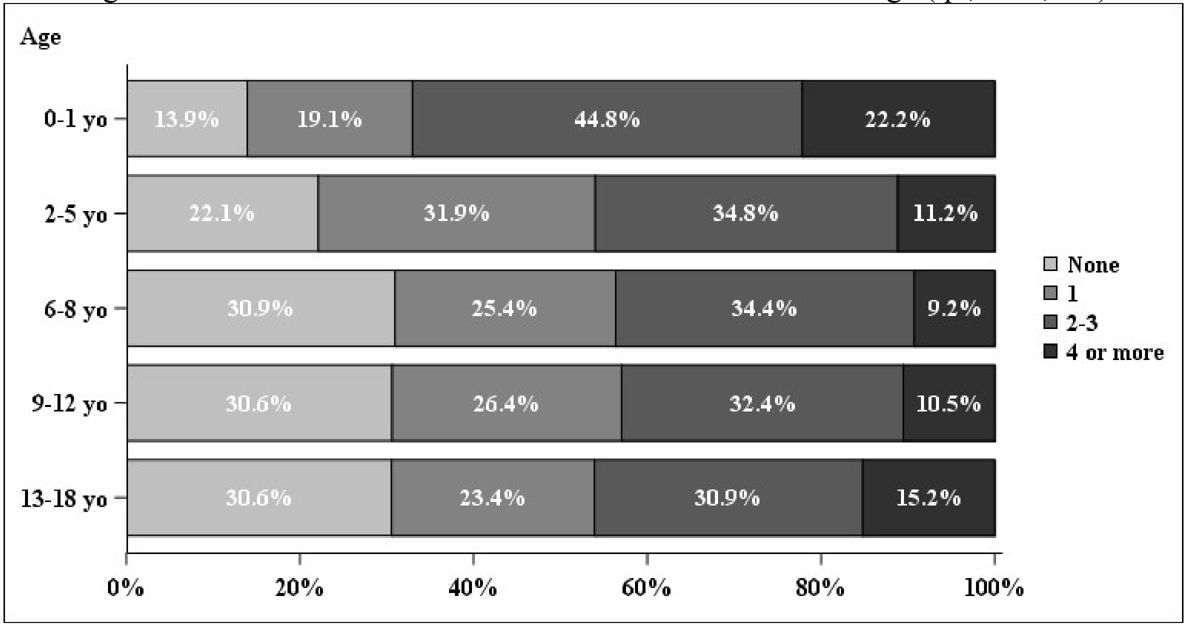


Figure R-18 indicates the relationship between caregiver responses to q6 and race-ethnicity of the child. NHW and NHB children generally had the most office/clinic visits and 18.4% of NHW children had 4 or more visits. H/L children had the fewest visits and 42.5% had no visits at all.

Figure R-18 Number of visits to doctor's office or clinic vs. race-ethnicity (q6; n= 2,181)

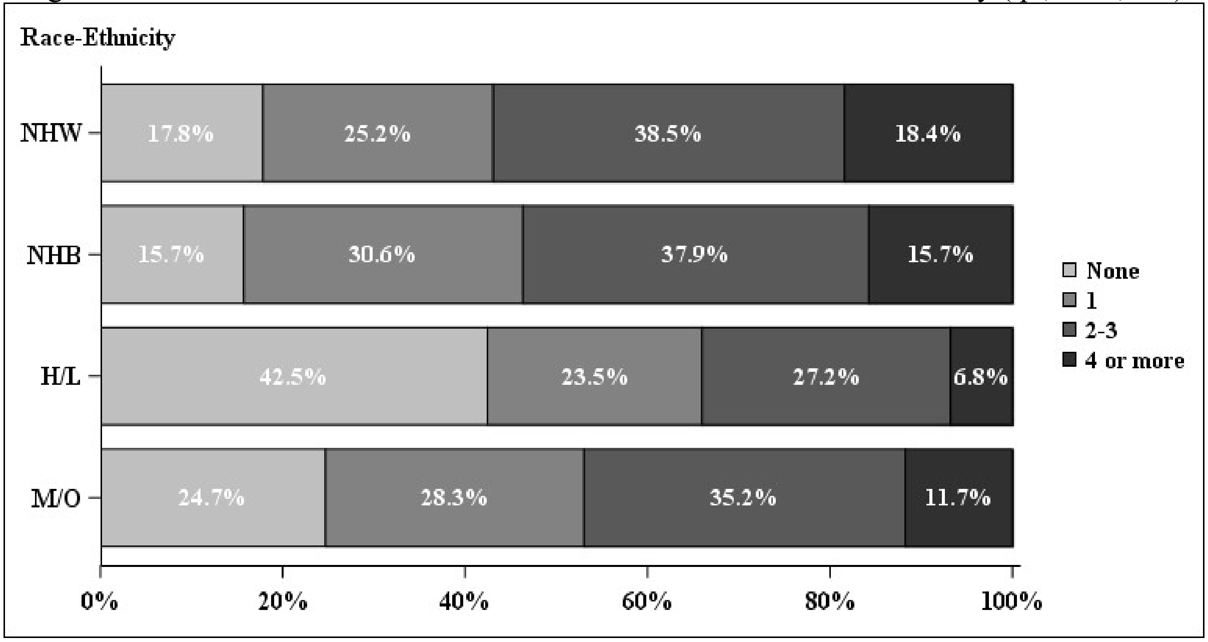


Figure R-19 shows variation in caregiver responses to q6 with race-ethnicity. Caregivers with >HS Grad/GED reported the most visits for their children, while those with <HS Grad/GED reported much fewer. Almost half (44.9%) of this latter group reported no visits for the child.

Figure R-19 Number of visits to doctor's office or clinic vs. caregiver education (q6; n= 2,167)

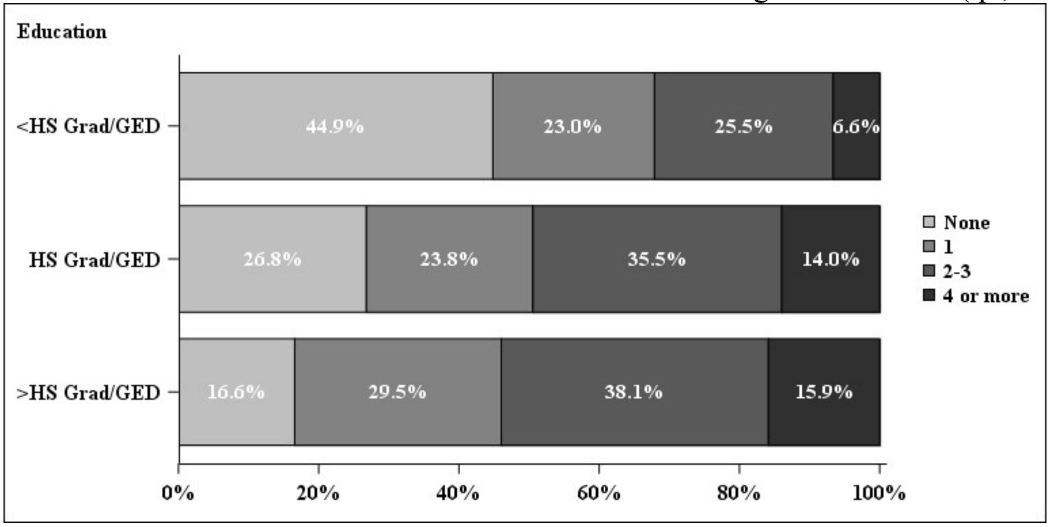
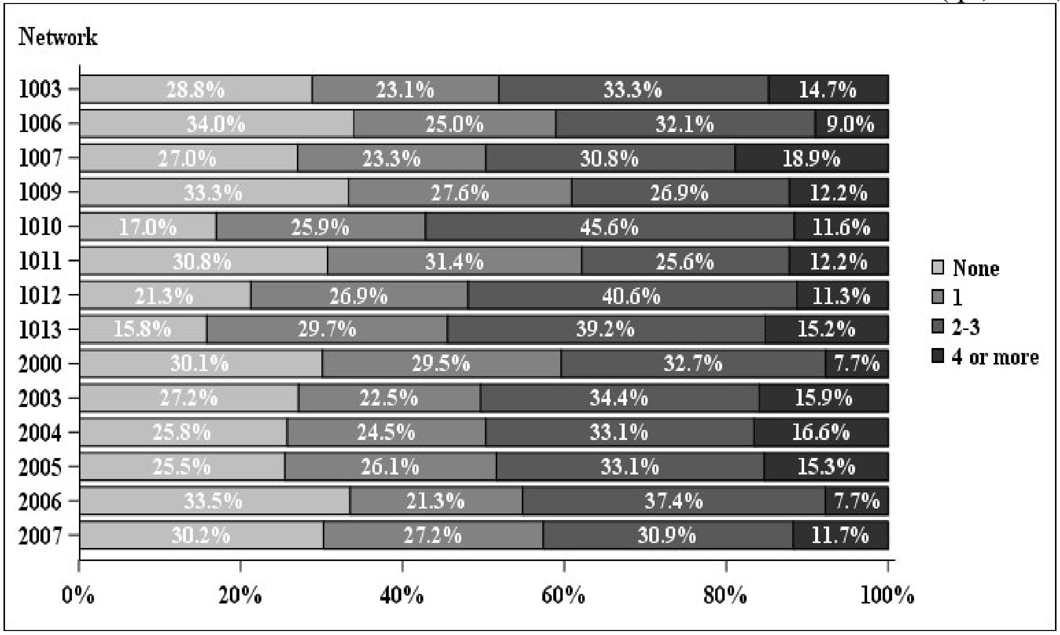


Figure R-20 indicates variation in caregiver responses to q6 with CCNC network. Children in Carolina Community Health Partnership (1010) and in Carolina Collaborative Care of Wake/Johnston Counties (1011) generally had the most visits to a doctor's office or clinic. Of some concern were no visits to the doctor reported for 1/3 or more of the children in CCNC Clinical Operations (1006), Community Care Partners of Greater Mecklenburg (1009), and Northwest Community Care (2006).

Figure R-20 Number of visits to doctor's office or clinic vs. CCNC network (q6; n= 2,192)



Discussions with provider about illness prevention (q7; satisfaction)

Question 7 asked how often discussions about specific things to prevent illness were held with the child's doctor or other health provider in the previous 6 months. Figure R-21 denotes that 51.7% of caregivers always discussed illness prevention with a health provider while 16.2%, 24.0% and 8.2% of caregivers had these discussions usually, sometimes, and never, respectively.

Figure R-21 Discussed illness prevention with provider in the previous 6 months (q7; n=1,639)

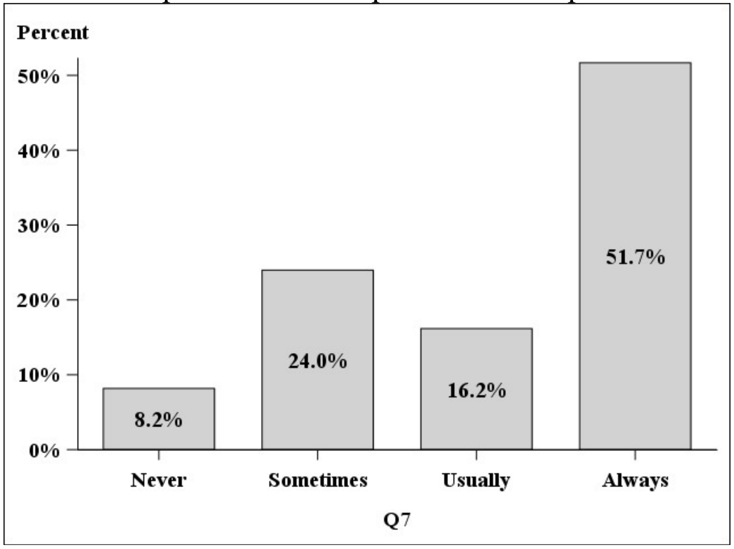


Figure R-22 depicts the relationship between caregiver responses to q7 and race-ethnicity. Sixty-four point nine percent (64.9%) of NHB children's caregivers always had discussions about illness prevention while only 44.5% of H/L children's caregivers always had these discussions.

Figure R-22 Discussed illness prevention with provider vs. race-ethnicity (q7; n=1,635)

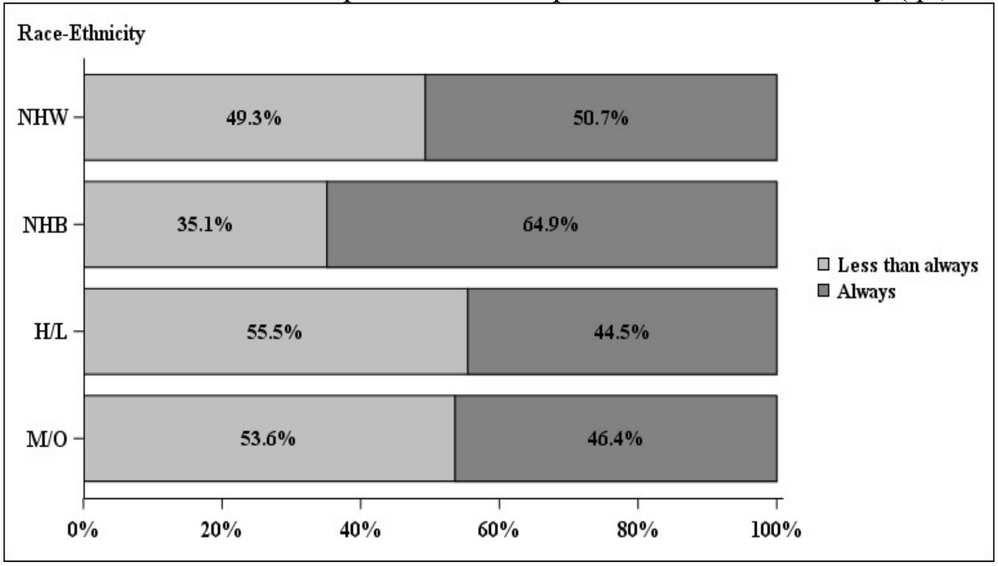
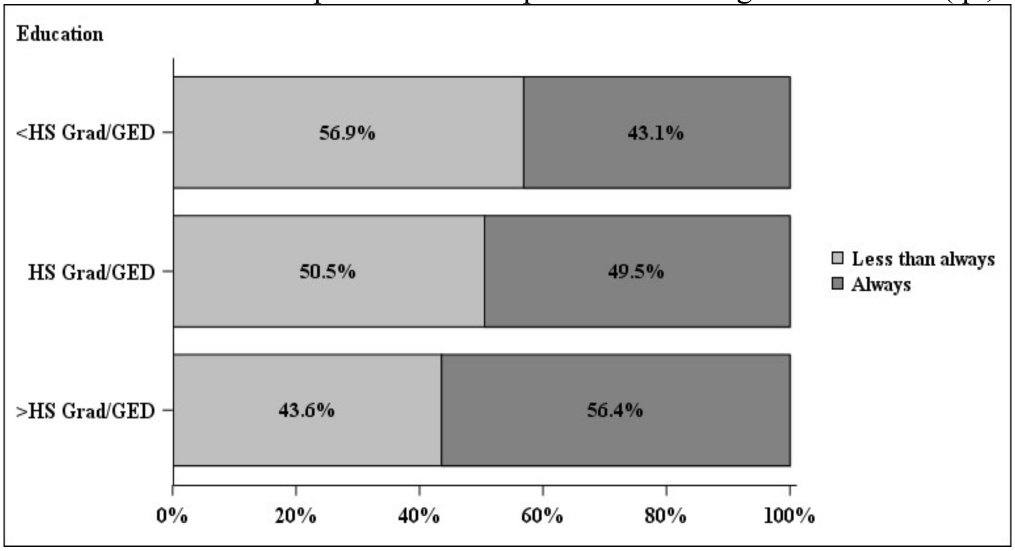


Figure R-23 shows the relationship between responses to q7 and caregiver education. Fifty-six point four percent (56.4%) of caregivers with >HS Grad/GED always discussed illness prevention with a provider, while only 43.1% of caregivers with <HS Grad/GED did the same.

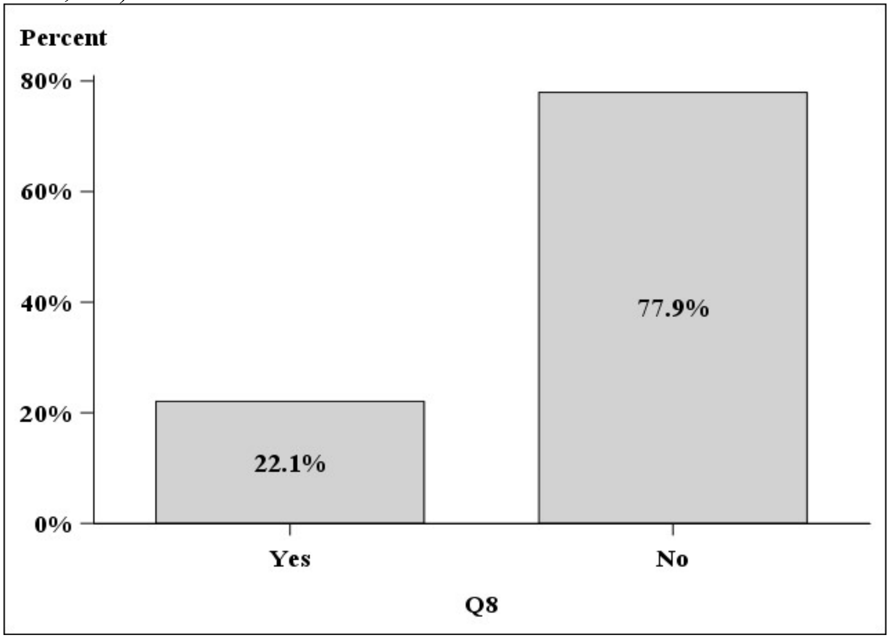
Figure R-23 Discussed illness prevention with provider vs. caregiver education (q7; n=1,624)



Questions about child's health or health care (q8; health status)

Question 8 asked caregivers if they had any questions or concerns about the child's health or health care in the previous 6 months. Figure R-24 shows that only 22.1% of caregivers had questions or concerns about their child's health or health care. We found no statistically significant relationships between q8 responses and any of the demographic or contextual variables.

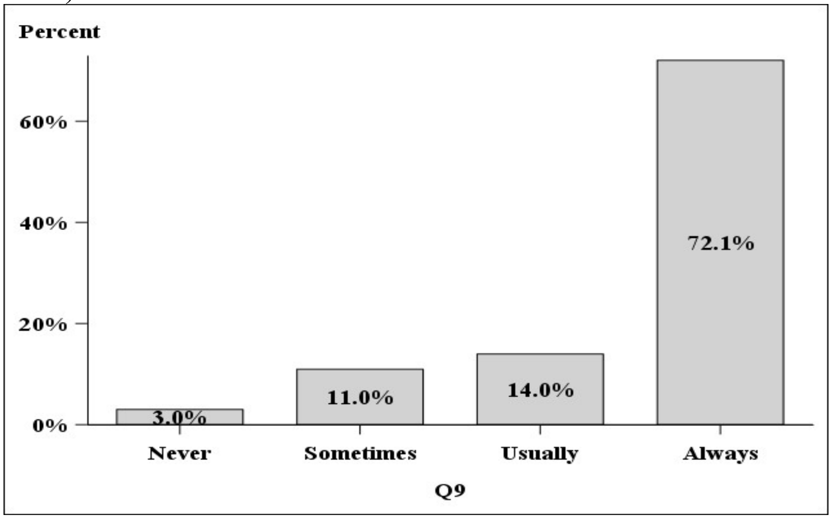
Figure R-24 Had questions about child's health or health care in the previous 6 months (q8; n=1,668)



Ease for caregiver to discuss health concerns with providers (q9; access)

Question 9 asked caregivers that responded ‘yes’ to q8 how often the child’s health providers made it easy to discuss concerns about the child’s health or health care. Figure R-25 illustrates that 72.1% of caregivers found it always easy to discuss the child’s health concerns with providers in the previous 6 months. We found no statistically significant relationships between q9 responses and any of the demographic or contextual variables.

Figure R-25 Ease to discuss health concerns with providers in the previous 6 months (q9; n=365)



Questions about child’s health care were answered (q10; satisfaction)

Question 10 asked caregivers that responded ‘yes’ to q8 how often the child’s providers answered questions about the child’s health or health care. Figure R-26 shows that in the previous 6 months, 71.4% of caregivers always got answers to their questions. This was followed by 19.6%, 8.2% and 0.8% that usually, sometimes, and never got their questions answered, respectively.

Figure R-26 Questions answered by health providers in the previous 6 months (q10; n= 367)

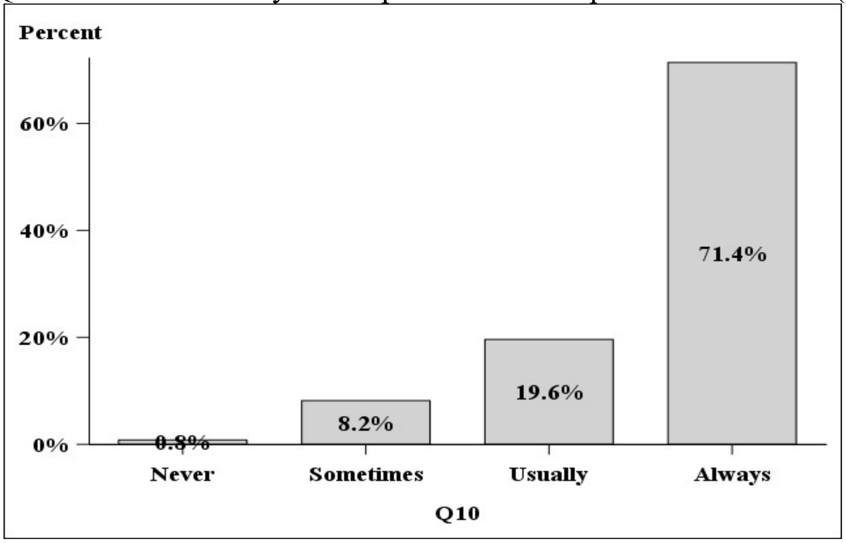
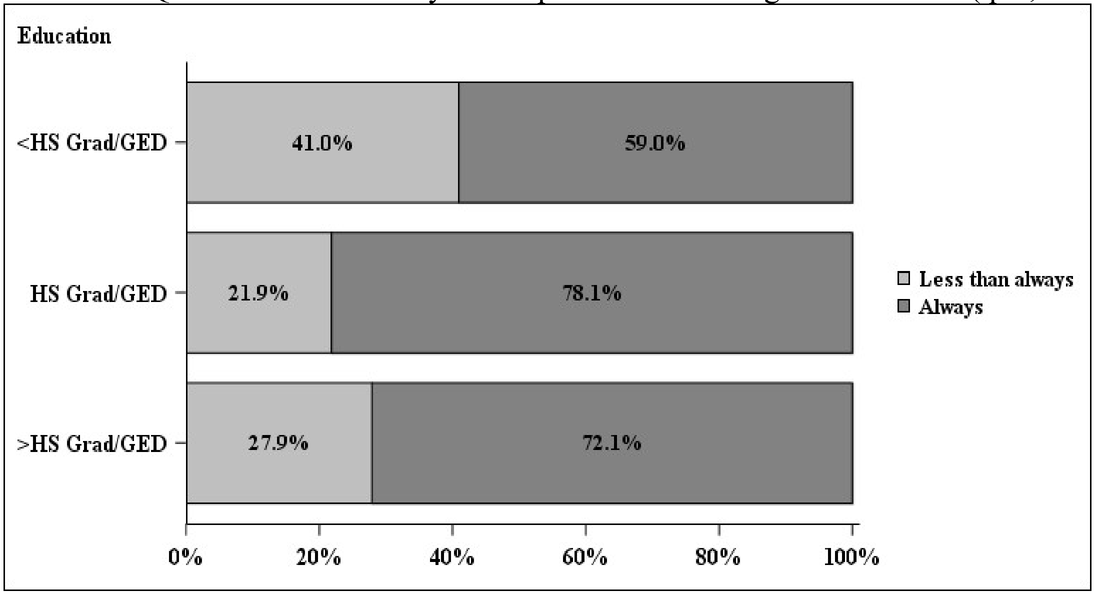


Figure R-27 indicates the relationship between caregiver responses to q10 and caregiver education. We note that for the first time the responses did not follow a trend with education level as those with HS Grad/GED had the greatest proportion (78.1%) whose questions were answered by health providers.

Figure R-27 Questions answered by health providers vs. caregiver education (q10; n=361)



Discussion multiple choices for the child's health care (q11; satisfaction)

Question 11 asked caregivers if, in the previous 6 months, doctors or other health providers had told the caregiver there was more than one choice for the child's treatment or health care. Figure R-28 shows that 42.1% of caregivers indicated that they were told of more than one choice of health care for the child.

Figure R-28 Providers said there was more than one choice for treatment or health care in the previous 6 months (q11; n=1,619)

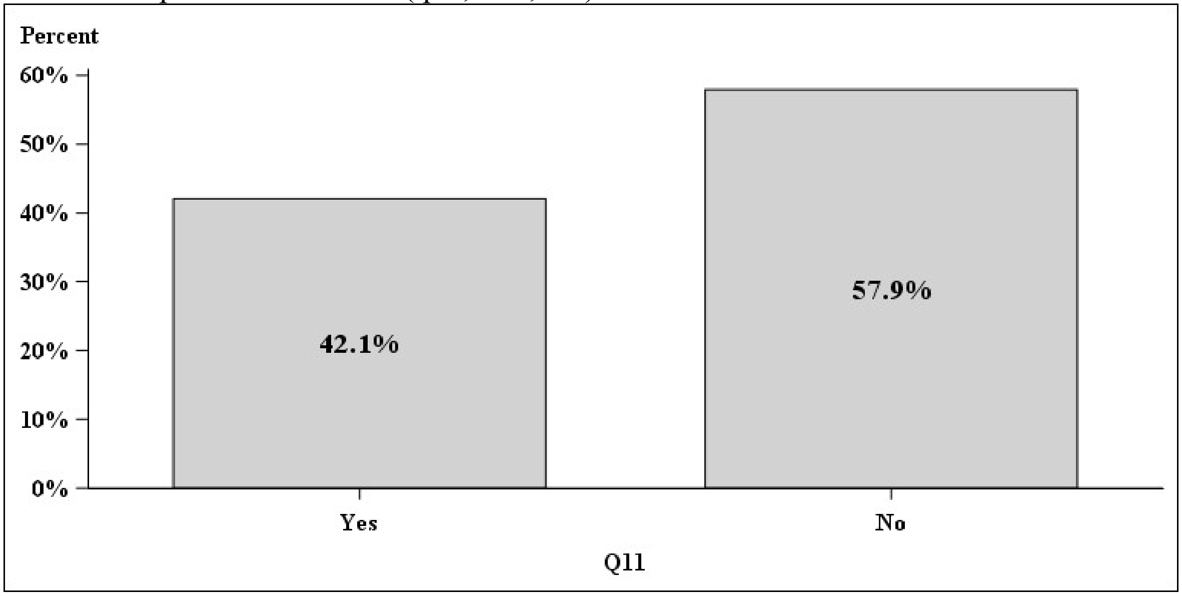
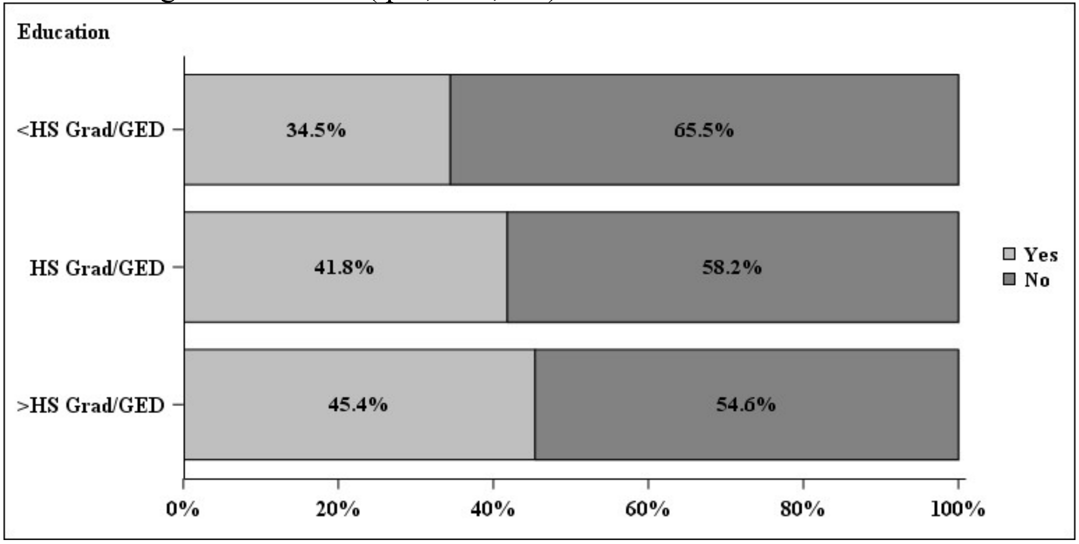


Figure R-29 describes the variation between caregiver responses to q11 and caregiver education. Only 34.5% of caregivers with <HS Grad/GED were told of health care choices for the child.

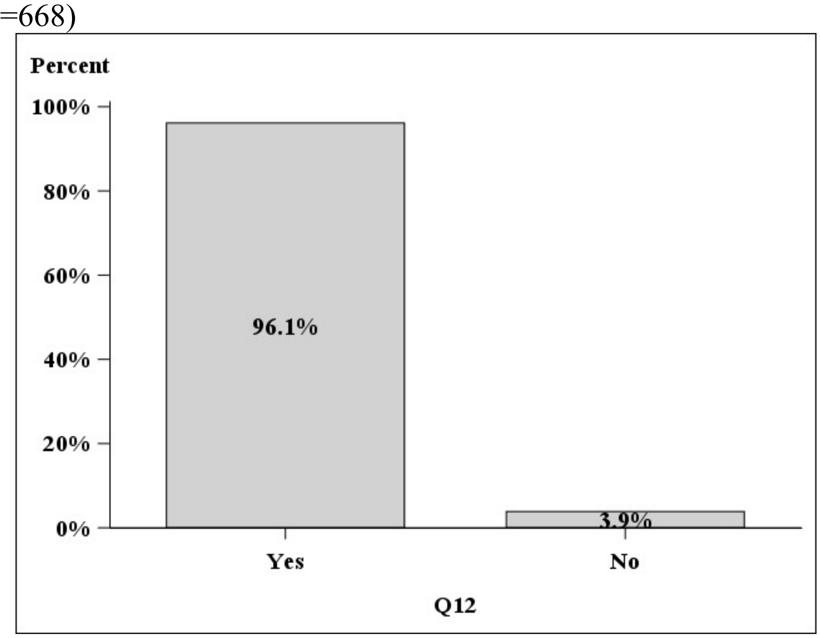
Figure R-29 Providers said there was more than one choice for treatment or health care vs. caregiver education (q11; n=1,603)



Discussing pros and cons of health care options (q12; satisfaction)

Question 12 asked caregivers that responded 'yes' to q11 if providers discussed pros and cons of each choice regarding the child's treatment. Figure R-30 indicates that 96.1% of caregivers had discussed with the provider the pros and cons of health care choices for the child. We found no statistically significant relationships between q12 responses and any of the demographic or contextual variables.

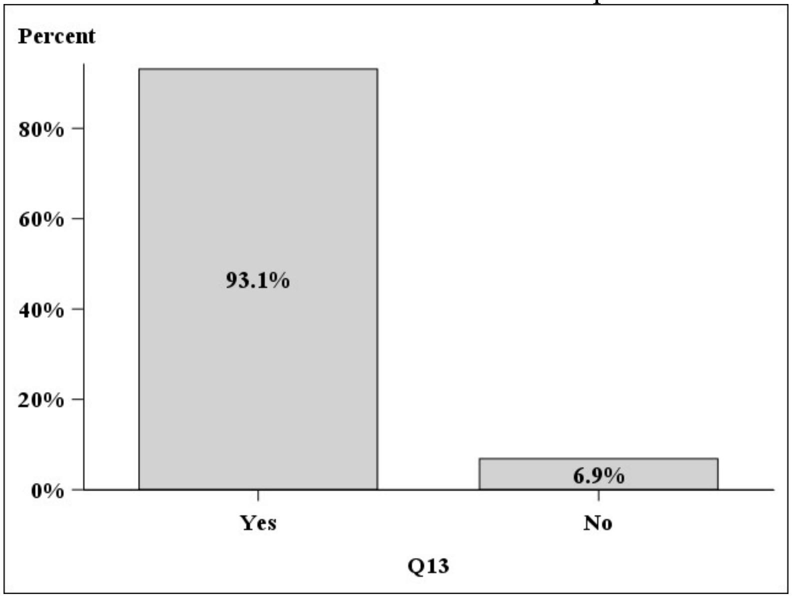
Figure R-30 Discussed pros and cons of health care choices in the previous 6 months (q12; n=668)



Providers asked which treatment choices were best for the child (q13; satisfaction)

Question 13 asked caregivers that responded 'yes' to q11 if health providers asked which treatment or care choice was best for the child. Figure R-31 indicates that 93.1% of caregivers were asked which choice was best. We found no statistically significant relationships between q13 responses and any of the demographic or contextual variables.

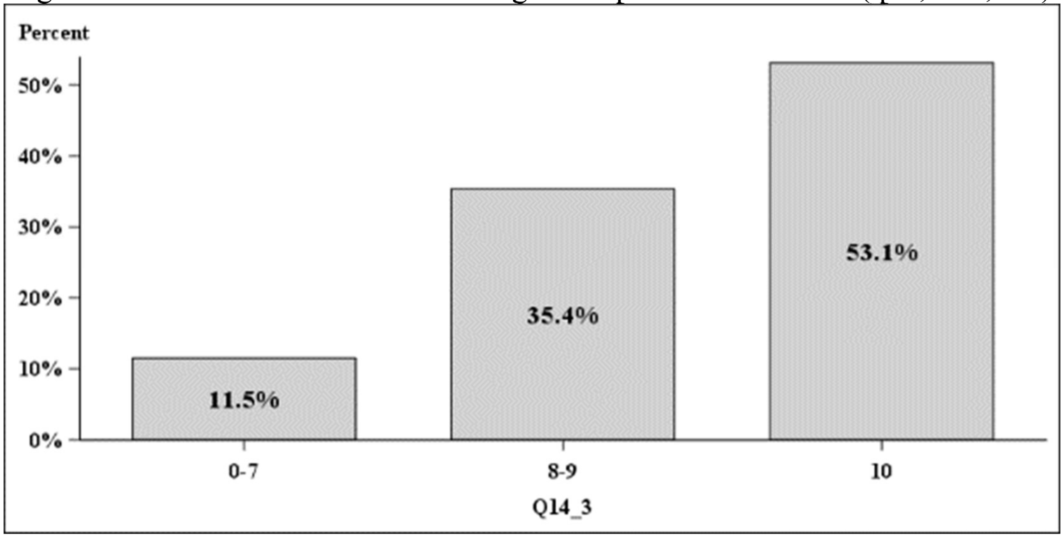
Figure R-31 Treatment or care choice best for the child in the previous 6 months (q13; n=670)



Rating child's total health care (q14; satisfaction)

Question 14 asked caregivers to rate all their child's health care on a scale of 0 to 10 with 0 being the worst health care possible and 10 being the best health care possible in the previous 6 months. Figure R-32 shows that 69.1% of caregivers gave a rating of 9 or 10, while the remaining 30.9% rated the care as less than 9. We found no statistically significant relationships between q14 responses and any of the demographic or contextual variables.

Figure R-32 Overall health care rating in the previous 6 months (q14; n=1,671)



Ease of getting needed medical care (q15; access)

Question 15 asked how often it was easy to get care, tests, or treatment the child needed in the previous 6 months. Figure R-33 indicates it was always easy for 71.1% of children to get the care they needed, usually easy for 15.8%, sometimes easy for 11.0%, and never easy for only 2.1% of children.

Figure R-33 Easy getting care, tests, or treatment in the previous 6 months (q15; n=1,654)

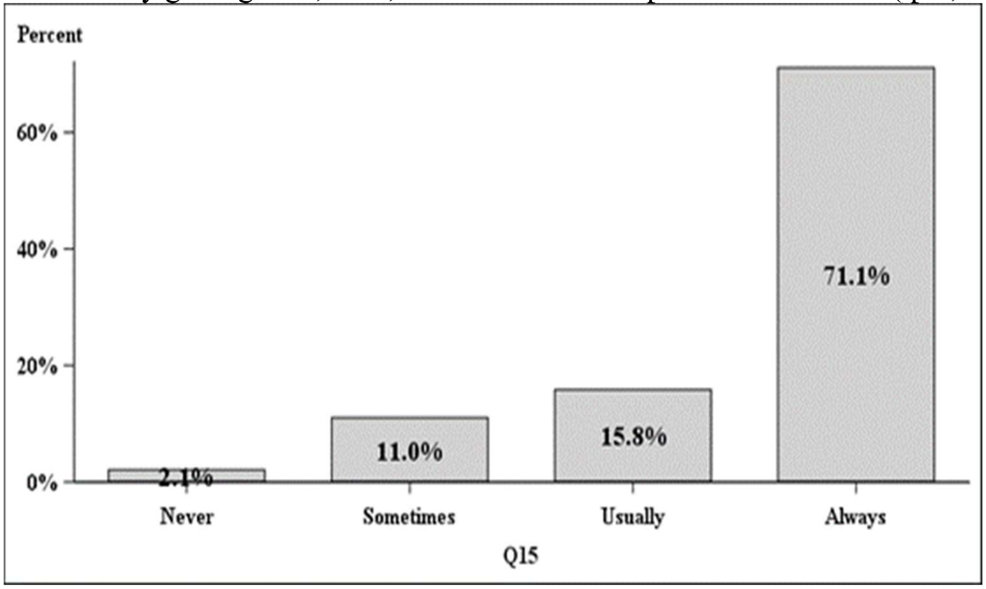


Figure R-34 shows the relationship between caregiver responses to q15 and race-ethnicity. Caregivers of NHW and NHB children found it always easy to get care, tests or treatment at 76.2% and 75.3% respectively. Only 61.9% of caregivers of H/L children reported it always easy to get the same care.

Figure R-34 Ease getting care, tests or treatment vs. race-ethnicity (q15; n= 1,650)

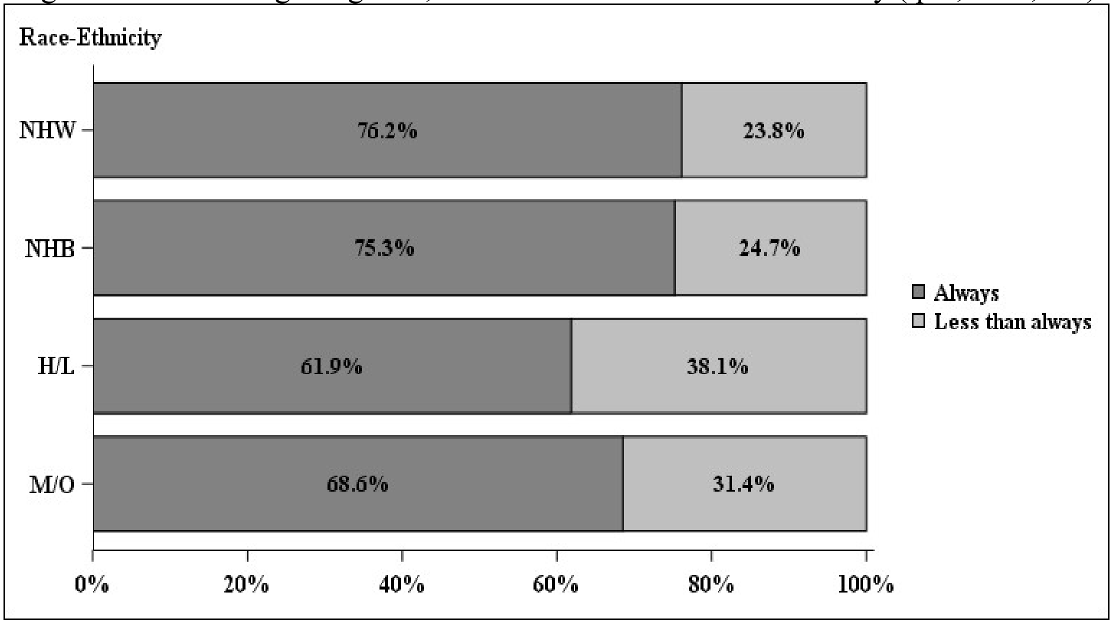
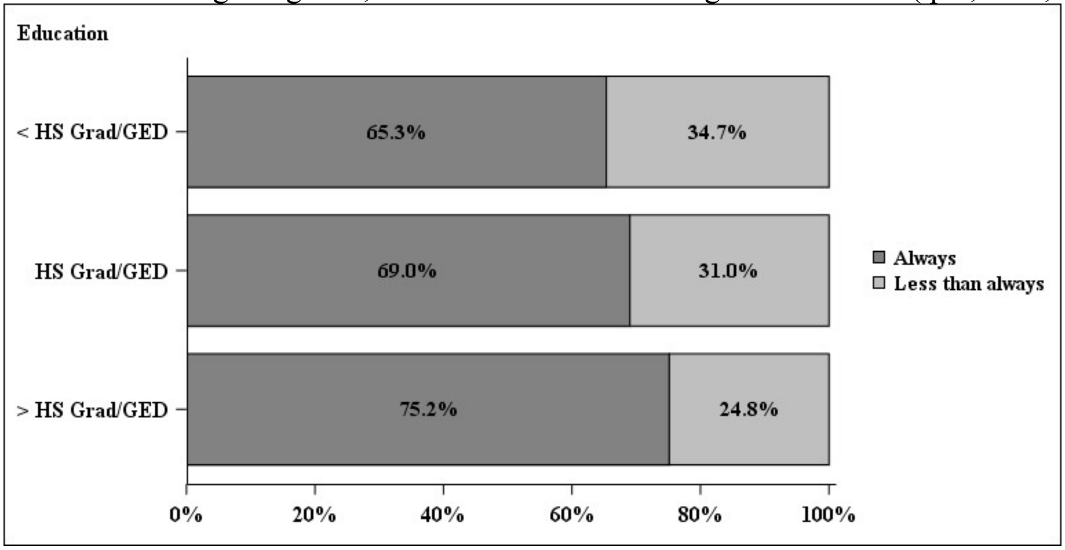


Figure R-35 shows variation in caregiver responses to q15 with caregiver education. Seventy-five point two percent (75.2%) of caregivers with >HS Grad/GED found it always easy to obtain care, tests or treatment needed, while only 65.3% of caregivers with <HS Grad/GED found it always easy.

Figure R-35 Ease getting care, tests or treatment vs. caregiver education (q15; n= 1,639)



3.2 Special Communication Needs and very Young Child Well-care (q16a-q22b)

Need for an interpreter to speak with providers (q16A; access)

An interpreter repeats or signs what one person says in a language used by another person.

Question 16A asked caregivers if they or the child needed an interpreter to help speak with the child's health providers. Figure R-36 indicates that only 20.2% needed an interpreter in the previous 6 months.

Figure R-36 Needed an interpreter to talk to health care providers in the previous 6 months (q16A; n=1,670)

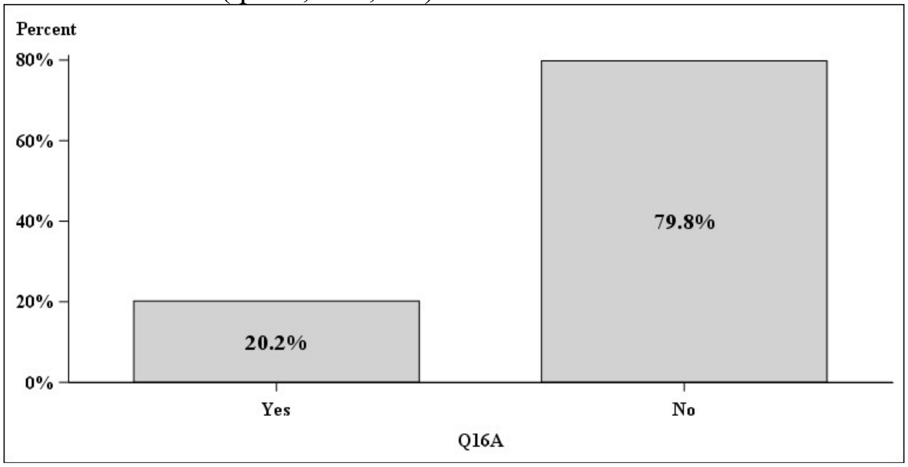


Figure R-37 depicts the relationship between caregiver responses to q16A and race-ethnicity. Not surprisingly, caregivers of Hispanic/Latino (H/L) children had a much greater than average need for an interpreter at 57.2%.

Figure R-37 Needed an interpreter to talk to health care providers vs. race-ethnicity (q16A; n=1,666)

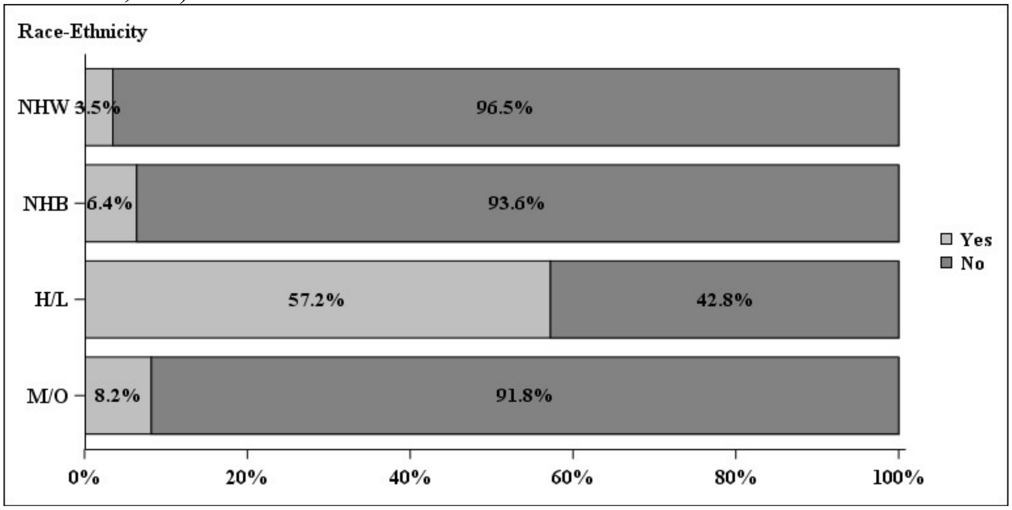


Figure R-38 illustrates the relationship between caregiver responses to q16A and caregiver education. Fifty-one point seven percent (51.7%) of caregivers with <HS Grad/GED needed an interpreter compared to only 6.0% of caregivers with >HS Grad/GED.

Figure R-38 Needed an interpreter to talk to health care providers vs. caregiver education (q16A; n=1,654)

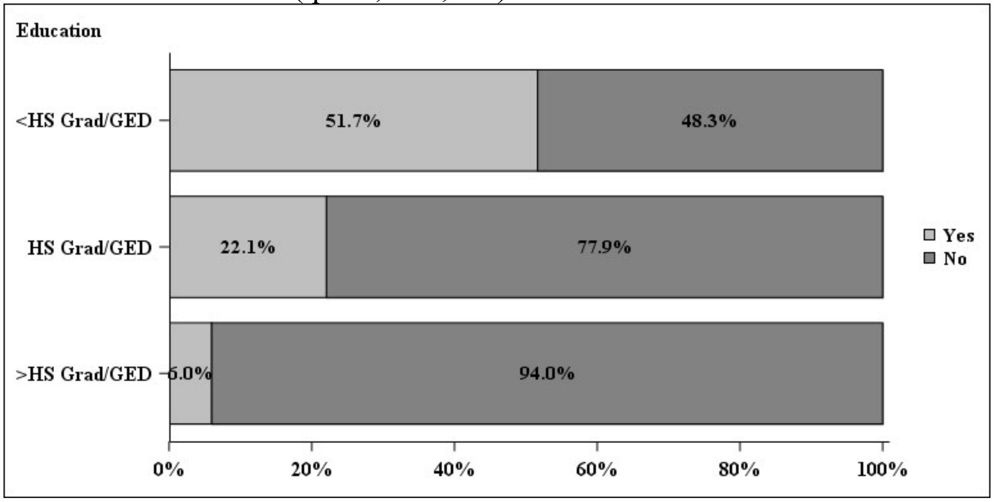


Figure R-39 depicts the relationship between caregiver responses to q16A and CCNC network. Community Care of Wake/Johnston (1011) and Northern Piedmont Community Care (2007) caregivers had the greatest need for interpreters at 33.0% and 28.9%, respectively. Conversely, Carolina Community Health Partnership (1010) and Carolina Collaborative Community Care (1013) had the lowest need for the same at 10.5% and 5.1%, respectively.

Figure R-39 Needed an interpreter to talk to health care providers vs. CCNC network (q16A; n=1,670)

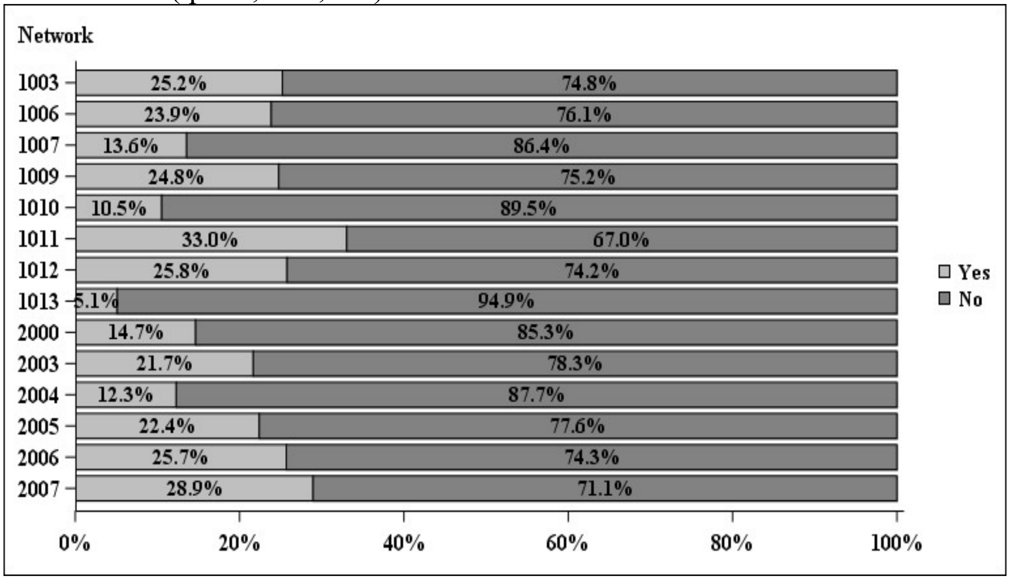
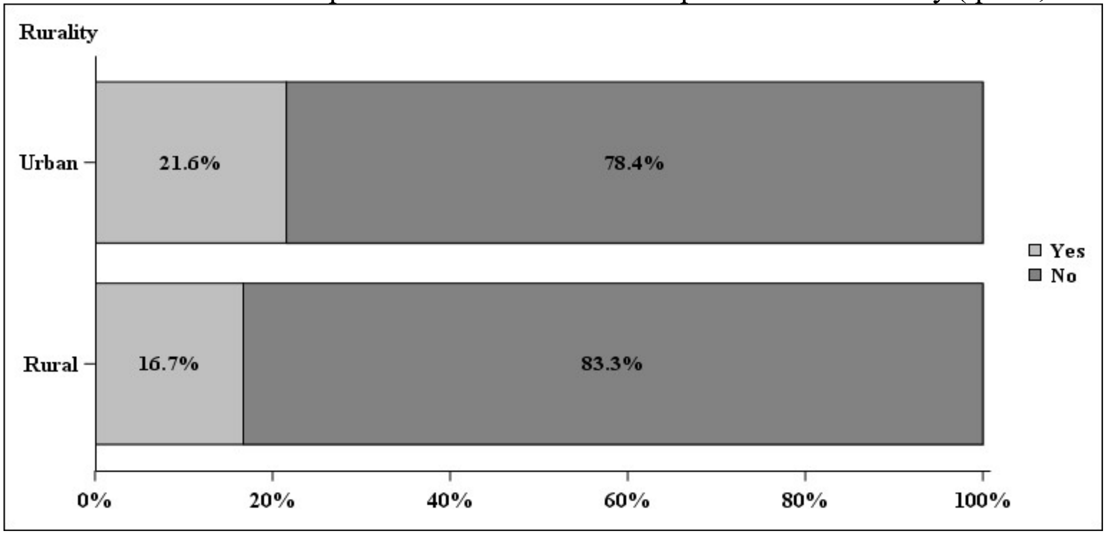


Figure R-40 indicates variation in caregiver responses to q16A with rurality of the child's residence. Twenty-one point six percent (21.6%) of urban caregivers needed an interpreter while only 16.7% of rural caregivers needed the same.

Figure R-40 Needed an interpreter to talk to health care providers vs. rurality (q16A; n=1,670)



Getting an interpreter to help speak with providers (q16B; access)

Question 16B asked caregivers who responded 'yes' to q16A how often they got the needed interpretation or translation help in the previous 6 months. Figure R-41 indicates that interpreters were always available for 67.4% of caregivers, usually available for 9.2%, sometimes available for 17.2%, and never available for 6.2% of caregivers.

Figure R-41 Got needed interpretation/translation help in the previous 6 months (q16B; n=337)

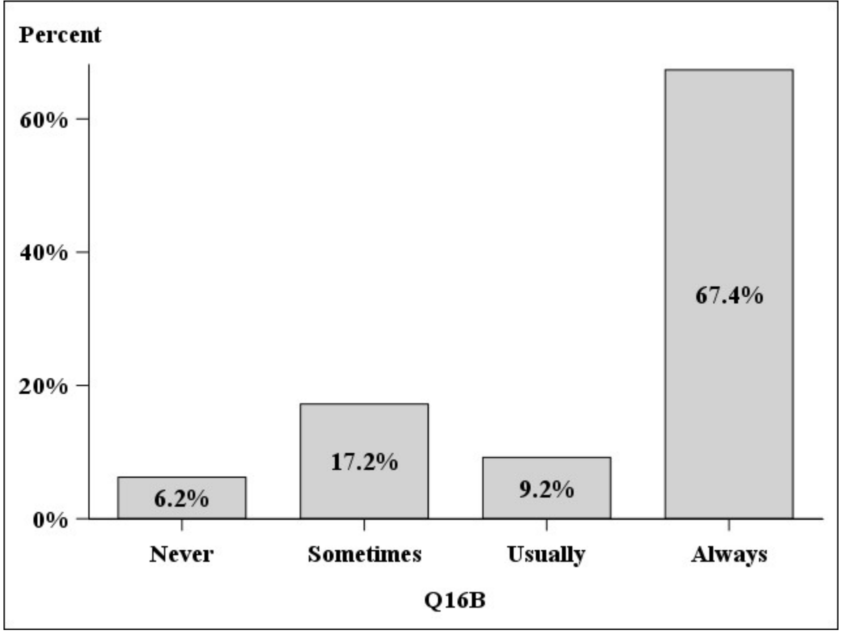


Figure R-42 indicates variation in caregiver responses to q16B with race-ethnicity. Seventy-one point eight percent (71.8%) of H/L caregivers/children always got needed interpretation help. Only roughly 50% of other race/ethnicity groups always got translation assistance noting Spanish was the only non-English language interpretation offered.

Figure R-42 Got needed interpretation/translation help vs. race-ethnicity (q16B; n=335)

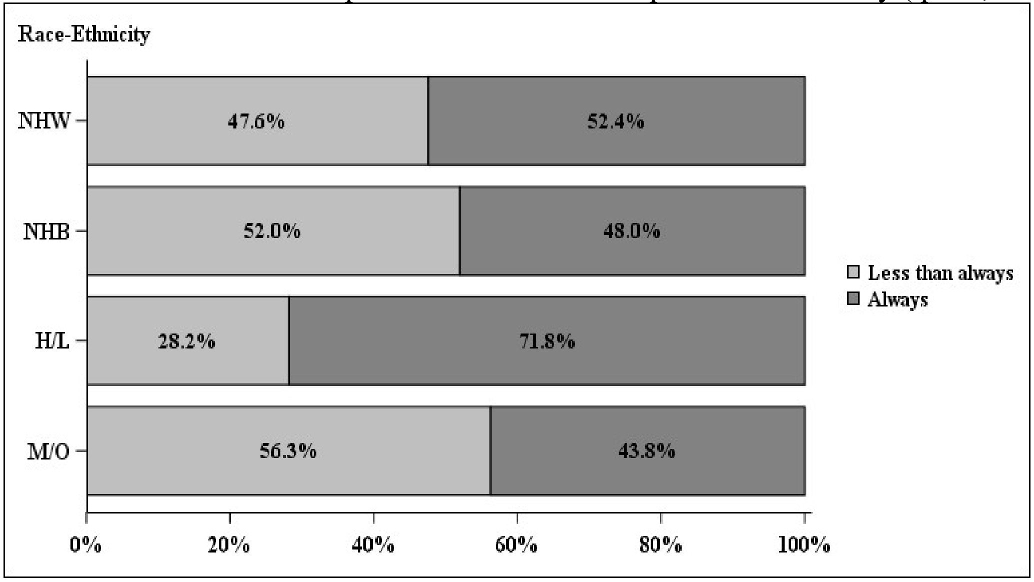
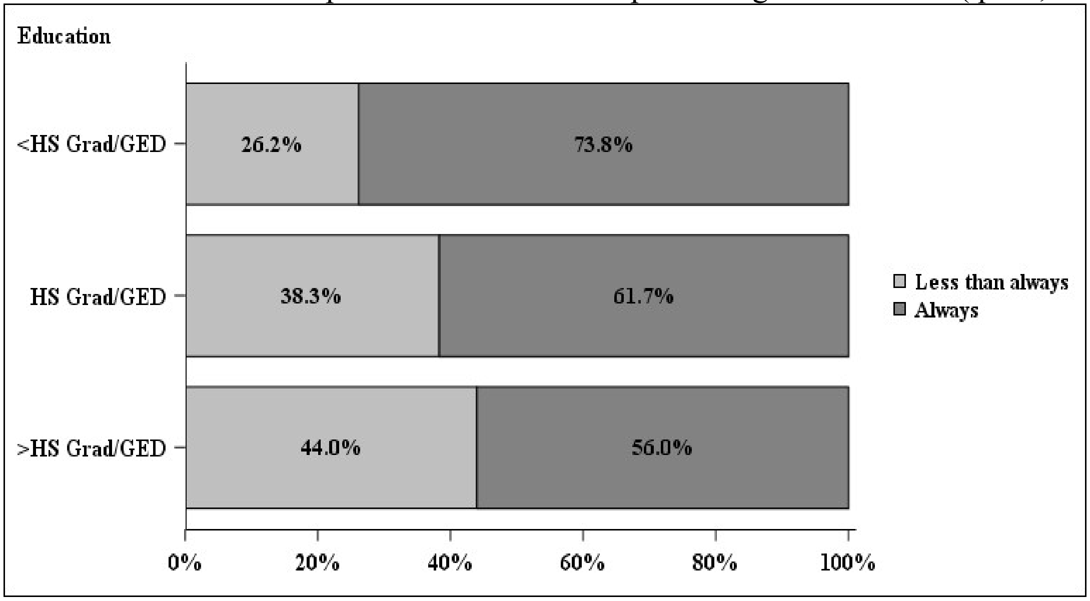


Figure R-43 shows variation in caregiver responses to q16B with caregiver education. While only 56.0% of caregivers with >HS Grad/GED got needed translation help, 73.8% of those with <HS Grad/GED always received this assistance.

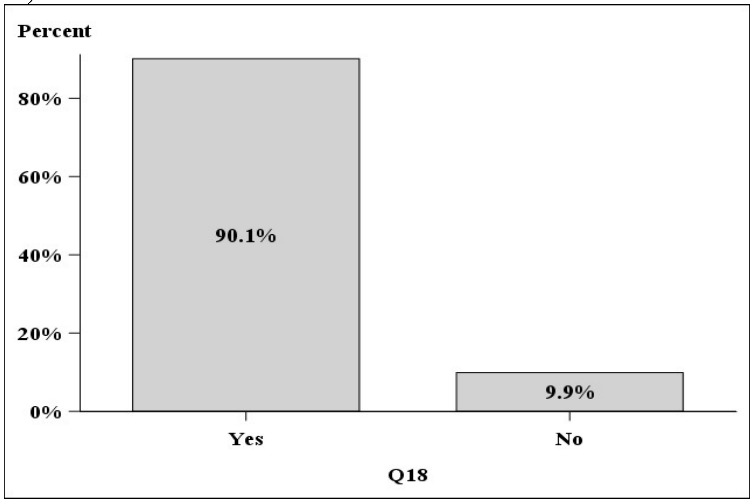
Figure R-43 Got needed interpretation/translation help vs. caregiver education (q16B; n=329)



Reminders about well-care check-ups or for shots or drops (q18; access)

Question 18 asked caregivers (who indicated that their child was ≤2 years old in q17) if they got reminders to bring the child in for a check-up or for shots or drops. Figure R-44 shows that 90.1% of caregivers had received a reminder in the previous 6 months. We found no statistically significant relationships between q18 responses and any of the demographic or contextual variables.

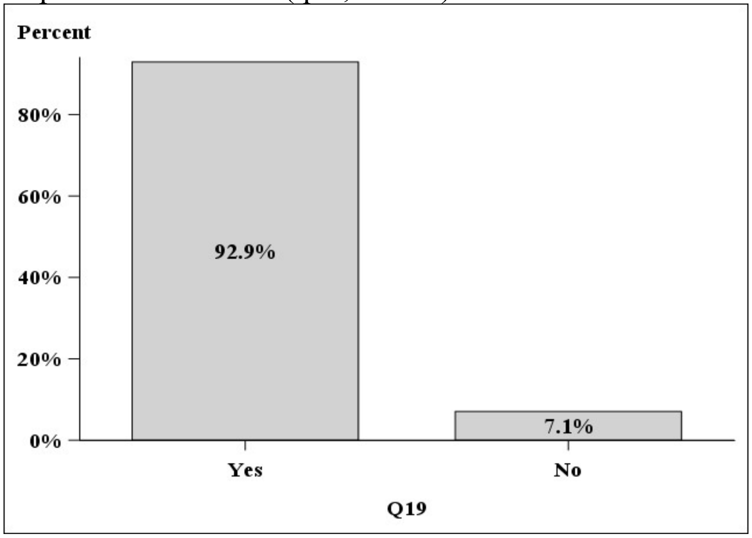
Figure R-44 Got reminders for check-ups or for shots or drops in the previous 6 months (q18; n=283)



Visited the doctor for a check-up or for shots or drops (q19; utilization)

Question 19 asked caregivers if they had taken the child (if ≤ 2 yo) to a doctor or other health provider for a check-up or for shots or drops. Figure R-45 indicates that 92.9% of children had been seen a provider for one of these services. We found no statistically significant relationships between q19 responses and any of the demographic or contextual variables.

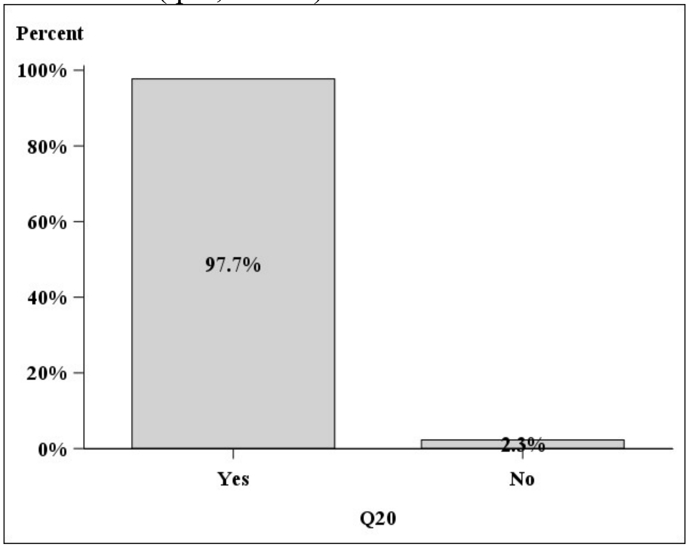
Figure R-45 Child went to a health provider for a check-up or for shots or drops in the previous 6 months (q19; n=283)



Timely availability of well-visit appointment (q20; access)

Question 20 asked caregivers who responded 'yes' to q19 if they got an appointment for the child's visit for a check-up, or for shots or drops, as soon as he or she needed it. Figure R-46 shows that 97.7% of caregivers got appointments for these services soon enough. We found no statistically significant relationships between q20 responses and any of the demographic or contextual variables.

Figure R-46 Got appointment for check-up, or for shots or drops as soon as needed in the previous 6 months (q20; n=263)



Needed health care provider to contact school or daycare (q22A; satisfaction)

Question 22A asked caregivers who indicated their child was enrolled in school or daycare (asked in q21), if they needed the child's doctors or other health providers to contact a school or daycare center about the child's health or health care in the previous 6 months. Figure R-47 indicates that 53.1% of caregivers needed the child's health providers to contact a school or daycare center.

Figure R-47 Needed health providers to contact a school or daycare center about health or health care in the previous 6 months (q22A; n=1,636)

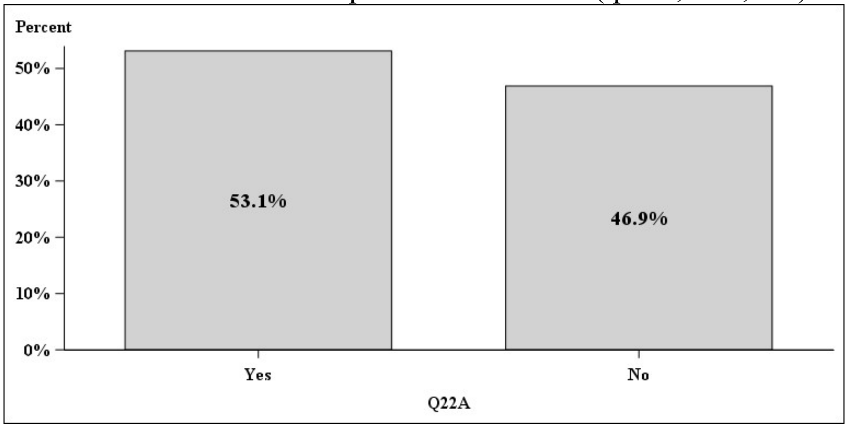


Figure R-48 illustrates the relationship between caregiver responses to q22A and age. Seventy-four point four percent (74.4%) of caregivers of 0-1 yo children needed the child's health providers to contact a school or daycare with a general trend downward as the child's age increased.

Figure R-48 Needed health providers to contact a school or daycare center about health or health care vs. age (q22A; n=1,636)

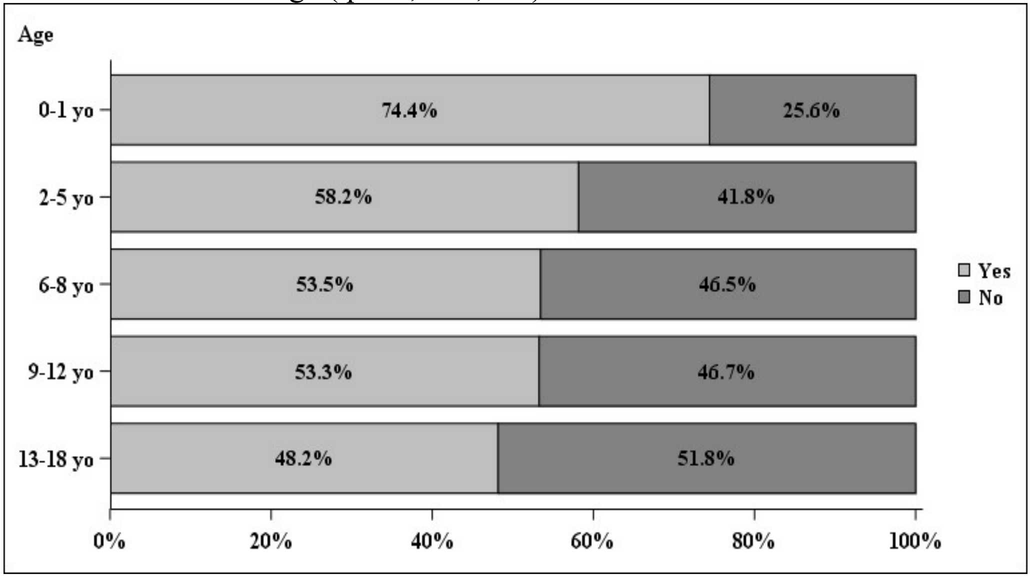


Figure R-49 shows the relationship between q22A responses and child race-ethnicity. Caregivers of Non-Hispanic Black (NHB) children had the greatest need for providers to contact a school/daycare at 60.3% while only 48.9% of caregivers of Non-Hispanic White (NHW) children had the same need.

Figure R-49 Needed health providers to contact a school or daycare center about health or health care vs. race-ethnicity (q22A; n=1,627)

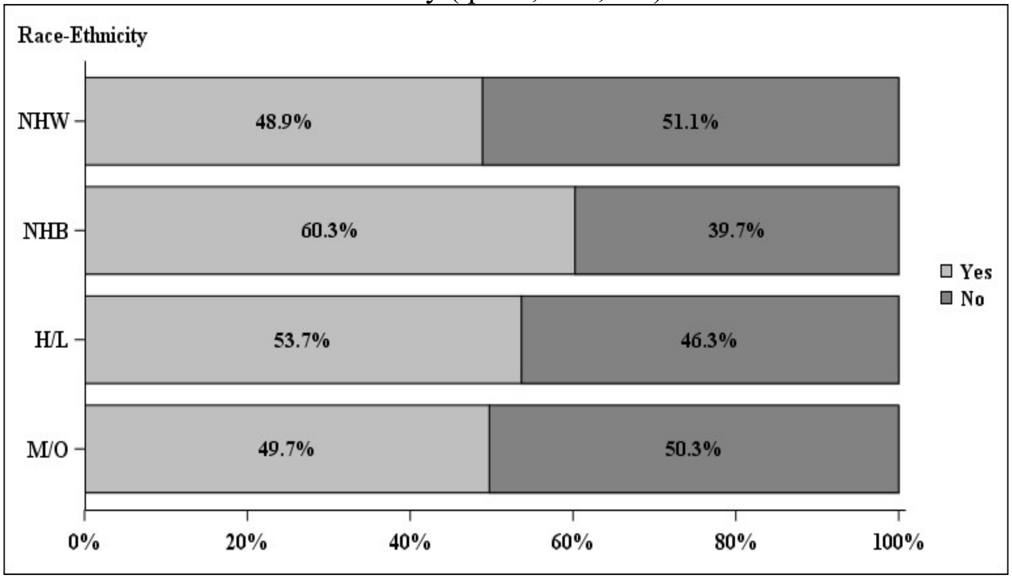
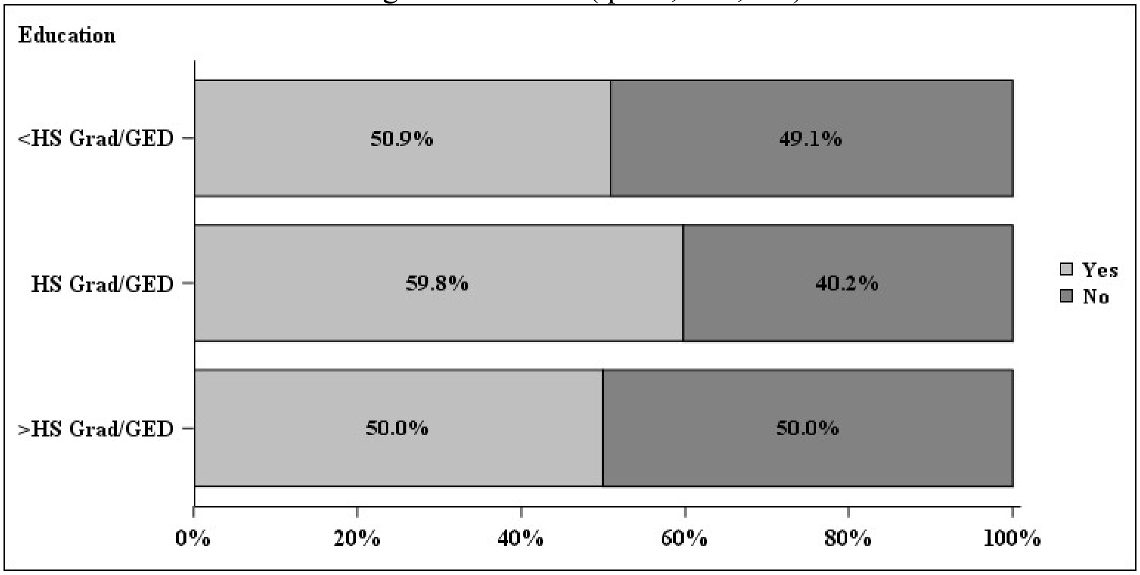


Figure R-50 shows the relationship between caregiver responses to q22A and caregiver education. Fifty-nine point eight five percent (59.8%) of caregivers with a HS Grad/GED needed health providers to contact a school/daycare.

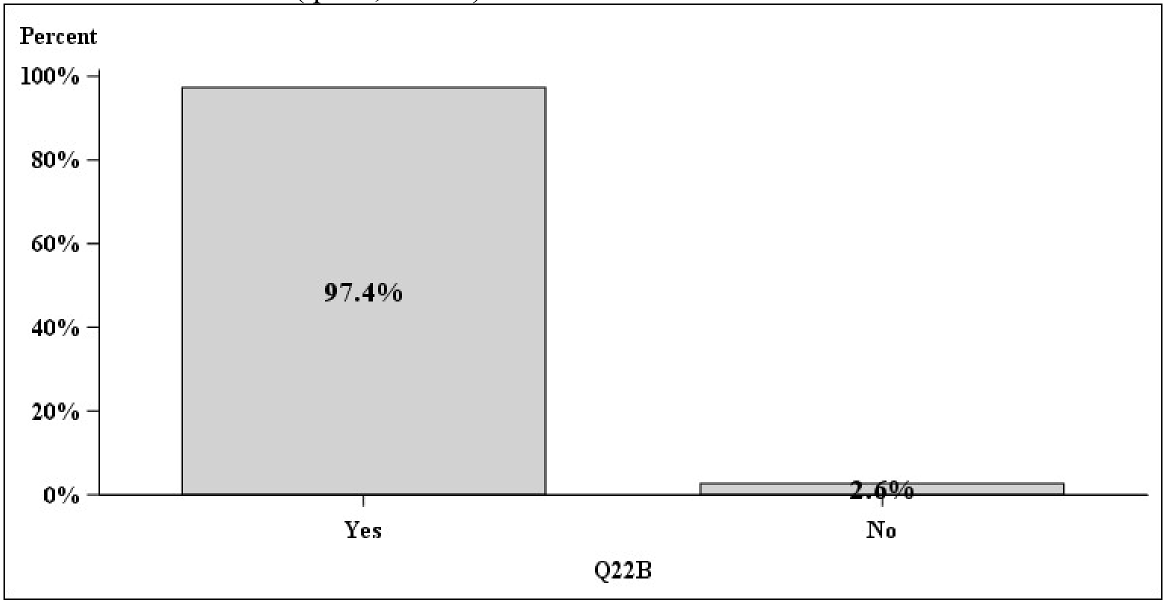
Figure R-50 Needed health providers to contact a school or daycare center about health or health care vs. caregiver education (q22A; n=1,617)



Provider contacted school or daycare when needed (q22b; satisfaction)

Question 22B asked caregivers who responded ‘yes’ to q22A if health providers called a school or daycare center as needed. Figure R-51 shows that 97.4% of caregivers responded that they got help. We found no statistically significant relationships between q22B responses and any of the demographic or contextual variables.

Figure R-51 Health providers called school or daycare center as needed in the previous 6 months (q22B; n=869)



3.3 Meeting Special Health Care Needs (q23-q30)

Need for special medical equipment or devices (q23; health status)

Question 23 asked caregivers if they tried to get any special medical equipment or devices for the child in the previous 6 months. Figure R-52 shows that only 8.4% of children needed special medical equipment or devices.

Figure R-52 Tried to get any special medical equipment or devices in the previous 6 months (q23; n=2,276)

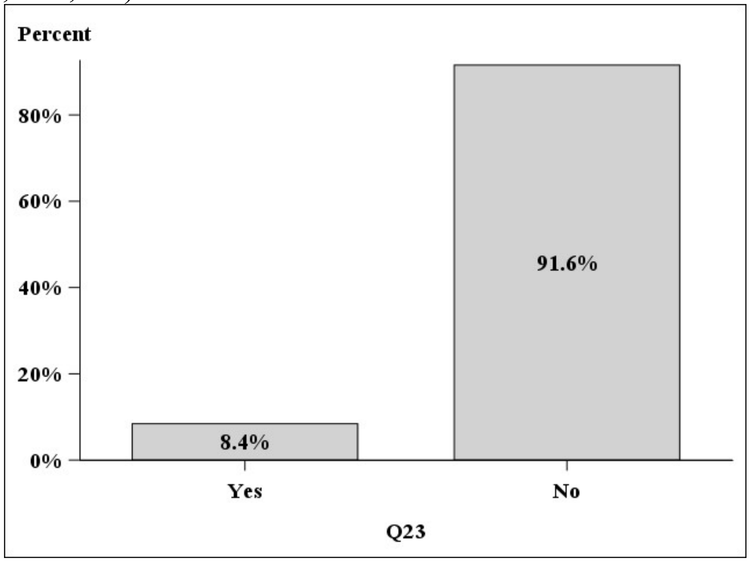


Figure R-53 depicts the relationship between caregiver responses to q23 and race-ethnicity. Twelve point five percent (12.5%) of Non-Hispanic black (NHB) children needed special medical equipment compared to only 6.5% of Hispanic/Latino (H/L) children.

Figure R-53 Tried to get special medical equipment or devices vs. race-ethnicity (q23; n=2,265)

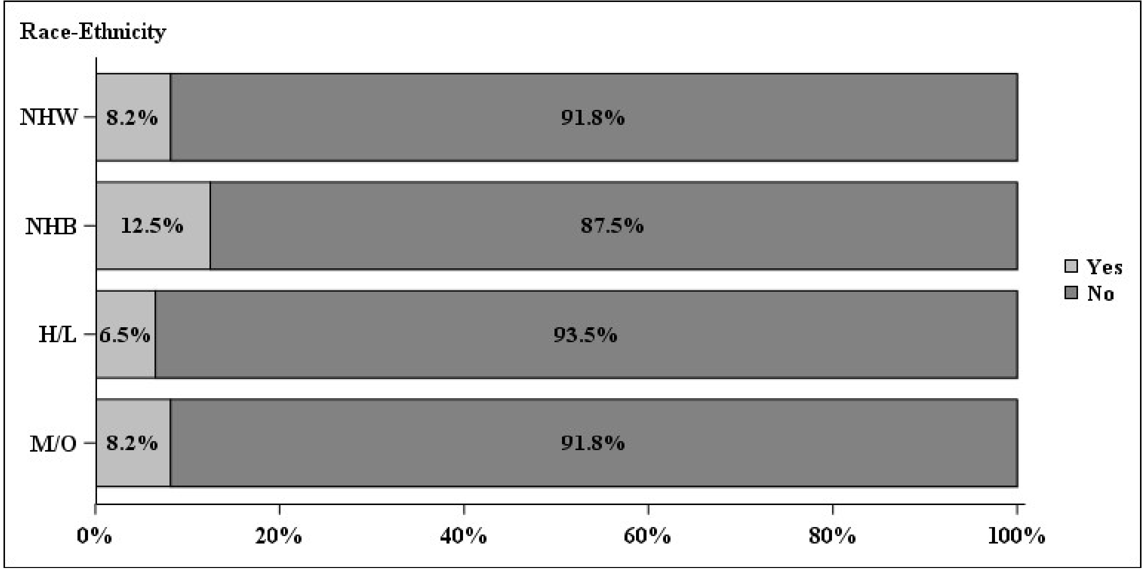
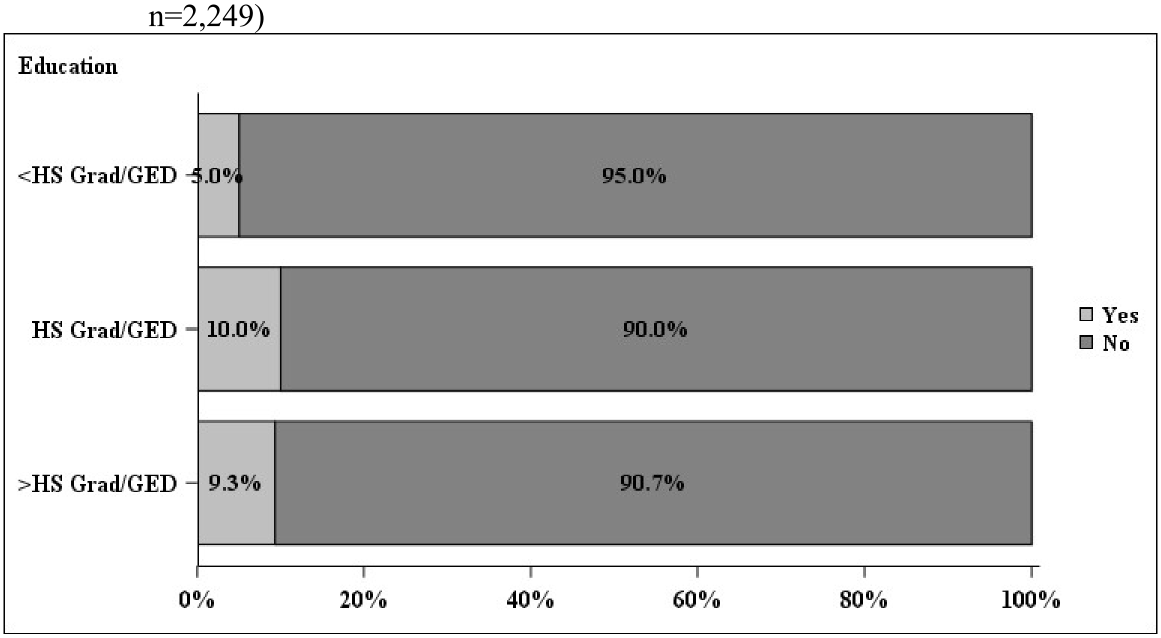


Figure R-54 shows how caregiver responses to q23 varied with caregiver education. Only 5.0% of caregivers with <HS Grad/GED needed special medical equipment for their child.

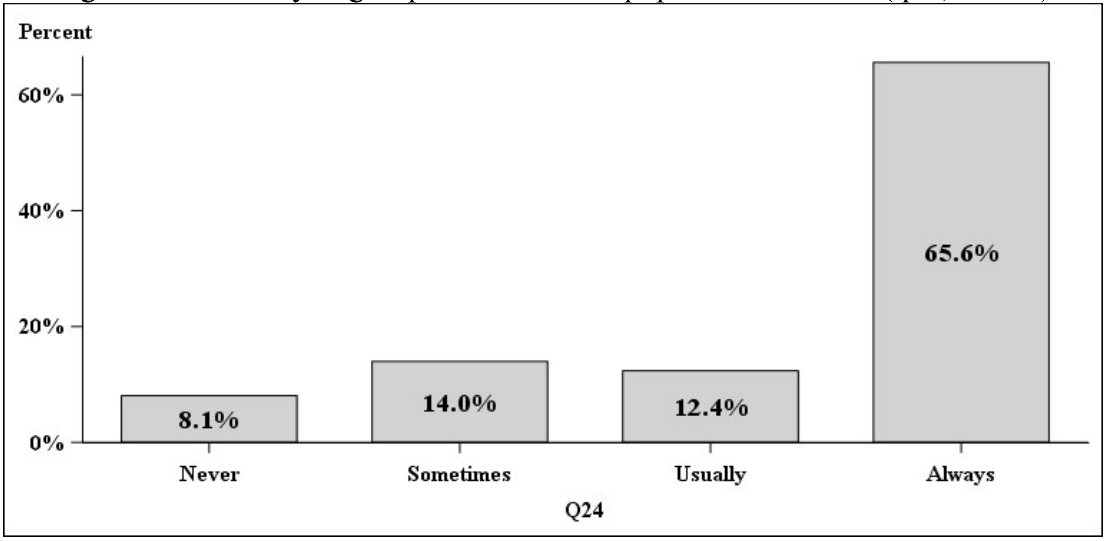
Figure R-54 Tried to get special medical equipment or devices vs. caregiver's education (q23; n=2,249)



Ease of getting special equipment or devices (q24; access)

Question 24 asked caregivers who responded 'yes' to q23 how often it was easy to get special medical equipment or devices for the child. Figure R-55 indicates that 65.6% of caregivers found it always easy, 12.4% said it was usually easy, 14.0% said it was sometimes easy, and 8.1% said it was never easy to get the special medical equipment. We found no statistically significant relationships between q24 responses and any of the demographic or contextual variables.

Figure R-55 Easy to get special medical equipment or devices (q24; n=186)



Assistance from provider or health plan to get special equipment or devices (q25; access)

Question 25 asked caregivers who responded 'yes' to q23 if anyone from the child's health plan or provider's office helped get special medical equipment for the child. Figure R-56 illustrates that 83.1% of children received help to get the special medical equipment from the provider or health plan in the previous 6 months.

Figure R-56 Someone from the health plan, MD office, or clinic helped get special medical equipment or devices in the previous 6 months (q25; n=189)

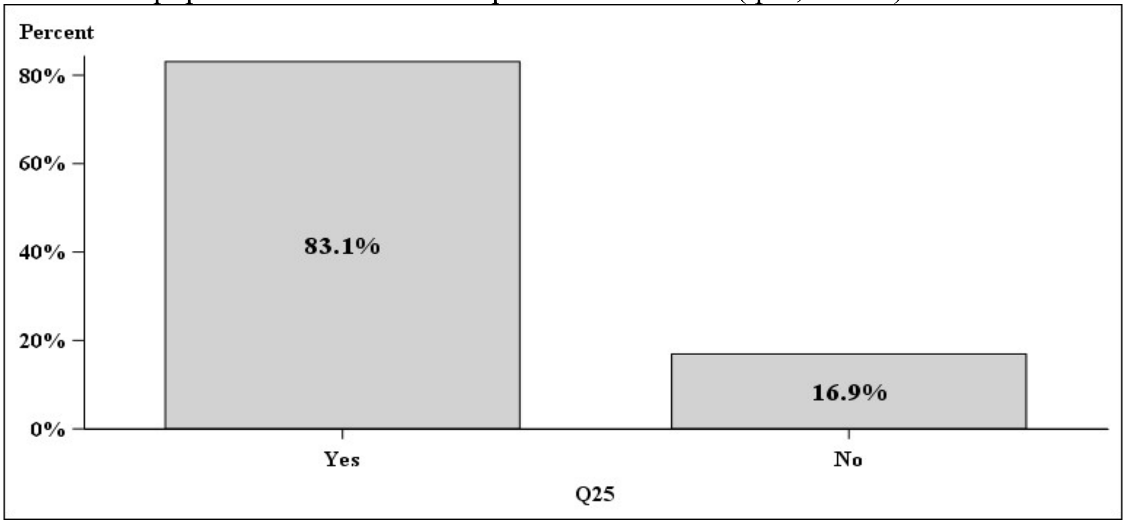


Figure R-57 shows variation in caregiver responses to q25 with age. Only 58.3% of caregivers of 0-1 yo children received help from the health plan to get special medical equipment.

Figure R-57 Someone from the health plan, MD office, or clinic helped get special medical equipment or devices vs. age (q25; n=189)

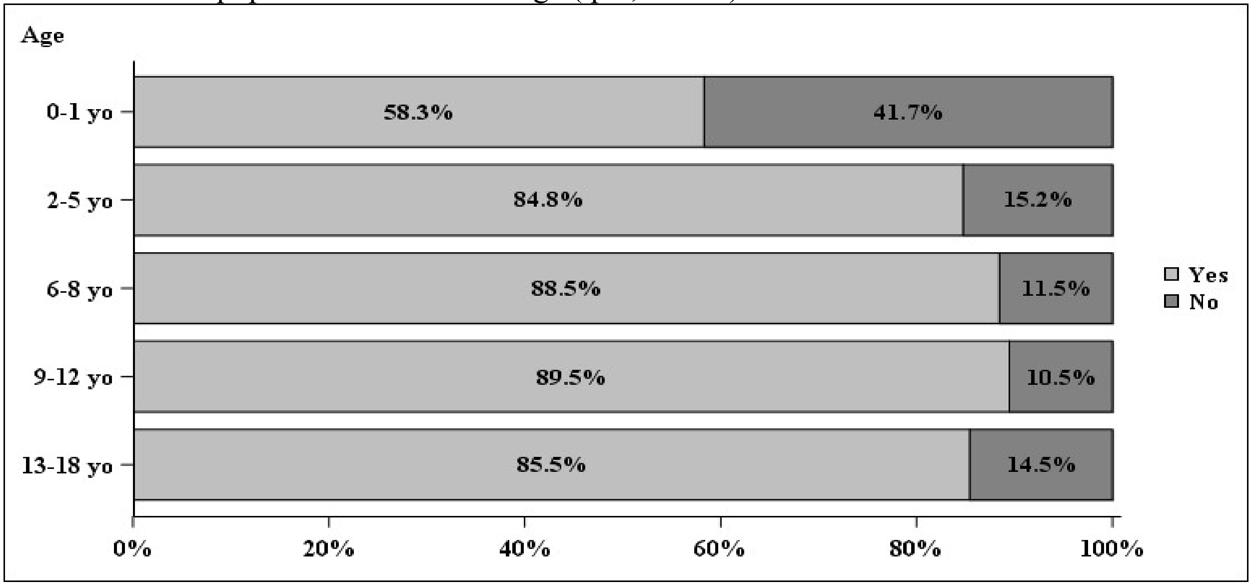


Figure R-58 describes the relationship observed between q25 responses and race-ethnicity. Caregivers of Non-Hispanic White (NHW) and NHB children received help to get special medical equipment at 91.5% and 87.5%, respectively. Conversely, only 71.7% of caregivers of H/L children reported the same.

Figure R-58 Someone from the health plan, MD office, or clinic helped get special medical equipment or devices vs. race-ethnicity (q25; n=189)

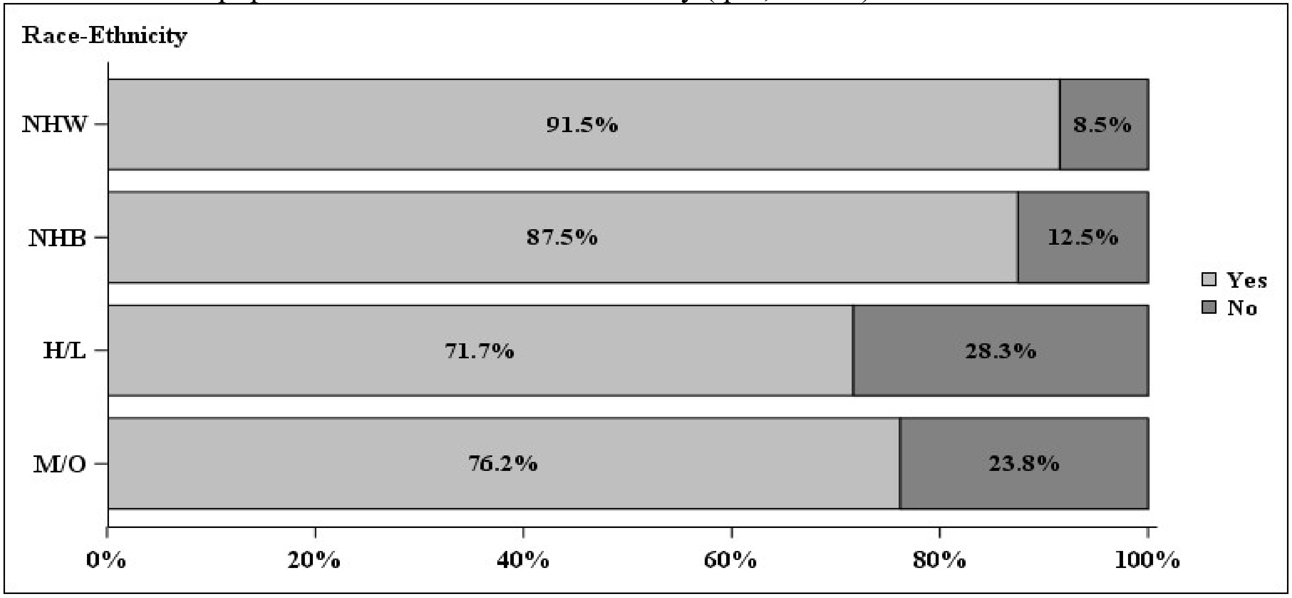
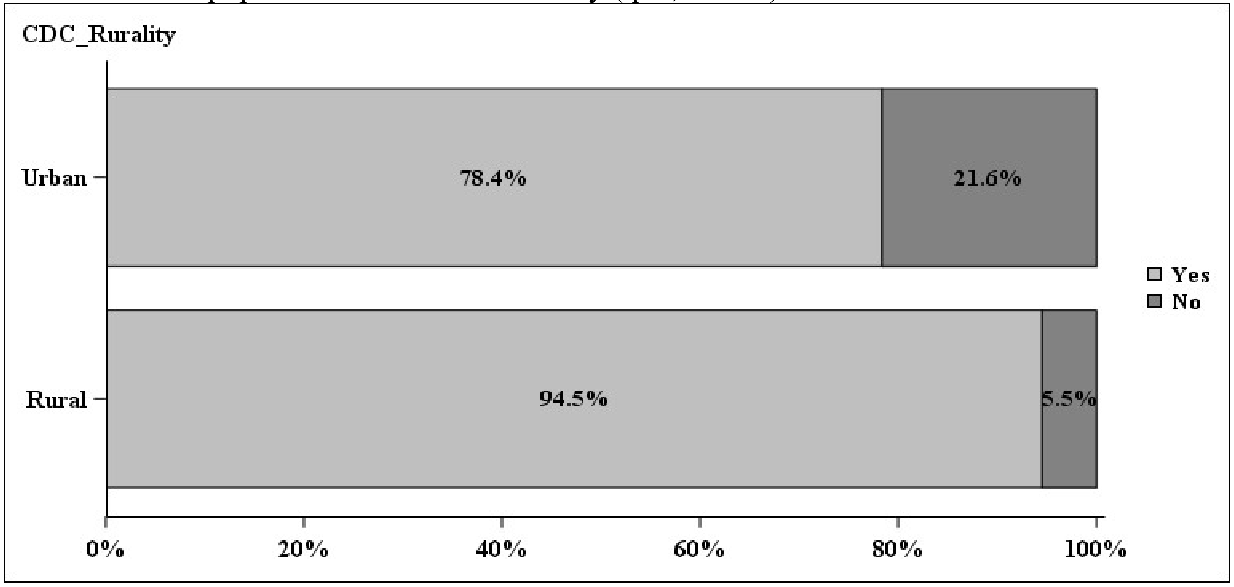


Figure R-59 shows how responses to q25 varied with rurality of the child's residence. Significantly more caregivers of children in rural counties (94.5%) received help to get special medical equipment than those in rural counties (78.4%).

Figure R-59 Someone from the health plan, MD office, or clinic helped get special medical equipment or devices vs. rurality (q25; n=189)



Need for special therapy (q26; health status)

Question 26 asked caregivers if they tried to get special therapy such as physical, occupational, or speech therapy for the child in the previous 6 months. Figure R-60 shows that 11.5% of children needed some form of special therapy.

Figure R-60 Tried to get special therapy such as physical, occupational or speech in the previous 6 months (q26; n=2,273).

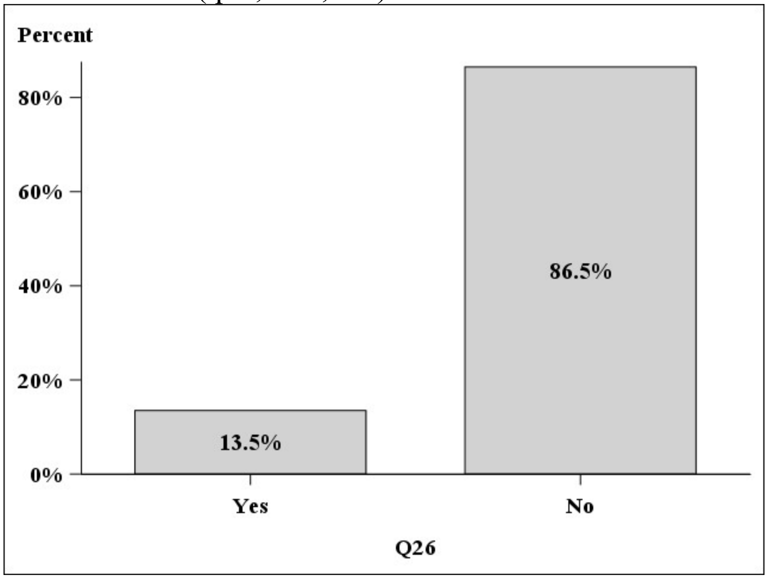
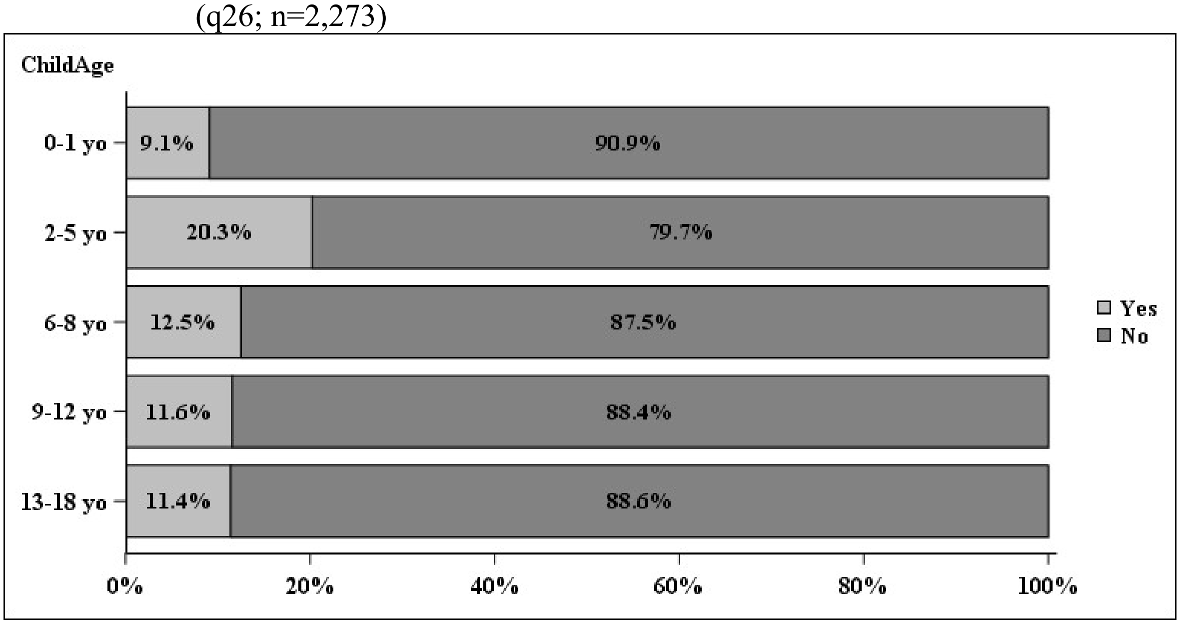


Figure R-61 shows how responses to q26 varied with the age of the child. Twenty point three percent (20.3%) of caregivers of 2-5 yo needed special therapy while only 9.1% of caregivers of 0-1 yo needed the same.

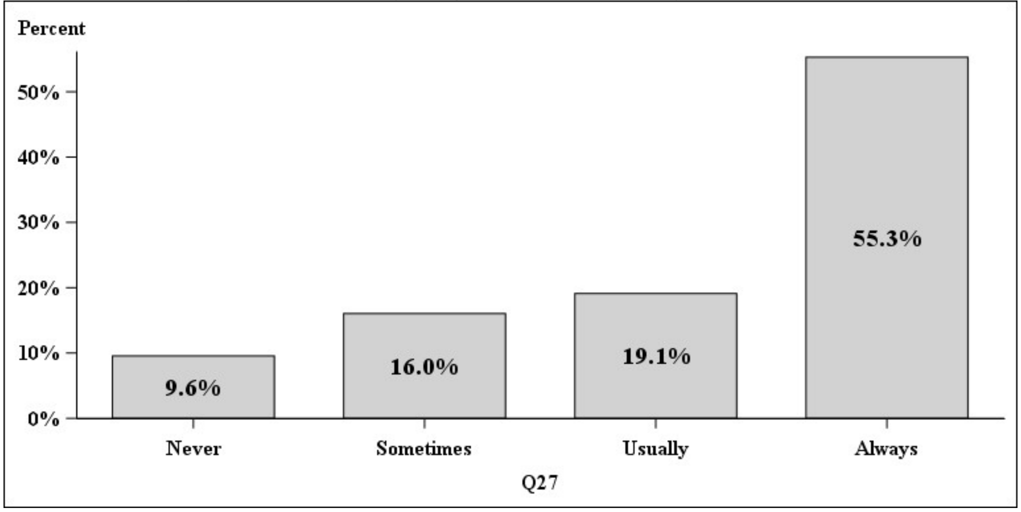
Figure R-61 Tried to get special therapy such as physical, occupational or speech vs. age (q26; n=2,273)



Ease of getting special therapy (q27; access)

Question 27 asked caregivers who responded ‘yes’ to q26 if it was easy to get the needed special therapy for the child. Figure R-62 indicates that 9.6% found it never easy, 16.0% found it sometimes easy, while 19.1% and 55.3% found it usually and always easy, respectively. We found no statistically significant relationships between q27 responses and any of the demographic or contextual variables.

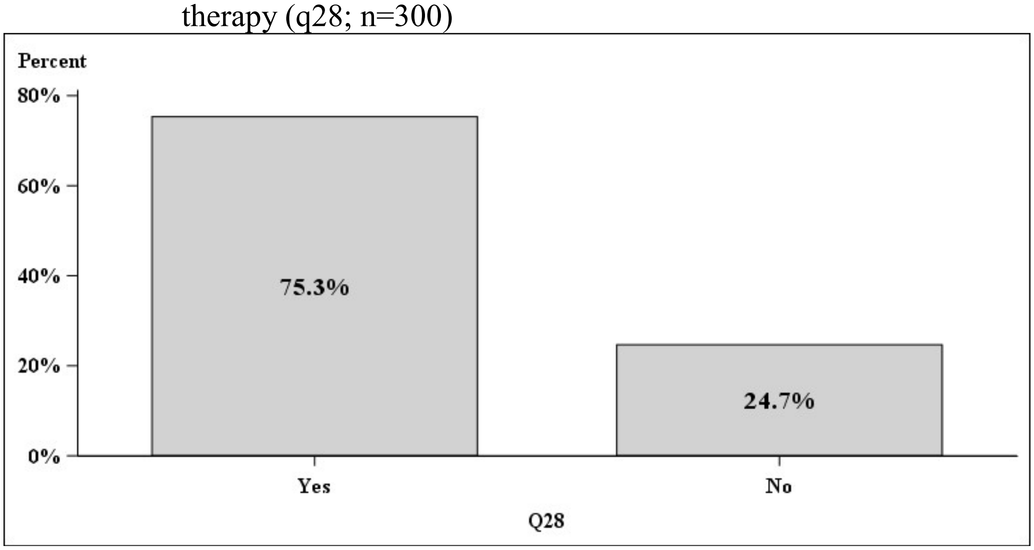
Figure R-62 Easy to get special therapy (q27; n=293)



Assistance from provider or health plan to get special therapy (q28; access)

Question 28 asked caregivers who responded ‘yes’ to q26 if someone from the health plan, MD office, or clinic helped get special therapy for the child. Figure R-63 shows that 75.3% of children received help to get special therapy from the provider or health plan in the previous 6 months. We found no statistically significant relationships between q28 responses and any of the demographic or contextual variables.

Figure R-63 Someone from the health plan, MD office, or clinic helped get special therapy (q28; n=300)



Utilizing more than one type of health care provider or service (q29; utilization)

Question 29 asked caregivers if they tried to get care from more than one kind of health care provider or used more than one kind of health care service for their child in the previous 6 months. Figure R-64 indicates that 27.6% of children received care from multiple providers or multiple types of health care services.

Figure R-64 Got care from more than one kind of health care provider or used more than one kind of health care service (q29; n=2,246)

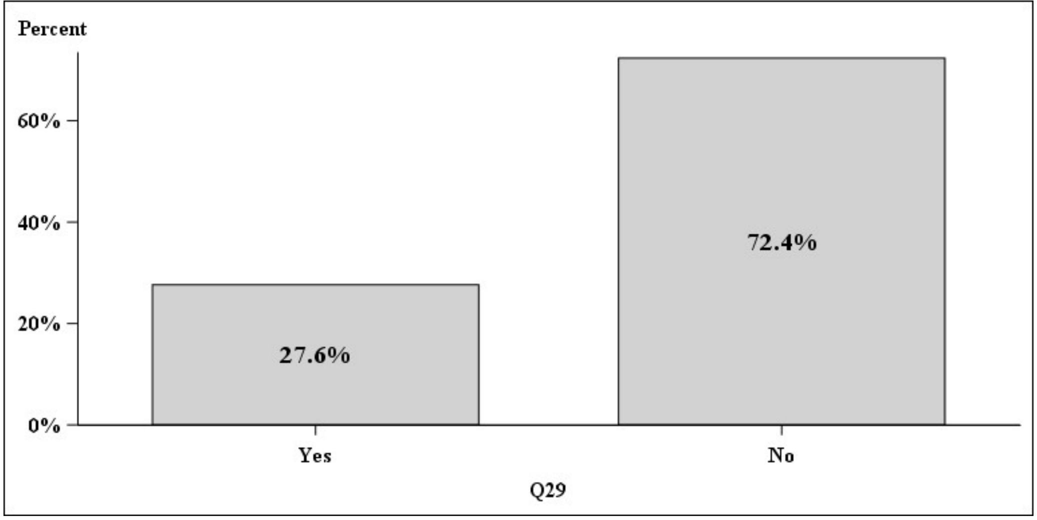


Figure R-65 shows the relationship between caregiver responses to q29 and race-ethnicity. Thirty-six point two percent (36.2%) of caregivers of NHW children utilized multiple health care providers or service types and only 18.8% of H/L children utilized the same.

Figure R-65 Got care from more than one kind of health care provider or used more than one kind of health care service vs. race-ethnicity (q29; n=2,235)

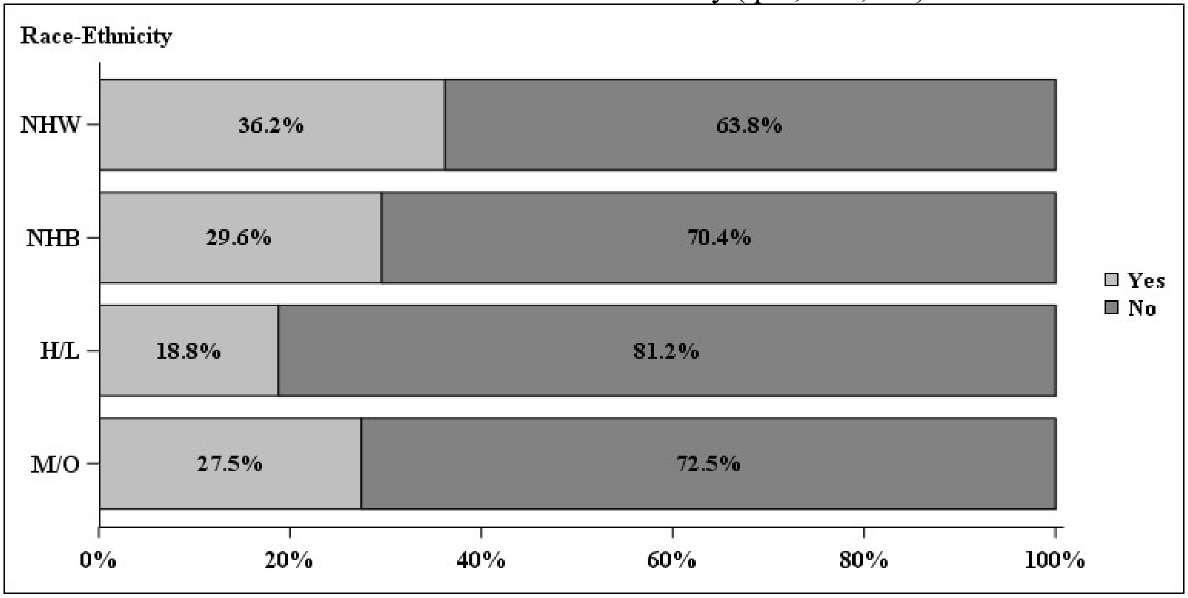
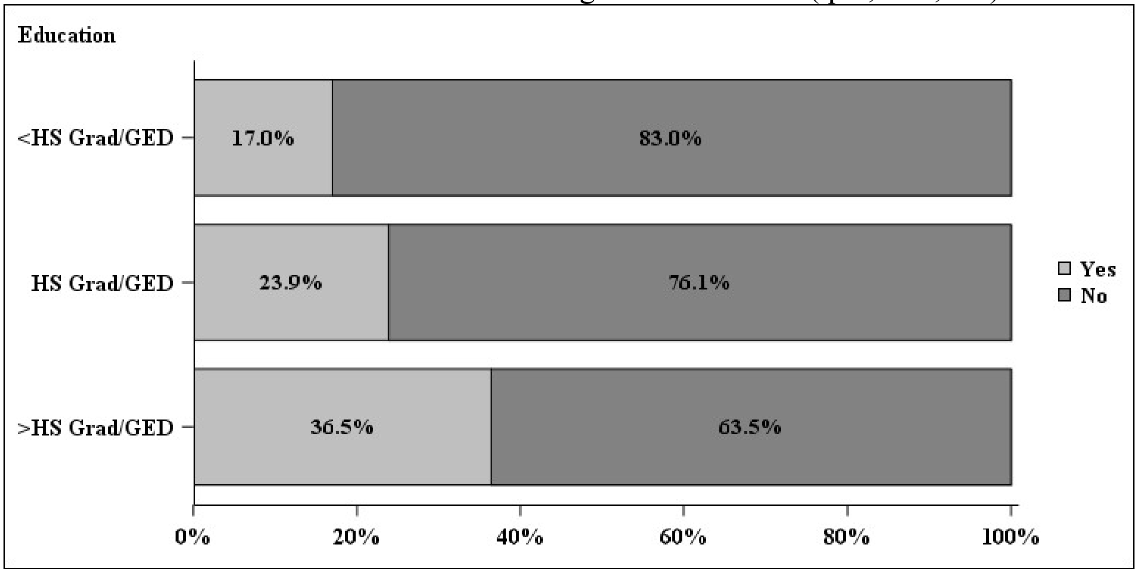


Figure R-66 shows variation in caregiver responses to q29 with caregiver's education. Thirty-six point five percent (36.5%) of caregivers with >HS Grad/GED got care from multiple providers or service types while only 17% of caregivers with <HS Grad/GED got the same.

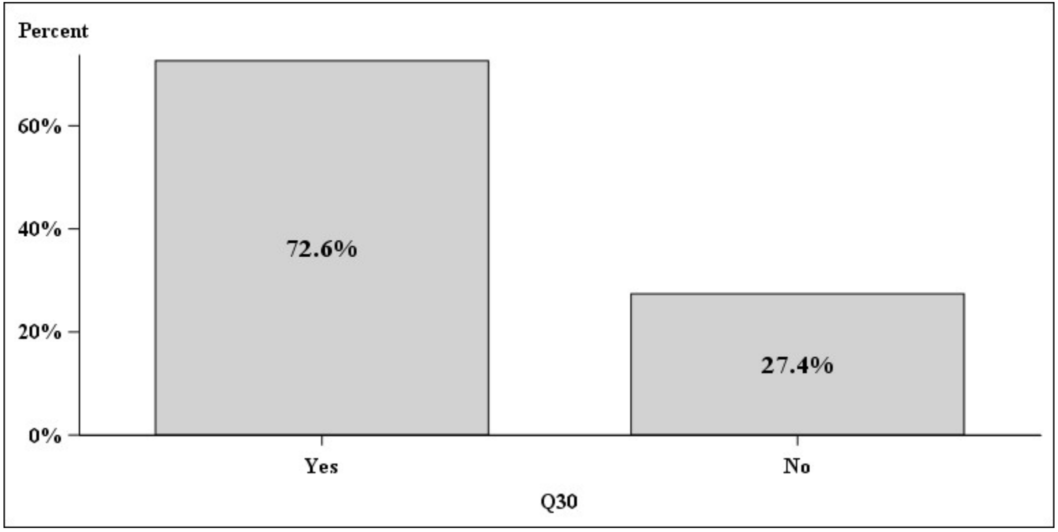
Figure R-66 Got care from more than one kind of health care provider or used more than one kind of health care service vs. caregiver's education (q29; n=2,219)



Help from doctor's office or health plan to coordinate care (q30; access)

Question 30 asked caregivers who responded 'yes' to q29 if someone from the health plan, MD office or clinic helped coordinate care among different providers. Figure R-67 illustrates that 72.6% of children received help to coordinate care among different providers. We found no statistically significant relationships between q30 responses and any of the demographic or contextual variables.

Figure R-67 Someone from the health plan, MD office, or clinic helped coordinate care among different providers (q30; n=606)



3.4 The Child's Personal Health Provider (q31-q50)

A personal health provider is the doctor or nurse that the child would see if he or she needs a check-up or gets sick or hurt. This can be a general physician, a specialist physician, a nurse practitioner, or a physician assistant.

One person regarded as personal health provider (q31; access)

Question 31 asked caregivers if there is one person that he or she regards as the child's personal health provider (PHP). If the child had more than one personal doctor or nurse, the caregiver was asked to answer regarding the caregiver the child saw most often. Figure R-68 shows that 76.6% of caregivers had someone they regarded as the child's PHP.

Figure R-68 Child has a personal health provider (q31; n=2,236)

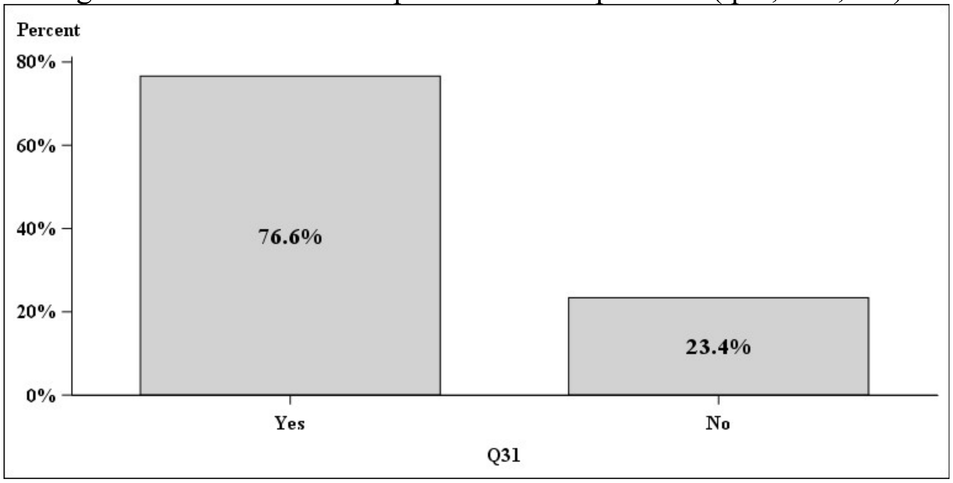


Figure R-69 shows how responses to q31 varied with race-ethnicity. Eighty-seven point eight percent (87.8%) of Non-Hispanic White (NHW) and 81.9% of Non-Hispanic Black (NHB) children had a personal health provider while only 62.5% of Hispanic/Latino (H/L) children were reported to have a PHP.

Figure R-69 Child has a personal health provider vs. race-ethnicity (q31; n=2,225)

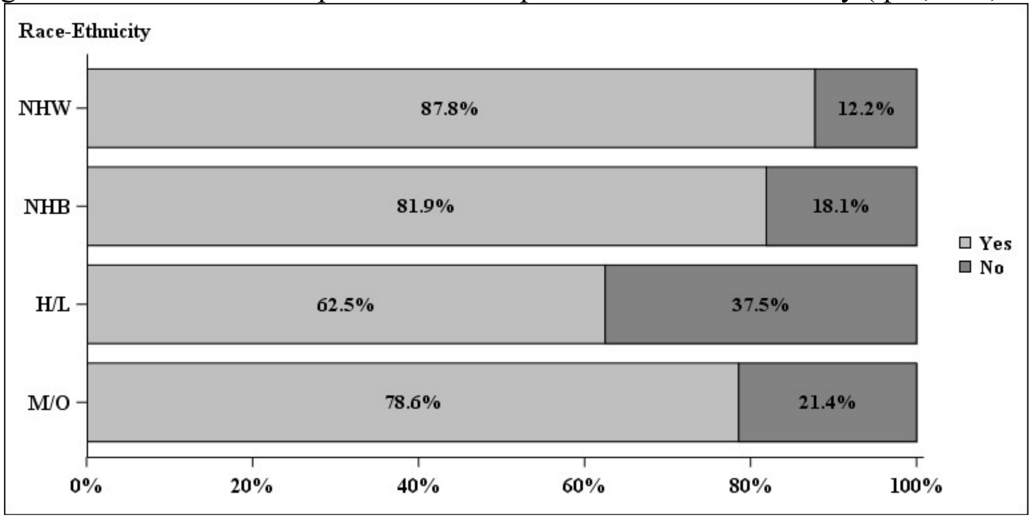


Figure R-70 describes variation in q31 responses across caregiver education. Eighty-three point three percent (83.3%) of caregivers with >HS Grad/GED reported their child had a personal health provider while only 65.3% of those with <HS Grad/GED reported the same.

Figure R-70 Child has a personal health provider vs. caregiver's education (q31; n=2,210)

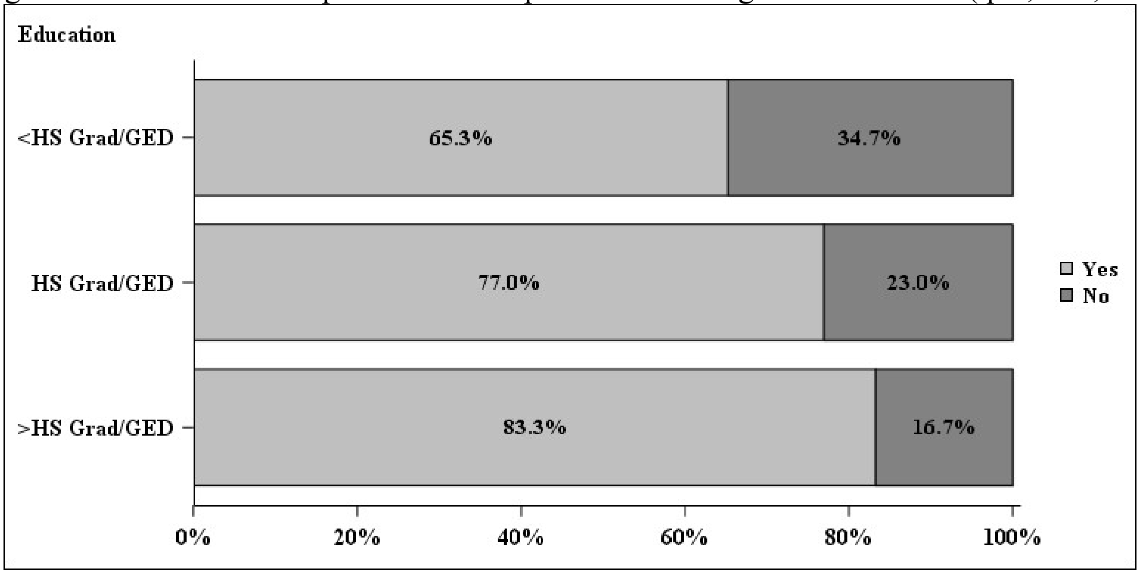


Figure R-71 show how responses to q31 varied with CCNC network. Eighty-six point one percent (86.1%) of children from Carolina Community Health Partnership (1010) and 85.8% of children from Partnership for Community Care (1012) had personal health providers. Conversely, only 66.7% of children from Community Care of Wake/Johnston Counties (1011) reported the same.

Figure R-71 Child has a personal health provider vs. CCNC Network (q31; n=2,236)

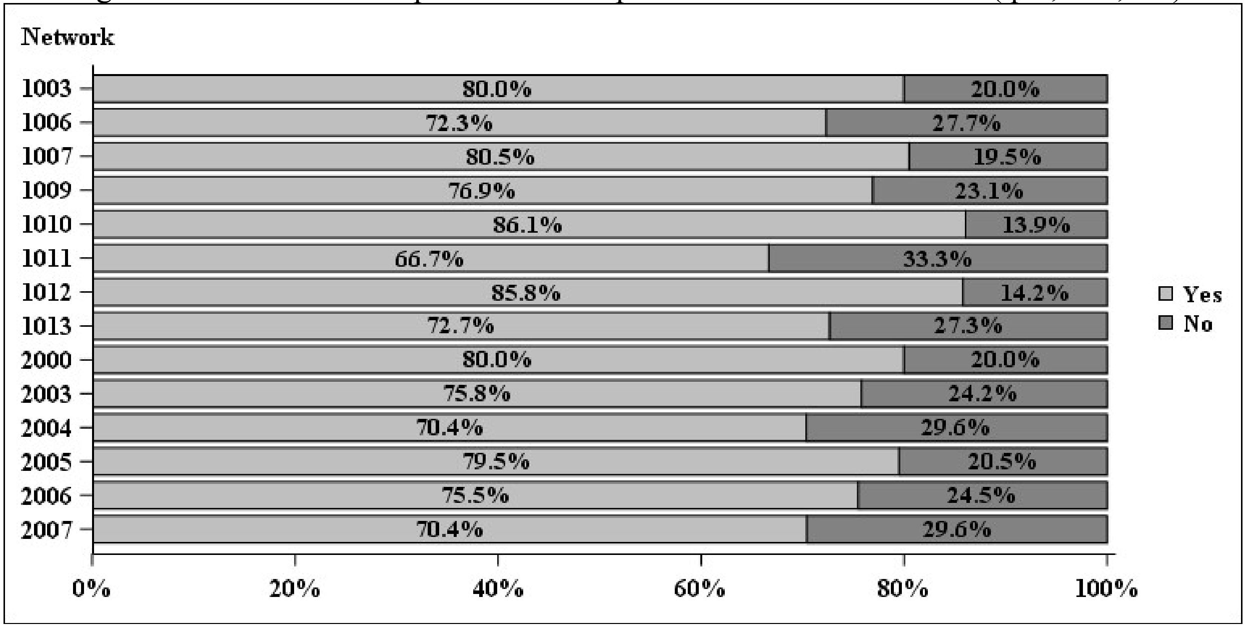
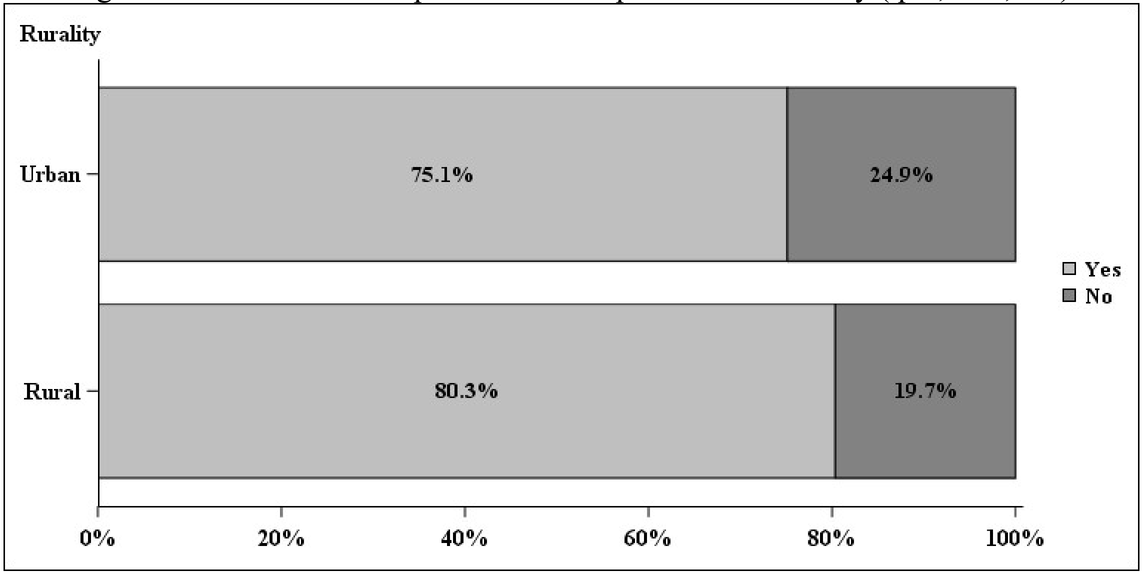


Figure R-72 shows how responses to q31 varied with rurality. Eighty point three percent (80.3%) of children from urban counties had personal health providers. Conversely, only 75.1% of children from rural counties reported the same.

Figure R-72 Child has a personal health provider vs. rurality (q31; n=2,236)



Number of visits to personal health provider (q32; utilization)

Question 32 asked caregivers how many times the child visited the personal health provider in the previous 6 months. Figure R-73 shows that 12.3% of children had 4 or more visits, 38.2% had 2-3 visits, 32.6% had 1 visit, and 17.0% had no visits at all to the personal health provider.

Figure R-73 Number of visits to personal health provider (q32; n=1,669)

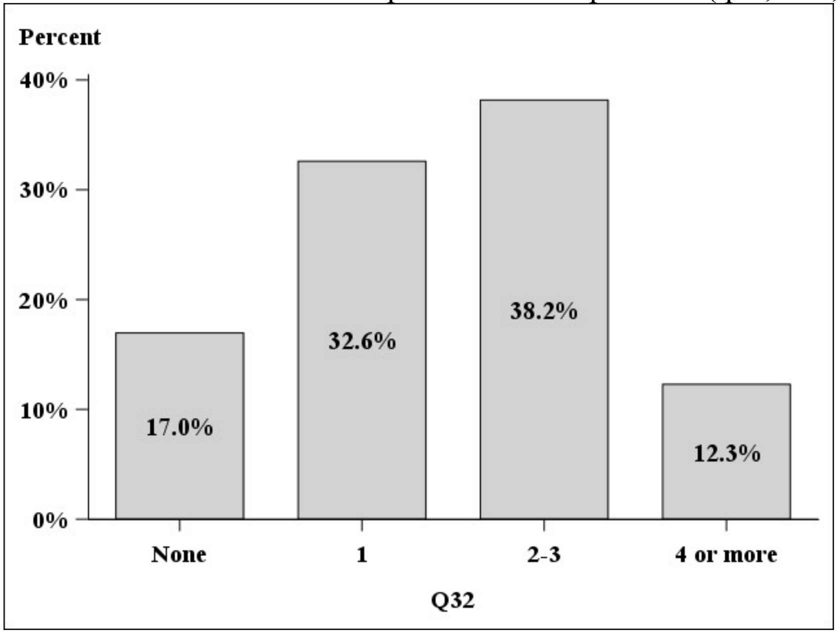


Figure R-74 shows how responses to q32 varied with the age of the child. In addition to having generally the highest number of visits to a PHP, 26.3% of children 0-1 yo had 4 or more visits to a personal health provider while 20.9% of children 13-18 yo had no visits at all.

Figure R-74 Number of visits to personal health provider vs. age (q32; n=1,669)

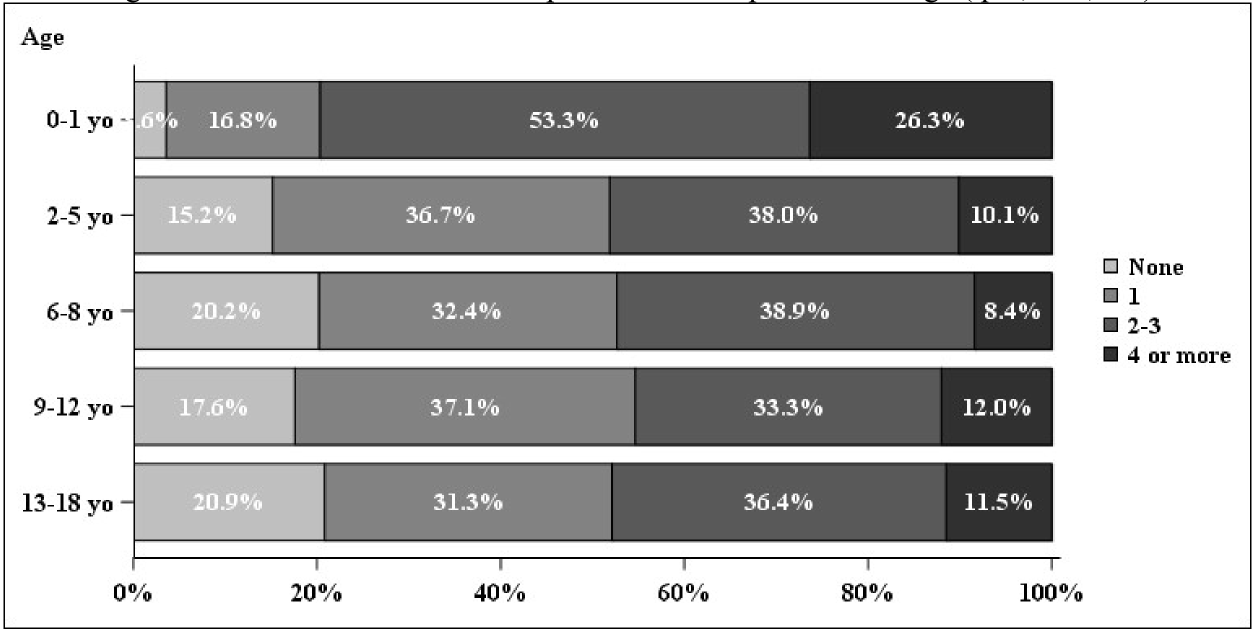


Figure R-75 shows how responses to q32 varied with race-ethnicity. While 15.4% of NHW children had 4 or more visits to a personal health provider, NHB children had the lowest proportion (12.3%) with no PHP visits.

Figure R-75 Number of visits to personal health provider vs. race-ethnicity (q32; n=1,661)

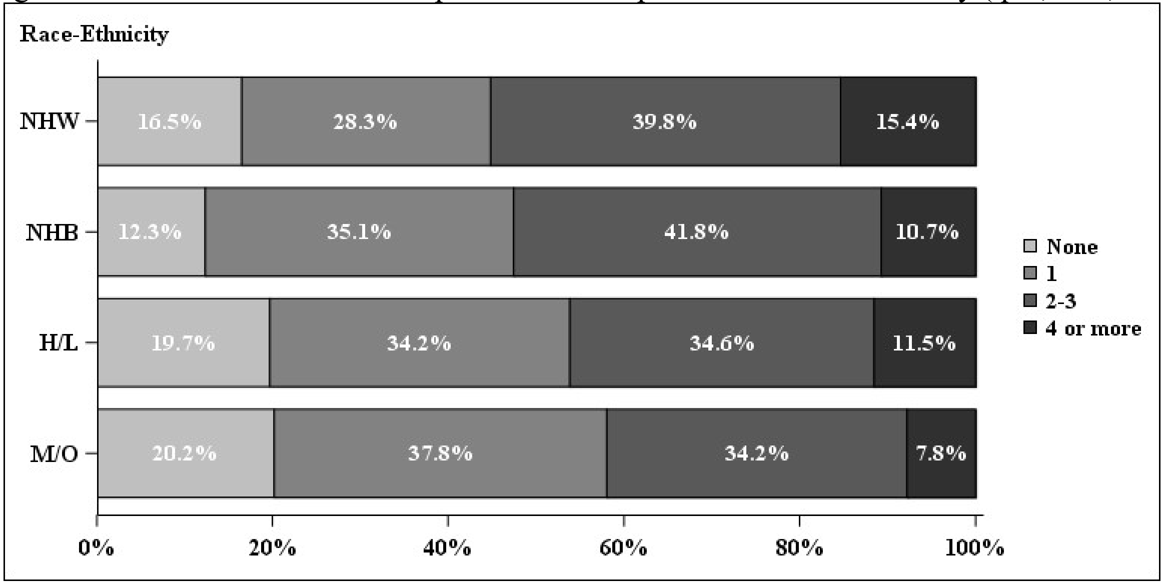


Figure R-76 shows variation in q32 responses with caregiver education. Caregivers with <HS Grad/GED generally reported the fewest visits for their child to a PHP with 22.8% of this group reporting no visits at all.

Figure R-76 Number of visits to personal health provider vs. caregiver education (q32; n=1,653)

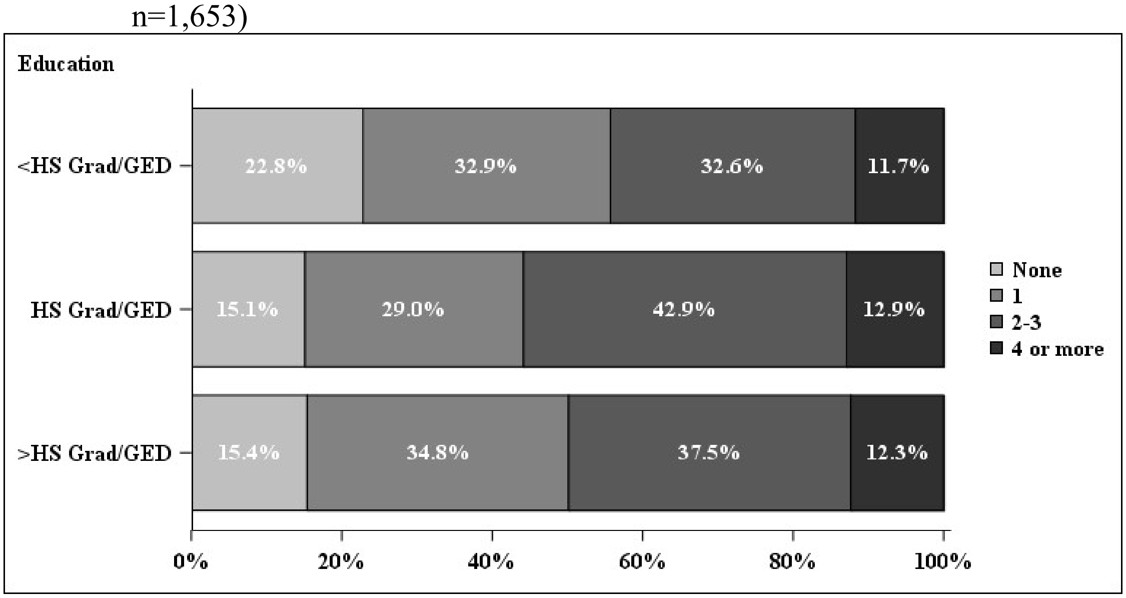
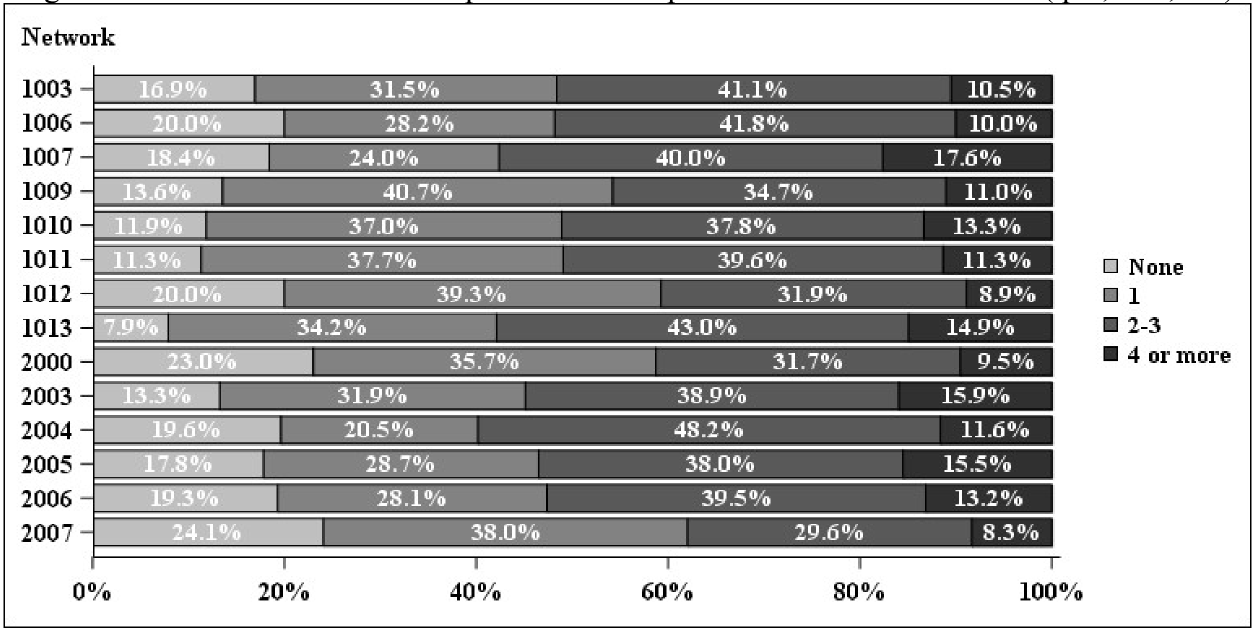


Figure R-77 shows how responses to q32 varied with CCNC network. Carolina Collaborative Community Care (1013) generally had the most visits to a PHP with only 7.9% from this network reporting no visits while 17.6% reported 4 or more. Northern Piedmont Community Care (2007) reported the generally fewest PHP visits with 24.1% reporting none.

Figure R-77 Number of visits to personal health provider vs. CCNC Network (q32; n=1,669)



Personal health provider's explanations were easy to understand (q33; satisfaction)

Question 33 asked caregivers who responded 'yes' to q31 how often in the previous 6 months the personal health provider explained things in a way that was easy to understand. Figure R-78 indicates that 87.4% of personal health providers always explained things in a way that was easy to understand for the caregiver, while 8.4%, 3.2% and 1.1% explained things in a way that was easy to understand usually, sometimes, and never, respectively.

Figure R-78 Personal health provider explained things in a way that was easy to understand (q33; n=1,419)

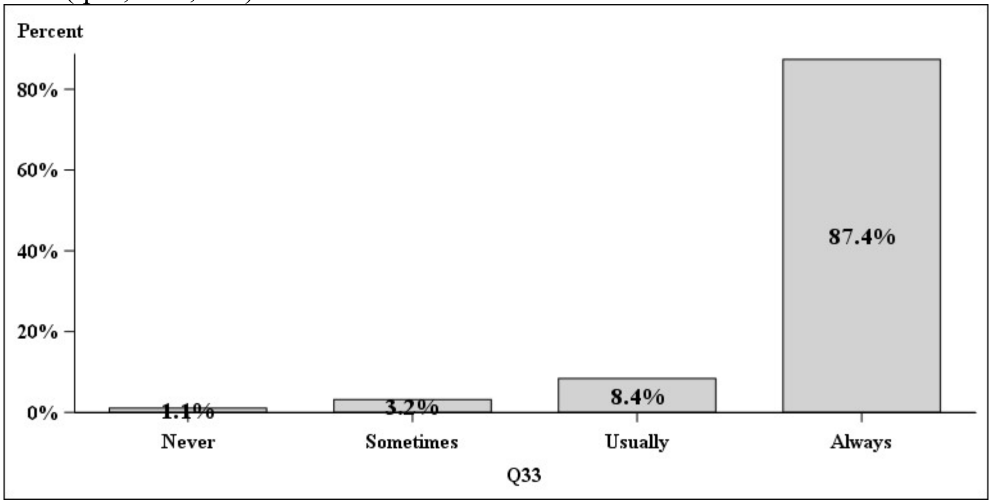


Figure R-79 indicates the relationship between caregiver responses to q33 and race-ethnicity. Ninety-three point four percent (93.4%) of personal health providers of NHB children always explained things in a way that was easy to understand while only 20.9% of personal health providers of H/L children always did the same.

Figure R-79 Personal health provider explained things in a way that was easy to understand vs. race-ethnicity (q33; n=1,413)

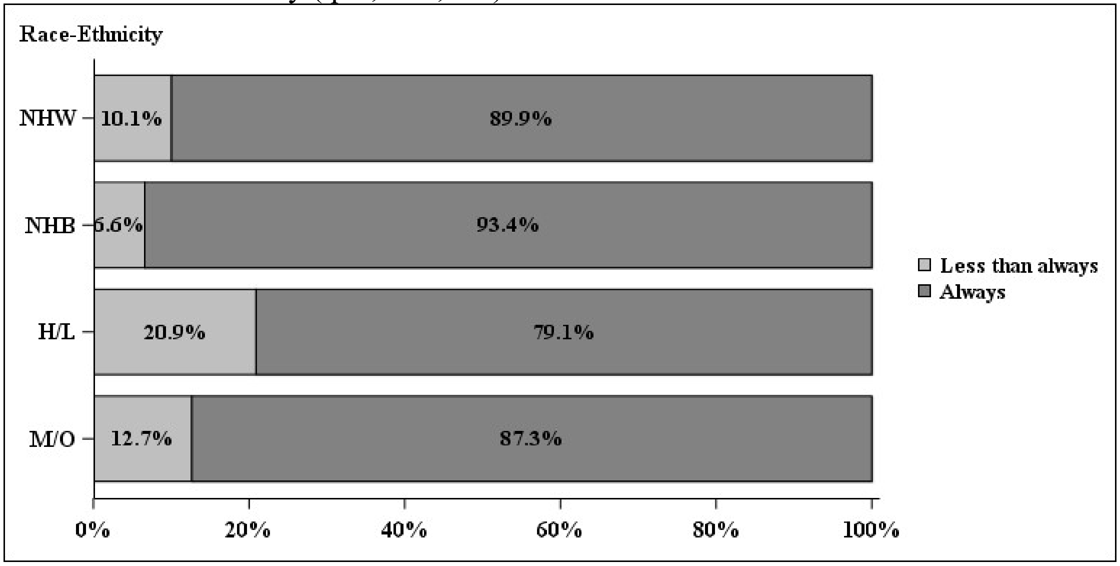


Figure R-80 shows how responses to q33 varied with caregiver education. Ninety point eight percent (90.8%) of caregivers with >HS Grad/GED reported PHP explanations were always easy to understand. Only 79.3% of caregivers with <HS Grad/GED reported the same.

Figure R-80 Personal health provider explained things in a way that was easy to understand vs. caregiver education (q33; n=1,405)

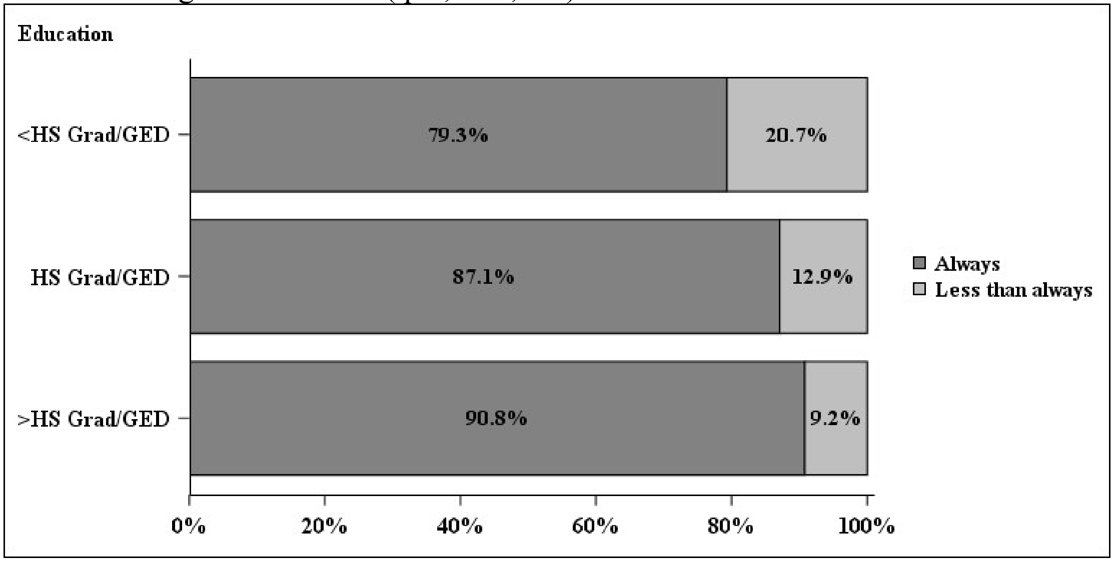
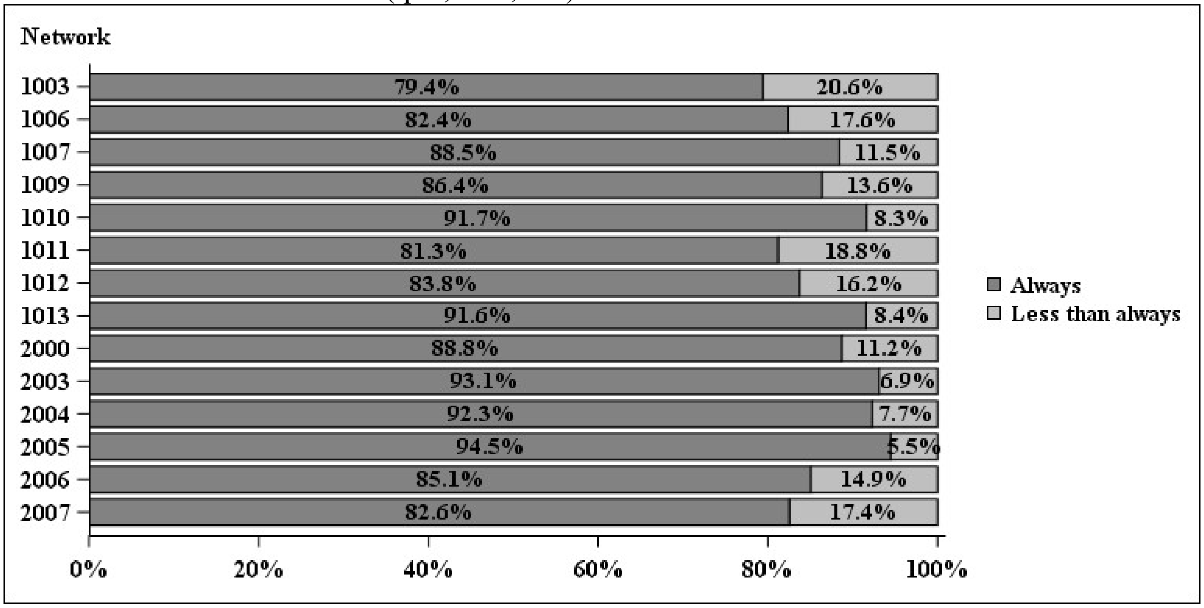


Figure R-81 shows variation in q33 responses across CCNC Networks. Community Health Partners (1003) caregivers least often reported that PHP explanations were always easy to understand at 79.4% while 94.5% of caregivers in Community Care of the Sandhills (2005) most often reported easily understood PHP explanations.

Figure R-81 Personal health provider explained things in a way that was easy to understand vs. CCNC Network (q33; n=1,419)



Language barrier hindered communication with personal health provider (q34; Satisfaction)

Question 34 asked caregivers how often in the previous 6 months the caregiver or child had a hard time understanding the personal health provider due to a language barrier. Figure R-82 illustrates that 5.9% of caregivers or children always had a hard time understanding the personal health provider due to a language barrier while 1.3%, 7.1% and 85.6% usually, sometimes, and never had a hard time understanding the personal health provider, respectively.

Figure R-82 Difficulty understanding PHP due to language barrier (q34; n=1,418)

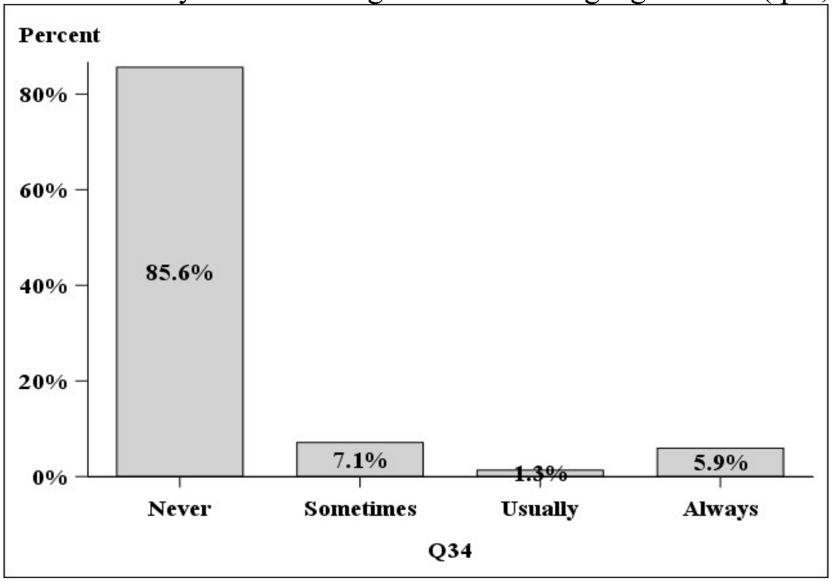


Figure R-83 shows variation in responses to q34 across race-ethnicity. Fifteen percent (15.0%) of H/L children or caregivers always had difficulty understanding the PHP due to a language barrier while only 1.9% and 2.1% of NHW and NHB caregivers respectively, always reported the same.

Figure R-83 Difficulty understanding PHP due to language barrier vs. race-ethnicity (q34; n=1,412)

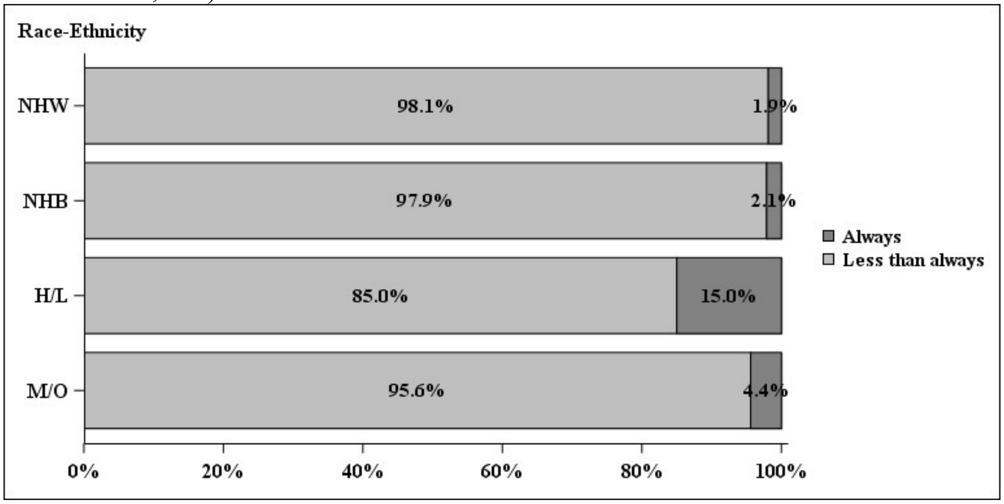
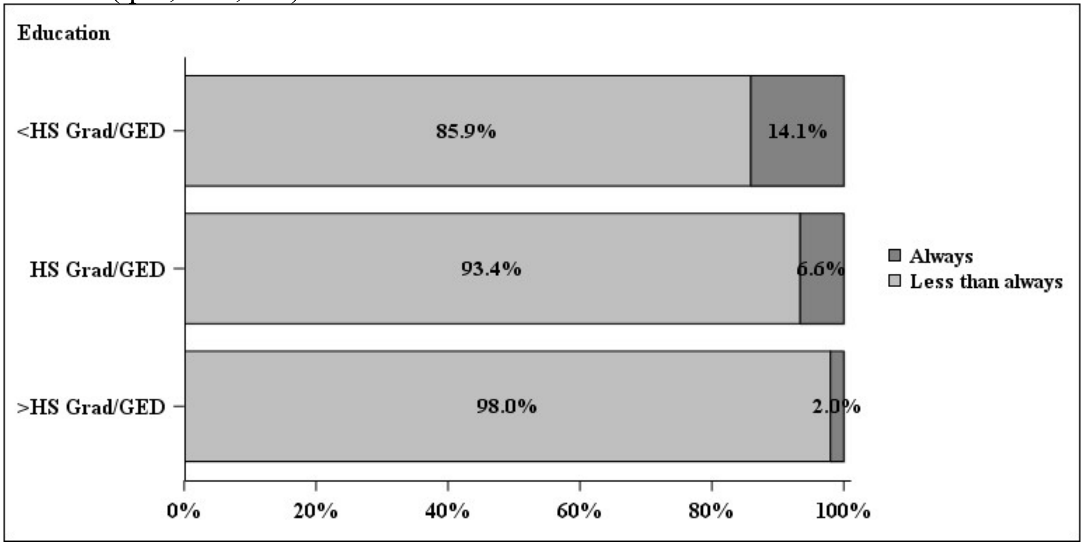


Figure R-84 demonstrates the relationship between responses to q34 and caregiver education. Caregivers with <HS Grad/GED (14.1%) always had difficulty understanding the personal health provider while only 2.0% of those with >HS Grad/GED always had language issues with the PHP.

Figure R-84 Difficulty understanding PHP due to language barrier vs. caregiver education (q34; n=1,404)



Personal provider listens carefully to caregiver (q35; satisfaction)

Question 35 asked caregivers how often the personal health provider listened carefully to the caregiver in the previous 6 months. Figure R-85 indicates that 89.3% of personal health providers always listened carefully to the caregiver. Seven percent (7.0%), 2.7% and 1.0% usually, sometimes, and never reported the PHP always listened carefully, respectively.

Figure R-85 PHP listened carefully to caregiver (q35; n=1,426)

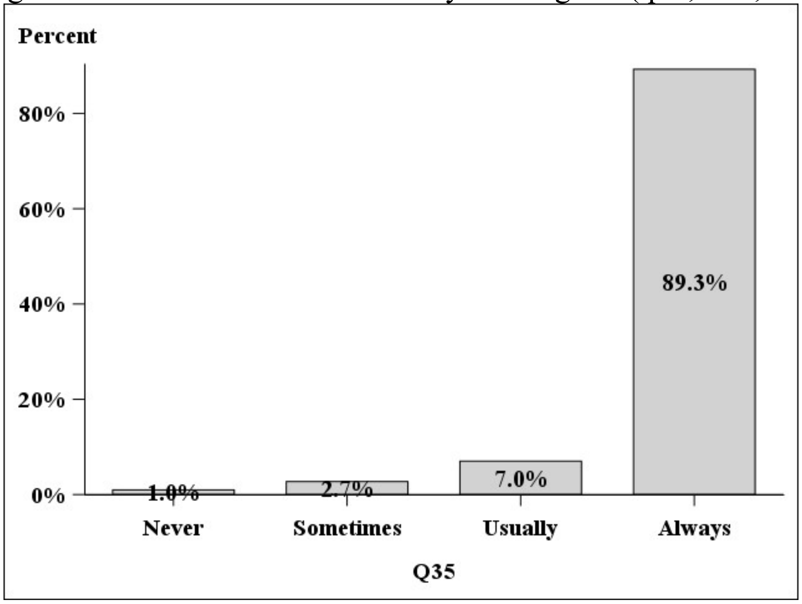
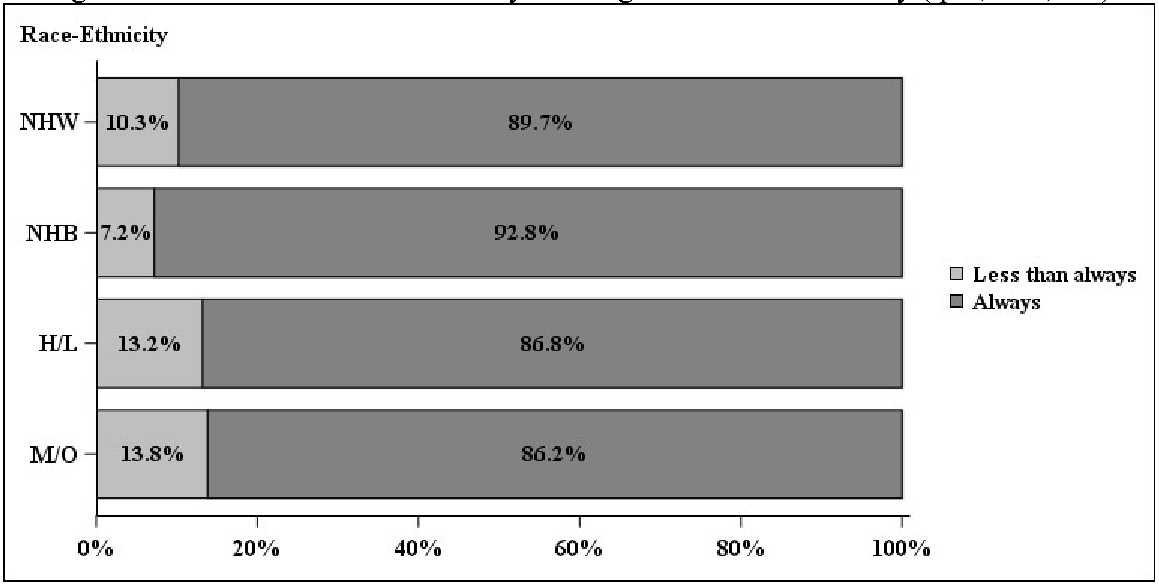


Figure R-86 shows variation in responses to q35 across the child's race-ethnicity. Leading the way, ninety-two point eight percent (92.8%) of NHB child caregivers reported the PHP always listened carefully.

Figure R-86 PHP listened carefully to caregiver vs. race-ethnicity (q35; n=1,420)



Personal health provider showed respect for caregiver's input (q36; satisfaction)

Question 36 asked caregivers who responded 'yes' to q31 how often the personal health provider showed respect for what the caregiver had to say in the previous 6 months. Figure R-87 indicates that 91.3% showed respect for what the caregiver had to say and, 4.8% 2.9% and 1.1% showed respect usually, sometimes, and never, respectively.

Figure R-87 PHP showed respect for what the caregiver had to say (q36; n=1,425)

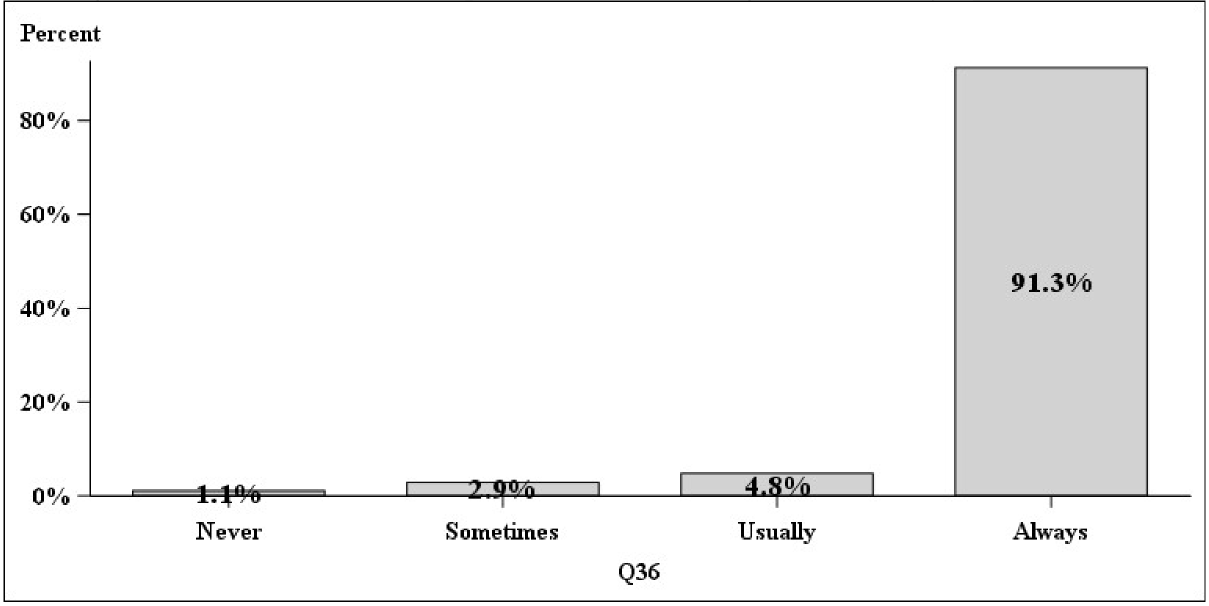
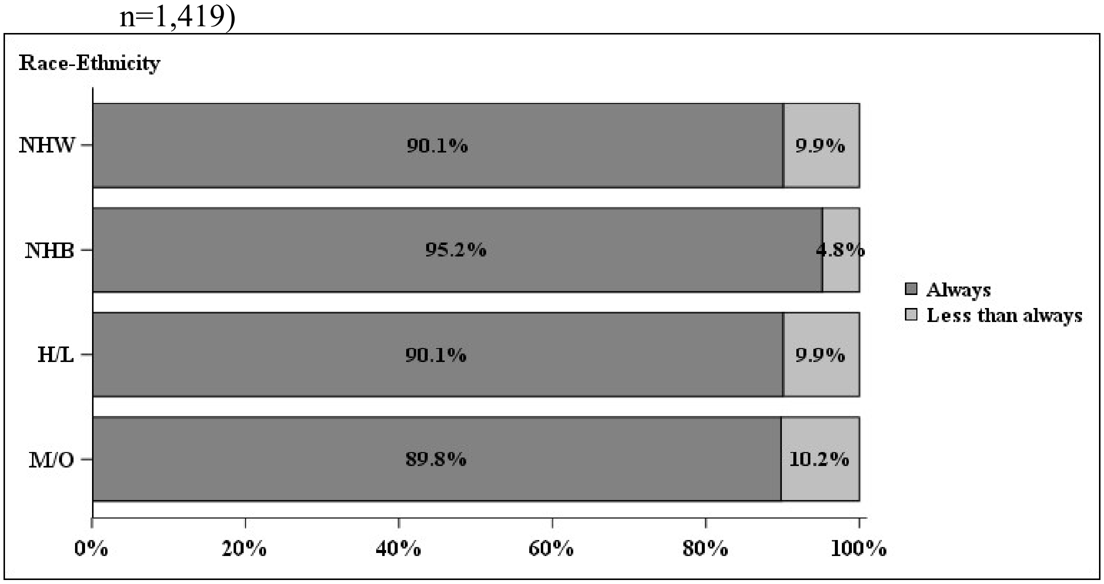


Figure R-88 shows the relationship between responses to q36 and race-ethnicity. Four point eight percent (4.8%) of NHB children's personal health providers showed respect for what the caregiver had to say less than always.

Figure R-88 PHP showed respect for what the caregiver had to say vs. race-ethnicity (q36; n=1,419)



Child's ability to speak with personal health provider about health (q37; satisfaction)

Question 37 asked caregivers if the child was able to talk to his or her personal health care provider about his or her health care in the previous 6 months. Figure R-89 indicates that 71.7% of children were able to talk to their personal health provider about their health care.

Figure R-89 The child is able to talk with the PHP about his or her health care (q37; n=1,415)

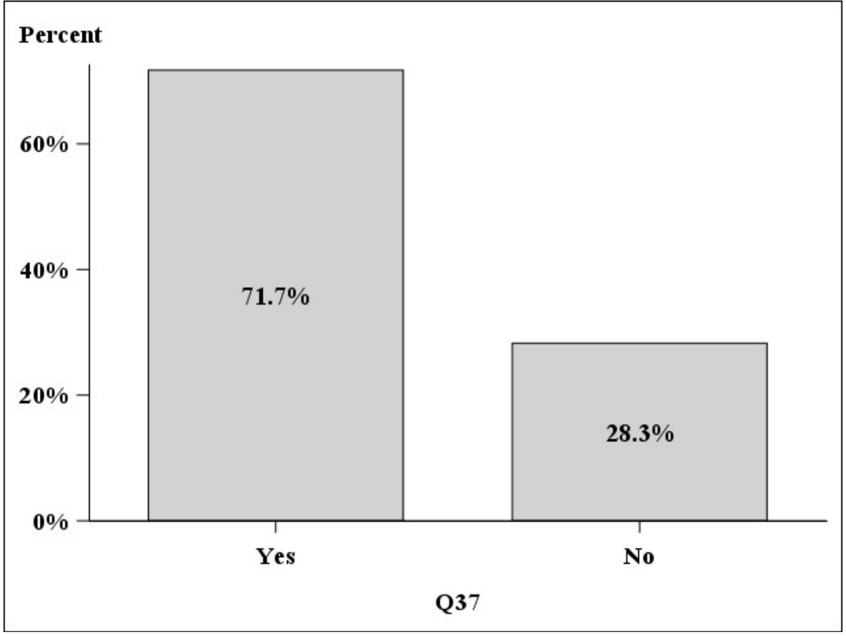


Figure R-90 displays the relationship between responses to q37 with the age of the child. Children 6-18 yo (87.6%, 91.5% and 94.6%) were able to talk with the personal health provider about their health care while only 9.7% and 47.6% of 0-5 yo were able to do the same. This sharp age trend is very likely driven by the child's ability to comprehend any communication.

Figure R-90 The child is able to talk with the PHP about his or her health care vs. age (q37; n=1,415)

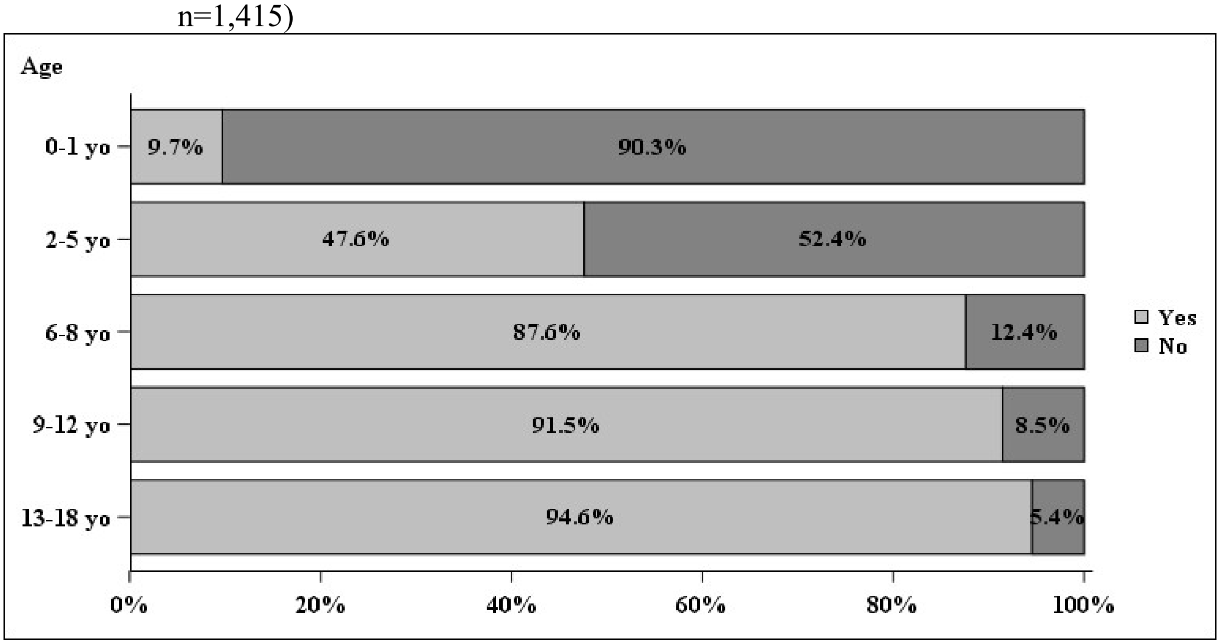
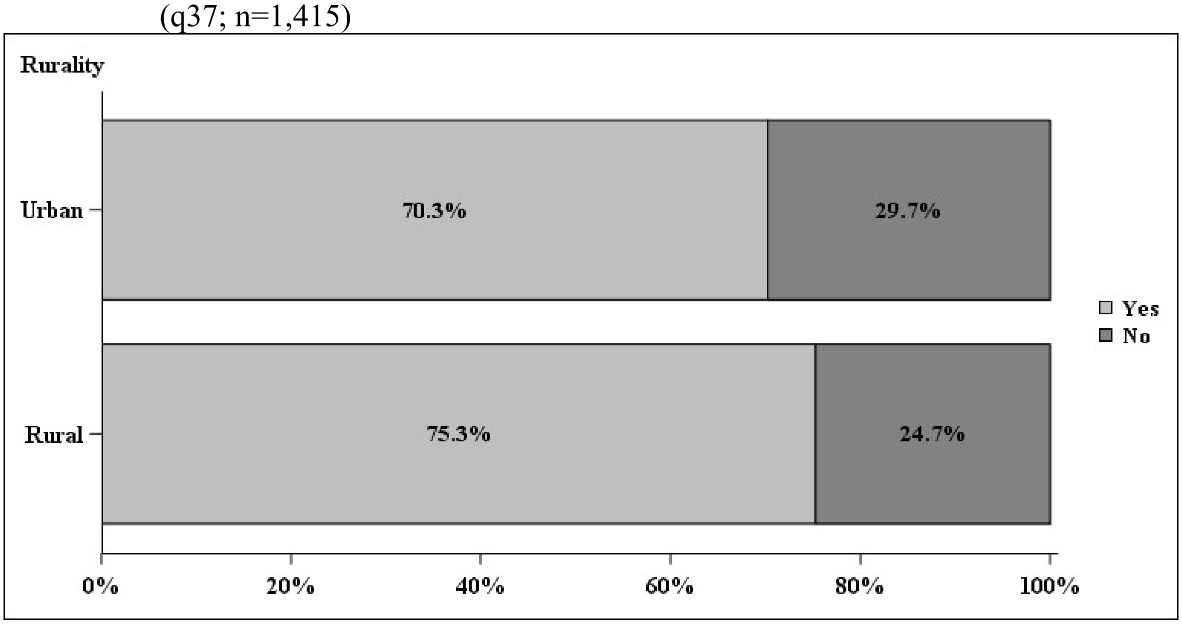


Figure R-91 shows the relationship between responses to q37 with rurality. Children from rural counties (75.3%) were able to talk with the personal health provider about their health care while only 70.3% of children from urban counties were able to do the same.

Figure R-91 The child is able to talk with the PHP about his or her health care vs. rurality (q37; n=1,415)



Child easily understood personal health provider's explanations (q38; satisfaction)

Question 38 asked caregivers who responded 'yes' to q37 how often the child's personal health provider explained things in a way that was easy to understand for the child in the previous 6 months. Figure R-92 shows it was always easy to understand explanations of the personal health provider for 80.6% of children, and 12.3%, 5.8% and 1.3% found it usually, sometimes and never easy, respectively, to understand the explanations.

Figure R-92 PHP explanations easy for the child to understand (q38; n=1,005)

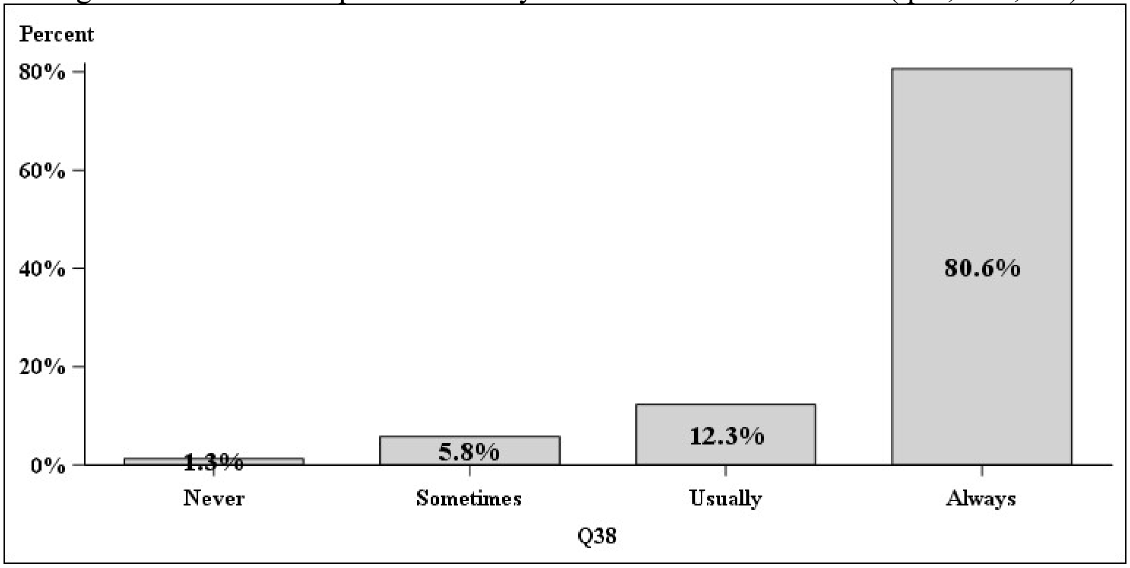
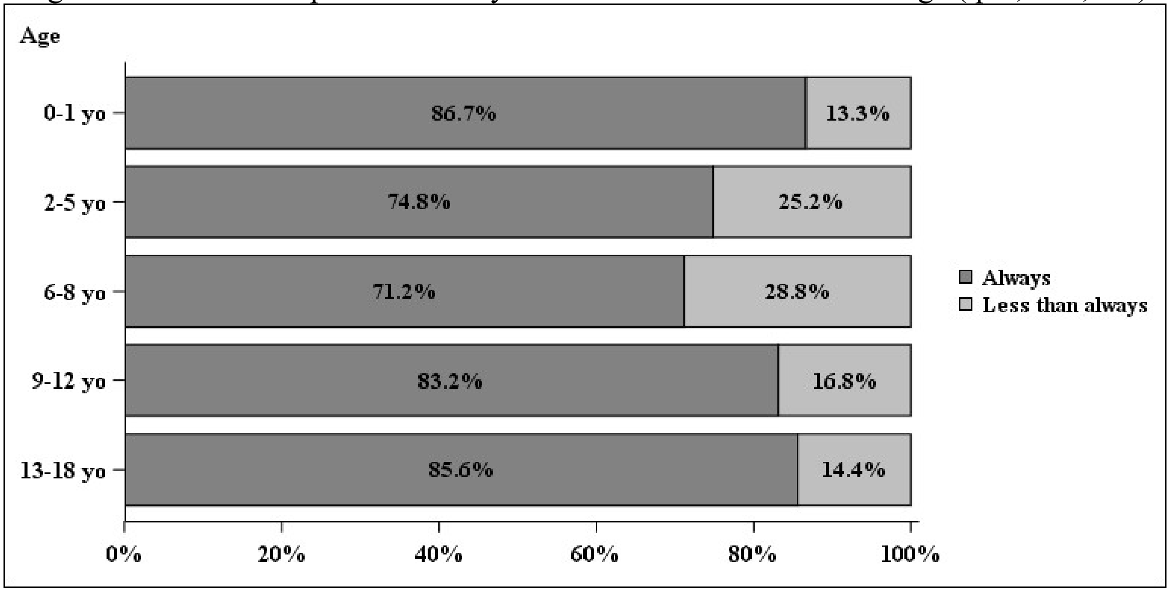


Figure R-93 describes the relationship between q38 responses and the age of the child. Eighty-five point six percent (85.6%) of personal health providers for 13-18 yo provided explanations that were easy for the child to understand while 71.2% of personal health providers of 6-8 yo did the same.

Figure R-93 PHP explanations easy for the child to understand vs. age (q38; n=1,005)



Personal health provider spent enough time with the child (q39; satisfaction)

Question 39 asked caregivers how often the personal health provider spent enough time with the child in the previous 6 months. Figure R-94 shows that 76.2% of personal health providers always spent enough time with the child and 13.2%, 8.6% and 2.1% spent enough time with the child usually, sometimes, and never, respectively.

Figure R-94 PHP spent enough time with the child (q39; n=1,413)

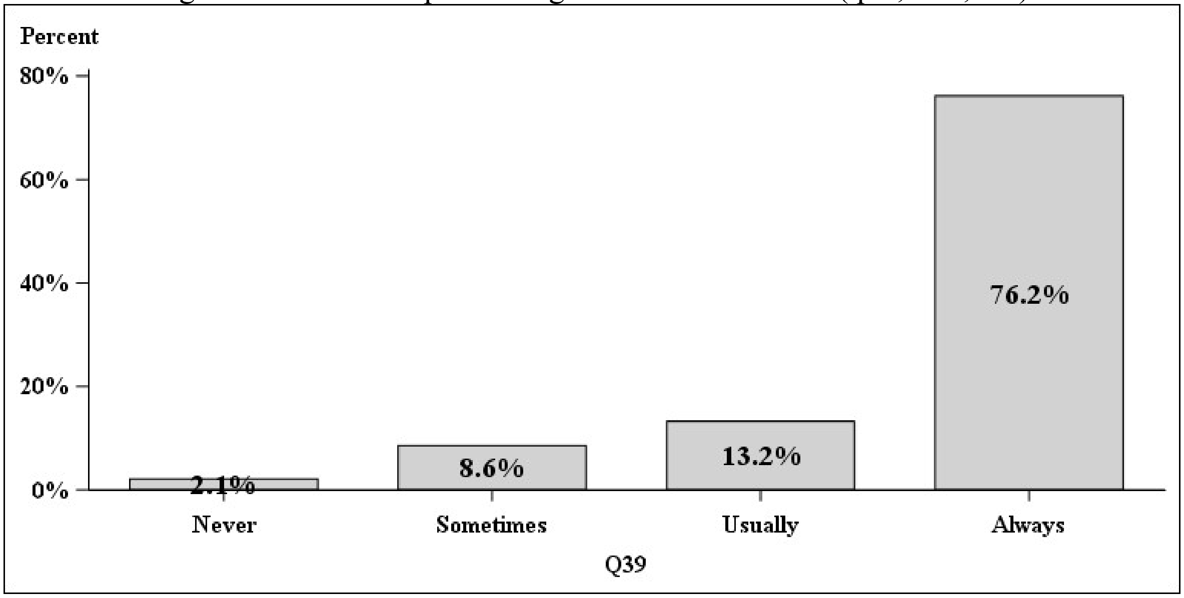


Figure R-95 shows variation in responses to q39 across race-ethnicity. Personal health providers of NHW (82.6%) and NHB (82.7%) children always spent enough time with the child. Only 61.9% of H/L personal health providers always did the same.

Figure R-95 PHP spent enough time with the child vs. race-ethnicity (q39; n=1,407)

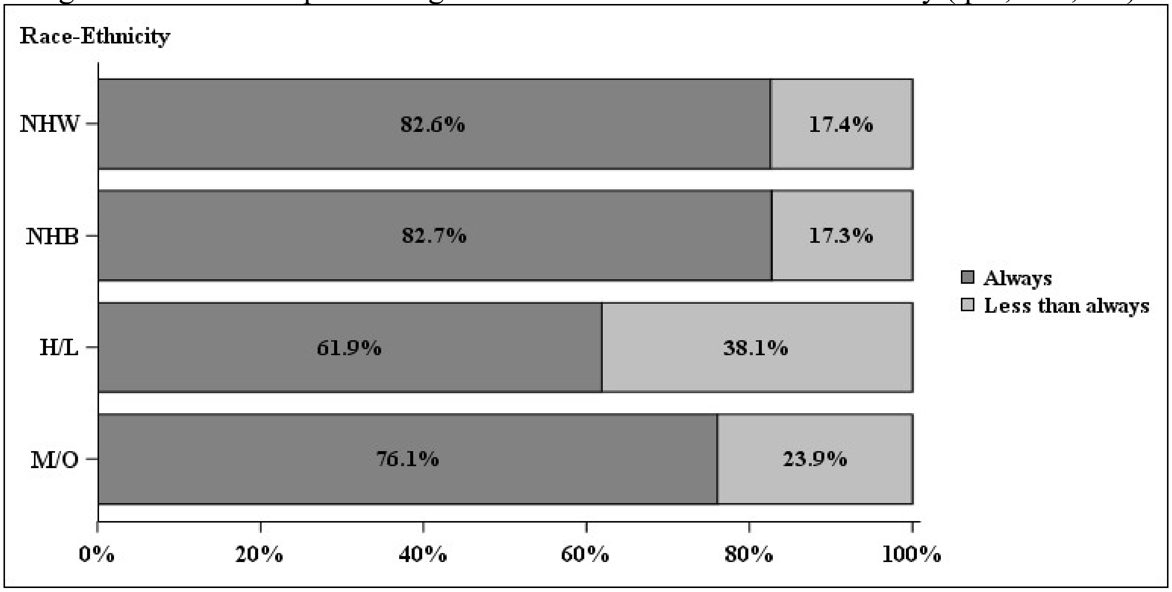


Figure R-96 shows variation in q39 responses with caregiver education. Thirty-six point three percent (36.3%) of caregivers with <HS Grad/GED reported that their PHP less than always spent enough time with the child. Only 18.8% of caregivers with >HS Grad/GED reported that their PHP less than always spent enough time with the child.

Figure R-96 PHP spent enough time with the child vs. caregiver education (q39; n=1,399)

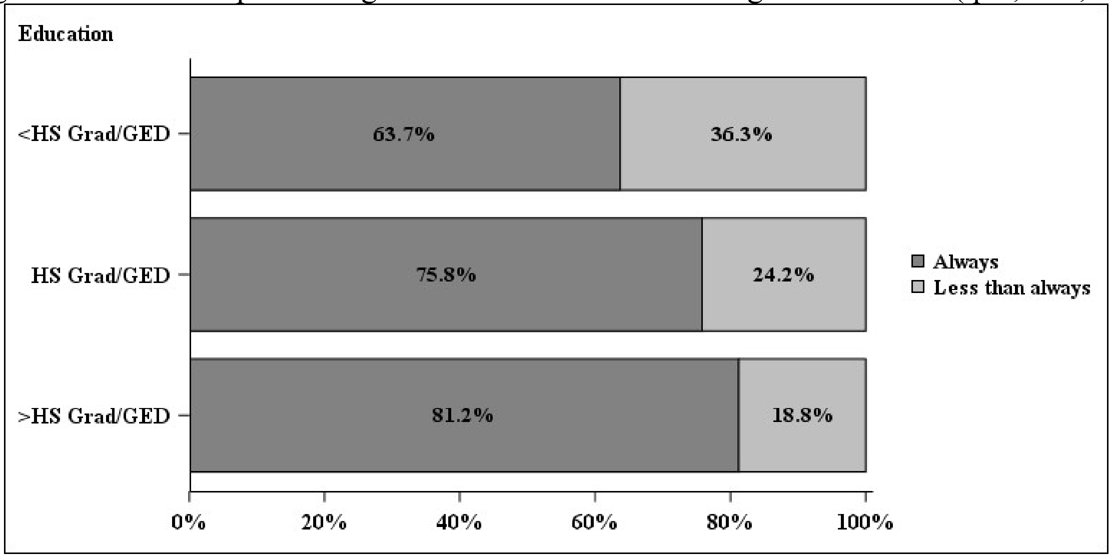


Figure R-97 shows variation in responses to q39 across CCNC network. Eighty-six point seven percent (86.7%) of PHPs in Carolina Community Health Partnership (1010) and 85.7% of personal health providers in Community Care of Western North Carolina (1007) always spent enough time with the child while only 67.3% of providers in Community Health Partners (1003) always spent enough time with the child.

Figure R-97 PHP spent enough time with the child vs. CCNC Network (q39; n=1,413)

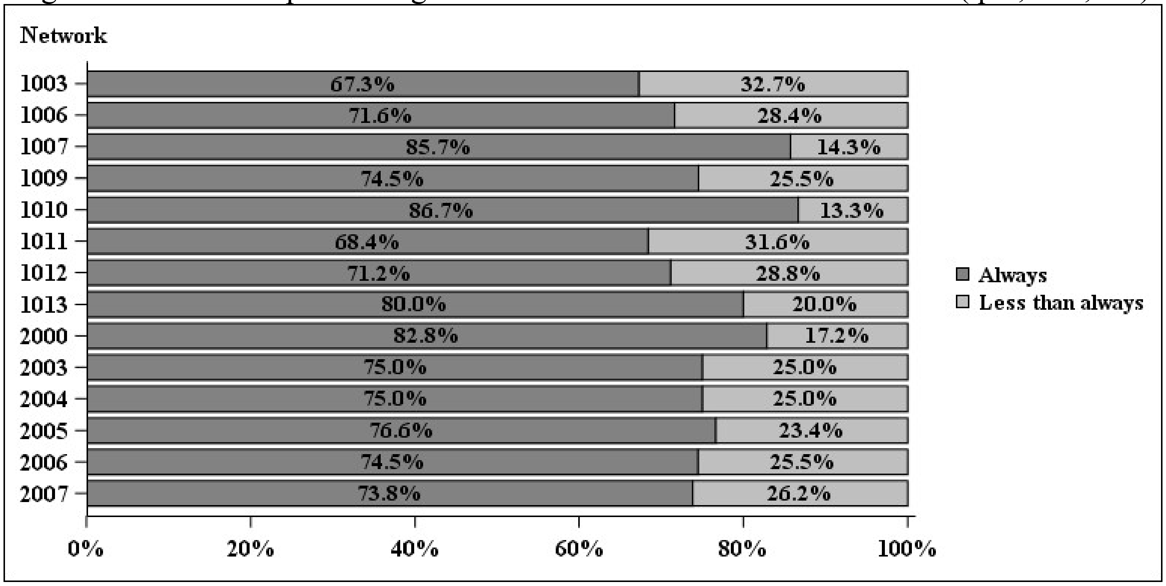
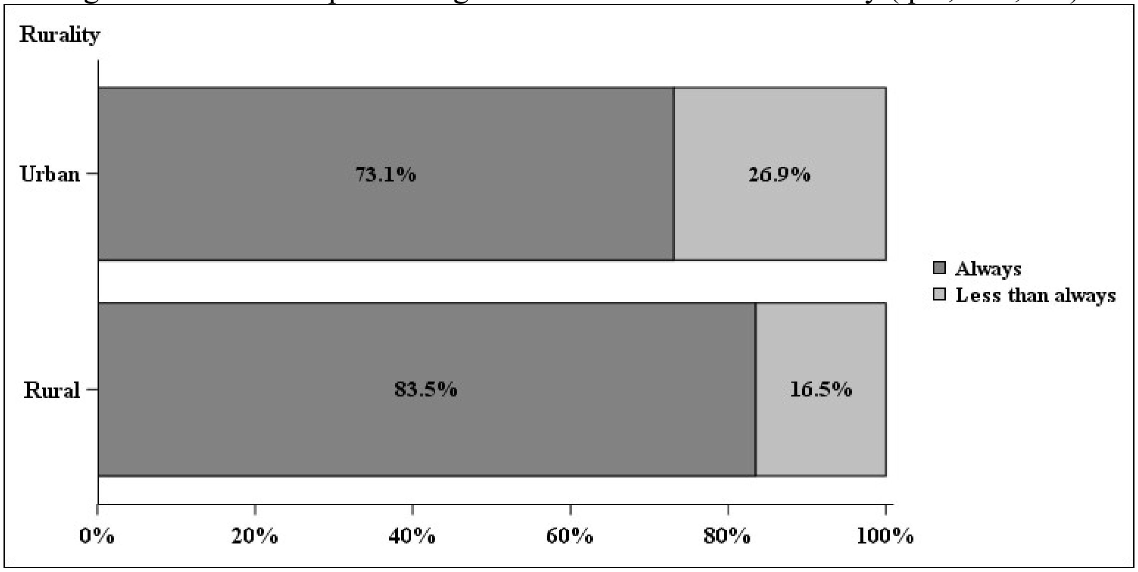


Figure R-98 indicates variation in responses to q39 across rurality. Eighty-three point five percent (83.5%) of personal health providers from rural counties always spent enough time with the child while 73.1% of providers from urban counties did the same.

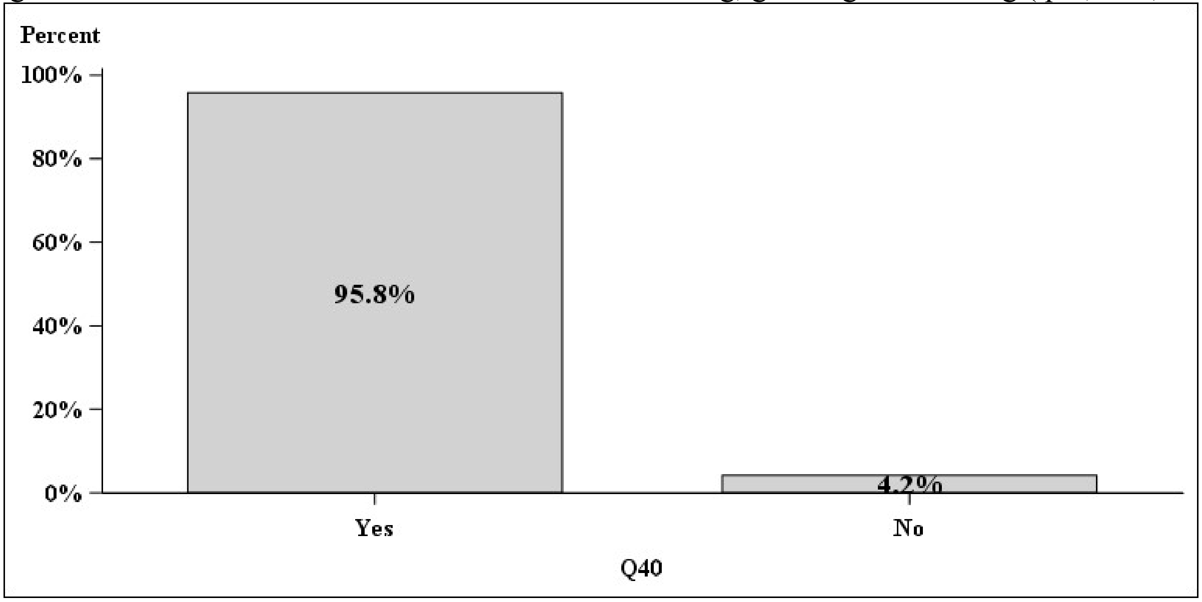
Figure R-98 PHP spent enough time with the child vs. rurality (q39; n=1,413)



Personal health provider discussed how child is feeling, growing, or behaving (q40; satisfaction)

Question 40 asked the caregivers who responded 'yes' to q37 if the child's personal health provider talked about how the child was feeling, growing and behaving in the previous 6 months. Figure R-99 indicates that 95.8% of personal health providers talked about how the child was feeling, growing or behaving. We found no statistically significant relationships between q40 responses and any of the demographic or contextual variables.

Figure R-99 PHP talked about how the child was feeling, growing or behaving (q40; n=1,423)



Called personal health provider for help or advice after hours (q41A; utilization)

Question 41A asked the caregivers who responded ‘yes’ to q41 if the caregiver called the personal health provider’s office after regular office for help or advice in the previous 6 months. Figure R-100 shows that 47.3% of caregivers called the personal health provider’s ofice after regular office hours for help or advice.

Figure R-100 Phoned PHP's office after regular office hours for help or advice (q41A; n=1,417)

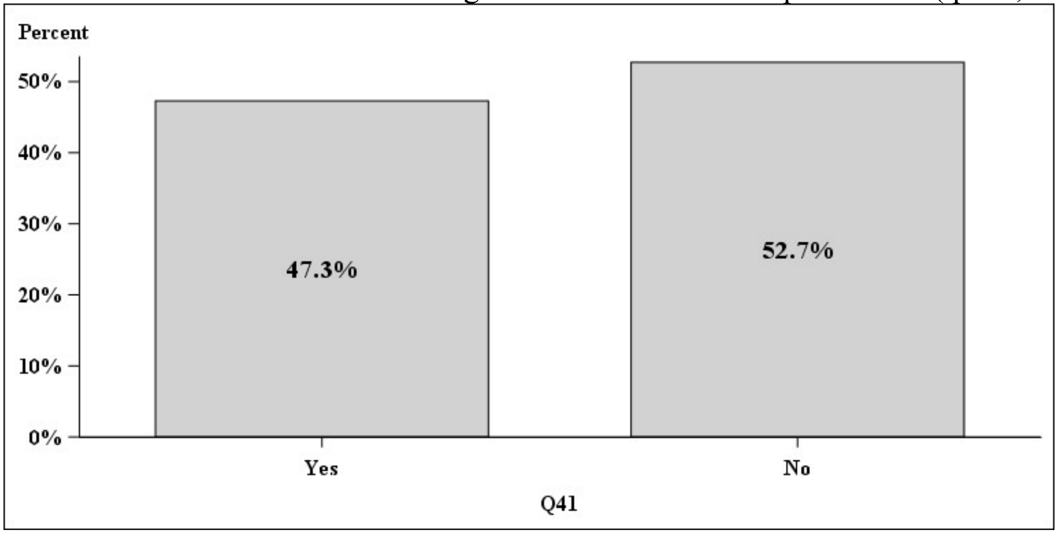


Figure R-101 shows the relationship observed between responses to q41 and the age of the child. Fifty-three point seven percent (53.7%) of caregivers of 0-1 yo called the personal health provider’s office after regular hours for help or advice while only 39.1% of caregivers of 13-18 yo did the same.

Figure R-101 Phoned PHP's office after regular office hours for help or advice vs. age (q41A; n=1,417)

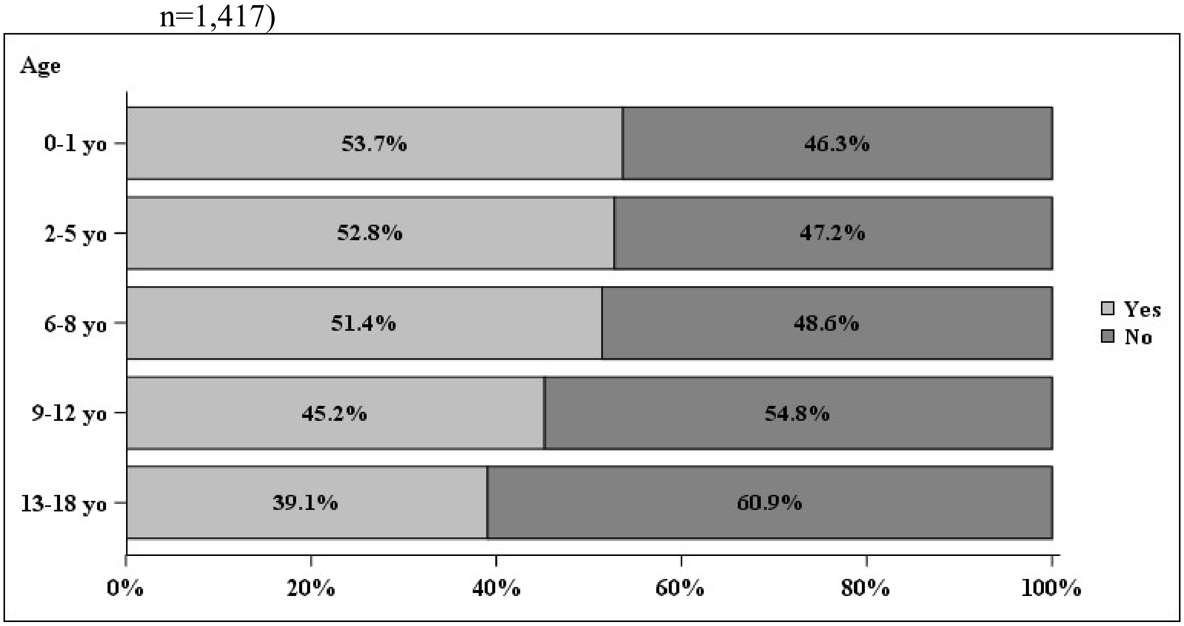
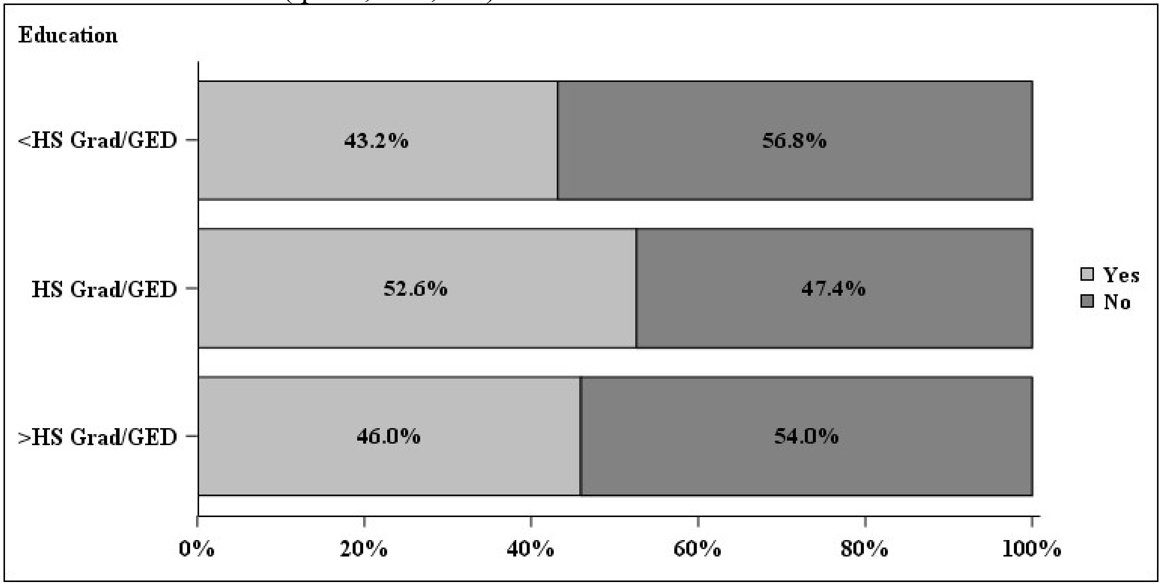


Figure R-102 describes variation in q41responses across caregiver education. Caregivers with a HS Grad/GED (52.6%) called the personal health provider's office after regular office hours for help or advice while only 43.2% of caregivers with <HS Grad/GED did the same.

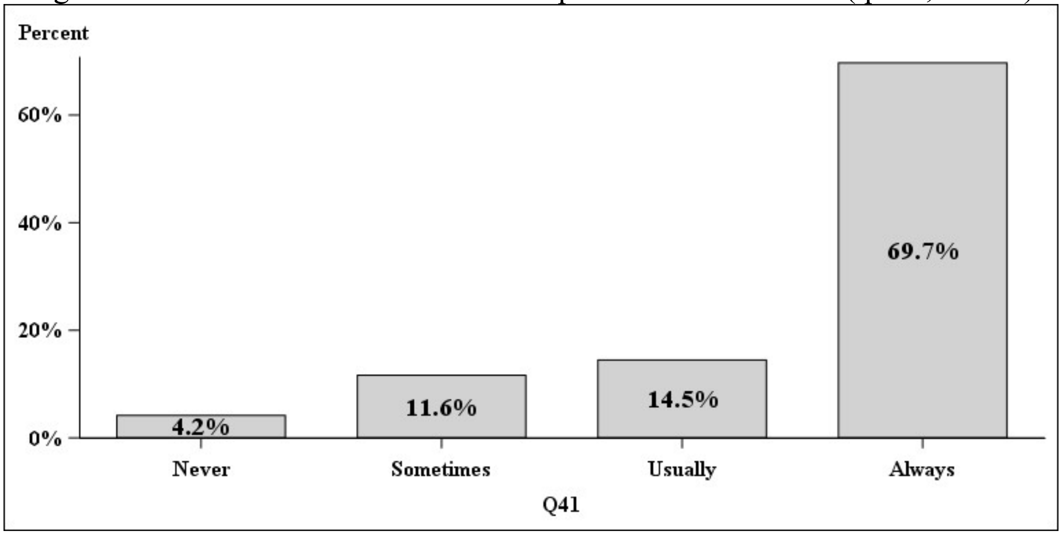
Figure R-102 Phoned PHP's office after regular office hours for help or advice vs. caregiver education (q41A; n=1,403)



Got help needed after regular hours by phone (q41B; access)

Question 41B asked the caregivers that had called after hours or who responded 'yes' to q41 how often they got the help or advice needed in the previous 6 months. Figure R-103 shows that 69.7% of caregivers always got the help they needed, 14.5%, 11.6%, and 4.2% usually, sometimes, and never, respectively, got the help they needed. We found no statistically significant relationships between responses to q41B and any of the demographic or contextual variables.

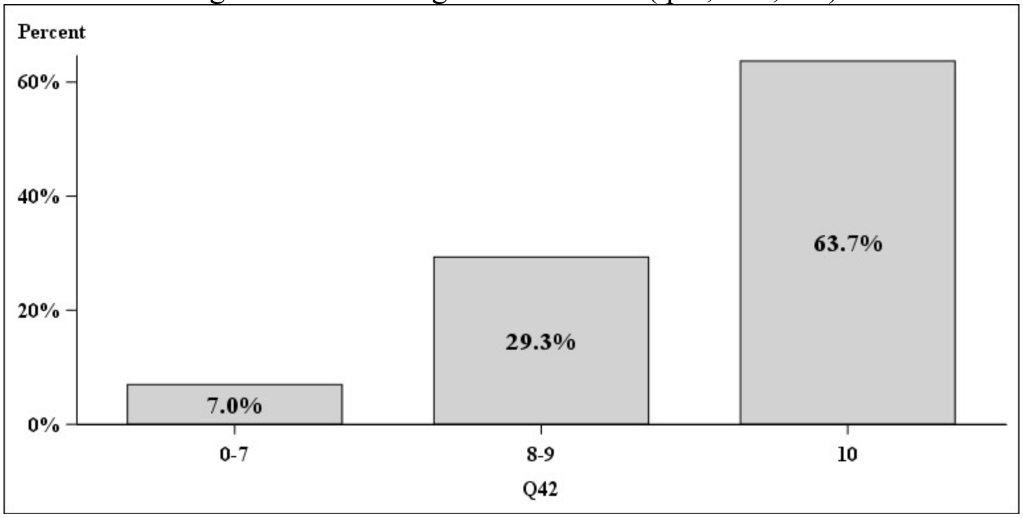
Figure R-103 Got needed after hours help or advice from PHP (q41B; n=670)



Overall rating of the child's personal health provider (q42; satisfaction)

Question 42 asked caregivers who responded 'yes' to q31, to rate their child's personal health provider using any number from 0 to 10, where 0 is the worst possible and 10 is the best possible in the previous 6 months. Figure R-104 shows that 63.7% of personal health providers were rated 10, while 29.3% were rated 8-9 and only 7.0% were rated 0-7. We found no statistically significant relationships between q42 responses and any of the demographic or contextual variables.

Figure R-104 Rating of child's PHP (q42; n=1,708)



Presence of emotional/developmental problem that requires counseling (q43; health status)

Question 43 asked caregivers if the child has an emotional, developmental, or behavioral problem for which he or she needed to get treatment or counseling in the previous 6 months. Figure R-105 indicates that 21.7% of children had an emotional, developmental or behavioral problem for which treatment or counseling was needed.

Figure R-105 Child has an emotional/ developmental/behavioral problem that needs treatment or counseling (q43; n=1,689)

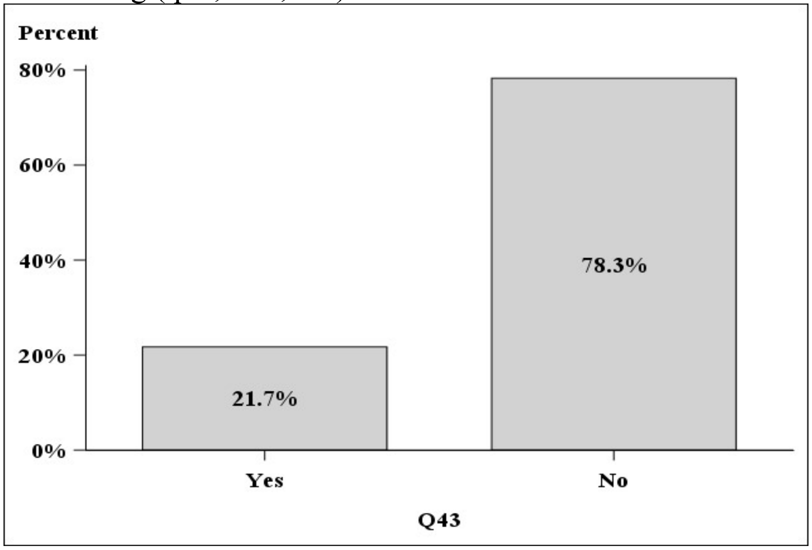


Figure R-106 shows the relationship observed between responses to q43 and the age of the child. Thirty-one percent (31.0%) of children 9-12 yo and 27.4% of 13-18 yo had an emotional, developmental or behavioral problem that needed treatment or counseling. Conversely, only 4.1% of 0-1 yo and 13.4% of 2-5 yo had similar issues.

Figure R-106 Child has an emotional/ developmental/behavioral problem that needs treatment or counseling vs. age (q43; n=1,689)

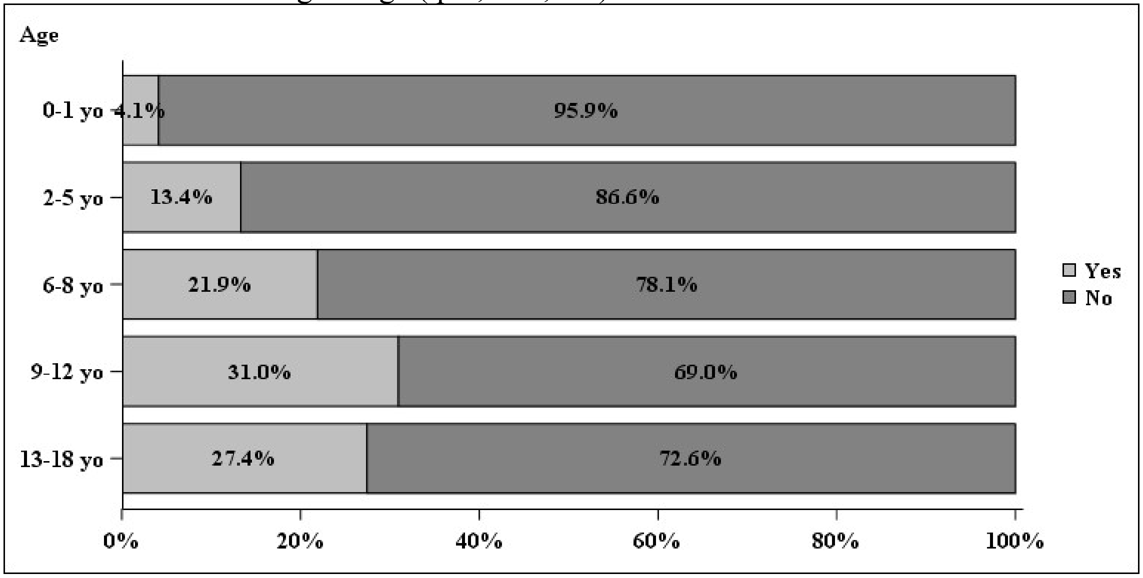


Figure R-107 shows variation in responses to q43 across race-ethnicity. Twenty-seven percent (27.0%) of NHW children had an emotional, developmental or behavioral problem that needed treatment or counseling while only 14.8% of H/L children needed the same.

Figure R-107 Child has an emotional/ developmental/behavioral problem that needs treatment or counseling vs. race-ethnicity (q43; n=1,681)

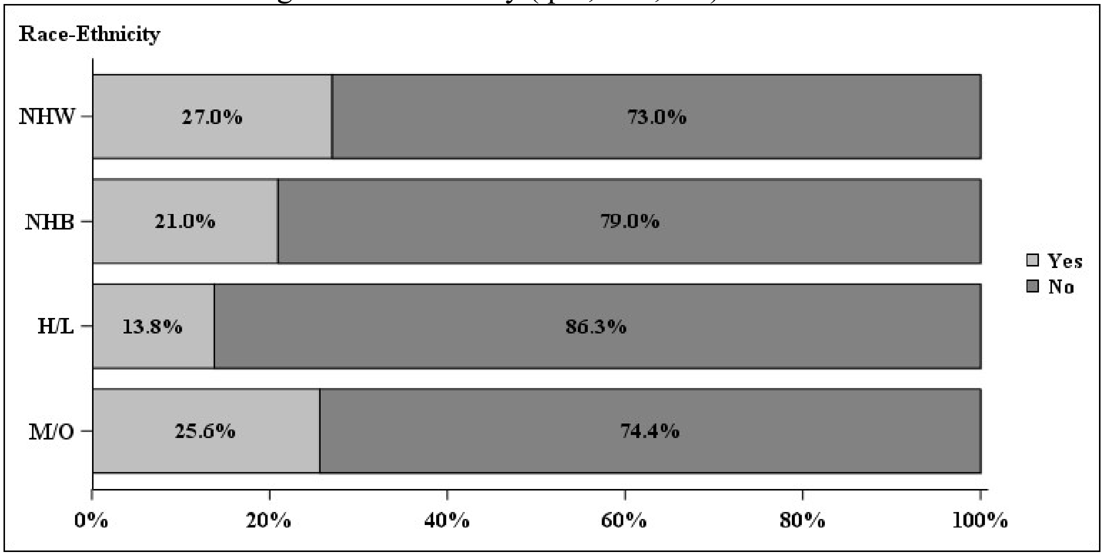
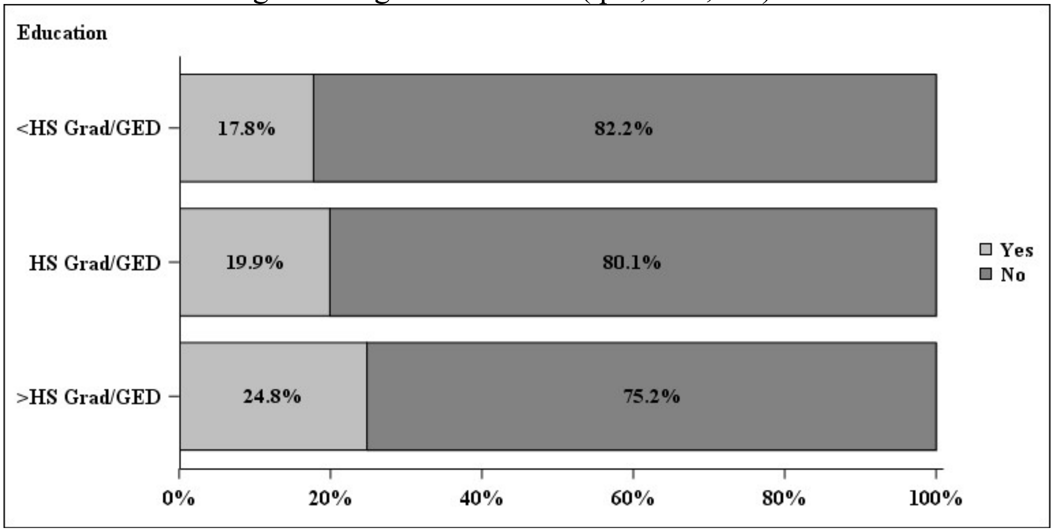


Figure R-108 shows variation in responses to q43 across caregiver education. Children of caregivers with >HS Grad/GED (24.8%) had an emotional, developmental or behavioral problem that needed treatment or counseling. Conversely, only 17.8% of caregivers with <HS Grad/GED had children displaying the same need.

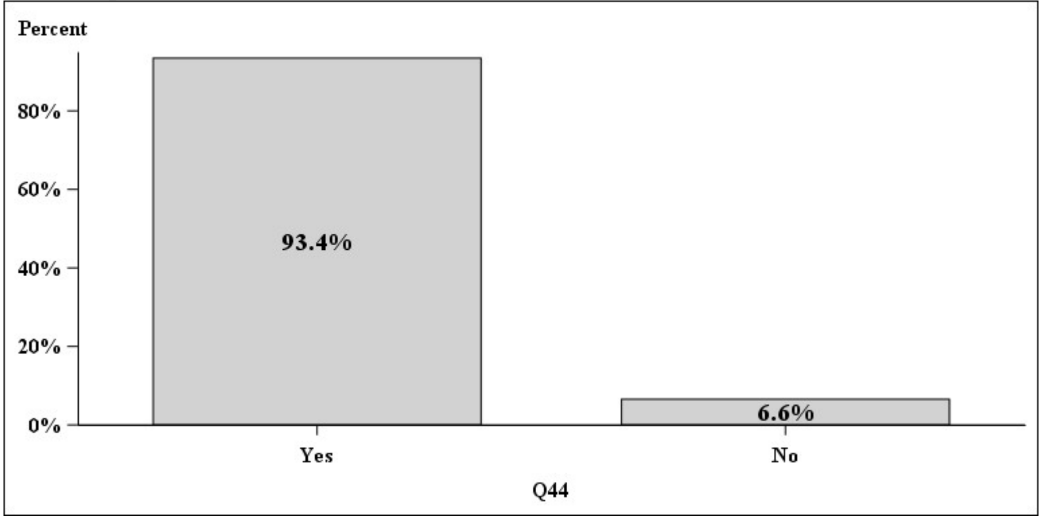
Figure R-108 Child has an emotional/ developmental/behavioral problem that needs treatment or counseling vs. caregiver education (q43; n=1,672)



Discussed child’s emotional development with PHP (q44; satisfaction)

Question 44 asked caregivers who responded ‘yes’ to q43, if the caregiver discussed the emotional, developmental or behavioral issues with the child’s personal health provider in the previous 6 months. Figure R-109 indicates that 93.4% of caregivers discussed the emotional, developmental or behavioral issues with the child’s personal health provider. We found no statistically significant relationships between q44 responses and any of the demographic or contextual variables.

Figure R-109 Caregiver discussed emotional/developmental/behavioral issues with child’s PHP (q44; n=366)



Ease of getting needed counseling or treatment (q45; access)

Question 45 asked caregivers who responded 'yes' to q43, if it was easy to get the emotional, developmental or behavioral treatment or counseling for the child in the previous 6 months. Figure R-110 indicates that it was always easy for 62.6% to get the emotional, developmental or behavioral treatment or counseling for the child, while 15.7%, 14.6% and 7.0% found it usually, sometimes and never easy, respectively.

Figure R-110 Easy to get emotional/developmental/behavioral treatment or counseling for the child (q45; n=356)

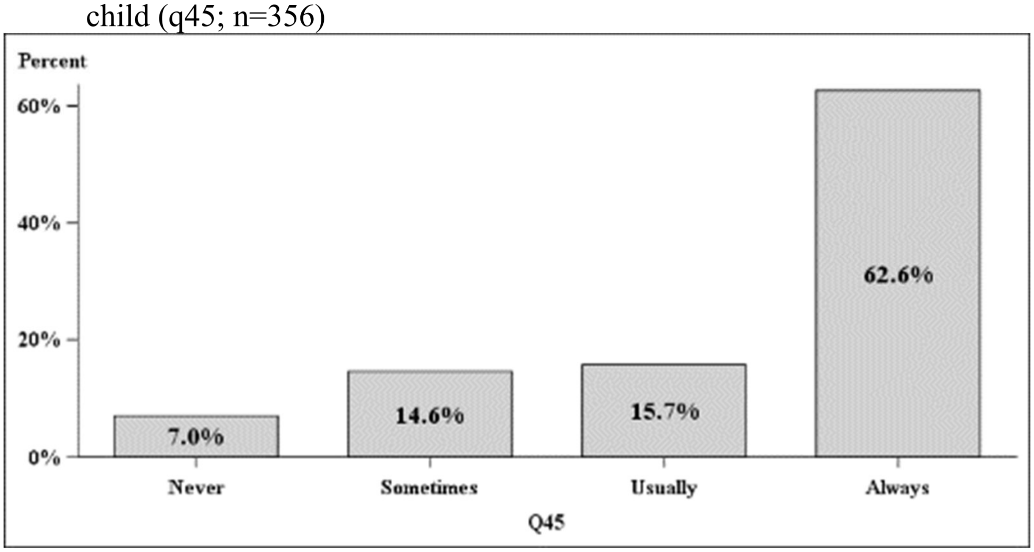
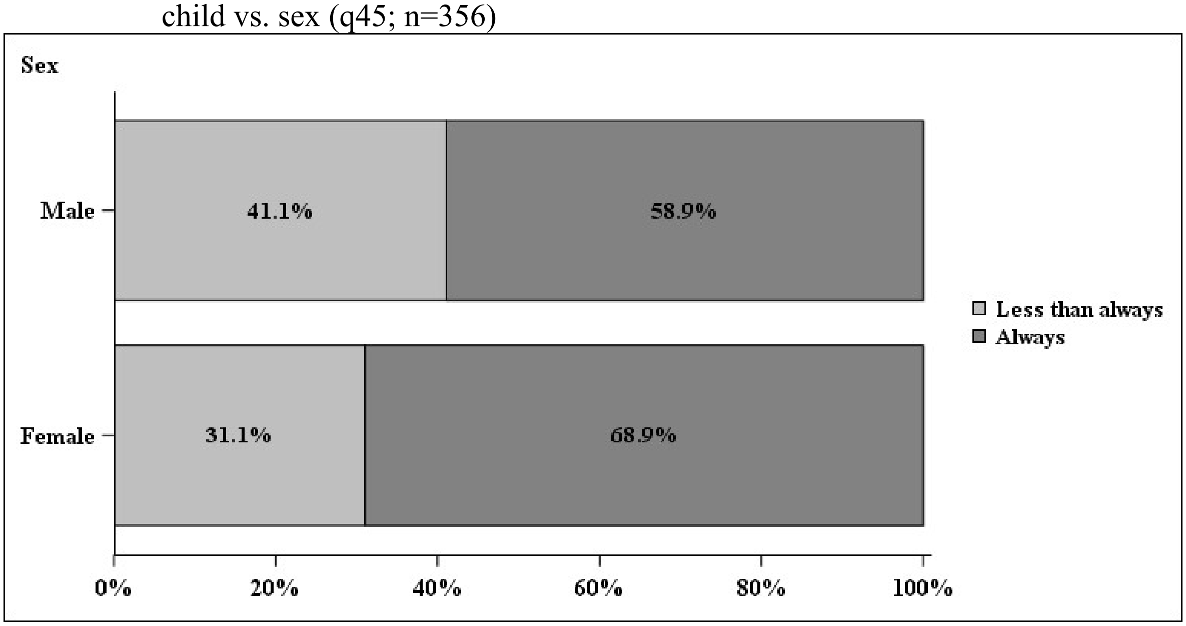


Figure R-111 shows how responses to q45 varied with sex. It was always easy for 68.9% of female children to get get the emotional, developmental or behavioral treatment or counseling needed while only 58.9% of male children found it always easy to get the same.

Figure R-111 Easy to get emotional/developmental/behavioral treatment or counseling for the child vs. sex (q45; n=356)



Same personal health provider before joining Medicaid (q46; access)

Question 46 asked caregivers if the child had the same personal health provider before he or she joined Medicaid in the previous 6 months. Figure R-112 illustrates that 48.2% of children had the same personal health provider before joining Medicaid, while 20.9% did not and 30.9% children had always been on Medicaid.

Figure R-112 Child's PHP is the same as before joining Medicaid (q46; n=1,685)

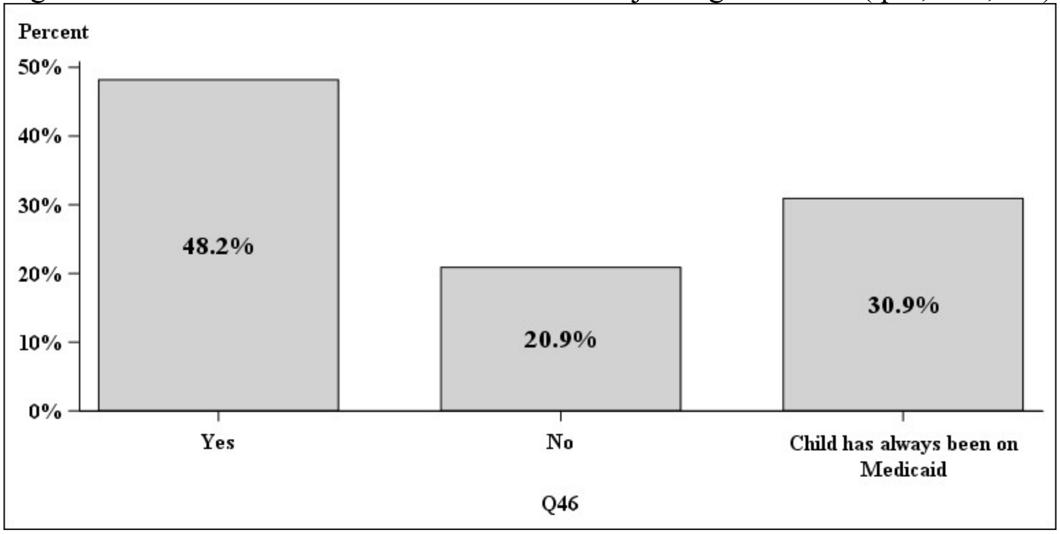


Figure R-113 shows the relationship observed between responses to q46 and the age of the child. Children 0-1 yo (36.8%) had the same personal health provider before joining Medicaid, while 46.2% of 0-1 yo children had always been on Medicaid. Only 22.7% of 13-18 yo children had always been on Medicaid.

Figure R-113 Child's PHP is the same as before joining Medicaid vs. age (q46; n=1,685)

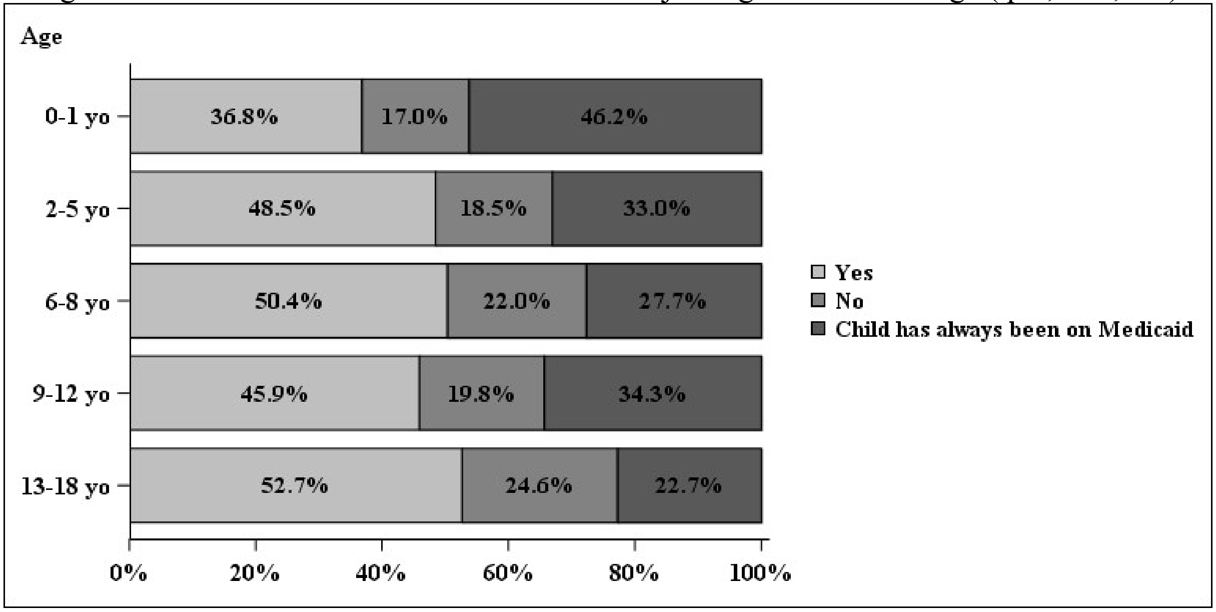


Figure R-114 shows variation in responses to q46 across caregiver education. Caregivers with <HS Grad/GED (37.8%) had children that had always been on Medicaid while 27.1% of caregivers with >HS Grad/GED had children that had always been on Medicaid.

Figure R-114 Child's PHP is the same as before joining Medicaid vs. caregiver education (q46; n=1,669)

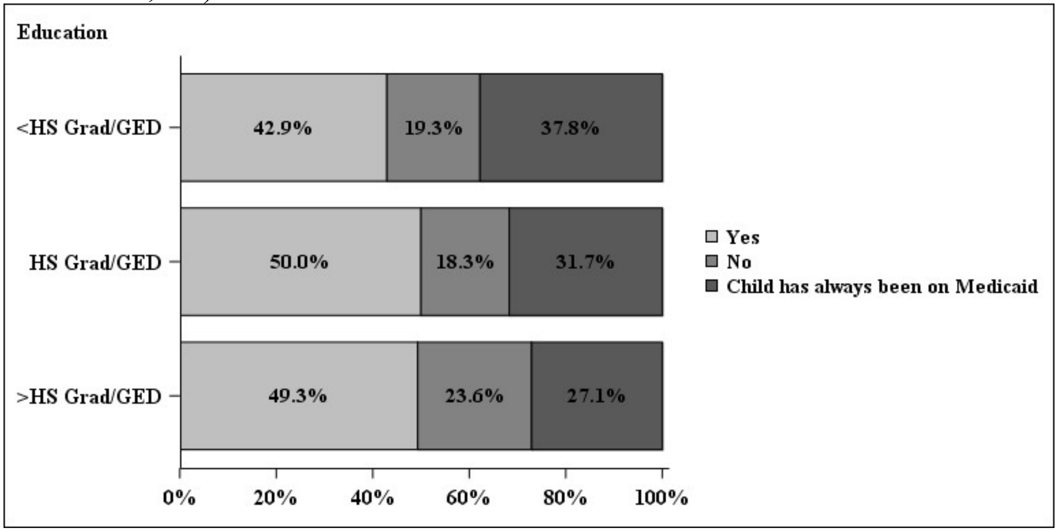
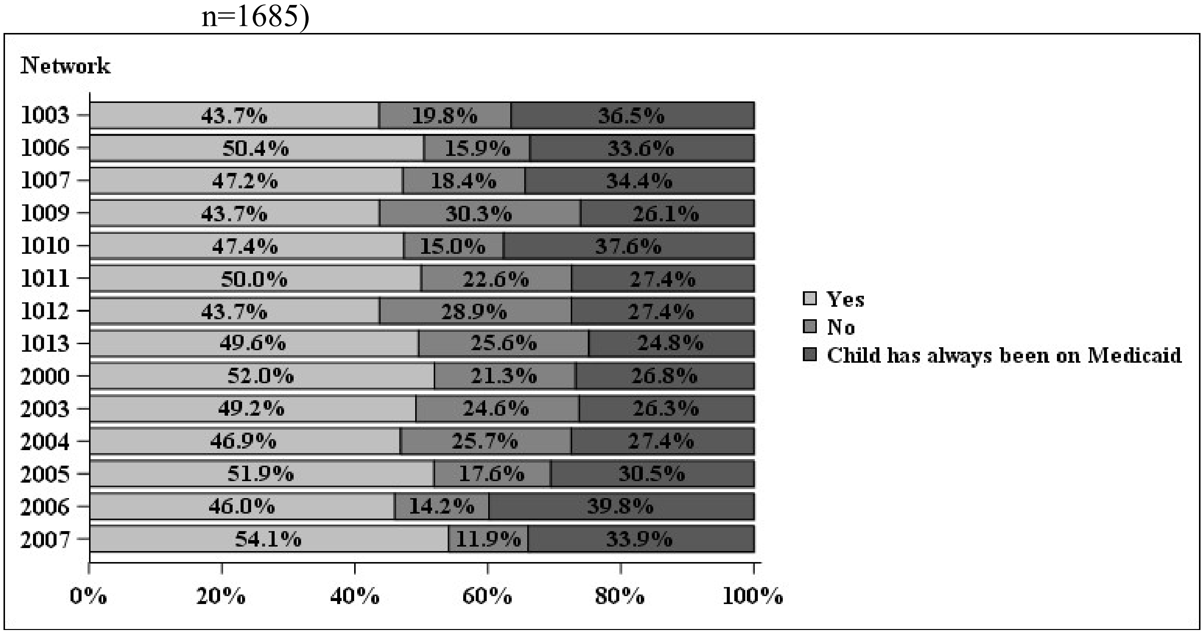


Figure R-115 shows how responses to q46 varied across CCNC Network. Thirty point three percent (30.3%) of children in Community Care Partners of Greater Mecklenburg (1009) did not have the same personal health provider as before joining Medicaid, while 28.9% of children in Partnership for Community Care (1012) did not have the same personal health provider as before joining Medicaid. Only 11.9% of children in Northern Piedmont Community Care (2007) did not have the same personal health provider as before joining Medicaid.

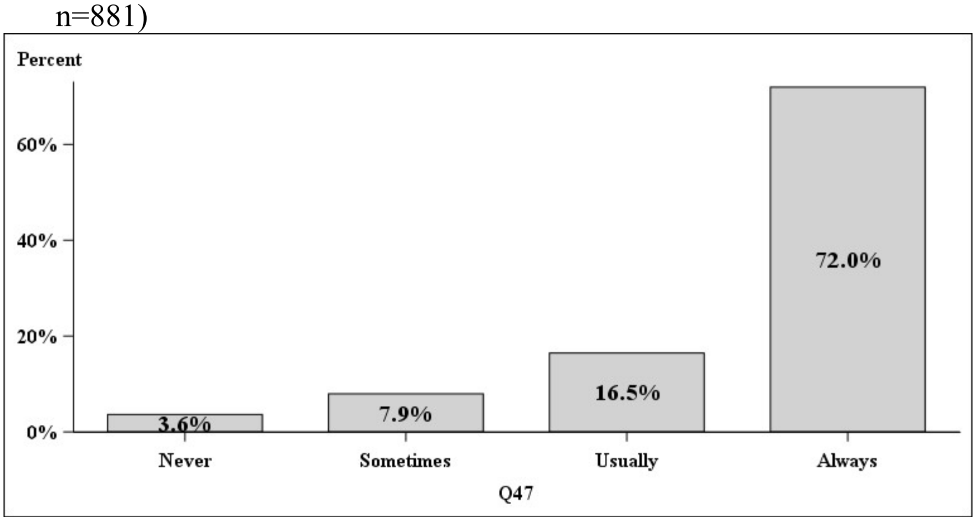
Figure R-115 Child's PHP is the same as before joining Medicaid vs. CCNC Network (q46; n=1685)



Ease of getting a suitable new personal health provider after joining Medicaid (q47; access)

Question 47 asked caregivers how often it was easy to get a personal health provider that the caregiver was happy with since they had joined Medicaid. Figure R-116 indicates that 72.0% of caregivers found it always easy to get a personal health provider that they were happy with since they had joined Medicaid. Sixteen-point five percent (16.5%), 7.9% and 3.6% of caregivers found it usually, sometimes and never easy, respectfully, to get a personal health provider that made them happy since they had joined Medicaid. We found no statistically significant relationships between q47 responses and any of the demographic or contextual variables.

Figure R-116 Easy to get a PHP for the child that made you happy since joining Medicaid (q47; n=881)



Medical, health, or behavioral issues lasting longer than 3 months (q48; health status)

Question 48 asked caregivers if the child had a medical, behavioral or other health conditions that had lasted longer than 3 months in the previous 6 months. Figure R-117 shows that only 28.4% of children had a medical, behavioral or other health conditions that had lasted longer than 3 months.

Figure R-117 Child has a medical, behavioral or other health condition that has lasted longer than 3 months (q48; n=1,706)

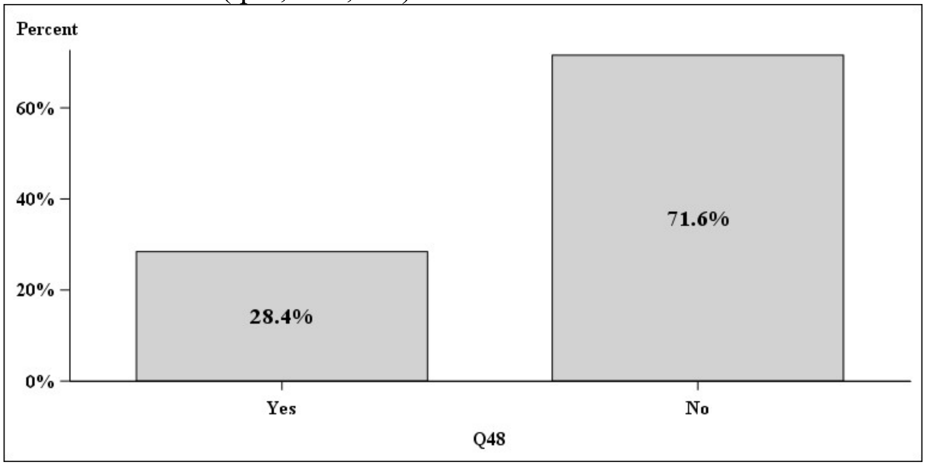


Figure R-118 illustrates how responses to q48 varied across the age of the child. Children who were 13-18 yo (36.4%) most often had a medical, behavioral or other health condition that had lasted longer than 3 months. Only 9.3% of children 0-1 yo and 21.6% of 2-5 yo had the same.

Figure R-118 Child has a medical, behavioral or other health condition that has lasted longer than 3 months vs. age (q48; n=1,706)

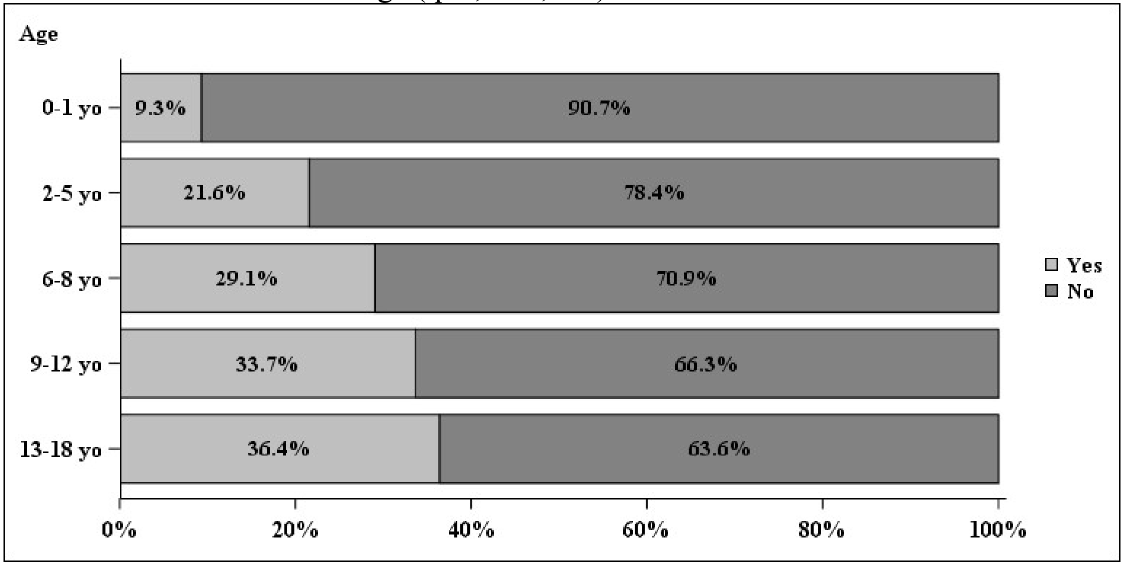


Figure R-119 shows variation in responses to q48 across the sex of the child. Male children (32.7%) more often had a medical, behavioral or other health condition that had lasted longer than 3 months while only 23.7% of female children had the same.

Figure R-119 Child has a medical, behavioral or other health condition that has lasted longer than 3 months vs. sex (q48; n=1,706)

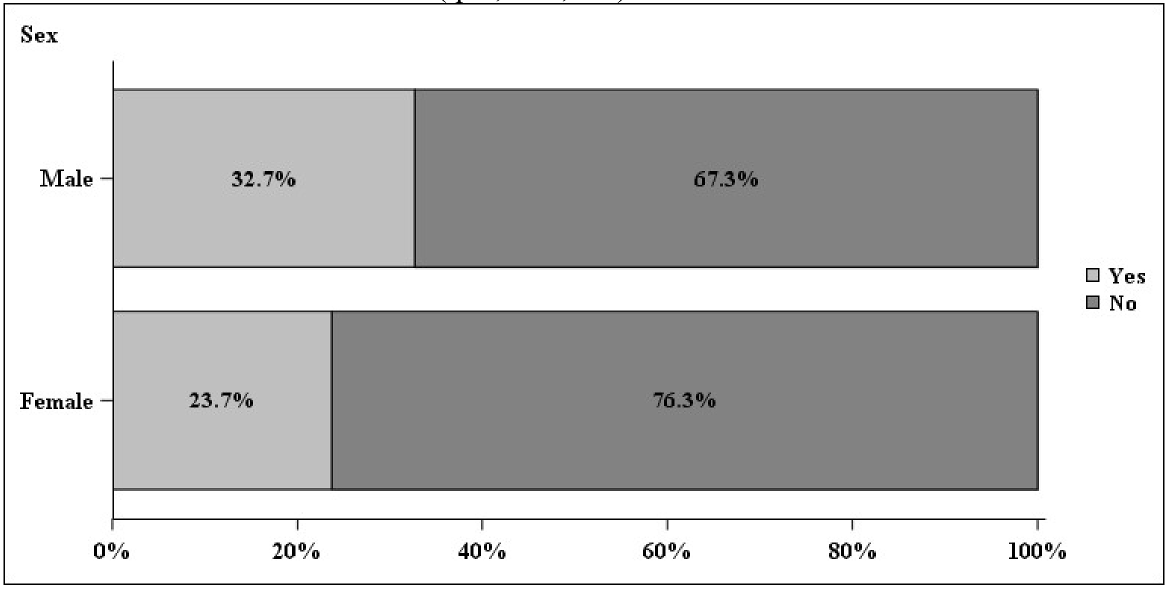


Figure R-120 shows variation in responses to q48 across race-ethnicity. NHW children (36.3%) most often had a medical, behavioral or other health conditions that had lasted longer than 3 months. Only 16.7% of H/L children had the same.

Figure R-120 Child has a medical, behavioral or other health condition that has lasted longer than 3 months vs. race-ethnicity (q48; n=1,698)

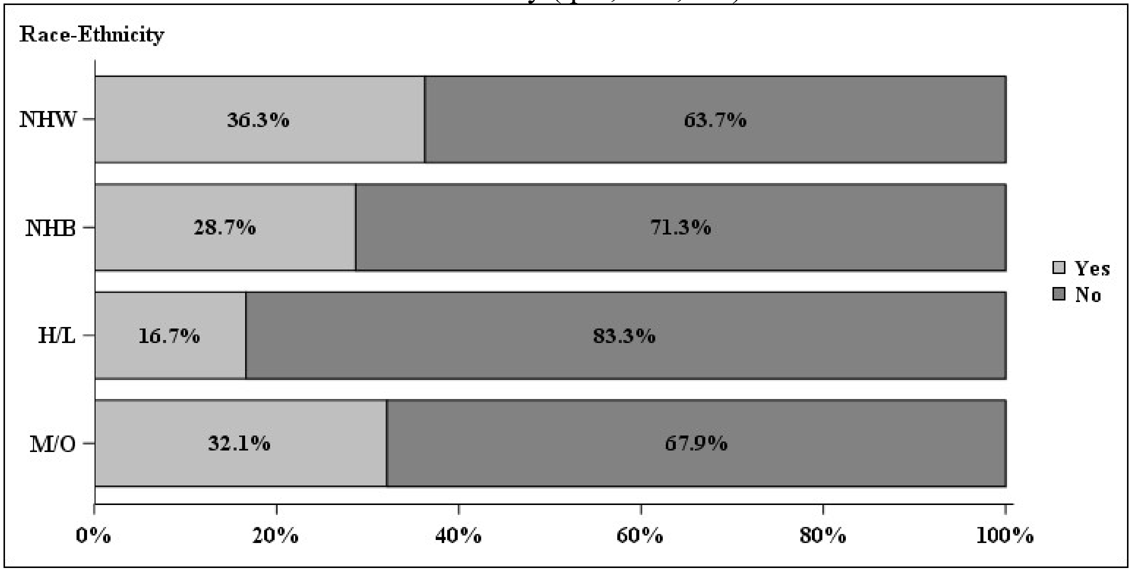
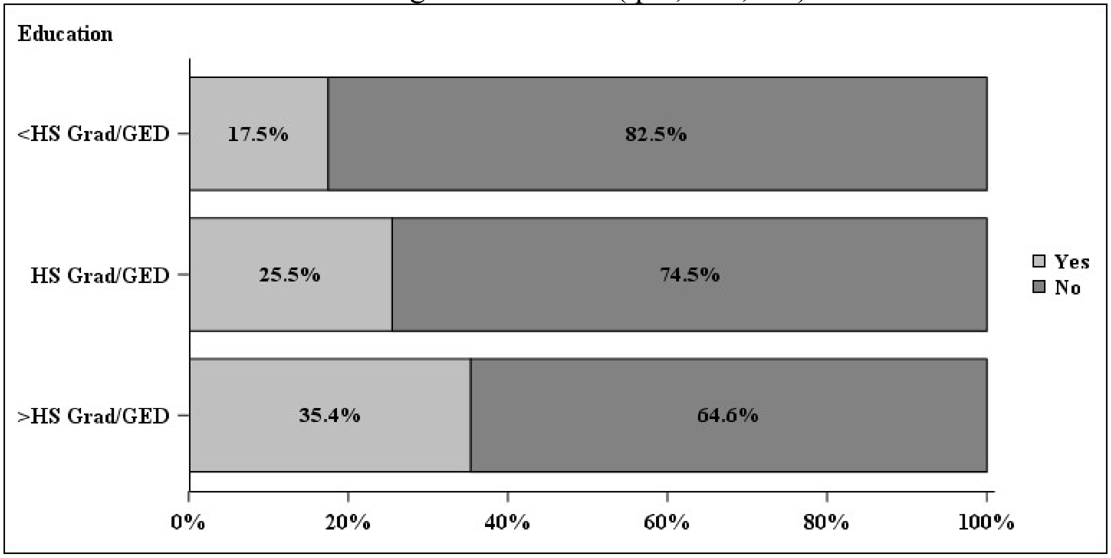


Figure R-121 shows the relationship between responses observed to q48 and caregiver education. Caregivers with >HS Grad/GED (35.4%) had children with a medical, behavioral or other health condition that had lasted longer than 3 months. Only 17.5% of caregivers with <HS Grad/GED had the same.

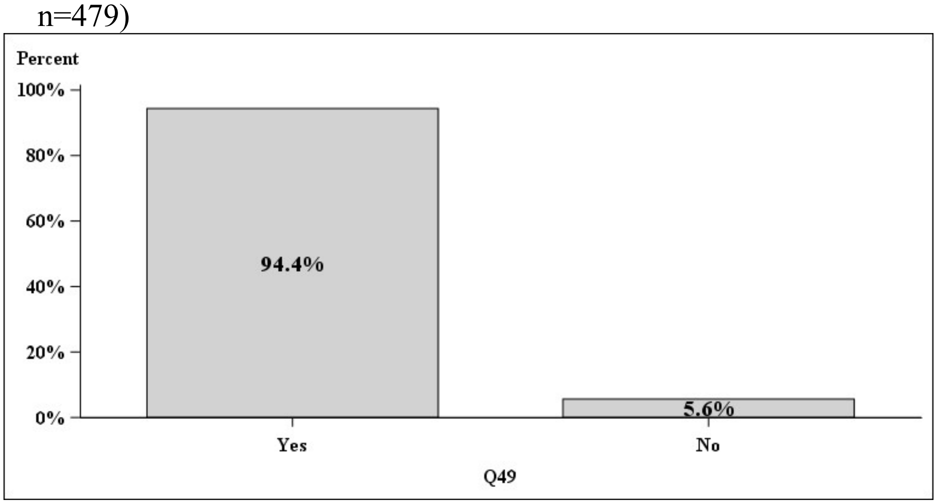
Figure R-121 Child has a medical, behavioral or other health condition that has lasted longer than 3 months vs. caregiver education (q48; n=1,690)



Personal health provider understood how child's medical condition affects the child's day-to-day life (q49; satisfaction)

Question 49 asked caregivers who responded 'yes' to q48 if the personal health provider understood how these conditions affected the child's day-to-day life in the previous 6 months. Figure R-122 shows that 94.4% of personal health providers understood how these conditions affected the child' day-to-day life. We found no statistically significant relationships between q49 responses and any of the demographic or contextual variables.

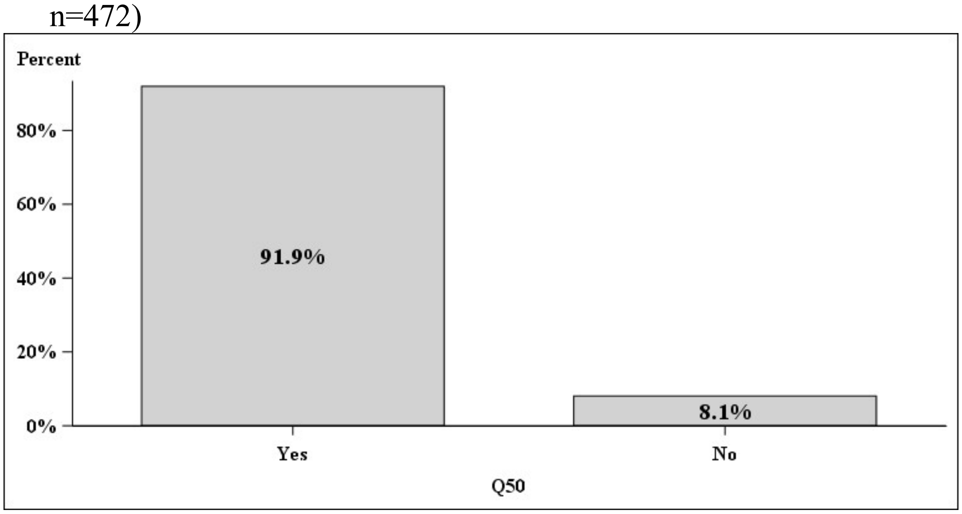
Figure R-122 PHP understands how these conditions affect the child's day-to-day life (q49; n=479)



Personal health provider understanding of how child's medical condition affects the family's day-to-day life (q50; satisfaction)

Question 50 asked caregivers who responded 'yes' to q48 if the personal health provider understood how these conditions affected the family's day-to-day life in the previous 6 months. Figure R-123 indicates that 91.9% of personal health providers understood how these conditions affected the family's day-to-day life. We found no statistically significant relationships between q50 responses and any of the demographic or contextual variables.

Figure R-123 PHP understands how these conditions affect the family's day-to-day life (q50; n=472)



3.5 Getting Health Care from Specialists (q51-q56)

Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and other doctors who specialize in one area of health care.

Appointments made for the child to see a specialist (q51; health status)

Question 51 asked caregivers if they made appointments for their child to see a specialist in the previous 6 months. Figure R-124 shows that 22.1% of children had been to see at least one specialist on at least one occasion.

Figure R-124 Appointments were made to see a specialist (q51; n=2,268)

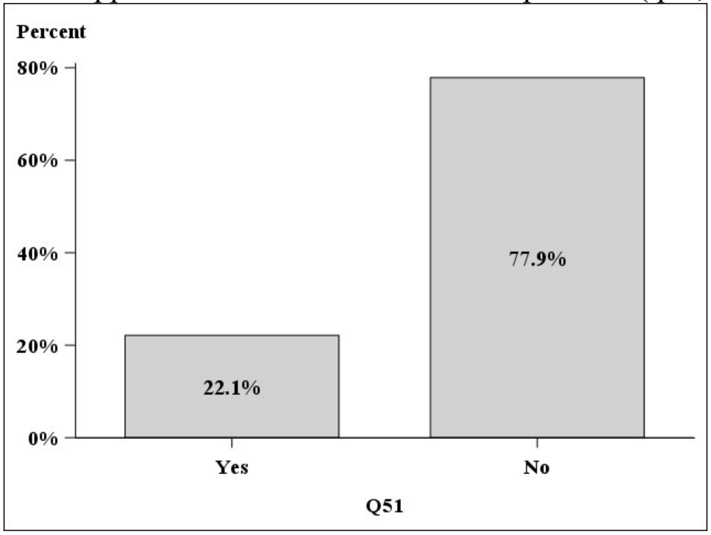


Figure R-125 shows how responses to q51 varied with race-ethnicity. Twenty-seven percent (27.0%) of Non-Hispanic White (NHW) children visited a specialist physician while only 16.1% of Hispanic/Latino (H/L) children visited a specialist.

Figure R-125 Appointments were made to see a specialist vs. race-ethnicity (q51; n=2,257)

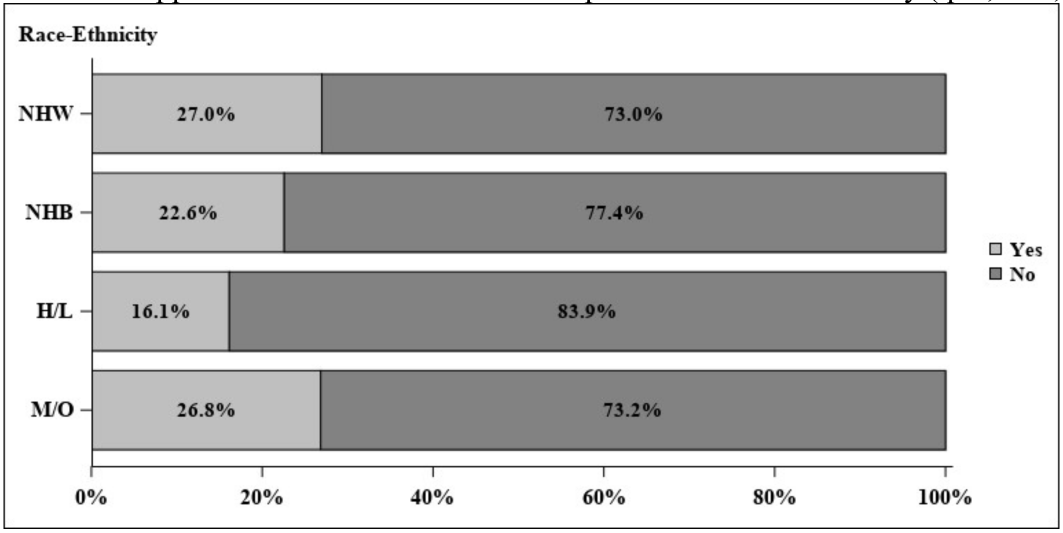
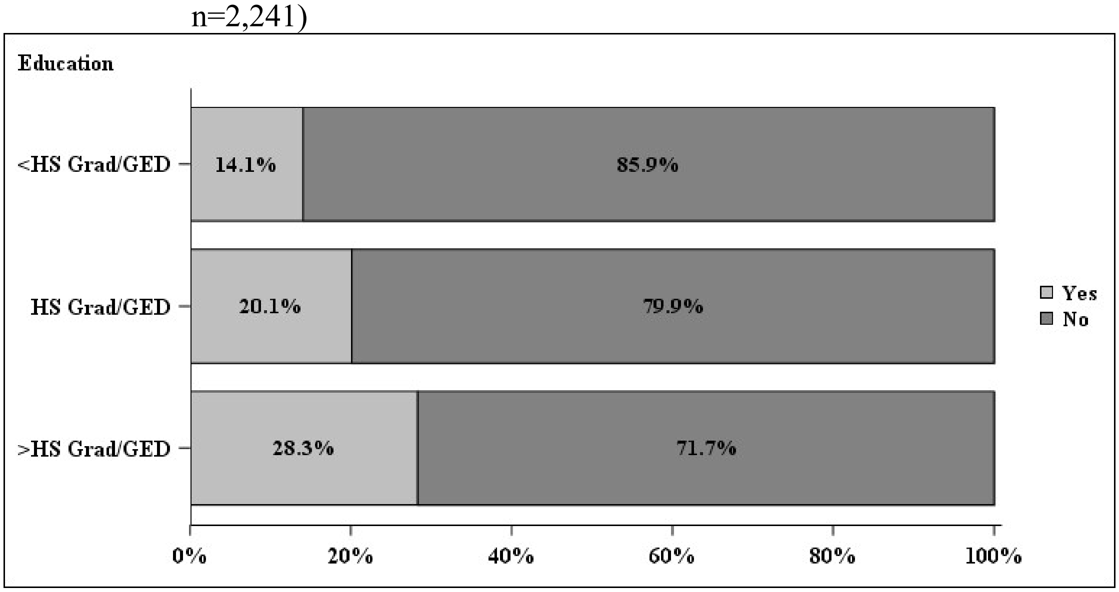


Figure R-126 describes variation in q51 responses across caregiver education. Twenty-eight point three percent (28.3%) Children of caregivers with >HS Grad/GED visited a specialist physician, while only 14.1% of those with <HS Grad/GED reported the same.

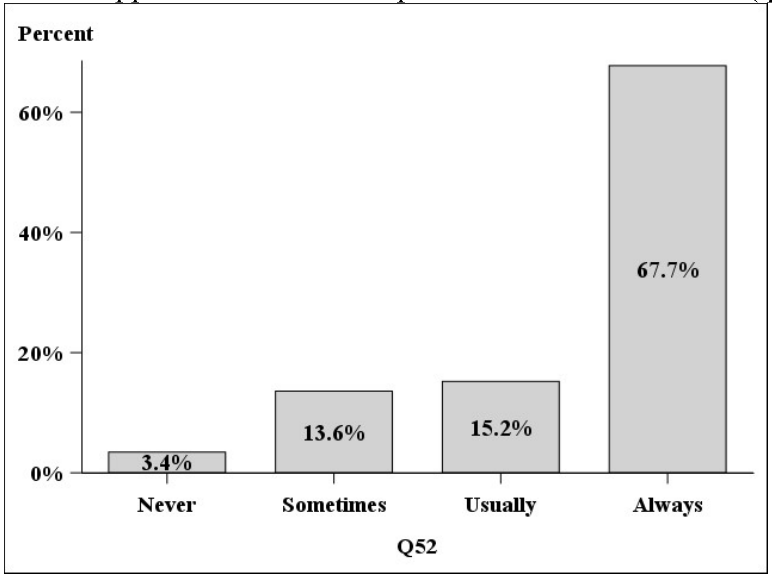
Figure R-126 Appointments were made to see a specialist vs. caregiver education (q51; n=2,241)



Timeliness of specialist appointments for the child (q52; access)

Question 52 asked caregivers who responded 'yes' to q51 how often they were able to get their child a specialist appointment as soon as needed in the previous 6 months. Figure R-127 shows that 67.7% always got appointments fast enough, 15.2% usually got them fast enough, 13.6% sometimes got them fast enough and 3.4% never got specialist appointments fast enough. We found no statistically significant relationships between q52 responses and any of the demographic or contextual variables.

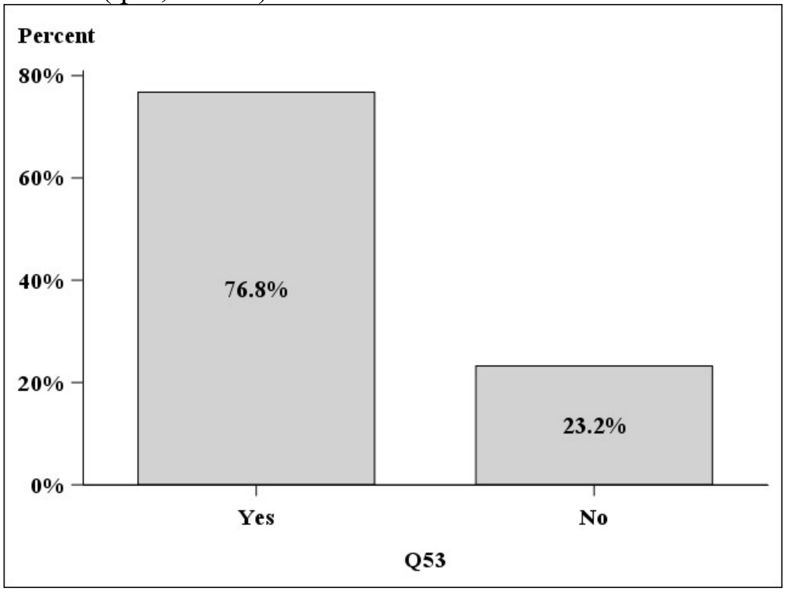
Figure R-127 Got appointments to see a specialist as soon as needed (q52; n=493)



Help from Medicaid or doctor's office to coordinate specialist care (q53; access)

Question 53 asked caregivers who responded 'yes' to q51 if anyone from the Medicaid plan or the child's doctor's office helped coordinate the child's care among specialists in the previous 6 months. Figure R-128 shows that 76.8% of caregivers disclosed receiving help coordinating care among specialists. We found no statistically significant relationships between q53 responses and any of the demographic or contextual variables.

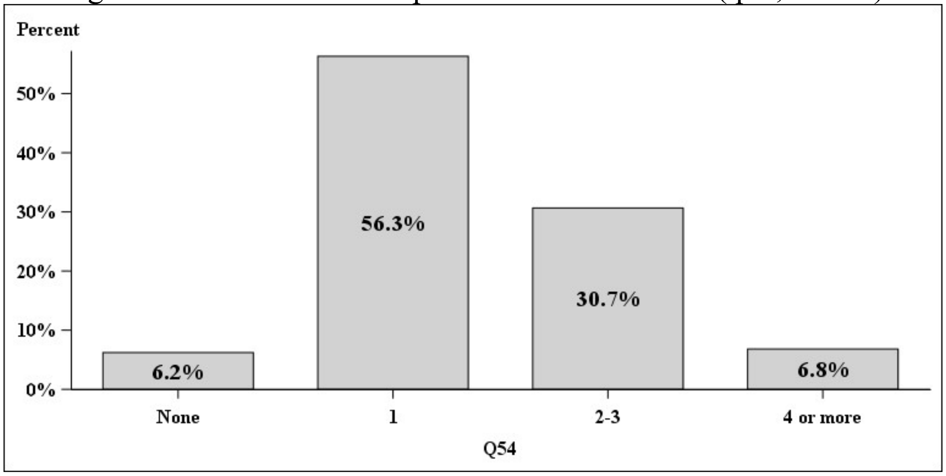
Figure R-128 Someone from the doctor's office or health plan helped coordinate care among specialists (q53; n=495)



Number of specialists the child saw (q54; utilization)

Question 54 asked caregivers who responded 'yes' to q51 how many specialists the child had seen in the previous 6 months. Figure R-129 indicates that the vast majority of children saw one specialist (56.3%) and 2-3 (30.7%), while 6.8% of children saw 4 or more specialists and 6.2% saw none. We found no statistically significant relationships between q54 responses and any of the demographic or contextual variables.

Figure R-129 Number of specialists the child saw (q54; n=499)



Overall rating of specialist seen most often (q55; satisfaction)

Question 55 asked caregivers who responded 'yes' to q51 to rate the specialist their child saw most often in the previous 6 months from 0-10, where 0 is the worst possible and 10 is the best possible. Figure R-130 suggests that 60.1% of caregivers rated this specialist a 10, 28.5% rated this doctor an 8 or 9, and 11.4% gave a rating between 0-7.

Figure R-130 Rating of specialist seen most often (q55; n=466)

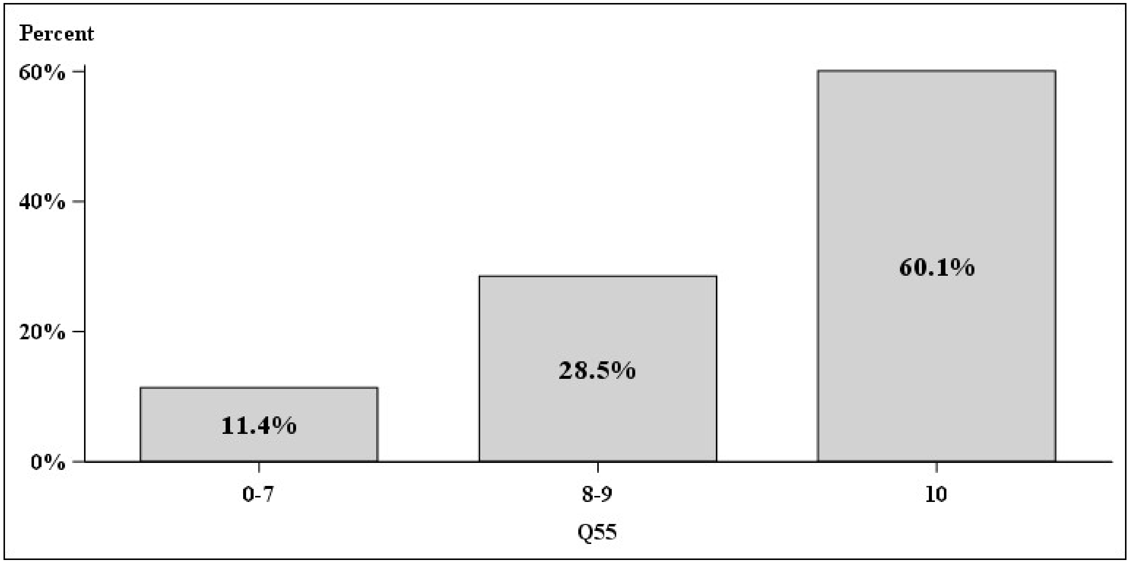
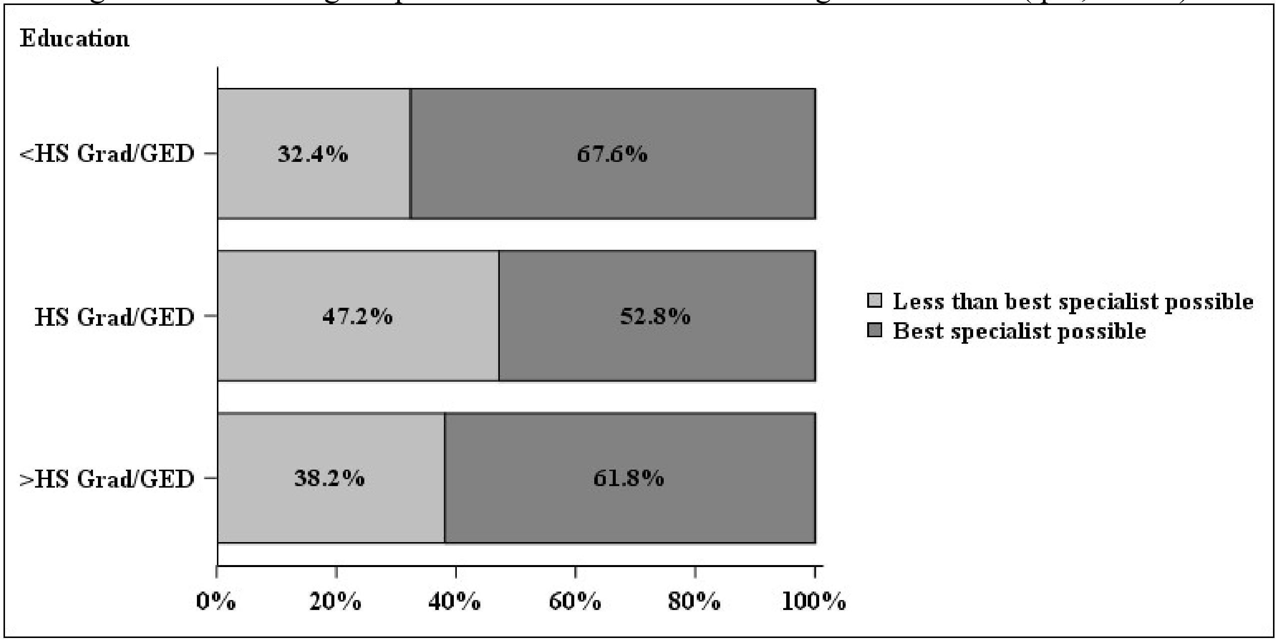


Figure R-131 shows how q55 responses varied across the caregiver's education. Sixty-seven point six percent (67.6%) of caregivers with <HS Grad/GED rated the specialist seen most often as the best specialist possible while only 52.8% of caregivers with HS Grad/GED did the same.

Figure R-131 Rating of specialist seen most often vs. caregiver education (q55; n=461)



Specialist also regarded as personal health provider (q56; access)

Question 56 asked caregivers if the specialist the child saw most often in the previous 6 months was the same as the child's personal health provider. Figure R-132 reveals that 24.9% of caregivers reported that these two health providers were the same individual.

Figure R-132 Specialist seen most often is also the PHP (q56; n=462)

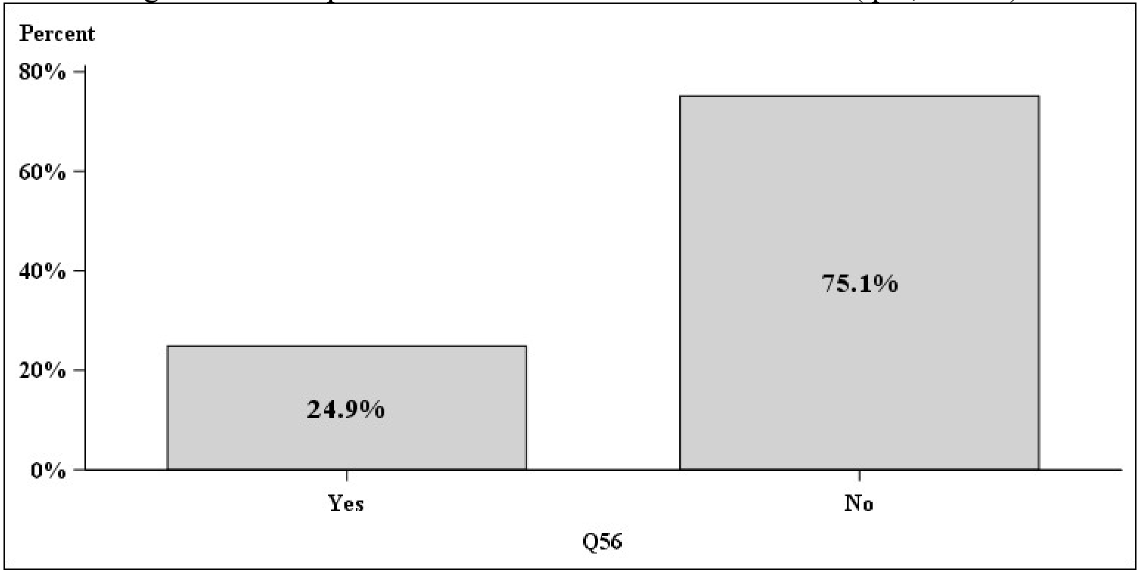


Figure R-133 describes how responses to q56 varied with race-ethnicity. Forty-five point three percent (45.3%) of H/L children reported that the personal health provider was also the specialist seen most often. Only 14.3% of Multi/Other and 15.6% of NHW children reported the same observation.

Figure R-133 Specialist seen most often is also the PHP vs. race-ethnicity (q56; n=461)

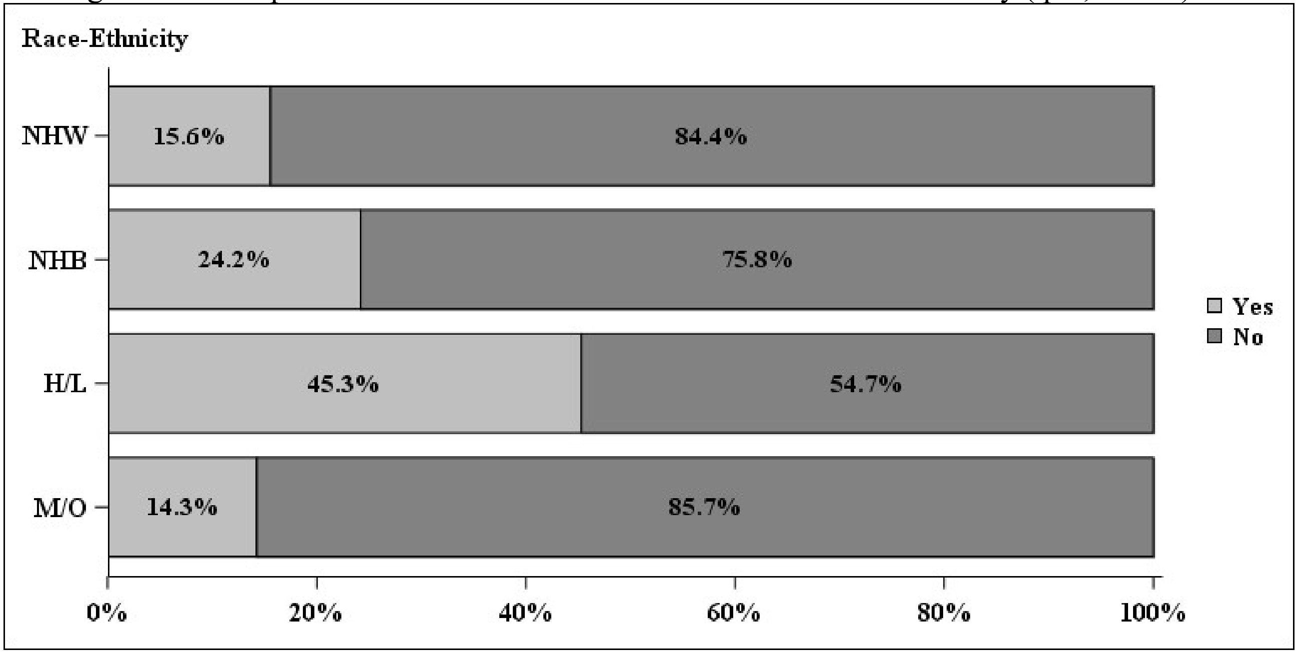
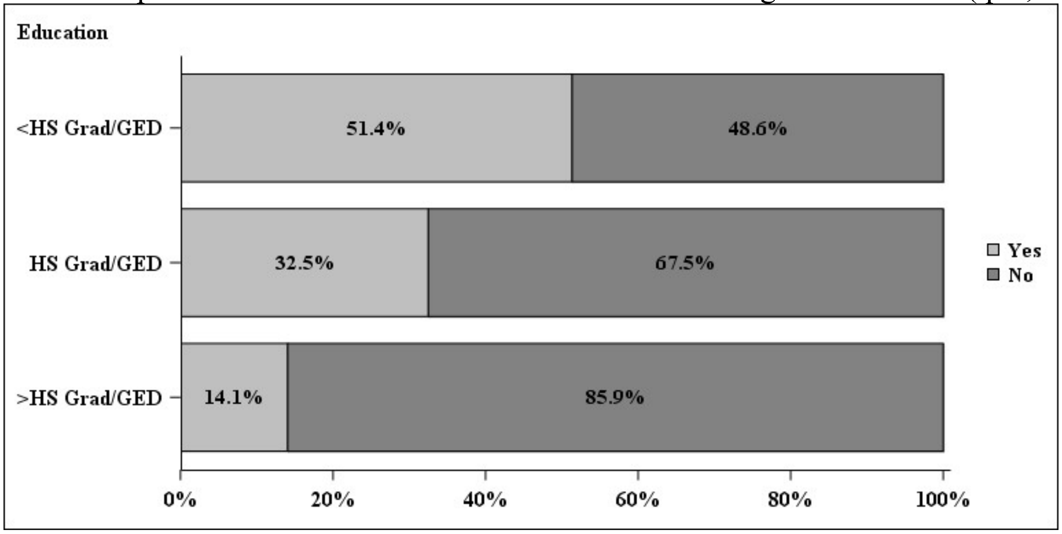


Figure R-134 shows how responses to q56 varied with caregiver education. Fifty-one point four percent (51.4%) of caregivers of children with <HS Grad/GED reported that the personal health provider was also the specialist seen most often. Only 14.1% of caregivers with >HS Grad/GED reported the same observation.

Figure R-134 Specialist seen most often is also the PHP vs. caregiver education (q56; n=457)



3.6 Interactions with the Child's Health Plan and Doctor's Office Staff (q57-q62)

This section asks about caregiver experience with the child's Medicaid health plan and office staff at the child's doctor offices.

Seeking information from office staff (q57; access)

Question 57 asked caregivers if they had tried to get information from the office staff at the child's health plan or doctor's office in the previous 6 months. Figure R-135 indicates that 36.5% of caregivers did seek information.

Figure R-135 Sought information or help from office staff at the health provider or health plan (q57; n=2,238)

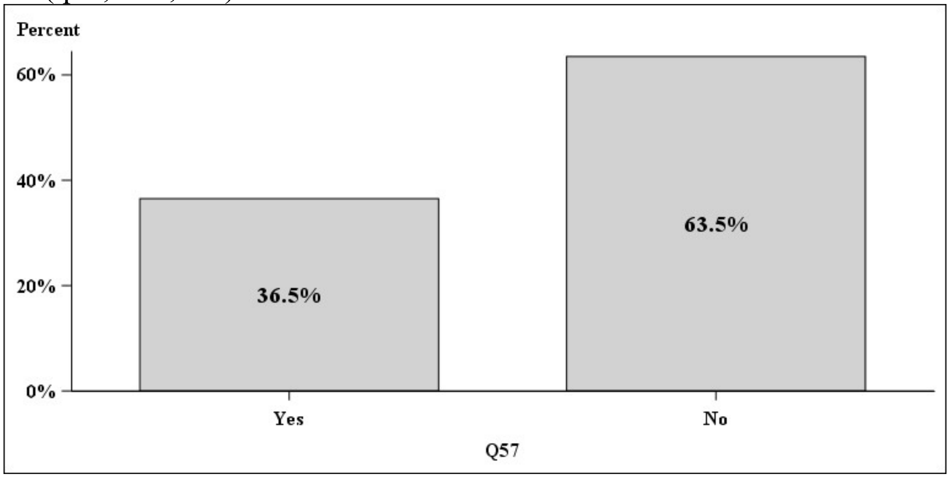


Figure R-136 shows how q57 responses varied across race-ethnicity. Only 31.4% of Hispanic/Latino (H/L) children sought help or information from office staff at the health provider or health plan.

Figure R-136 Sought information or help from office staff at the health provider or health plan vs. race-ethnicity (q57; n=2,227)

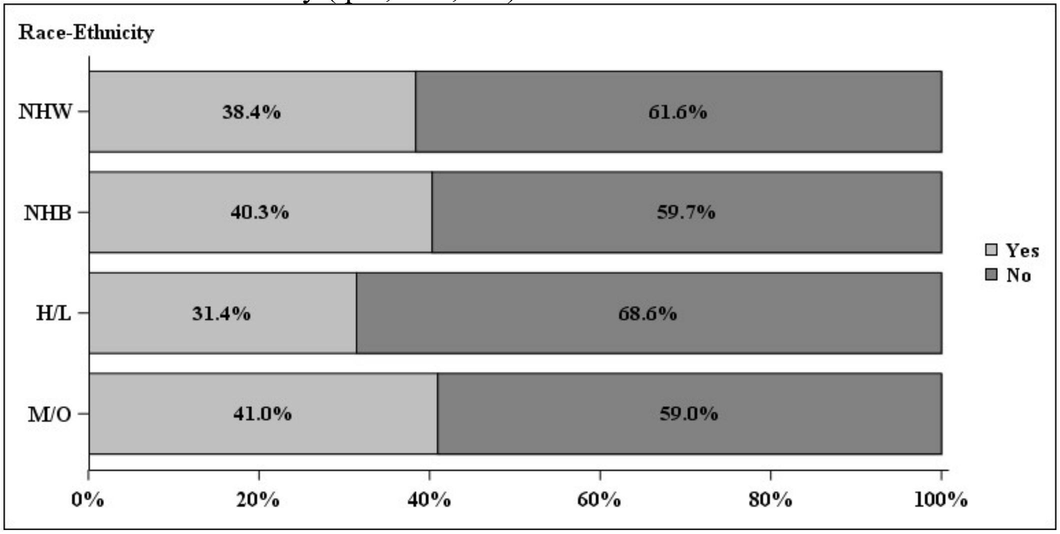
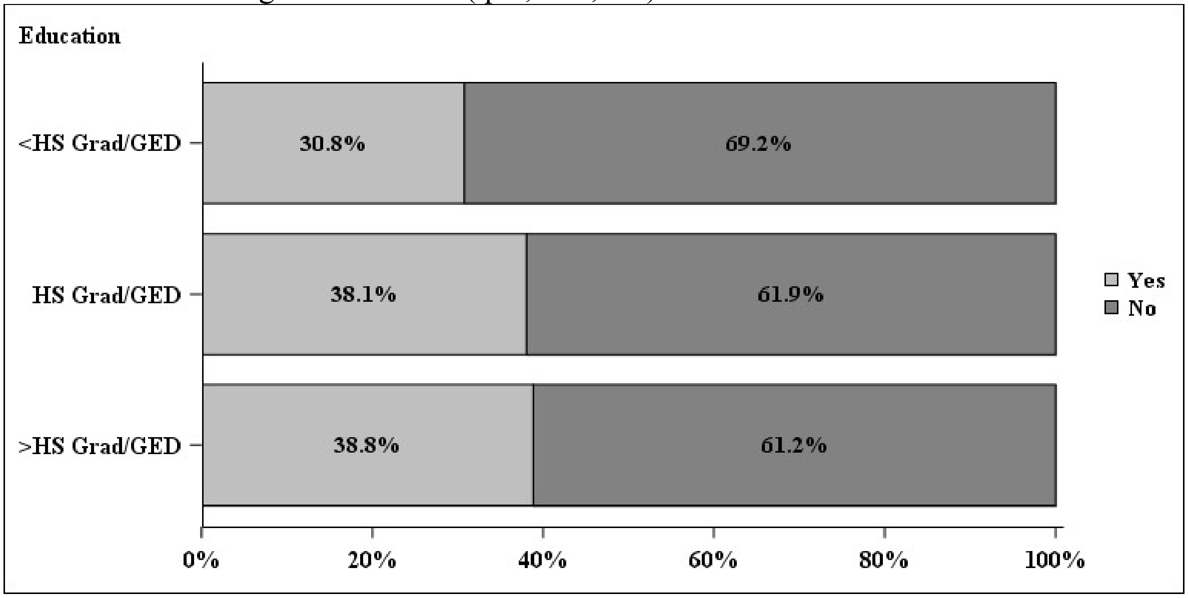


Figure R-137 shows the variation in responses to q57 across caregiver education. Only 30.8% of caregivers with <HS Grad/GED needed help from the provider's office or health plan.

Figure R-137 Sought information or help from office staff at the health provider or health plan vs. caregiver education (q57; n=2,213)



Getting needed information from office staff (q58; satisfaction)

Question 58 asked caregivers who answered 'yes' to q57 how often they got the information or help they needed from office staff at the health plan or provider in the previous 6 months. Figure R-138 demonstrates that 71.5% of caregivers always got the help they needed from the provider's office or health plan, 18.7% and 8.7% usually and sometimes got the help they needed, respectively, while only 1.1% never got the help they needed.

Figure R-138 Got the information or help needed from office staff at health plan or provider (q58; n=814)

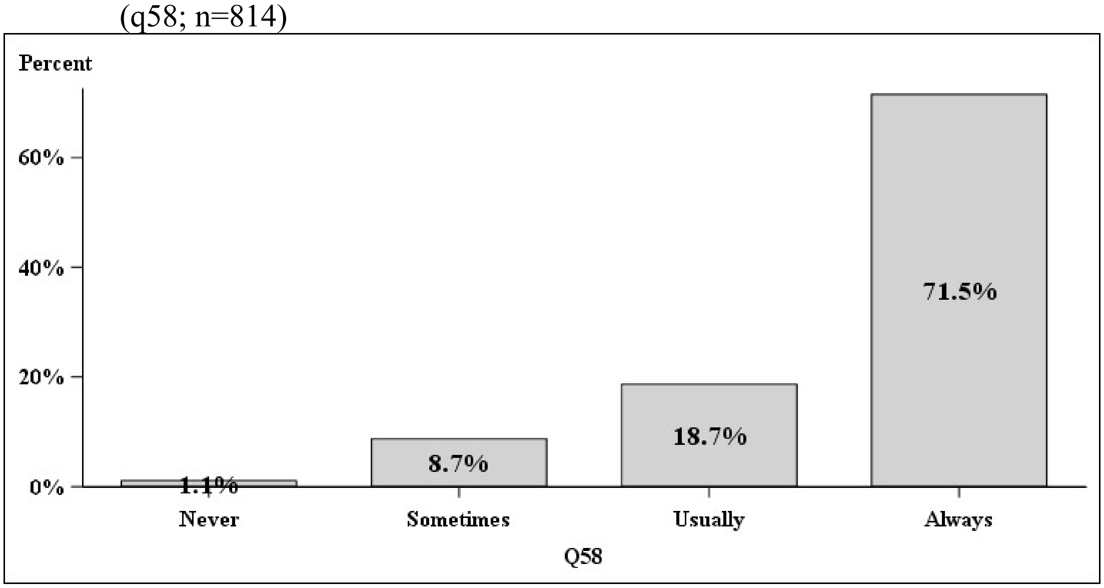


Figure R-139 shows how q58 responses varied across race-ethnicity. Caregivers of Non-Hispanic White (NHW) children always got the information or help needed from office staff at the health plan or provider at 79.9%. Only 65.2% of caregivers of H/L and 63.7% of M/O children reported the same response.

Figure R-139 Got the information or help needed from office staff at health plan or provider vs. race-ethnicity (q58; n=812)

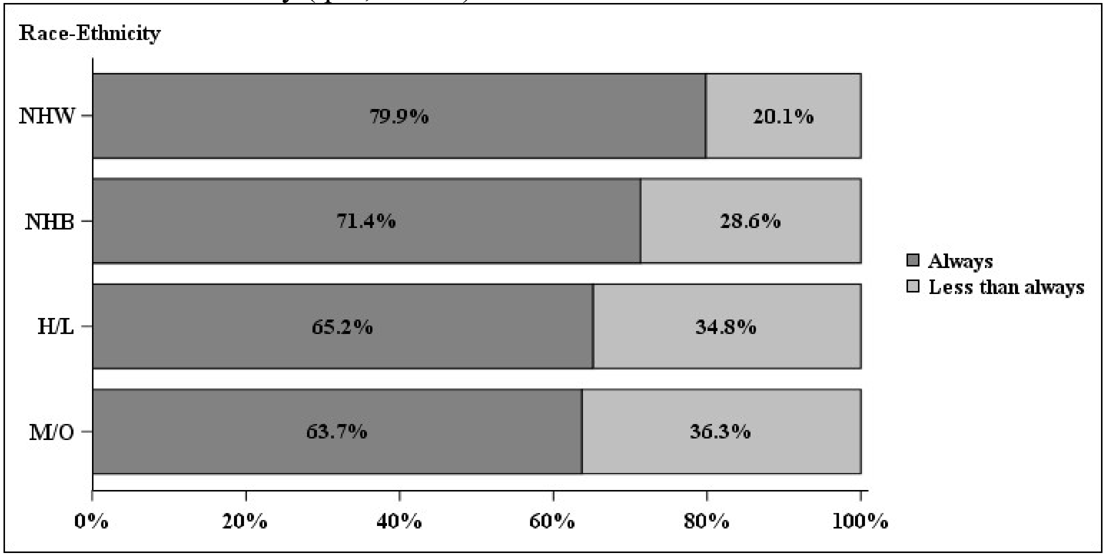
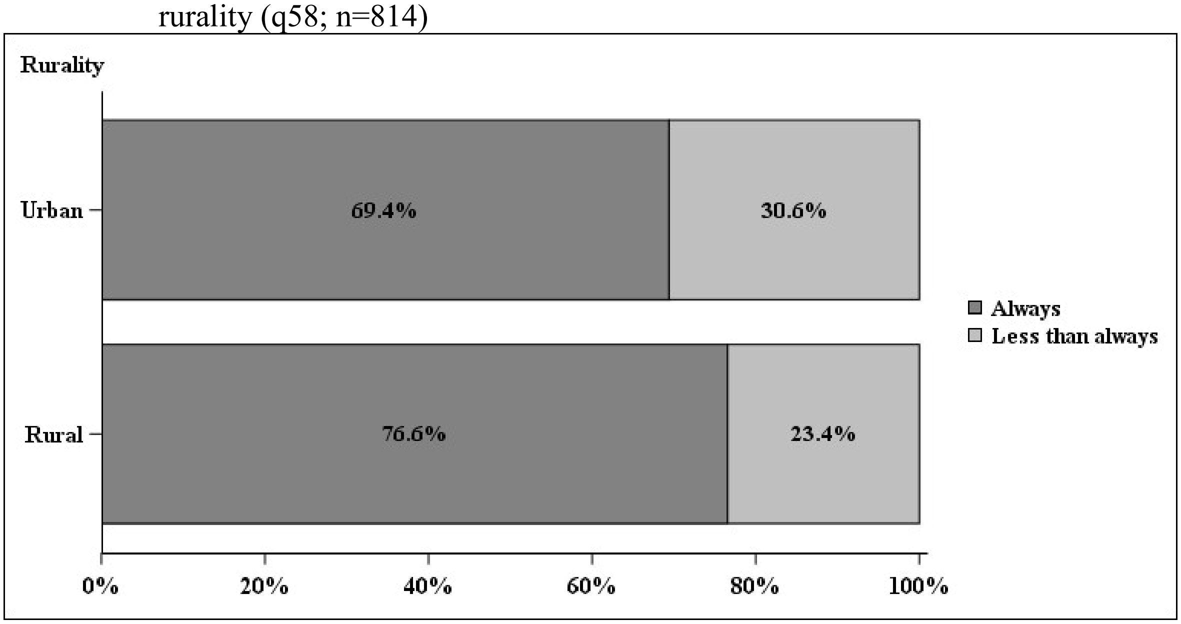


Figure R-140 shows how q58 responses varied across rurality. Children from rural counties (76.6%) more often always got the information or help needed from office staff at the health plan or provider, while only 69.4% of children from urban counties reported the same observation.

Figure R-140 Got the information or help needed from office staff at health plan or provider vs. rurality (q58; n=814)



Being treated with respect by office staff (q59; satisfaction)

Question 59 asked caregivers who responded ‘yes’ to q57, how often the office staff at the child’s health provider or health plan treated the child with courtesy and respect. Figure R-141 indicates that 91.4% of children were always treated with courtesy and respect, while 5.8%, 2.5%, and 0.4% were usually, sometimes, and never, respectively, treated the same.

Figure R-141 Office staff at the health provider or health plan treated the child with courtesy and respect (q59; n=814)

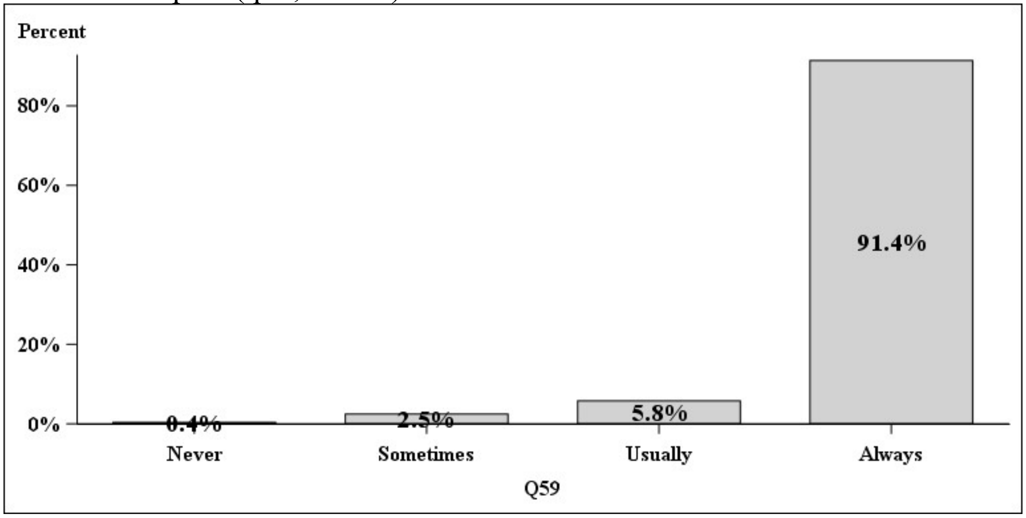
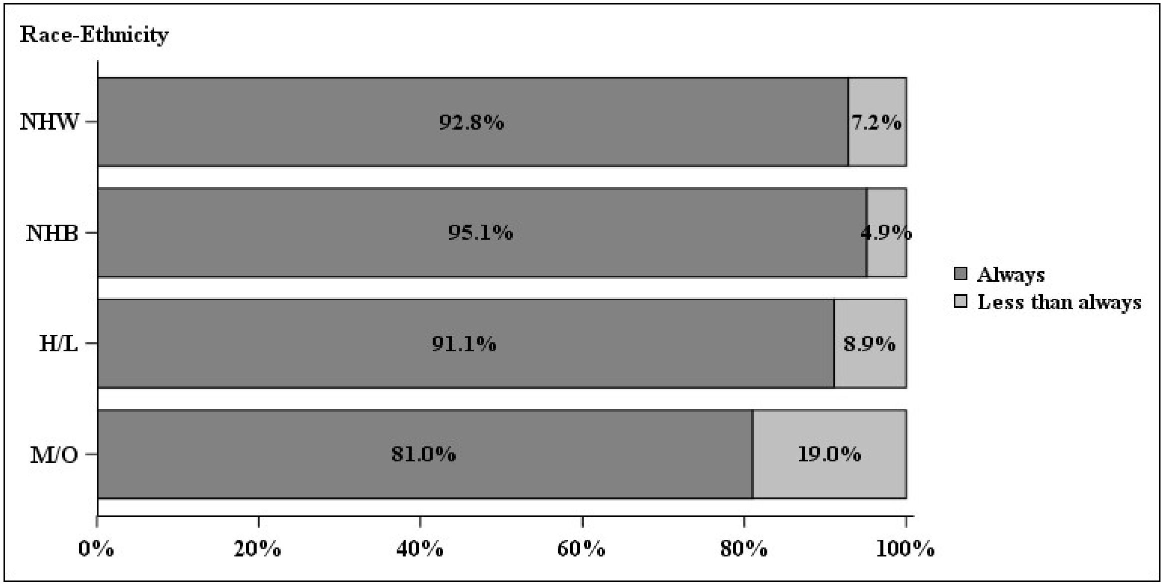


Figure R-142 shows how q59 responses varied across race-ethnicity. Non-Hispanic Black (NHB) children (95.1%) were always treated with courtesy and respect by the office staff at the child’s health provider or health plan. Only 81.0% of Multi/Other (M/O) children reported the same observation.

Figure R-142 Office staff at the health provider or health plan treated the child with courtesy and respect vs. race-ethnicity (q59; n=812)



Caregivers given forms to fill out (q60a; satisfaction)

Question 60a asked caregivers if the child's health provider or health plan gave them any forms to fill out. Figure R-143 shows that 78.9% of caregivers reported they were given forms to fill out.

Figure R-143 Health provider or health plan gave caregiver forms to fill out (q60a; n=2,243)

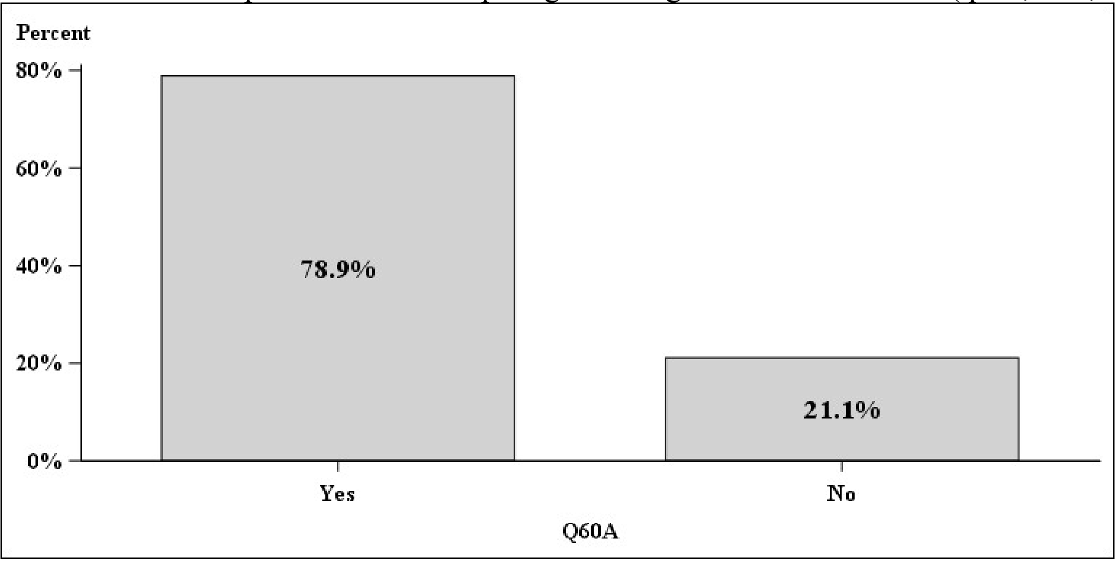


Figure R-144 shows how q60a responses varied with age. Eighty-four point two percent (84.2%) of caregivers of 0-1 yo were more often given forms to fill out by the health provider or health plan while only 74.9% of caregivers of 13-18 yo were asked to fill out forms.

Figure R-144 Health provider or health plan gave caregiver forms to fill out vs. age (q60a; n=2,243)

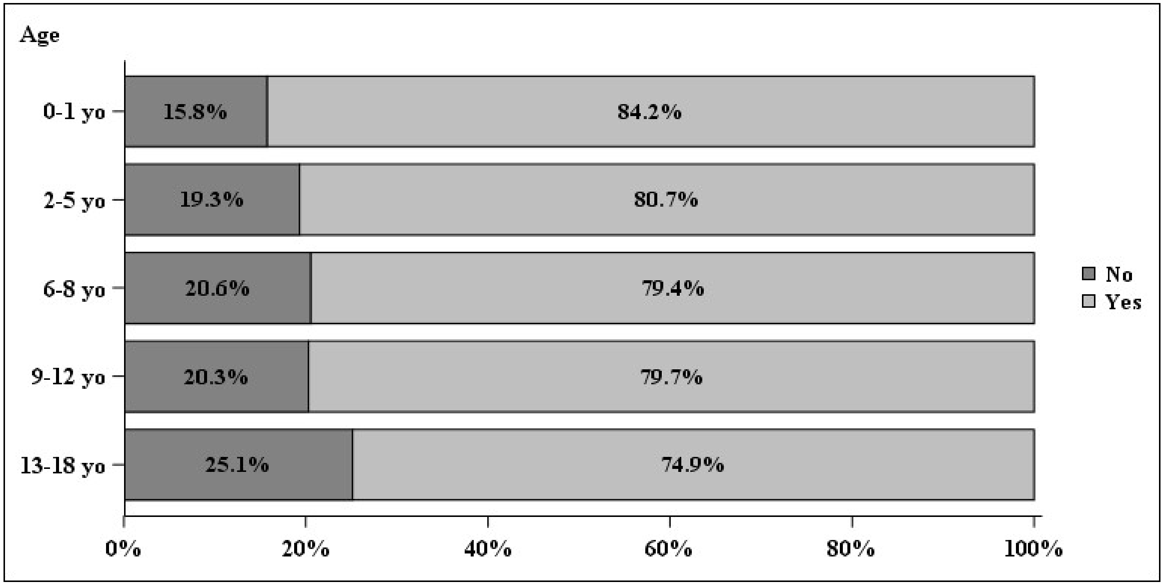
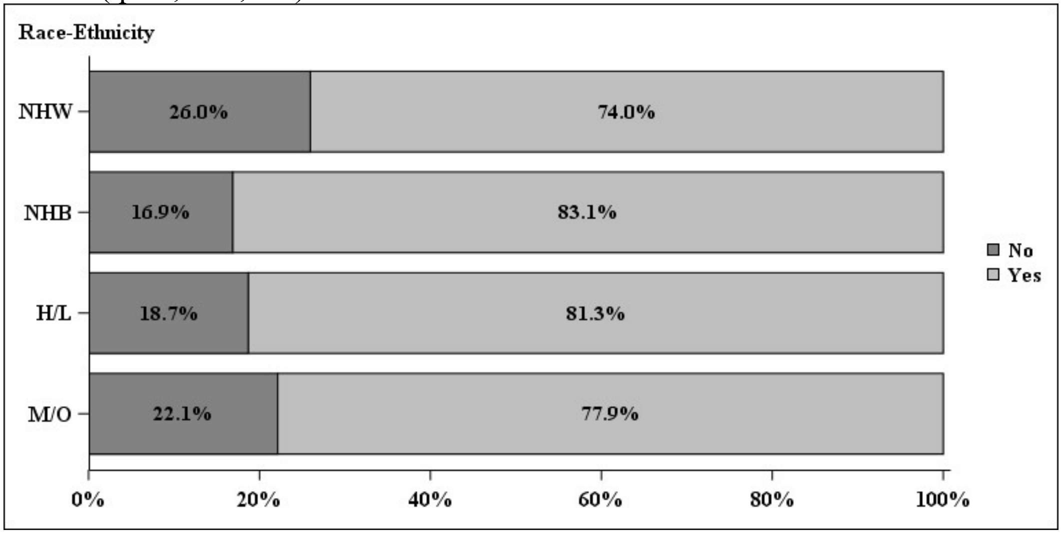


Figure R-145 shows how q60a responses varied with race-ethnicity. Eighty-three point one percent (83.1%) of caregivers of NHB children were given forms to fill out by the health provider or health plan while only 74.0% of caregivers of NHW children were asked the same.

Figure R-145 Health provider or health plan gave caregiver forms to fill out vs. race-ethnicity (q60a; n=2,243)



Ease of completing forms (q60b; satisfaction)

Question 60b asked caregivers who answered ‘yes’ to q60a how often forms were easy to fill out. Figure R-146 demonstrates that forms were always easy to fill out for 63.7% of caregivers, usually and sometimes easy for 20.4% and 14.0% of caregivers, respectfully, while never easy for 1.9% of caregivers.

Figure R-146 Forms from the health provider or health plan were easy to fill out (q60b; n=1,770)

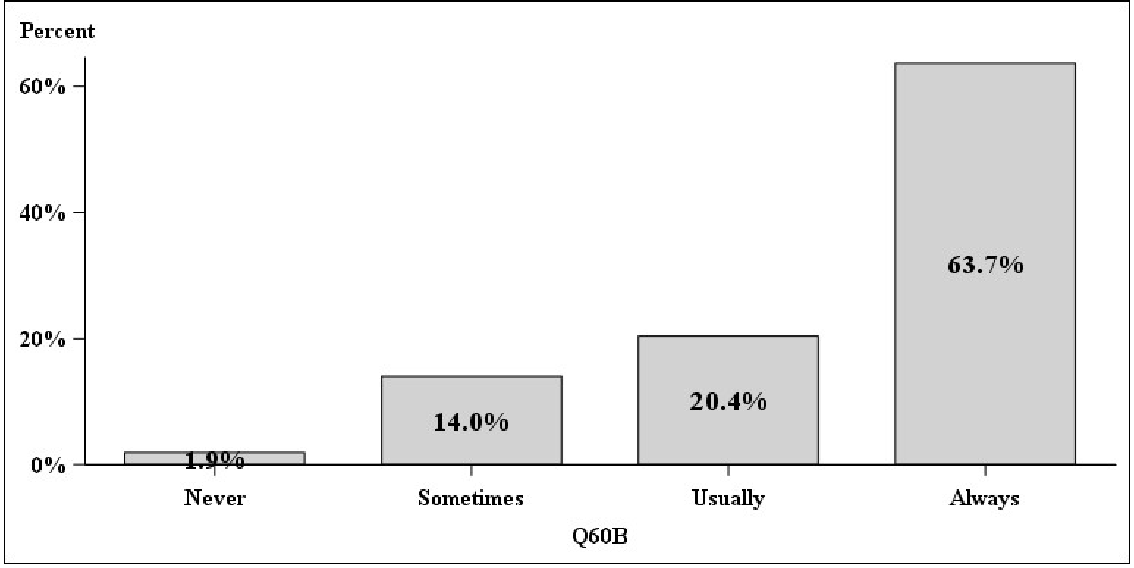


Figure R-147 shows how q60b responses varied with age. Caregivers of 0-1 yo children (74.3%) most often reported that forms from the health provider or health plan were always easy to fill out.

Figure R-147 Forms from the health provider or health plan were easy to fill out vs. age (q60b; n=1,770)

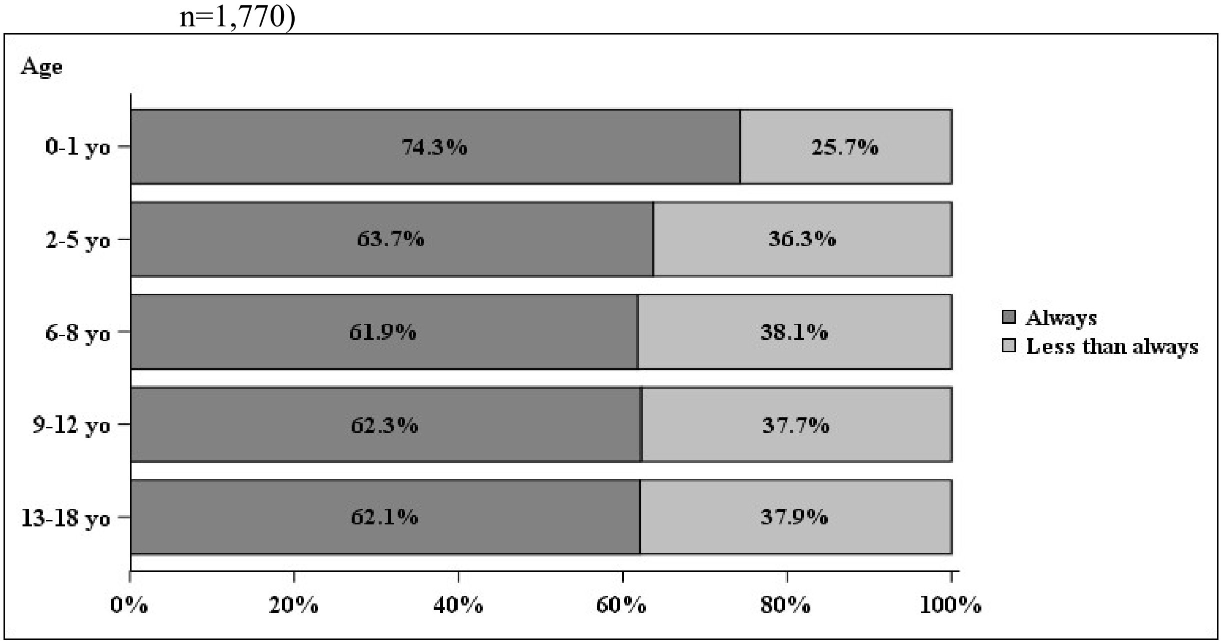
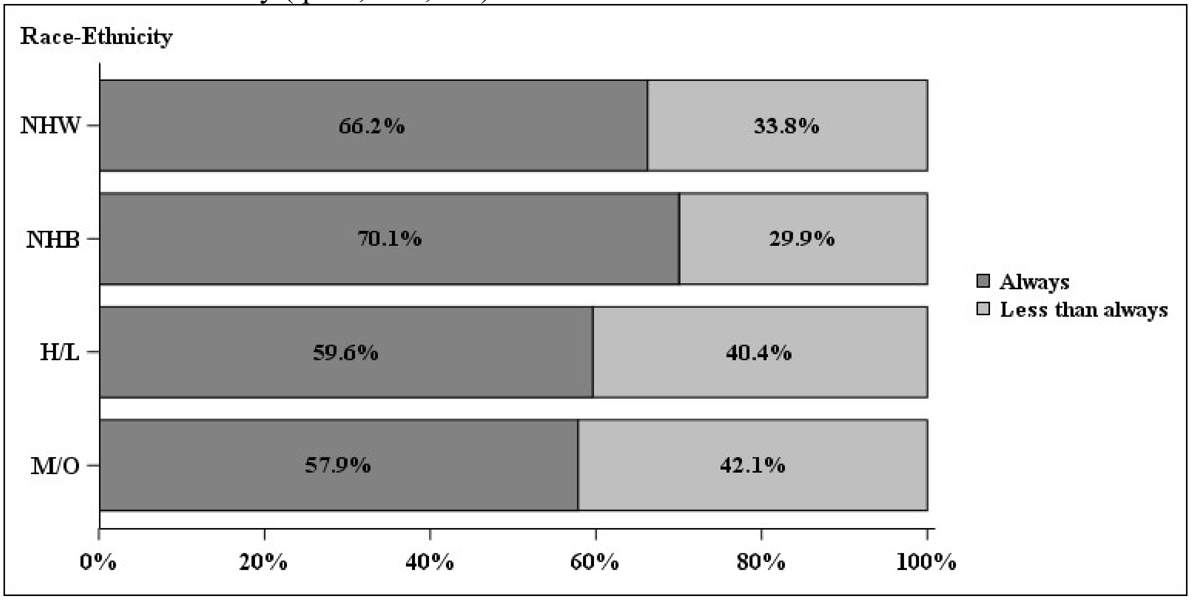


Figure R-148 shows how q60b responses varied with race-ethnicity. Seventy point one percent (70.1%) of caregivers of NHB children most often reported that forms from the health provider or health plan were always easy to fill out. Only 59.6% and 57.9% of caregivers of H/L and M/O children, respectively, reported the same observation.

Figure R-148 Forms from the health provider or health plan were easy to fill out vs race-ethnicity (q60b; n=1,762)



Tried to get transportation help from a non-family member (q61a; access)

Question 61a asked caregivers if they tried to get transportation help from a non-family member to get the child to a medical appointment or to get a prescription. Figure R-149 indicates that 22.0% of caregivers tried to get this kind of help.

Figure R-149 Needed transportation help from a non-family member for a medical appointment or prescription (q61a; n=2,268)

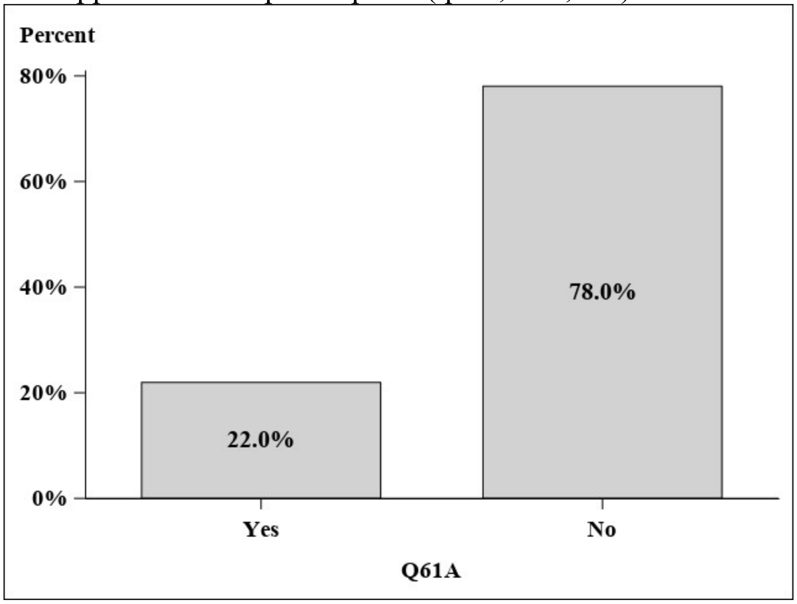


Figure R-150 shows how q61a responses varied with race-ethnicity. Caregivers of NHB children (31.5%) most often needed transportation help from a non-family member for a medical appointment or to get a prescription. Only 15.4% of caregivers of NHW children needed the same help.

Figure R-150 Needed transportation help from a non-family member for a medical appointment or prescription vs. race-ethnicity (q61a; n=2,257)

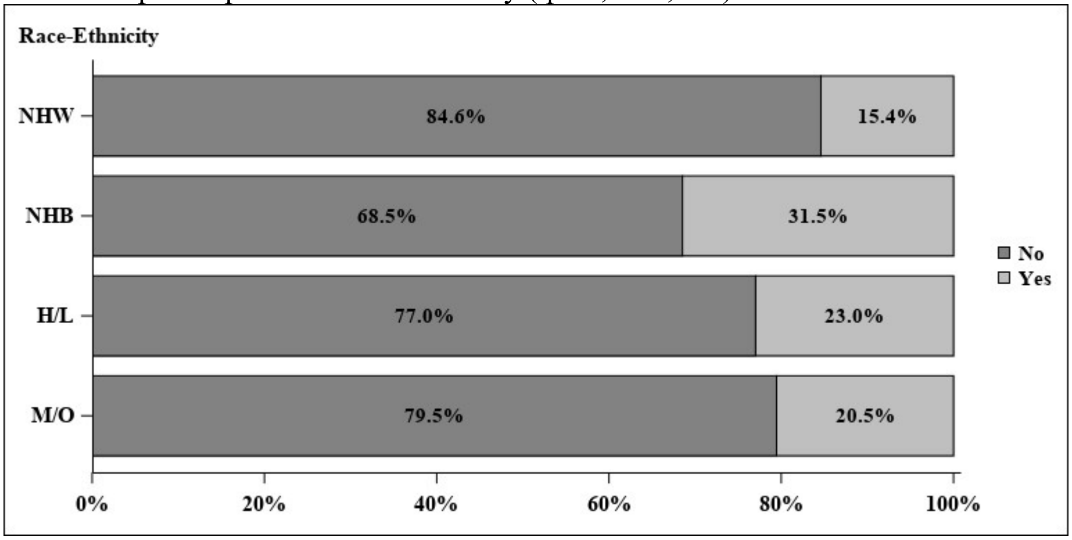
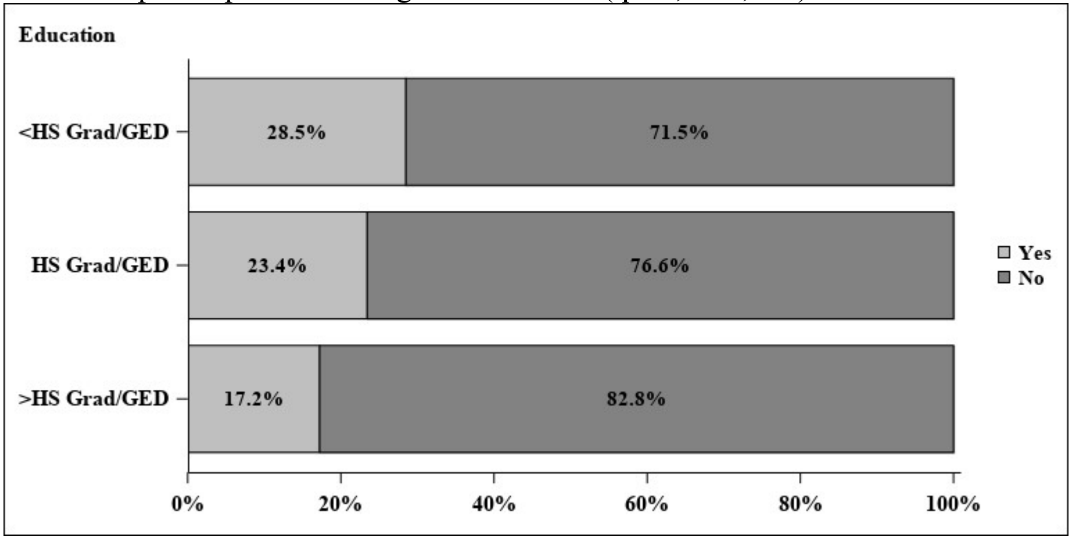


Figure R-151 demonstrates the relationship between responses to q61a and caregiver education. Caregivers with <HS Grad/GED (28.5%) needed transportation help much more often from a non-family member for a medical appointment or to get a prescription. Only 17.2% of caregivers with >HS Grad/GED reported a need for the same help.

Figure R-151 Needed transportation help from a non-family member for a medical appointment or prescription vs. caregiver education (q61a; n=2,241)



Getting needed transportation help from a non-family member (q61b; access)

Question 16b asked caregivers who responded ‘yes’ to q16a, if they got the needed transportation help from a non-family member to get the child to a medical appointment or get a prescription. Figure R-152 indicates that 49.8% of caregivers always got the needed transportation help, while 8.4%, 27.3% and 14.5% of caregivers usually, sometimes and never, respectively, got this kind of help.

Figure R-152 Got needed transportation help from a non-family member for a medical appointment or prescription (q61b; n=498)

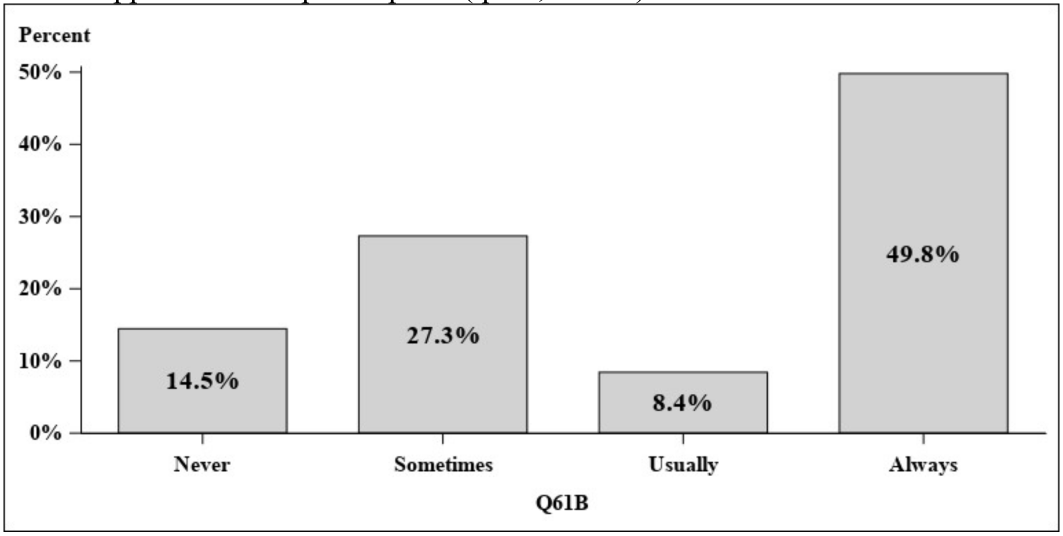
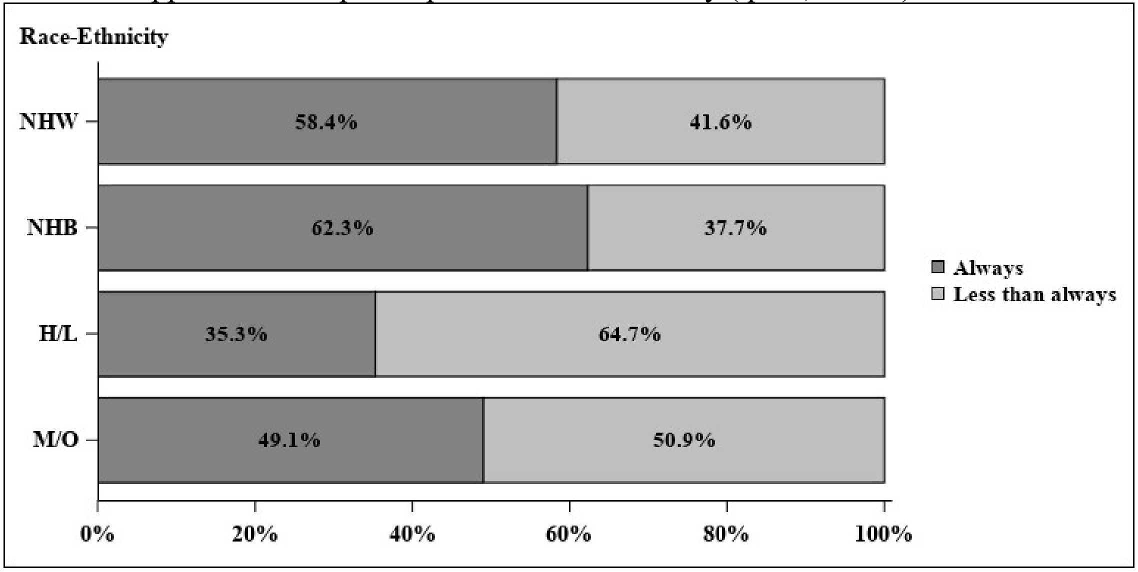


Figure R-153 demonstrates the relationship between responses to q61b and race-ethnicity. Caregivers of NHB children (62.3%) always got the needed transportation help more often from a non-family member for a medical appointment for the child or to get the child a prescription. Only 35.3% of caregivers of H/L children got the same kind of help.

Figure R-153 Got needed transportation help from a non-family member for a medical appointment or prescription vs. race-ethnicity (q61b; n=496)



Overall caregiver rating of health plan (q62; satisfaction)

Question q62 asked caregivers to rate their child's Carolina Access, Medicaid or Health Check plan from 0-10, where 0 is the worst possible health plan and 10 is the best possible. Figure R-154 demonstrates that 64% of caregivers rated their child's Medicaid plan a 10, 26.5% rated the plan an 8 or 9, and 9.6% rated their child's plan between 0 and 7.

Figure R-154 Rating of the Medicaid plan (q62; n=2,249)

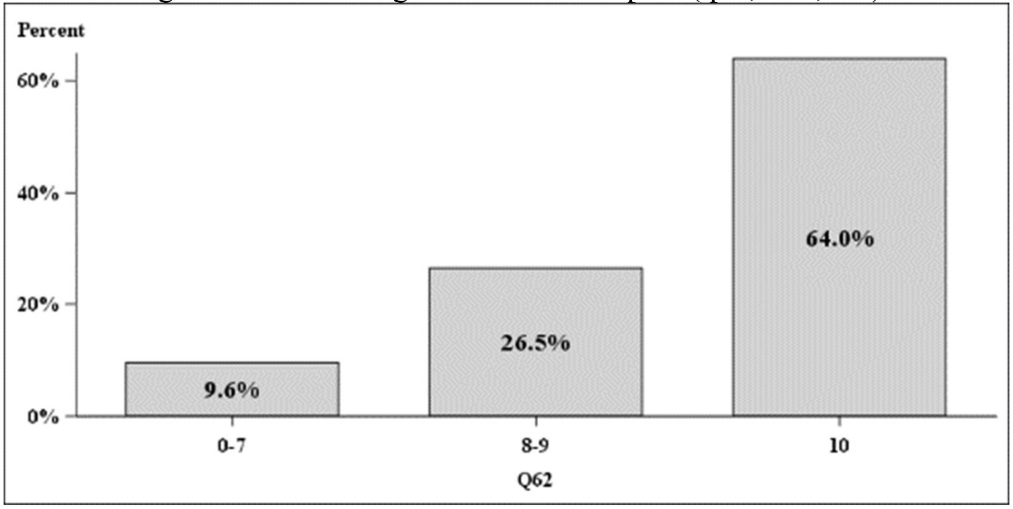


Figure R-155 displays the relationship between responses to q62 and race-ethnicity. Caregivers of H/L children most often rated their child's Medicaid plan as the best (68.5%).

Figure R-155 Rating of the Medicaid plan vs. race-ethnicity (q62; n=2,238)

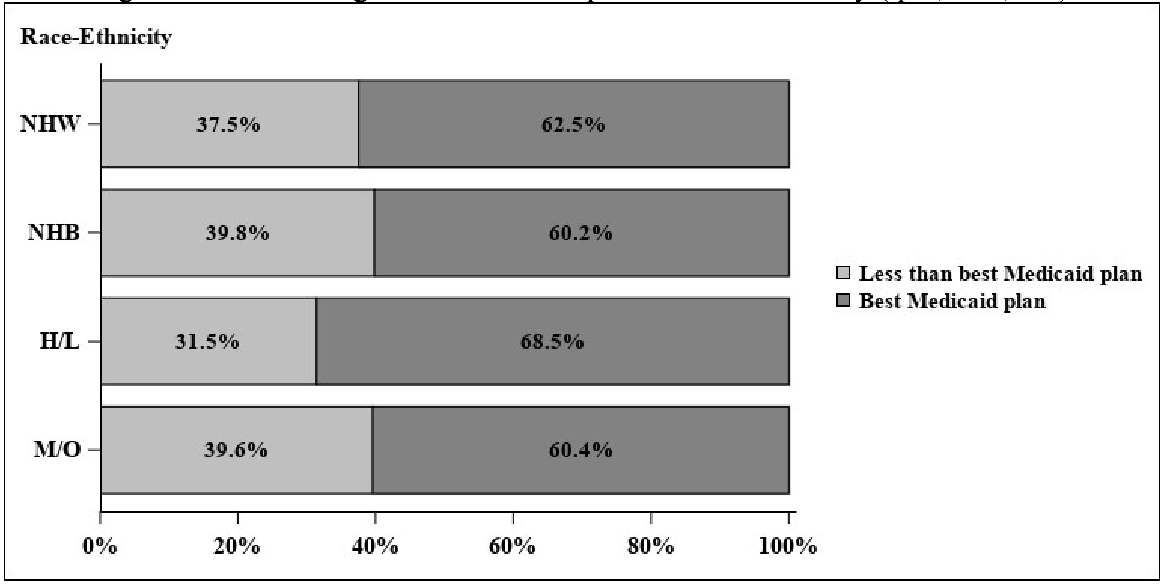
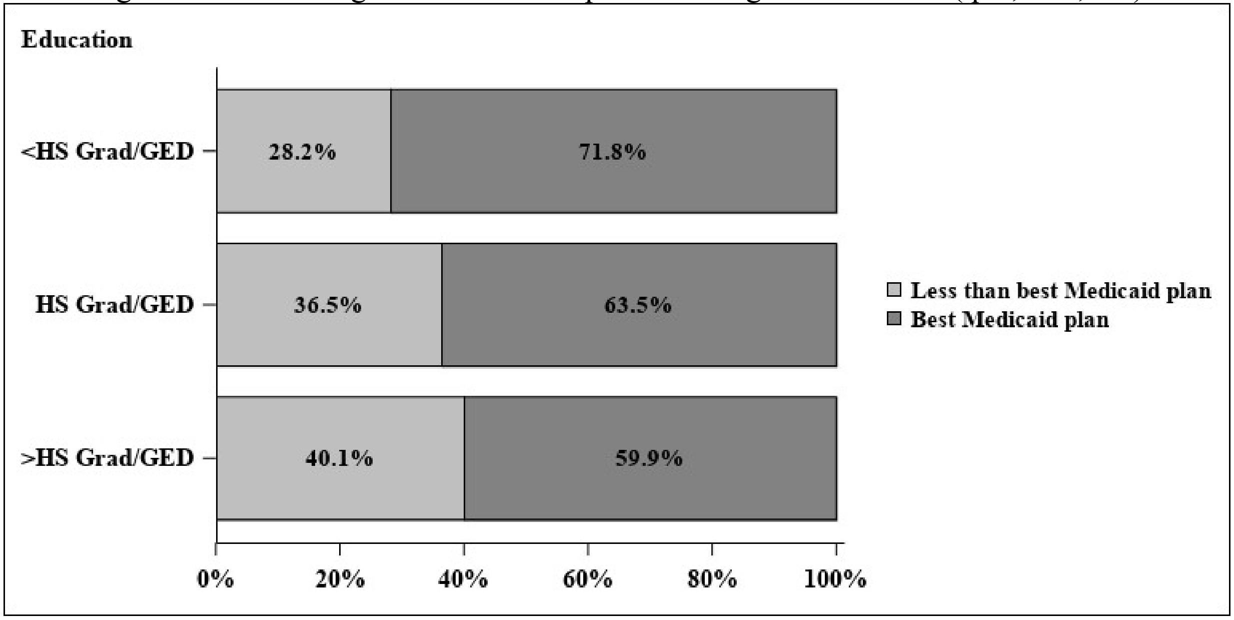


Figure R-156 shows how responses to q62 varied with caregiver education. Seventy-one point eight percent (71.8%) of caregivers with <HS Grad/GED rated their child's Medicaid plan as the best plan (rating of 10). Only 59.9% of caregivers with >HS Grad/GED rated their child's Medicaid plan as the best.

Figure R-156 Rating of the Medicaid plan vs. caregiver education (q62; n=2,223)



3.7 The Child's Health Status (q63-q80)

Filling prescriptions for the child (q63; Utilization)

Question 63 asked caregivers if they filled any prescription medicines for the child in the previous 6 months. Figure R-157 indicates that prescriptions were filled for 49.6% of children.

Figure R-157 Refilled or filled new prescription medicines for the child (q63; n=2,264)

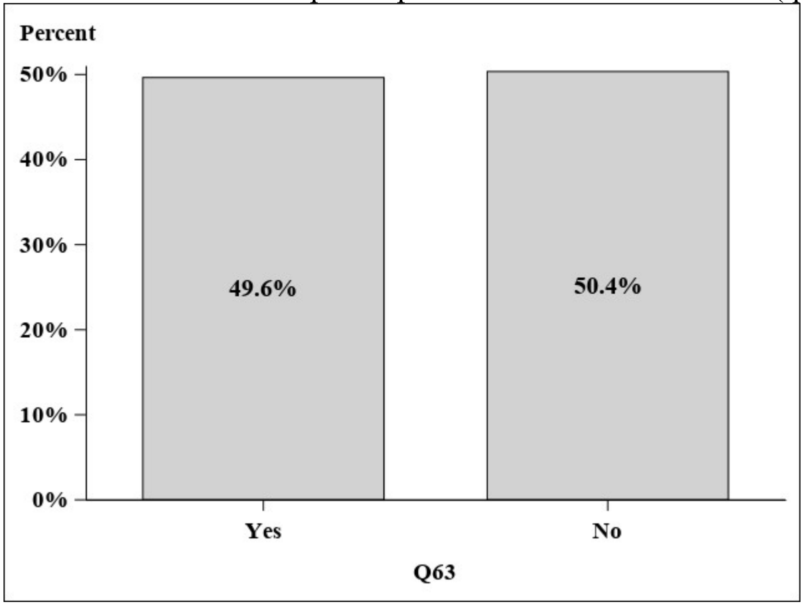


Figure R-158 describes how responses to q63 varied with age. Caregivers of children 13-18 yo filled prescriptions most often for the child at 55.8% while prescriptions were filled less often for children aged 0-1 and 2-5 yo (41.5% and 44.2%, respectively).

Figure R-158 Refilled or filled new prescription medicines for the child vs. age (q63; n=2,264)

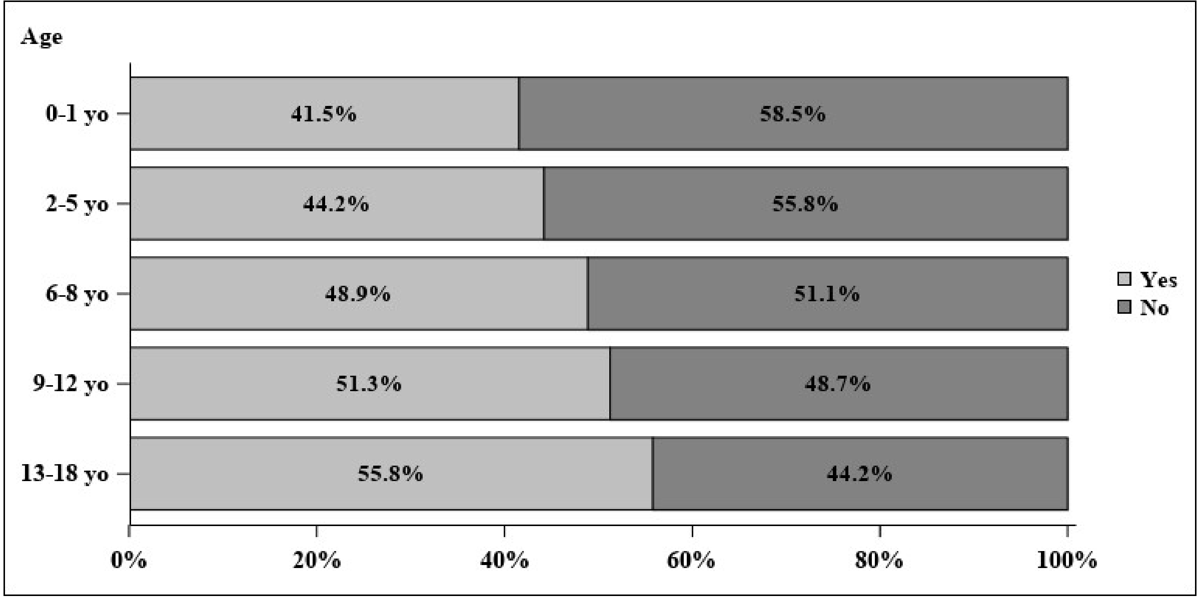


Figure R-159 shows how responses to q63 varied with race-ethnicity. Caregivers of Non-Hispanic White (NHW) children refilled or filled new prescription medicines for the child most often at 60.9% while prescriptions were filled for of Non-Hispanic Black (NHB) children at 53.5%. Caregivers of Hispanic/Latino (H/L) children filled these prescriptions much less often at only 37.0%.

Figure R-159 Refilled or filled new prescription medicines for the child vs. race-ethnicity (q63; n=2,253)

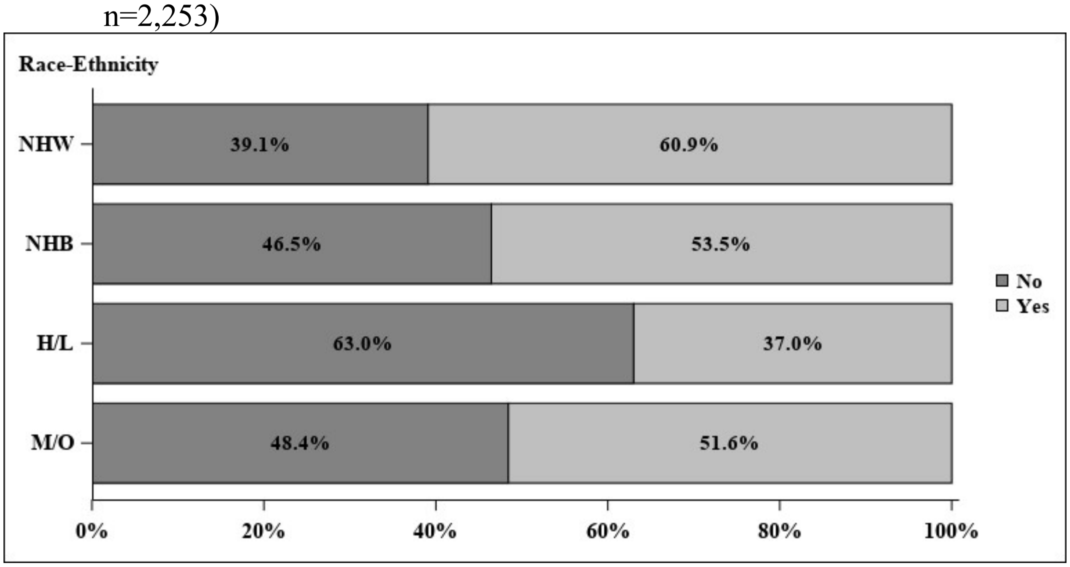
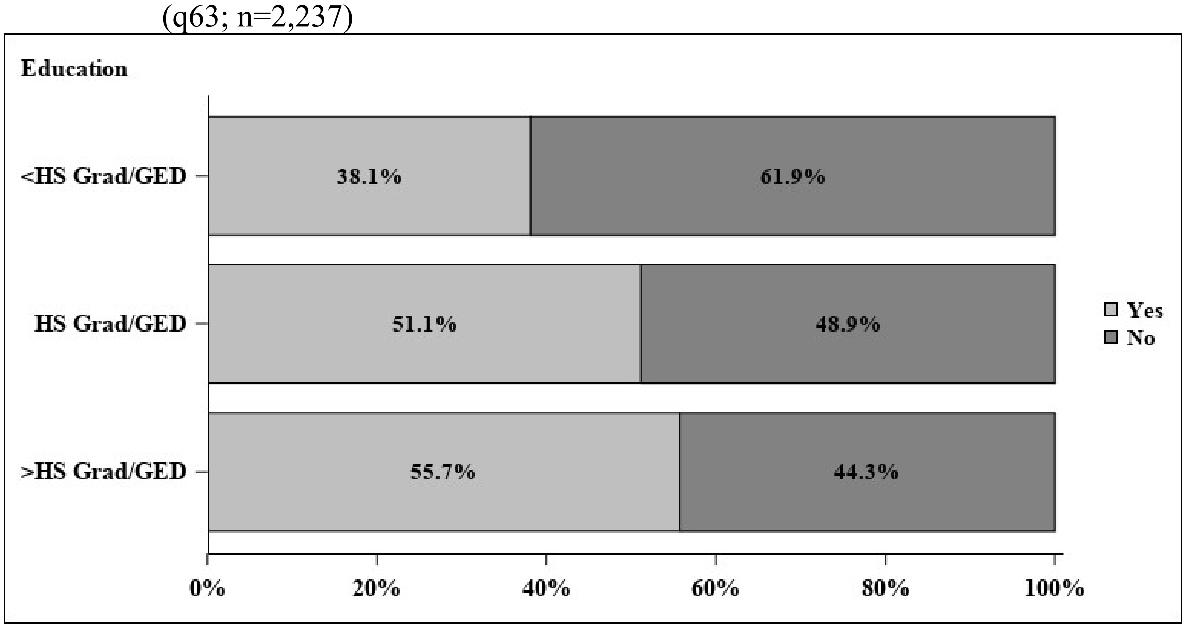


Figure R-160 shows the relationship between responses to q63 and caregiver education. Caregivers with >HS Grad/GED filled prescriptions for the child much more often at 55.7% while only 38.1% of caregivers with <HS Grad/GED did the same.

Figure R-160 Refilled or filled new prescription medicines for the child vs. caregiver education (q63; n=2,237)



Ease getting prescriptions filled (q64; access)

Question 64 asked caregivers who responded ‘yes’ to q63 if it was easy to get prescriptions for the child through the health plan. Figure R-161 shows that 75.8% of caregivers said it was always easy, 13.1%, 9.7% and 1.4% said it was usually, sometimes and never easy, respectfully, to get prescriptions for the child.

Figure R-161 Easy to get prescription medicines through the health plan (q64; n=1,114)

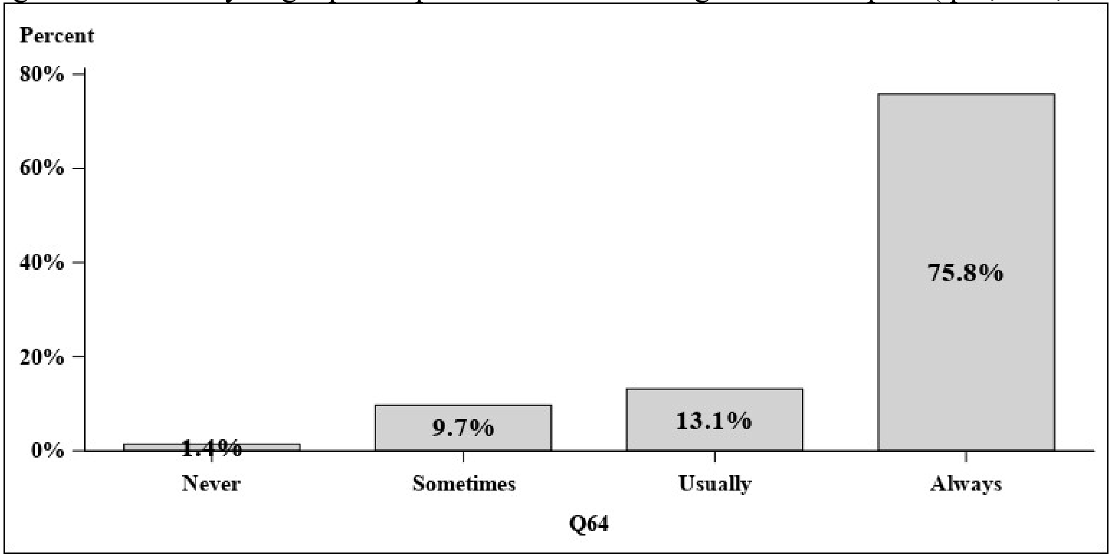
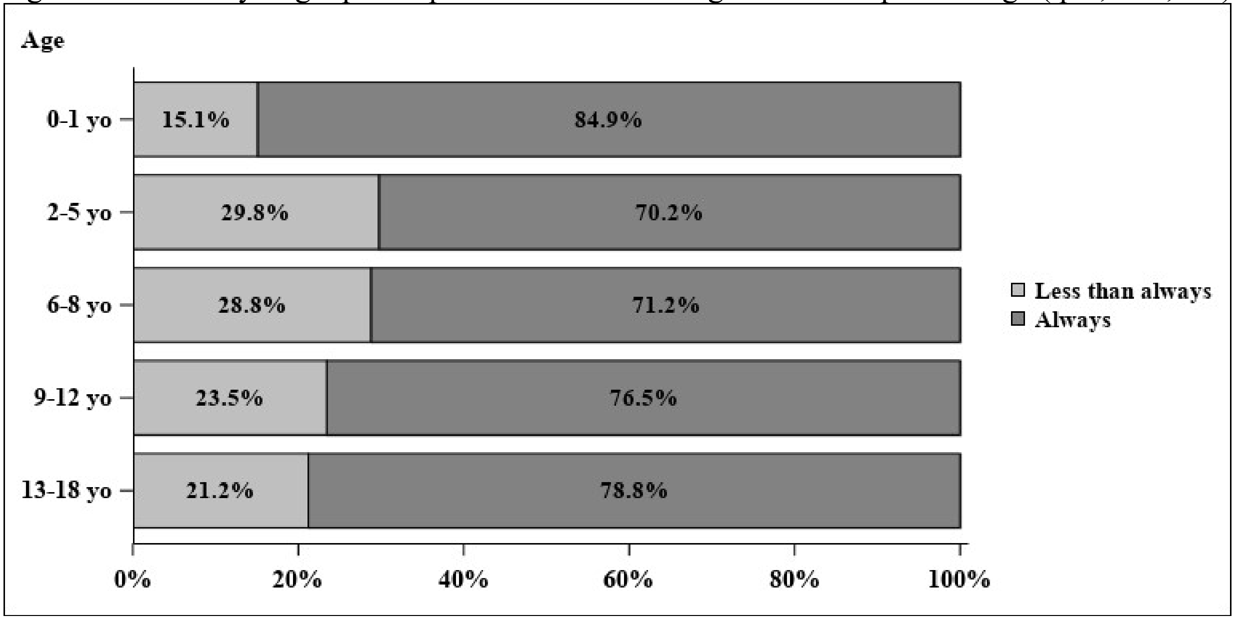


Figure R-162 demonstrates how q64 responses varied with age. Caregivers of children 0-1 yo most often found it always easy to fill prescriptions (84.9%) while it was always easy for only 70.2% of 2-5 yo children. Aside from the 0-1 yo observation, it was easier to fill prescriptions for older children.

Figure R-162 Easy to get prescription medicines through the health plan vs. age (q64; n=1,114)



Getting assistance to fill prescriptions (q65; access)

Question 65 asked caregivers who responded 'yes' to q63, if anyone from the child's health plan, doctor's office or clinic helped them get the child's prescriptions. Figure R-163 indicates that 62.1% of caregivers disclosed that they got help filling prescriptions.

Figure R-163 Health plan, MD office, or clinic helped get prescription medicine (q65; n=1,097)

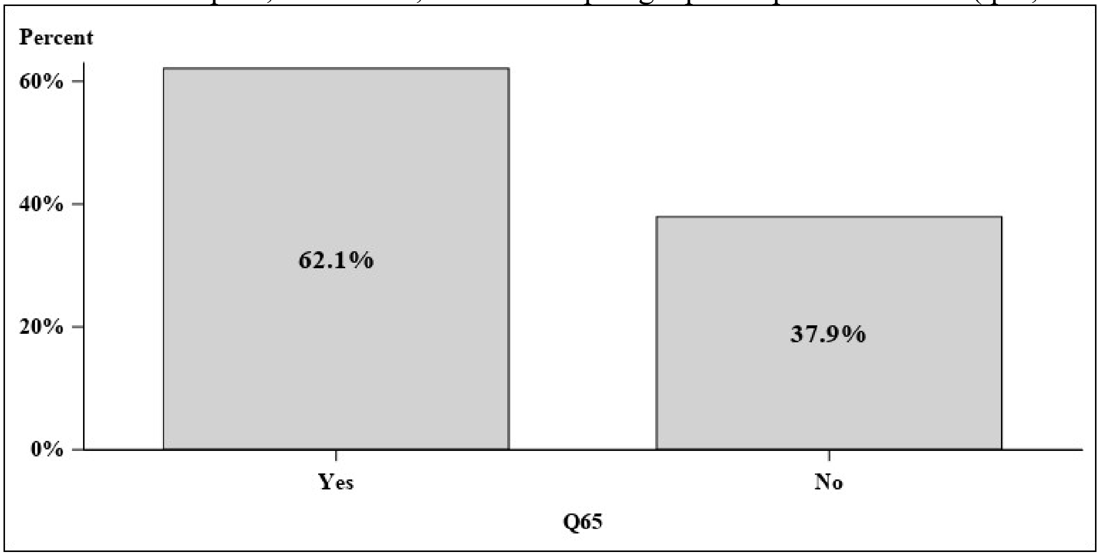


Figure R-164 demonstrates how responses to q65 varied with age. More caregivers of children 9-12 yo reported getting help from the health plan or doctor's office to fill prescriptions at 69.8%.

Figure R-164 Health plan, MD office, or clinic helped get prescription medicine vs. age (q65; n=1,097)

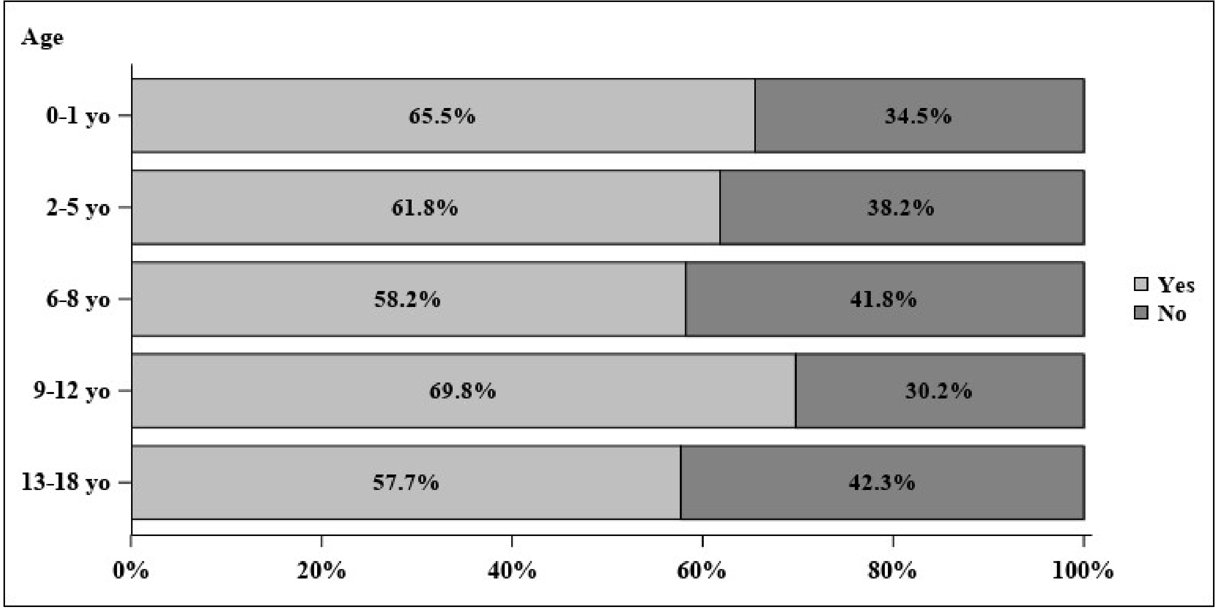
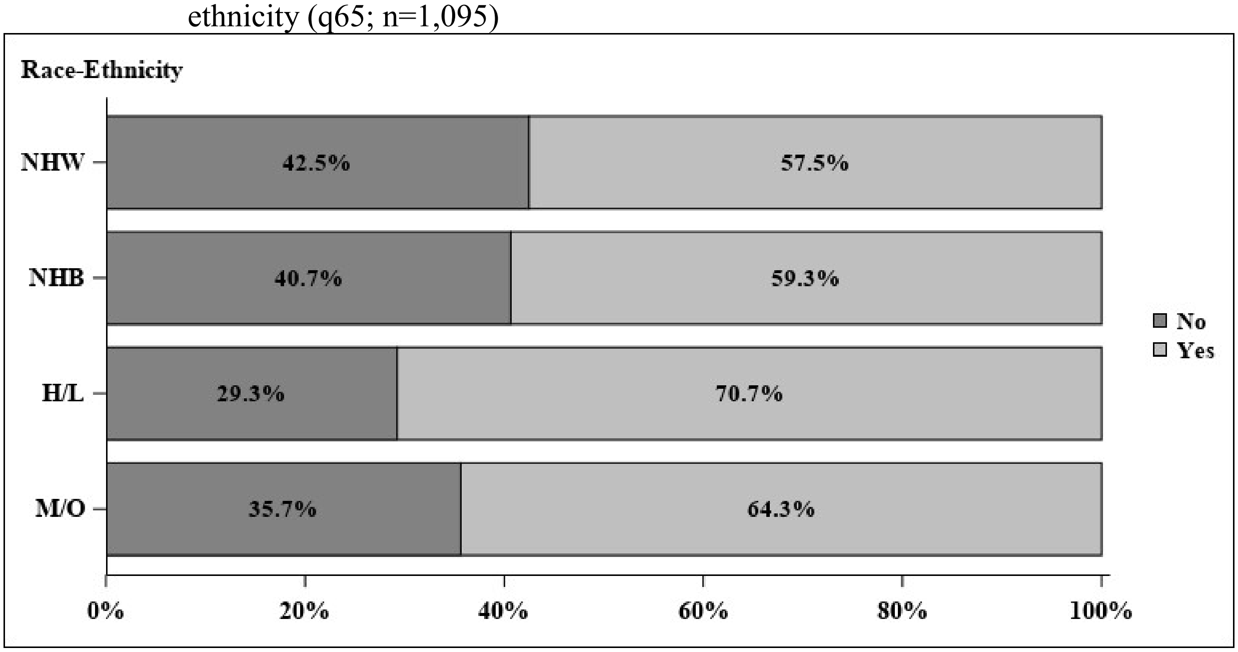


Figure R-165 indicates how responses to q65 varied with race-ethnicity. H/L children more often got help from the health plan or doctor's office to fill prescriptions at 70.7%. Only 57.5% of NHW children got the same assistance.

Figure R-165 Health plan, MD office, or clinic helped get prescription medicine vs. race-ethnicity (q65; n=1,095)



Caregiver's rating of the child's overall health (q66; health status)

Question 66 asked caregivers to rate their child's overall health. Figure R-166 shows that 41.0% of children were rated in excellent health, 30.9% were rated in very good, 22.9%, 4.4% and 0.8% were rated in good, fair and poor health, respectively.

Figure R-166 Overall health rating (q66; n=2,278)

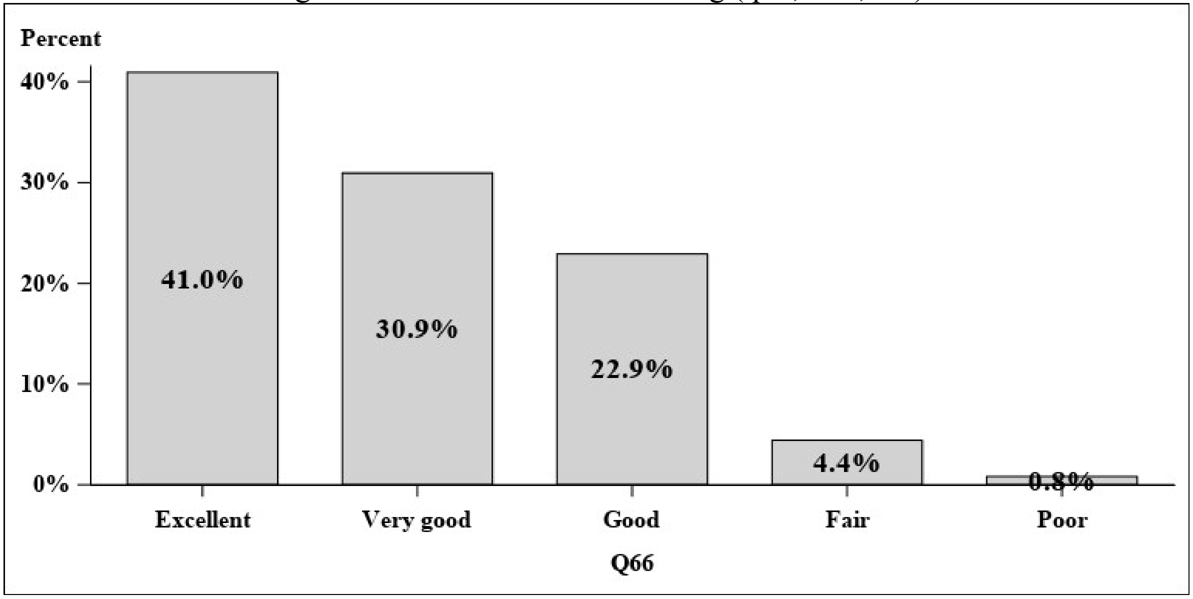


Figure R-167 shows the relationship between q66 responses and age. Caregivers of younger children 0-1 yo and 2-5 yo reported their children's overall health to be excellent/very good at 82.1% and 77.2%, respectively. Only 66.9% of 13-18yo children were reported to be in excellent/very good health.

Figure R-167 Overall health rating vs. age (q66; n=2,278)

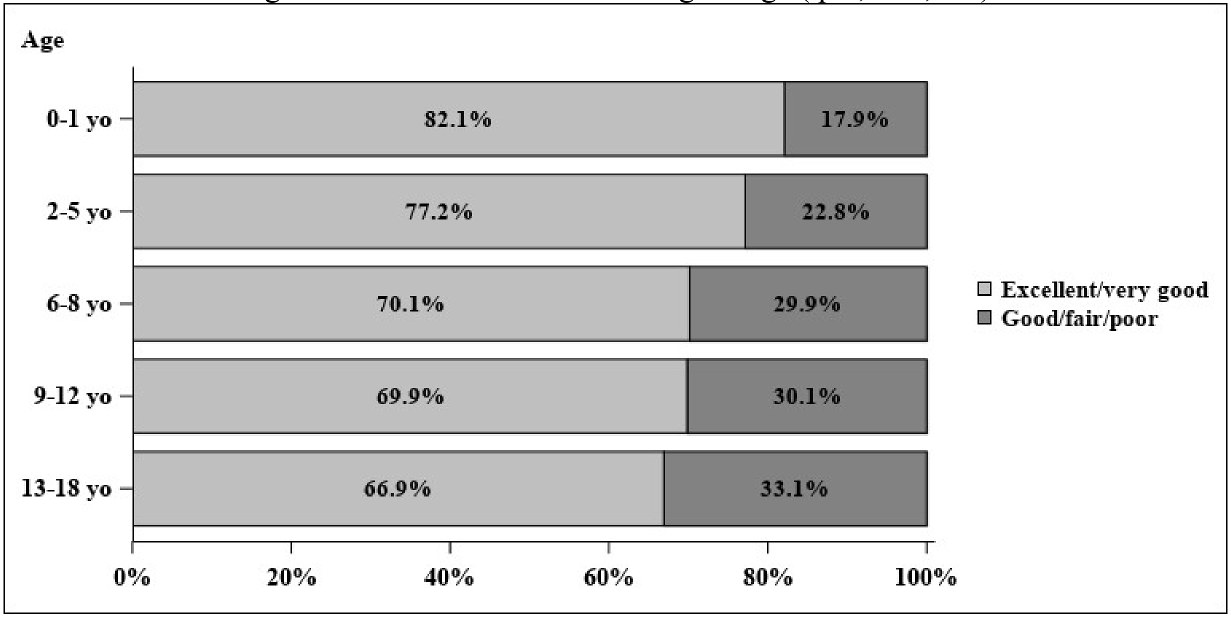


Figure R-168 indicates how responses to q66 varied with race-ethnicity. Caregivers of M/O (78.3%) and NHW (75.4%) children most often reported their children to be in excellent/very good health. Only 68.9% and 68.7% of caregivers of H/L and NHB children, respectively, reported excellent/very good health.

Figure 168 Overall health rating vs. race-ethnicity (q66; n=2,267)

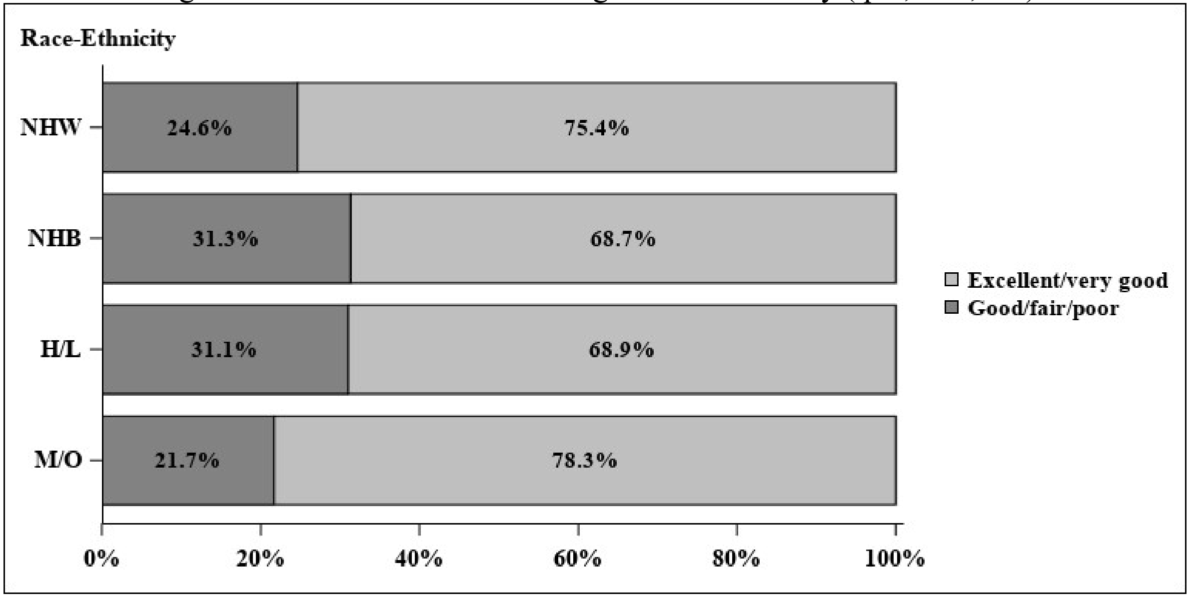
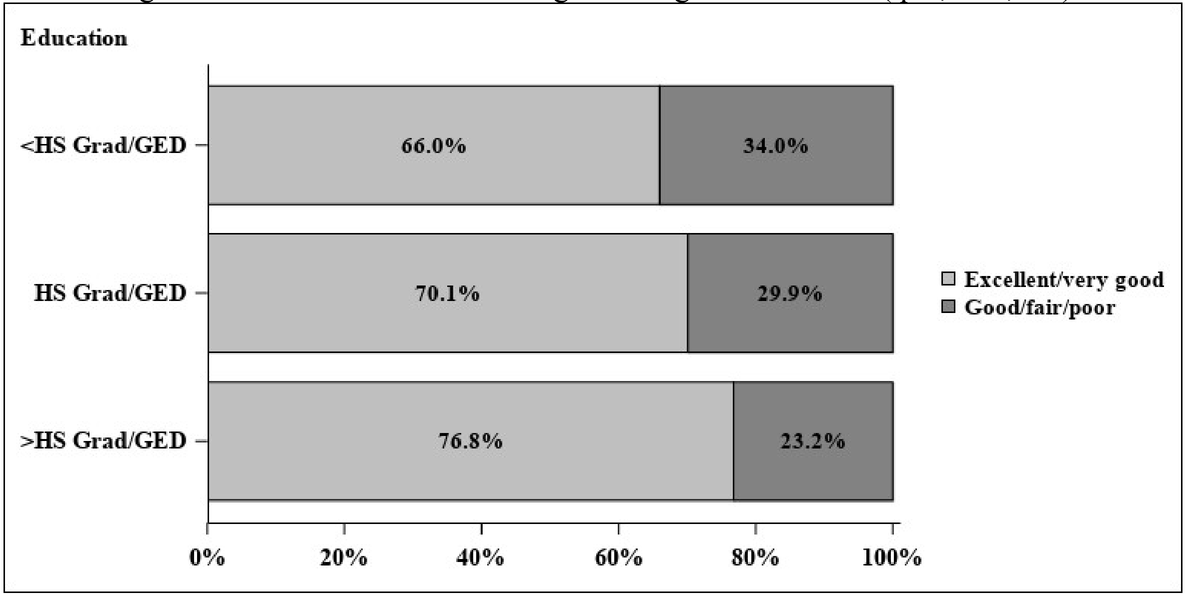


Figure R-169 demonstrates the relationship between responses to q66 and caregiver education. Caregivers with >HS Grad/GED had the highest proportion (76.8%) that reported their children having excellent/very good health, while caregivers with <HS Grad/GED only had 66.0% of children with excellent/very good health.

Figure R-169 Overall health rating vs. caregiver education (q66; n=2,252)



Caregiver's rating of child's mental or emotional health (q67; health status)

Question 67 asked caregivers to rate their child's mental or emotional health. Figure R-170 demonstrates that 44.7% of caregivers rated their children's mental or emotional health as excellent; 25.4%, 20.7%, 7.6% and 1.6% reported their children to be in very good, good, fair, and poor mental or emotional health, respectively.

Figure R-170 Overall mental health rating (q67; n=2,271)

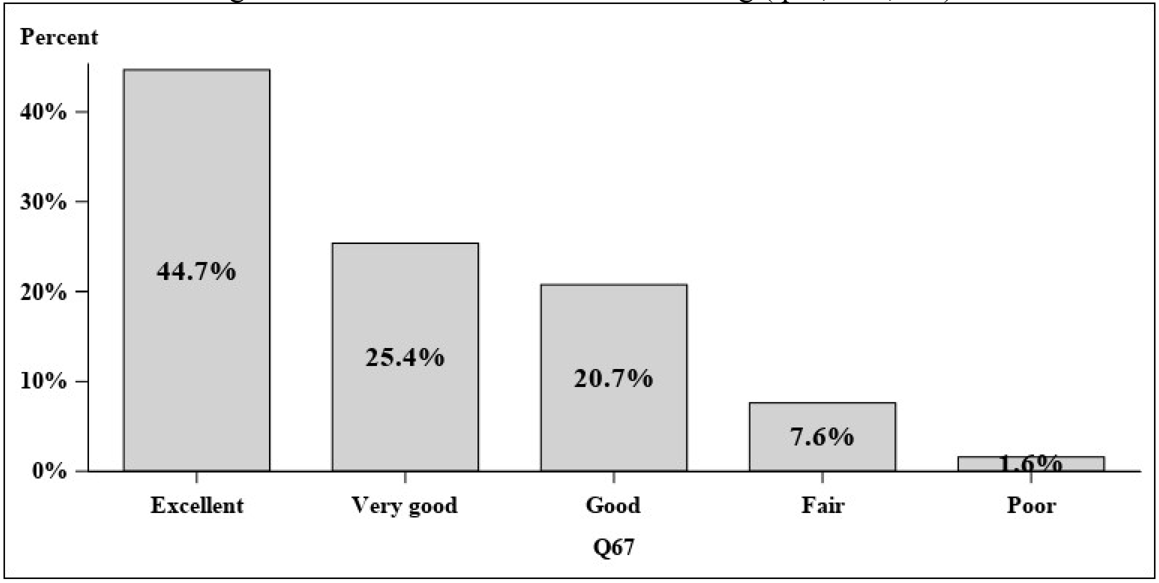


Figure R-171 describes how q67 responses varied with age. Children 0-1 yo (85.1%) and 2-5 yo (79.7%) were most highly rated in excellent/very good mental or emotional health whereas children 13-18 yo were least often rated in excellent/very good mental or emotional health at 61.2%.

Figure R-171 Overall mental health rating vs. age (q67; n=2,271)

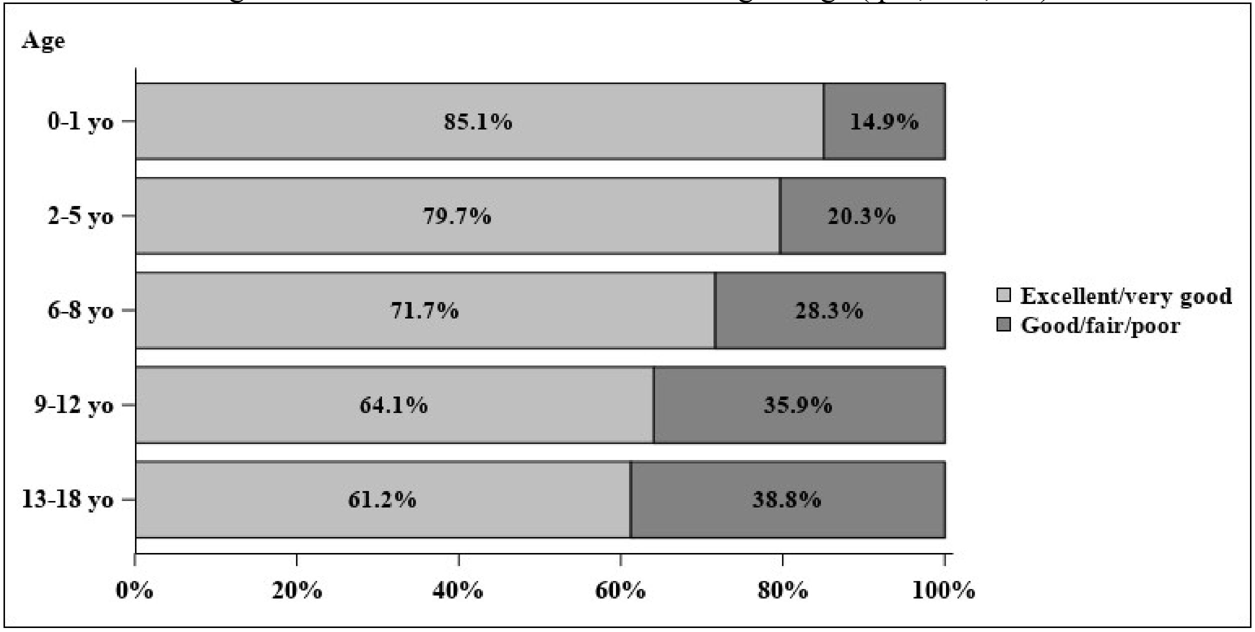


Figure R-172 indicates the relationship between q67 responses and sex. Seventy-two point three percent (72.3%) of females were in excellent/very good mental emotional health whereas only 68.0% of males were reported in the same status.

Figure R-172 Overall mental health rating vs. sex (q67; n=2,271)

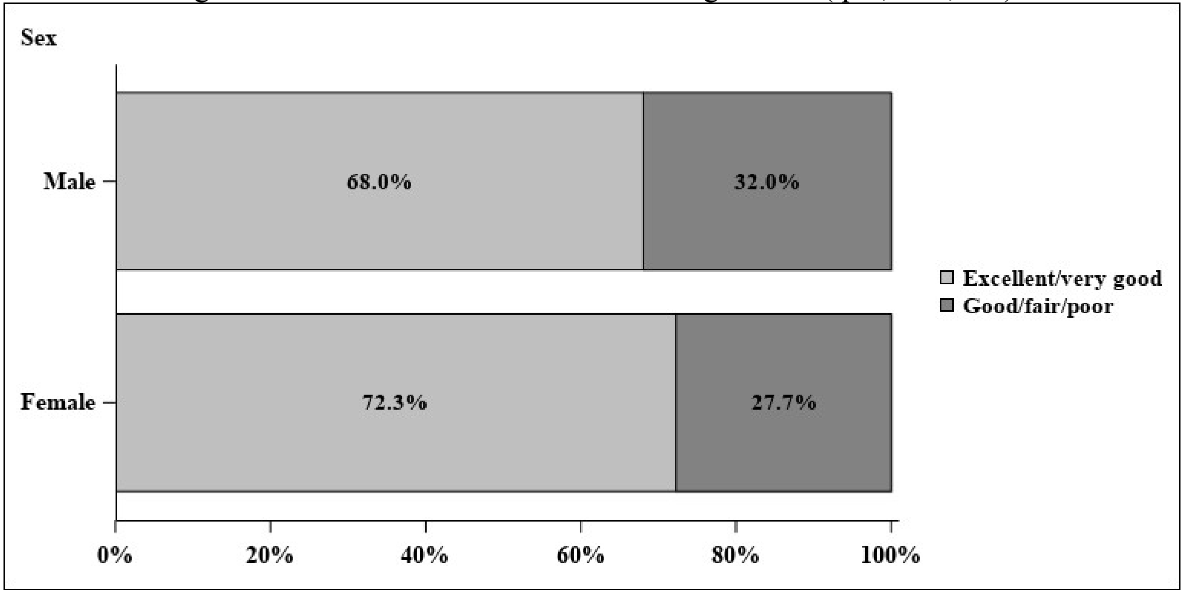


Figure R-173 exhibits the relationship between q67 responses and race-ethnicity. Only 65.3% of NHB children were rated in excellent/very good mental/emotional health.

Figure R-173 Overall mental health rating vs. race-ethnicity (q67; n=2,260)

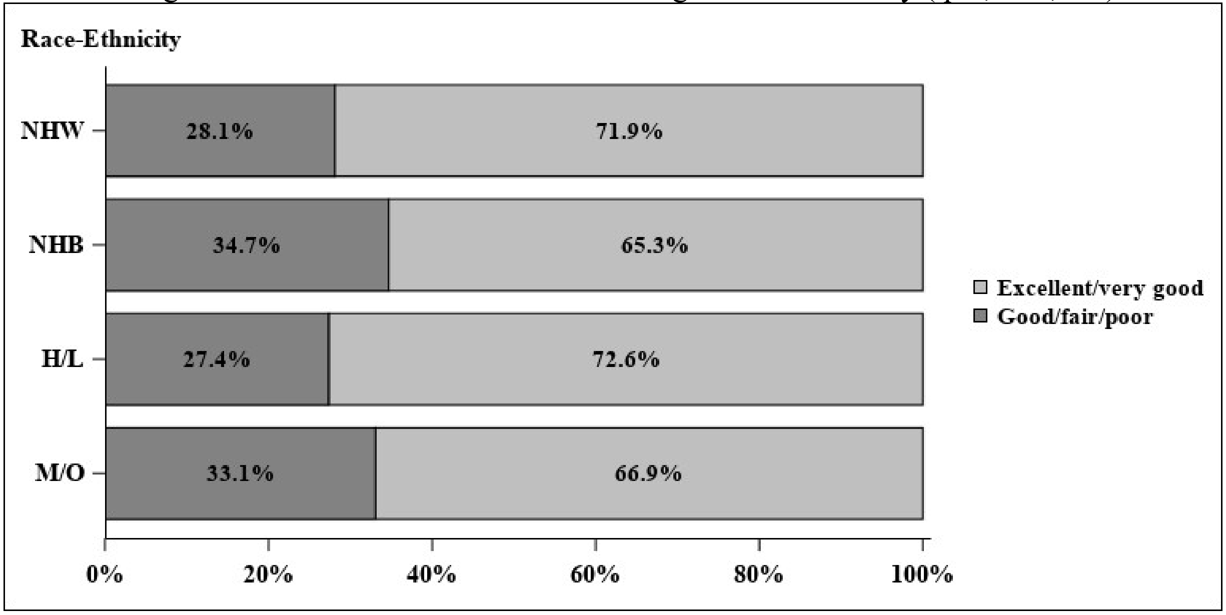
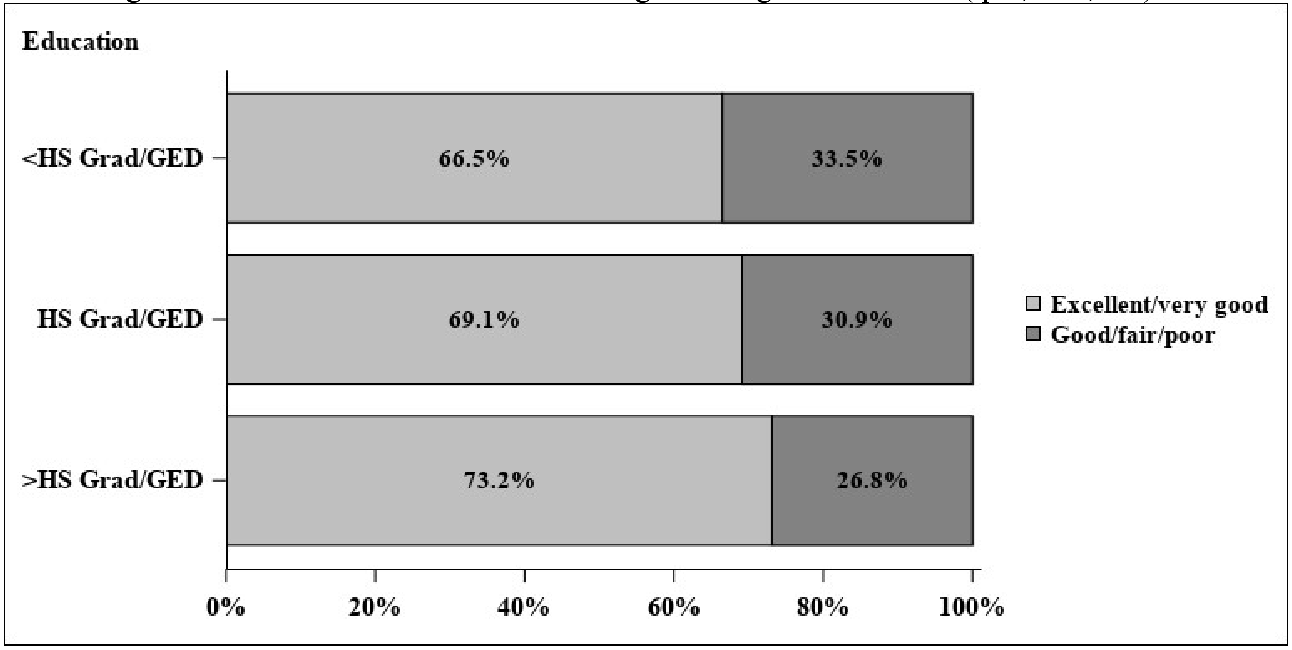


Figure R-174 reveals the relationship between q67 responses and caregiver education. Caregivers with >HS Grad/GED had the greatest proportion (73.2%) of children in excellent/very good mental health whereas caregivers with <HS Grad/GED reported the lowest proportion (66.5%) in excellent/very good health.

Figure R-174 Overall mental health rating vs. caregiver education (q67; n=2,244)



Number of visits to the ER (q68; utilization)

Question 68 asked caregivers how many times the child went to an emergency room (ER) for care in the previous 6 months. Figure R-175 shows that 79.6% of children had no ER visits, 14.8% had 1 visit, 4.7% had 2-3 ER visits, and 0.8% had 4 or more ER visits.

Figure R-175 Number of emergency room visits (q68; n=2,265)

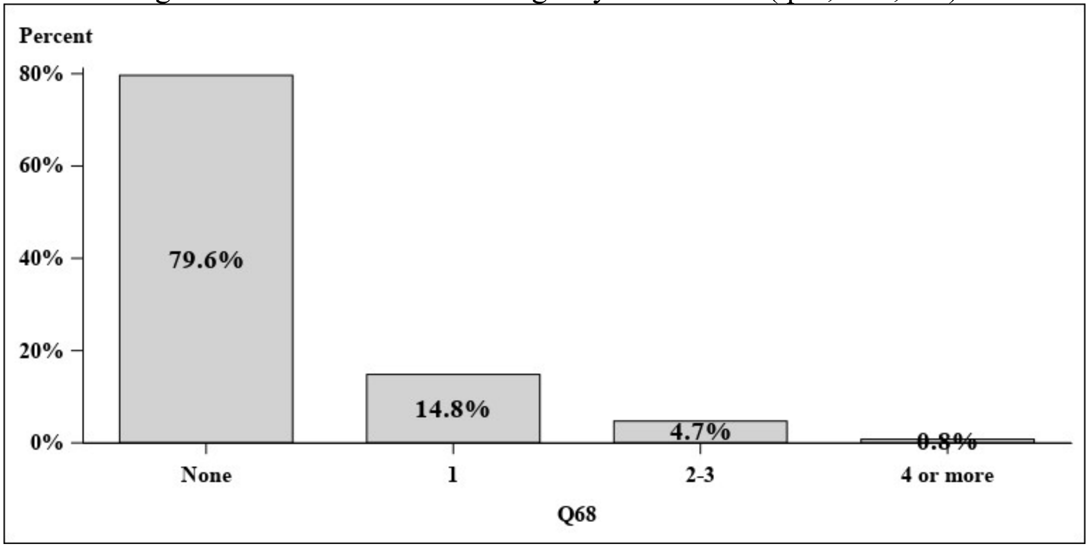


Figure R-176 indicates how responses to q68 varied with age. In addition to generally having the most overall ER visits, children 0-1 yo had the highest proportion with 2-3 visits at 11.2% and the lowest proportion with no visits at all at 67.5%.

Figure R-176 Number of emergency room visits vs. age (q68; n=2,265)

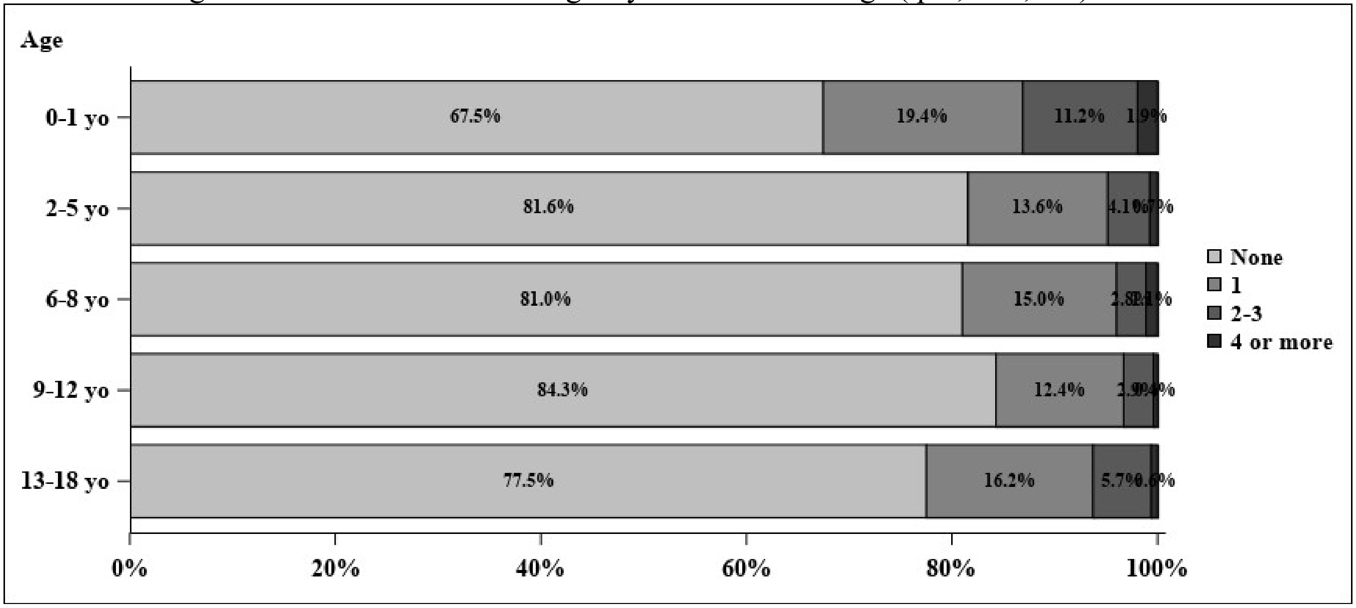
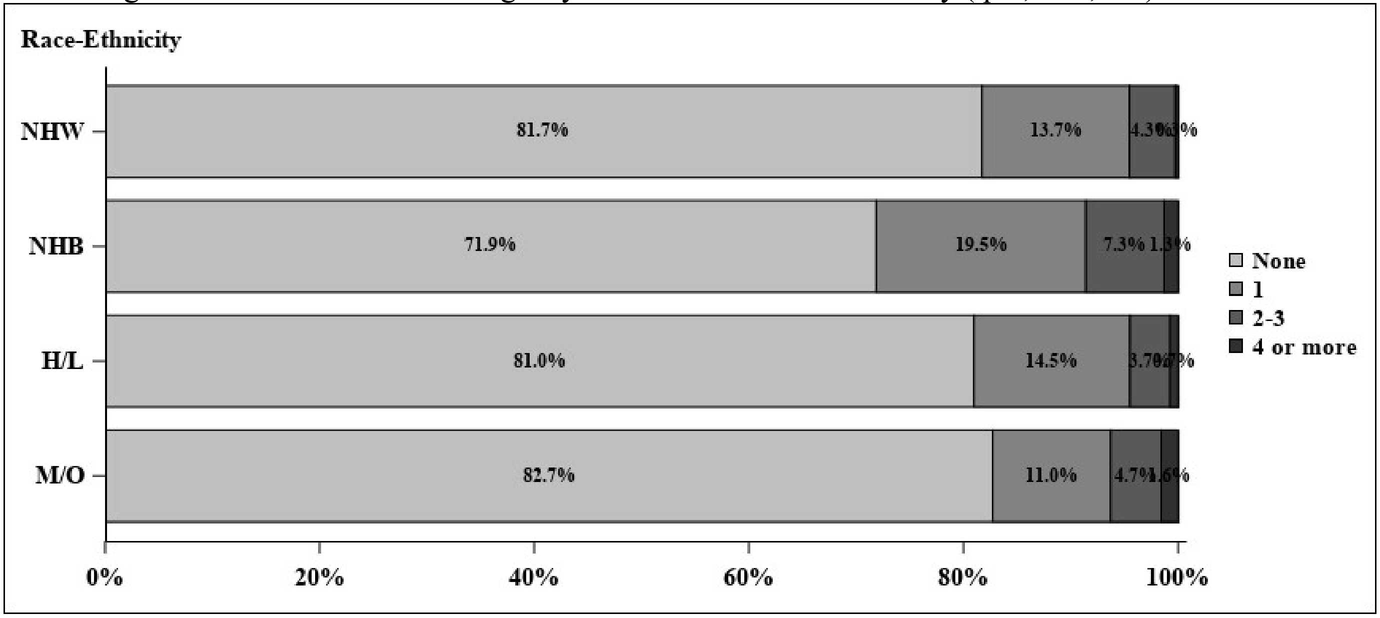


Figure R-177 exhibits the relationship between q68 responses and race-ethnicity. Caregivers of NHB children reported the most ER visits overall as well as 19.5% reporting 1 visit and 7.3% reporting 2-3 visits.

Figure R-177 Number of emergency room visits vs. race-ethnicity (q68; n=2,254)



Child's need for prescribed medications (q69; health status)

Question 69 asked caregivers if the child currently needed or used medicine, other than vitamins, prescribed by a doctor, nurse or physician assistant. Figure R-178 shows that 34.6% of children needed or used prescription medicine.

Figure R-178 Needs or uses prescribed non-vitamin medicine (q69; n=2,272)

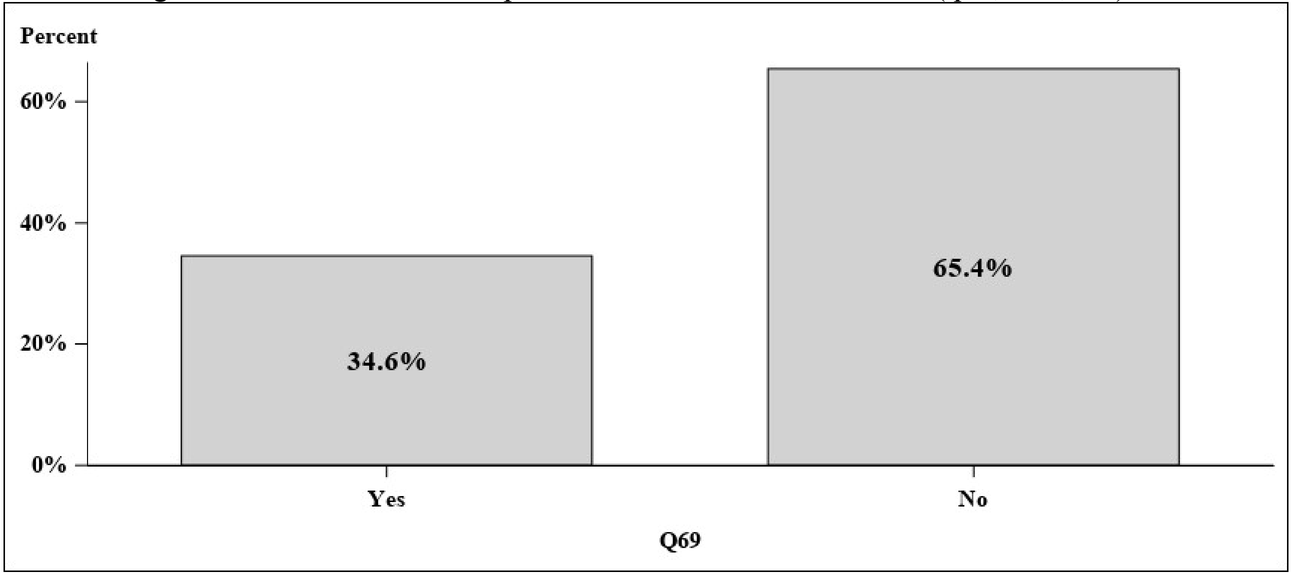


Figure R-179 shows that a solid trend is seen in increased usage of non-vitamin medications as the child's age increases. While only 15.0% of 0-1 yo children use medicines, this increases to 42.6% and 41.8%, respectively for 9-12 yo and 13-18 yo children.

Figure R-179 Needs or uses prescribed non-vitamin medicine vs. age (q69; n=2,272)

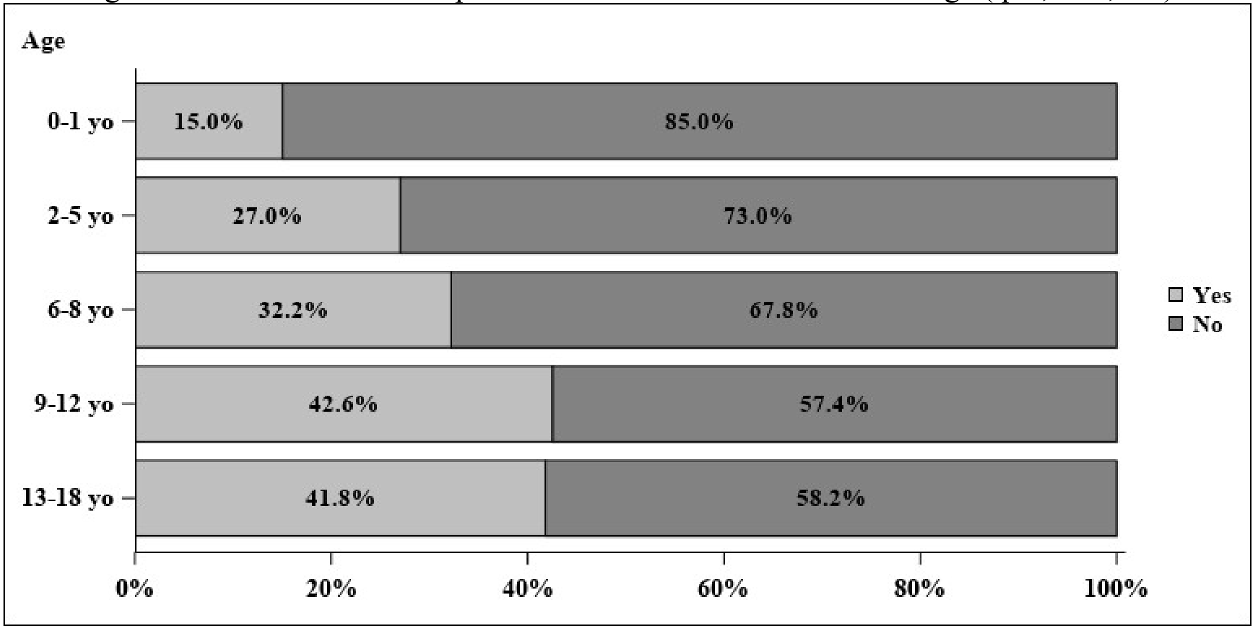


Figure R-180 demonstrates how q69 responses varied with race-ethnicity. Caregivers of NHB (44.3%) and NHW (43.9%) children most often reported use of prescribed, non-vitamin medication while H/L children were reported to have the lowest need at 19.1%

Figure R-180 Needs or uses prescribed non-vitamin medicine vs. race-ethnicity (q69; n=2,261)

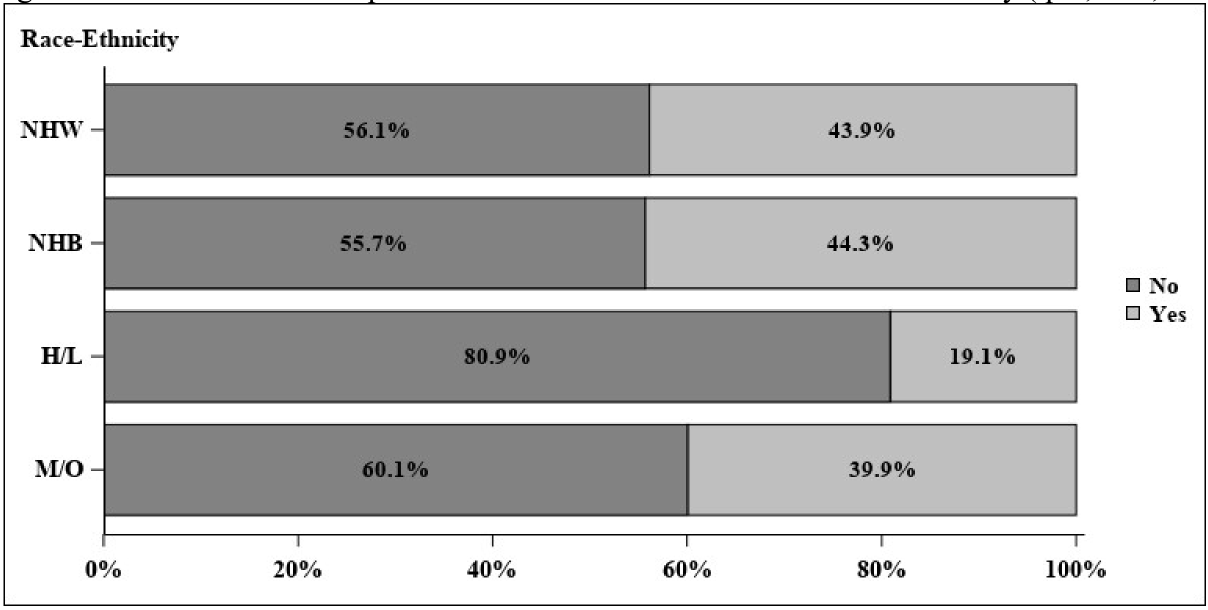
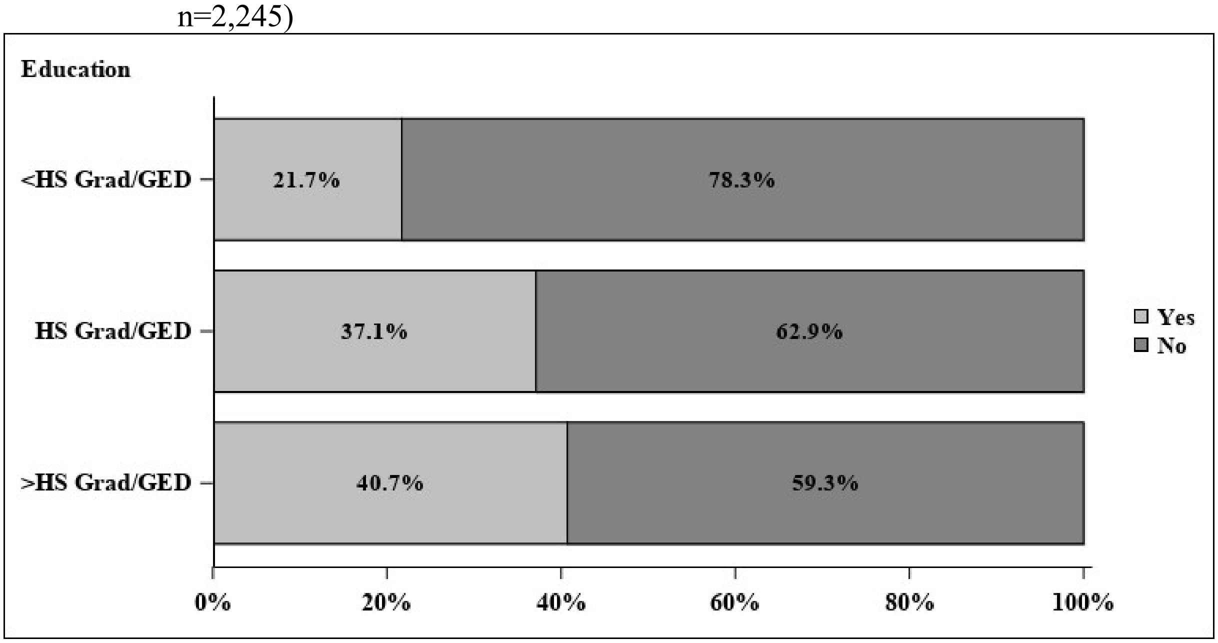


Figure R-181 shows variation in q69 responses with caregiver education. Children of caregivers with >HS Grad/GED had a high need or use for prescription medicine at 40.7% whereas children of caregivers with <HS Grad/GED had a low need for the same at only 21.7%.

Figure R-181 Needs or uses prescribed non-vitamin medicine vs. caregiver education (q69; n=2,245)



Medication needed for a medical, behavioral, or other health condition (q70; health status)

Question 70 asked caregivers who responded ‘yes’ to q69 if the prescription medication was for a medical, behavioral, or other health condition. Figure R-182 shows that 78.9% of children that take prescription medication(s) need them for a medical, behavioral or other health condition.

Figure R-182 Prescription is for a medical, behavioral, or other health condition (q70; n=772)

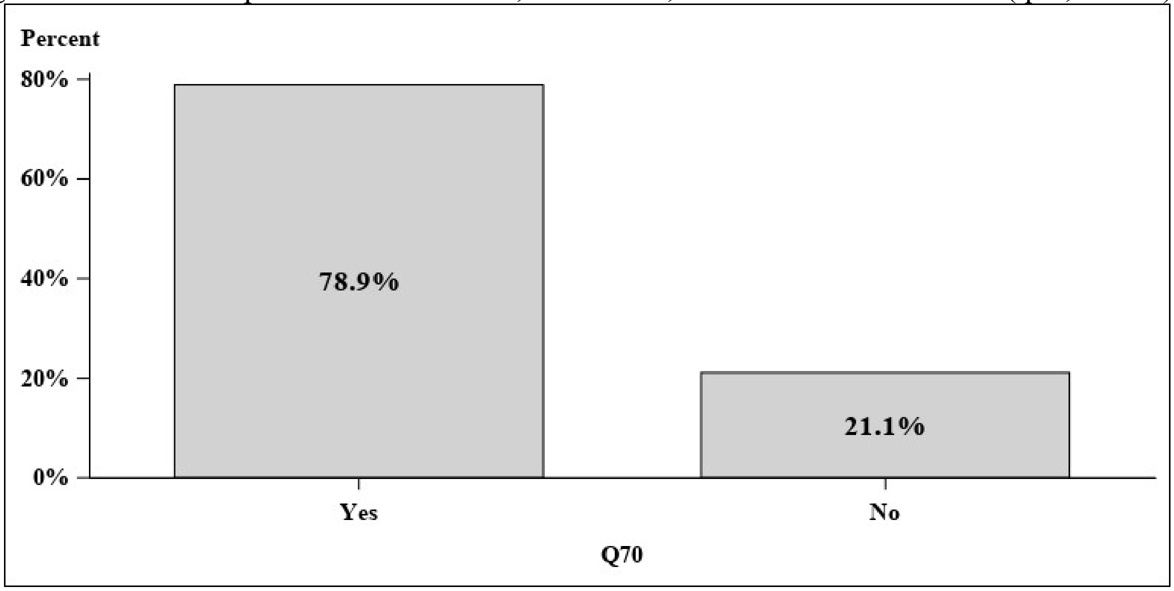


Figure R-183 shows the relationship between q70 responses and age. Caregivers of 0-1 yo children made up the lowest proportion for whom their medications were for a medical, behavioral, or other health condition at 51.7%.

Figure R-183 Prescription is for a medical, behavioral or other health condition vs. age (q70; n=772)

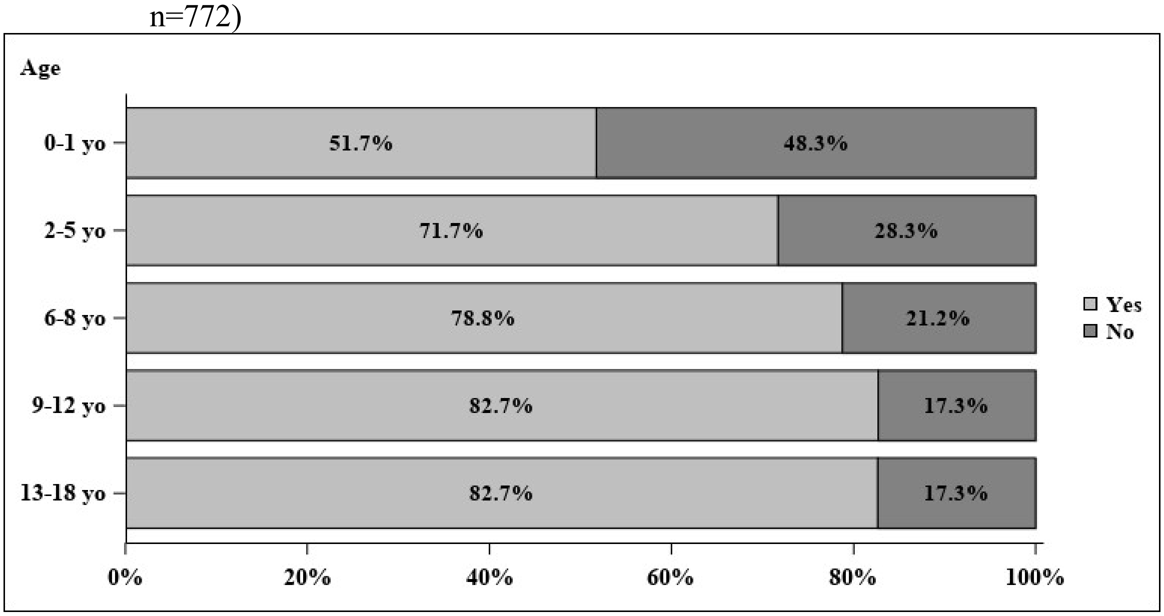


Figure R-184 exhibits how responses to q70 varied with sex. Caregivers of male children (82.1%) made up the highest proportion reporting that prescription medications were for a medical, behavioral, or other health condition whereas the same was reported for 75.3% of female children.

Figure R-184 Prescription is for a medical, behavioral or other health condition vs. sex (q70; n=772)

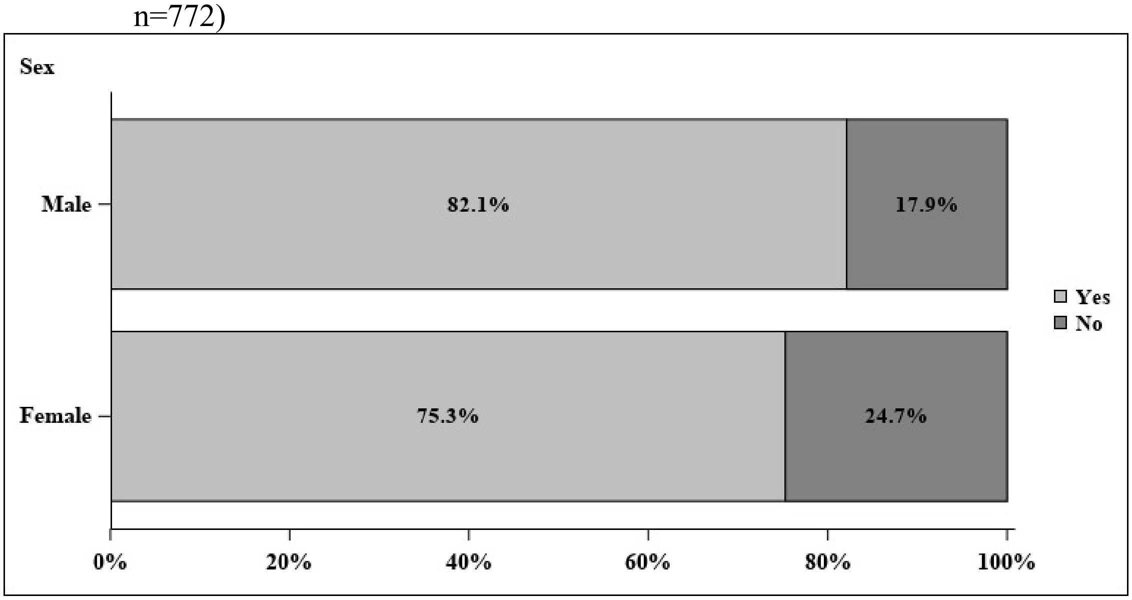


Figure R-185 depicts the variation between responses to q70 with race-ethnicity. Caregivers of NHW children made up the highest proportion reporting that prescription medications were for a medical, behavioral, or other health condition at 86.5%. The same was reported by caregivers of just 64.9% of H/L children.

Figure R-185 Prescription is for a medical, behavioral, or other health condition vs. race-ethnicity (q70; n=771)

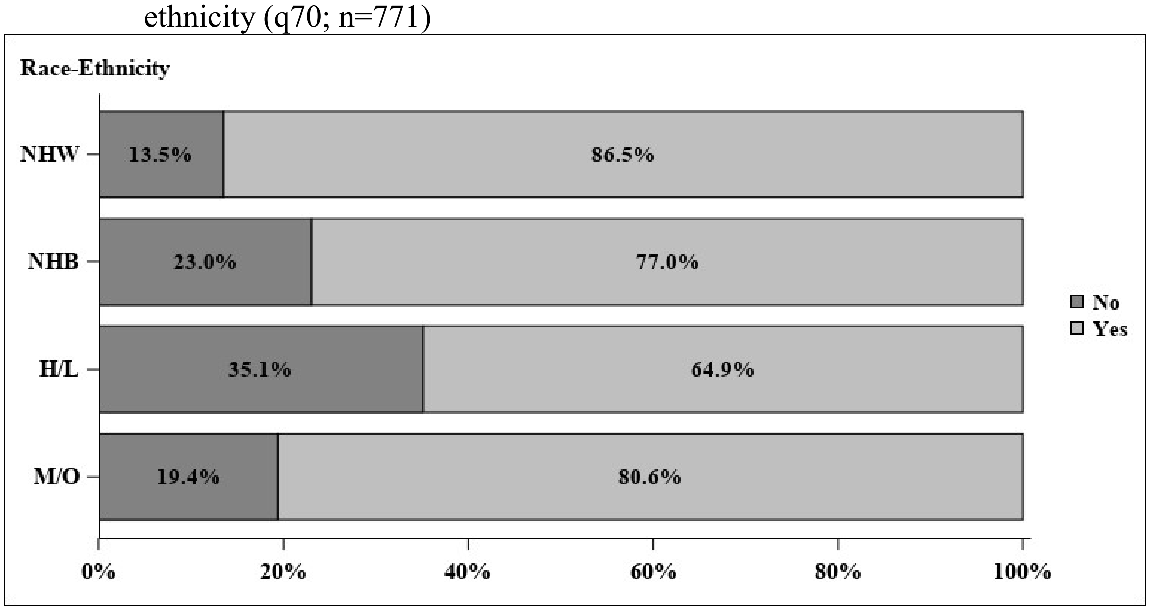


Figure R-186 demonstrates how q70 responses varied with caregiver education. A higher proportion of caregivers with >HS Grad/GED reported the child needed prescription medications for a medical, behavioral, or other health condition at 85.2%.

Figure R-186 Prescription is for a medical, behavioral, or other health condition vs. caregiver education (q70; n=764)

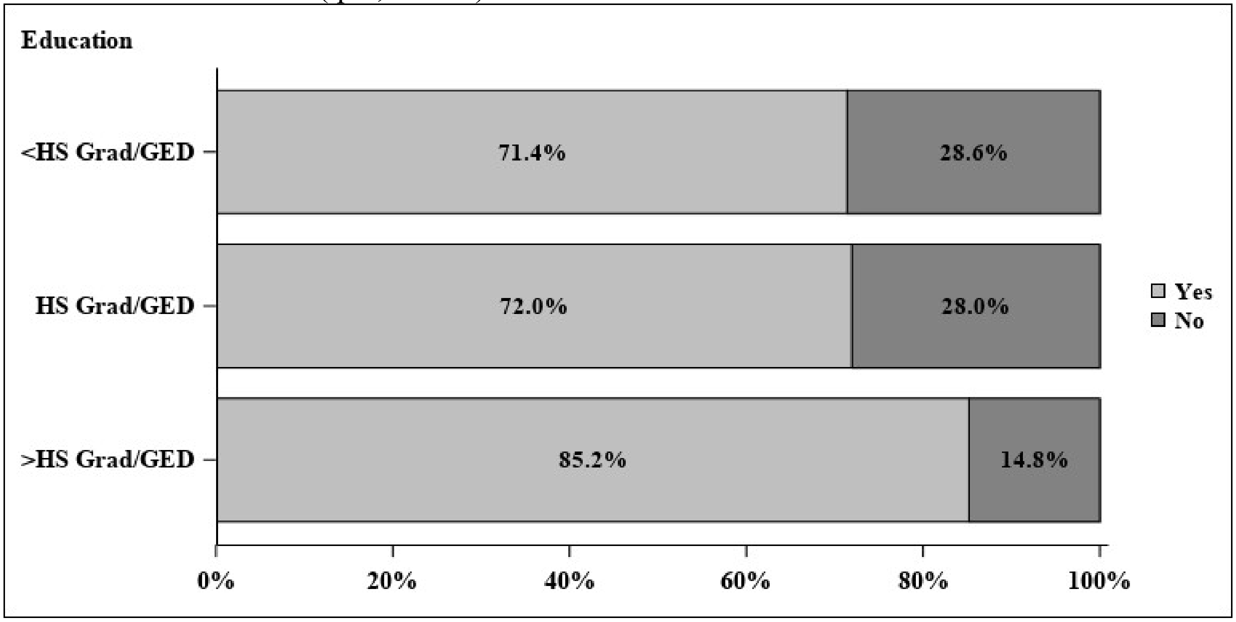
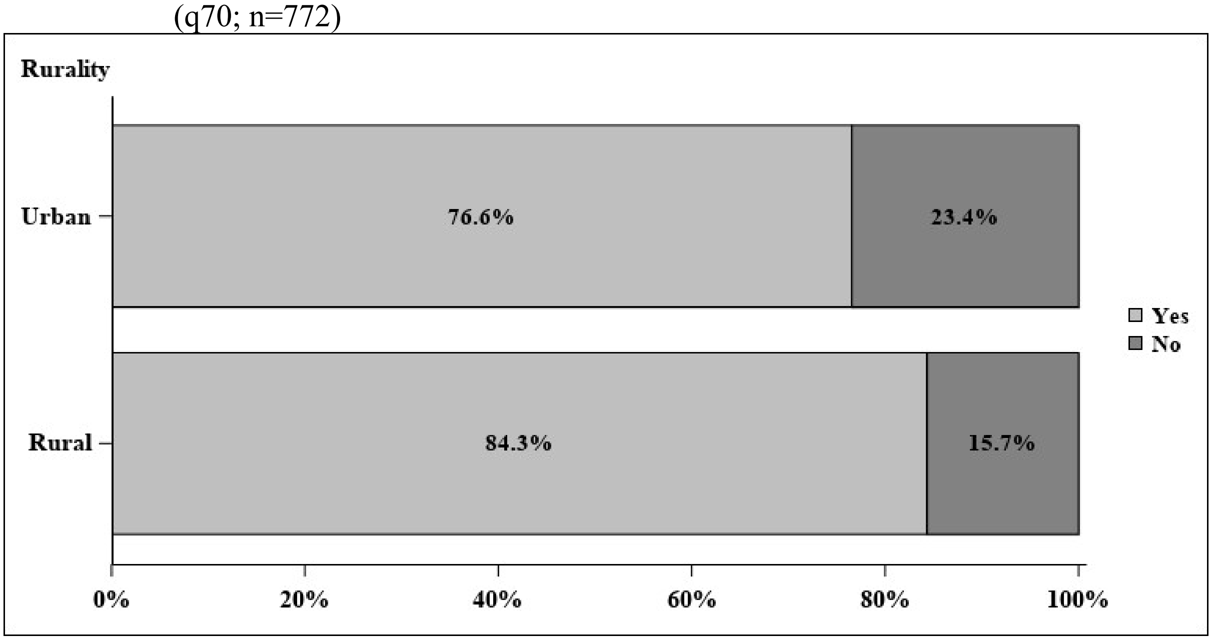


Figure R-187 illustrates the variation in responses to q70 with rurality. Rural children needed to take prescription medications for a medical, behavioral or other health condition at 84.3% while only 76.6% of urban children indicated a need for the same.

Figure R-187 Prescription is for a medical, behavioral or other health condition vs. rurality (q70; n=772)



Prescription medication(s) for a condition lasting 12 months or longer (q71; health status)

Question 71 asked caregivers who responded ‘yes’ to q69 if the prescription medication(s) the child was taking were for a condition that had lasted or was expected to last for at least 12 months. Figure R-188 shows that 91.8% of children were taking medications for a condition expected to last at least 12 months.

Figure R-188 Condition has or is expected to last for at least 12 months (q71; n=587)

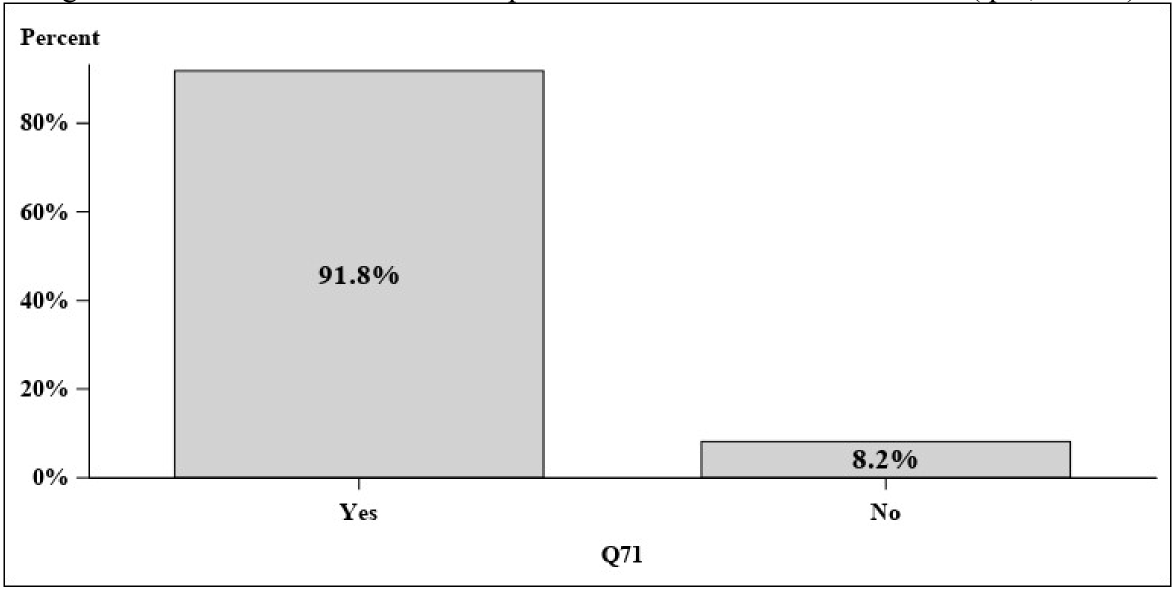


Figure R-189 describes the q71 variation with age. Ninety-five point eight percent (95.8%) of 13-18 yo were taking prescription medications for a condition lasting longer than 12 months. Children in younger age-groups, 0-1 yo and 2-5 yo, were taking prescription medications for a condition lasting longer than 12 months at 64.3% and 84.0%, respectively.

Figure R-189 Condition has or is expected to last for at least 12 months vs. age (q71; n=587)

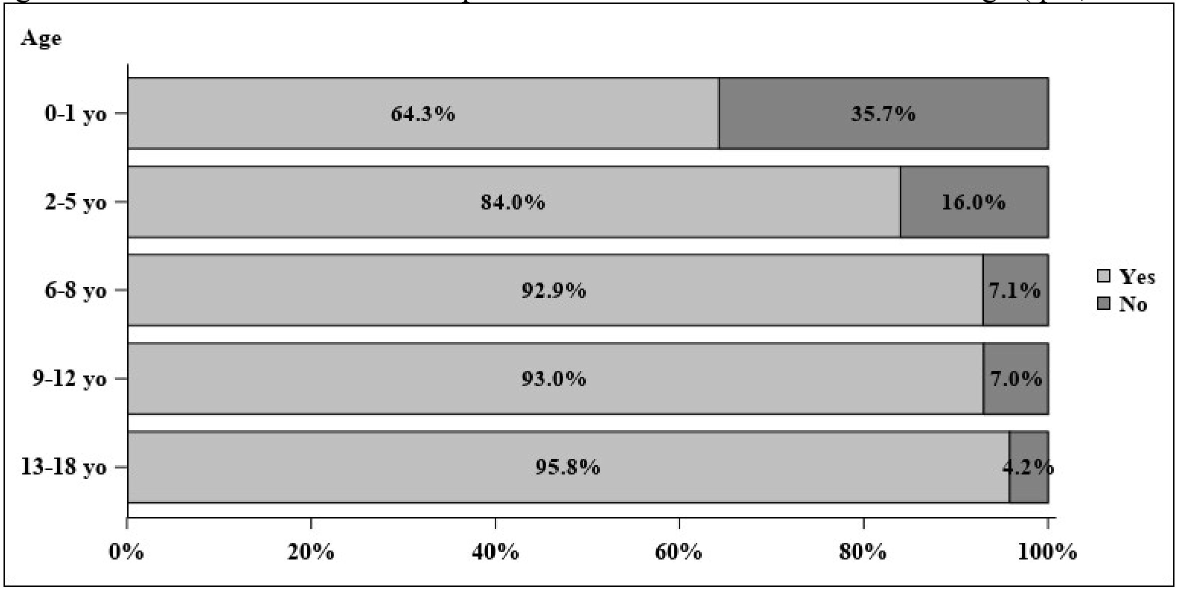
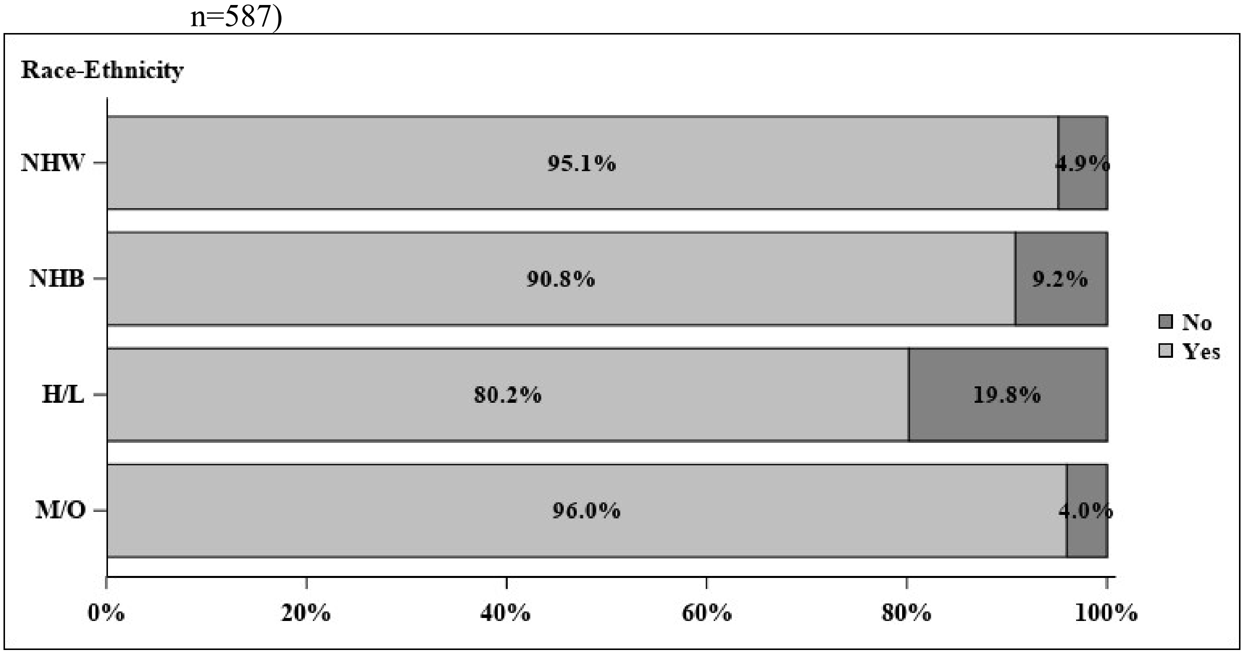


Figure R-190 indicates how responses to q71 varied with race-ethnicity. The lowest proportion of children taking prescription medications for a condition lasting longer than 12 months was seen in H/L at 80.2%.

Figure R-190 Condition has or is expected to last for at least 12 months vs. race-ethnicity (q71; n=587)



Needs more medical, mental or educational services than others of same age (q72; health status)

Question 72 asked caregivers if the child needed or used more medical care, more mental health services, or more educational services than was usual for most children of the same age. Figure R-191 illustrates that 18.3% of children needed more of these services than other children of the same age.

Figure R-191 Uses more medical/mental health/educational services than others of the same age (q72; n=2,245)

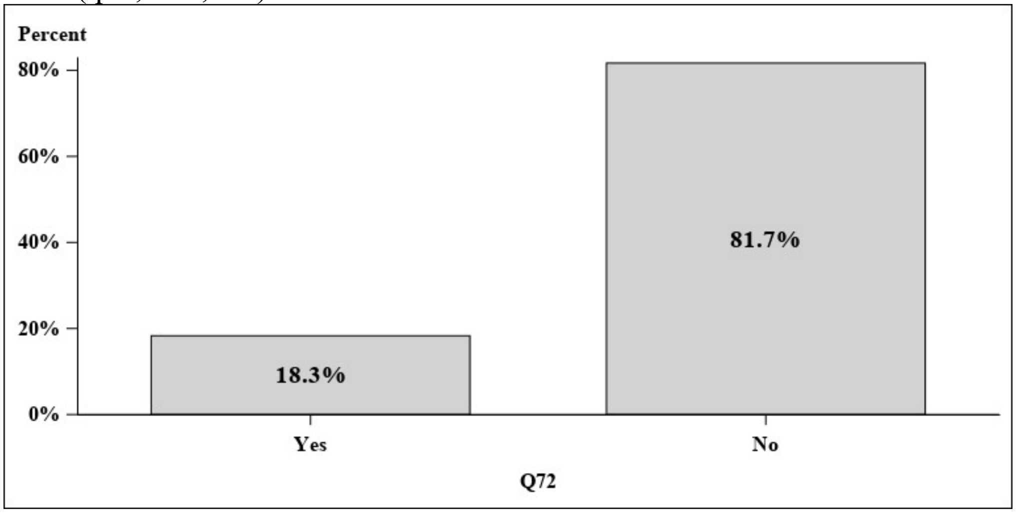


Figure R-192 describes how responses to q72 varied with age. Children in older age groups, 9-12 yo (24.5%) and 13-18 yo (22.7%), were reported to have a greater need for medical, mental health, or educational services than others of the same age. Children in younger age groups, 2-5 yo (13.3%) and 0-1 yo (5.7%) had a lower need for the same services.

Figure R-192 Uses more medical/mental health/educational services than others of the same age vs. age (q72; n=2,245)

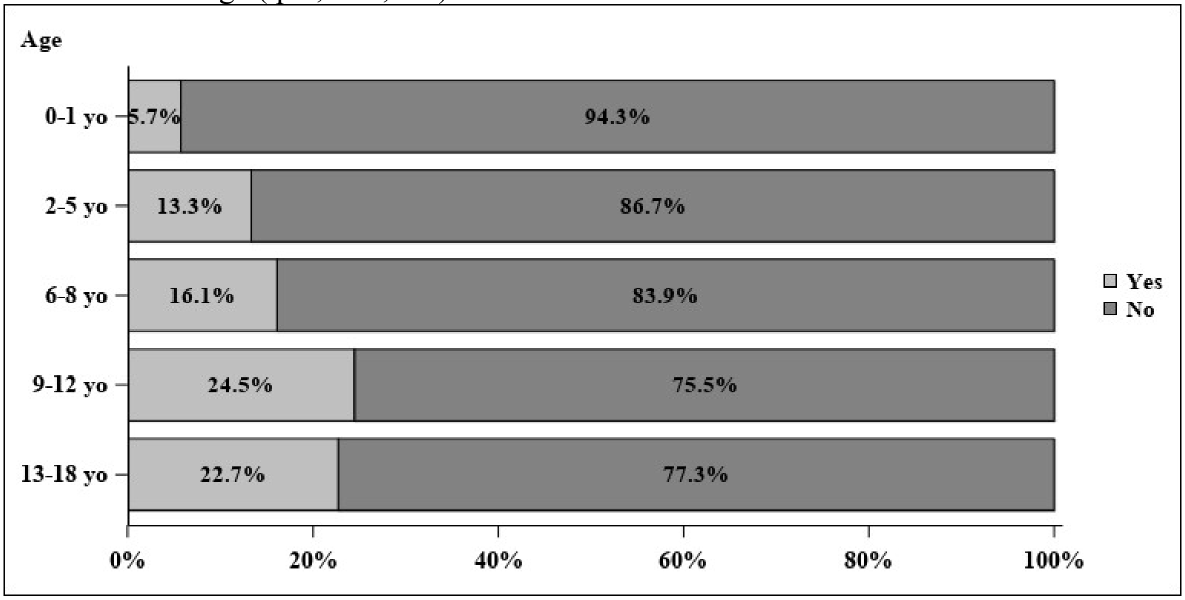


Figure R-193 demonstrates the relationship between q72 responses and sex. Male children (21.5%) were reported more often than female children (14.8%) to need or use more medical, mental health, or educational services than others of the same age.

Figure R-193 Uses more medical/mental health/educational services than others of the same age vs. sex (q72; n=2,245)

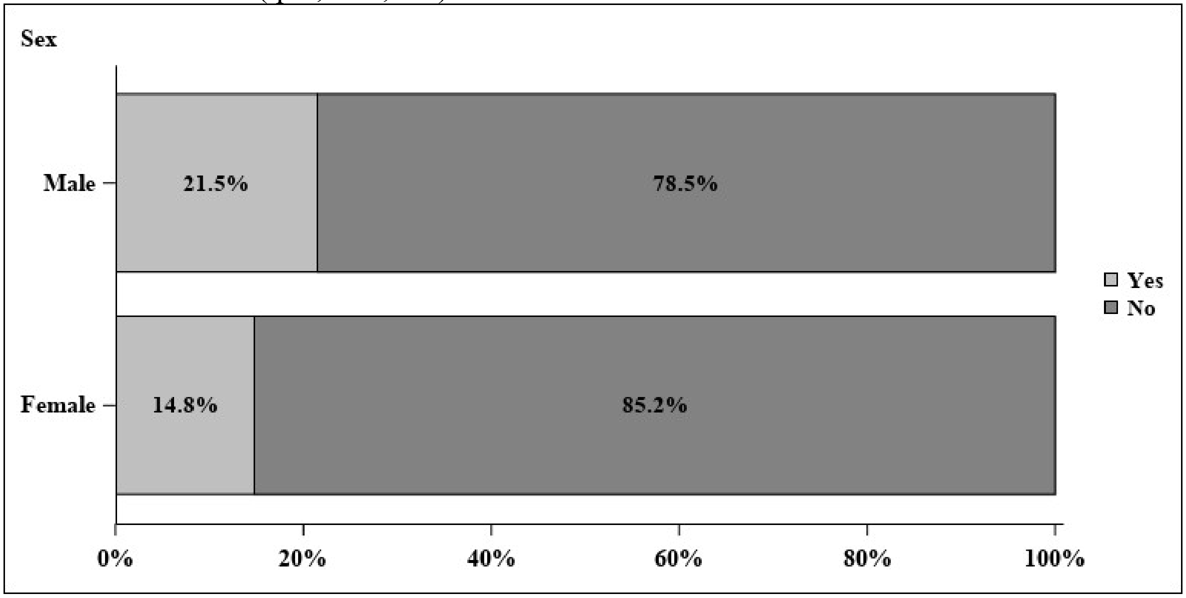


Figure R-194 shows variation in q72 responses with race-ethnicity. A greater proportion of NHW children (24.9%) were reported to need or use more medical, mental health, or educational services than others of the same age. The same was reported for just 10.6% of H/L children.

Figure R-194 Uses more medical/mental health/educational services than others of the same age vs. race-ethnicity (q72; n=2,237)

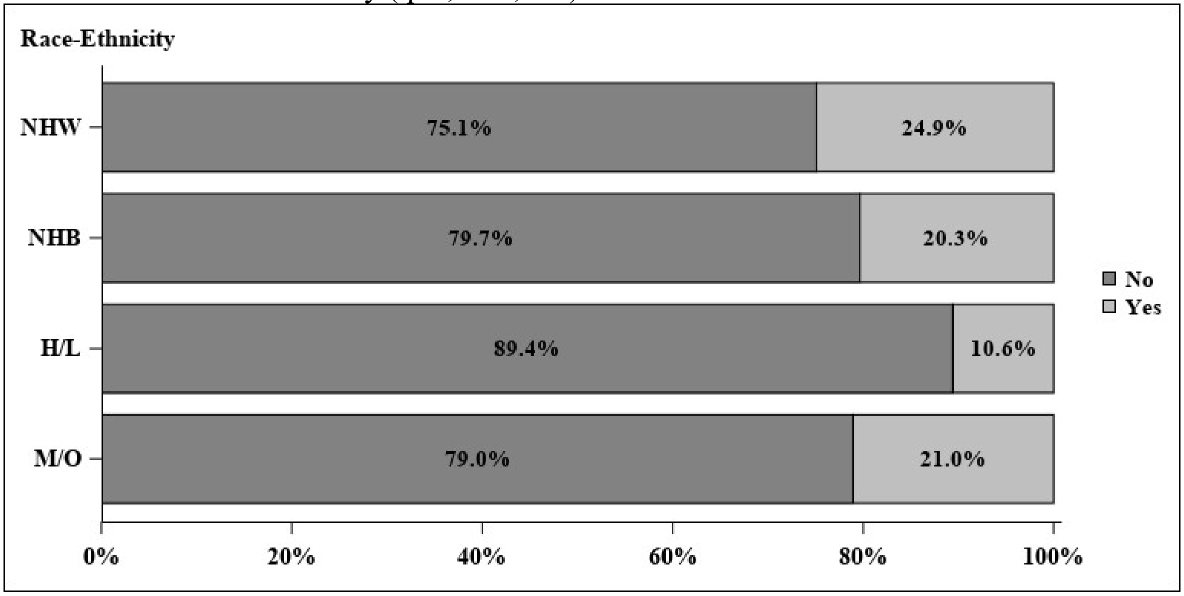
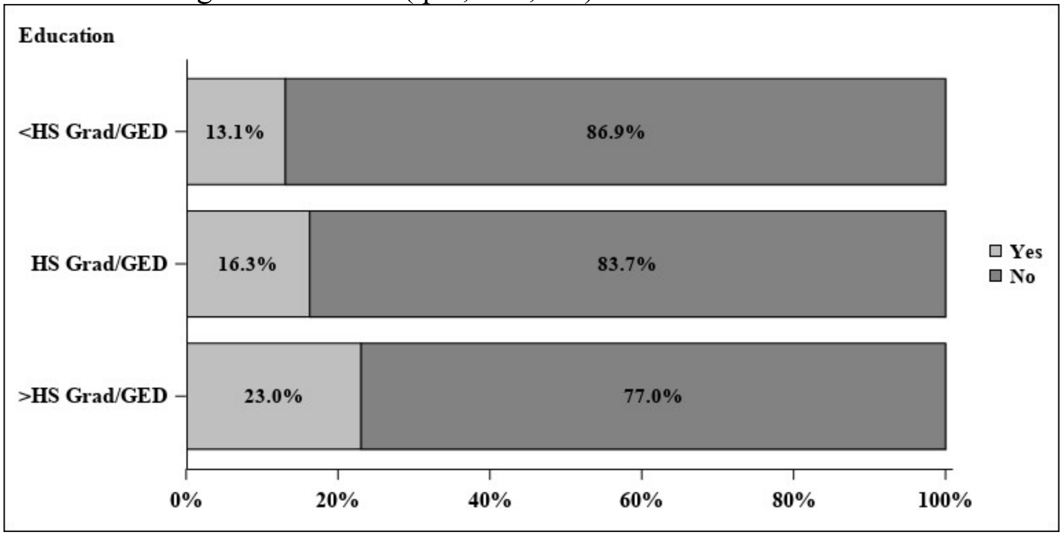


Figure R-195 shows how responses to q72 varied with caregiver education. Caregivers with >HS Grad/GED reported their children had a higher proportion (23.0%) using more medical, mental health or educational services than others of the same age while only 13.1% of caregivers with <HS Grad/GED reported the same observation with their children.

Figure R-195 Uses more medical/mental health/educational services than others of the same age vs. caregiver education (q72; n=2,219)



Greater health/educational service need due to medical, behavioral, or other health condition (q73; health status)

Question 73 asked caregivers who responded ‘yes’ to q72 if the greater use of medical care, mental health and educational services was because of a medical, behavioral, or other health condition. Figure R-196 shows that 86.5% of caregivers reported that their child’s greater need for the services was as a result of a health condition.

Figure R-196 Greater service use is due to a medical, behavioral, or other health condition (q73; n=406)

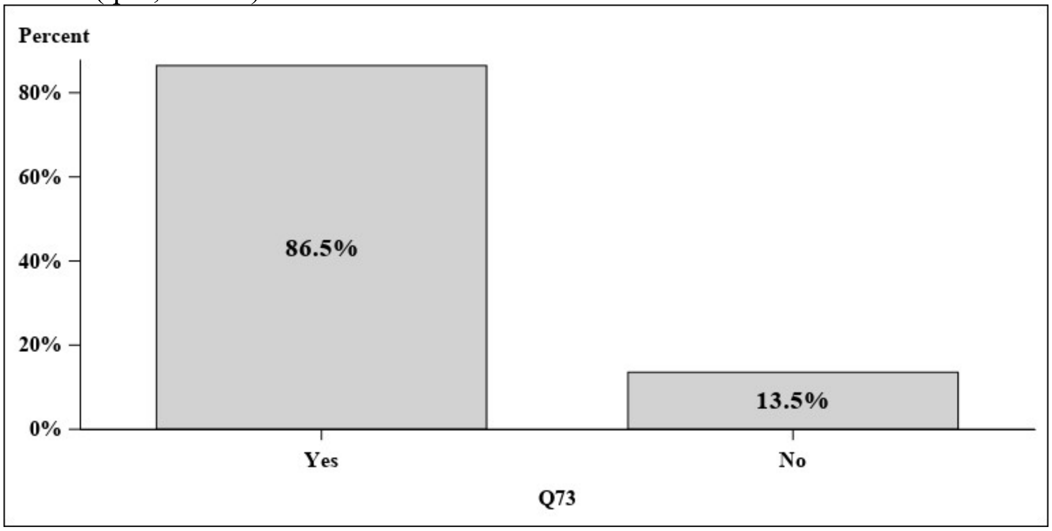


Figure R-197 illustrates the variation in q73 responses across race-ethnicity. Caregivers of H/L children had the lowest proportion demonstrating a greater need for services due to a medical, behavioral, or other health condition at 78.0%.

Figure R-197 Greater service use is due to a medical, behavioral, or other health condition vs. race-ethnicity (q73; n=406)

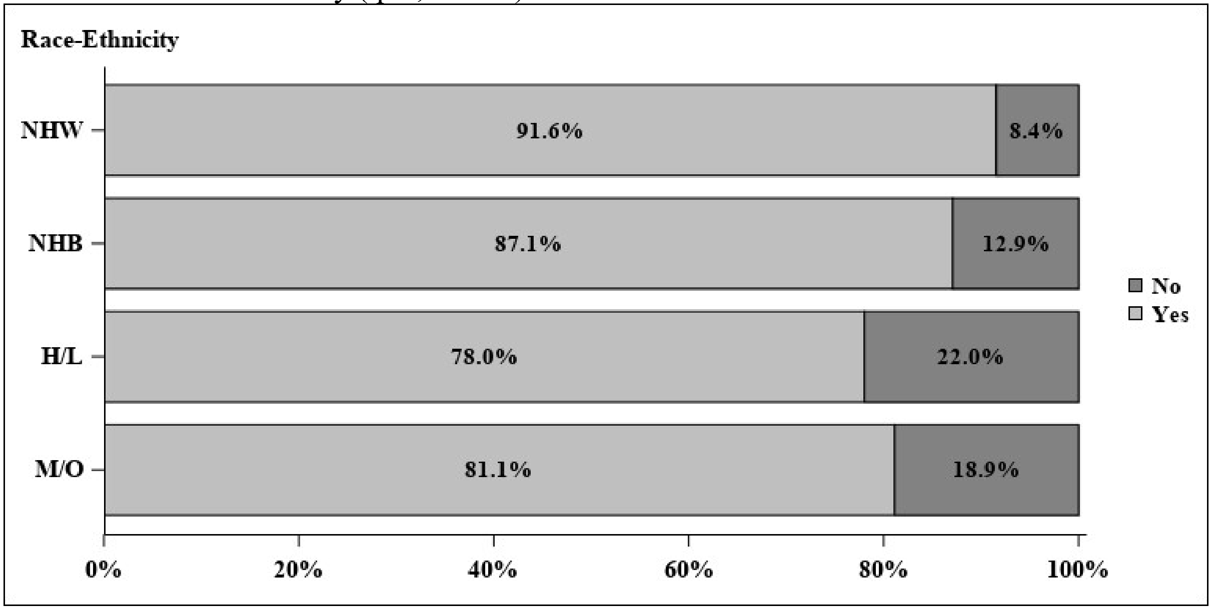
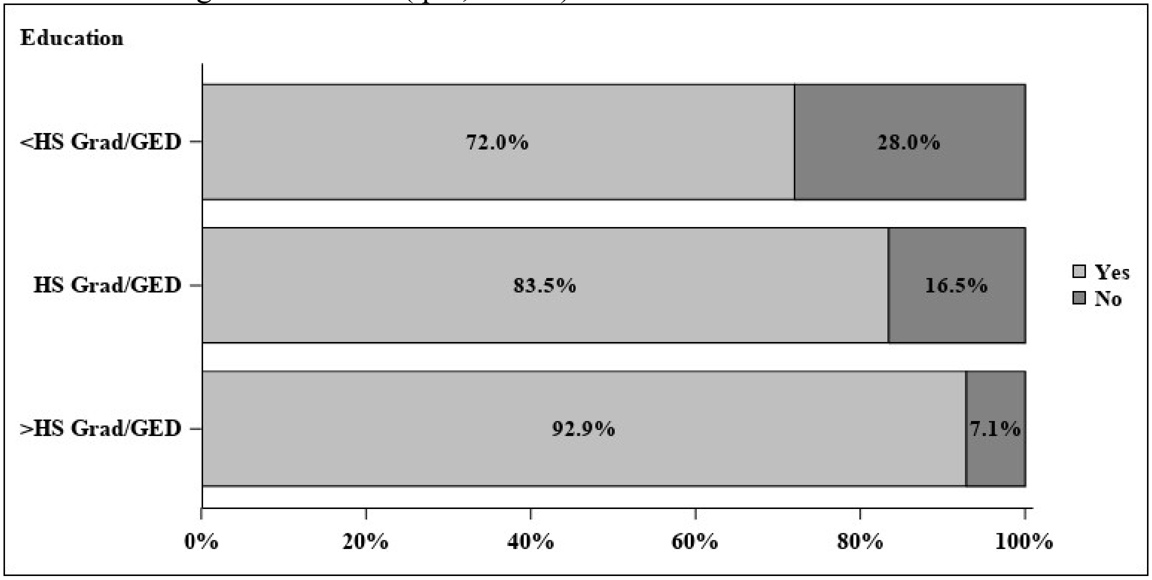


Figure R-198 depicts the variation in q73 responses across caregiver education. Caregivers with >HS Grad/GED reported the greatest proportion (92.9%) of children whose need for more services was because of a medical, behavioral, or other health condition compared to caregivers with <HS Grad/GED at 72.0%.

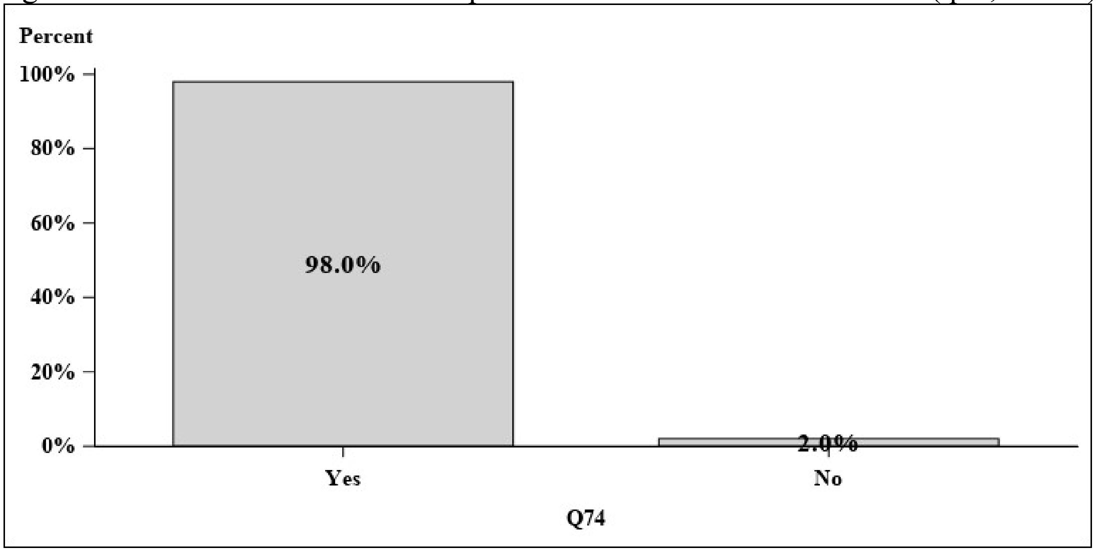
Figure R-198 Greater service use is due to a medical, behavioral, or other health condition vs. caregiver education (q73; n=404)



Medical condition requiring more services expected to last ≥12 months (q74; health status)

Question 74 asked caregivers who responded 'yes' to q72 if the child's medical condition that required the need for more services than other similarly aged children was expected to last for at least 12 months. Figure R-199 indicates that 98.0% of children had a medical condition expected to last for at least 12 months. We found no statistically significant relationships between q74 responses and any of the demographic or contextual variables.

Figure R-199 Condition has or is expected to last for at least 12 months (q74; n=347)



Child limited in ability to do things most children can do (q75; health status)

Question 75 asked caregivers if the child was limited in any way in his or her ability to do the things most children of the same age could do. Figure R-200 shows that 16.5% of children had this limitation.

Figure R-200 Limited or prevented in ability to do the things most others of the same age do (q75; n=2,250)

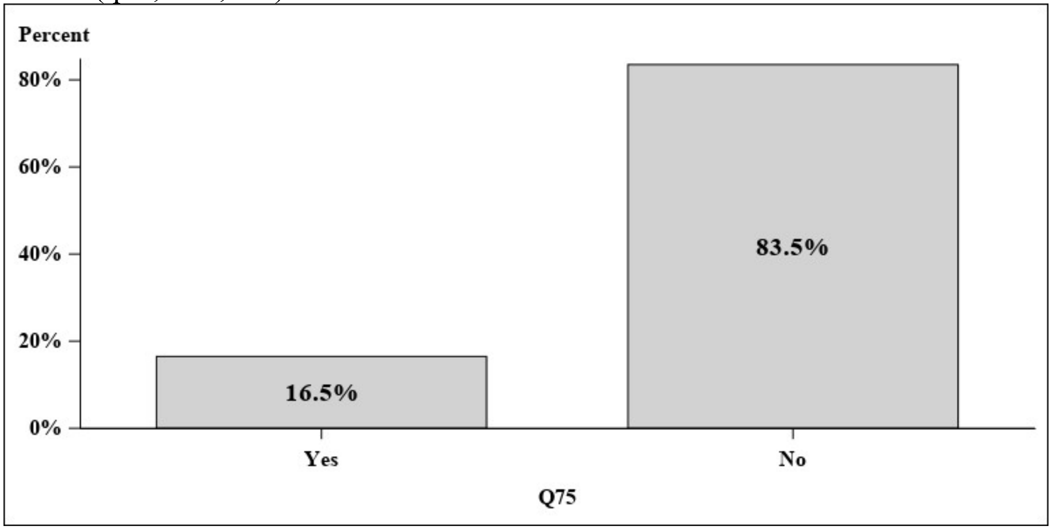


Figure R-201 illustrates the relationship between q75 responses and age. Children 13-18 yo had a higher proportion (20.8%) reported to be limited in the ability to do things compared to similarly aged children. Only 9.3% of 0-1 yo children were reported to have similar limitations.

Figure R-201 Limited or prevented in ability to do the things most others of the same age do vs. age (q75; n=2,250)

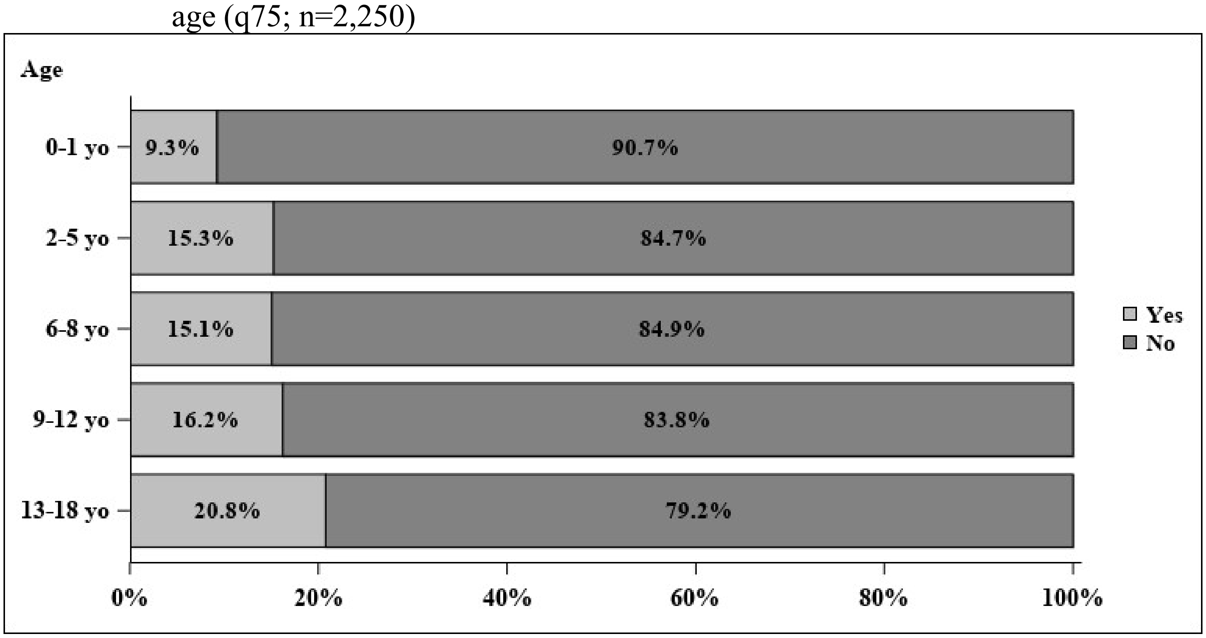
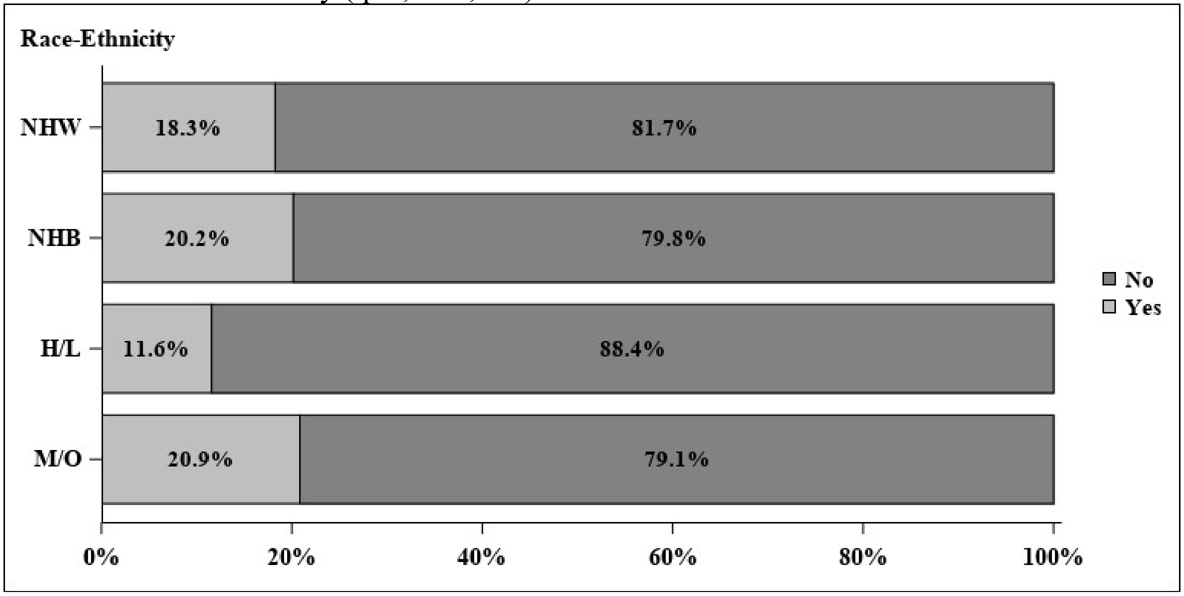


Figure R-202 indicates the relationship between responses to q75 and race-ethnicity. Caregivers of H/L children had the lowest proportion demonstrating a limitation in the ability to do things compared to similarly aged children at 11.6%.

Figure R-202 Limited or prevented in ability to do the things most others of the same age do vs. race-ethnicity (q75; n=2,239)



Activities limited by medical, behavioral or other health condition (q76; health status)

Question 76 asked caregivers who responded 'yes' to q75 if the medical or behavioral condition preventing the child from doing the same things as other children had lasted or was expected to last for at least 12 months. Figure R-203 shows that 64.4% of caregivers disclosed that this was a long-term medical condition.

Figure R-203 Limitation is due to a medical, behavioral, or other health condition (q76; n=362)

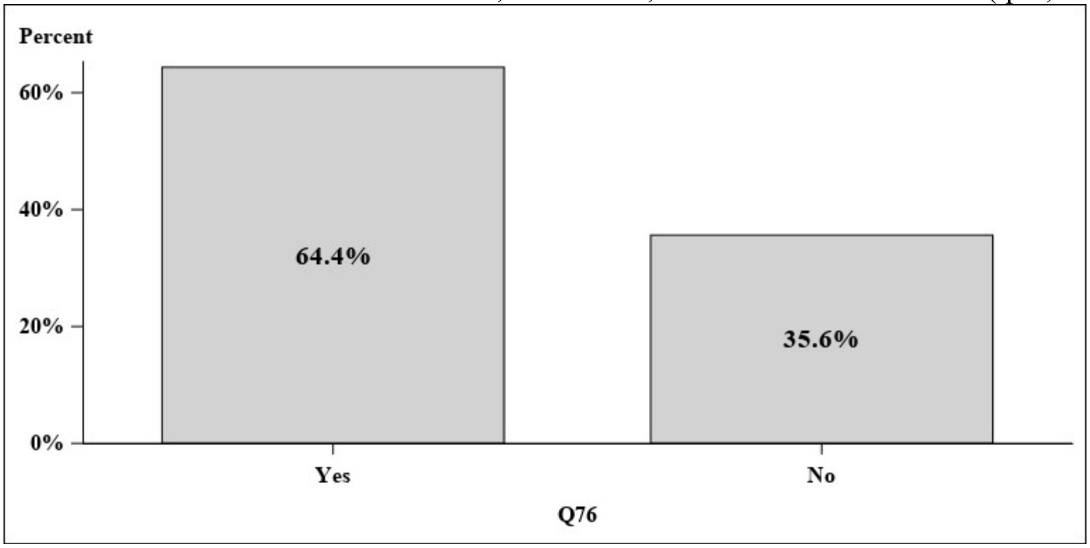


Figure R-204 describes the relationship between q76 responses and age. There was a general trend upward with age, whereby, as age increased, so did the proportion of caregivers reporting that their children had limited activities due to a medical, behavioral or other health condition, ranging from 42.1% of children 0-1 yo up to 72.0% of those 13-18 yo.

Figure R-204 Limitation is due to a medical, behavioral, or other health condition vs. age (q76; n=362)

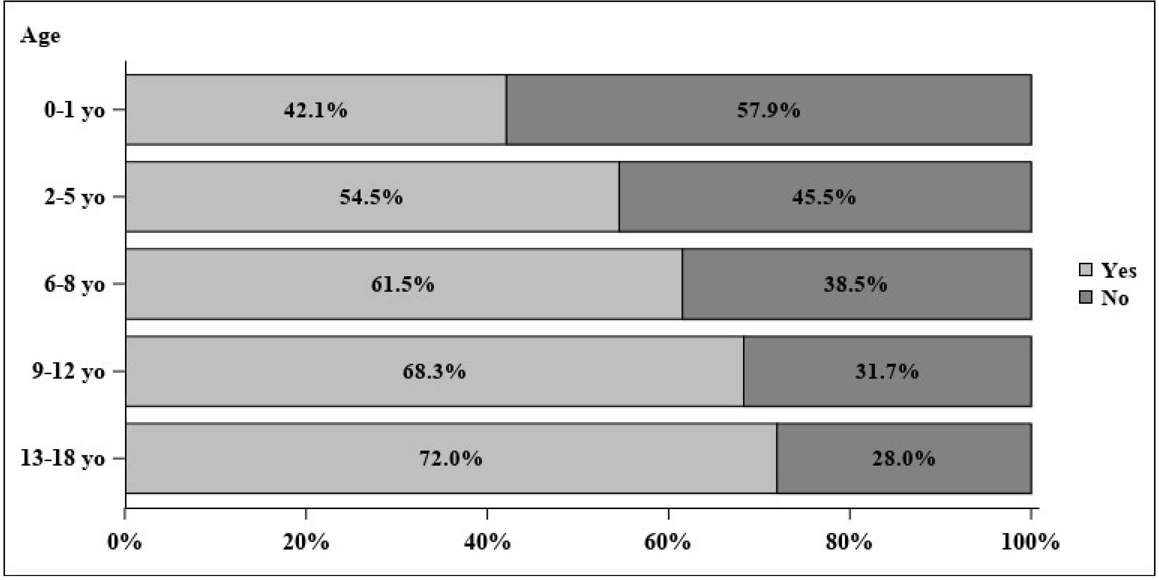


Figure R-205 illustrates the relationship between responses to q76 and race-ethnicity. NHW children were most often reported to have limitations in their activities due to a medical/behavioral condition at 84.1% while the same was reported for only 35.6% of H/L children.

Figure R-205 Limitation is due to a medical, behavioral, or other health condition vs. race-ethnicity (q76; n=362)

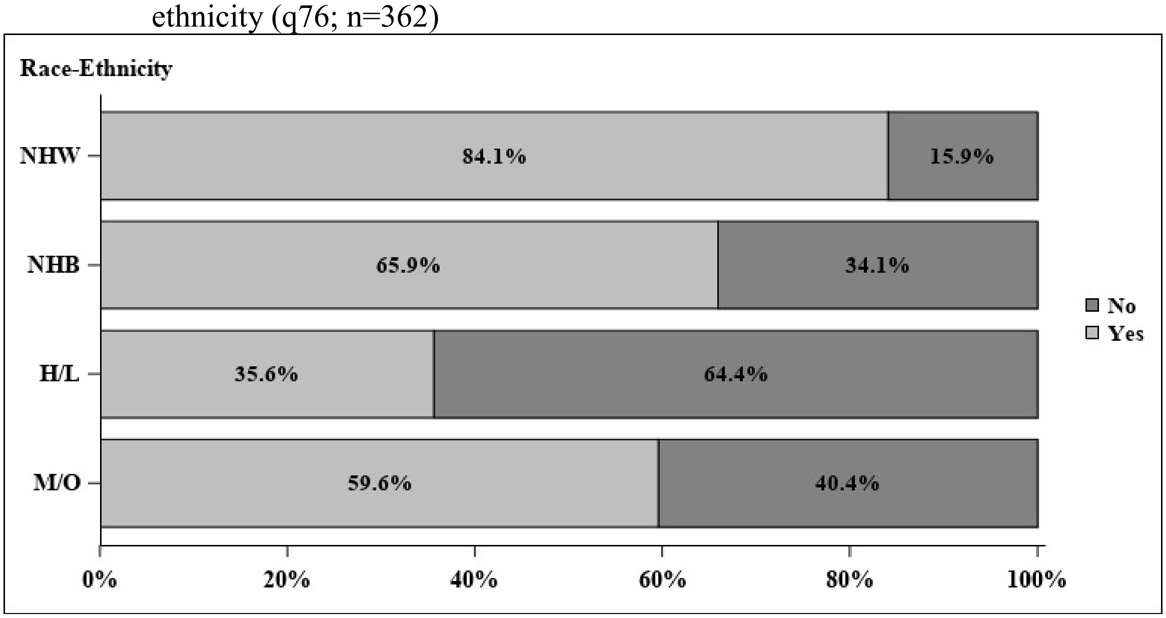


Figure R-206 displays the relationship between responses to q76 and caregiver education. Caregivers with >HS Grad/GED represented the highest proportion (81.1%) who reported their child's limited activities was because of medical/behavioral conditions. Only 40.4% of caregivers with <HS Grad/GED reported the same circumstances.

Figure R-206 Limitation is due to a medical, behavioral, or other health condition vs. caregiver education (q76; n=357)

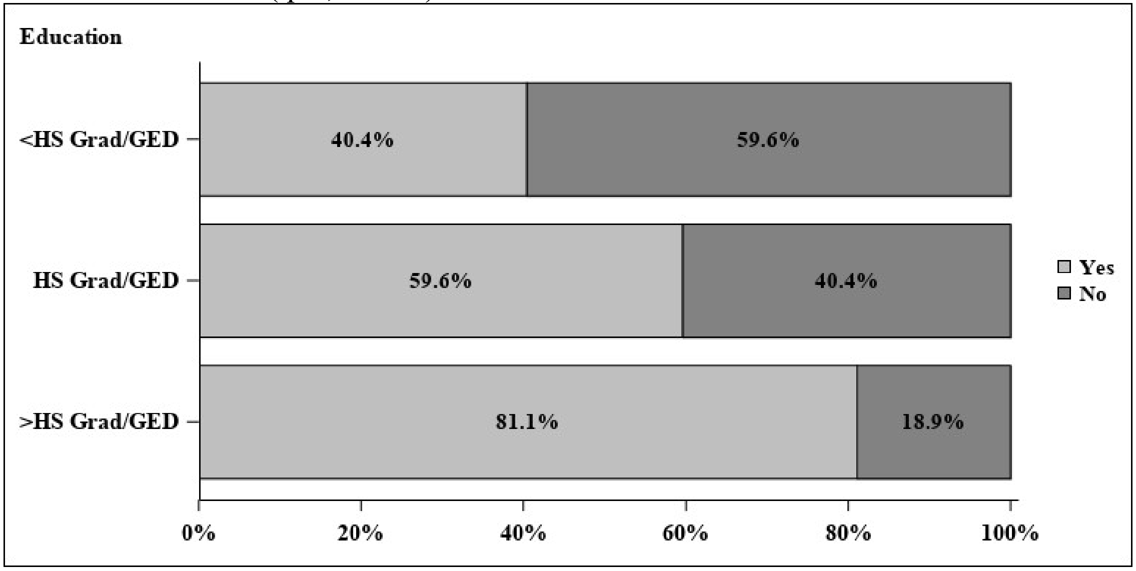
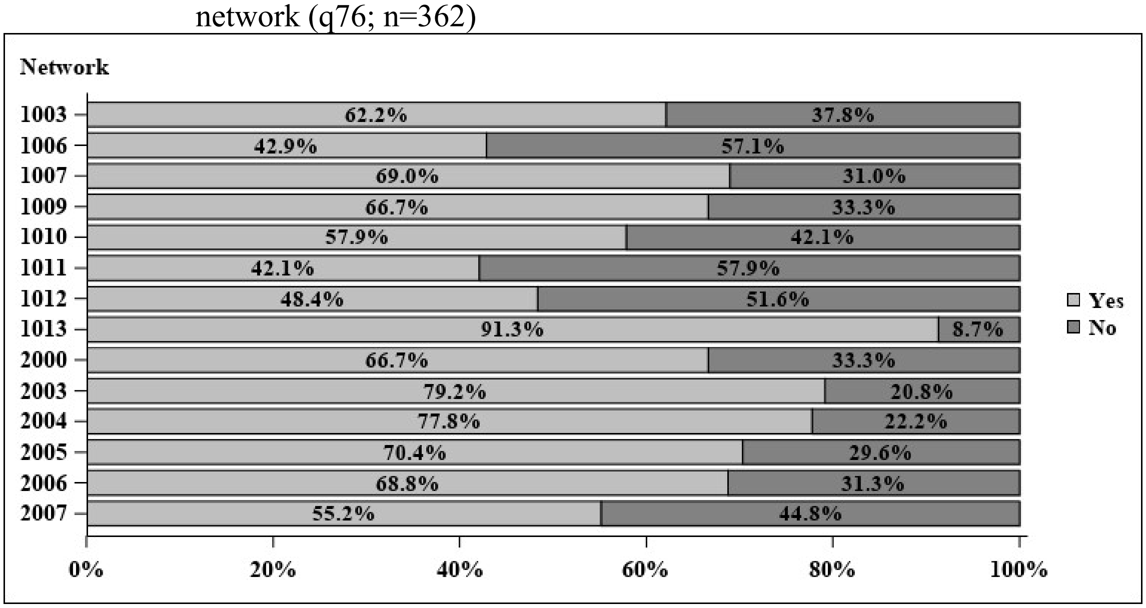


Figure R-207 shows variation in responses to q76 and CCNC network. Children from Carolina Collaborative Community Care (1013) had the highest proportion of children reporting limitations in activities because of a medical, behavioral, or other health condition at 91.3%.

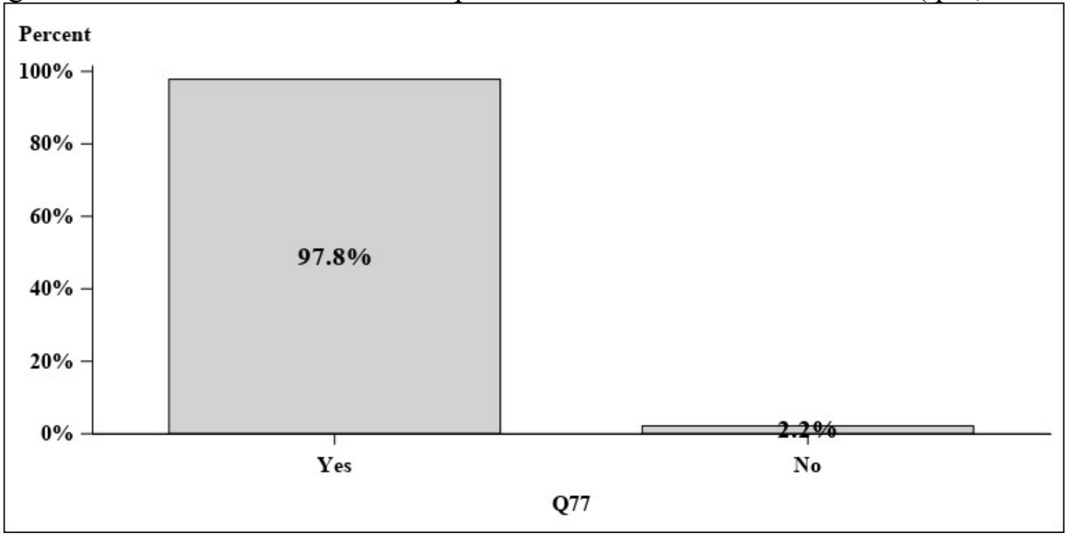
Figure R-207 Limitation is due to a medical, behavioral, or other health condition vs. CCNC network (q76; n=362)



Medical/behavioral condition that limits activities expected to last ≥12 months (q77; health status)

Question 77 asked caregivers who responded ‘yes’ to q76 if the medical or behavioral condition that caused a limitation in activities had lasted or was expected to last for at least 12 months. Figure R-208 illustrates that 97.8% of children were reported to have a condition that had lasted or was expected to last for at least 12 months. We found no statistically significant relationships between q77 responses and any of the demographic or contextual variables.

Figure R-208 Condition has or is expected to last for at least 12 months (q77; n=230)



Child's need for special therapy (q78; health status)

Question 78 asked caregivers if the child needed or received special therapy such as physical, occupational, or speech therapy. Figure R-209 indicated that only 13.6% of children needed or received special therapy.

Figure R-209 Needs or gets special therapy such as physical, occupational or speech (q78; n=2,271)

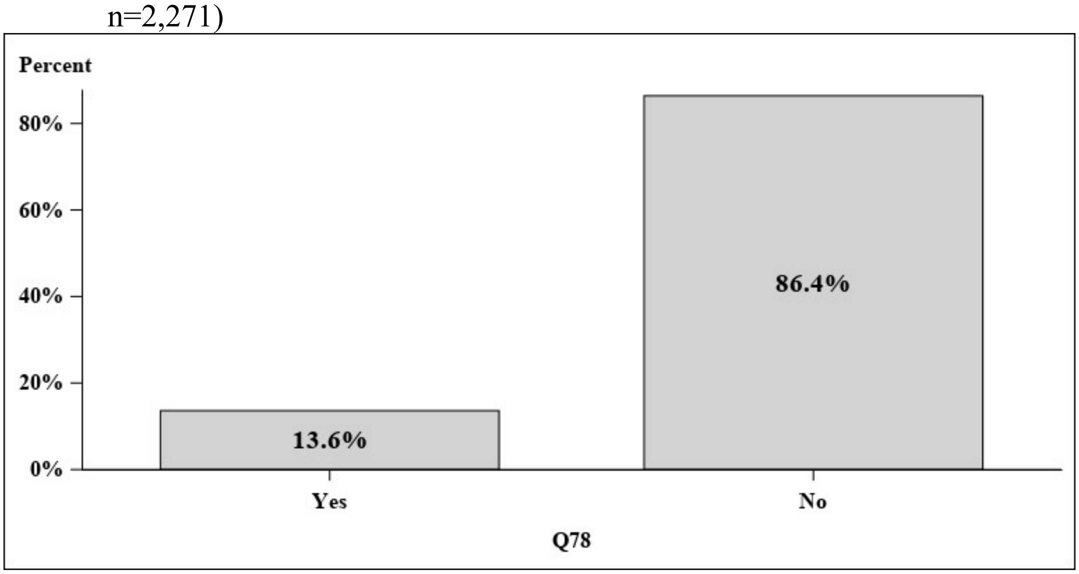


Figure R-210 illustrates how responses to q78 varied with age. Children 2-5 yo needed or got special therapy such as physical, occupational or speech at 18.6% compared to children 0-2 yo who got the same special therapy at only 6.7%.

Figure R-210 Needs or gets special therapy such as physical, occupational or speech vs. age (q78; n=2,271)

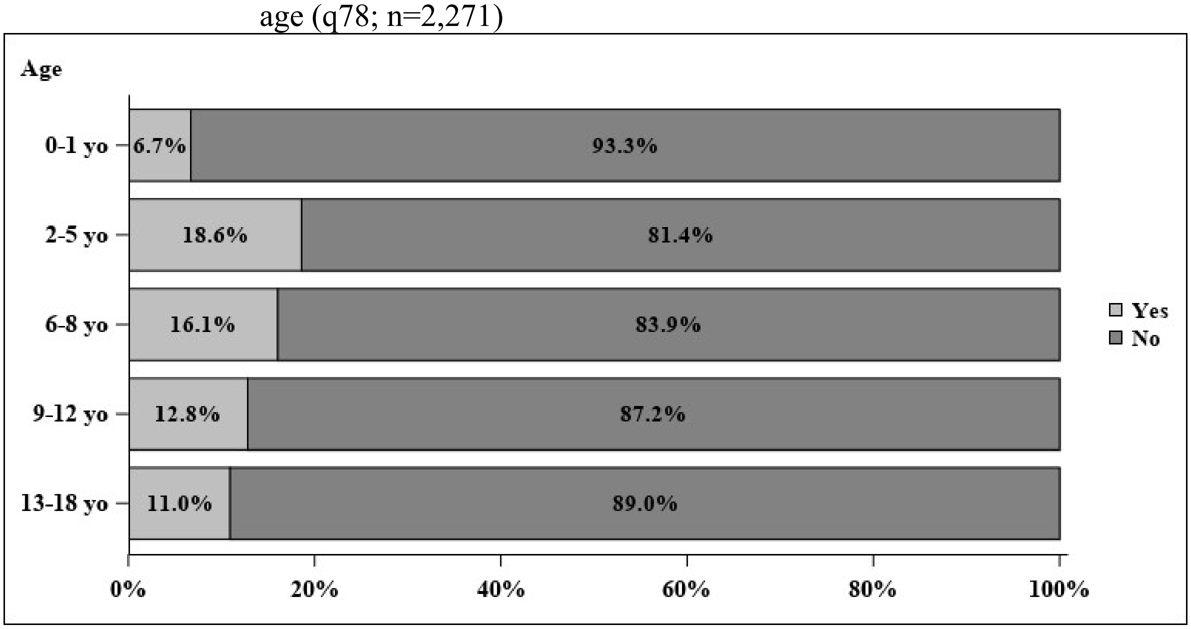


Figure R-211 shows how the relationship between q78 responses and sex. A greater proportion of male children (15.9%) needed or got special therapy while only 11.1% of female children needed special therapy such as physical, occupational or speech.

Figure R-211 Needs or gets special therapy such as physical, occupational or speech vs. sex (q78; n=2,271)

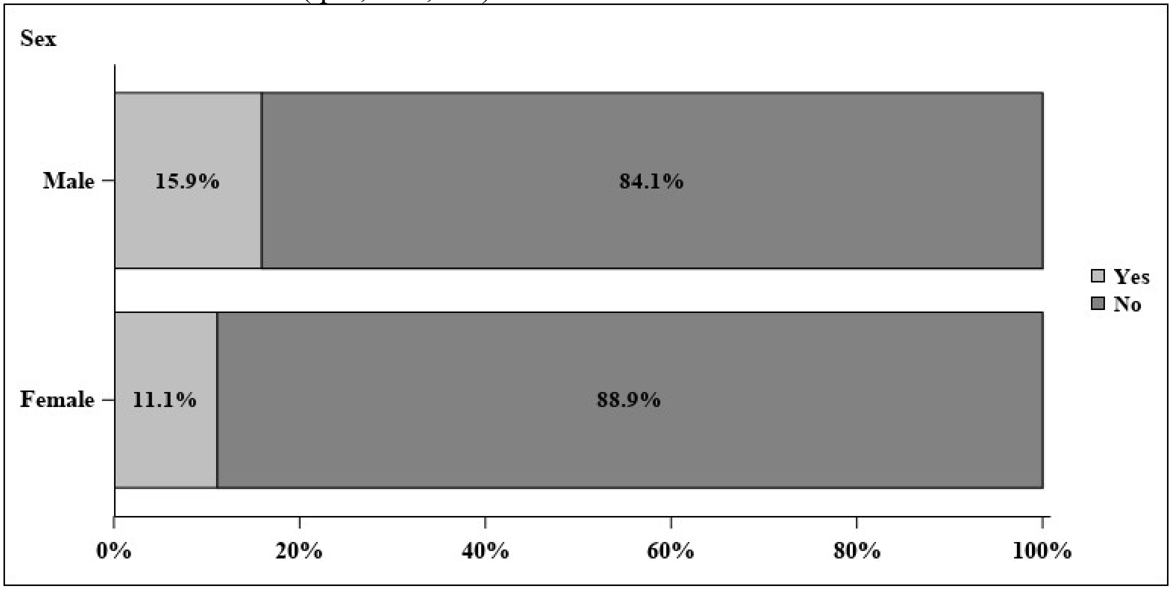


Figure R-212 depicts the variation in responses to q78 and race-ethnicity. NHB children (17.9%) needed or got special therapy such as physical, occupational or speech at a higher proportion. Only 9.7% of H/L children needed the same special therapy.

Figure R-212 Needs or gets special therapy such as physical, occupational or speech vs. race-ethnicity (q78; n=2,260)

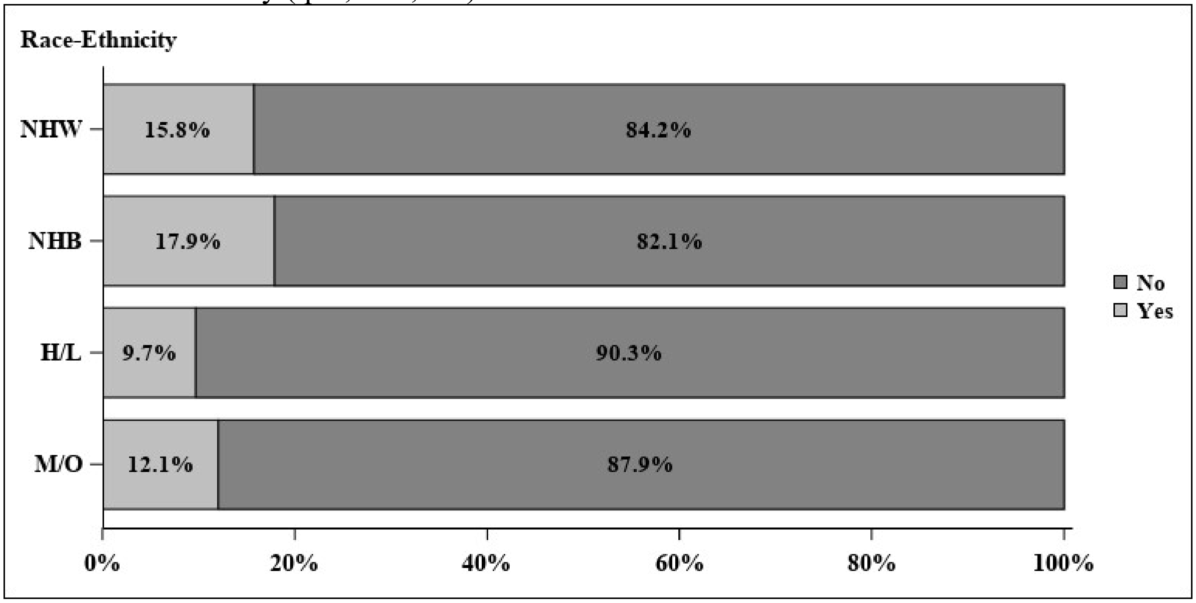
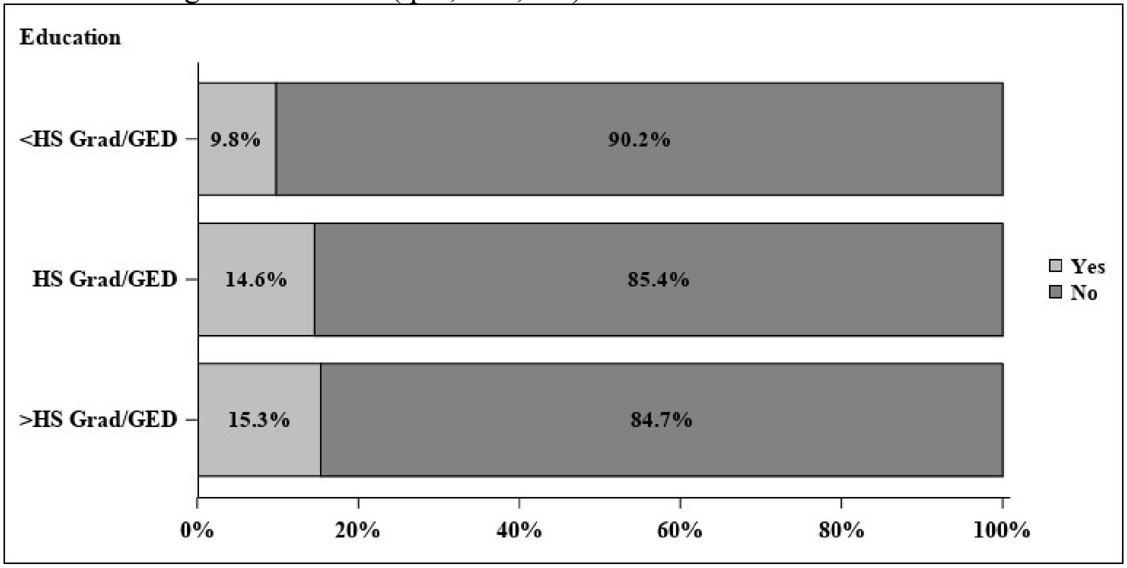


Figure R-213 shows the relationship between q78 responses and caregiver education. The lowest proportion of caregivers with <HS Grad/GED reported their children needed or received special therapy such as physical, occupational or speech at 9.8%.

Figure R-213 Needs or gets special therapy such as physical, occupational or speech vs. caregiver education (q78; n=2,246)



Special therapy needed due to medical/behavioral/health condition (q79; health status)

Question 79 asked caregivers who responded 'yes' to q78 if the special therapy needed was because of a medical, behavioral, or other health condition. Figure R-214 indicates that 68.7% of caregivers reported that their children needed the special therapy due to a medical, behavioral, or other health condition.

Figure R-214 Therapy is needed because of a medical, behavioral, or other health condition (q79; n=300)

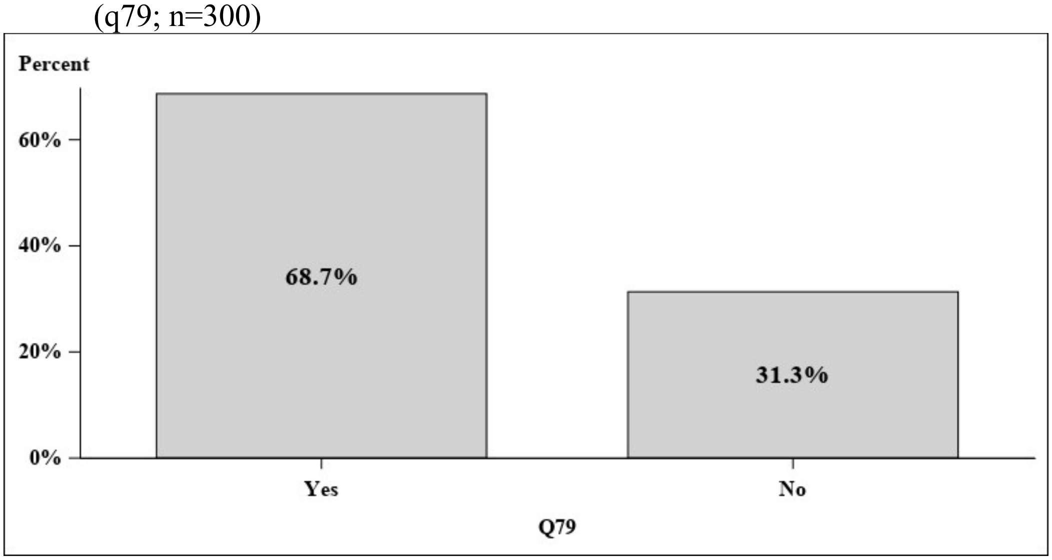


Figure R-215 demonstrates the relationship between responses to q79 and age. Eighty-three point one percent (83.1%) of 13-18 yo children were reported to need special therapy because of a medical, behavioral, or other health condition. Only 51.5% of 2-5 yo children were reported to need the same therapy because of a medical, behavioral, or other condition.

Figure R-215 Therapy is needed because of a medical, behavioral, or other health condition vs. age (q79; n=300)

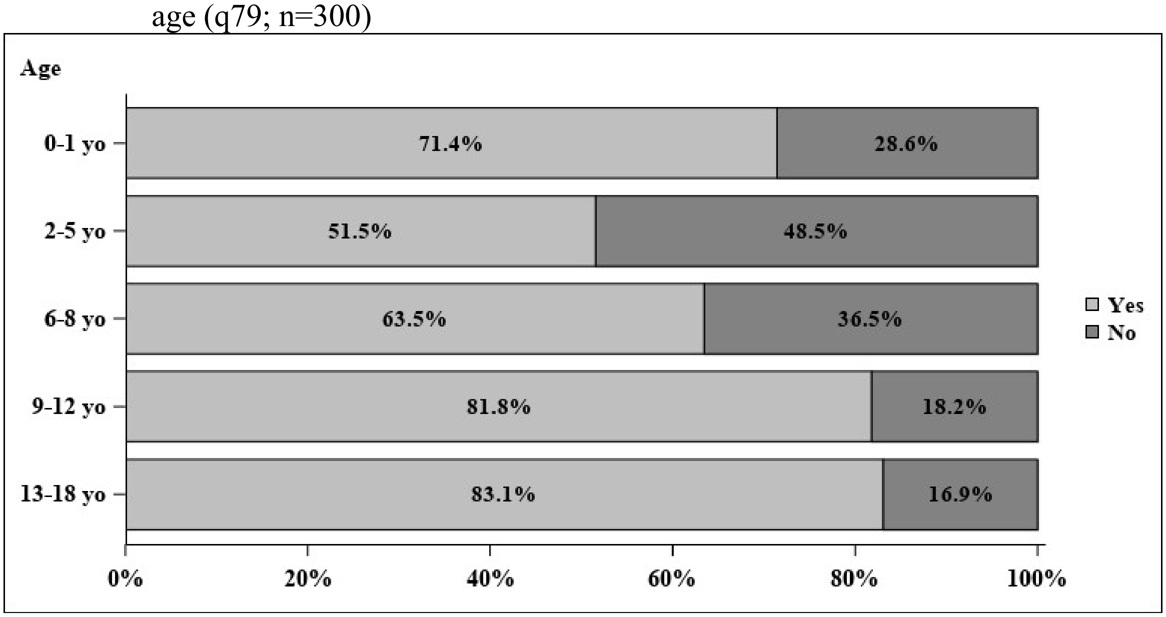


Figure R-216 depicts the variation in responses to q79 with race-ethnicity. A higher proportion of NHW children were reported to need special therapy because of a medical, behavioral, or other health condition at 80.0% while H/L children needed the same at only 45.3%.

Figure R-216 Therapy is needed because of a medical, behavioral, or other health condition vs. race-ethnicity (q79; n=299)

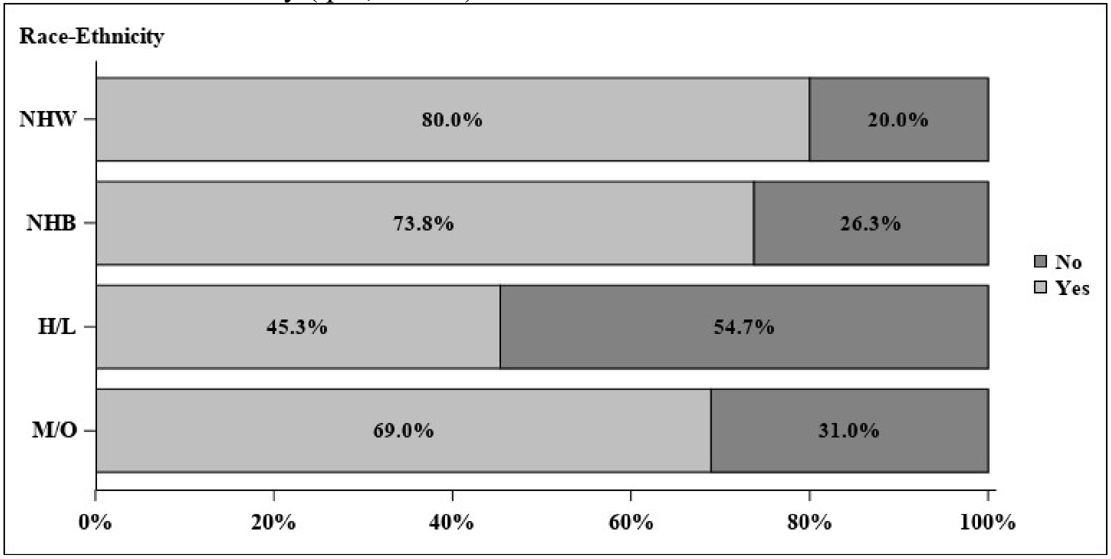
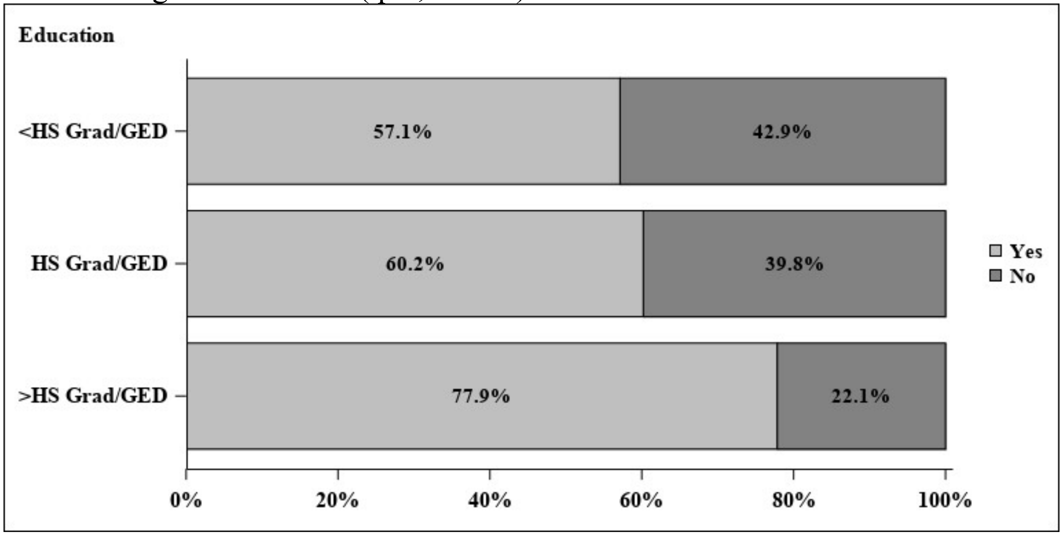


Figure R-217 demonstrates the relationship between responses to q79 and caregiver education. A higher proportion of caregivers with >HS Grad/GED reported that their children needed special therapy due to a medical, behavioral, or other health condition at 77.9%.

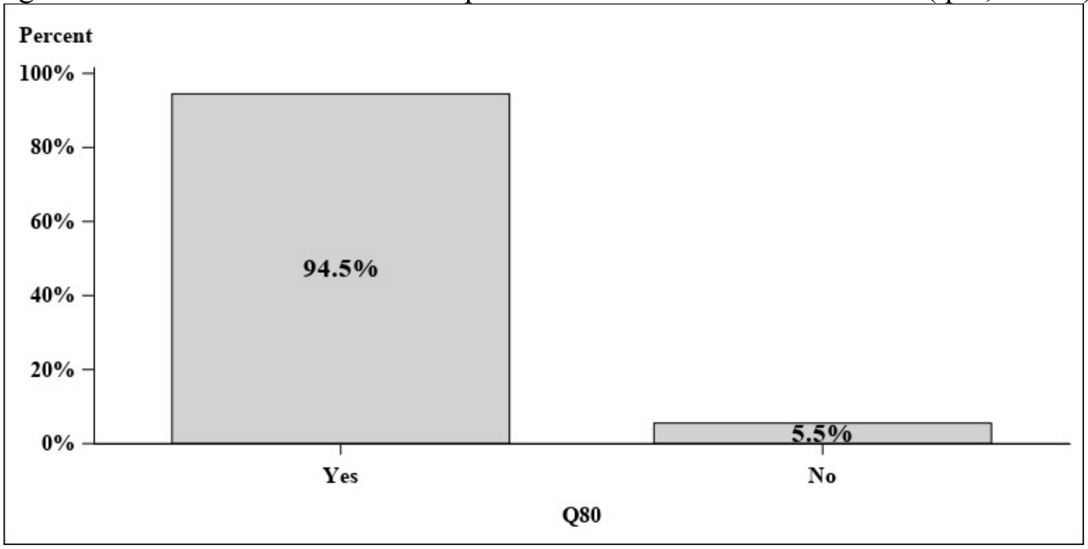
Figure R-217 Therapy is needed because of a medical, behavioral, or other health condition? vs. caregiver education (q79; n=298)



Condition requiring special therapy expected to last ≥12 months (q80; health status)

Question 80 asked caregivers who responded ‘yes’ to q79 if the condition had lasted or was expected to last for at least 12 months. Figure R-218 shows that 94.5% of children were reported to have a condition that had lasted or expected to last for at least 12 months. We found no statistically significant relationships between q80 responses and any of the demographic or contextual variables.

Figure R-218 Condition has or is expected to last for at least 12 months (q80; n=199)



3.8 Trust in the Child's Health Providers (q92-q96)

Personal health provider may not make needed referrals to a specialist (q92; trust)

Question 92 asked caregivers if they agreed that the child's personal health provider may not refer him/her to a specialist when needed. Figure R-219 illustrates that 57.8% of caregivers strongly disagreed with this statement, 13.8%, 3.0%, 8.8% and 16.6% somewhat disagreed, neither agreed nor disagreed, somewhat agreed, and strongly disagreed, respectively.

Figure R-219 May not refer to a specialist when needed (q92; n=2,030)

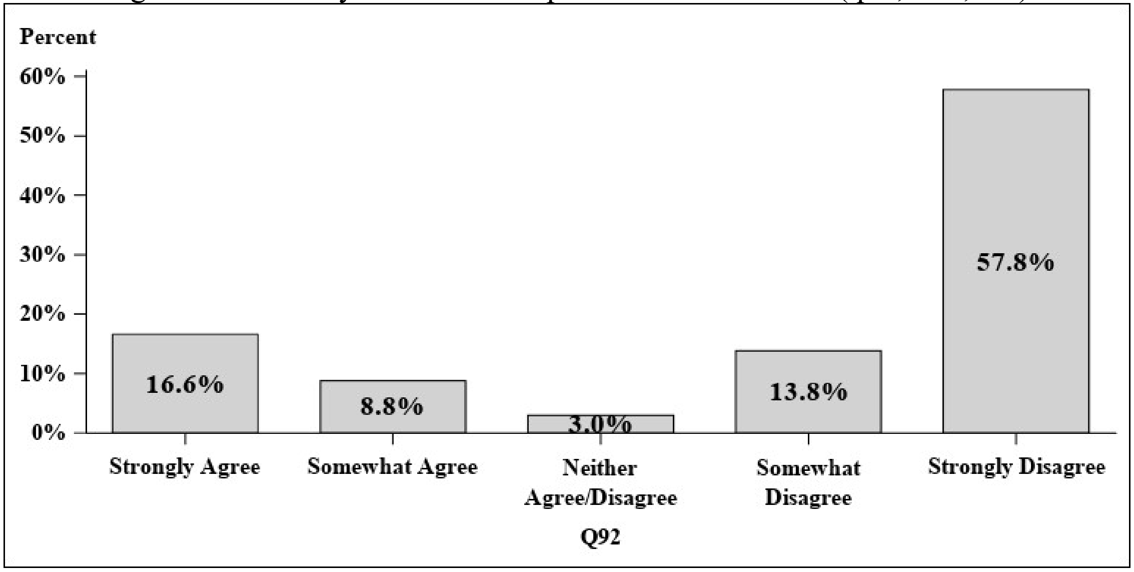


Figure R-220 describes the variation in responses to q92 with age. Caregivers of children 9-12 yo trusted least often that the child's health provider would refer to a specialist when needed at 67.0%.

Figure R-220 May not refer to a specialist when needed vs. age (q92; n=1,964)

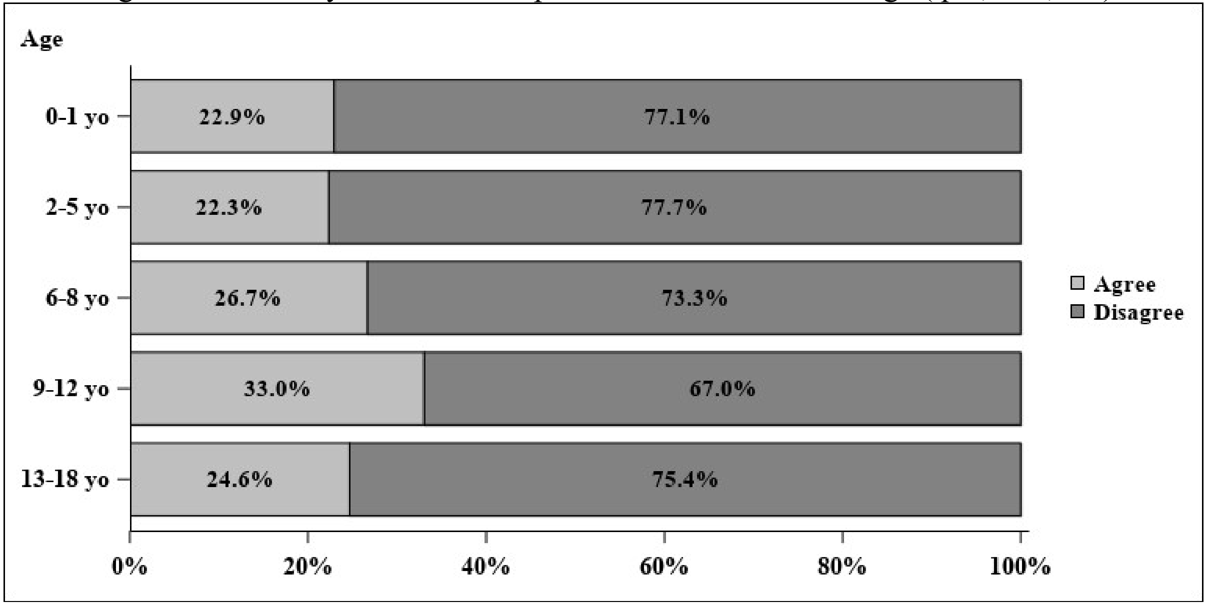


Figure R-221 indicates the relationship between responses to q92 and race-ethnicity. Caregivers of NHW children trust the most (83.9%) that caregivers referred to specialists when needed with caregivers of NHB children just lower at 81.4%. Only 54.2% of caregivers of (H/L) children trusted that the child's health providers referred to specialists when needed.

Figure R-221 May not refer to a specialist when needed vs. race-ethnicity (q92; n=1964)

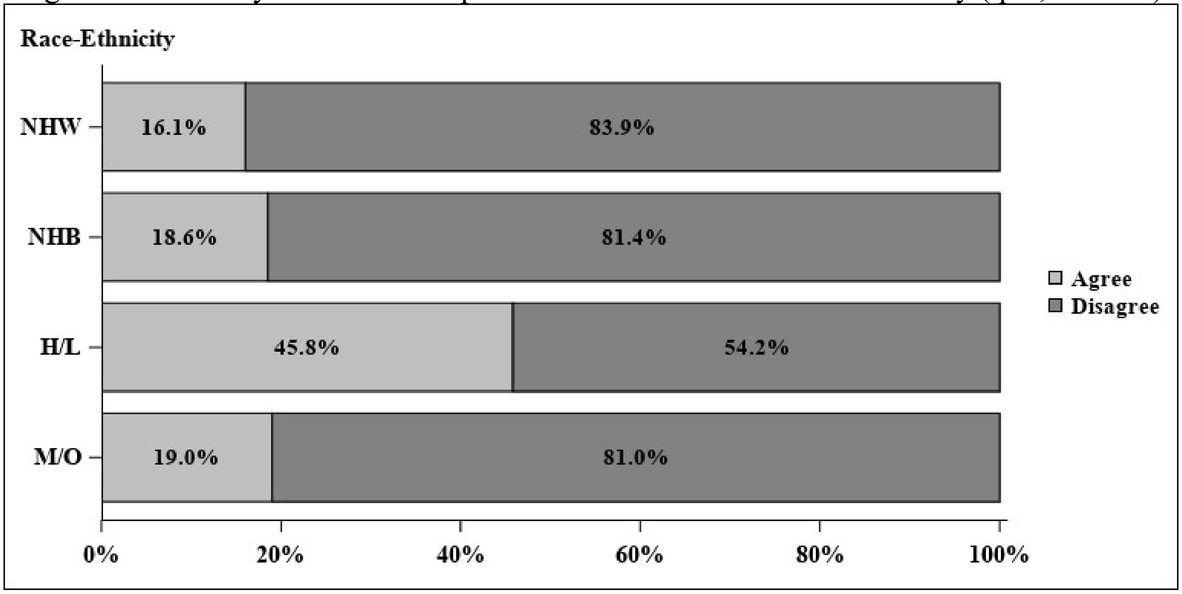


Figure R-222 demonstrates the variation in q92 responses across caregiver education. Caregivers with >HS Grad/GED trusted more that their child's health provider referred to a specialist when needed at 85.7%. In contrast, caregivers with <HS Grad/GED trusted less that their child's health provider would refer to a specialist when needed at 49.9%.

Figure R-222 May not refer to a specialist when needed vs. caregiver education (q92; n=1952)

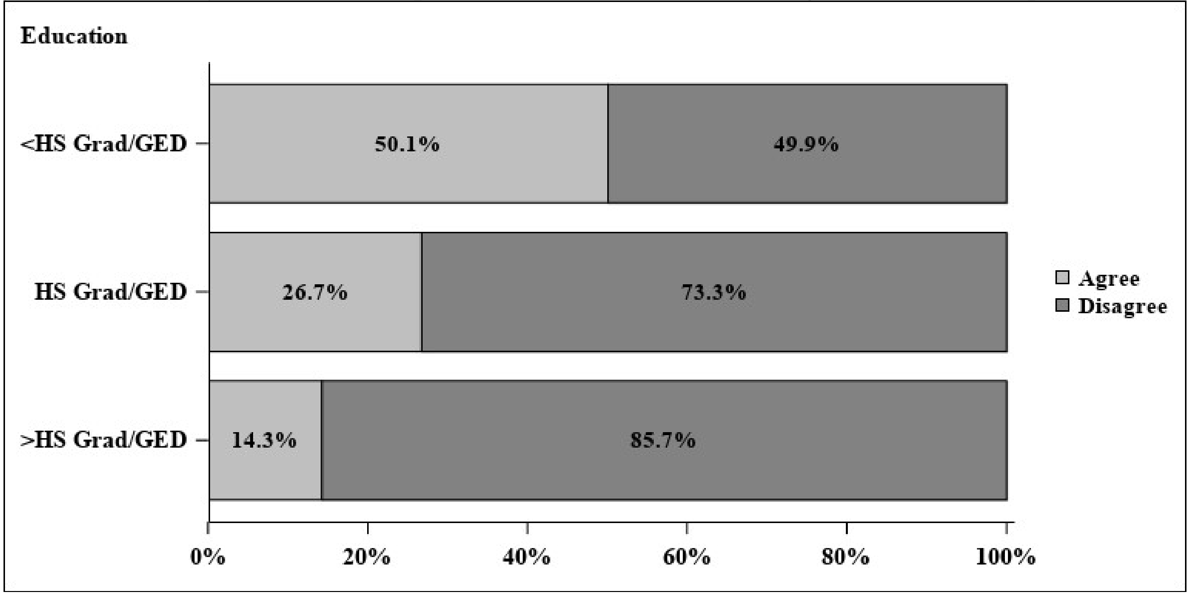
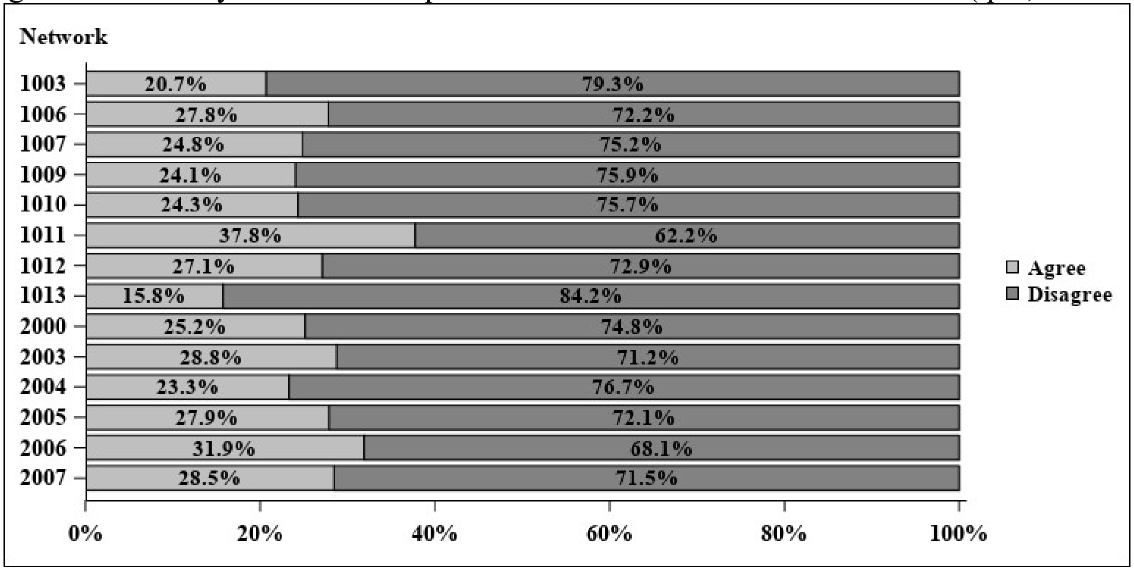


Figure R-223 illustrates how responses to q92 varied across CCNC network. Caregivers with children in Carolina Collaborative Community Care (1013) trusted most that their child's health provider would refer to a specialist when needed at 84.2%. Caregivers with children in Community Care of Wake and Johnston Counties (1011) least often trusted 49.9%) that their child's health provider would refer to a specialist when needed.

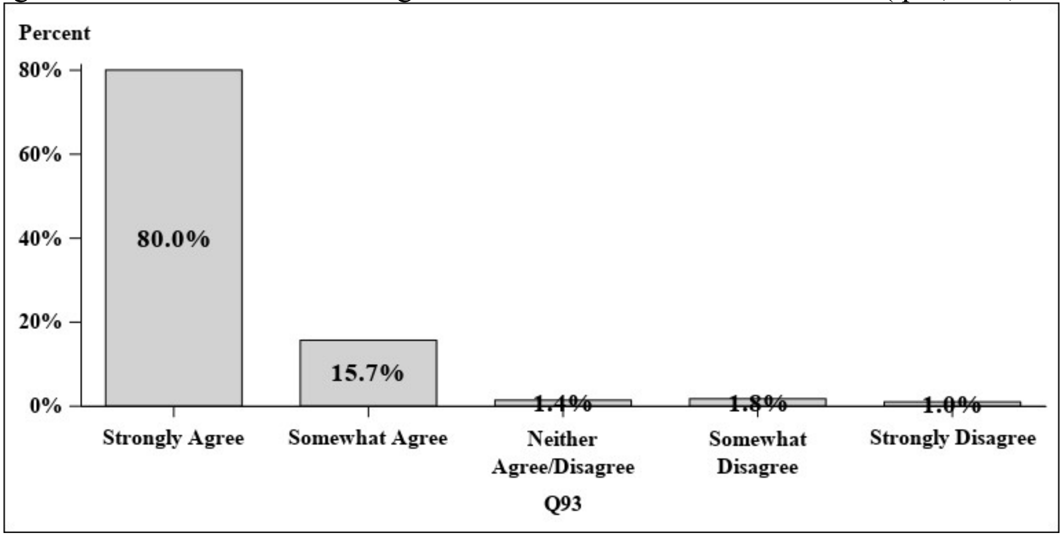
Figure R-223 May not refer to a specialist when needed vs. CCNC network (q92; n=1970)



Health providers put the child's needs above all other considerations (q93; trust)

Question 93 asked caregivers if their child's health providers put the child's medical needs above all other considerations when treating medical problems. Figure R-224 shows that 80% strongly agreed that the child's health provider placed the child's medical needs above all other considerations, 15.7% somewhat disagreed, 1.4% neither agreed nor disagreed, 1.8% somewhat agreed, and 1.0% strongly agreed. No statistically significant relationships were observed between responses to q93 and any of the demographic or context variables.

Figure R-224 Medical needs regarded above all other considerations (q93; n=2,145)



Health providers might perform unnecessary tests or procedures (q94; trust)

Question 94 asked caregivers if they thought that the child's health provider might perform unnecessary tests or procedures. Figure R-225 demonstrates that 65.2% strongly disagreed with the statement, 14.6% somewhat disagreed, 2.7% neither agreed nor disagreed, 8.5% somewhat agreed and 9.0% strongly agreed.

Figure R-225 May perform unnecessary tests or procedures (q94; n=2,118)

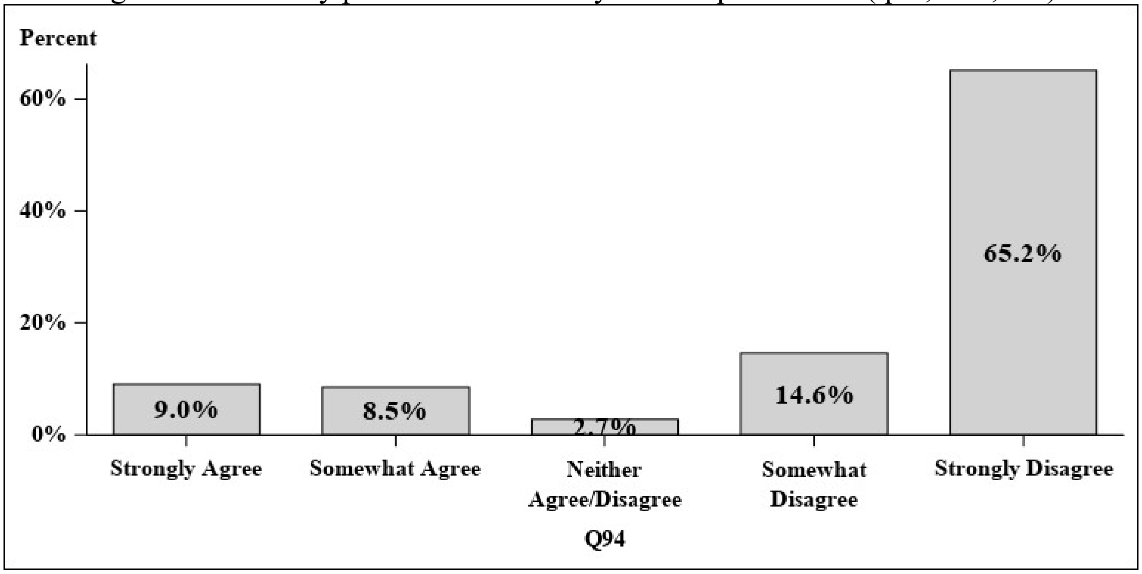


Figure R-226 indicates how the relationship to q94 responses varied with race-ethnicity. Caregivers of NHW children (91.3%) most trusted the child's providers to only perform necessary tests and procedures, while 90.1% of caregivers of NHB children felt the same. Only 65.7% of caregivers of H/L children reported the same regarding their child's health provider.

Figure R-226 May perform unnecessary tests or procedures vs. race-ethnicity (q94; n=2,052)

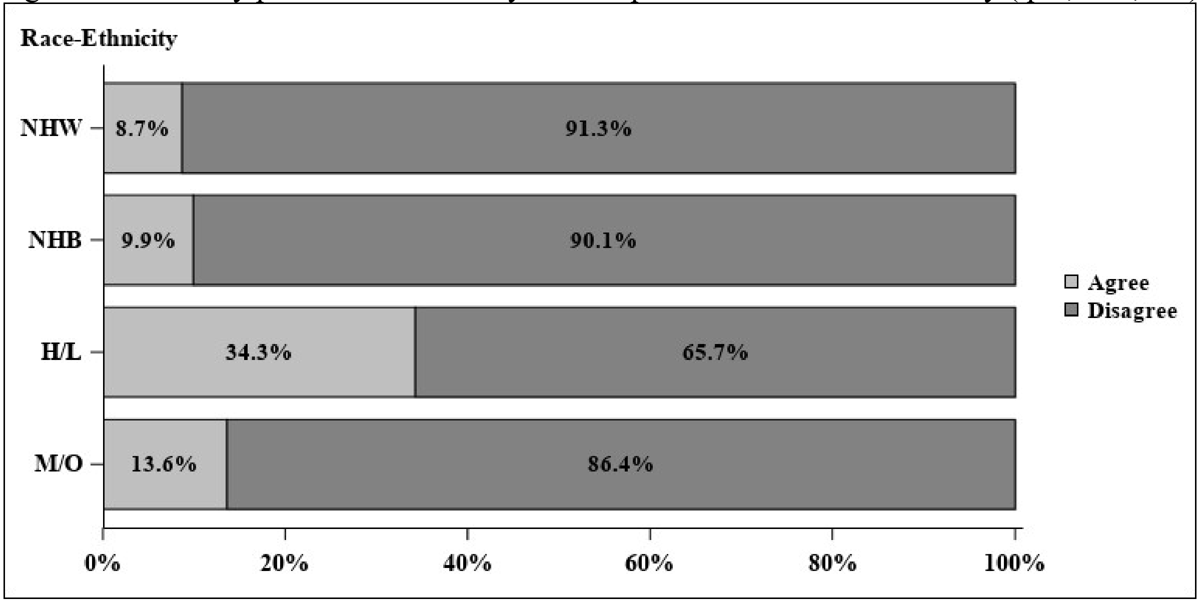


Figure R-227 describes the relationship between responses to q94 and caregiver education. Caregivers with >HS Grad/GED trusted most (90.3%) that the child's health provider only performed necessary tests or procedures while caregivers with <HS Grad/GED trusted least that the child's health provider might perform unnecessary tests or procedures at 64.4%.

Figure R-227 May perform unnecessary tests or procedures vs. caregiver education (q94; n=2,042)

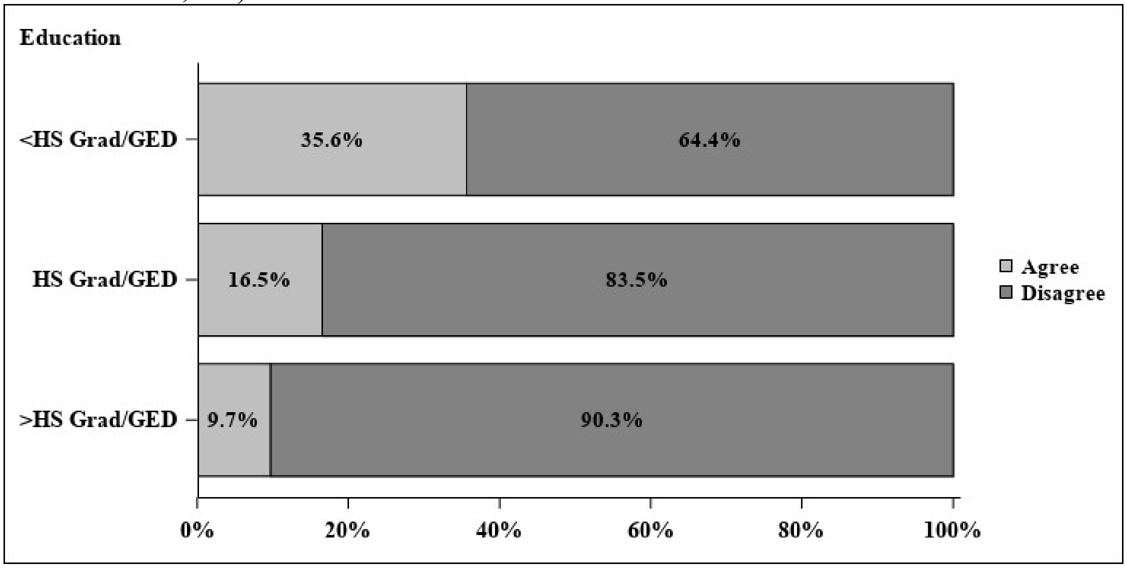
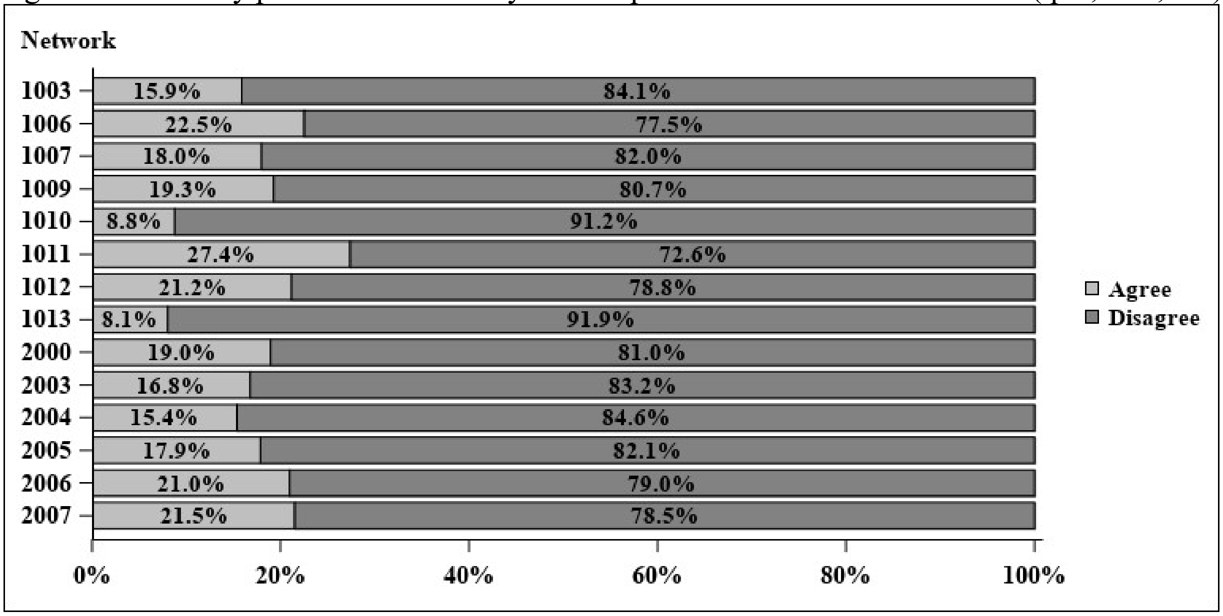


Figure R-228 illustrates the variation in responses to q94 with CCNC network. Caregivers with children in Carolina Collaborative Community Care (1013) trusted most at 91.9% that the child's health provider only performed necessary tests or procedures while caregivers in Community Care of Wake and Johnston Counties (1011) trusted least (72.6%).

Figure R-228 May perform unnecessary tests or procedures vs. CCNC network (q94; n=2,060)



Health providers' medical skills not as good as they should be (q95; trust)

Question 95 asked caregivers if their child's health provider's medical skills were not as good as they should be. Figure R-229 shows that 69.6% strongly disagreed that their child's health provider's medical skills were not as they should be, 13.3% somewhat disagreed, 2.5% neither agreed nor disagreed, 6.7% somewhat agreed, and 7.9% strongly agreed.

Figure R-229 Medical skills are not as good as they should be (q95; n=2,108)

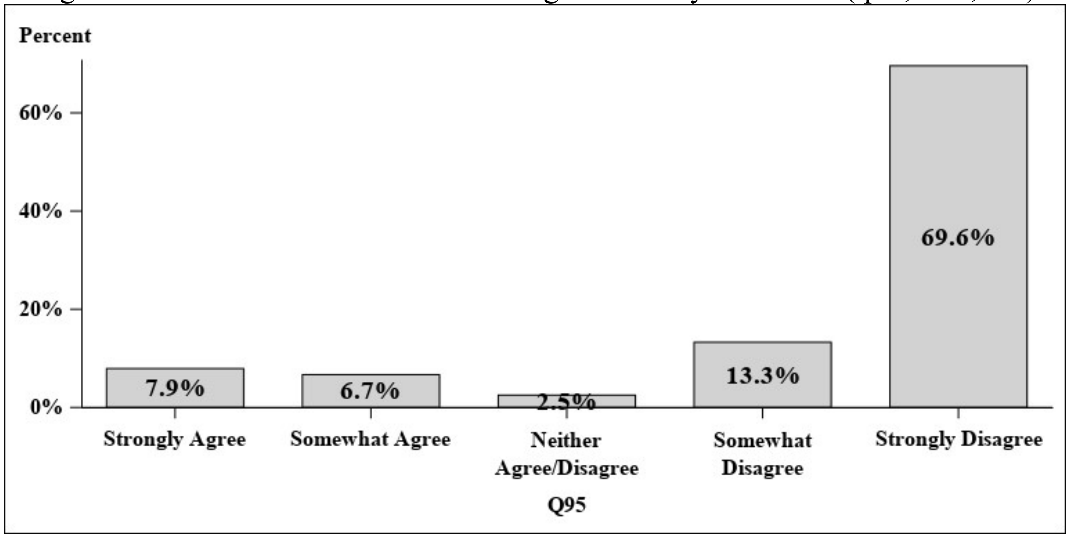


Figure R-230 shows the relationship between q95 responses and age. Caregivers of children 13-18 yo trusted most that their child's health provider's medical skills were as good as they should be at 88.5%.

Figure R-230 Medical skills are not as good as they should be vs. age (q95; n=2,055)

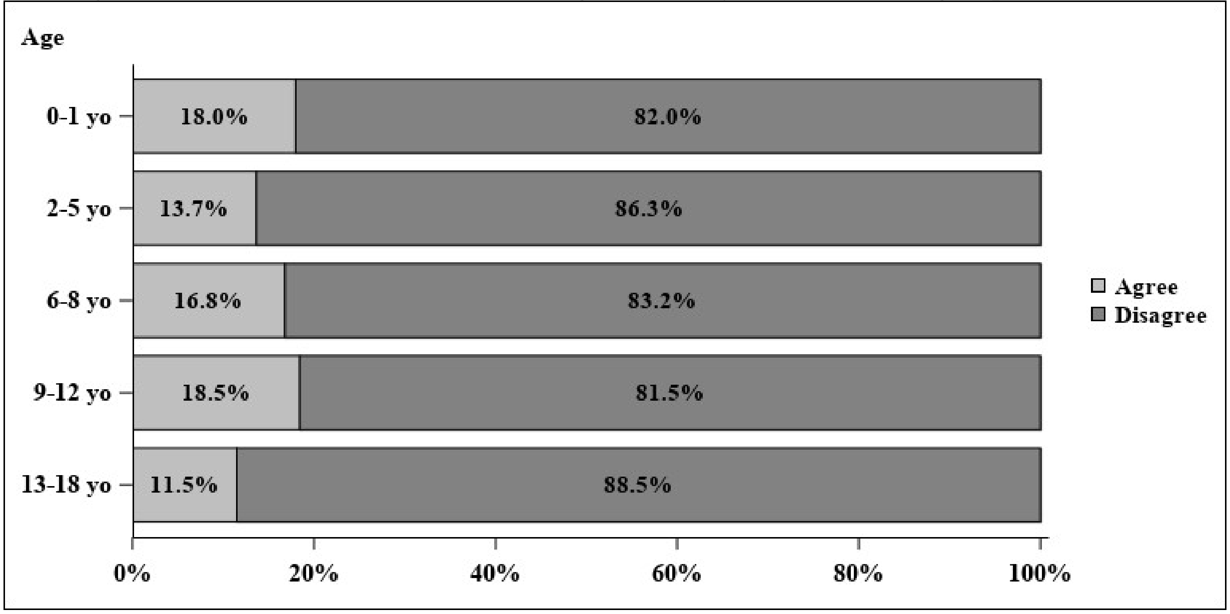


Figure 231 examines how q95 responses varied with race-ethnicity. Caregivers of NHW children (92.6%) and NHB children (92.4%) most trusted that their child's health provider's medical skills were as good as they should be. Caregivers of H/L children reported the lowest trust in their child's health providers skills at 70.7%.

Figure R-231 Medical skills are not as good as they should be vs. race-ethnicity (q95; n=2,048)

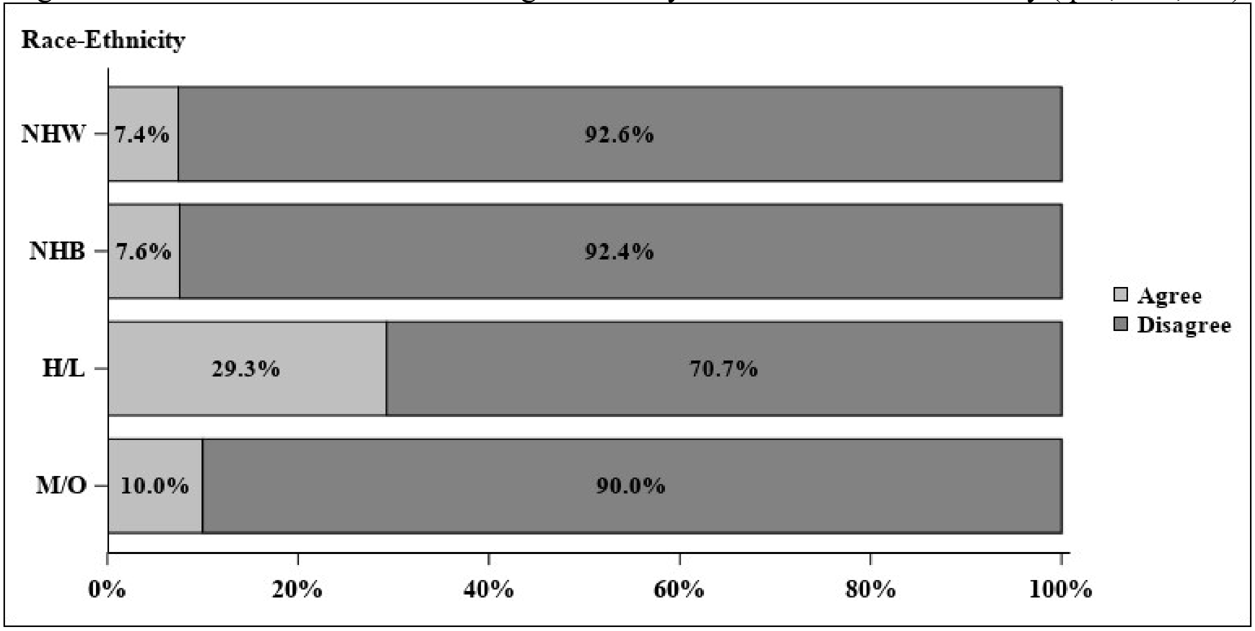


Figure R-232 describes the relationship between q95 responses and caregiver education. Caregivers with >HS Grad/GED trusted most at 93.9% that their child's health provider's medical skills were as good as they should be while caregivers with <HS Grad/GED trusted least at 66.0%.

Figure R-232 Medical skills are not as good as they should be vs. caregiver education (q95; n=2,036)

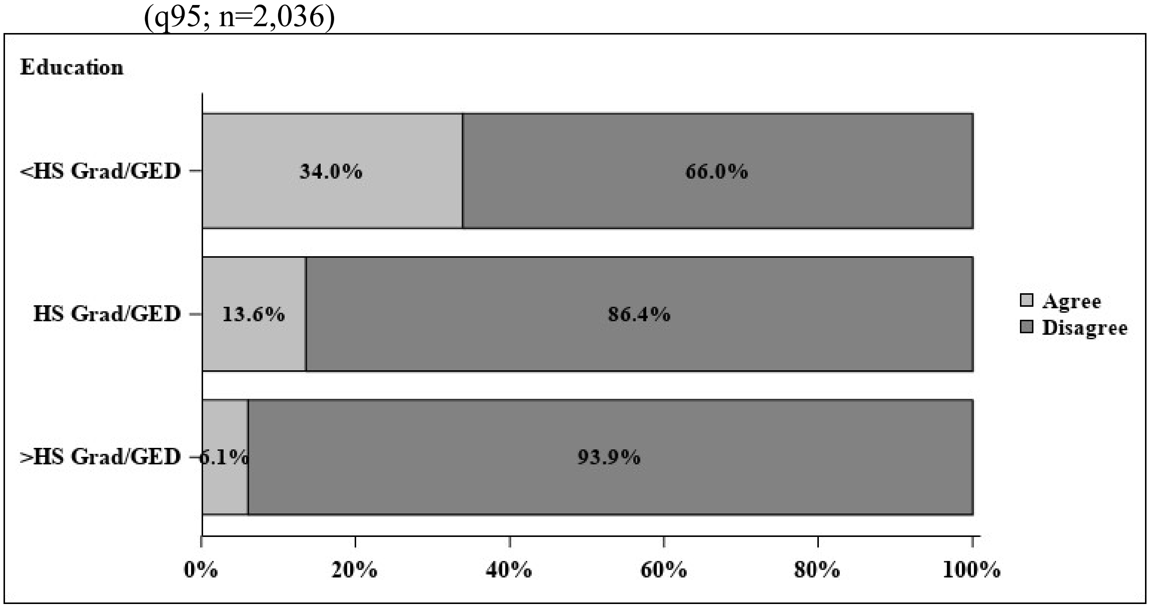
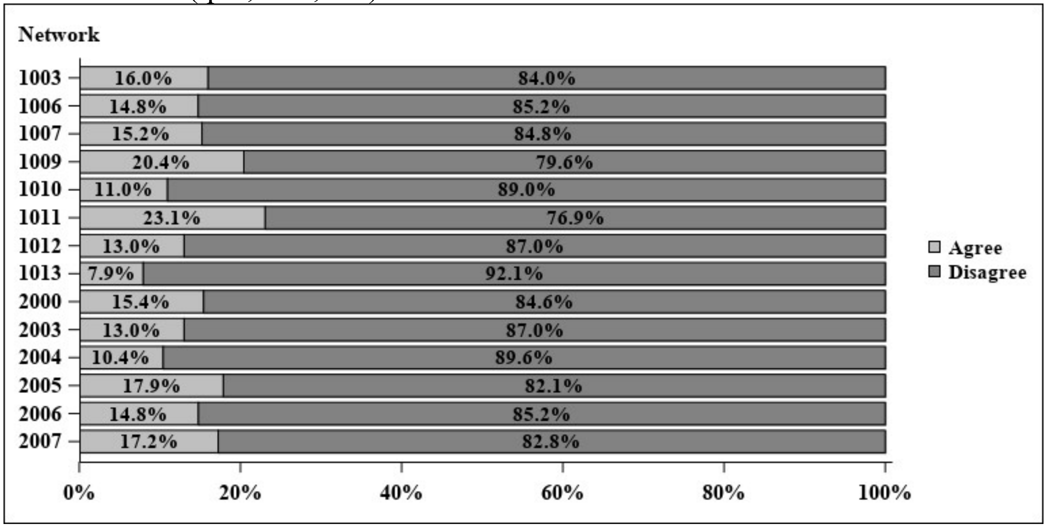


Figure R-233 illustrates the variation in q95 responses across CCNC network. Caregivers in Carolina Collaborative Community Care (1013) trusted most often at 92.1% that their child's health provider's medical skills were as good as they should be while caregivers in Community Care of Wake and Johnston Counties (1011) trusted least often at 76.9%.

Figure R-233 Medical skills are not as good as they should be vs. CCNC network (q95; n=2,055)



Health provider always pays full attention to caregiver (q96; trust)

Question 96 asked caregivers if the child's health provider always payed full attention to what the caregiver tried to tell him or her. Figure R-234 illustrates that 84.6% strongly agreed that the child's health provider always payed full attention to what the caregiver tried to tell him or her. Ten point five percent (10.5%) of caregivers somewhat agreed, 0.6% neither agreed nor disagreed, 2.4% somewhat disagreed and 1.8% strongly disagreed with the statement.

Figure R-234 PHP always pays full attention (q96; n=2,181)

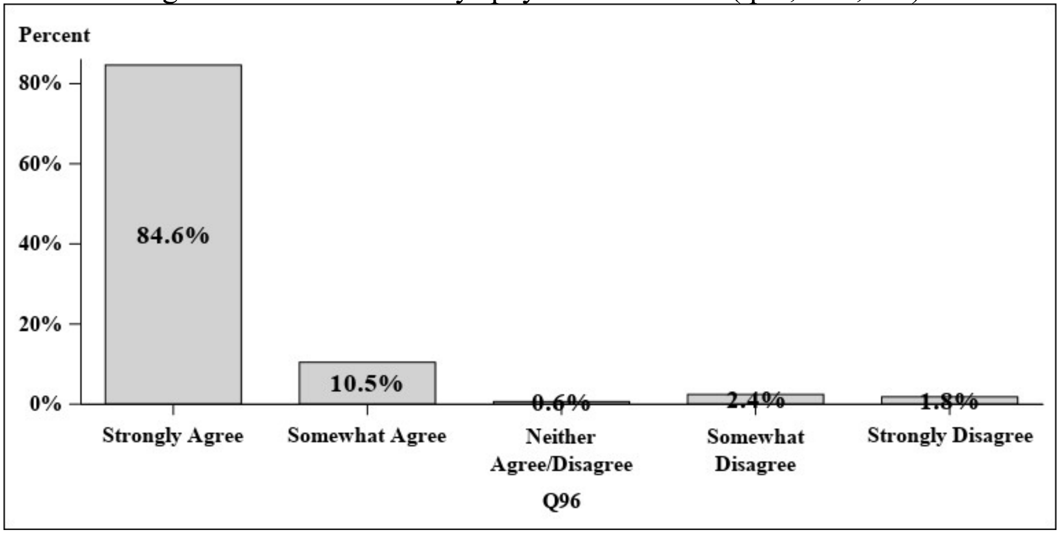
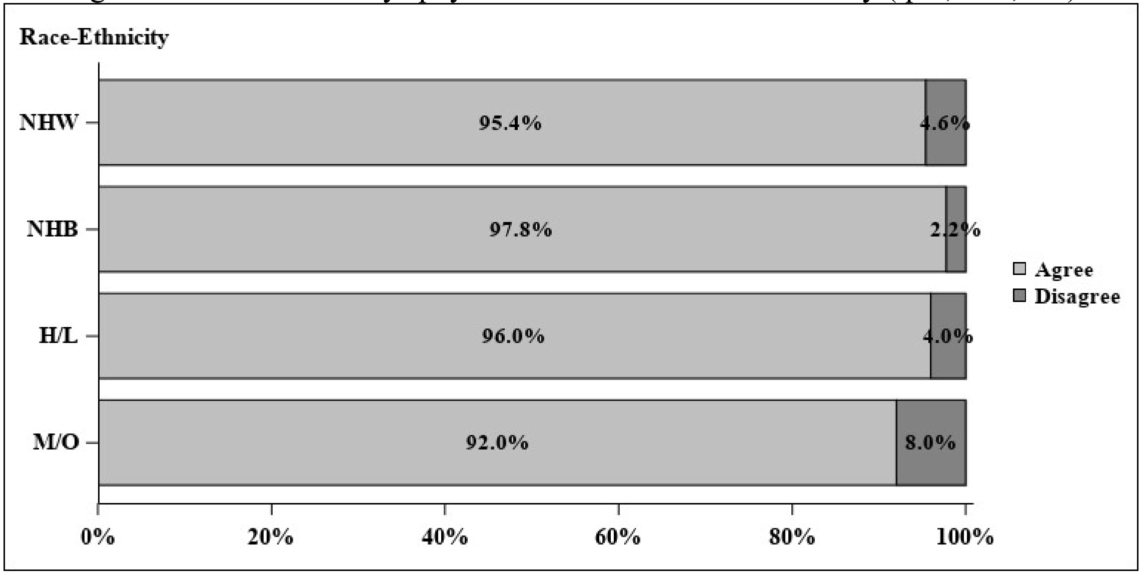


Figure R-235 demonstrates the variation in q96 responses across race-ethnicity. Caregivers of NHB children trusted more at 97.8% that providers always paid full attention while caregivers of M/O children trusted least (92.0%).

Figure R-235 PHP always pays full attention vs. race-ethnicity (q96; n=2,158)



4 INTERPRETING THE RESULTS OF THE 2018 CHILD SURVEY

Eighty-four survey questions across five domains – satisfaction with care, access to care, health care services utilization, health status, and trust in providers – were asked of adult caregivers on behalf of eligible child 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 child's caregiver. As a reminder, respondents are generally limited to the previous 6 months of the child's care in expressing their opinions and observations.

Table 4-1 Survey Questions Across the Domains

Domain	# Questions	Proportion
Satisfaction	24	28.6%
Access	26	31.0%
Utilization	8	9.5%
Health Status	21	25.0%
Trust	5	5.9%
	84	100.0%

In Chapter 3 Results, univariate statistics gave 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-ethnicity of the child, education level of the respondent caregiver, CCNC network where the child's care is received, and rurality of the county in which the child lives. These analyses were conducted to seek out possible disparities in whatever aspect of care each question addresses across these demographic and contextual variables. Across all child survey questions, statistically significant relationships were most often found in the race-ethnicity and age of the child, and the education level of the caregiver.

The UNC Charlotte research team considered all survey questions and chose 24 key indicator questions (shown in Table 2-4 in Chapter 2 Methods) to afford a broad but digestible discussion of caregiver 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 vs. Disagree.

Satisfaction with Health Care

Table 4-2 shows the 9 key indicator questions in the satisfaction domain. With minor exceptions, caregivers were satisfied with their child's care:

- 64.0% rated the Medicaid health plan the best possible Medicaid plan (q62).

- 63.7% rated their child's personal health provider (PHP) the best possible (q42).
- 60.1% rated the specialist their child saw most often the best possible (q55).
- 51.7% rated their child's overall health care the best possible (q14). This lower rating for the overall vs. the individual components mirrors what was seen in the 2012 and 2015 child surveys as well as the 2018 adult survey.
- 89.3% of caregivers indicated that their child's PHP always listened carefully (q35).
- 87.4% said their child's PHP always explained things in a way that was easy to understand (q33).
- 76.2% reported that their child's PHP always spent enough time with the child (q39).
- 71.4% said that their questions were always answered by their child's health providers (q10).
- Only 51.7% of caregivers indicated they always discussed ways to prevent illness with their child's providers (q7).

Table 4-2 Satisfaction Key Indicator Questions

Question Number	Question
7	Discussed illness prevention with a health provider
10	Health providers answered questions
14	Overall health care rating
33	PHP explained things in a way that was easy to understand
35	PHP listened carefully
39	PHP spent enough time
42	PHP rating
55	Rating of specialist seen most often
62	Rating of Medicaid plan

Potential Disparities in Satisfaction

Of the 9 key indicator questions in the satisfaction domain, 6 achieved statistical significance with caregiver education and 5 did so with the child's race-ethnicity. Potential disparities in satisfaction are noted in the following bivariate results:

Satisfaction and race-ethnicity

- Non-Hispanic Black (NHB) children had the greatest prevalence of provider conversations about illness prevention while Hispanic/Latino (H/L) children had the lowest (q7).
- PHPs of NHW children most often explained things in a way that was easy to understand while those of H/L children least often did the same (q33).
- PHPs most often spent enough time with NHW and NHB children while least often with H/L children (q39).
- Caregivers of H/L children most often rated Medicaid as the best possible plan (q62).

Satisfaction and caregiver education

- As caregiver education increased, conversations with providers about illness prevention did also (q7).
- As caregiver education increased, PHPs more often explained things in a way that was easy to understand (q33).

- As caregiver education increased, more PHPs spent enough time with caregiver and child (q39).
- As caregiver education increased, ratings of Medicaid as the best plan decreased (q62).

Satisfaction and CCNC network

- PHPs in Community Care of Southern Piedmont (2003) and in Community Care of the Sandhills (2005) most often explained things in a way that was easy to understand (q33). PHPs in Community Health Partners (1003) and in Community Care of Wake/Johnston Counties (1011) least often did so.
- PHPs in Carolina Community Health Partnership (1010) and in Community Care of Western North Carolina (1007) most often spent enough time (q39) while those in Community Health Partners (1003) least often did the same.

Satisfaction and rurality

- PHPs most often spent enough time with rural caregivers and children while PHPs least often did the same with those in urban counties (q39).

Access to Health Care

Table 4-3 shows the 8 key indicator questions in the access domain. Univariate results of access questions show quite good results and are reported below:

- 78.7% of children always got urgent care as quickly as needed (q3).
- 76.8% indicated that the doctor’s office or health plan always coordinated care among specialists (q53).
- 76.6% of children have a PHP (q31).
- 75.8% always found it easy to get prescription medicines through the health plan (q64).
- 71.4% of children always got routine care or check-ups as quickly as needed (q5).
- 71.1% of caregivers said it was always easy for the child to get care, tests or treatment (q15).
- 67.7% of children always got appointments to see a specialist as soon as needed (q52).
- 62.6% of caregivers reported it always easy to get treatment or counseling for their child’s emotional/developmental problem (q45).

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
15	Easy to get care, tests, or treatment
31	Has a PHP
45	Easy to get treatment or counseling for an emotional/developmental problem
52	Got appointments to see a specialist as soon as needed
53	Doctor’s office or health plan helped coordinate care among specialists
64	Easy to get prescription medicines through the health plan

Potential Disparities in Access

Of the 8 key indicator questions in the access domain, 4 had statistically significant relationships with each of child race-ethnicity and caregiver education. Descriptions of potential disparities are below:

Access and age

- With the exception of children 0-1 yo, there is a trend with prescriptions being easier to obtain as the child's age increases (q64).

Access and race-ethnicity

- Non-Hispanic White (NHW) children most often got urgent care as soon as needed while H/L children least often got urgent care as soon as needed (q3).
- NHW children most often got routine care and check-ups as soon as needed, NHB children somewhat less often got this type of care as soon as needed, while H/L children much less often got it as soon as needed (q5).
- Caregivers of NHW children most often found it easy to get care, tests or treatment while H/L children least often found it easy (q15).
- NHW children most often had a PHP, NHB children somewhat less often had a PHP while the prevalence of a PHP relationship dropped precipitously for H/L children (q31).

Access and caregiver education

- As caregiver education increased, more children got urgent care for the child as soon as needed (q3).
- As caregiver education increased, more children got routine care or check-ups as soon as needed (q5).
- As caregiver education increased, more children got care, tests or treatment soon as needed (q15).
- As caregiver education increased, more children were reported to have a PHP (q31).

Access and CCNC network

- Children in Carolina Community Health Partnership (1010) and in Partnership for Community Care (1012) most often have a PHP while those in Community Care of Wake & Johnson Counties (1011) least often have a PHP (q31).

Access and rurality

- Rural children more often got urgent care as soon as needed (q3).
- Rural children more often have a PHP than urban children (q31).

Utilization

Table 4-4 shows the 2 key indicator questions in the utilization domain. Univariate results are summarized below:

- Of the children that were reported to have a PHP, 17.0% made no visits to their PHP in the previous 6 months, 32.6% made 1, 38.2% visited 2 or 3 times while 11.3% were reported to have made 4 or more visits to their PHP (q32).
- 79.7% of children did not visit an ER at all in the previous 6 months, 14.8% had 1 ER visit, 4.7% had 2 or 3 visits, while only 0.8% visited the ER 4 or more times (q68).

Table 4-4 Utilization Key Indicator Questions

Question Number	Question
32	Number of visits to the PHP
68	Number of emergency room (ER) visits

Potential Disparities in Utilization

Both utilization domain key indicator questions had statistically significant relationships with each of age, child race-ethnicity, and caregiver education. Potential disparities are described below:

Utilization and age

- Children aged 0-1 yo generally had the highest overall number of PHP visits while also having the highest proportion with 4 or more. Those 13-18 yo had the highest proportion with no PHP visits (q32).
- Children aged 0-1 yo generally had the highest number of ER visits including the fewest with no visits in the past 6 months (q68).

Utilization and race-ethnicity

- NHW children had the highest proportion with 4 or more PHP visits while NHB children had the lowest proportion with no PHP visits (q32).
- NHB children had the greatest number of ER visits generally as well as the fewest with no visits (q68).

Utilization and caregiver education

- Caregivers with <HS Grad/GED generally reported the fewest PHP visits for their child with 22.8% of this group reporting no visits at all (q32).

Health Status

Table 4-5 shows the 4 key indicator questions in the health status domain. Univariate results are discussed below:

- 21.7% of children have an emotional/developmental problem that needs counseling or treatment (q43).
- 71.9% of caregivers indicated that their child is in excellent/very good overall health (q66).
- 70.1% of caregivers indicated that their child is in excellent/very good mental health (q67).
- 34.6% of children were reported to need or use non-vitamin prescribed medication (q69).

Table 4-5 Health Status Key Indicator Questions

Question Number	Question
43	Has an emotional/developmental problem that needs treatment or counseling
66	Overall health rating
67	Overall mental or emotional health rating
69	Currently needs or uses prescribed non-vitamin medication

Potential Disparities in Health Status

Each of 4 health status domain key indicator questions had statistically significant relationships with each of the child's age, race-ethnicity, and caregiver education. Bivariate relationships described below can mean disparities exist:

Health status and age

- As child age increased, presence of an emotional/development problem that needs treatment sharply trends upward. Possibly contributing to this is higher development expectation in older children that more often revealed problems (q43).
- As child age increased, general overall health trends downward (q66).
- As child age increased, an even sharper trend is seen in reduced overall mental/emotional. Again, a contributing factor could be higher development of mental/emotional capacity with age, thus more opportunity to observe health is worse (q67).
- As child age increased, the sharpest trend yet is seen in the need/use of prescription medicine flattening at ~42% of the population in the 9-12 and 13-18 yo groups (q69).

Health status and sex

- Female children were reported to be in better mental/emotional health than males (q67).

Health status and race-ethnicity

- Having an emotional/development problem that needs treatment is almost 2x as prevalent in NHW children as in H/L children (q43).
- NHW children and those of Multi/Other ethnicity (M/O) are in considerably better than average overall health while NHB and H/L children are of equal observed overall general health and appreciably below average (q66).
- NHB children are in considerably poorer than average mental/emotional health (q67).
- A greater than average use of prescribed medication was seen in NHW, NHB, and M/O children, with much lower than average use in H/L children (q69).

Health status and caregiver education

- As caregiver education level increases, children's prevalence of an emotional/development problem that needs treatment trended upward (q43).
- As caregiver education level increased, children's overall general health trended upward (q66).
- As caregiver education level increased, children's mental/emotional health trended upward (q67).
- As caregiver education level increased, children's need for prescribed medication trended upward. Those with <HS Grad/GED had much less than average need (q69).

Trust in Providers

Question 94, the trust key indicator question, asked whether "health providers might perform unnecessary tests or procedures."

- 82.0% of caregivers disagreed with the above statement, indicating they trust that providers are not performing unnecessary tests or procedures on the child (q94).

Potential Disparities in Trust

Question 94 had statistically significant relationships with the child's race-ethnicity, the caregiver's education, and the CCNC network of residence.

Trust and race-ethnicity

- Caregivers of both NHW and NHB children had very high trust levels, 91.3% and 90.1%, respectively that the child's providers were only performing necessary tests or procedures. Trust among caregivers of H/L children was much lower at 65.7%.

Trust and caregiver education

- As caregiver education level increased, so did trust that providers are only performing necessary tests or procedures on the child.

Trust and CCNC network

- Caregivers in Carolina Collaborative Community Care (1013) and Carolina Community Health Partnership (1010) had greater than average trust in providers only performing necessary tests or procedures at 91.9% and 91.2%, respectively. Only 72.6% of caregivers in Community Care of Wake and Johnston Counties (1010) felt the same way.

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Appendix A: The 2018 Child Survey Instrument

Version: **CAHPS 5.0 Child 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 the home of *target respondent*? (record new phone number and then call.)

IF YES, say, “I’d like to talk with *target respondent’s* primary caregiver who could answer questions about the child’s healthcare. Is anyone 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. Neither you nor your child’s Medicaid benefits will 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.”

Please answer the questions for the target respondent. Please do not answer for any other children.

1. Our records show that your child is now in MEDICAID or HEALTH CHECK. Is that right?
   - 1☐ Yes
   - 2☐ No → **If No, Thank you.**

Your Child's Health Care in the Last 6 Months

These questions ask about your child's health care. Do **not** include care your child got when he or she stayed overnight in a hospital. Do **not** include the times your child went for dental care visits.

2. In the last 6 months, did your child 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. When your child **needed care right away**, how often did your child get care as soon as he or she 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** for your child at a doctor's office or clinic?
   - 1☐ Yes
   - 2☐ No → **If No, go to question #6**

5. How often did you get an appointment for a **check-up or routine care** at a doctor's office or clinic as soon as your child needed?
   - 1☐ Never
   - 2☐ Sometimes
   - 3☐ Usually
   - 4☐ Always

6. In the last 6 months, **not** counting the times your child went to an emergency room, how many times did he or she go to a doctor's office or clinic to get health care?

   Record the number. →**If None (0), go to question #21**

7. How often did you and your child's doctor or other health provider talk about specific things you could do to prevent illness in your child?

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

8. In the last 6 months, did you have any questions or concerns about your child's health or health care?

1☐ Yes
2☐ No → **If No, go to question #11**

9. How often did your child's doctors or other health providers make it easy for you to discuss your questions or concerns?

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

10. How often did you have your questions answered by your child's doctors or other health providers?

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

11. Choices for your child's treatment or health care can include choices about medicine, surgery, or other treatment. In the last 6 months, did your child's doctor or other health provider tell you there was more than one choice for your child's treatment or health care?

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

12. Did your child's doctor or other health provider talk with you about the pros and cons of each choice for your child's treatment or health care?

1☐ Yes
2☐ No

13. When there was more than one choice for your child's treatment or health care, did your child's doctor or other health provider ask you which choice was best for your child?

1☐ Yes
2☐ No

14. 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 child's 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

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

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

Special Communication Needs and very Young Child Well-care

16. An interpreter is someone who repeats or signs what one person says in a language used by another person. If you or your child needed an interpreter to help you speak with your child's doctors or other health providers, how often did you get one?

0☐ Did not need interpreting help
1☐ Needed help and never got it
2☐ Needed help and sometimes got it
3☐ Needed help and usually got it
4☐ Needed help and always got it

17. Is your child 2 years old or younger?

1☐ Yes
2☐ No → **If No, go to question #21**

18. Reminders from the doctor's office or clinic or from the health plan can come to you by mail, by telephone, or in-person during a visit. After your child was born, did you get any reminders to bring him or her in for a check-up to see how he or she was doing or for shots or drops?

1☐ Yes
2☐ No

19. Since your child was born, has he or she gone to a doctor or other health provider for a check-up or for shots or drops?

1☐ Yes
2☐ No →**If No, go to question #21**

20. Did you get an appointment for your child's visit for a check-up, or for shots or drops, as soon as he or she needed it?

1☐ Yes
2☐ No

21. Is your child now enrolled in any kind of school or daycare?

1☐ Yes
2☐ No → **If No, go to question #23**

22. If you needed your child's doctors or other health providers to contact a school or daycare center about your child's health or health care, did you get the help you needed?

0☐ Did not need help contacting school or day care
1☐ Needed help and <u>got it</u>
2☐ Needed help and <u>did not get it</u>

Meeting Special Health Care Needs

23. Special medical equipment or devices include a walker, wheelchair, nebulizer, feeding tubes, or oxygen equipment. In the last 6 months, did you get or try to get any special medical equipment or devices for your child?

1☐ Yes
2☐ No → **If No, go to question #26**

24. How often was it easy to get special medical equipment or devices for your child?

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

25. Did anyone from your child's CAROLINA ACCESS, MEDICAID, or HEALTH CHECK, doctor's office, or clinic help you get special medical equipment or devices for your child?

1☐ Yes
2☐ No

26. In the last 6 months, did you get or try to get special therapy such as physical, occupational, or speech therapy for your child?

1☐ Yes
2☐ No → **If No, go to question #29**

27. How often was it easy to get this therapy for your child?

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

28. Did anyone from your child's health plan, doctor's office, or clinic help you get this therapy for your child?

1☐ Yes
2☐ No

29. In the last 6 months, did your child get care from more than one kind of health care provider or use more than one kind of health care service?

1☐ Yes
2☐ No → **If No, go to question #31**

30. Did anyone from your child's health plan, doctor's office, or clinic help coordinate your child's care among these different providers or services?

1☐ Yes
2☐ No

The Child's Personal Health Provider

A personal health provider is the doctor or nurse who your child would see if he or she needs a check-up or gets sick or hurt. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. These questions ask about your experiences in the last 6 months.

31. Do you have one person you think of as your child's personal health provider? If your child has more than one personal doctor or nurse, choose the person your child sees most often.

1☐ Yes
2☐ No → **If No, go to question #51**

32. In the last 6 months, how many times did your child visit his or her personal health provider for care?

Record the number. →**If None (0), go to question #42.**

33. How often did your child's personal health provider explain things in a way that was easy to understand?

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

34. How often did you or your child have a hard time speaking with or understanding your child's personal health provider because the provider spoke a different language?

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

35. How often did your child's personal health provider listen carefully to you?

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

36. How often did your child's personal health provider show respect for what you had to say?

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

37. Is **your child** able to talk with his or her personal health provider about his or her health care?

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

38. How often did your child's personal health provider explain things in a way that was easy for **your child** to understand?

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

39. How often did your child's personal health provider spend enough time with your child?

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

40 Did your child's personal health provider talk with you about how your child was feeling, growing, or behaving?

1☐ Yes
2☐ No

41. If you called after regular office hours to get help or advice for your child, how often did you get the help or advice you needed?

0☐ Did not need after hours help
1☐ Needed help and <u>never</u> got it
2☐ Needed help and <u>sometimes</u> got it
3☐ Needed help and <u>usually</u> got it
4☐ Needed help and <u>always</u> got it

42. 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 child's personal health provider?

☐ 0 Worst personal health provider possible
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10 Best personal health provider possible

43. Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs to get treatment or counseling?

1☐ Yes

2☐ No → **If No, go to question #46**

44. Did you discuss these issues with your child's personal health provider?

1☐ Yes
2☐ No

45. How often was it easy to get this treatment or counseling for your child?

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

46. Did your child have the same personal health provider **before** he/she joined Carolina Access, Medicaid or Health Check?

☐ Yes → **If Yes, Go to question #48**
☐ Child has always been on Medicaid → **Go to question #47**
☐ No

47. Since your child joined this health plan, how often was it easy to get a personal health provider for him or her that you are happy with?

☐ Never
☐ Sometimes
☐ Usually
☐ Always

48. Does your child have any medical, behavioral, or other health conditions that have lasted for more than **3 months**?

1☐ Yes
2☐ No → **If No, go to question #51**

49. Does your child's personal health provider understand how these medical, behavioral, or other health conditions affect your child's day-to-day life?

1☐ Yes
2☐ No

50. Does your child's personal health provider understand how your child's medical, behavioral, or other health conditions affect your **family's** day-to-day life?

1☐ Yes
2☐ No

Getting Health Care from Specialist Physicians

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

51. 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 for your child to see a specialist?

1☐ Yes
2☐ No → **If No, go to question #57**

52. How often did you get appointments for your child to see a specialist as soon as he or she needed?

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

53. Did anyone from your child's doctor's office, clinic, or Carolina Access, Medicaid, or health plan help coordinate your child's care among these specialists?

1☐ Yes
2☐ No

54. How many specialists has your child seen in the last 6 months?

Record the number. →**If None (0), go to question #57**

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

☐ 0 Worst specialist possible
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10 Best specialist possible

56. Was the specialist your child saw most often the same as your child's personal health provider?
- 1☐ Yes
- 2☐ No

Interactions with the Child's Health Plan and Doctor's Office Staff

The next questions ask about your experience with your child's health plan. You may know your health plan as Carolina Access, Medicaid, or Health Check.

57. In the last 6 months, did you get information or help from office staff at your child's health provider or health plan?
- 1☐ Yes
- 2☐ No → **If No, go to question #60**

58. How often did office staff at your child's health plan, doctor's office, or clinic give you the information or help you needed?
- 1☐ Never
- 2☐ Sometimes
- 3☐ Usually
- 4☐ Always

59. How often did office staff at your child's health plan, doctor's office, or clinic treat you child with courtesy and respect?
- 1☐ Never
- 2☐ Sometimes
- 3☐ Usually
- 4☐ Always

60. How often were any forms from your child's health provider or health plan easy to fill out?
- 0☐ Did not fill out forms
- 1☐ Filled out forms and it was <u>never</u> easy
- 2☐ Filled out forms and it was <u>sometimes</u> easy
- 3☐ Filled out forms and it was <u>usually</u> easy
- 4☐ Filled out forms and it was <u>always</u> easy

61. If you needed transportation help from a non-family member to get your child to a medical appointment or to get a prescription filled, how often did you get it?
- 0☐ Did not need any assistance
- 1☐ Needed assistance and <u>never</u> received it
- 2☐ Needed assistance and <u>sometimes</u> received it
- 3☐ Needed assistance and <u>usually</u> received it
- 4☐ Needed assistance and <u>always</u> received it

62. Using any number from 0 to 10, where 0 is the worst and 10 is the best possible, what number would you use to rate your child's Carolina Access, Medicaid, or Health Check plan?

☐ 0 Worst health plan possible
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10 Best health plan possible

The Child's Health Status

63. In the last 6 months, did you get or refill any prescription medicines for your child?

1☐ Yes
2☐ No → **If No, go to question #66**

64. How often was it easy to get prescription medicines for your child through his or her health plan?

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

65. Did anyone from your child's health plan, doctor's office, or clinic help you get your child's prescription medicines?

1☐ Yes
2☐ No

66. In general, how would you rate your child's overall health?

1☐ Excellent
2☐ Very Good
3☐ Good
4☐ Fair
5☐ Poor

67. In general, how would you rate your child's **mental or emotional** health?

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

68. In the last 6 months, how many times did your child go to an emergency room for care?

Record the number.

69. Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant?

- 1☐ Yes
- 2☐ No → **If No, go to question #72**

70. Is this because of any medical, behavioral, or other health condition?

- 1☐ Yes
- 2☐ No → **If No, go to question #72**

71. Is this a condition that has lasted or is expected to last for at least 12 months?

- 1☐ Yes
- 2☐ No

72. Does your child need or use more medical care, more mental health services, or more educational services than is usual for most children of the same age?

- 1☐ Yes
- 2☐ No → **If No, go to question #75**

73. Is this because of any medical, behavioral, or other health condition?

- 1☐ Yes
- 2☐ No → **If No, go to question #75**

74. Is this a condition that has lasted or is expected to last for at least 12 months?

- 1☐ Yes
- 2☐ No

75. Is your child limited or prevented in any way in his or her ability to do the things most children of the same age can do?

- 1☐ Yes
- 2☐ No → **If No, go to question #78**

76. Is this because of any medical, behavioral, or other health condition?

1☐ Yes
2☐ No → **If No, go to question #78**

77. Is this a condition that has lasted or is expected to last for at least 12 months?
1☐ Yes
2☐ No

78. Does your child need or get special therapy such as physical, occupational, or speech therapy?

1☐ Yes
2☐ No → **If No, go to question #81**

79. Is this because of any medical, behavioral, or other health condition?

1☐ Yes
2☐ No → **If No, go to question #81**

80. Is this a condition that has lasted or is expected to last for at least 12 months?

1☐ Yes
2☐ No

About You and Your Child

81. What is **your child's** age?
0☐ Less than 1 year old

______ Years old *(rounded to nearest year)*

82. Is your child male or female?
1☐ Male
2☐ Female

83. Is your child of Hispanic or Latino origin or descent?

1☐ Yes, Hispanic or Latino
2☐ No, not Hispanic or Latino

84. What is your child's 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

85. What is **your** age?

__________Years old (*rounded to nearest year)*

86. Are you male or female?

[1] ☐ Male
[2] ☐ Female

87. 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

88. How are you related to the child?

[1] ☐ Mother or father
[2] ☐ Grandparent
[3] ☐ Aunt or uncle
[4] ☐ Older sibling
[5] ☐ Other relative
[6] ☐ Legal guardian

89. What language do you **mainly** speak at home?

[1] ☐ English
[2] ☐ Spanish
[3] ☐ Some other language

90. What language does your child **mainly** speak at home?

[1] ☐ English
[2] ☐ Spanish
[3] ☐ Some other language

91. What language do you mainly speak when talking with your child's doctor or health provider?

[1] ☐ English
[2] ☐ Spanish
[3] ☐ Some other language

Trust in the Child's Health Providers

92. I think my child's health providers may not refer him/her to a specialist when needed.
   - 1☐ Strongly Agree
   - 2☐ Somewhat Agree
   - 3☐ Neither Agree/Disagree
   - 4☐ Somewhat Disagree
   - 5☐ Strongly Disagree

93. I trust my child's health providers to put my child's medical needs above all other considerations when treating my child's medical problems.
   - 1☐ Strongly Agree
   - 2☐ Somewhat Agree
   - 3☐ Neither Agree/Disagree
   - 4☐ Somewhat Disagree
   - 5☐ Strongly Disagree

94. I sometimes think that my child's health providers might perform unnecessary tests or procedures.
   - 1☐ Strongly Agree
   - 2☐ Somewhat Agree
   - 3☐ Neither Agree/Disagree
   - 4☐ Somewhat Disagree
   - 5☐ Strongly Disagree

95. My child's 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

96. My child's health providers always pay 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 from the total respondents at p < 0.05 with the survey question, where:

A = enrollee's age
S = enrollee's sex
R/E = enrollee's race/ethnicity
Ed = adult caregiver's education level
N = enrollee's CCNC care network
R = degree of rurality of the enrollee's county of residence

Language of conducted survey (n=2,282)	
English	74.9%
Spanish	25.1%

The Child's Health Care in the Last 6 Months

Question 2: (Health Status) In the last 6 months, did your child have an illness, injury, or condition that **needed care right away** in a clinic, emergency room, or doctor's office? (n=2,258) *A, R/E, Ed*	
Yes	26.6%
No → **If No, go to question #4**	73.4%

Question 3: (Access) When your child **needed care right away**, how often did your child get care as soon as he or she needed? (n=587) *R/E, Ed, R*	
Never	1.4%
Sometimes	7.2%
Usually	12.8%
Always	78.7%

Question 4: (Access) In the last 6 months, did you make any appointments for a **check-up or routine care** for your child at a doctor's office or clinic? (n=2,258) A, *R/E, Ed*	
Yes	74.0%
No → **If No, go to question #6**	26.0%

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 your child needed? (n=1,614) *R/E, Ed*

Never	1.2%
Sometimes	14.6%
Usually	12.8%
Always	71.4%

Question 6: (Utilization) In the last 6 months, not counting the times your child went to an emergency room, how many times did he or she go to a doctor's office or clinic to get health care? (n=2,192) *A, R/E, Ed, N*

None→**If None, go to question 21**	27.2%
1	26.0%
2-3	33.9%
4 or more	12.9%

Question 7: (Satisfaction) How often did you and your child's doctor or other health provider talk about specific things you could do to prevent illness in your child? (n=1,639) *R/E, Ed*

Never	8.2%
Sometimes	24.0%
Usually	16.2%
Always	51.7%

Question 8: (Health Status**)** In the last 6 months, did you have any questions or concerns about your child's health or health care? (n=1,668) *Ed*

Yes	22.1%
No → **If No, go to question #11**	77.9%

Question 9: (Access) How often did your child's doctors or other health providers make it easy for you to discuss your questions or concerns? (n=365)

Never	3.0%
Sometimes	11.0%
Usually	14.0%
Always	72.1%

Question 10: (Satisfaction) How often did you have your questions answered by your child's doctors or other health providers? (n=367) *Ed*	
Never	0.8%
Sometimes	8.2%
Usually	19.6%
Always	71.4%

Question 11: (Satisfaction) Choices for your child's treatment or health care can include choices about medicine, surgery, or other treatment. In the last 6 months, did your child's doctor or other health provider tell you there was more than one choice for your child's treatment or health care? (n=1,619) *Ed*	
Yes	42.1%
No → **If No, go to question #14**	57.9%

Question 12: (Satisfaction) Did your child's doctor or other health provider talk with you about the pros and cons of each choice for your child's treatment or health care? (n=674)	
Yes	96.1%
No	3.9%

Question 13: (Satisfaction) When there was more than one choice for your child's treatment or health care, did your child's doctor or other health provider ask you which choice was best for your child? (n=670)	
Yes	93.1%
No	6.9%

Question 14: (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 child's health care in the last 6 months? (n=1,671)	
0 Worst health care possible	0.2%
1	0.1%
2	0.3%
3	0.5%
4	0.6%
5	1.6%
6	2.0%
7	6.3%
8	19.4%
9	15.9%
10 Best health care possible	53.1%

Question 15: (Access) In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed? (n=1,654) *R/E, Ed*	
Never	2.1%
Sometimes	11.0%
Usually	15.8%
Always	71.1%

Special Communication Needs and Very Young Child Well-care

Question 16: (Access) An interpreter is someone who repeats or signs what one person says in a language used by another person. If you or your child needed an interpreter to help you speak with your child's doctors or other health providers, how often did you get one? (n=1,670) *R/E, Ed, N, R*	
Did not need interpreting help	79.8%
Needed help and never got it	1.3%
Needed help and sometimes got it	3.5%
Needed help and usually got it	1.9%
Needed help and always got it	13.6%

Question 17: (Demographic Client) Is your child 2 years old or younger? (n=1,673)	
Yes	17.0%
No → **If No, go to question #21**	83.0%

Question 18: (Access) Reminders from the doctor's office or clinic or from the health plan can come to you by mail, by telephone, or in-person during a visit. After your child was born, did you get any reminders to bring him or her in for a check-up to see how he or she was doing or for shots or drops? (n=283)	
Yes	90.1%
No	9.9%

Question 19: (Utilization) Since your child was born, has he or she gone to a doctor or other health provider for a check-up or for shots or drops? (n=283)	
Yes	92.9%
No →**If No, go to question #21**	7.1%

Question 20: (Access) Did you get an appointment for your child's visit for a check-up, or for shots or drops, as soon as he or she needed it? (n=263)	
Yes	97.7%
No	2.3%

Question 21: (Demographic Client) Is your child now enrolled in any kind of school or daycare? (n=2,275)	
Yes	73.1%
No → **If No, go to question #23**	26.9%

Question 22: (Satisfaction) If you needed your child's doctors or other health providers to contact a school or daycare center about your child's health or health care, did you get the help you needed? (n=1,636) *A*, *R/E, Ed*	
Did not need help contacting school or day care	46.9%
Needed help and got it	51.7%
Needed help and did not get it	1.4%

Meeting Special Health Care Needs

Question 23: (Health Status) Special medical equipment or devices include a walker, wheelchair, nebulizer, feeding tubes, or oxygen equipment. In the last 6 months, did you get or try to get any special medical equipment or devices for your child? (n=2,276) *R/E, Ed*	
Yes	8.4%
No → **If No, go to question #26**	91.6%

Question 24: (Access) How often was it easy to get special medical equipment or devices for your child? (n=186)	
Never	8.1%
Sometimes	14.0%
Usually	12.4%
Always	65.6%

Question 25: (Access) Did anyone from your child's CAROLINA ACCESS, MEDICAID, or HEALTH CHECK, doctor's office, or clinic help you get special medical equipment or devices for your child? (n=189) *A, R/E, R*	
Yes	83.1%
No	16.9%

Question 26: (Health Status) In the last 6 months, did you get or try to get special therapy such as physical, occupational, or speech therapy for your child? (n=2,273) *A*	
Yes	13.5%
No → **If No, go to question #29**	86.5%

Question 27: (Access) How often was it easy to get this therapy for your child? (n=293)	
Never	9.6%
Sometimes	16.0%
Usually	19.1%
Always	55.3%

Question 28: (Access) Did anyone from your child's health plan, doctor's office, or clinic help you get this therapy for your child? (n=300)	
Yes	75.3%
No	24.7%

Question 29: (Utilization) In the last 6 months, did your child get care from more than one kind of health care provider or use more than one kind of health care service? (n=2,246) *R/E, Ed*	
Yes	27.6%
No → **If No, go to question #31**	72.4%

Question 30: (Access) Did anyone from your child's health plan, doctor's office, or clinic help coordinate your child's care among these different providers or services? (n=606)	
Yes	72.6%
No	27.4%

The Child's Personal Health Provider

Question 31: (Access) Do you have one person you think of as your child's personal health provider? If your child has more than one personal doctor or nurse, choose the person your child sees most often. (n=2,236) *R/E, Ed, N, R*

Yes	76.6%
No → **If No, go to question #51**	23.4%

Question 32: (Utilization) In the last 6 months, how many times did your child visit his or her personal health provider for care? (n = 1,669) *A, R/E, Ed, N*

None→**If None, go to Question 42**	17.0%
1	32.6%
2	25.4%
3	12.8%
4	5.6%
5 to 9	4.4%
10 or more	1.3%

Question 33: (Satisfaction) How often did your child's personal health provider explain things in a way that was easy to understand? (n=1,419) *R/E, Ed, N*

Never	1.1%
Sometimes	3.2%
Usually	8.4%
Always	87.4%

Question 34: (Satisfaction) How often did you or your child have a hard time speaking with or understanding your child's personal health provider because the provider spoke a different language? (n=1,418) *R/E, Ed*

Never	85.6%
Sometimes	7.1%
Usually	1.3%
Always	5.9%

Question 35: (Satisfaction) How often did your child's personal health provider listen carefully to you? (n=1,426) *R/E*

Never	1.0%
Sometimes	2.7%
Usually	7.0%
Always	89.3%

Question 36: (Satisfaction) How often did your child's personal health provider show respect for what you had to say? (n=1,425) *R/E*

Never	1.1%
Sometimes	2.9%
Usually	4.8%
Always	91.3%

Question 37: (Satisfaction) Is **your child** able to talk with his or her personal health provider about his or her health care? (n=1,415) *A, R*

Yes	71.7%
No → **If No, go to question #39**	28.3%

Question 38: (Satisfaction) How often did your child's personal health provider explain things in a way that was easy for **your child** to understand? (n=1,005) *A*

Never	1.3%
Sometimes	5.8%
Usually	12.3%
Always	80.6%

Question 39: (Satisfaction) How often did your child's personal health provider spend enough time with your child? (n=1,413) *R/E, Ed, N, R*

Never	2.1%
Sometimes	8.6%
Usually	13.2%
Always	76.2%

Question 40: (Satisfaction) Did your child's personal health provider talk with you about how your child was feeling, growing, or behaving? (n=1,423)

Yes	95.8%
No	4.2%

Question 41: (Utilization/Access) If you called after regular office hours to get help or advice for your child, how often did you get the help or advice you needed? (n=1,417) *A, Ed*

Did not need after hours help	52.7%
Needed help and <u>never</u> got it	2.0%
Needed help and <u>sometimes</u> got it	5.5%
Needed help and <u>usually</u> got it	6.8%
Needed help and <u>always</u> got it	33.0%

Question 42: (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 your child's personal health provider? (n=1,708)	
0 Worst personal health provider possible	0.2%
1	0.2%
2	0.2%
3	0.2%
4	0.4%
5	1.1%
6	1.3%
7	3.5%
8	12.5%
9	16.9%
10 Best personal health provider possible	63.7%

Question 43: (Health Status**)** Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs to get treatment or counseling? (n=1,689) *A, R/E, Ed*	
Yes	21.7%
No → **If No, go to question #46**	78.3%

Question 44: (Satisfaction**)** Did you discuss these issues with your child's personal health provider? (n=366)	
Yes	93.4%
No	6.6%

Question 45: (Access) How often was it easy to get this treatment or counseling for your child? (n=356) *S, R/E*	
Never	7.0%
Sometimes	14.6%
Usually	15.7%
Always	62.6%

Question 46: (Access) Did your child have the same personal health provider **before** he/she joined Carolina Access, Medicaid or Health Check? (n=1,685) *A, Ed, N*	
Yes → **If Yes, Go to question #48**	48.2%
Child has always been on Medicaid → **Go to question #47**	20.9%
No	30.9%

Question 47: (Access) Since your child joined this health plan, how often was it easy to get a personal health provider for him or her that you are happy with? (n=881)	
Never	3.6%
Sometimes	7.9%
Usually	16.5%
Always	72.0%

Question 48: (Health Status) Does your child have any medical, behavioral, or other health conditions that have lasted for more than **3 months**? *A, S, R/E, Ed*	
Yes	28.4%
No → **If No, go to question #51**	71.6%

Question 49: (Satisfaction) Does your child's personal health provider understand how these medical, behavioral, or other health conditions affect your child's day-to-day life?	
Yes	94.4%
No	5.6%

Question 50: (Satisfaction) Does your child's personal health provider understand how your child's medical, behavioral, or other health conditions affect your **family's** day-to-day life?	
Yes	91.9%
No	8.1%

Getting Health Care from Specialists

Question 51: (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 for your child to see a specialist? *R/E, Ed*	
Yes	22.1%
No → **If No, go to question #57**	77.9%

Question 52: (Access) How often did you get appointments for your child to see a specialist as soon as he or she needed? (n=493)	
Never	3.4%
Sometimes	13.6%
Usually	15.2%
Always	67.7%

Question 53: (Access) Did anyone from your child's doctor's office, clinic, or Carolina Access, Medicaid, or health plan help coordinate your child's care among these specialists? (n=495)	
Yes	76.8%
No	23.2%

Question 54: (Utilization) How many specialists has your child seen in the last 6 months? (n = 499)	
None→**If None, go to Question 57**	6.2%
1	56.3%
2	21.0%
3	9.6%
4	4.2%
5 to 9	2.4%
10 or more	0.2%

Question 55: (Satisfaction) We want to know your rating of the specialist your child saw most often in the last 6 months. Using any number from 0 to 10, where 0 is the worst and 10 is the best, what number would you use to rate that specialist? (n=466) *Ed*	
0 Worst specialist possible	0.0%
1	0.4%
2	0.4%
3	0.9%
4	0.2%
5	1.5%
6	2.4%
7	5.6%
8	15.5%
9	13.1%
10 Best specialist possible	60.1%

Question 56: (Access) Was the specialist your child saw most often the same as your child's personal health provider? (n=462) *R/E, Ed*	
Yes	24.9%
No	75.1%

Interactions with the Child's Health Plan and Doctor's Office Staff

Question 57: (Access) In the last 6 months, did you get information or help from office staff at your child's health provider or health plan? (n=2,238) *R/E, Ed*	
Yes	36.5%
No → **If No, go to question #60**	63.5%

Question 58: (Satisfaction) How often did office staff at your child's health plan, doctor's office, or clinic give you the information or help you needed? (n=814) *R/E, R*	
Never	1.1%
Sometimes	8.7%
Usually	18.7%
Always	71.5%

Question 59: (Satisfaction) How often did office staff at your child's health plan, doctor's office, or clinic treat you child with courtesy and respect? (n=814) *R/E*	
Never	0.4%
Sometimes	2.5%
Usually	5.8%
Always	91.4%

Question 60: (Satisfaction) How often were any forms from your child's health provider or health plan easy to fill out? (n=2,243) *A, R/E*	
Did not fill out forms	21.1%
Filled out forms and it was never easy	1.5%
Filled out forms and it was sometimes easy	11.1%
Filled out forms and it was usually easy	16.1%
Filled out forms and it was always easy	50.2%

Question 61: (Access) If you needed transportation help from a non-family member to get your child to a medical appointment or to get a prescription filled, how often did you get it? (n=2,268) *R/E, Ed*

Did not need any assistance	78.0%
Needed assistance and never received it	3.2%
Needed assistance and sometimes received it	6.0%
Needed assistance and usually received it	1.9%
Needed assistance and always received it	10.9%

Question 62: (Satisfaction) Using any number from 0 to 10, where 0 is the worst and 10 is the best possible, what number would you use to rate your child's Carolina Access, Medicaid, or Health Check plan? (n=2,249) *R/E, Ed*

0 Worst health plan possible	0.2%
1	0.3%
2	0.3%
3	0.2%
4	0.5%
5	2.2%
6	1.8%
7	4.1%
8	13.1%
9	13.3%
10 Best health plan possible	64.0%

The Child's Health Status

Question 63: (Utilization) In the last 6 months, did you get or refill any prescription medicines for your child? (n=2,264) *A, R/E, Ed*

Yes	49.6%
No → **If No, go to question #66**	50.4%

Question 64: (Access) How often was it easy to get prescription medicines for your child through his or her health plan? (n=1,114) *A*

Never	1.4%
Sometimes	9.7%
Usually	13.1%
Always	75.8%

Question 65: (Access) Did anyone from your child's health plan, doctor's office, or clinic help you get your child's prescription medicines? (n=1,097) *A, R/E*	
Yes	62.1%
No	37.9%

Question 66: (Health Status) In general, how would you rate your child's overall health? (n=2,278) *A, R/E, Ed*	
Excellent	41.0%
Very Good	30.9%
Good	22.9%
Fair	4.4%
Poor	0.8%

Question 67: (Health Status) In general, how would you rate your child's **mental or emotional** health? (n=2,271) *A, S, R/E, Ed*	
Excellent	44.7%
Very Good	25.4%
Good	20.7%
Fair	7.6%
Poor	1.6%

Question 68: (Utilization) In the last 6 months, how many times did your child go to an emergency room for care? (n=2,265) *A, R/E*	
None	79.6 %
1	14.8%
2	3.5%
3	1.2%
4	0.5%
5 to 9	0.2%
10 or more	0.1%

Question 69: (Health Status**)** Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant? (n=2,272) *A, R/E, Ed*	
Yes	34.6%
No → **If No, go to question #72**	65.4%

Question 70: (Health Status) Is this because of any medical, behavioral, or other health condition? (n=772) *A, S, R/E, Ed, R*

Yes	78.9%
No → **If No, go to question #72**	21.1%

Question 71: (Health Status) Is this a condition that has lasted or is expected to last for at least 12 months? (n=587) *A, R/E*

Yes	91.8%
No	8.2%

Question 72: (Health Status) Does your child need or use more medical care, more mental health services, or more educational services than is usual for most children of the same age? (n=2,245) *A, S, R/E, Ed*

Yes	18.3%
No → **If No, go to question #75**	81.7%

Question 73: (Health Status) Is this because of any medical, behavioral, or other health condition? (n=406) *R/E, Ed*

Yes	86.5%
No → **If No, go to question #75**	13.5%

Question 74: (Health Status) Is this a condition that has lasted or is expected to last for at least 12 months? (n=347)

Yes	98.0%
No	2.0%

Question 75: (Health Status) Is your child limited or prevented in any way in his or her ability to do the things most children of the same age can do? (n=2,250) *A, R/E*

Yes	16.5%
No → **If No, go to question #78**	83.5%

Question 76: (Health Status) Is this because of any medical, behavioral, or other health condition? (n=362) *A, R/E, Ed, N*

Yes	64.4%
No → **If No, go to question #78**	35.6%

Question 77: (Health Status) Is this a condition that has lasted or is expected to last for at least 12 months? (n=230)	
Yes	97.8%
No	2.2%

Question 78: (Health Status) Does your child need or get special therapy such as physical, occupational, or speech therapy? (n=2,271) *A, S, R/E, Ed*	
Yes	13.6%
No → **If No, go to question #81**	86.4%

Question 79: (Health Status) Is this because of any medical, behavioral, or other health condition? (n=300) *A, R/E, Ed*	
Yes	68.7%
No → **If No, go to question #81**	31.3%

Question 80: (Health Status) Is this a condition that has lasted or is expected to last for at least 12 months? (n=199)	
Yes	94.5%
No	5.5%

About You and Your Child

Question 81: (Demographic Client) What is your child's age? (n=2,282))	
0 to 1 year old	9.2%
2 to 5 years old	23.7%
6 to 8 years old	15.6%
9 to 12 years old	22.7%
13 to 18 years old	28.9%

Question 82: (Demographic Client) Is your child male or female? (n=2,282)	
Male	52.4%
Female	47.6%

Question 83: (Demographic Client) Is your child of Hispanic or Latino origin or descent? (n=2,282)	
Yes, Hispanic or Latino	36.0%
No, not Hispanic or Latino	64.0%

Question 84: (Demographic Client) What is your child's race? (n=2,271)

White	47.5%
Black or African-American	21.4%
Asian	2.3%
Native Hawaiian or other Pacific Islander	0.3%
American Indian or Alaska Native	2.1%
Other/Multi	26.5%

Question 85: (Demographic Caregiver) What is your age? (n=2,260)

Under 18 years old	0.0%
18-24 years old	4.6%
25-34 years old	33.9%
35-44 years old	37.9%
45-54 years old	14.2%
55-64 years old	5.8%
65-74 years old	2.8%
75 years old or older	0.8%

Question 86: (Demographic Caregiver) Are you male or female? (n=2,281)

Male	14.1%
Female	85.9%

Question 87: (Demographic Caregiver) What is the highest grade or level of school that you have completed? (n=2,255)

8th grade or less	12.5%
Some high school, but did not graduate	14.0%
High school graduate or GED	29.3%
Some college or 2-year degree	30.4%
4-year college graduate	10.4%
More than 4-year college degree	3.5%

Question 88: (Demographic Caregiver) How are you related to the child? (n=2,272)

Mother or Father	87.9%
Grandparent	8.5%
Aunt or Uncle	1.0%
Older sibling	0.3%
Other relative	0.5%
Legal guardian	1.9%

Question 89: (Demographic Caregiver) What language do you **mainly** speak at home? (n=2,266)

English	67.3%
Spanish	28.9%
Some other language	3.7%

Question 90: (Demographic Client) What language does your child **mainly** speak at home? (n=2,216)

English	77.2%
Spanish	20.2%
Some other language	2.7%

Question 91: (Demographic Caregiver) What language do you mainly speak when talking with your child's doctor or health provider? (n=2,264)

English	80.4%
Spanish	18.9%
Some other language	0.7%

Trust in the Child's Health Providers

Question 92: I think my child's health providers may not refer him/her to a specialist when needed. (n=2,030) *A, R/E, Ed, N*

Strongly Agree	16.6%
Somewhat Agree	8.8%
Neither Agree/Disagree	3.0%
Somewhat Disagree	13.8%
Strongly Disagree	57.8%

Question 93: I trust my child's health providers to put my child's medical needs above all other considerations when treating my child's medical problems. (n=2,145)

Strongly Agree	80.0%
Somewhat Agree	15.7%
Neither Agree/Disagree	1.4%
Somewhat Disagree	1.8%
Strongly Disagree	1.0%

Question 94: I sometimes think that my child’s health providers might perform unnecessary tests or procedures. (n=2,118) *R/E, Ed, N*

Strongly Agree	9.0%
Somewhat Agree	8.5%
Neither Agree/Disagree	2.7%
Somewhat Disagree	14.6%
Strongly Disagree	65.2%

Question 95: My child’s health provider’s medical skills are not as good as they should be. (n=2,108) *A, R/E, Ed, N*

Strongly Agree	7.9%
Somewhat Agree	6.7%
Neither Agree/Disagree	2.5%
Somewhat Disagree	13.3%
Strongly Disagree	69.6%

Question 96: My child’s health providers always pay full attention to what I am trying to tell him or her. (n=2,181) *R/E*

Strongly Agree	84.6%
Somewhat Agree	10.5%
Neither Agree/Disagree	0.6%
Somewhat Disagree	2.4%
Strongly Disagree	1.8%

Appendix D: Bivariate Relationship Summary and Question Maps

Q#	Univariate Figure	Age	Sex	Race-Ethnicity	Caregiver Education	CCNC Network	Rurality	Domain	CAHPS-5.0 "Map"
2	R-1	R-2		R-3	R-4			Health Status	Core-03
3	R-5			R-6	R-7		R-8	Access	Core-04
4	R-9	R-10		R-11	R-12			Access	Core-05
5	R-13			R-14	R-15			Access	Core-06
6	R-16	R-17		R-18	R-19	R-20		Utilization	Core-07
7	R-21			R-22	R-23			Satisfaction	H-01
8	R-24							Health Status	C-03
9	R-25							Access	C-04
10	R-26				R-27			Satisfaction	CC-01
11	R-28				R-29			Satisfaction	CC-02
12	R-30							Satisfaction	CC-03
13	R-31							Satisfaction	CC-04
14	R-32							Satisfaction	Core-08
15	R-33			R-34	R-35			Access	Core-09
16a	R-36			R-37	R-38	R-39	R-40	Access	I-01/I-04
16b	R-41			R-42	R-43			Access	I-01-I-05
18	R-44							Access	WC-02
19	R-45							Utilization	WC-03
20	R-46							Access	WC-04
22a	R-47	R-48		R-49	R-50			Satisfaction	CC-06/CC-07
22b	R-51							Satisfaction	CC-06/CC-08
23	R-52			R-53	R-54			Health Status	CC-08
24	R-55							Access	CC-09
25	R-56	R-57		R-58			R-59	Access	CC-10
26	R-60	R-61						Health Status	CC-11
27	R-62							Access	CC-12
28	R-63							Access	CC-13
29	R-64			R-65	R-66			Utilization	CC-17
30	R-67							Access	CC-18
31	R-68			R-69	R-70	R-71	R-72	Access	Core-10
32	R-73	R-74		R-75	R-76	R-77		Utilization	Core-11
33	R-78			R-79	R-80	R-81		Satisfaction	Core-12
34	R-82			R-83	R-84			Satisfaction	C-01/C-02
35	R-85			R-86				Satisfaction	Core-13
36	R-87			R-88				Satisfaction	Core-14
37	R-89	R-90					R-91	Satisfaction	Core-15
38	R-92	R-93						Satisfaction	Core-16
39	R-94			R-95	R-96	R-97	R-98	Satisfaction	Core-17
40	R-99							Satisfaction	Core-18
41a	R-100	R-101			R-102			Utilization	C-03
41b	R-103							Access	C-04
42	R-104							Satisfaction	Core-19
43	R-105	R-106		R-107	R-108			Health Status	CC-37
44	R-109							Satisfaction	New
45	R-110		R-111					Access	CC-15
46	R-112	R-113			R-114	R-115		Access	PD-01
47	R-116							Access	PD-02
48	R-117	R-118	R-119	R-120	R-121			Health Status	CC-19
49	R-122							Satisfaction	CC-20

Q#	Univariate Figure	Age	Sex	Race-Ethnicity	Caregiver Education	CCNC Network	Rurality	Domain	CAHPS-5.0 "Map"
50	R-123							Satisfaction	CC-21
51	R-124			R-125	R-126			Health Status	Core-20
52	R-127							Access	Core-21
53	R-128							Access	OHP-03
54	R-129							Utilization	Core-22
55	R-130				R-131			Satisfaction	Core-23
56	R-132			R-133	R-134			Access	UT-02
57	R-135			R-136	R-137			Access	Core-24
58	R-138			R-139			R-140	Satisfaction	Core-25
59	R-141			R-142				Satisfaction	Core-26
60a	R-143	R-144		R-145				Satisfaction	Core-27
60b	R-146	R-147		R-148				Satisfaction	Core-28
61a	R-149			R-150	R-151			Access	T-01
61b	R-152			R-153				Access	T-02
62	R-154			R-155	R-156			Satisfaction	Core-29
63	R-157	R-158		R-159	R-160			Utilization	CC-22
64	R-161	R-162						Access	CC-23
65	R-163	R-164		R-165				Access	CC-24
66	R-166	R-167		R-168	R-169			Health Status	Core-30
67	R-170	R-171	R-172	R-173	R-174			Health Status	Core-31
68	R-175	R-176		R-177				Utilization	UT-01
69	R-178	R-179		R-180	R-181			Health Status	CC-25
70	R-182	R-183	R-184	R-185	R-186		R-187	Health Status	CC-26
71	R-188	R-189		R-190				Health Status	CC-27
72	R-191	R192	R-193	R-194	R-195			Health Status	CC-28
73	R-196			R-197	R-198			Health Status	CC-29
74	R-199							Health Status	CC-30
75	R-200	R-201		R-202				Health Status	CC-31
76	R-203	R-204		R-205	R-206	R-207		Health Status	CC-32
77	R-208							Health Status	CC-33
78	R-209	R-210	R-211	R-212	R-213			Health Status	CC-34
79	R-214	R-215		R-216	R-217			Health Status	CC-35
80	R-218							Health Status	CC-36
92	R-219	R-220		R-221	R-222	R-223		Trust	N/A
93	R-224							Trust	N/A
94	R-225			R-226	R-227	R-228		Trust	N/A
95	R-229	R-230		R-231	R-232	R-233		Trust	N/A
96	R-234			R-235				Trust	N/A

Questions have designations to tell their CAHPS sourcing (core or supplemental); these are noted in the last column in Appendix D and described below:

Core – core CAHPS5.0

CAHPSv4.0 Supplemental
UT – Utilization
H – Hedis ® C – Communication
CC – Chronic conditions supplemental
I – Interpreter
C – Communication
OHP – Coordination with other health providers
WC – Well-child care
PD – Personal doctor
T – Transportation

Table Appendix E: Demographic and Contextual Characteristics, 2012-2018

		2012	**2015**	**2018**
Gender/Sex	Male	51.3%	52.5%	52.4%
	Female	48.7%	47.5%	47.6%
	n =	**3,199**	**5,265**	**2,282**
Age	0-1 years	3.6%	3.7%	9.2%
	2-5 years	30.8%	24.2%	23.7%
	6-8 years	19.8%	18.1%	15.6%
	9-12 years	21.9%	22.8%	22.7%
	13-18 years	23.9%	31.2%	28.9%
	n =	**3,199**	**5,264**	**2,282**
Race/Ethnicity	Non-Hispanic White	32.3%	31.1%	32.4%
	Non-Hispanic Black	27.7%	26.9%	20.5%
	Hispanic/Latino	32.7%	33.3%	35.8%
	Multi/Other	7.3%	8.7%	11.4%
	n =	**3,059**	**5,232**	**2,271**
Caregiver Education	<HS Grad/GED	34.6%	31.5%	26.4%
	HS Grad/GED	31.0%	30.3%	29.3%
	>Hs Grad/GED	32.4%	38.2%	44.3%
	n =	**3,133**	**5,232**	**2,255**
Rurality	Urban	62.5%	66.3%	72.0%
	Rural	37.5%	33.7%	28.0%
	n =	**3,199**	**5,265**	**2,282**

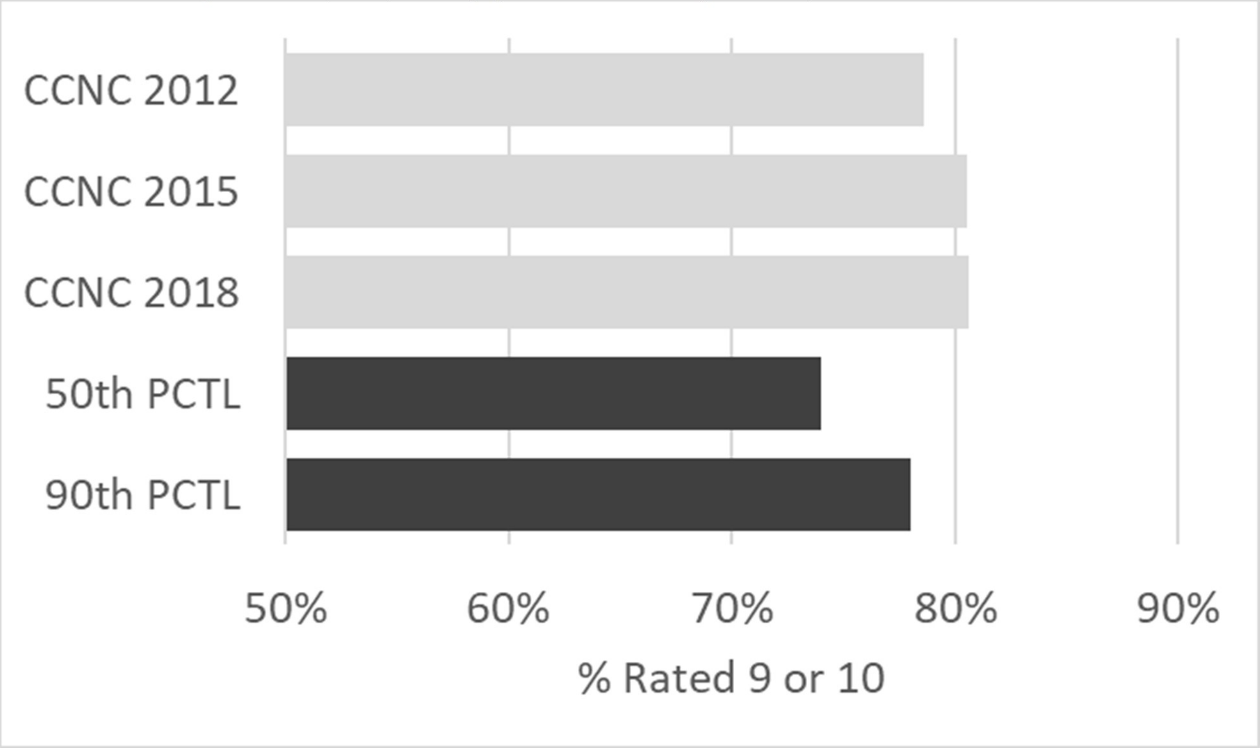
Appendix F: 2012-2018 Top-Box Analysis vs. National CAHPS Standard

- The following pages compare the results of 2012, 2015, and 2018 CAHPS satisfaction surveys of NC Medicaid ambulatory child populations (only associated with CCNC) to US Medicaid child managed care results (79,346 children in 150 plans). These questions are intended to collect a responsible caregiver's input on the child's behalf based on the previous 6 months of care (per CAHPS guidelines for Medicaid populations).

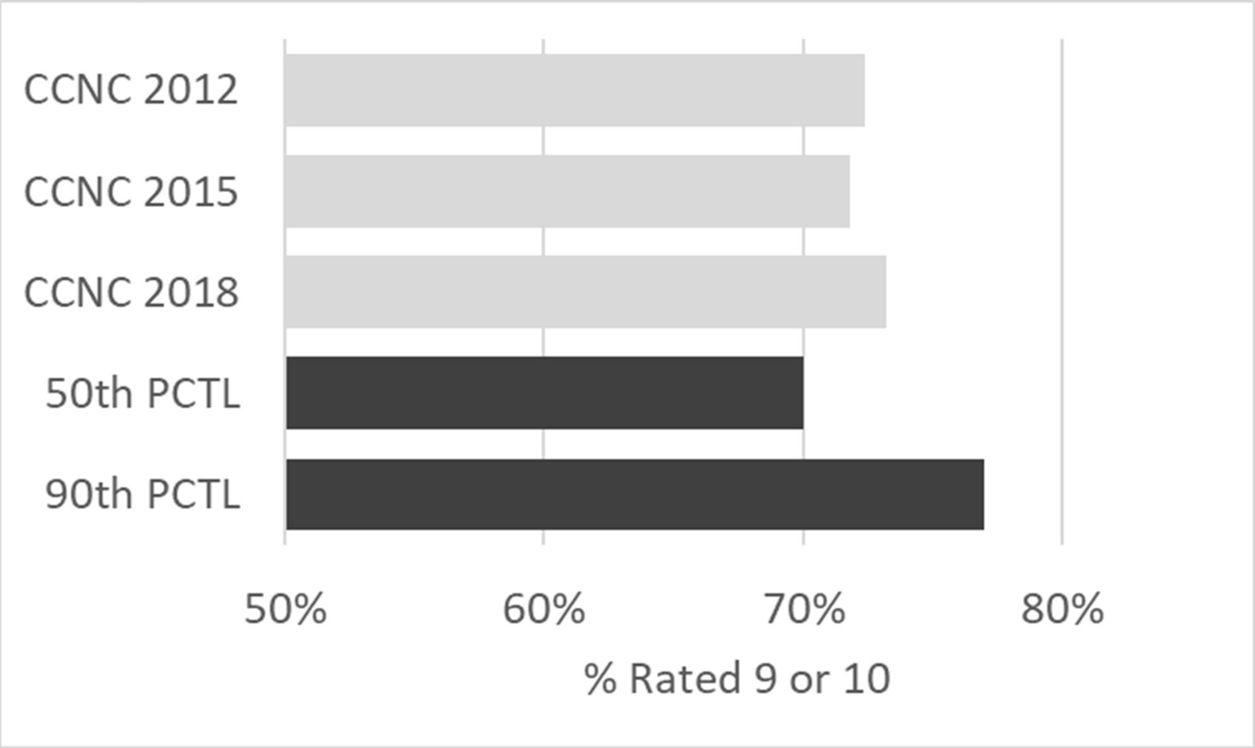
- Pages 189-190 describe questions asking respondents to rate various aspects of their health care and health plan on a 0-10 scale (0-10, 10 = best possible).
  - For each question, the graphs show the % that responded "9" or "10" in each year along with the 50th and 90th percentile values from the national Medicaid database reported in 2018.
- Pages 191-196 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 Medicaid database reported in 2018.
- Page 197 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 child Medicaid population reports satisfaction values above the median value (50th percentile), and frequently close to or exceeding the 90th percentile values for the US child Medicaid managed care population.
  - A notable exception is the last question on specific illness prevention discussions where NC respondents reported considerably lower prevalence of these discussions than the national database.

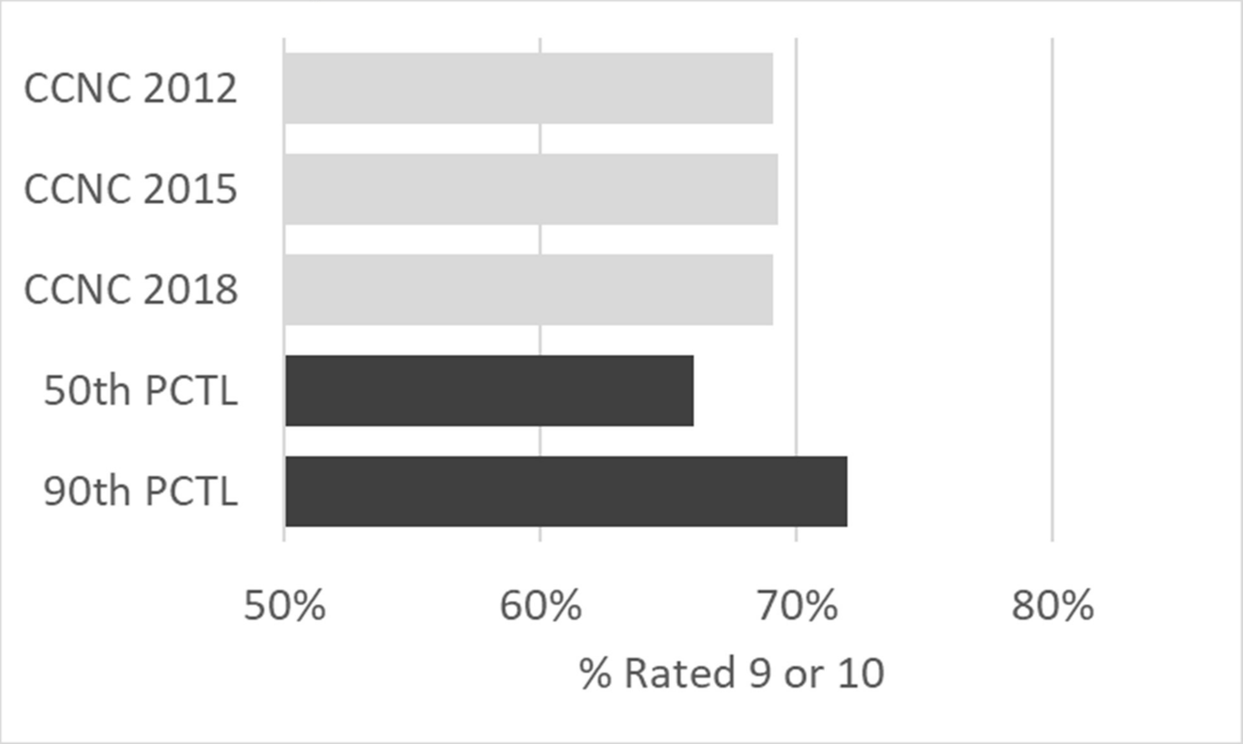
Personal health provider (PHP) rating (0-10, 10 = best possible)



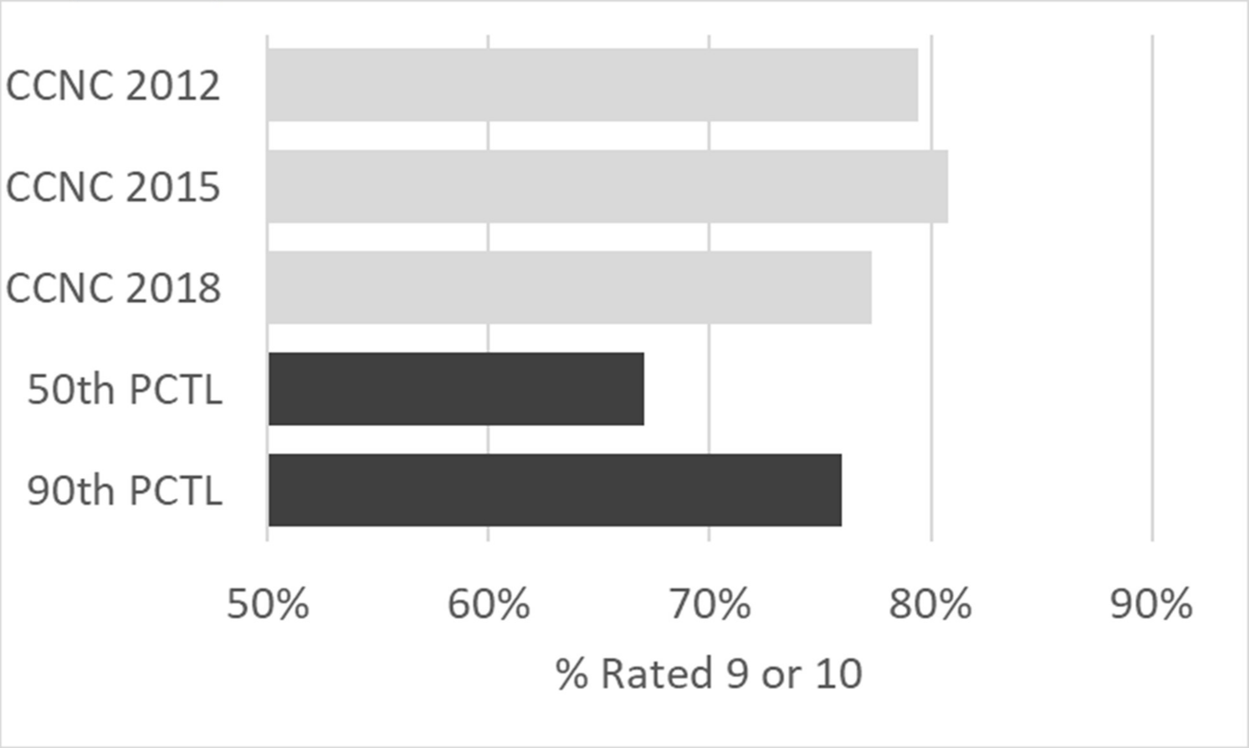
Rating of specialist seen most often



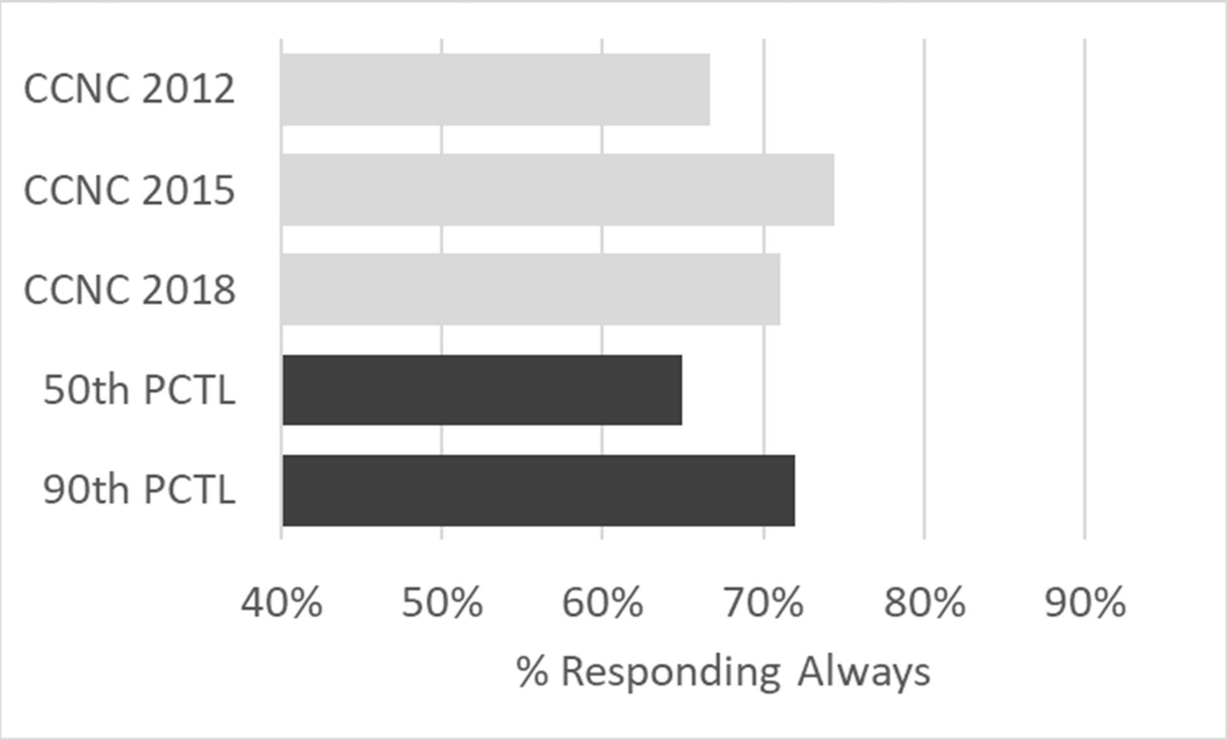
Overall health care rating



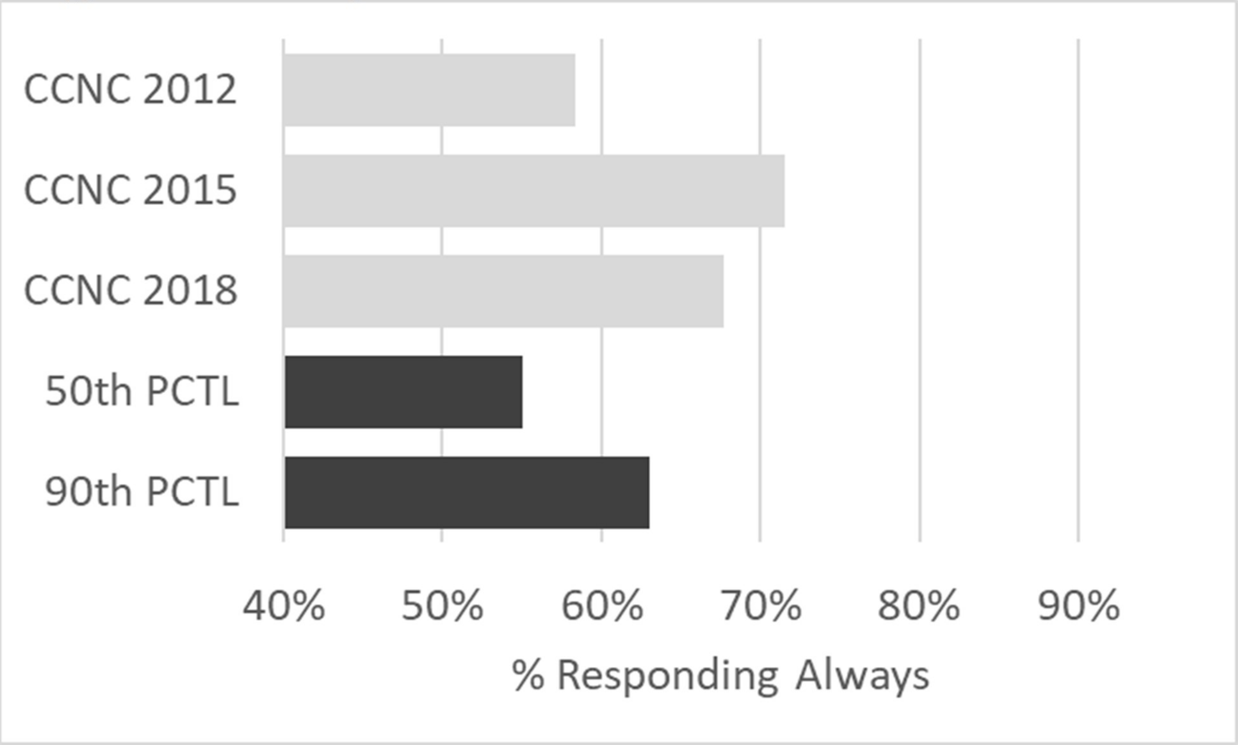
Rating of health plan



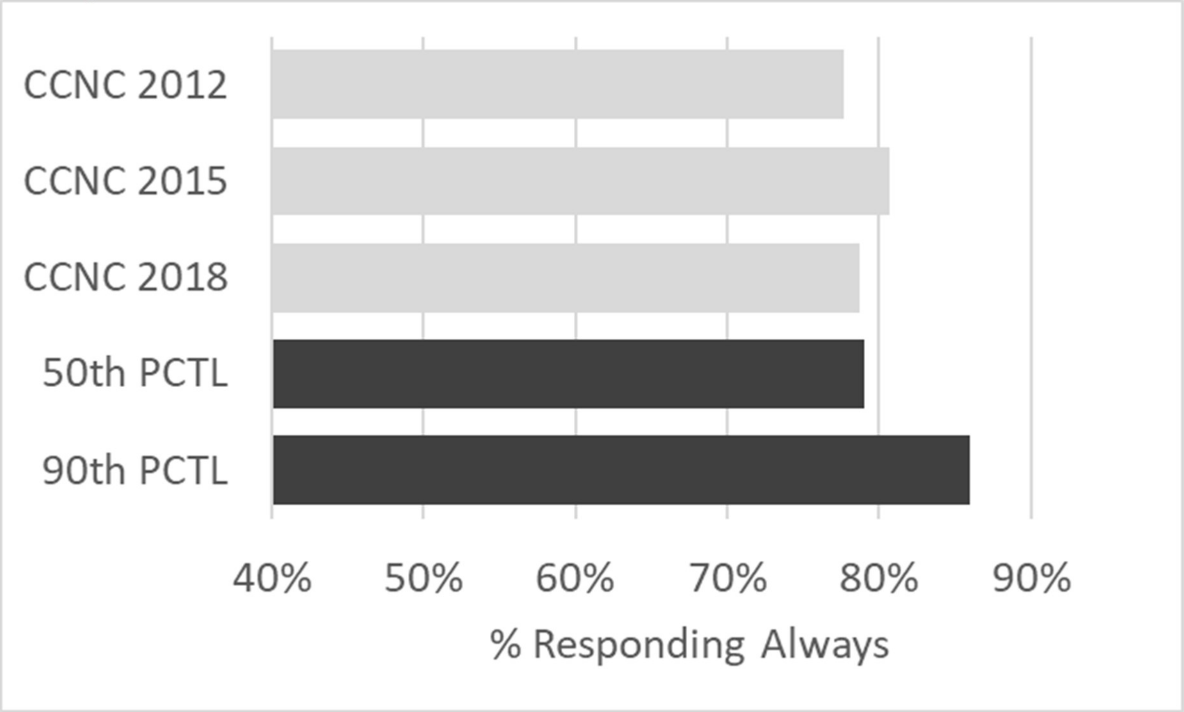
Easy to get care, tests, or treatment (Never/Sometimes/Usually/Always)



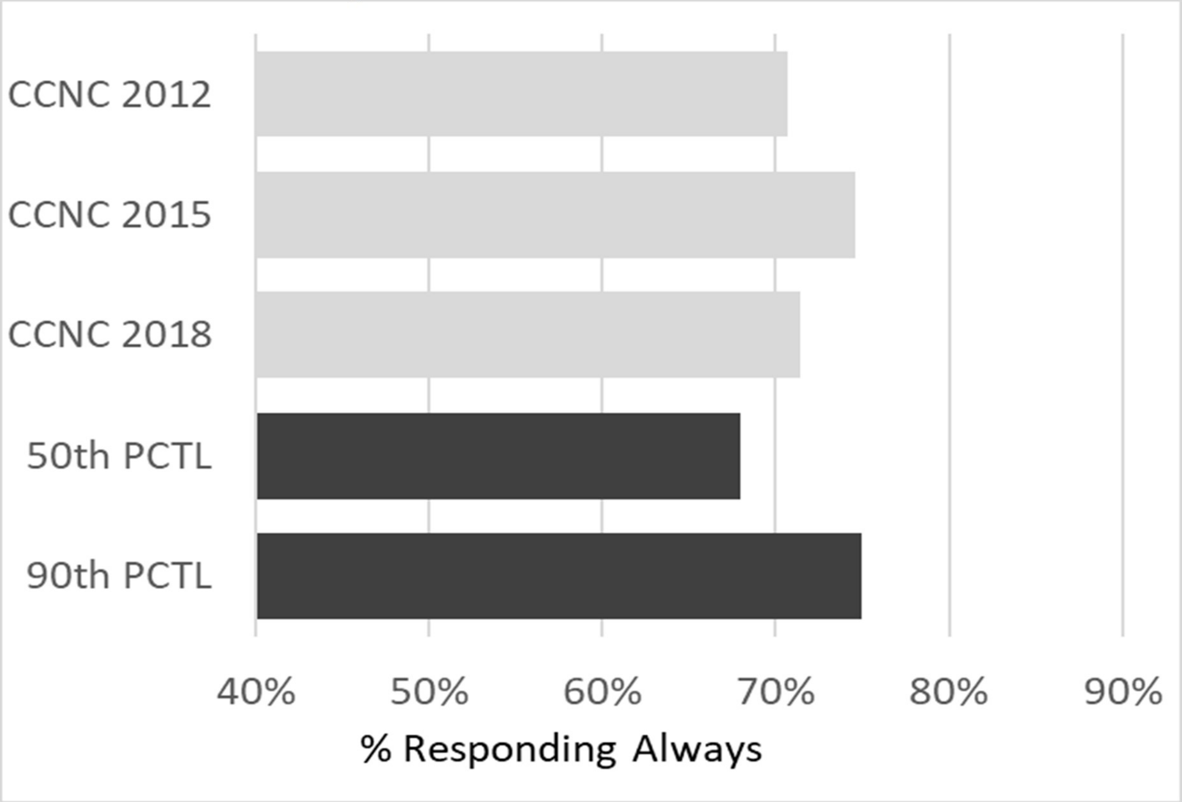
Got appointments to see a specialist as soon as needed



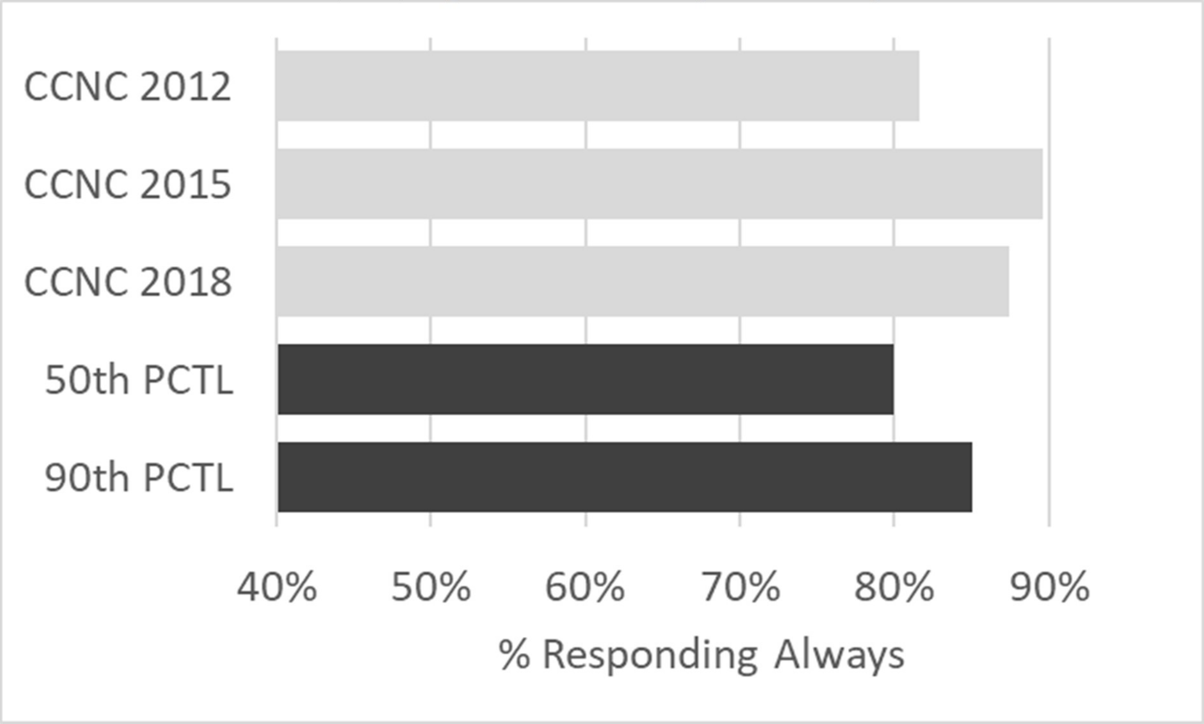
Got urgent care as soon as needed



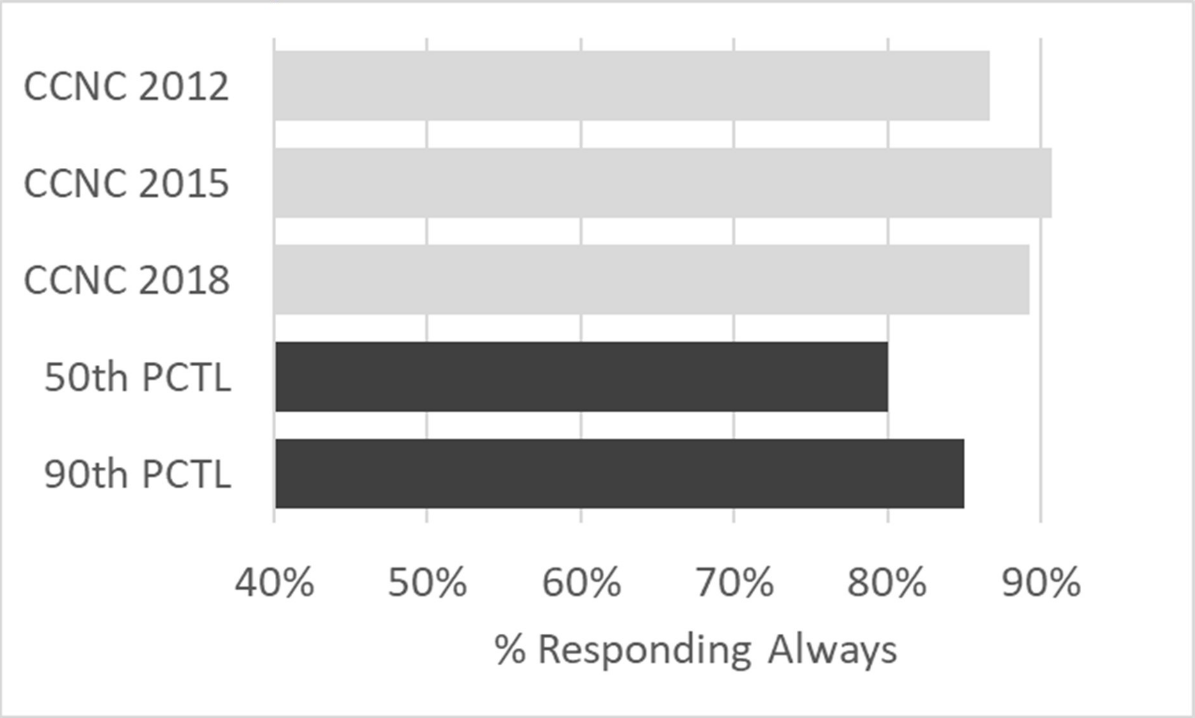
Got routine care or check-ups as soon as needed



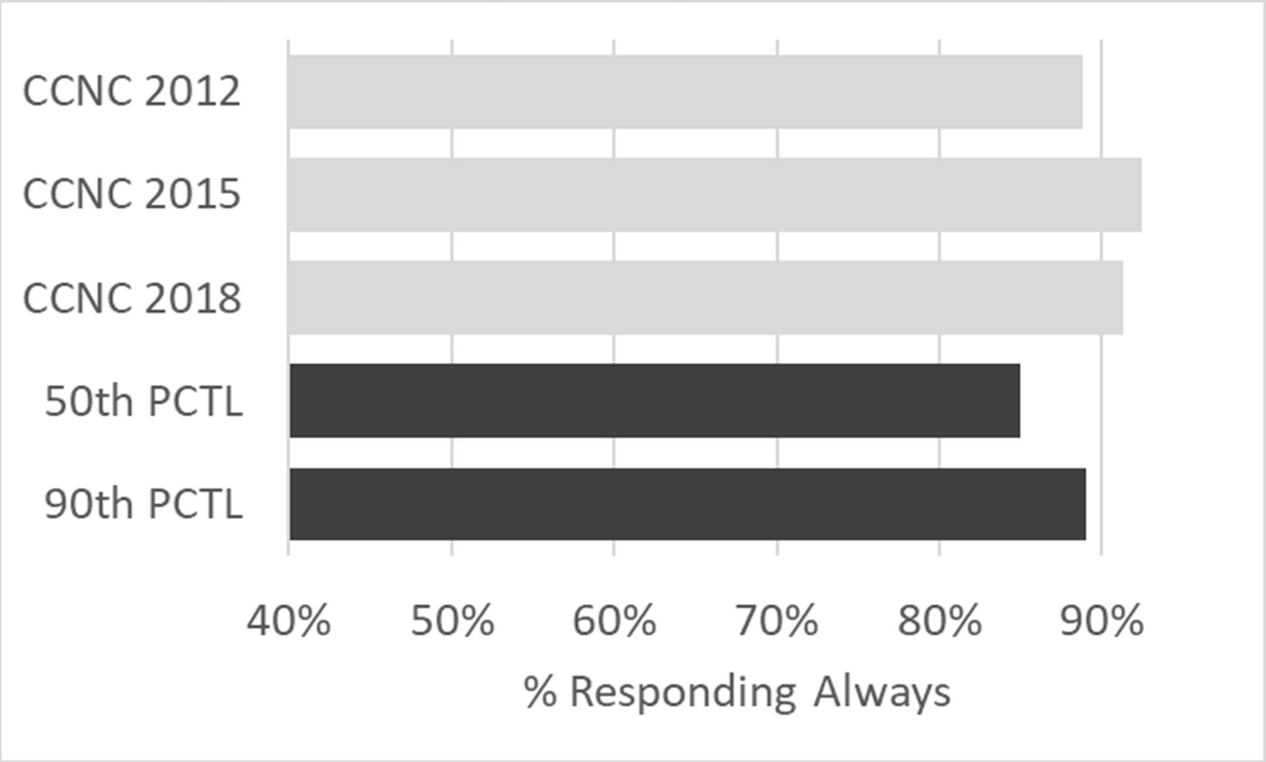
Personal Health Provider (PHP) explanations were easy for the caregiver to understand



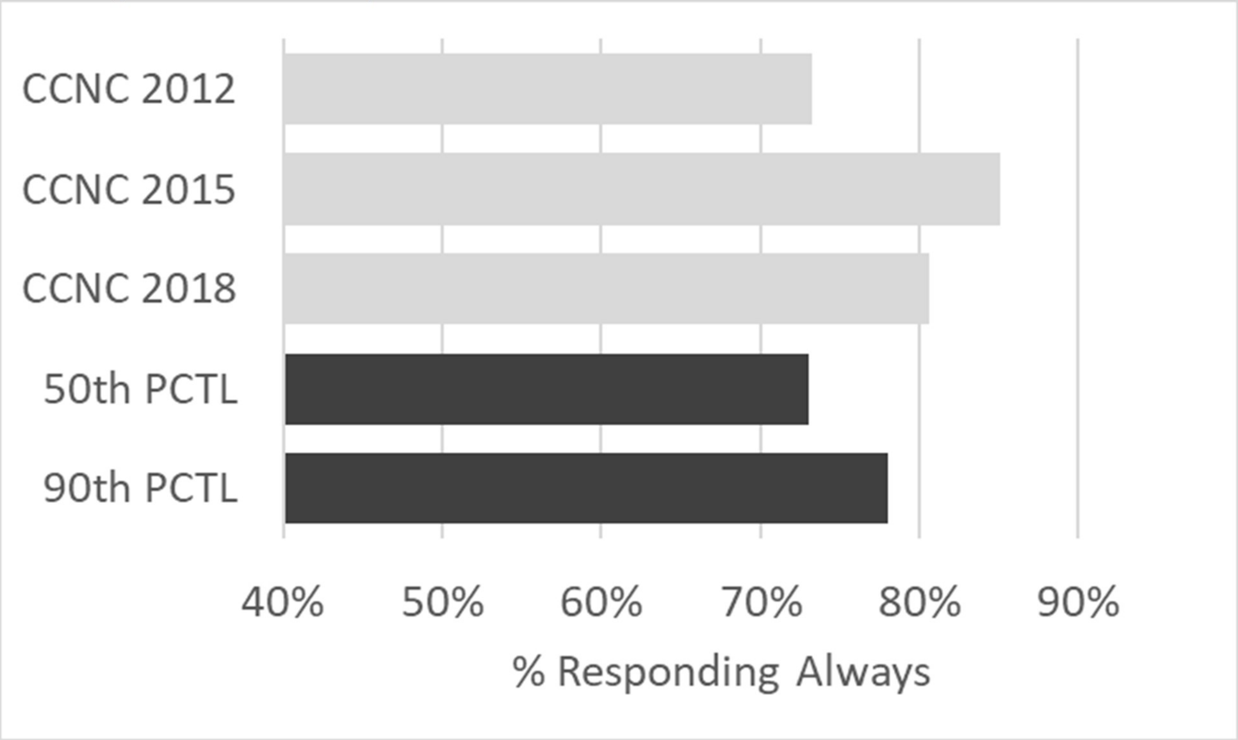
PHP listened carefully



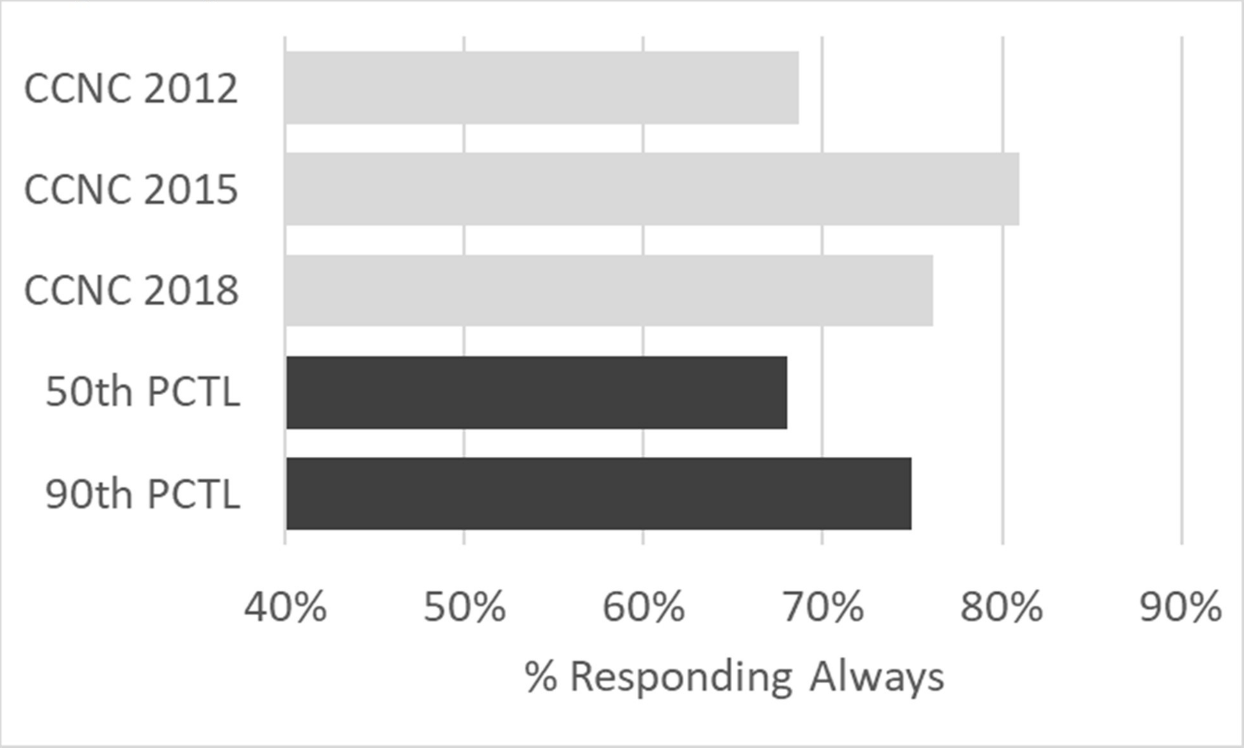
PHP showed respect for what the caregiver had to say



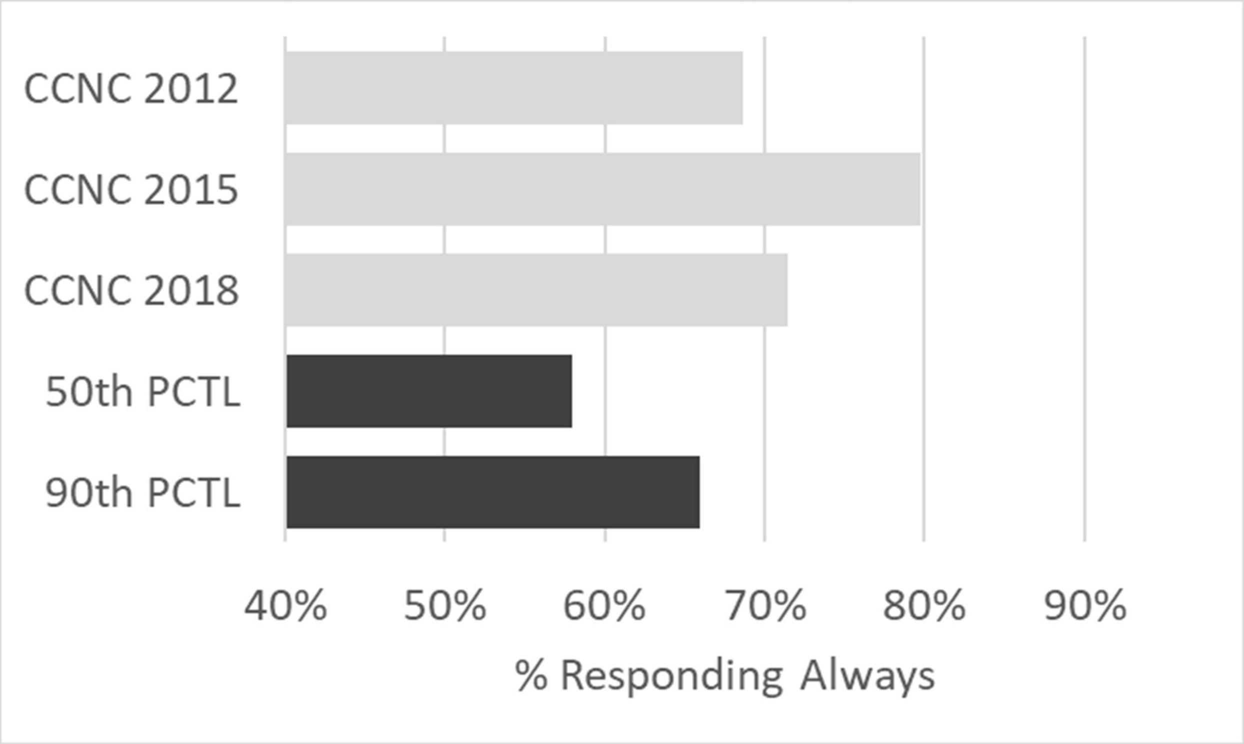
` PHP explanations were easy for the child to understand



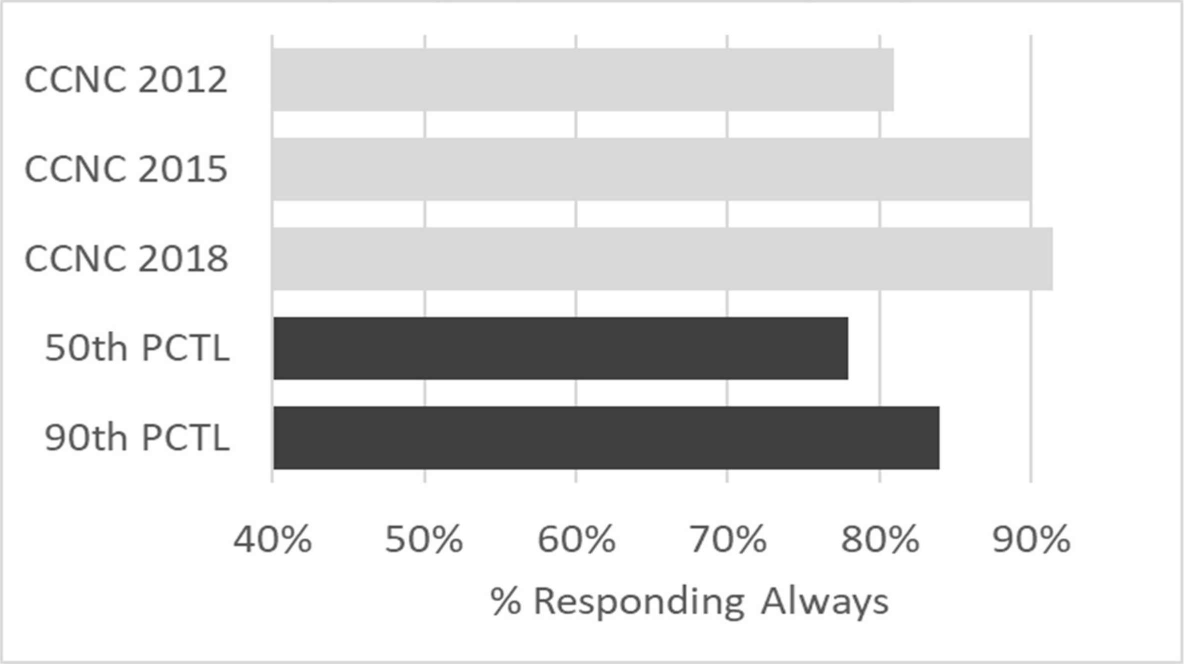
PHP spent enough time with the child



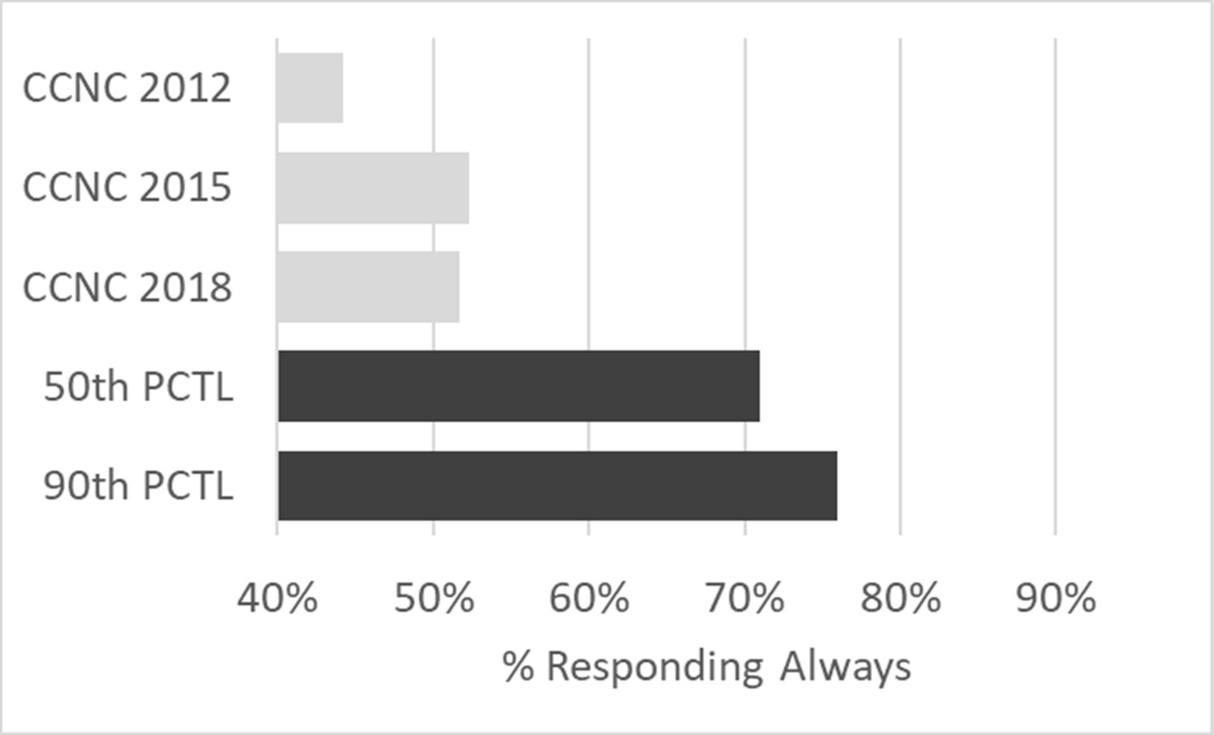
Got information or help needed from office staff at health plan or provider



Child treated with courtesy and respect by office staff at health plan or provider



Discussed specific things to prevent illness with a health provider



NC Medicaid Top Box Scores-Crosswalk

2012 Q #(n)	2015 Q #(n)	2018 Q #(n)	Composite/Item
			Overall Ratings
51(n=2,516)	48(n=3,855)	42(n=1,708)	Personal health provider (PHP) rating
61(n=528)	58(n=949)	55(n=1,816)	Rating of specialist seen most often
14(n=2,248)	15(n=3,493)	14(n=1,671)	Overall health care rating
70(n=3,182)	65(n=5,212)	62(n=2,249)	Rating of health plan
			Getting Needed Care
64(n=739)[1]	16(n=3,450)	15(n=1,654)	Easy to get care, tests or treatment
58(n=580)	55(n=1,020)	52(n=493)	Got appointments to see a specialist as soon as needed
4(n=866)	4(n=3,688)	3(n=587)	Got urgent care as soon as needed
6(n=2,025)	6(n=3,561)	5(n=1,614)	Got routine care or check-up as soon as needed
			How Well Doctors Communicate
40(n=1,988)	38(n=2,982)	33(n=1,419)	PHP explanations were easy for the caregiver to understand
42(n=1,999)	40(n=2,984)	35(n=1,426)	PHP listened carefully
43(n=1,996)	41(n=2,984)	36(n=1,425)	PHP showed respect for what the caregiver had to say
45(n=1,497)	43(n=2,268)	38(n=1,005)	PHP explanations easy for the child to understand
47(n=1,987)	44(n=2,957)	39(n=1,413)	PHP spent enough time with the child
			Health Plan Information and Customer Service
66(n=641)	61(n=1,832)	58(n=1,468)	Got information or help needed from office staff at health plan or provider
67(n=3,165)	62(n=5,103)	59(n=1,468)[2]	Child treated with courtesy and respect by office staff at health plan or provider
			HEDIS Item Set
8(n=2,242)	8(3,416)	7(n=1,639)	Discussed specific things to prevent illness with a health provider
3,199	5,180	2,282	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.

2-This question was asked of all respondents in 2012 and 2015, but a skip pattern error significantly reduced n in 2018.