

**University of North Carolina at Charlotte**

**Policy Report No. 13**

**Statewide Assessment of Children's Experience with Medicaid Managed Care in  
North Carolina**

**Report of a 2012 Consumer Assessment of Health Providers and Systems Survey of  
Primary Care Case Managed Child Enrollees**

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Finally, we also express our gratitude for the excellent expert work of Jake Martin and his staff of interviewers at Clearwater Research, Inc., which fielded the two surveys. Collaborating with him and his colleagues was extremely easy and pleasant.

It goes without saying, however, that any misunderstandings of Medicaid and its rules reflected in this document are due to our failure to ask the right questions or to understand the information that Betty explained so patiently to us!

Figure 2 is reprinted from *The North Carolina Atlas: Portrait for a New Century*, edited by A. Stuart and D. M. Orr (Chapel Hill, NC: University of North Carolina Press, 2000) with permission of the publisher. We should also explicitly acknowledge that *Policy Report 13* incorporates much material from the "Introduction" and "Methods" sections of *Policy Report 12*, which presents the results of a comparable survey administered in 2007 (Brandon, Schoeps, Sun, and Smith, 2008).

The authors also gratefully acknowledge funding from the N. C. Department of Health and Human Services, Division of Medical Assistance and the Metrolina Medical Foundation Research Fund. However, the views expressed in this report are those of the authors; they do not represent the views of the State of North Carolina, the Metrolina Medical Foundation Research Fund, or the University of North Carolina Charlotte.

## ***A Guide for the Busy Reader***

*The authors recognize that the length of this final report of the Child Survey of adult caregivers of 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, which interprets the results of the survey, provides the amount of detail that they desire.*

*Readers who then wish to access specific information in the chapter that reports the results of the surveys (Chapter 3) will find that using the sequential figure number will help them find the relevant graph and associated text. The question numbers are useful for looking up the exact wording of questions in Appendix F, where the reader can also find the answers that respondents provided expressed in percentages.*

## EXECUTIVE SUMMARY

### **Background and Research Description** (Part I, Chapters 1-2)

North Carolina Medicaid has adopted primary care case management (PCCM) in order to provide efficient and effective health care to many of its beneficiaries. In this form of managed care a primary care provider receives per member/per month fees to manage the health care of specific enrolled patients (including securing specialty referrals that they may need), but all health services are paid for on a fee-for-service basis. The N.C. Department of Health and Human Services periodically funds independent research to determine patient perceptions of this large health care program.

In May 2011 a 3-year contract between the Department and the University of North Carolina Charlotte to survey a representative sample of the Medicaid beneficiaries who were served by Carolina Access and Community Care of North Carolina (CCNC) took effect. The purpose of the surveys was to determine how adult beneficiaries and an adult responsible for a child's care regarded access to, utilization of and satisfaction with health care provided by Medicaid as well as the self-reported health status of the adult or child surveyed. The researchers used the standard instrument for Medicaid surveys, the Consumer Assessment of Health Providers and Systems (CAHPS) Survey. Consultation with Medicaid officials led to the decision to include additional questions that elicited attitudes about trust in the patient's primary health provider and, by implication, the system of care established by Medicaid.

Thus, this volume, *Statewide Assessment of Children's Experience with Medicaid Managed Care in North Carolina*, constitutes the report of the findings of the Child survey to evaluate Medicaid recipients' perception of access to, satisfaction with, and utilization of their health care, as well as the enrollee's health status. Subsequent volumes reporting on adults' experience and examining respondents' trust in their health providers and specific aspects related to methods of computer use and communication) will follow. Representative samples of the target Medicaid populations of adults and children were surveyed and the answers were analyzed using what the authors call "demographic" and "context" variables to determine whether there were subpopulations that differed from the aggregated attitudes and experiences of the entire populations.

Important features of the sampling, survey, and analysis include:

- The study sampling frame consisted of 448,424 children who had been enrolled in a CCNC for 6 months;
  - 36.0% black, 42.4% white, and over 21% "other" race;
  - From a number of Medicaid programs with participants in CCNCs, but excluding such groups as Medicaid for Pregnant Women and those institutionalized or receiving Adult Care Home Services, and Health Choice (North Carolina's SCHIP program);
- Stratified random samples were drawn to insure sufficient numbers of enrollees in each of 14 CCNCs to permit them to be compared;
  - Target of 200 child interviews from each CCNC;
  - Children defined as under 19 years of age;

- The survey was conducted by Clearwater Research Inc. of Boise, Idaho using a computer-assisted telephone interview methodology;
  - 3,199 interviews of an adult responsible for a Medicaid child's care, June – August, 2012;
  - Problems: workable telephone numbers for only 62.9% of the sampling frame as initially provided by program administrators; this proportion was subsequently increased to 87.9% by the addition of supplemental data from other public assistance programs;
  - Response rate using American Association for Public Opinion Research standards: 36.6%;
- The analysis and reporting of results involved grouping the questions under the broad topics of access, satisfaction, health status, utilization and trust;
  - Analysis using IBM Statistical Package for the Social Sciences (SPSS) Statistics version 20 PC software employed the demographic and program variables age, gender, race and context variables CCNC, urbanicity, and region to discover any differences among subpopulations;
  - Construction of the variables urbanicity (3 values: urban, mixed and rural) and region (4 values: tidewater, coastal plain, Piedmont, and mountains) is described in Chapter 2 Methods;
  - Differences defined as 0.05 level of statistical significance using Chi-square tests;
  - Responses to all health-related questions are reported in the text of Policy Report 13 except for the trust and communication questions that will be the subject of a subsequent report;
  - Results of all differences that were statistically significant are reported unless the number of those responding was too small to permit valid inferences;
  - Responses to *all* questions are reported in Appendix F with coding indicating the variables that produced statistically significant differences;

### **Child Survey Results**

The most general findings that emerged from responses by adults responsible for a child's care to the 87 health-related questions that addressed issues of access, satisfaction, health status, and utilization were:

- Most respondents believed that their child was getting the access to health care that was needed;

- Caregivers were highly satisfied with that care;
- Most children were reported to be in “good,” “very good,” or “excellent” health;
- However, less than half of respondents (~45%) rated the child’s health as “excellent;”
- Prescription medications were widely used with more than 50% of children having had a new or refilled prescription in the last 6 months;
- Caregivers seemed to seek health care for their children responsibly, with high numbers of visits to primary care providers and relatively low reported use of emergency rooms;
- Less than 30% of respondents reported that they needed assistance in obtaining transportation to get their child to a doctor’s visit or to pick up their child’s prescription;
- However, only 52.2% of those caregivers who said they needed transportation assistance always received it while 33.3% only sometimes or never received it.

Responses to each question were analyzed to see whether important subpopulations held views or displayed tendencies that diverged from these overall population results. Analysis by the variables age, gender/sex, ethnicity, CCNC, urbanicity and region revealed that:

- Younger children and girls were generally deemed in better health by caregivers than older children and boys;
- Additionally, younger children had at least one primary care visit in greater proportions than older children;
- The caregivers of Hispanic children and those caregivers who indicated that Spanish was the preferred language in the home perceived greater difficulty than non-Hispanic Whites or non-Hispanic Blacks in gaining access to care for their child and lower satisfaction with the quality of their child’s care;
- The caregivers of Hispanic children and those caregivers who indicated that Spanish was the preferred language in the home generally reported better health status for their enrolled children compared to the children of non-Hispanic white and non-Hispanic black children.
- Relatively few bivariate relationships associated with the context variables (CCNC network, region, and urbanicity) were statistically significant. Among those that were, there is ample evidence to suggest that the relationships are confounded by the child’s ethnicity.

## **PART I**

### **BACKGROUND**

Background materials comprise a general introduction to this assessment of the Medicaid program and an explanation of the methodology involved. The Introduction explains how the Medicaid program in North Carolina is structured and the background of this assessment project by the University of North Carolina at Charlotte. It explains the two kinds of primary care case management delivery organizations, Carolina ACCESS and Community Care of North Carolina (CCNC). (Because the differences between the two are not important for this assessment, the abbreviation CCNC in this Report generally refers to all the primary care case management organizations.)

The second chapter provides the relevant details of the conduct and analysis of the survey of the adult caregivers of 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. However, the two variables referred to as "context variables" (region and urbanicity) were developed by the authors to characterize the settings in which the respondents live. The reader may want to read how the authors derived these context variables to better understand the study findings.

## 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 (Kaiser Family Foundation, 2014). Although each state has the option of participating, all states and the District of Columbia exercise that option with each state administering its own program and establishing its own eligibility standards and scope of services within a broad regulatory framework instituted by the federal government.

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, 56 million Americans were enrolled in state Medicaid programs in 2012, a figure that constituted a 57.7% increase in enrollment since 2001 (Sanofi Aventis U.S. LLC, 2013). Estimates indicate that slightly less than 1.5 million people in North Carolina (15.4% of the state's population) were enrolled in the state's Medicaid program in July 2011 (North Carolina Office of State Management and Budget, 2014; U.S. Department of Health and Human Services, 2011).

*Managed care*, a strategy that promotes accountability for cost and quality through utilization measurement and management of health resources, has been widely adopted to address the challenges of increasing numbers of Medicaid enrollees, expanding benefits and services, and constrained public budgets. Nearly 78% of America's Medicaid recipients were enrolled in managed care organizations (MCOs) in 2012 (Sanofi-Aventis U.S. LLC, 2013). North Carolina has chosen the *primary care case management* (PCCM) as its form of organizing managed care. 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 (Section H) of the Balanced Budget Act of 1997 (P.L. 105-33) defines PCCMs, specifies the nature of case management activity 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, especially unnecessary care, the primary care case manager 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). In North Carolina the CCNCs have also increasingly been the focus of disease management for those patients

Among all state Medicaid programs, North Carolina ranked tenth overall in the number of enrollees in Medicaid managed care in 2011 and second in terms of the most Medicaid MCO members enrolled in PCCMs (U.S. Department of Health and Human

Services, 2011). The North Carolina statewide Medicaid managed care program consisted of two options in 2011. The first option, named Carolina ACCESS, was described in the 2006 Medicaid Annual Report as “a primary care case management model (PCCM), characterized by a primary care provider (PCP) gatekeeper” (North Carolina Department of Health and Human Services, Division of Medical Assistance, 2007, p. 35). The second PCCM arrangement in North Carolina was named *Community Care of North Carolina (CCNC)*. CCNC, which was formerly known as ACCESS II and ACCESS III, was described in the 2006 Annual Report as “a demonstration program that began in July 1998 and aims to build upon Carolina ACCESS by working with community providers to better manage the enrolled Medicaid population” (North Carolina Department of Health and Human Services, Division of Medical Assistance, 2007, p. 35). In 2011 CCNC was composed of 14 local community networks involving local physicians, hospitals, and health and social services departments in each of the state’s 100 counties. 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 arrangements.

The CCNC networks proactively address the overall health status of program 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 in achieving quality, utilization, and cost objectives (North Carolina Department of Health and Human Services, Division of Medical Assistance, 2007). Another way in which the Division of Medical Assistance monitors and evaluates the success of its programs is with 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. 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 and trust in the health care system are considered to be important indicators of the quality of a health care delivery system (Donabedian, 1980 and 1985).

In May 2011 a three year contract between the NC Department of Health and Human Services, Division of Medical Assistance and the University of North Carolina Charlotte 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 took effect. One survey asked adults about the care that they received; the other asked a responsible and knowledgeable adult about the care of a child on Medicaid. Previously 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 in their health providers and questions to help the Division evaluate enrollee computer use and communications with beneficiaries. Because of the length of the Report of the child and adult surveys, they will be presented in separate volumes and the analysis and reporting of the trust and computer use sections of both surveys will appear in a third, shorter volume.

## 2 METHODS

*Statewide Assessment of Children's and Adults' Experience with Medicaid Managed Care in North Carolina, Policy Reports 13 and 14*, summarize the experiences of adult and child Medicaid beneficiaries in terms of their health status and their access to, satisfaction with, and utilization of health services and care in 2012. The methods used to report these phenomena were applied to data collected from adult enrollees (the “adult survey”) and the adult caregivers of child enrollees (the “child survey”) who had been continuously enrolled for at least six months in the network programs of Community Care of North Carolina, the state Medicaid program’s primary organizational entity for delivering managed care.

Using the eligibility files provided by the state’s Division of Medical Assistance, the authors of *Policy Report 13 and 14* drew random samples from the sampling frame of eligible adults and children enrolled in selected Medicaid programs. The drawn samples were submitted to Clearwater Research, Inc. of Boise, Idaho, a private survey research firm that was awarded a contract to conduct the telephone surveys following a competitive bidding process. Clearwater Research performed the two surveys using computer assisted telephone interview (CATI) methodology. The child survey was initiated on June 4, 2012 and concluded on August 26, 2012. The adult survey commenced on July 5, 2012 and concluded on September 20, 2012.

### Population Inclusion Criteria, Demographic, and Context Variables

The eligibility file data provided by the North Carolina Division of Medical Assistance consisted of all North Carolina Medicaid beneficiaries who were enrolled in one of the following assistance programs on December 31, 2011:

- 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 to 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 years with Title V (the health services safety net for all women and children enacted as part of the Social Security Act of 1935) block grant assistance.

The number of adults who were enrolled in at least one of these programs in the state-provided data was 522,748 while the number of children who met these inclusion criteria was 885,363.<sup>1</sup> This dataset was subsequently pared to include only those individuals who

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<sup>1</sup> Individuals enrolled in the following program categories were specifically excluded from the study

had been continuously enrolled in one of the CCNC care networks for at least six months prior to December 31, 2011. The resultant data set included 148,140 adult enrollees (the sampling frame of adults) and 455,960 child enrollees. One additional inclusion criterion – the date of birth after June 30, 1993 – was applied to the child population. The rationale for this inclusion criterion was to exclude those child enrollees who were likely to “age-out” of Medicaid coverage prior to fielding the survey in June 2012. The resultant data set represented the sampling frame for children and included 448,424 enrollees.

In terms of the demographic variables provided by the state eligibility file data, the differences between the adult and child sampling frames are noteworthy (see Appendix A, Demographic, Region, and Urbanicity Characteristics, Adult and Child)). For example, the proportion of male enrollees in the children’s sampling frame (51.1%) slightly outnumbers that of female enrollees (48.9%). By contrast, females comprised nearly 67% of the adult sampling frame. The likely explanations for this difference are: (a) the targeting of Medicaid services to women and their children, (b) the differences in custodial parenting arrangements, or (c) the wage gap between women and men. An additional source of variation is the proportion of dual eligibles in each of the sampling frames. Forty percent of individuals in the adult sampling frame qualified for both Medicaid and Medicare benefits. Conversely, no child enrollees in the children’s sampling frame were categorized as dually-eligible.

Variation was also present when comparing the racial makeup of the two sampling frames. For instance, the adult sampling frame was very balanced in terms of the proportions of whites and blacks. Blacks and whites comprised 44.9% and 45.4%, respectively, with those categorized by the eligibility files as “unreported” race representing 6.3% of the sampling frame. The remaining portion of this group was divided among the Asian, Native American, and Pacific Islander subgroups. By contrast, there was more variation in the racial makeup of the children’s sampling frame with whites accounting for 42.4% of enrollees and blacks representing 36.0%. The proportion of child enrollees whose race was categorized as “unreported” by the state’s eligibility files was 18.4%.

With regard to age, Medicaid eligibility standards require individuals to be at least 19 years of age or older to qualify as an adult.<sup>2</sup> Consequently, the youngest adult age interval begins at 19. Adults younger than 25 years constituted 10.8% of the sampling frame, followed by 17.3% in the 25 to 34-year old category, 16.3% in the 35 to 44-year old category, 18.9% in the 45 to 54-year old category, 17.8% in the 55 to 64-year old

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populations: individuals enrolled in the Community Alternatives Program (CAP), 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; QMB (Qualified Medicare Beneficiaries - those who are partially eligible because they only receive premium support benefits as opposed to the “full duals” who are eligible for both Medicare and Medicaid); institutionalized enrollees receiving long-term care, nursing home, and Adult Care Home services; enrollees receiving end-stage renal dialysis services; and enrollees in the Health Choice (SCHIP) program.

<sup>2</sup> Medicaid for Families with Dependent Children “provides medical coverage for parent(s) or other caretaker/relative with child(ren) age 18 and under in the household and for children under age 21.” (North Carolina Department of Human Services, 2012).

category, 10.3% in the 65 to 74-year old category, and 8.7% in the 75 years and older category.

The age intervals in the sampling frame of the child enrollees ranged between birth (0 years of age) and less than 19 years (although inclusion in the sampling frame required 6 months of enrollment in the CCNC, which eliminated newborns). The interval of 0 to less than 2-years of age contained 8.9% of the sampling frame with 32.3% in the 2 to less than 6-year age group, 17.1% in the 6 to less than 9-year age group, 20.1% in the 9 to less than 13-year age group, and finally, 21.6% in the 13 years of age to the less than 19 category.

In addition to the demographic variables of sex, race, and age, the research team at UNC Charlotte also analyzed the eligibility file data in terms of three important context variables – the CCNC network in which the Medicaid beneficiary was enrolled, the region of North Carolina in which the enrollee resided, and the degree of urbanicity of the county in which the enrollee lived. Stratifying the data in terms of these context variables provides varying degrees of differentiation that might otherwise be masked when analyzing aggregated, statewide data.

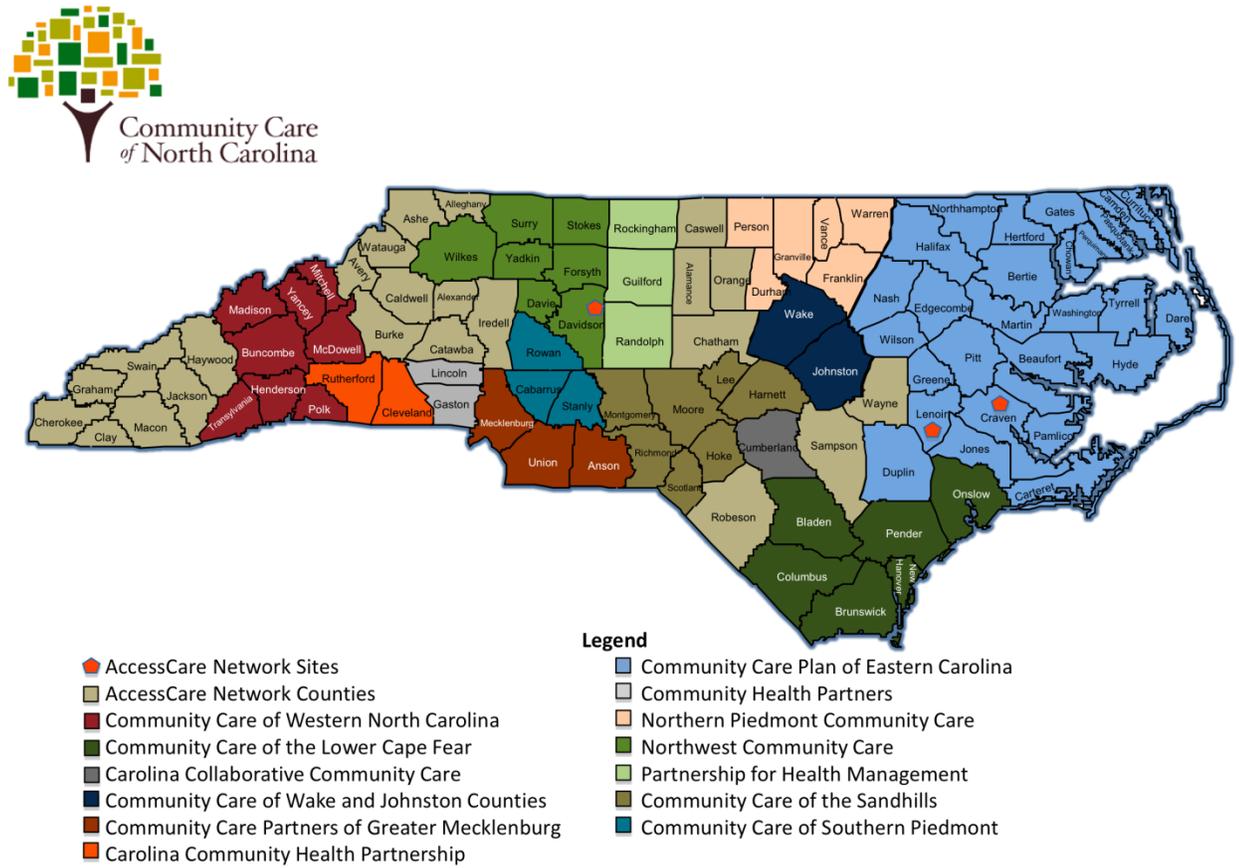
The care networks, or CCNCs, are the organizational units by which primary care is delivered to Medicaid managed care beneficiaries. Table 2-1 provides the names and network numbers of the fourteen care networks and Figure 2-1 displays the care networks on a map of North Carolina’s 100 counties. It should be noted that while most CCNC network sites are located in contiguous, multi-county areas, the AccessCare Network *counties* are non-contiguously distributed across the State and the AccessCare Network *sites* are located primarily in eastern North Carolina.

**Table 2-1: Community Care of North Carolina Networks**

AccessCare Network Sites and Counties (#1006)	Community Care Plan of Eastern North Carolina (#2000)
Community Care of Western North Carolina (#1007)	Community Health Partners (#1003)
Community Care of the Lower Cape Fear (#2004)	Northern Piedmont Community Care (#2007)
Carolina Collaborative Community Care (#1013)	Northwest Community Care Network (#2006)
Carolina Community Health Partnership (#1010)	Partnership for Health Management (#1012)
Community Care of Wake/Johnston Counties (#1011)	Community Care of the Sandhills (#2005)
Community Care Partners of Greater Mecklenburg (#1009)	Community Care of Southern Piedmont (#2003)

The *urbanicity* variable describes the enrollee’s residence in terms of its urban or rural character: urban, rural or mixed. Because federal revisions of 2000 rurality measures were not available when analysis of the 2012 Medicaid survey was undertaken, this report uses the categories employed in our previous report (Brandon, Schoeps, Sun, and Smith, 2008). This continuity has the advantage of enhancing the comparability of findings of the two reports.

Figure 2-1. Community Care of North Carolina Network Map



Source: CCNC August 2012

Source: Community Care of North Carolina. 2012. [accessed on August 14, 2012]. Available at: <https://www.communitycarenc.org/our-networks/ccnc-network-nc-county-maps/>

Table 2-2 depicts the nine levels of urbanicity from the 2003 Rural-Urban Continuum Codes, along with the frequency distribution of North Carolina’s 100 counties using 2000 Census data.<sup>3</sup>

**Table 2-2: Frequency Distribution of N.C. Counties in the Nine-Level Classification of County Urbanicity**

<i>Code</i>	<i>Defining Criteria</i>	<i>Number of N.C. Counties</i>
1	County in metropolitan area with population of 1 million or more	6
2	County in metropolitan area with population of 250,000 to 1 million	27
3	County in metropolitan area with population of fewer than 250,000	7
4	Nonmetropolitan county with urban population of 20,000 or more, adjacent to a metropolitan area	17
5	Nonmetropolitan county with urban population of 20,000 or more, not adjacent to a metropolitan area	2
6	Nonmetropolitan county with urban population of 2,500-19,999, adjacent to a metropolitan area	15
7	Nonmetropolitan county with urban population of 2,500-19,999, not adjacent to a metropolitan area	5
8	Nonmetropolitan county completely rural or less than 2,500 urban population, adjacent to metropolitan area	9
9	Nonmetropolitan county completely rural or less than 2,500 urban population, not adjacent to metropolitan area	12

**Source:** U.S. Department of Agriculture, Economic Research Services. 2004a. *Measuring Rurality: Rural-Urban Continuum Codes*. Economic Research Services, U.S. Department of Agriculture. Available at: [http://webarchives.cdlib.org/wayback.public/UERS\\_ag\\_1/20110913215735/](http://webarchives.cdlib.org/wayback.public/UERS_ag_1/20110913215735/) <http://www.ers.usda.gov/Briefing/Rurality/RuralUrbCon/>. Accessed on December 5, 2013.

The data in Table 2-2 were aggregated into the three general categories of *urban*, *rural*, and *mixed* as follows:

- codes 1, 2, and 3 constitute the “urban” category (counties located in metropolitan areas),
- codes 4 and 5 constitute the “mixed” category (counties located in non-metropolitan areas with populations of 20,000 or more),
- codes 6, 7, 8, and 9 comprise the “rural” category (counties located in non-metropolitan areas with populations less than 20,000).

<sup>3</sup> Two anomalies related to the classification of North Carolina counties are worthy of comment. One is the designation of Currituck County as an urban area. This county, which is located along the Atlantic coast in the extreme northeastern portion of the state, has a Census 2000 population of approximately 18,000 inhabitants and a low density of 69.5 persons per square mile. (The average density in North Carolina was 165.2 people per square mile.) Currituck is classified as metropolitan due to its inclusion in the Virginia Beach-Norfolk-Newport News, VA-NC Metropolitan Statistical Area.

The second anomaly involves the designation of Anson County as an urban county. This county is located in the southern Piedmont region of the state and has a Census 2000 population slightly greater than 25,000 but a population density of only 47.5 people per square mile. However, it is included in the Charlotte-Gastonia-Concord Metropolitan Statistical Area (U.S. Census Bureau, 2003).

Table 2-3 summarizes the number of North Carolina counties that fall within each of the three categories of urbanicity whereas Table 2-4 and Table 2-5 describe the categorical breakdown of urbanicity for the adult and child sampling frames, respectively.

**Table 2-3: Frequency Distribution of N.C. Counties in the Three-Level Classification of County Urbanicity.**

<i>Code</i>	<i>Number of Counties</i>
<i>Urban (1); metropolitan area</i>	40
<i>Mixed (2); Non-metropolitan with population ≥ 20,000</i>	19
<i>Rural (3); Non-metropolitan with population &lt; 20,000</i>	41

**Table 2-4: Frequency Distribution of Adult Sampling Frame Residence by Urbanicity**

	<i>(n = 148,140 )</i>
Urban	58.9%
Mixed	22.7%
Rural	18.4%

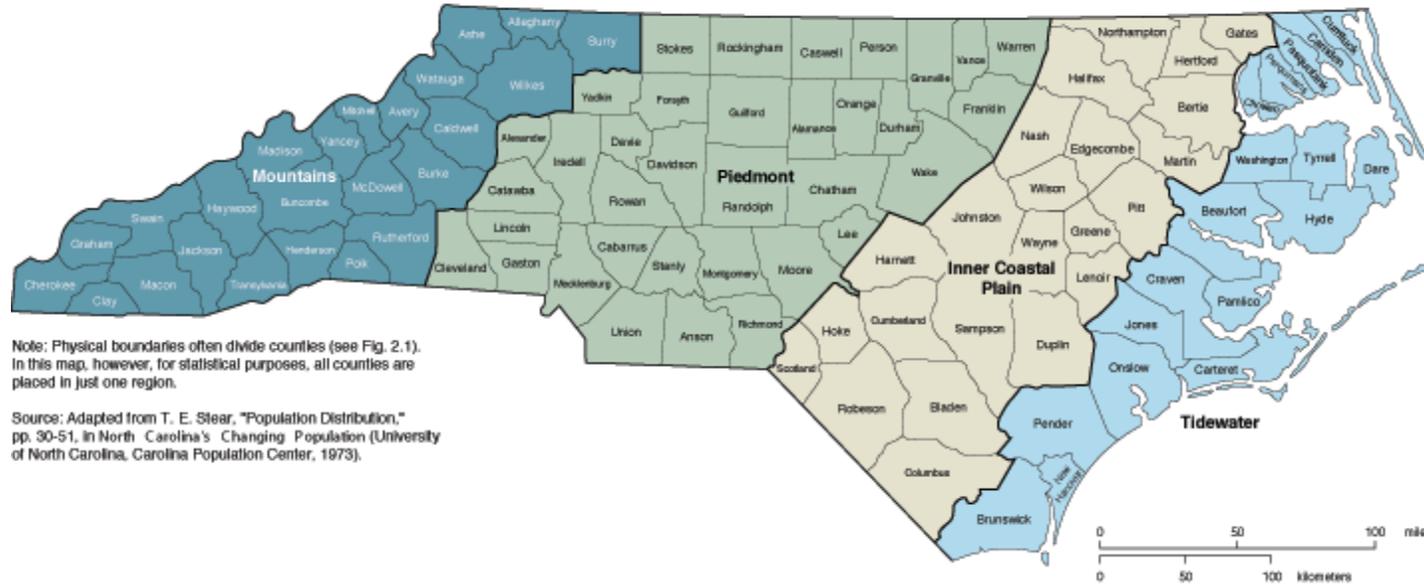
**Table 2-5: Frequency Distribution of Child Sampling Frame Residence by Urbanicity**

	<i>(n = 448,424 )</i>
Urban	64.5%
Mixed	21.4%
Rural	14.1%

*Region* represents the geographic region of the state where the enrollee has established residence. Values of this variable were determined by the template established by Diemer and Bobyarchick (2000) in the most recent hardbound version of the North Carolina Atlas that divided the state into four distinct land regions. The specific land regions are operationalized by assigning counties to one of the following four categories: (1) the Mountain region, consisting of the Appalachian Mountains and foothills sections of western North Carolina, (2) the Piedmont region, which consists of the Piedmont Plateau located in the center of the state, (3) the Coastal Plain region, which includes the land area in eastern North Carolina that is not directly adjacent to or influenced by the Atlantic Ocean, and (4) the Tidewater region, comprised of the land regions that lie adjacent to the Atlantic Ocean. A map that graphically depicts the specific land regions that define the region variable appears in Figure 2-2 and frequency distributions of the adult and child sampling frames by geographical region appear in Table 2-6 and Table 2-7, respectively.

**Figure 2-2: North Carolina Land Regions by County**

**Figure 1b.** Land Regions



Note: Physical boundaries often divide counties (see Fig. 2.1). In this map, however, for statistical purposes, all counties are placed in just one region.

Source: Adapted from T. E. Stear, "Population Distribution," pp. 30-51, in *North Carolina's Changing Population* (University of North Carolina, Carolina Population Center, 1973).

**North Carolina Land Regions by County**

***Mountains***

Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Surry, Swain, Transylvania, Watauga, Wilkes, Yancey

***Piedmont***

Alamance, Alexander, Anson, Cabarrus, Caswell, Catawba, Chatham, Cleveland, Davidson, Davie, Durham, Forsyth, Franklin, Gaston, Granville, Guilford, Iredell, Lee, Lincoln, Mecklenburg, Montgomery, Moore, Orange, Person, Randolph, Richmond, Rockingham, Rowan, Stanly, Stokes, Union, Vance, Wake, Warren, Yadkin

***Coastal Plain***

Bertie, Bladen, Columbus, Cumberland, Duplin, Edgecombe, Gates, Greene, Halifax, Harnett, Hertford, Hoke, Johnston, Lenoir, Martin, Nash, Northampton, Pitt, Robeson, Sampson, Scotland, Wayne, Wilson

***Tidewater***

Beaufort, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Hyde, Jones, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell, Washington

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**Table 2-6: Frequency Distribution of Adult Sampling Frame Residence by Region**

<i>Region</i>	<i>(n = 148,140 )</i>
Mountains	14.4%
Piedmont	45.3%
Coastal Plain	32.1%
Tidewater	8.2%

**Table 2-7: Frequency Distribution of Child Sampling Frame Residence by Region**

<i>Region</i>	<i>(n = 448,424)</i>
Mountains	12.8%
Piedmont	53.6%
Coastal Plain	25.7%
Tidewater	7.9%

**Consumer Assessment of Healthcare Providers and Systems (CAHPS)**

The CAHPS project is a private-public partnership that originated in 1995 with governmental support from the Agency for Healthcare Research and Quality (AHRQ, formerly known as the Agency for Health Care Policy and Research, or AHCPR), an entity housed within the U.S. Public Health Service of the U.S. Department of Health and Human Services (U.S. Department of Health and Human Services, Agency for Health Research and Quality, 2002). Private research organizations that were involved in the earliest stages of the development of the CAHPS survey products included the Harvard Medical School in Boston, Massachusetts, the RAND Corporation, a global policy think tank headquartered in Santa Monica, California, the Research Triangle Institute (RTI), one of the world’s leading research institutes located in Research Triangle Park, North Carolina, and Westat, a survey research firm with clients in both the private and public sectors and headquartered in Rockville, Maryland. The Health Care Financing Administration (HCFA, now known as the Centers for Medicare and Medicaid Services, or CMS) joined AHCPR as a CAHPS partner in January of 1996. The project officers from AHRQ and CMS, along with the contracting organizations (which now includes the American Institutes for Research, or AIR) and their partners and subcontractors constitute the CAHPS Consortium.

The *CAHPS Health Plan Survey 4.0, Adult Medicaid Questionnaire* and the *CAHPS Health Plan Survey 4.0, Child Medicaid Questionnaire* served as templates for the survey documents that were created by the UNC Charlotte research team and ultimately administered to program enrollees by the North Carolina Department of Health and Human Services. Both the adult and child survey instruments conformed to CAHPS guidelines that mandate the placement of various supplemental survey questions in relation to specific core questions.<sup>4</sup> In the case of the child survey, these questions included a number of items that evaluated the experience of children with chronic conditions. Additionally, a number of core and supplemental questions in both surveys were included to meet the criteria for *Health Home Experience of Care Assessment*, an

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<sup>4</sup> The sources for the supplemental questions were the *CAHPS Health Plan Survey 4.0, Supplemental Items for the Adult Questionnaires* and the *CAHPS Health Plan Survey 4.0, Supplemental Items for the Child Questionnaires*, respectively.

initiative established by the Centers for Medicare and Medicaid Services to evaluate beneficiaries' care in a health home.<sup>5</sup> (See Appendix B, The Child Survey.) Although all the questions necessary for evaluation were incorporated into these CAHPS surveys, the outside health home evaluators decided to gather their own data using another method. Moreover, the UNC Charlotte research team consulted various plan administrators and providers to ensure that any unique features pertinent to the experience of North Carolina Medicaid beneficiaries enrolled in CCNCs were integrated into the survey. As a result, several questions were slightly rephrased to reflect this variation (see Appendix C, Modifications of CAHPS Survey Items).

In the case of the child survey, the CAHPS protocol required that interviewers speak directly with a responsible adult who was knowledgeable about the health care of the child on Medicaid. Each CAHPS question surveying access, satisfaction, utilization, or health status clearly stated that the adult respondent was being asked about the child's experience.

In order to accommodate those households where English may not have been the primary language spoken in the home, Spanish versions of the adult and child surveys were created from the Spanish versions of the *CAHPS Health Plan Survey 4.0, Adult Medicaid Questionnaire* and the *CAHPS Health Plan Survey 4.0, Child Medicaid Questionnaire*, respectively. The corresponding supplemental items were appropriately positioned in accordance with CAHPS guidelines for item placement and skip patterns (see Appendix B). Questions that had been slightly modified in the English versions of the surveys by the UNC Charlotte research team were also modified in the Spanish versions. Translations were performed by a team of trained translators within the Department of Language and Culture Studies at UNC Charlotte and independently validated by Spanish speaking professors in UNC Charlotte's Political Science and Public Administration Department and in the College of Health and Human Sciences.

## Sample

A number of references, including Babbie (2004) and Bowling (2002), describe the virtues of random selection as the best probability sampling strategy in terms of minimizing sampling error and threats to validity as well as ensuring representativeness of the population. Additionally, Babbie points to stratification as a mechanism for selecting adequate numbers of homogeneous groups that facilitate group comparisons. Therefore, in order to permit statistically valid comparisons among the fourteen North Carolina Medicaid CCNCs, the UNC Charlotte research team combined the principles of random sampling and stratification into a single strategy – a stratified random sampling technique. The basis for selecting the network affiliation variable as the stratification variable was to facilitate cross-network comparisons of access and consumer satisfaction

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<sup>5</sup> The health home as a model of service delivery “expands on the traditional medical home models that many states have developed in their Medicaid programs, by building additional linkages and enhancing coordination and integration of medical and behavioral health care to better meet the needs of people with multiple chronic illnesses.” (Kaiser Family Foundation. 2011. p 1). See also U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services. 2013. *Health homes* at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Support/Integrating-Care/Health-Homes/Health-Homes.html>

of specific CCNC networks. State Medicaid officials instructed the UNC Charlotte researchers to design the study so that it would produce valid comparisons among the fourteen networks.

Adults: A stratified random sample of adults was obtained from the sampling frame created from the eligibility file data provided by the North Carolina Department of Health and Human Services. The stratification variable employed for this sampling procedure was *network affiliation*. A total of 3,000 adult enrollees in each network were randomly selected with the goal of obtaining 200 completed surveys in each of the fourteen care networks. The rationale for selecting 200 completed surveys in each network is that this number conforms to pre-study power and sample calculations intended to facilitate inter-network comparisons and to detect relatively small effect sizes (U.S. Department of Health and Human Services, 2008). Moreover, the basis for selecting the relatively high number of 3,000 adult enrollees for the drawn sample was to provide a sufficient number of enrollees to obtain the requisite 200 completed surveys, given the relatively low proportion (~54%) of adult enrollees in the sampling frame with phone numbers and other well-documented difficulties in locating Medicaid respondents by telephone surveys (i.e., lower than average literacy levels, high levels of mobility; see Brown, Nederend, Hays, Short, and Farley; 1999). Appendices A, D1-D3, and E1-E3 provide descriptive detail of the demographic and context variables at various levels of the sampling process namely, the sampling frame (N), the drawn sample, and the surveyed sample (n, or the “respondents”).

Children: The sampling goals and objectives for the child survey were similar to those in the adult survey. A stratified random sample of enrolled children was obtained from the children’s sampling frame. The stratification variable employed for this sampling procedure was again *network affiliation*, which allowed comparison of care networks as described above. An initial target sample of n = 2,000 enrollees in each network was selected with the objective of obtaining approximately 200 completed surveys in each network. The drawn sample size of n = 2,000 enrollees in each network was selected to obtain 200 completed surveys, given that 87.9% of child enrollees in the sampling frame had phone numbers, and also to allow for the other potential pitfalls of contacting Medicaid respondents as described above.

### Survey

Clearwater Research, Inc. conducted 3,199 computer-assisted telephone interviews (CATI) of the parents, guardians, or other knowledgeable adults from the drawn samples of enrolled children between June 4, 2012 and August 26, 2012. Additionally, Clearwater Research conducted 3,202 interviews of adult beneficiaries from the drawn samples of adults between July 5, 2012 and September 20, 2012. The child survey questionnaire, along with the percentage distributions of responses provided by survey respondents, appears in Appendix F, which is coded to indicate all statistically significant differences that emerged from the analysis conducted by the UNC Charlotte research team.

Research Involving Human Subjects. UNC Charlotte’s Institutional Review Board found the research that is the subject of this report, IRB reference 11-05-03, to be exempt from review on the grounds that it provides a public benefit. The fact that it has been conducted at the behest of a public agency was central to that finding. Nonetheless,

the researchers had to establish that participants in the survey provided consent by agreeing to be interviewed. No financial incentives were offered in exchange for participation in the survey.

Response Rates. Previous sections of this chapter have referenced the challenges of conducting telephone surveys of Medicaid populations and the implied difficulties associated with obtaining adequate response rates. These challenges were especially problematic in this study. The eligibility file data provided by the North Carolina Medicaid Division of Medical Assistance contained unsuitably small proportions of any potentially “workable” 10-digit phone numbers.<sup>6</sup> Specifically, only 62.9% of child enrollees in the child sampling frame and 3.3% of adult enrollees in the adult sampling frame had any workable 10-digit phone number recorded in the designated phone number fields of the Medicaid eligibility file data. The dearth of phone numbers prompted Medicaid plan administrators to contact state administrators of the federal Supplemental Nutrition Assistance Program (SNAP), or food stamp program, to extract and forward data to the UNC Charlotte research team for evaluation as a means of buttressing the phone number files. The UNC Charlotte research team merged the SNAP data with the Medicaid eligibility file data and determined that there was a considerable degree of beneficiary overlap between the two programs and that the quality of phone numbers in the SNAP database was far superior to that present in the Medicaid eligibility files. The result was a dramatic increase in the proportion of workable phone numbers to 87.9% (n = 394,151) for the child sampling frame and 52.8% (n = 78,270) for the adult sampling frame.

In a similar manner, state plan administrators contacted personnel within the North Carolina Division of Child Development and Early Education Services, a sister agency housed within the Department of Health and Human Services, to obtain additional telephone numbers of program participants who may also have been enrolled in a CCNC network. The net result of this strategy was a modest increase in the number of workable telephone numbers to 53.6% (n = 79,460) for the adult sampling frame. Appendix G describes the prevalence of workable phone numbers in both the adult and child sampling frames and compares those beneficiaries with phones to those without phones on selected key demographic variables.

The response rates reported for these two studies are based on responses to the telephone surveys when either a landline or wireless telephone number was available for the individual in the sample. The response rates were calculated in accordance with the standards and definitions employed by the American Association for Public Opinion Research, or AAPOR (2011). At the present time, there are no official AAPOR standards and definitions for CATI surveys, although this organization is seeking the cooperation of companies that perform CATI surveys to assist in the development and implementation of such standards. The standards and definitions presented below are specifically designed for random-digit dialing surveys but were adapted for use in this Medicaid telephone survey. The formula for calculating the response rate (RR) in this study is referred to as “Response Rate 2,” or “RR2” by AAPOR and considers a number of “dispositions” which are described below:

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<sup>6</sup> “Workable” phone numbers do **not** include “placeholder” phone numbers such as 000-000-0000, 111-111-1111, or 999-999-9999 or phone numbers with less than 10 digits. Phone numbers of this type comprised large proportions of the phone number fields in the eligibility file data sets.

$$RR = [(I+P) / [(I+P) + (R+NC+O) + (UH+UO)]] \times 100$$

where,

**RR** = the response rate, or “the number of complete interviews divided by the number of interviews (complete plus partial) plus the number of non-interviews (refusals and break-offs plus non-contacts plus others) plus all cases of unknown eligibility (unknown if household/occupied HU plus unknown, other)” (American Association for Public Opinion Research, p. 44),

**I** = the number of completed interviews (a form of an *eligible with response*),

**P** = the number of partial interviews (a second form of an *eligible with response*),<sup>7</sup>

**R** = the number of refusals or break-offs (forms of an *eligible, non-response*; a refusal “consists of cases in which some contact has been made with the telephone household and a responsible household member has declined to do the interview;” a break-off is defined as “a refusal sometime after the interview has commenced.”) (American Association for Public Opinion Research, p. 13),

**NC** = the number of non-contacts (a second form of an *eligible, non-response*; includes “cases in which the [telephone] number is confirmed as an eligible household, but the selected respondent is never available or only a telephone answering device is reached with only its message confirming a residential household.”) (American Association for Public Opinion Research, p. 14),

**O** = the number of other cases (a third form of an *eligible, non-response*; “other cases represent instances in which there is a respondent who did not refuse the interview, but no interview is obtainable. They include: a) death; b) the respondent’s physical and/or mental inability to do an interview; c) language problems; d) sound quality too poor/intermittent; e) location/activity not permitting an interview; and f) miscellaneous other reasons.”) (American Association for Public Opinion Research, p. 15),

**UH** = the number of cases of unknown household/occupied housing unit (a form of *unknown eligibility, non-interview*; cases “include situations in which it is not known if an eligible residential household exists at the sampled telephone number and those in which such a household exists, but it is unknown whether an eligible respondent resides there.”)<sup>8</sup> (American Association for Public Opinion Research, p. 15). Examples include: “a) always busy; b) no answer; c) a telephone answering message (e.g. voicemail or a telephone answering machine) that does not conclusively indicate whether the number is for a residential household or not; d) call-screening, call-blocking, or other telecommunication technologies that create barriers to getting through to a number; e) technical phone problems, e.g., phone circuit overloads, bad phone lines, phone company equipment switching problems, etc.; and f) ambiguous operator’s messages that do not make clear

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<sup>7</sup> A survey was designated as “complete” if the respondent answered all questions relating to access, satisfaction, utilization, and health status but may have omitted the demographic and communication questions in the survey. A small percentage of respondents in both the adult (0.5%) and child (1.8%) surveys failed to complete the entire survey, yet responded to a sufficient number of these pre-determined sections of the surveys to consider their disposition as “complete.”

<sup>8</sup> Multiple calls (<10) were made before giving up on numbers that no one answered.

whether the number is associated with a household or not.” (American Association for Public Opinion Research, p. 16),

**UO** = the number of cases of “ a miscellaneous other category [that] should be used for highly unusual cases in which the eligibility of the [phone] number is undetermined and which do not clearly fit into one of the above designations.”

Examples include “a case in which a number dialed is answered but not by a responsible adult” or “a case in which not enough information is gathered to ascertain eligibility.” (American Association for Public Opinion Research, p. 17).

Given the inclusion of each of these terms in the denominator of the response rate equation, it is clear that this formula is likely to lead to low response rates.<sup>9</sup>

Using the formula described above, the response rates calculated for the adult and child surveys were 34.8% and 36.6%, respectively. A large proportion of these figures is explained by the high refusal rate of 30.1% in the adult survey and 24.9% in the child survey, respectively. Fortunately, recent research suggests that surveys that can only obtain data on a small proportion of subjects included in a sample are still accurate representations of the underlying population so long as there is no systematic bias determining who responds and who does not (Groves, 2006; Keeter et al., 2006; Stag and Jockel, 2004; Triplett, 2008; but see contrary evidence in Holle et al., 2006). Appendix H summarizes the final disposition codes for all cases of the adult and child surveys.

### Data Analysis

Analysis of the quantitative data was conducted using IBM Statistical Package for the Social Sciences (SPSS) Statistics version 20.0 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 such interval/ratio-level data are the responses to the questions that ask about the number of doctor or emergency room visits.<sup>10</sup>

The Chi-square test was used to detect the overall statistical significance of the cross-tabulations. A statistical significance level of 0.05 was used after all “no response” or “don’t know” answers were eliminated from the data.<sup>11</sup> In the case of evaluating the statistical significance of a specific cell within a table, the *adjusted residual* was employed by SPSS. Values of the adjusted residual can be interpreted “roughly as z-scores (look for values well below -2 or above +2) to identify cells that depart markedly from the model of independence” (SPSS Inc., 1999, p. 70-71). All of the survey questions, including those without statistically significant differences in the answers, and the corresponding frequencies of survey responses appear in Appendix F.

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<sup>9</sup> It should be noted that the following situations are NOT included in the denominator of the response rate equation: non-working or disconnected numbers, dedicated fax or data lines, and special technological circumstances such as pagers.

<sup>10</sup> As a practical matter, Clearwater Research, Inc. programmed a maximum value of 30 visits into the CATI software questionnaire for these questions. Thus, in the highly unlikely event that the number of visits exceeded 30 in a six-month period, it is possible that the value of the ratio-level variable could be upper-censored at 30.

<sup>11</sup> A 0.05 significance level means that in 19 out of 20 times reported differences are most likely due to genuine differences in objective reality rather than random chance due to the fact that a sample is being used to generalize to a much larger population. Of course, probability dictates that in 1 of 20 analyses the results are due to chance variation in the data and its collection and do not indicate a genuine difference.

Chapter 3 reports the survey results by grouping the questions according to whether their focus is principally on access to care, satisfaction with care, health status, or utilization of care. These groupings become the section headings that organize the discussion in Chapter 4. Two other categories of questions, trust in the health care system and survey items relating to preferred communication modes and computer proficiency and use, are reported in a separate, forthcoming report. The trust and communication questions differ from the other four categories by reflecting the respondent's personal opinions to a greater extent, whereas the care-focused questions clearly ask adult caregivers to respond for and about the child.

In reporting the "Results" after grouping the questions by type, the authors begin by stating the question and providing the frequencies for each of its possible, multiple-choice answers without any analysis by independent variables. This form of univariate analysis is followed by providing bivariate analyses, where we cross-tabulate each question with the "demographic" variables (sex, race, dual-eligibility status, and age in the adult survey and sex, ethnicity, language and age in the child survey) and the "context" variables of CCNC care network, urbanicity of residence, and region of the state. Sufficient numbers of children were identified as "Hispanic" by the adult respondent to permit race to include ethnicity ("non-hispanic whites," "non-hispanic blacks," "Hispanics" and "other"). The adult population included large numbers of "dual-eligible" Medicaid recipients, who received both Medicare and Medicaid. Because dual eligibles typically suffer from serious chronic illness or disability, identifying that population in the analysis allows readers to judge whether those adults who are sicker experience Medicaid differently from those who are not designed by this proxy for chronic illness.

In the chapters that follow we present only those bivariate analyses that show significant differences at the 0.05 level. Readers wishing to find the number of valid responses used in each analysis, the percentage giving each answer, and a summary of the significant bivariate relationships should consult the appendices.

## PART II

### THE CHILD SURVEY

To provide a more coherent structure in presenting the findings, the research team grouped the questions into the categories of access, satisfaction, health status, and utilization, which are discussed in that order in each chapter that reports survey findings. The categories are somewhat loose and a number of questions overlap two or more categories. Sometimes we found it more meaningful to include a question in one group or another, because the survey had created a series of interrelated questions. Often whether a respondent was even asked a question depended on the answer to a prior question. (This relationship is sometimes termed the “skip pattern” in a survey.)

Part II also contains two chapters. The first chapter states how respondents answered the question on the survey and illustrates the answers in a simple graph. That introduction is followed by the presentation of all statistically significant differences (at the  $p < 0.05$  level) that emerged when the answers are examined by each of the individual demographic and context variables (ethnicity, gender/sex, age of the enrolled child, CCNC network to which the enrollee belongs, the degree of urbanicity of the county, and the region of the state in which the interview subject lives).

The concluding chapter in Part II discusses the analysis and interpretation of the results of the child survey. The only questions asked of respondents for children surveyed that have been omitted from consideration in *Policy Report 13* are the computer use and trust questions. Those questions were not part of the CAHPS instrument; they were added by the UNC Charlotte research team to capture information of particular interest to North Carolina Medicaid officials. The analysis and reporting of results of those questions will appear in a forthcoming volume.

### 3 RESULTS OF THE CHILD SURVEY

#### Access

Without question, access to health care is a basic criterion to improve health for any population, but this is especially true for the Medicaid population. Although lack of insurance is not a hindrance, this low income, lower than average education, and generally sicker population does have potential obstacles. This section attempts to unearth problems the NC Medicaid children have accessing health care and to note disparities where present across demographic and context variables.

As will be shown in other sections of this document, disparities in access between Hispanic and non-Hispanic children are widespread. The child's ethnicity is statistically significant in 21 of 33 access questions, with preferred adult respondent language ranking second at 9 questions (see Appendix I). In all cases with significant results, caregivers of Hispanic children reported less access than caregivers of non-Hispanic children. Access as related to preferred adult language generally aligned with child's ethnicity in that Spanish language and Hispanic ethnicity produced similar results.

Table CA-1 provides the access domain questions asked in the child's survey.

**Table CA-1 – Access Questions**

No.	Question
q4	In the last 6 months, when your child needed care right away, how often did your child get care as soon as you thought he or she needed?
q5	In the last 6 months, not counting the times your child needed care right away, did you make any appointments for your child's health care at a doctor's office or clinic?
q6	In the last 6 months, not counting the times your child needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought your child needed?
q10	In the last 6 months, how often did your child's doctors or other health providers make it easy for you to discuss your questions or concerns?
q16	In the last 6 months, did you need an interpreter to help you speak with your child's doctors or other health providers?
q17	In the last 6 months, when you needed an interpreter to help you speak with your child's doctors or other health providers, how often did you get one?
q18	In the last 6 months, did your child need an interpreter to help him or her speak with doctors or other health providers?
q19	In the last 6 months, when your child needed an interpreter to help him or her speak with your doctors or other health providers, how often did your child get one?
q21	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?
q23	Did you get an appointment for your child's visit for a check-up, or for shots or drops as soon as you thought he or she needed it?
q28	In the last 6 months, how often was it easy to get special medical equipment or devices for your child?

q29	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?
q31	In the last 6 months, how often was it easy to get special therapy, such as physical, occupational, or speech therapy for your child?
q32	Did anyone from your child's health plan, doctor's office, or clinic help you get this therapy for your child?
q34	In the last 6 months, how often was it easy to get treatment or counseling for your child for an emotional, developmental, or a behavioral problem?
q35	Did anyone from your child's health plan, doctor's office, or clinic help you get this treatment or counseling for your child?
q37	In the last 6 months, did anyone from your child's health plan, doctor's office, or clinic help coordinate your child's care among the different providers or services your child needed?
q38	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.
q46	In the last 6 months, how often did your child have a hard time speaking with or understanding doctors or other health providers because they spoke different languages?
q50	In the last 6 months, when you called after regular office hours, how often did you get the help or advice you needed for your child?
q52	Did your child have the same personal health provider <b>before</b> the child joined CAROLINA ACCESS, MEDICAID, or Health Check?
q53	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?
q57	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 try to make any appointments for your child to see a specialist?
q58	In the last 6 months, how often was it easy to get appointments for your child with specialists?
q59	In the last 6 months, 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?
q62	In the last 6 months, was the specialist your child saw most often the same doctor as your child's personal doctor?
q63	In the last 6 months, did you try to get any kind of care, tests, or treatment for your child through his or her health provider or health plan?
q64	In the last 6 months, how often was it easy to get the care, tests, or treatment you thought your child needed through his or her health provider or health plan?
q65	In the last 6 months, did you try to get information or help from office staff at your child's health provider or health plan?
Q69a	In the last 6 months, did you need transportation help from a non-family member to get your child to a medical appointment or to get a prescription filled?
Q69b	In the last 6 months, 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?
q72	In the last 6 months, how often was it easy to get your prescription medicine for your child through his or her health plan?
q73	Did anyone from your child's health plan, doctor's office, or clinic help you get your child's prescription medicines?

***Timeliness of Care Needed Right Away (q4)***

Question 4 was asked only of those caregivers who had indicated their child needed care right away in the last 6 months and inquired how often his/her child got care quickly enough. Figure CA-1 (n=866) reveals that 77.7% of caregivers indicated that care was always available quickly enough with 11.5% reporting that care was usually provided quickly enough. The balance (10.7%) reported that care was sometimes or never provided quickly enough.

**Figure CA-1** - In the last 6 months, when your child needed care right away, how often did your child get care as soon as you thought he or she needed?

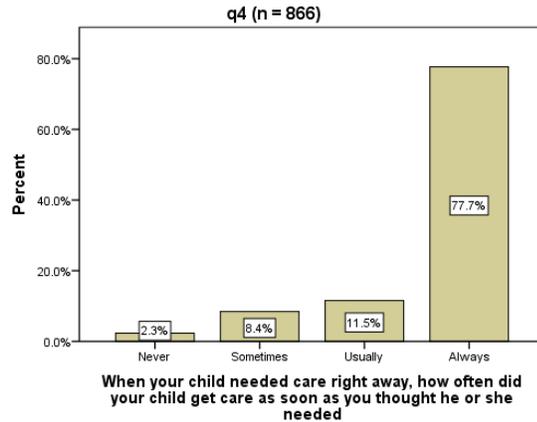


Figure CA-2 shows the relationship between the child's ethnicity and the caregiver's response to q4. Caregivers of Hispanic children generally reported more concerns with timely access, with only 58.4% reporting that care was always available quickly enough vs. 79.7% (Other) to 87.2% (Non-Hispanic Whites) reporting the same response. Only 3.5% of caregivers of White children reported care sometimes or never being available as soon as needed whereas 24.2% of caregivers of Hispanic expressing the same concern.

**Figure CA-2** - In the last 6 months, when your child needed care right away, how often did your child get care as soon as you thought he or she needed?

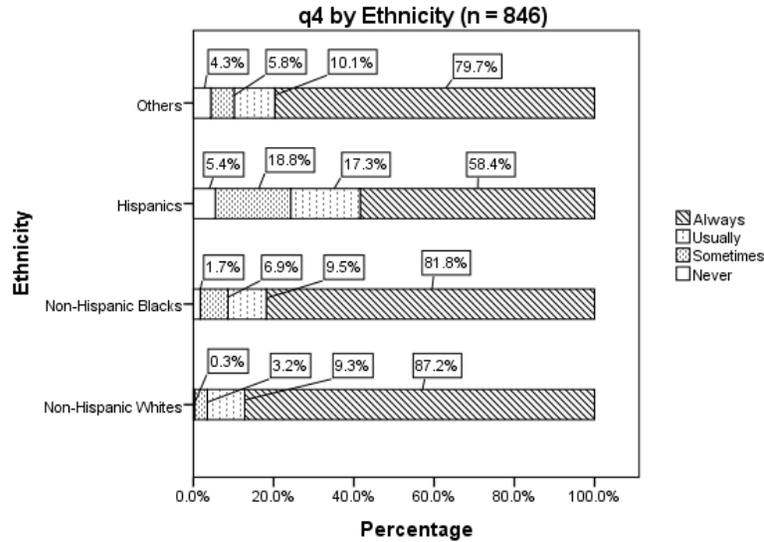
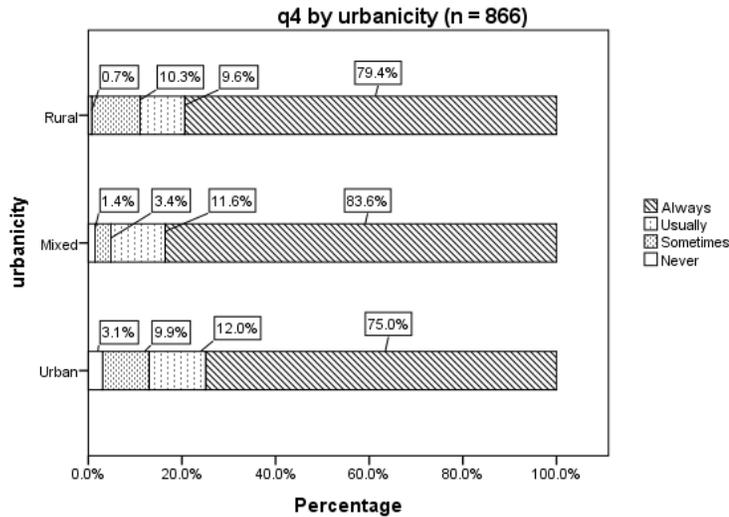


Figure CA-3 shows the relationship between the child’s county of residence urbanicity and the caregiver’s response to q4. The range of values reporting that care was usually or always timely enough was 87.0% (urban) to 95.2% (mixed).

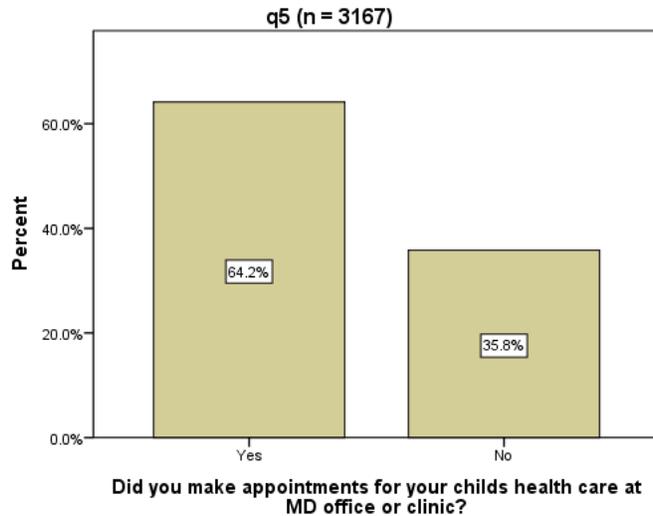
**Figure CA-3** - In the last 6 months, when your child needed care right away, how often did your child get care as soon as you thought he or she needed?



**Making Appointments at a Doctor’s Office or Clinic (q5)**

Question 5 asked caregivers if any non-urgent appointments were made on behalf of the child in the last 6 months. Figure CA-4 (n=3,167) indicates that 64.2% of children did have appointments scheduled.

**Figure CA-4** - In the last 6 months, not counting the times your child needed care right away, did you make any appointments for your child’s health care at a doctor’s office or clinic?



The relationship between the child’s ethnicity and q5 responses is shown in Figure CA-5. Significant differences were seen along ethnic lines with 71.3% and 75.3% of caregivers of Non-Hispanic Black and White children, respectively, reporting that they had made an appointment for their child while the same was reported by only 47.1% of caregivers of Hispanic children.

**Figure CA-5** - In the last 6 months, not counting the times your child needed care right away, did you make any appointments for your child’s health care at a doctor’s office or clinic?

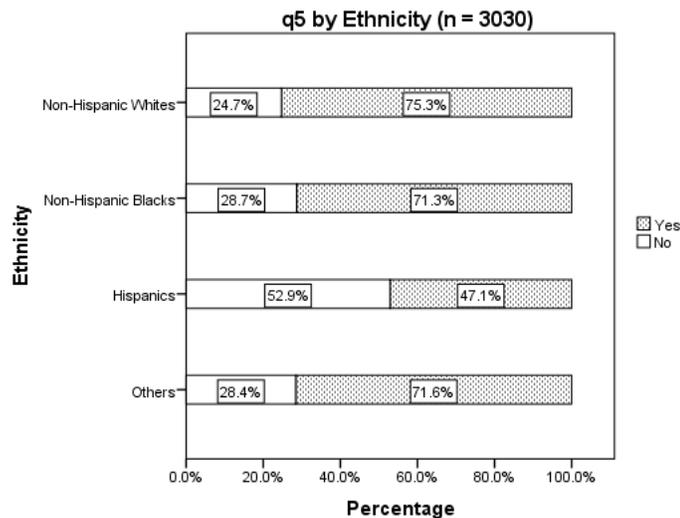


Figure CA-6 shows a strong bias based on the caregiver’s preferred language. While 72.8% of English-preferred caregivers report scheduling appointment(s) for the child, only 44.2% of Spanish-preferred caregivers report the same for their children.

**Figure CA-6 -** In the last 6 months, not counting the times your child needed care right away, did you make any appointments for your child’s health care at a doctor’s office or clinic?

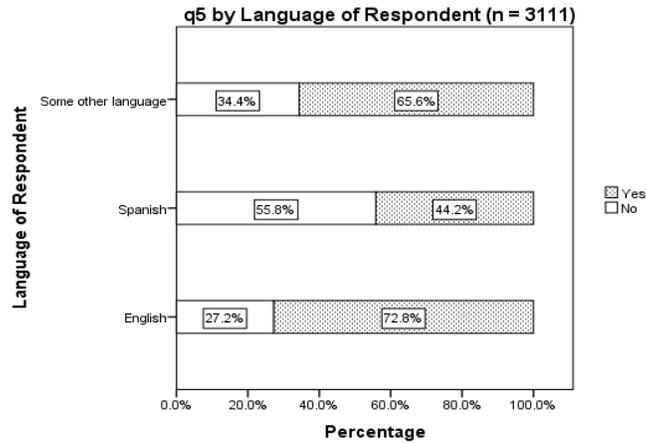
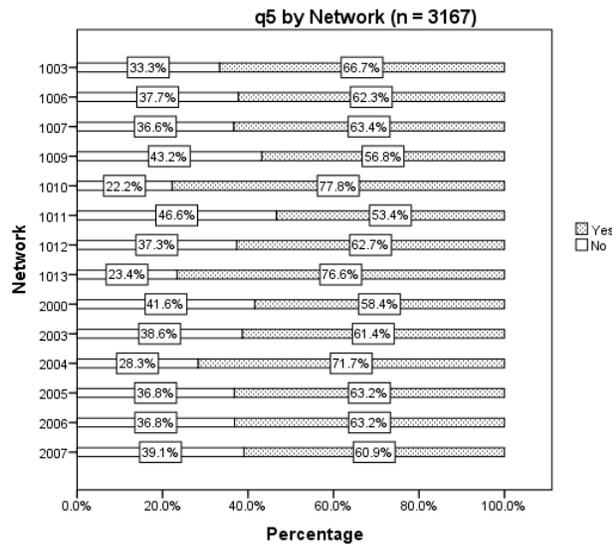


Figure CA-7 reveals the relationship between CCNC network and the responses to q5. The Carolina Community Health Partnership (1010) and the Carolina Collaborative Community Care (1013) had the highest proportions (77.8% and 76.6%, respectively) of caregivers indicating that appointments had been scheduled for the child whereas Community Care of Wake/Johnson (1011) had the lowest proportion (53.4%).

**Figure CA-7 -** In the last 6 months, not counting the times your child needed care right away, did you make any appointments for your child’s health care at a doctor’s office or clinic?



**Timeliness of Non-Urgent Appointments (q6)**

Question 6 asked if caregivers thought their children had gotten appointments quickly enough for non-urgent needs in the last 6 months. Q6 was asked only of those caregivers who indicated their child had been to a doctor’s office or clinic (n= 2,025). Figure CA-8 indicates that 84.0% of respondents indicated that appointments were

usually or always scheduled quickly enough, whereas 14.2% indicated appointments were only scheduled quickly enough sometimes. Only 1.6% reported that appointments were never scheduled quickly enough.

**Figure CA-8**– In the last 6 months, not counting the times your child needed care right away, how often did you get an appointment for your health care at a doctor’s office or clinic as soon as you thought your child needed?

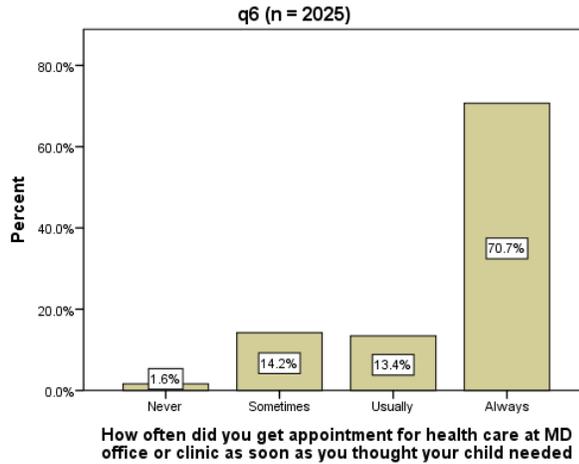
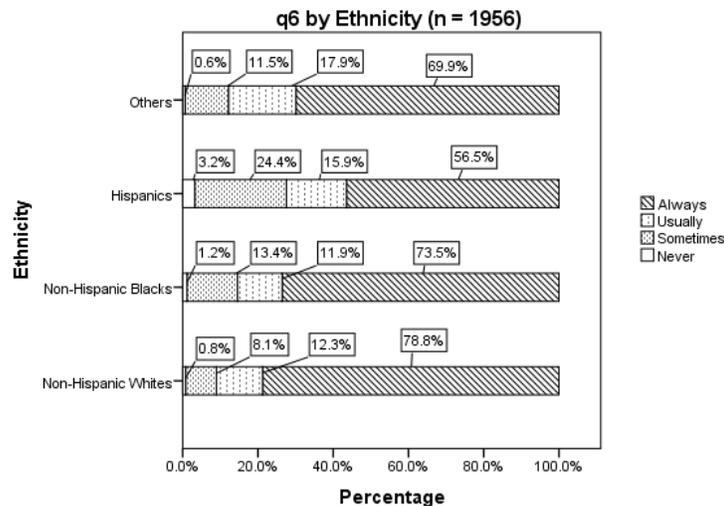


Figure CA-9 shows the relationship between the child’s ethnicity and caregiver’s response to q6. Generally, caregivers of Hispanic children did not believe they got timely appointments as often as did caregivers of non-Hispanic children. Specifically, 78.8% of caregivers of White children felt appointments were always obtained quickly enough while only 56.5% of Hispanics felt the same way. Caregivers of Black children report similar results to those of White children, but the results were not significant.

**Figure CA-9**– In the last 6 months, not counting the times your child needed care right away, how often did you get an appointment for your health care at a doctor’s office or clinic as soon as you thought your child needed?



***Ease of Discussing Health Concerns (q10)***

Question 10 asked caregivers how often in the previous 6 months the child’s health providers made it easy to discuss questions or concerns about the child’s health. This question was asked only of those caregivers (n=723) who indicated they had had these types of concerns. Figure CA-10 shows the univariate results with 68.6% of caregivers indicating it was always easy to have these discussions.

**Figure CA-10** – In the last 6 months, how often did your child’s doctors or other health providers make it easy for you to discuss your questions or concerns?

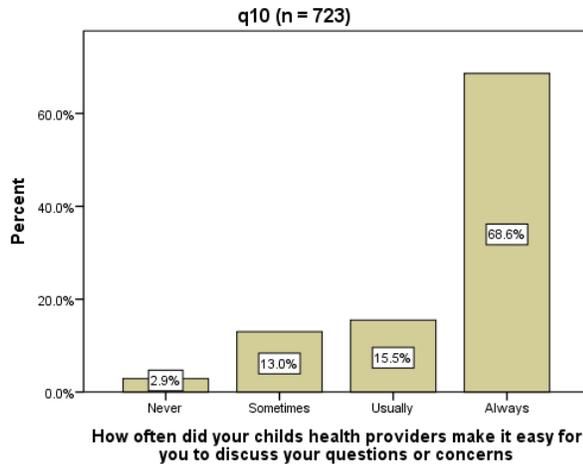


Figure CA-11 shows the relationship between the sex of the child and the caregiver’s response to q10. Although none of the individual results was significant, caregivers of male children did report it being always easy more often (73.1%) than those of females (63.7%).

**Figure CA-11** – In the last 6 months, how often did your child’s doctors or other health providers make it easy for you to discuss your questions or concerns?

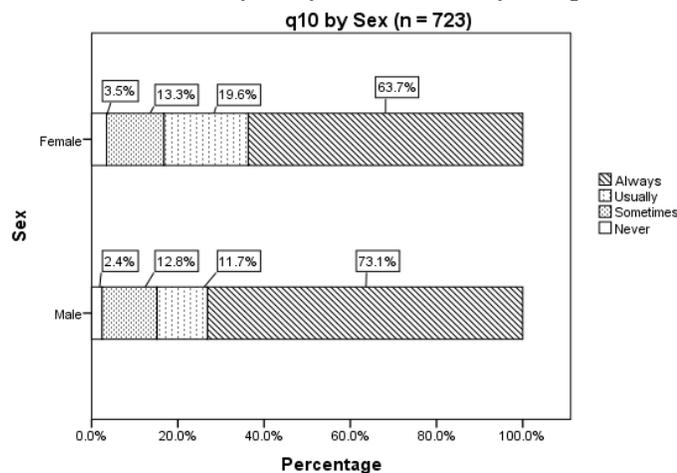
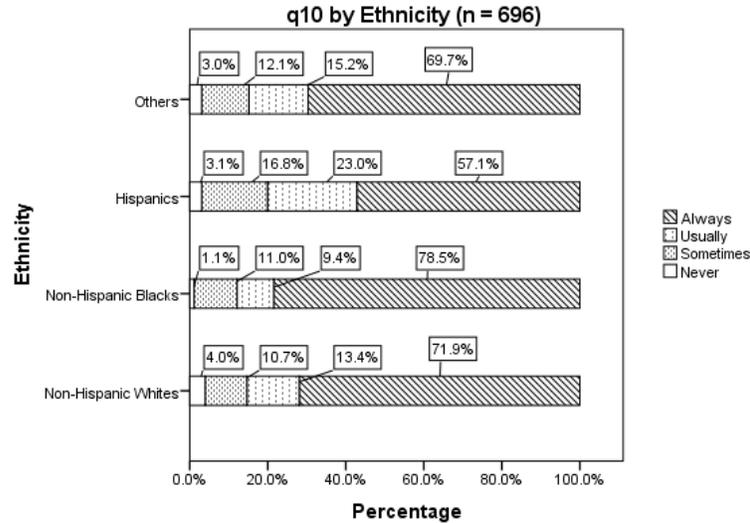


Figure CA-12 reveals the relationship between the child’s ethnicity and the caregiver’s response to q10. Although no individual relationships were significant,

78.5% of Non-Hispanic Black caregivers felt it was always easy to discuss health concerns with providers whereas only 57.1% of Hispanic caregivers felt the same way.

**Figure CA-12** – In the last 6 months, how often did your child’s doctors or other health providers make it easy for you to discuss your questions or concerns?



**Caregiver’s Need for An Interpreter (q16)**

Question 16 asked if the caregiver needed an interpreter to communicate with the child’s health care providers in the last 6 months. Figure CA-13 provides the results for 2,253 respondents to this question showing that 15.7% of caregivers needed this assistance.

**Figure CA-13** – In the last 6 months, did you need an interpreter to help you speak with your child’s doctors or other health providers?

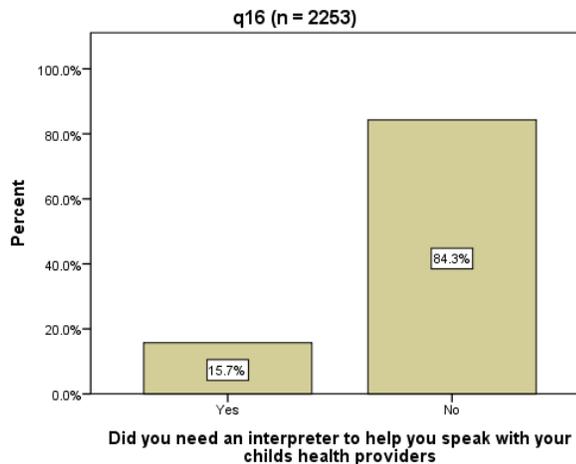
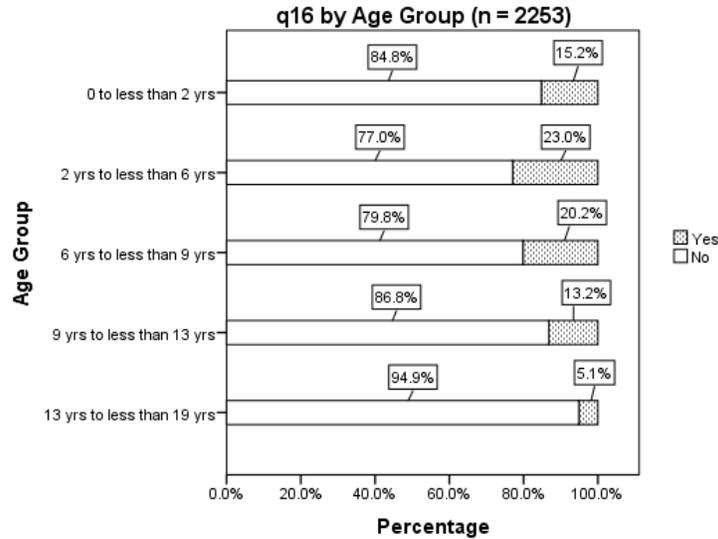


Figure CA-14 shows the relationship between the child’s age and the caregiver’s need for interpreting assistance to communicate with health providers (q16). A general trend was seen that the older the child, the lower proportion of caregivers that needed

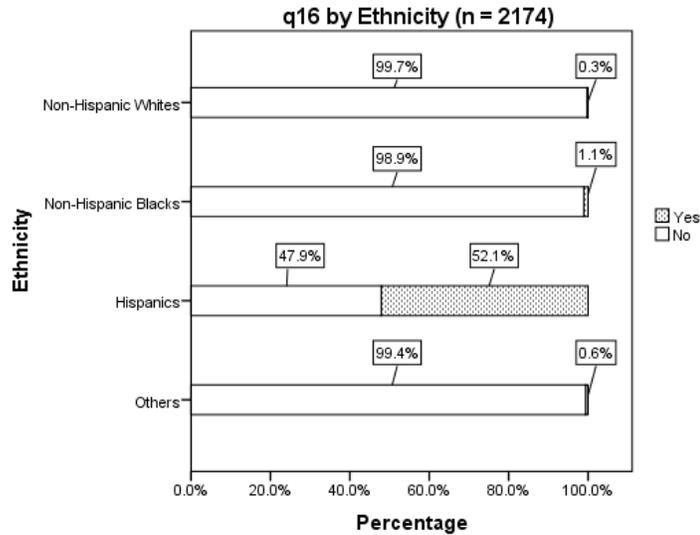
interpretation assistance. Specifically, 23.0%, 20.2%, and 5.1% of caregivers of 2-5, 6-8, and 13-18 year-old children, respectively, needed interpretation assistance when speaking to providers. The non-ordered value for 0-1 year-olds (15.2%) may be an artifact of the “aging” caused by the time lag between the dates of study eligibility and survey fielding. This phenomenon is particularly impactful on the narrow age band that is bounded sharply at the low end by the birth of the child.

**Figure CA-14** – In the last 6 months, did you need an interpreter to help you speak with your child’s doctors or other health providers?



Not surprisingly, Figure CA-15 reveals that caregivers of Hispanic children were the most prevalent in needing interpretation assistance (52.1%) with much smaller proportions of other ethnicities reporting need (0.3-1.1%). Figure CA-16 shows an even more pronounced relationship between caregiver-preferred language and interpretation need with 66.9% of Spanish-preferring caregivers having needed interpretation help to speak to health providers.

**Figure CA-15** – In the last 6 months, did you need an interpreter to help you speak with your child’s doctors or other health providers?



**Figure CA-16** – In the last 6 months, did you need an interpreter to help you speak with your child’s doctors or other health providers?

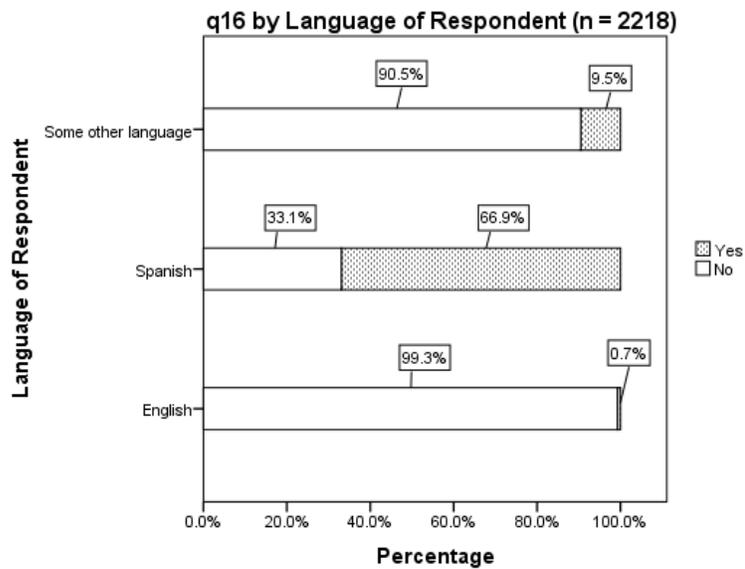


Figure CA-17 shows the relationship between state geographic region and the caregiver’s need for interpretation help to speak with the child’s health care providers. The proportion of caregivers requiring this assistance ranged from 7.8% in the Mountains to 20.7% in the Piedmont.

**Figure CA-17** – In the last 6 months, did you need an interpreter to help you speak with your child’s doctors or other health providers?

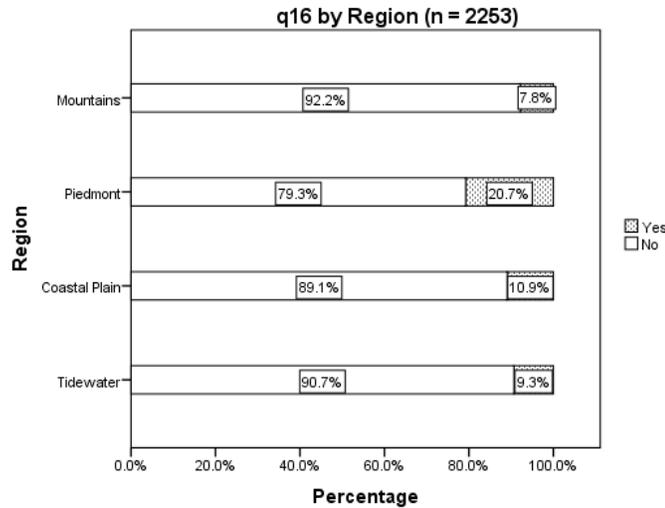


Figure CA-18 depicts a wide range of caregiver need for interpretative services across the CCNC networks. At the low end of caregiver need for an interpreter to communicate to the child’s health provider were the Carolina Community Health Partnership (1010) and Carolina Collaborative Community Care (1013) networks at 0.6% and 3.6%, respectively, of caregiver respondents. The greatest proportional assistance needs were in the Northern Piedmont Community Care (2007) and the Community Care Partners of Greater Mecklenburg (1009), wherein 25.6% and 27.8%, respectively, of caregivers needed interpreting assistance.

**Figure CA-18** – In the last 6 months, did you need an interpreter to help you speak with your child’s doctors or other health providers?

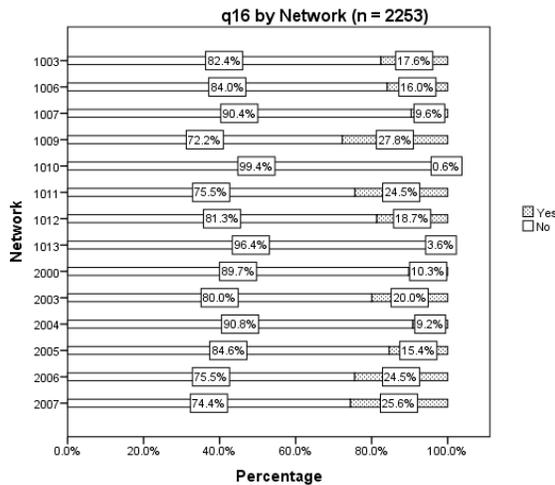
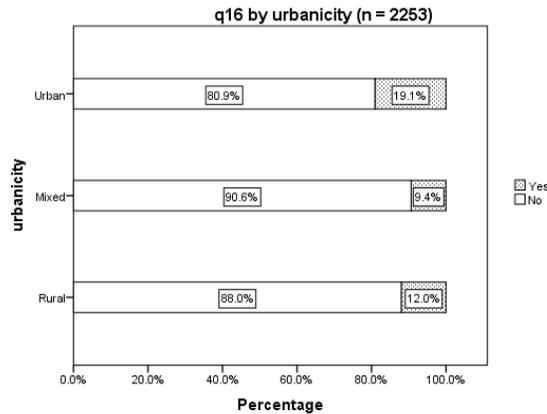


Figure CA-19 shows the relationship between urbanicity and the responses to q16. The proportions of caregivers that reported needing interpretation services to speak to health care providers ranged from 9.4% in the mixed urbanicity counties to 19.1% in the urban counties.

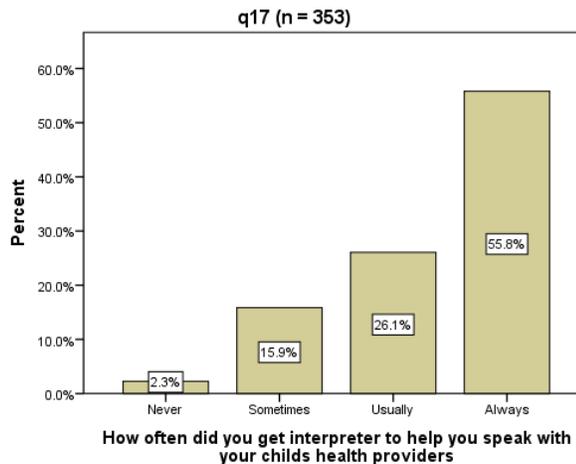
**Figure CA-19** – In the last 6 months, did you need an interpreter to help you speak with your child’s doctors or other health providers?



**Ease of Access to an Interpreter for Caregivers (q17)**

Figure CA-20 shows the results for question 17, which asked of the caregivers that needed interpretation help in the previous 6 months (n=353) how often they were able to get this assistance. The survey indicates that 81.9% of caregivers usually or always received the help needed, while 18.2% of caregivers sometimes or never received the needed help. No significant relationships were seen between the q17 results and any of the demographic or context variables.

**Figure CA-20** – In the last 6 months, when you needed an interpreter to help you speak with your child’s doctors or other health providers, how often did you get one?



**Child’s Need for an Interpreter (q18)**

Figure CA-21 provides the results of question 18, which asks the caregiver if, in the last 6 months, the child needed an interpreter to help speak to health providers. Of the 2,252 caregivers of whom this question was asked, 9.2% reported that their child did need this assistance.

**Figure CA-21** – In the last 6 months, did your child need an interpreter to help him or her speak with doctors or other health providers?

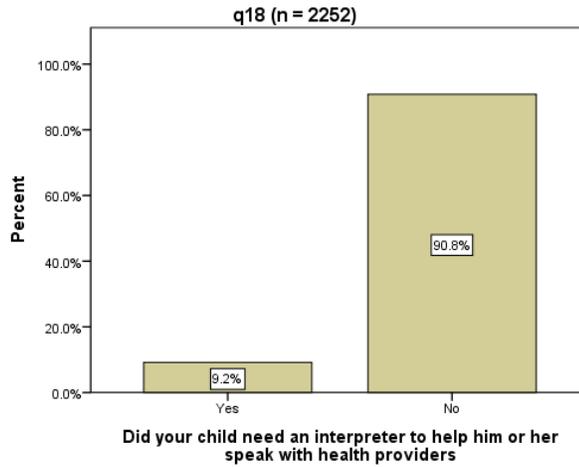


Figure CA-22 shows the relationship between the child’s age and whether he or she needed an interpreter to talk to health care providers. Similar to the caregiver’s need for interpretation assistance in q16, the data show a general trend downward in need for assistance as child age increased. This observation ranged from 15.8% of 2-5 year-olds needing help down to 1.8% of 13-19 year-olds.

**Figure CA-22** – In the last 6 months, did your child need an interpreter to help him or her speak with doctors or other health providers?

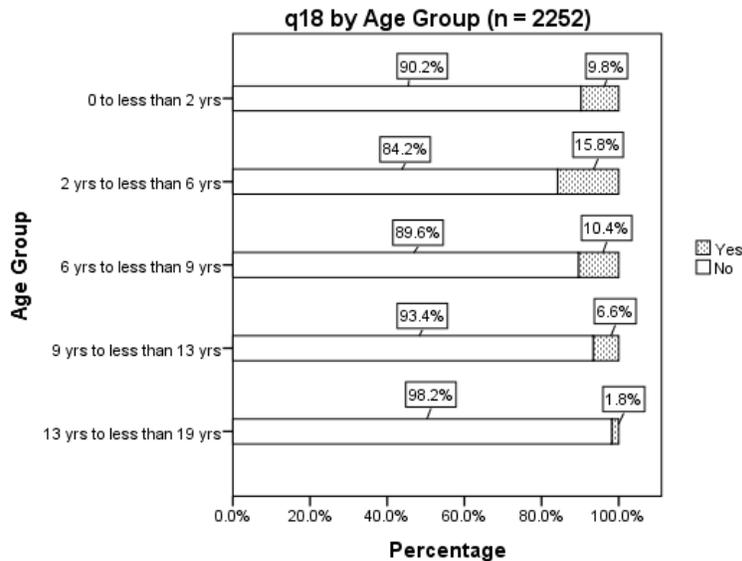
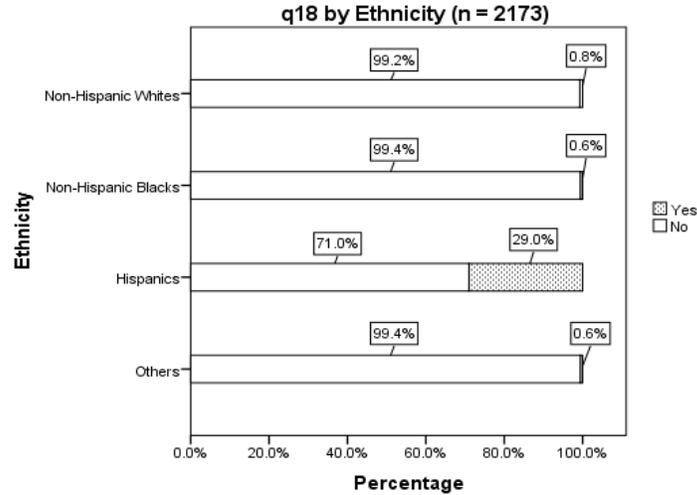


Figure CA-23 shows the relationship between the child’s ethnicity and his/her need for interpretation assistance to speak to health care providers. Hispanic children had the greatest proportion needing interpretation assistance (29.0%) with much smaller proportions of other ethnicities reporting need (0.6-3.4%). Figure CA-24 shows a somewhat steeper relationship between caregiver-preferred language and the child

needing interpretation help with 37.6% of Spanish-speaking caregivers reporting that their child needed interpretation assistance.

**Figure CA-23** – In the last 6 months, did your child need an interpreter to help him or her speak with doctors or other health providers?



**Figure CA-24** – In the last 6 months, did your child need an interpreter to help him or her speak with doctors or other health providers?

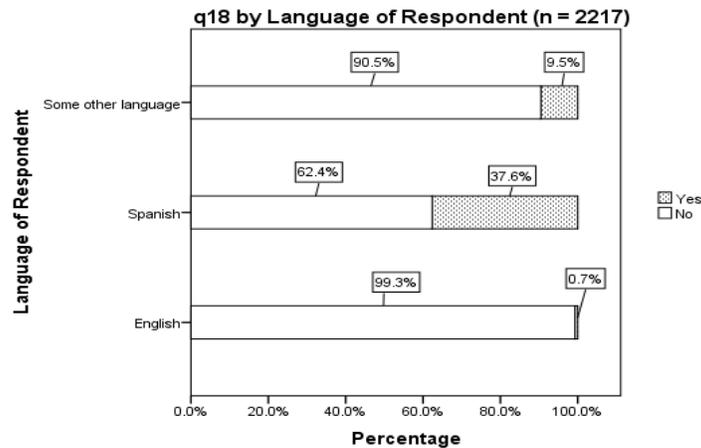


Figure CA-25 shows how the child’s need for interpretation assistance varies across North Carolina. The Piedmont region had the greatest proportion of surveyed children reported to need interpretation assistance at 12.5% with the Coastal Plain and Mountain regions reporting the lowest at 5.0% and 5.1%, respectively.

**Figure CA-25** – In the last 6 months, did your child need an interpreter to help him or her speak with doctors or other health providers?

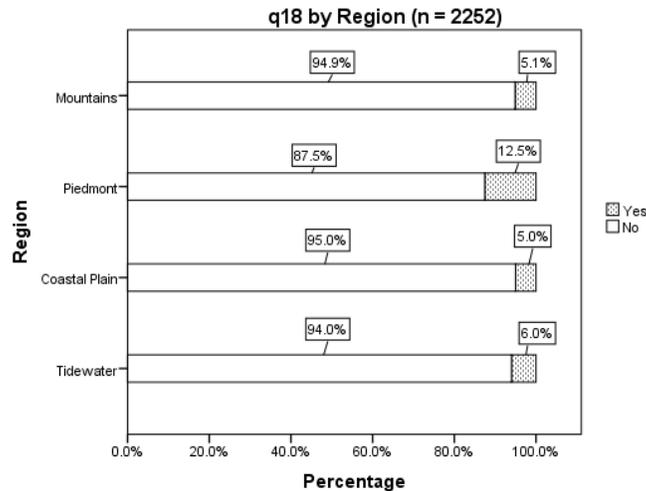


Figure CA-26 depicts a wide range of child need for interpretative services across the CCNC networks with the same networks having significant relationships as in q16 (caregiver need for interpretation help). At the low end of child need for an interpreter to communicate to the child’s health provider were the Carolina Community Health Partnership (1010) and Carolina Collaborative Community Care (1013) networks at 1.9% and 0.5%, respectively, of caregiver respondents. The greatest proportional assistance needs were in the Northern Piedmont Community Care (2007) and the Community Care Partners of Greater Mecklenburg (1009), wherein 16.4% and 19.8%, respectively, of children needed interpreting assistance.

**Figure CA-26** – In the last 6 months, did your child need an interpreter to help him or her speak with doctors or other health providers?

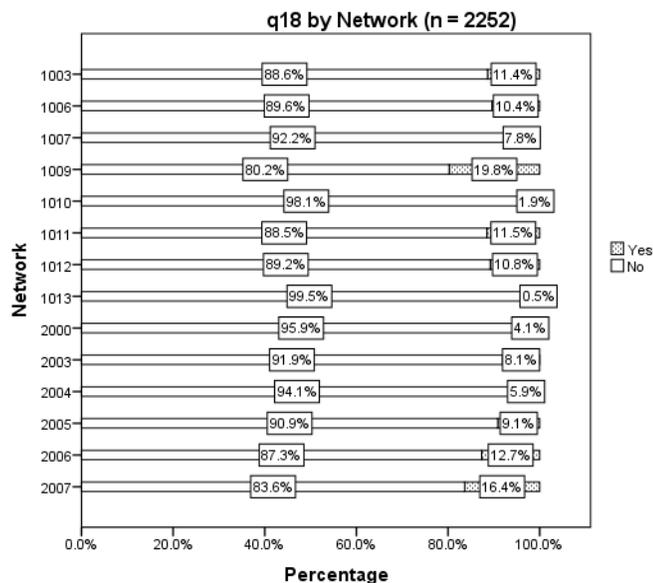
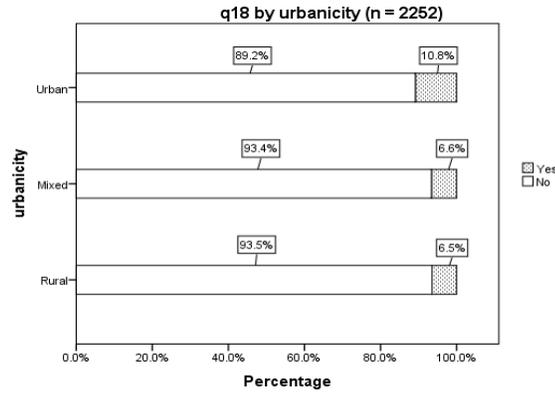


Figure CA-27 shows the relationship between urbanicity of the county of residence of the child and the child’s need for interpreting assistance to speak with health

providers. The Urban and Rural designations had the highest and lowest proportions of caregivers who report their children needing this assistance at 10.8% and 6.5%, respectively.

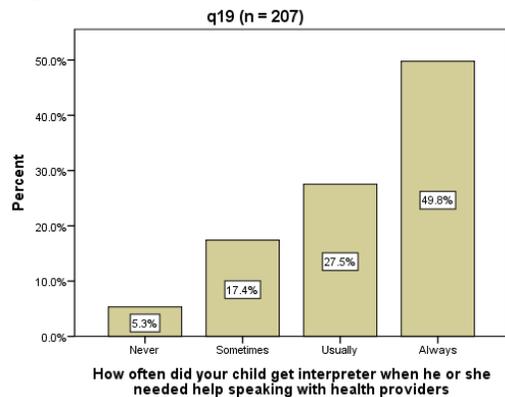
**Figure CA-27** – In the last 6 months, did your child need an interpreter to help him or her speak with doctors or other health providers?



**Ease of Access to an Interpreter for Children (q19)**

Figure CA-28 shows the results for question 19, which asked of the caregivers whose children needed interpretation help in the previous 6 months (n=207) how often they were able to get this assistance. The survey indicates that 77.3% of children usually or always received the help needed, while 22.7% of children only sometimes or never received the needed help. No significant bivariate relationships were observed between q19 and any of the demographic or context variables.

**Figure CA-28** – In the last 6 months, when your child needed an interpreter to help him or her speak with your doctors or other health providers, how often did your child get one?



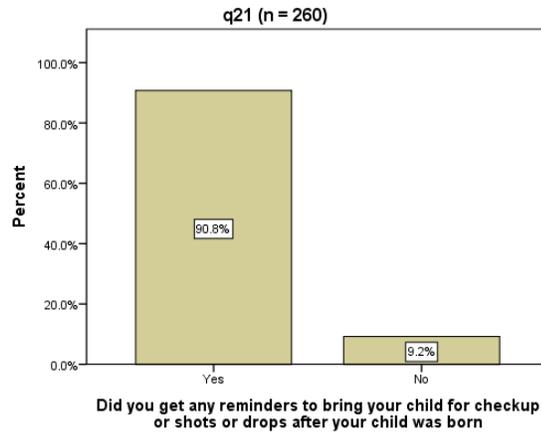
**Reminders About Preventive Care for Young Children (q21)**

Question 21 asked the caregivers of children under 2 years old (n=260) if they had received any reminders to bring the child in for a well visit or for shots or drops. Figure CA-29 reveals that 90.8% of caregivers report having received these reminders. No

significant bivariate relationships were seen between q21 and any of the demographic or context variables.

The “aging” phenomenon resulting from the time lag (7-9 months) between survey eligibility determination and when the survey was in the field had an unavoidable and possibly significant impact by reducing the desired number of respondents on questions 21 and 23.

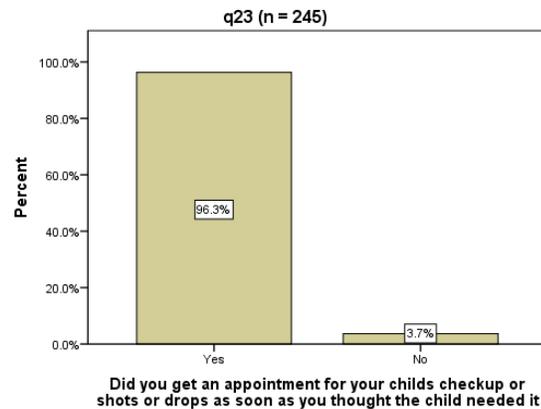
**Figure CA-29** –After your (0-1 year-old) child was born, did you get any reminders to bring him or her in for a check-up to see how he or she was doing or for shots or drops?



**Timeliness of Getting an Appointment for Well-care (q23)**

Question 23 asked the caregivers of children under 2 years old who had gotten an appointment for well-care if this appointment was arranged as quickly as needed (n=245). Figure CA-30 indicates that 96.3% of caregivers reported that the appointment was arranged as quickly as needed. No significant bivariate relationships were observed between q23 results and any of the demographic or context variables.

**Figure CA-30** - Did you get an appointment for your child’s (0-1 years old) visit for a check-up, or for shots or drops as soon as you thought he or she needed it?



**Ease of Securing Special Medical Equipment (q28)**

Question 28 asked caregivers of children who needed special equipment or devices (n=207) how often it was easy to get these items. Figure CA-31 indicates that 67.6% of caregivers reported it always easy, whereas 27.6% reported it usually or sometimes easy to get the needed equipment.

**Figure CA-31** – In the last 6 months, if needed, how often was it easy to get special equipment or medical devices, such as a walker, wheelchair, nebulizer, feeding tubes, or oxygen equipment for your child?

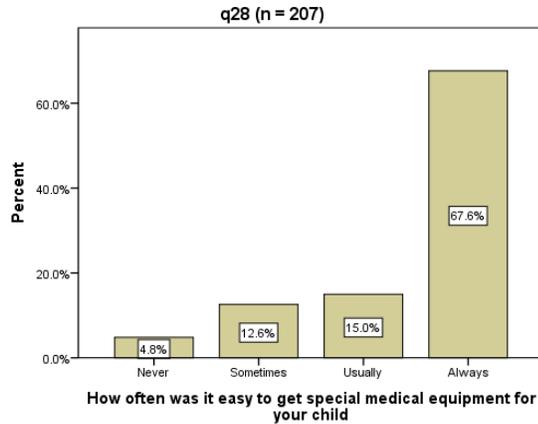
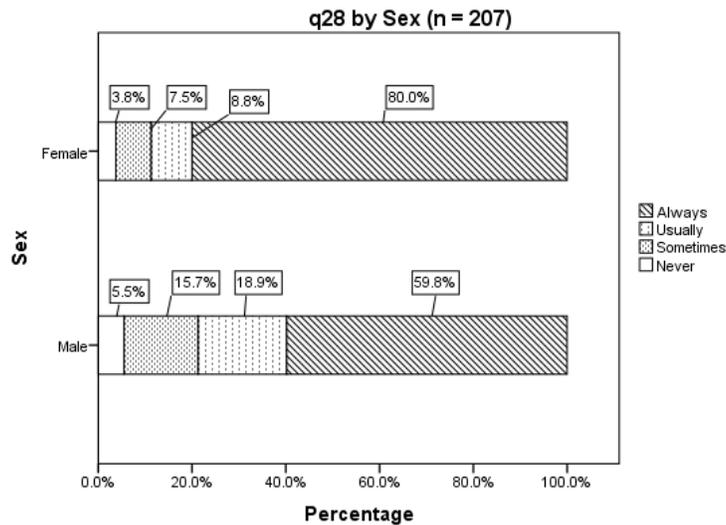


Figure CA-32 describes the relationship between the child’s sex and the responses to q28. Interesting observations include noting that 80.0% of caregivers of female children reported it always easy to get the special equipment as compared to 59.8% of males.

**Figure CA-32** - In the last 6 months, if needed, how often was it easy to get special equipment or medical devices, such as a walker, wheelchair, nebulizer, feeding tubes, or oxygen equipment for your child?



**Assistance Securing Special Medical Equipment (q29)**

Question 29 asked caregivers whose children needed special equipment (n=208) if they received any assistance from their health plan or providers in getting their children’s needed special equipment. Figure CA-33 indicates that 81.3% of caregivers indicated they did receive help in meeting these special equipment needs.

**Figure CA-33** – Did anyone from your child’s Carolina Access, Medicaid, Health Check, doctor’s office, or clinic help you get special medical equipment or devices for your child?

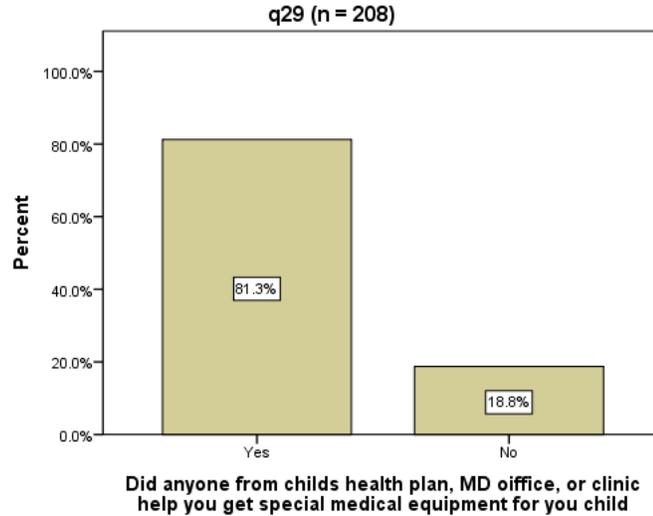


Figure CA-34 shows the relationship between the child’s age and whether the caregiver received assistance in securing needed special medical equipment or devices. Significant results include 66.7% of children 9-12 year-olds getting this assistance going up to 93.8% of 2-5 year-olds getting help.

**Figure CA-34** – Did anyone from your child’s Carolina Access, Medicaid, Health Check, doctor’s office, or clinic help you get special medical equipment or devices for your child?

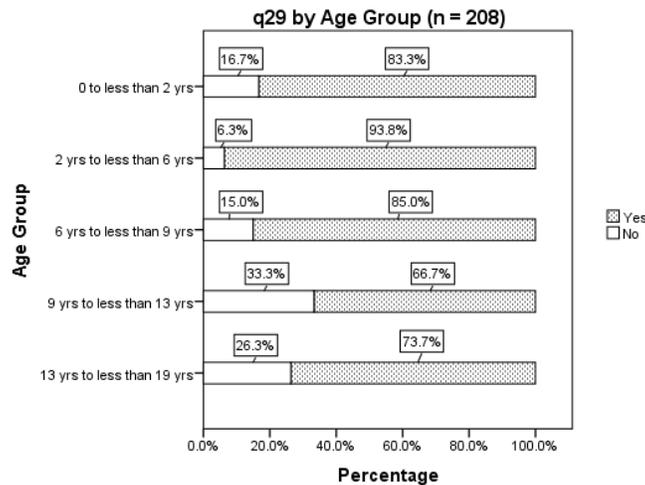
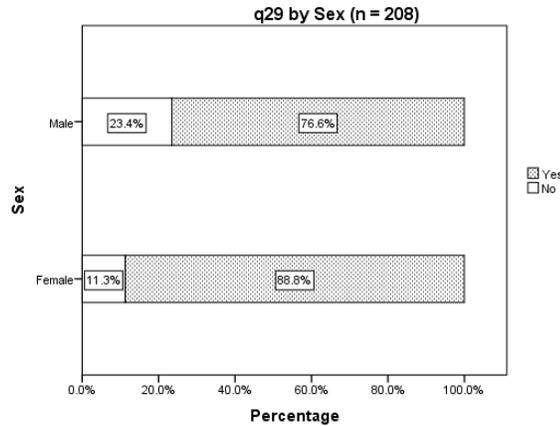


Figure CA-35 describes the relationship between the child’s sex and whether the caregiver reported receiving assistance to get special medical equipment. The proportion of male children getting this assistance was 76.6% while 88.8% of female children received help.

**Figure CA-35** – Did anyone from your child’s Carolina Access, Medicaid, Health Check, doctor’s office, or clinic help you get special medical equipment or devices for your child?



**Ease of Getting Special Therapy For the Child (q31)**

Question 31 asks the caregivers of children who required special therapy (n=338) how often it was easy to arrange the therapy. Figure CA-36 indicates that 73.4% of caregivers indicated this care was usually or always easy to get but 11.5% reported it was never easy to get.

**Figure CA-36** – In the last 6 months, how often was it easy to get special therapy such as physical, occupational, or speech therapy for your child?

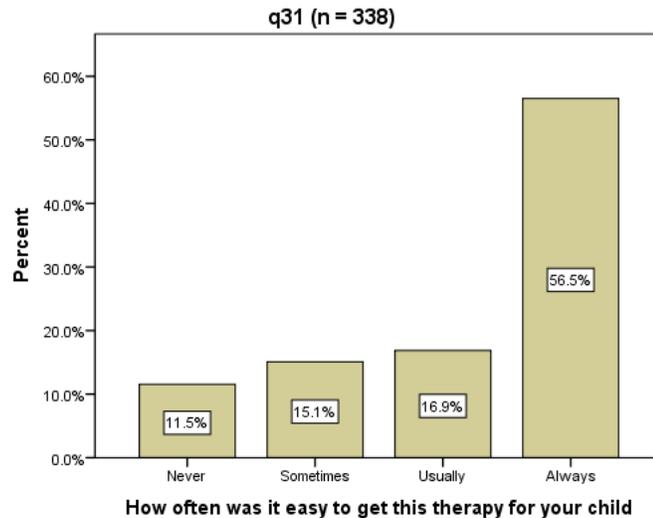


Figure CA-37 shows the relationship between the child’s age and how often it was easy to get special therapy. Nearly half (48.4%) of caregivers of 2-5 year-olds

reported it was always easy ranging up to 71.4% of 9-12 year-olds reporting the same. The range that reported that it was never easy to get therapy is 0.0% for 0-1 year-olds to 19.7% of 13-17 year-olds.

**Figure CA-37** – In the last 6 months, how often was it easy to get special therapy such as physical, occupational, or speech therapy for your child?

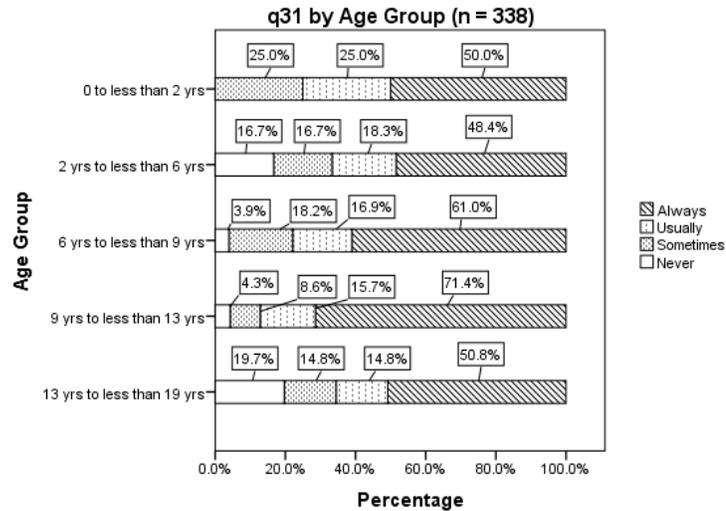
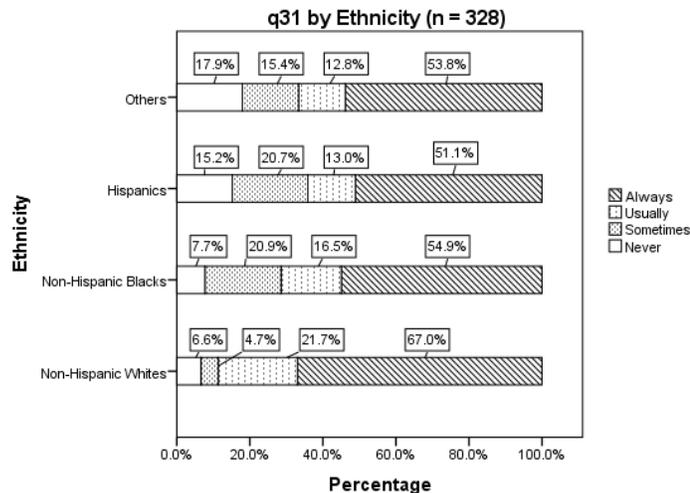


Figure CA-38 describes how the ease of getting special therapy was related to the child’s ethnicity. Interestingly, 64.1% of Hispanics ranging up to 88.7% of Non-Hispanic Whites reporting it usually or always easy to get special therapy.

**Figure CA-38** – In the last 6 months, how often was it easy to get special therapy such as physical, occupational, or speech therapy for your child?

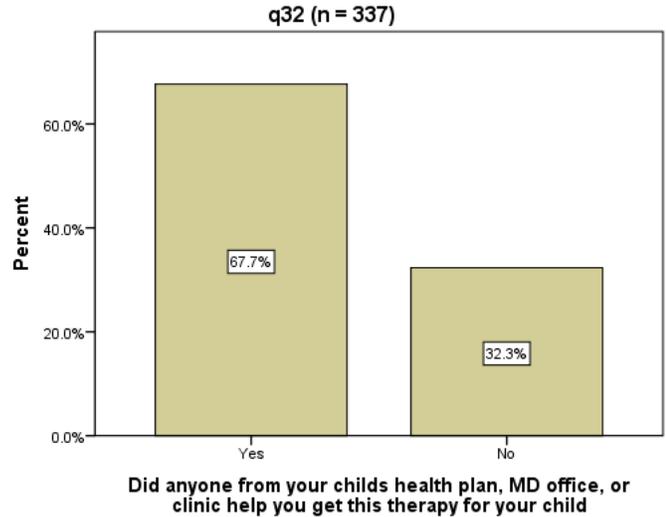


**Assistance Securing Special Therapy (q32)**

Question 32 asked caregivers whose children needed special therapy (n=337) if they had received any assistance from their health plan or providers in securing this help. Figure CA-39 indicates that 66.7% of respondents indicated using health plan or health

provider to access special therapy. This represented a substantial drop from the 81.3% who received this type of assistance related to special equipment (q29). No significant bivariate relationships with either demographic or context variables were observed.

**Figure CA-39** – Did anyone from your child’s health plan, doctor’s office, or clinic help you get the special therapy, such as physical, occupational, or speech therapy that your child needed?



***Ease of Securing Mental Health Services (q34)***

Question 34 asks the caregivers of children who had sought treatment for an emotional, developmental, or behavioral problem (n=451) how often it was easy to get this needed care. Figure CA-40 indicates that 73.1% of caregivers reported it usually or always easy to arrange these services whereas 9.6% reported it was never easy.

**Figure CA-40** - In the last 6 months, how often was it easy to get treatment or counseling for your child for an emotional, developmental, or behavioral problem?

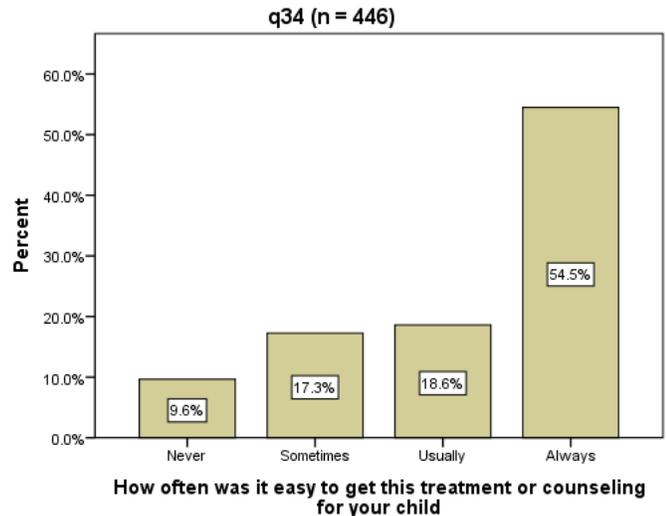
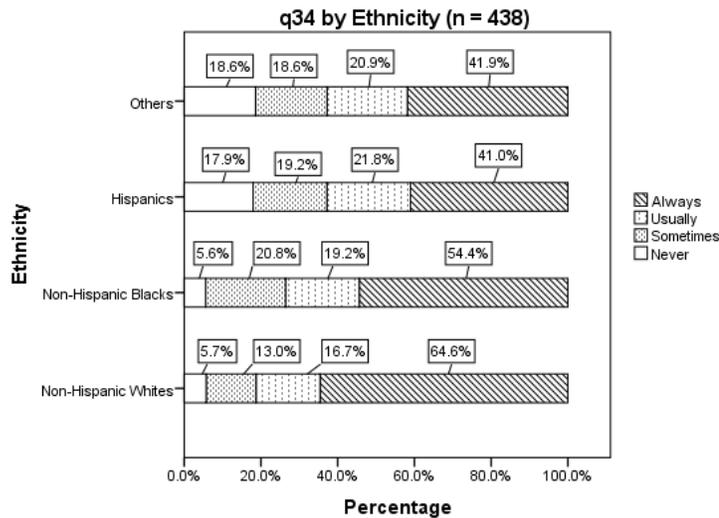


Figure CA-41 shows the relationship between the child’s ethnicity and the ease of getting treatment for any mental health issues of the child. Approximately four in ten (41.0% and 41.9%, respectively) caregivers of Hispanic and Other ethnicity children reported it always easy to arrange these services whereas 64.6% of White Non-Hispanics reported the same result.

**Figure CA-41** - In the last 6 months, how often was it easy to get treatment or counseling for your child for an emotional, developmental, or behavioral problem?



**Assistance in Securing Mental Health Services (q35)**

Question 35 asked the caregivers who had sought mental health services for their child (n=451) if anyone from their health plan or provider’s office had helped them access services for mental health issues. Figure CA-42 indicates that 62.7% of caregivers reported getting assistance in arranging the needed services.

**Figure CA-42** – Did anyone from your child’s health plan, doctor’s office, or clinic help you get treatment or counseling for your child for an emotional, developmental, or behavioral problem?

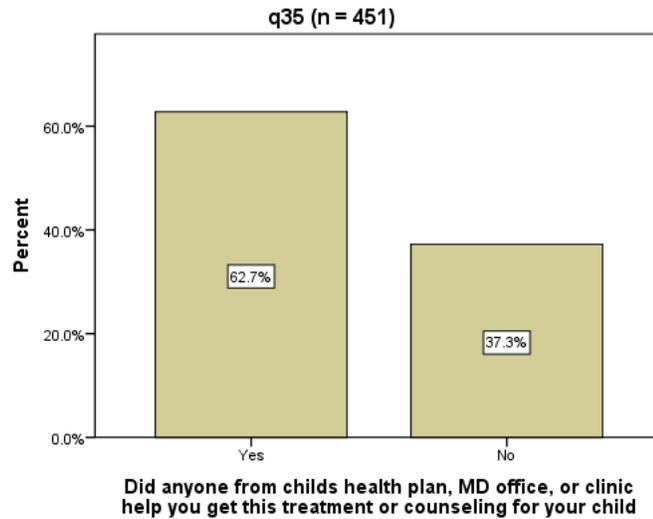
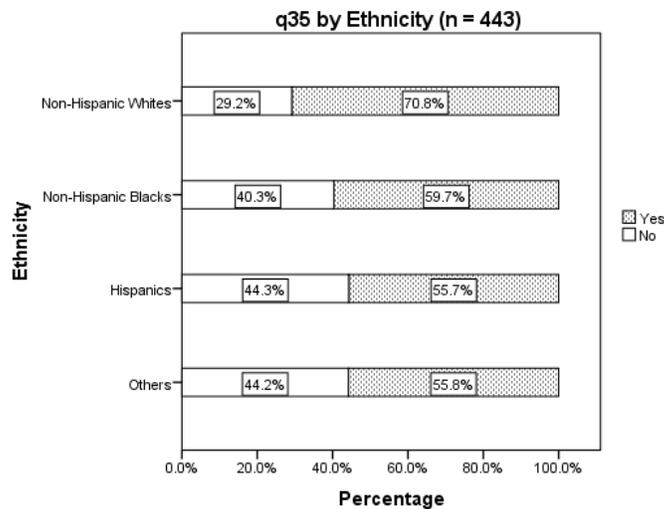


Figure CA-43 shows the relationship between the child’s ethnicity and whether anyone from the health plan or provider’s office helped secure mental health services. The distribution of responses across ethnicities was observed ranging from 55.7% of Hispanics to 70.8% of Non-Hispanic Whites who reported receiving this type of help.

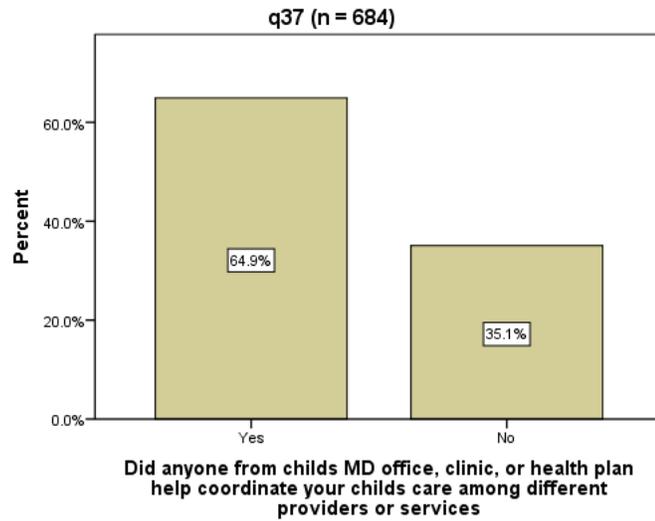
**Figure CA-43** – Did anyone from your child’s health plan, doctor’s office, or clinic help you get treatment or counseling for your child for an emotional, developmental, or behavioral problem?



**Coordination of Care Across Different Providers/Services (q37)**

Question 37 asked caregivers whose children had received services of more than one type or from more than one kind of health care provider (n=684) if anyone from the health plan or provider’s office had helped coordinate this care. Figure CA-44 indicates that when multiple services or providers had been utilized, 64.9% of caregivers reported that they did receive assistance coordinating this care. None of the bivariate relationships with demographic or context variables were significant.

**Figure CA-44** – In the last 6 months, if your child needed care from multiple providers or different types of service, did anyone from your child’s health plan, doctor’s office, or clinic help coordinate your child’s care?



**Existence of a Patient-Personal Health Provider Relationship** (q38)

Question 38 asks the caregiver if the child had one person (i.e., a general doctor, specialist doctor, nurse practitioner, or physician assistant) that the caregiver thought of as the child’s personal health provider. Figure CA-45 (n=3,173) reports that 79.5% of caregivers indicated that such a patient-personal provider relationship did exist for the child.

**Figure CA-45** – Do you have one person you think of as your child’s personal health provider?

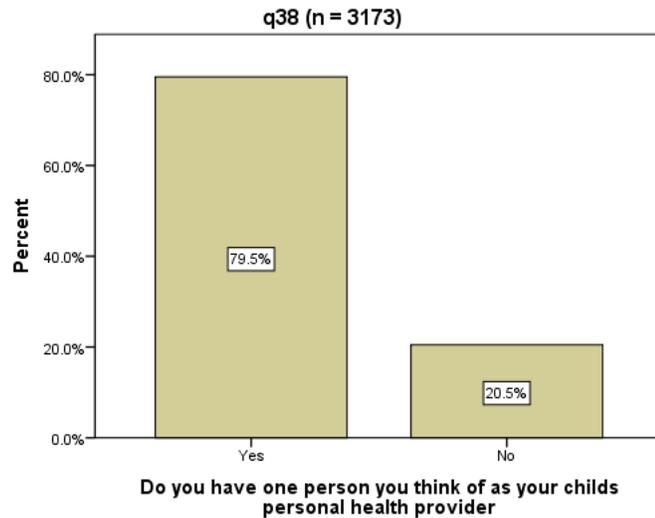


Figure CA-46 describes the relationship between the child’s ethnicity and the responses to q38. A wide difference is seen between caregivers of Non-Hispanic White children, 90.2% of whom reported the existence of a personal health provider, compared to caregivers of Hispanic children, with only 65.4% reporting a personal health provider being in place. Caregivers of Non-Hispanic Black children and of Other ethnic

descriptions reported proportions similar to Non-Hispanic Whites (84.1% and 85.8%, respectively).

**Figure CA-46** – Do you have one person you think of as your child’s personal health provider?

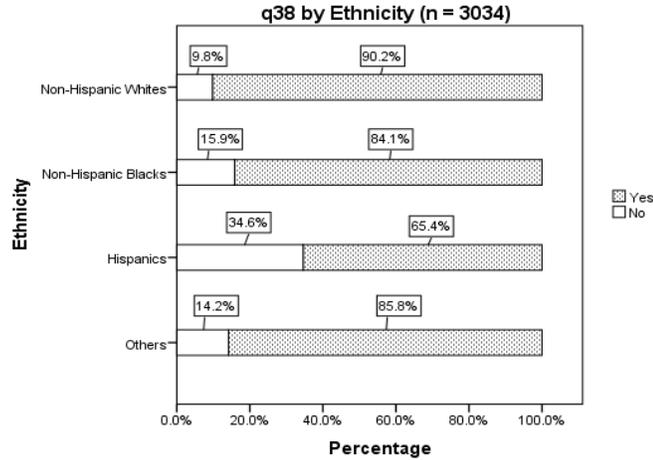


Figure CA-47 shows the relationship between the caregiver adult’s preferred language and whether the child has a personal health provider or not. As was often seen in a number of the Access questions, the alignment across adult language directly mirrors the alignment across child ethnicity. Specifically, 87.0% of caregivers that prefer English reported the existence of a personal health provider wherein only 62.6% of caregivers that prefer Spanish reported the same result.

**Figure CA-47** – Do you have one person you think of as your child’s personal health provider?

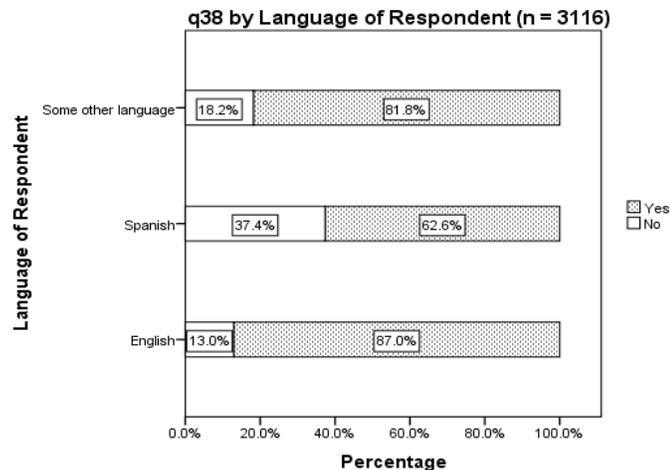


Figure CA-48 reveals the relationship between NC geographical region and the response to q38. Caregivers in the Coastal Plain region had the highest proportion (83.3%) reported to have a personal health provider relationship whereas only 76.8% of caregivers in the Piedmont reported this type of relationship.

**Figure CA-48** – Do you have one person you think of as your child’s personal health provider?

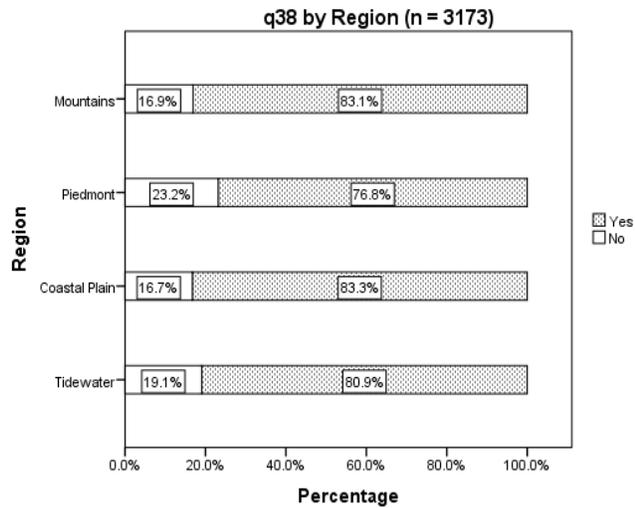


Figure CA-49 shows the relationship between the CCNC network in which the child is enrolled and the existence of a patient-personal health provider relationship. The Northern Piedmont Community Care network (2007) had the lowest proportion of its caregivers (68.5%) that reported a patient-personal provider relationship whereas caregivers in the the Carolina Collaborative Community Care (1013) reported the largest proportion at 88.7%

**Figure CA-49** – Do you have one person you think of as your child’s personal health provider?

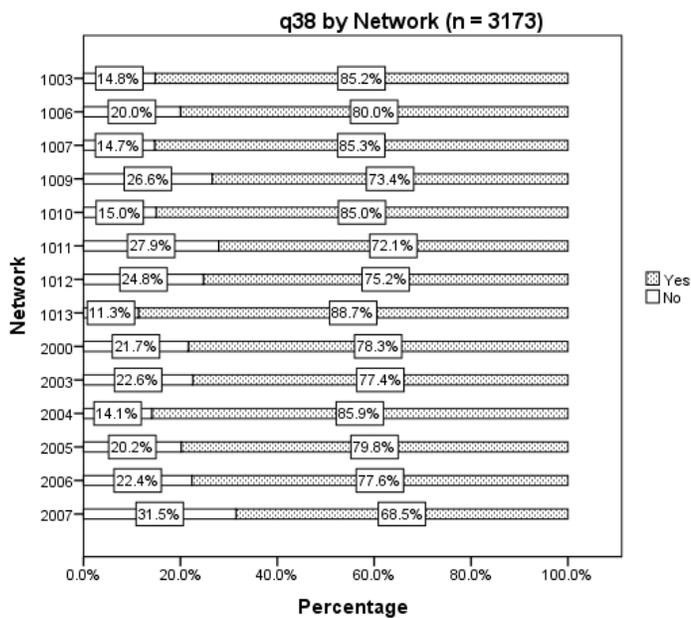
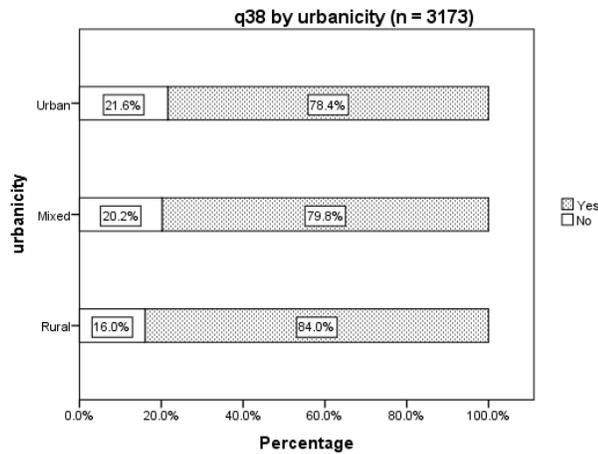


Figure CA-50 reveals the relationship between urbanicity level of the county of residence for the child and the caregiver’s response to the existence of a personal health provider. The overall distribution was significant but the range of reported responses across urbanicity was quite narrow with 78.4% of caregivers in the urban counties reporting a personal relationship and 84.0% of caregivers in rural counties reporting such an arrangement.

**Figure CA-50** – Do you have one person you think of as your child’s personal health provider?



**Language-Related Communications Issues for the Child and the Provider (q46)**

Question 46 asks the caregivers how often, in the last 6 months, it was difficult for the child to understand or speak with doctors or other health providers because they spoke different languages? Figure CA-51 shows that 82.4% of caregivers reported language was never a problem for their child and physicians although 6.1% reported it was always a problem.

**Figure CA-51** – In the last 6 months, how often did your child have a hard time speaking with or understanding doctors or other health providers because they spoke different languages?

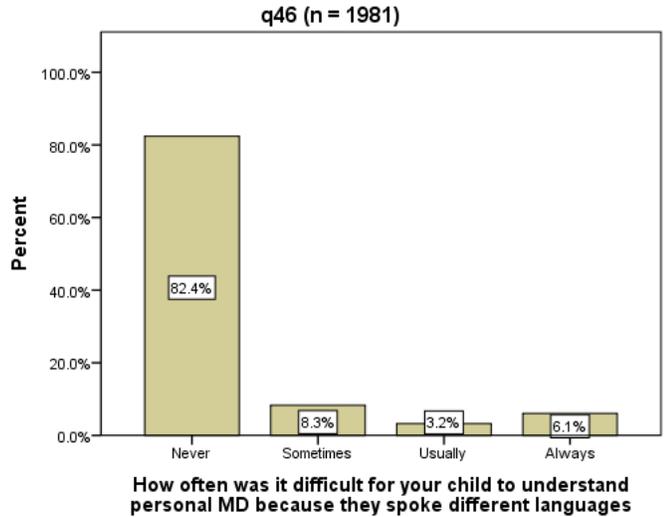


Figure CA-52 shows the relationship between the child’s age and how often language hindered communication with health providers. One should probably discount the 91.4% of caregivers of 0-1 year-olds reporting no language problem given the low likelihood that these children could communicate meaningfully, independent of language. For the remaining age groupings, there is a trend (76.3%-87.9%) going from 2-5 year-olds up to 13-18 year-olds of increasing language difficulty being reported. This is somewhat puzzling, as greater age seems likely to associate with increased time in the country and the expectation that language skills would be better.

**Figure CA-52** – In the last 6 months, how often did your child have a hard time speaking with or understanding doctors or other health providers because they spoke different languages?

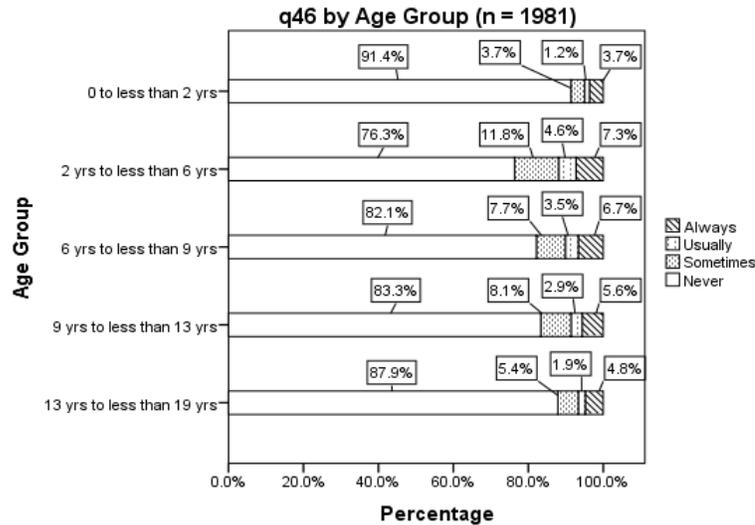
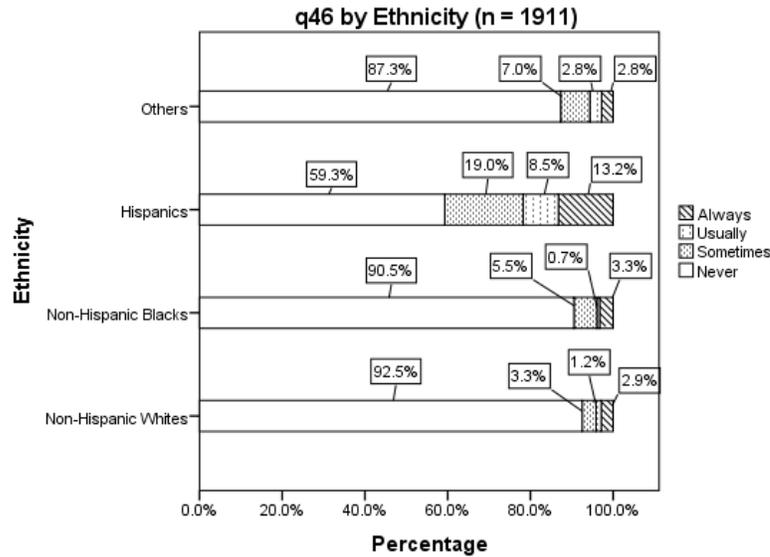


Figure CA-53 reports on how ethnicity relates to responses to q46. In all reported combinations, Hispanic children are reported to have language-related communication problems more often than other ethnic groups. Specifically, 14.1% of caregivers of Hispanic children reported that language was usually or always a barrier whereas the

other ethnic groups reported this same response approximately 6% of the time. Only 59.3% of caregivers of Hispanic children reported that language was never a problem vs. 87.3%-92.5% of the other ethnic groups reporting language was not a hindrance.

**Figure CA-53** – In the last 6 months, how often did your child have a hard time speaking with or understanding doctors or other health providers because they spoke different languages?



***After Hours Assistance (q50)***

Question 50 asks how often in the last 6 months the caregiver was able to get help or advice needed for the child, when such help was needed (n=477). Figure CA-54 reveals that 82.2% of caregivers usually or always got the after-hours help they needed. Only 3.8% of caregivers were never able to get this assistance.

**Figure CA-54** – In the last 6 months, when you called after regular office hours, how often did you get the help or advice you needed for your child?

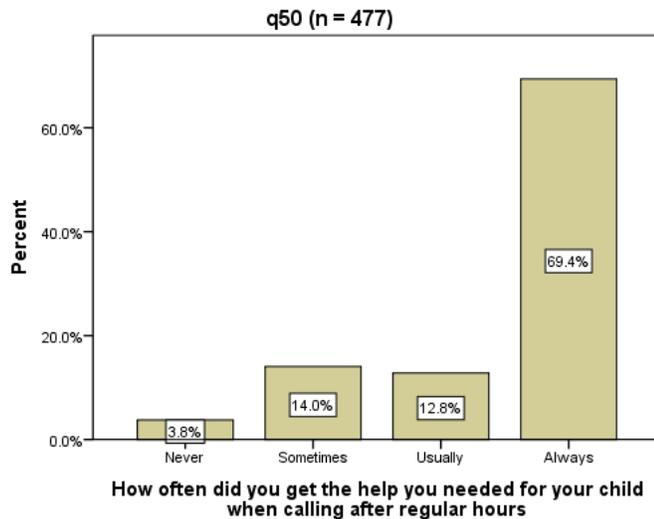
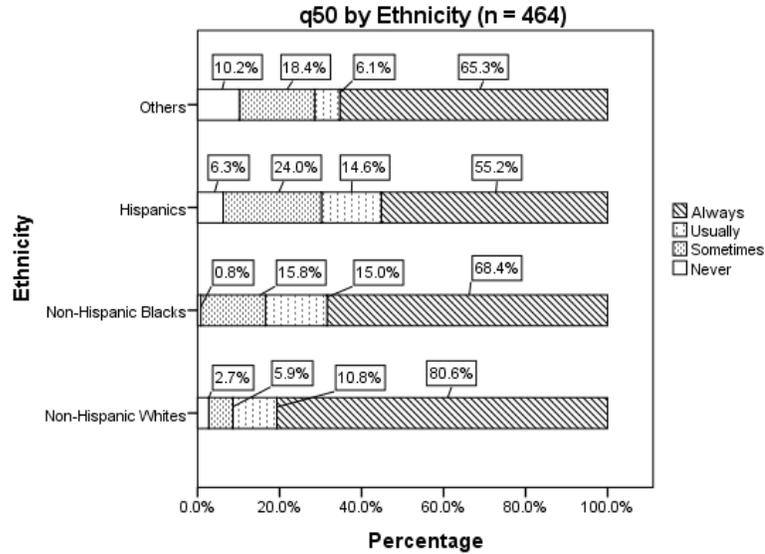


Figure CA-55 shows the relationship between the child’s ethnicity and how often the caregiver was able to access needed after-hours assistance. Continuing a general trend, caregivers of Hispanic children report less success at getting this need met than Non-Hispanics. For instance, 68.4% of Hispanics reported that they always got needed after hours help whereas 80.6% of Non-Hispanic Whites reported the same, with Non-Hispanic Blacks falling in the middle.

**Figure CA-55** – In the last 6 months, when you called after regular office hours, how often did you get the help or advice you needed for your child?



**Keeping the Same Provider When Joining Medicaid (q52)**

Question 52 asked the caregiver if the child had the same personal health provider before attaining coverage by NC Medicaid as he or she has now. Figure CA-56 indicates that 70.4% of all caregivers (n=2,483) indicated that the child had the same personal physician as before joining a CCNC network. This can be taken as an indication of how successful CCNC has been at recruiting a large percentage of the state’s physicians into the network.

**Figure CA-56** – Did your child have the same personal health provider **before** he or she joined Carolina Access, Medicaid, or Health Check?

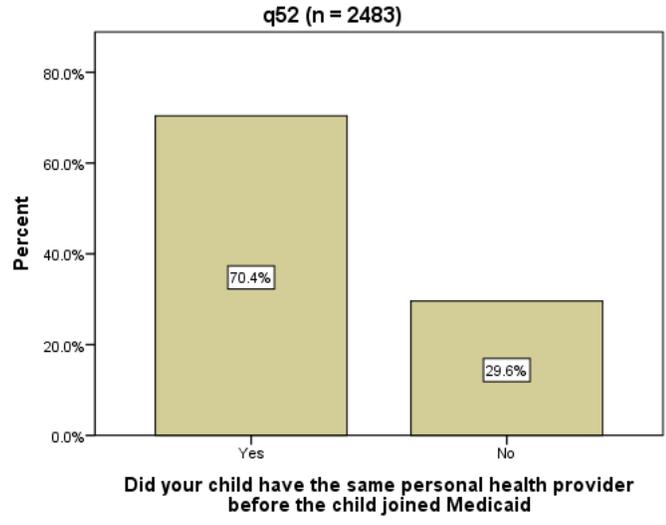
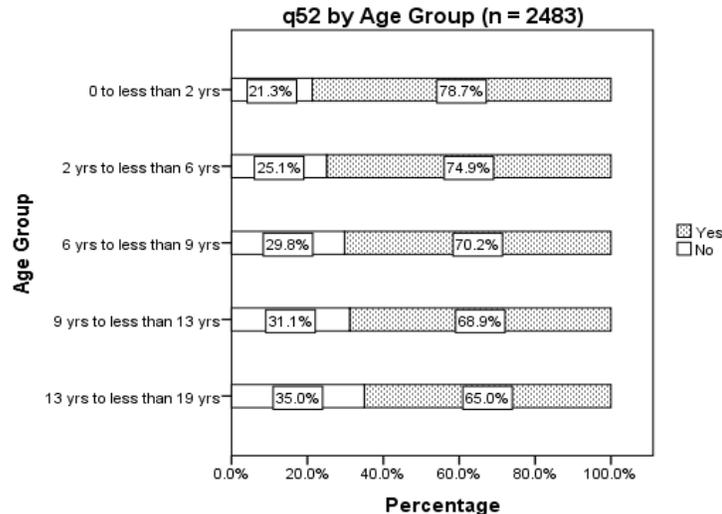


Figure CA-57 shows the relationship between the child’s age and whether or not a new personal health provider had to be found upon entering the network. Two findings in the table were especially interesting in that 25.1% and 35.0% of caregivers, respectively, of 2-5 year-olds and 13-18 year-olds indicated that the child did not have the same personal provider before and after joining a CCNC network. Moreover, this is part of a steady trend of a greater proportion of reports of needing to find a new physician as age increases (21.3% of 0-1 year-olds to 35.0% of 13-18 year-olds). This could be related to older children having been in Medicaid longer and not necessarily needing to find a different physician but perhaps choosing to.

**Figure CA-57** – Did your child have the same personal health provider **before** he or she joined Carolina Access, Medicaid, or Health Check?

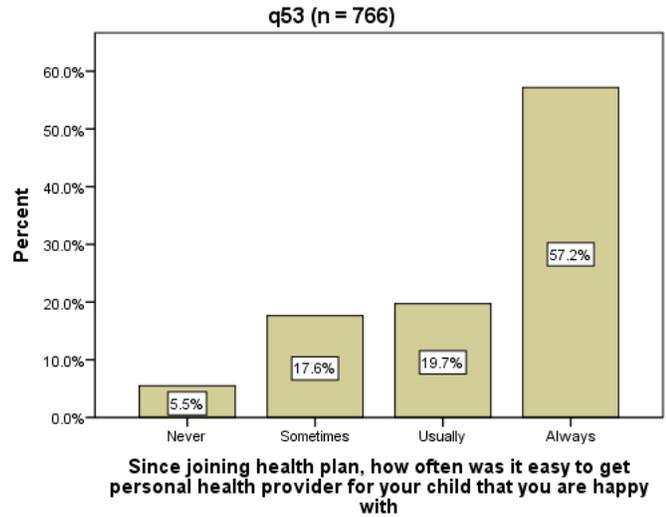


**Ease of Finding a New Personal Health Provider (q53)**

Question 53 asked the caregivers of children for whom a new personal health provider had to be found (n=766) how often it was easy to find such a provider. Figure CA-58 indicates that 77.9% of caregivers reported it was usually or always easy to find a

new personal health provider while 5.5% said it was never easy. No statistically significant bivariate relationships were found with any of the demographic or context variables.

**Figure CA-58** – 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?



**Making Appointments With Specialists (q57)**

Question 57 asked if the caregiver had tried to make any appointments in the last 6 months for the child to see a specialist (a health provider who specializes in one area of health care). The respondents were asked not to consider dental visits or overnight stays in the hospital for the child. Figure CA-59 (n=3,190) reveals that 18.2% of caregivers reported making specialist appointments for their children.

**Figure CA-59** – In the last 6 months, did you try to make any appointments for your child to see a specialist?

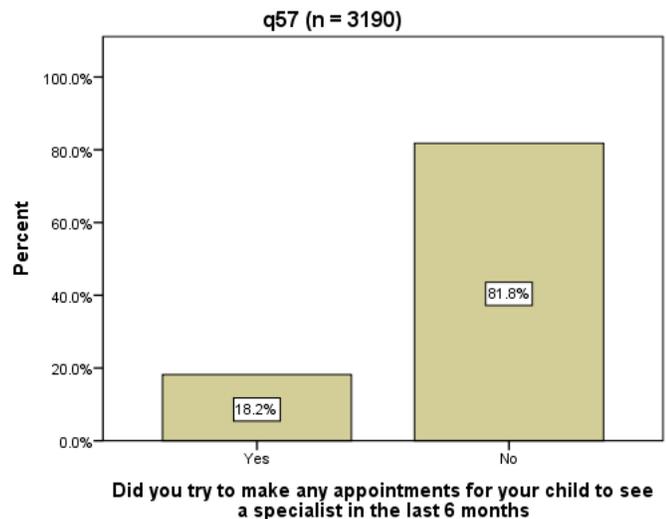
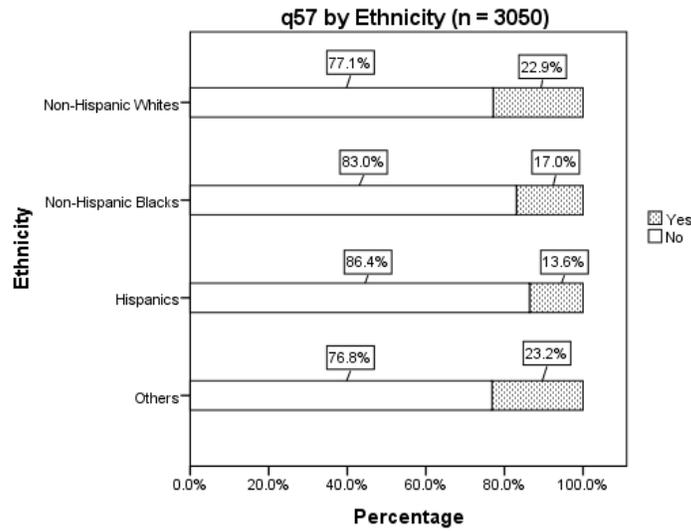


Figure CA-60 describes the relationship between the child’s ethnicity and whether or not the caregiver scheduled any appointments with specialists. Although the swing across ethnicity was not as pronounced as in many earlier questions, the proportion of White Non-Hispanic children for whom specialist appointments were scheduled (22.9%) was highest with Hispanics reporting the lowest proportion at 13.6%. Directly mirroring these results were those for language, where 20.9% of English-preferring caregivers reported scheduling a specialist visit while only 12.2% of Spanish-preferring caregivers and 5.9% of Other language-preferring caregivers reported the same. These latter results are shown in Figure CA-61.

**Figure CA-60** – In the last 6 months, did you try to make any appointments for your child to see a specialist?



**Figure CA-61** – In the last 6 months, did you try to make any appointments for your child to see a specialist?

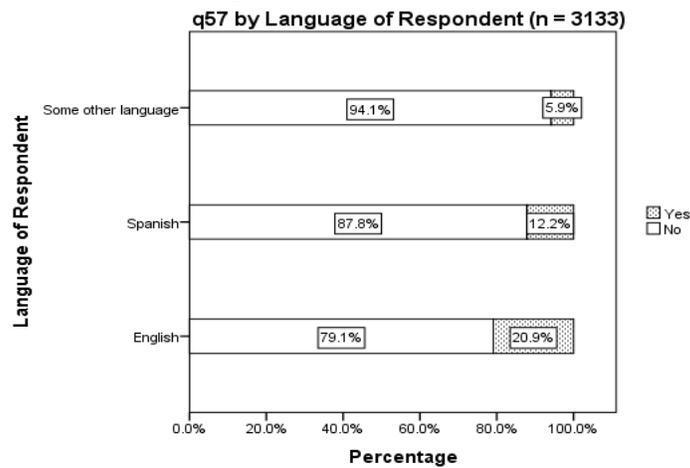
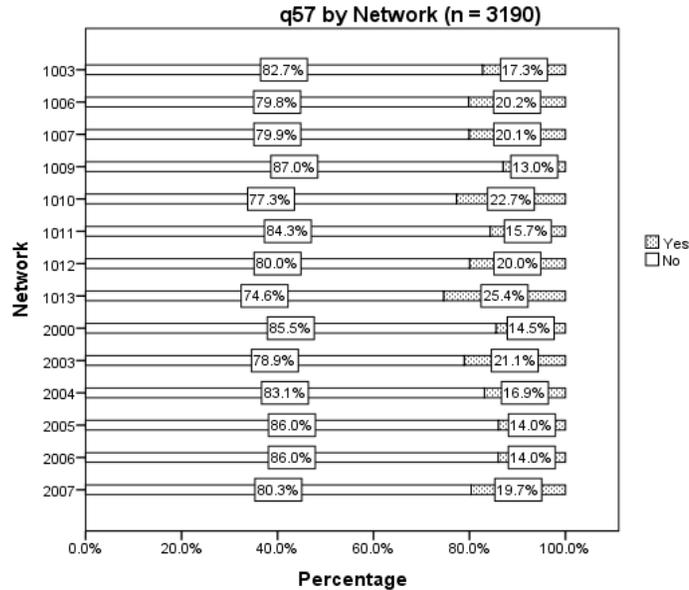


Figure CA-62 shows the relationship between the CCNC network from which the child received service and whether specialist appointments were scheduled. Carolina

Collaborative Community Care (1013) led the way with 25.4% of caregivers reporting having scheduled specialist appointments for the child. The lowest proportion reporting specialist appointments among the care networks was the Community Care Partners of Greater Mecklenburg (1009) at 13.0%.

**Figure CA-62** – In the last 6 months, did you try to make any appointments for your child to see a specialist?



**Ease of Scheduling Appointments With Specialists (q58)**

Question 58 asked caregivers (n= 580) how often in the last 6 months it was easy to schedule appointments for the child with a specialist. Figure CA-63 indicates that 77.2% of caregivers found it usually or always easy while 7.1% never found it easy to schedule specialist appointments.

**Figure CA-63** – In the last 6 months, how often was it easy to get appointments for your child with specialists?

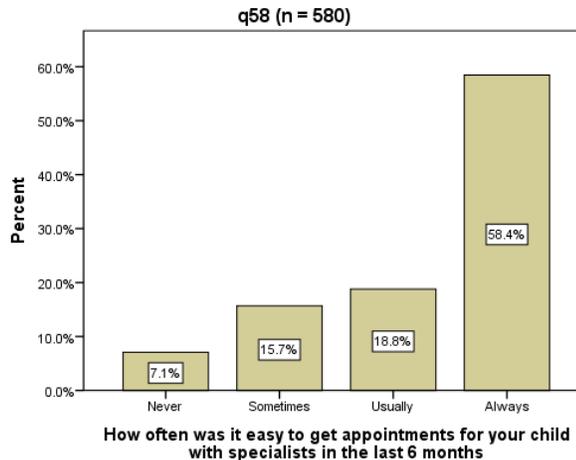
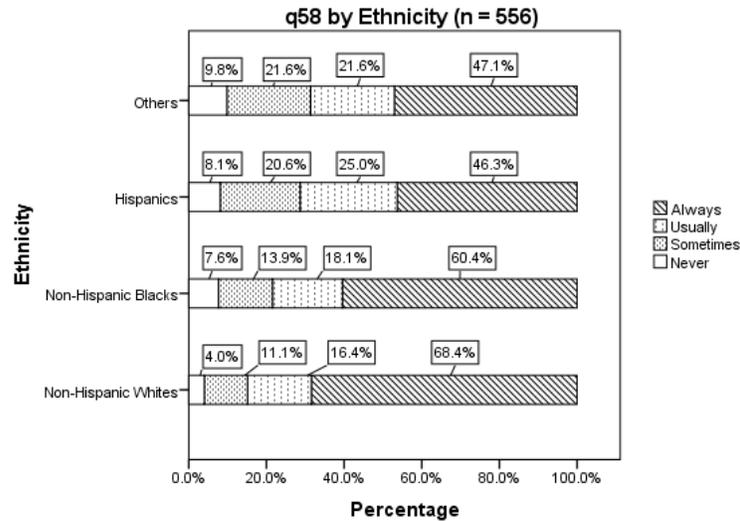


Figure CA-64 shows the relationship between the child’s ethnicity and how often it was easy to schedule appointments with a specialist. The greatest proportion reporting it always easy to schedule specialist appointments was 68.4% and was reported by caregivers of Non-Hispanic Whites with Hispanics reporting the lowest proportion at 46.3%. At the other end of the spectrum, only 4.0% of caregivers of Non-Hispanic White children reported it never easy whereas 9.8% of children of Other ethnic groups were reported to never find it easy to schedule specialist appointments.

**Figure CA-64** - In the last 6 months, how often was it easy to get appointments for your child with specialists?



**Assistance Scheduling Specialist Appointments (q59)**

Question 59 asked the caregivers (n=578) if anyone from the child’s doctor’s office, clinic, or health plan coordinated the child’s care among the specialist he or she saw in the last 6 months. Figure CA-65 indicates that 75.6% of caregivers reported that their child’s care among different specialists was coordinated.

**Figure CA-65** – In the last 6 months, did anyone from your child’s doctor’s office, clinic, or health plan help coordinate your child’s care among these specialists?

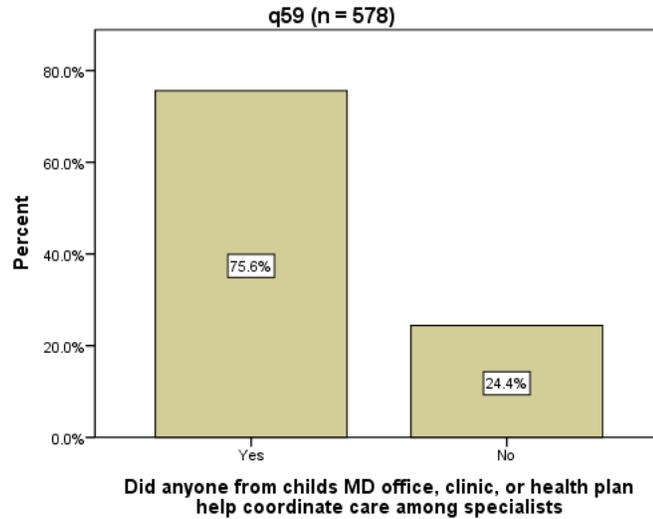
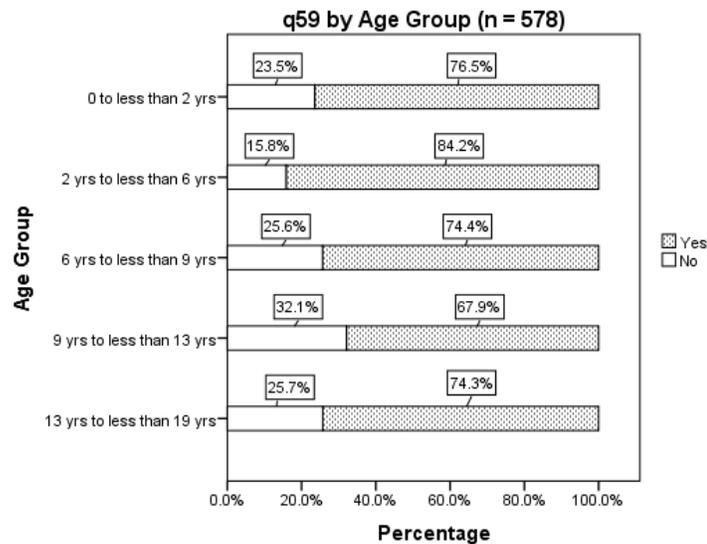


Figure CA-66 shows the relationship between the child’s age and whether anyone from the doctor’s office or health plan helped coordinate care among specialists. The range of responses was narrow, with no statistically significant individual cells. The age group whose caregivers reported the greatest proportion receiving coordination help was the 2-5 year-olds at 84.2% whereas the 9-12 year-olds were reported to have the lowest proportion at 67.9%.

**Figure CA-66** – In the last 6 months, did anyone from your child’s doctor’s office, clinic, or health plan help coordinate your child’s care among these specialists?



***Most Seen Specialist Serving as Personal Doctor (q62)***

Question 62 asks if, in the last 6 months, the specialist the child saw most often also served as the child’s personal doctor. Figure CA-67 (n=526) indicates that this was the case only 21.5% of the time. This finding should be regarded as positive since even a

child needing specialized care also needs a relationship with a more general, primary care provider to meet broader health needs.

**Figure CA-67** – In the last 6 months, was the specialist your child saw most often the same doctor as your child’s personal doctor?

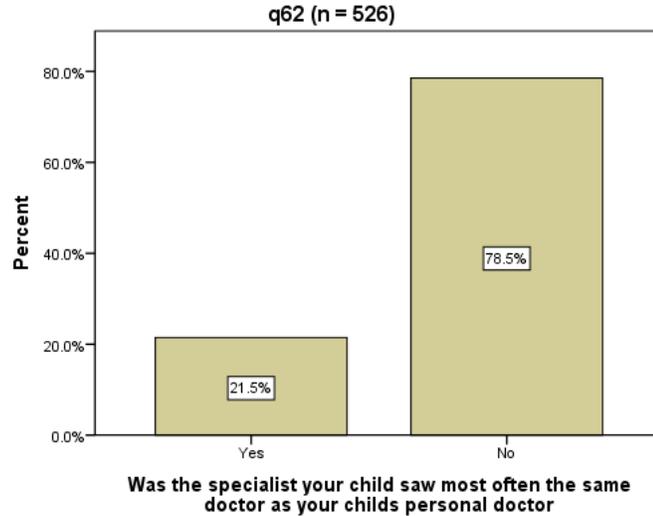
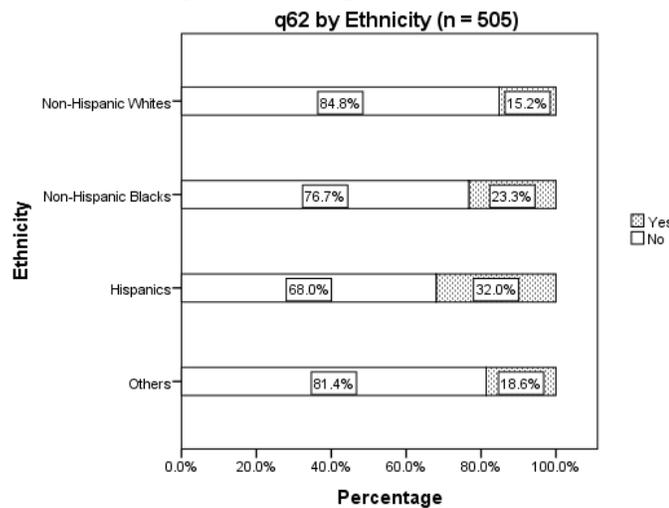


Figure CA-68 shows the relationship between the child’s ethnicity and whether or not the caregiver reported that the specialist seen most often and the child’s personal health provider were one and the same. The extreme responses were statistically significant and included 32.0% of Hispanics indicating that the most often seen specialist was also the personal health provider whereas only 15.2% of Non-Hispanic Whites indicated the same situation to be true. One must wonder whether this could be a language or cultural issue as specialist vs. more general providers can be a subtle concept.

**Figure CA-68** – In the last 6 months, was the specialist your child saw most often the same doctor as your child’s personal doctor?



***Seeking Tests, Care, or Treatment (a63)***

Question 63 asks the caregiver if any attempts were made to get care, tests, or treatment for the child through his or her provider of health plan. Figure CA-69 (n=3,167) indicates that 23.4% of caregivers indicated that these types of services had been sought.

**Figure CA-69** – In the last 6 months, did you try to get any kind of care, tests, or treatment for your child through his or her health provider or health plan?

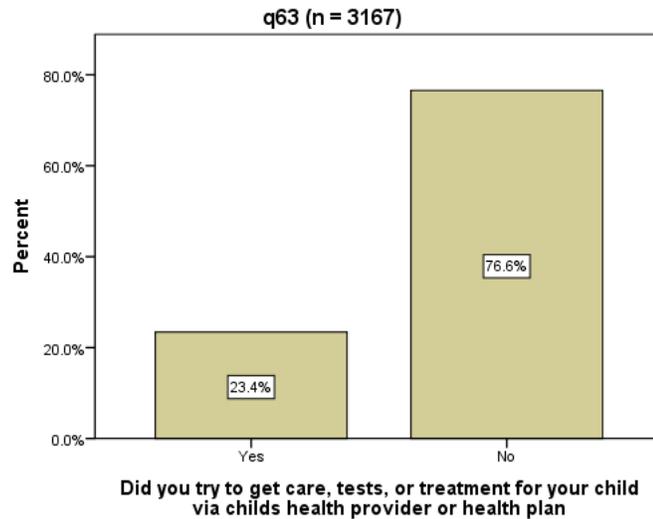


Figure CA-70 shows the relationship between the child’s age and whether the caregiver reported that attempts had been made to get tests or treatment. The figure shows that 27.8% of caregivers of 13-18 year-olds reported attempts to get these services whereas only 19.8% of caregivers of 2-5 year-olds reported the same.

**Figure CA-70** – In the last 6 months, did you try to get any kind of care, tests, or treatment for your child through his or her health provider or health plan?

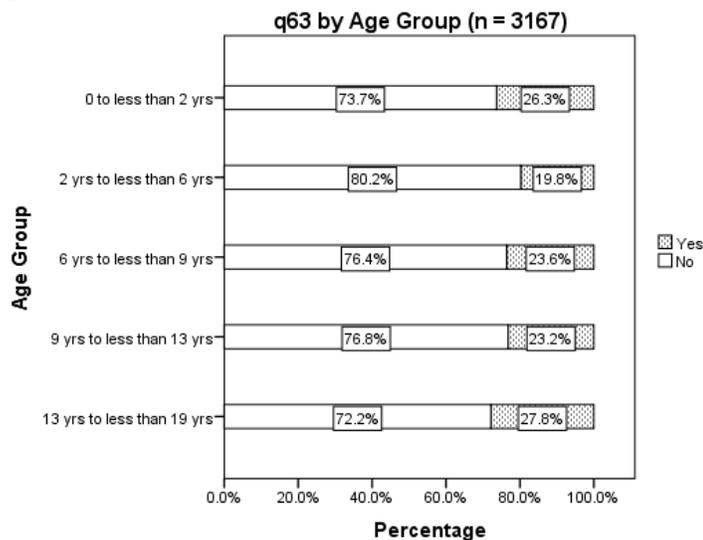
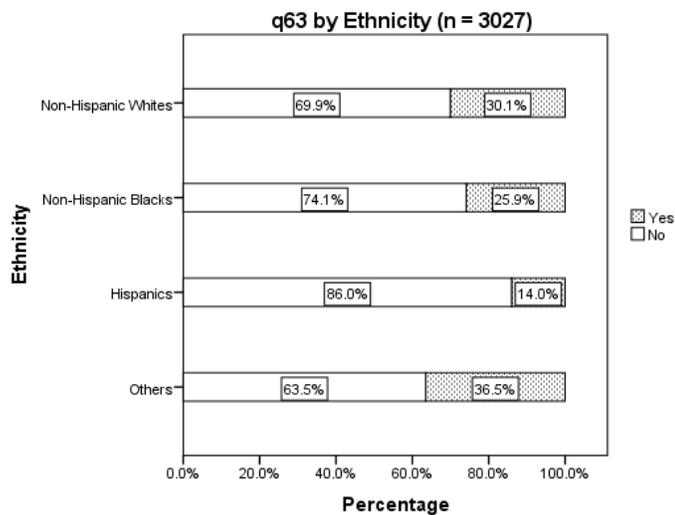


Figure CA-71 shows the results for seeking tests and treatment across the different ethnicities of children surveyed with wide and significant gaps observed. The proportion of Non-Hispanic Whites and Other ethnic groups that seek these services were 30.1% and 36.5%, respectively, whereas only 14.0% of Hispanics were reported to seek tests or treatment in the previous 6 months. Between these two boundaries of the distribution, 25.9% of Non-Hispanic Blacks sought these services. Similar results for language are seen as well. Figure CA-72 indicates that 28.9% of English-preferring caregivers reported seeking these tests for their children whereas only 11.7% of Spanish-preferring caregivers reported the same.

**Figure CA-71** - In the last 6 months, did you try to get any kind of care, tests, or treatment for your child through his or her health provider or health plan?



**Figure CA-72** - In the last 6 months, did you try to get any kind of care, tests, or treatment for your child through his or her health provider or health plan?

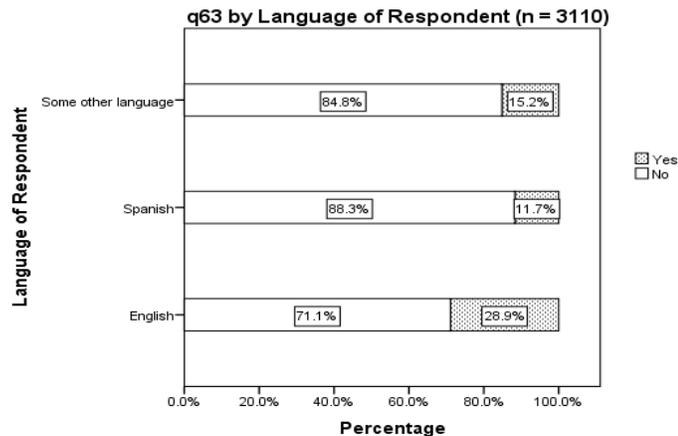
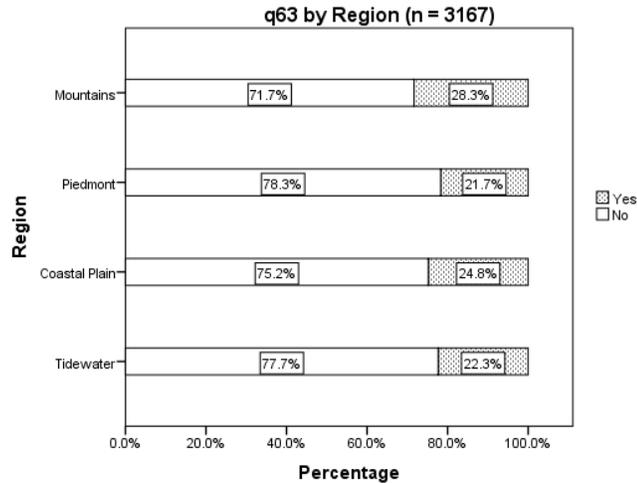


Figure CA-73 shows the relationship between the state geographic region of residence and whether the child was reported to seek tests or treatment. The Mountains

had the highest proportion at 28.3% of caregivers reporting they did seek these services whereas the Piedmont region had the lowest proportion at 21.7%.

**Figure CA-73** - In the last 6 months, did you try to get any kind of care, tests, or treatment for your child through his or her health provider or health plan?



**Ease of Accessing Tests, Care, or Treatment (q64)**

Question 64 asks those caregivers who reported that their children needed the above services (n=739) how often these services were easy to get in the previous 6 months. Figure CA-74 indicates that 66.7% of caregivers indicated these services were always easy to access whereas 16.0% indicated they were sometimes or never easy to get.

**Figure CA-74** – In the last 6 months, how often was it easy to get the care, tests, or treatment you thought your child needed through his or her health provider or health plan?

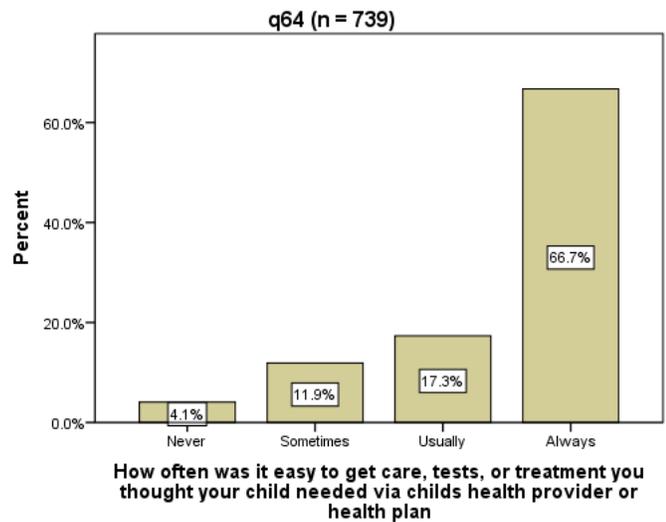
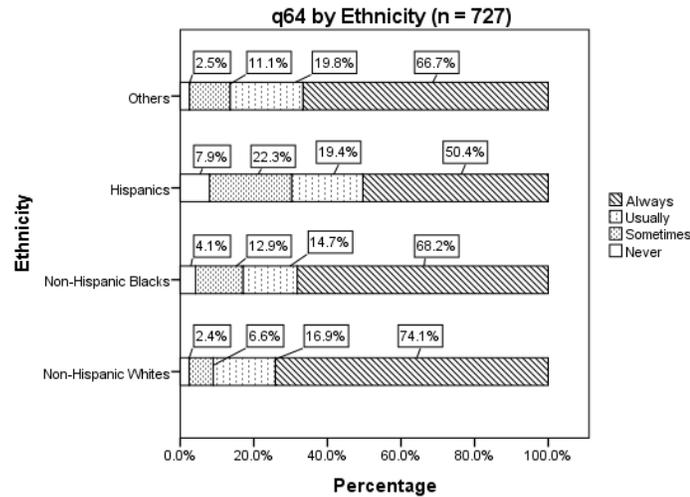


Figure CA-75 shows the relationship between the child’s ethnicity and the ease of accessing needed tests or treatment. Significant differences were seen as 74.1% of caregivers of Non-Hispanic White children reported it always being easy to get these needed services whereas only 50.4% of Hispanics reported the same. At the other end of the response spectrum, 30.2% of caregivers of Hispanic children reported it sometimes or never easy to access these services whereas only 9.0% of Whites reported the same level of difficulty. Non-Hispanic Black and Other reported ethnicity children gave responses in between these extremes.

**Figure CA-75** – In the last 6 months, how often was it easy to get the care, tests, or treatment you thought your child needed through his or her health provider or health plan?



**Getting Information From Health Plan or Provider Office Staff (q65)**

Question 65 asks the caregivers if, in the last 6 months, they had tried to get information or help from the office staff at the child’s health providers or health plan. Figure CA-76 (n=3,182) reveals that 20.1% of caregivers indicated they had sought this kind of assistance.

**Figure CA-76** – In the last 6 months, did you try to get information or help from office staff at your child’s health provider or health plan?

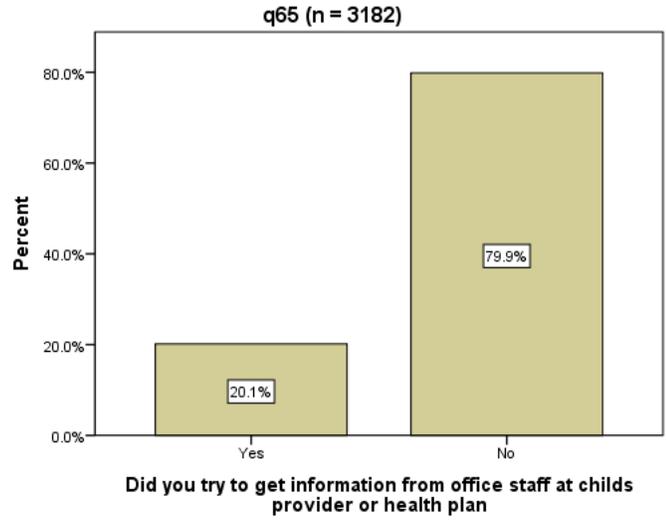
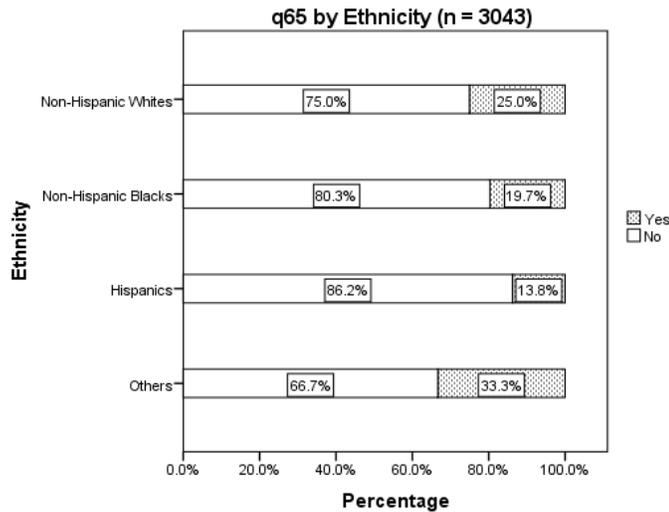
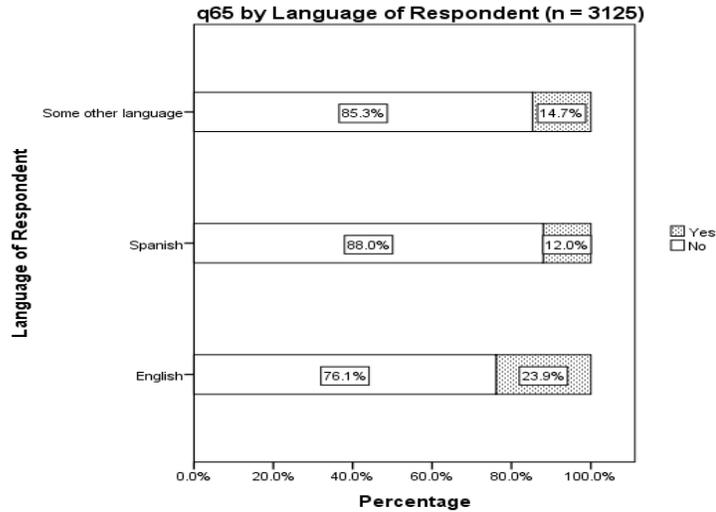


Figure CA-77 shows the relationship between the child’s ethnicity and whether the caregiver had attempted to get information or help from health plan or provider office staff. Results varied widely with 33.3% and 25.0%, respectively, of caregivers of Other ethnicity children and Non-Hispanic White children reporting they needed this help. Only 13.8% of Hispanic children were reported to need this assistance. Similar results were seen again in the impact of language as 23.9% of English-preferring caregivers indicated they needed this help whereas only 12.0% of caregivers who preferred Spanish reported the same (Figure CA-78).

**Figure CA-77** – In the last 6 months, did you try to get information or help from office staff at your child’s health provider or health plan?



**Figure CA-78** – In the last 6 months, did you try to get information or help from office staff at your child’s health provider or health plan?



**Need for Transportation Assistance for Appointments and Prescriptions (q69a)**

Question 69a asks the caregiver if transportation help from a non-family member was needed in the last 6 months to get the child to a medical appointment or to get a prescription filled. Figure CA-79 (n=3,187) indicates that 28.3% of the survey respondents reported having needed assistance in transportation.

**Figure CA-79** – In the last 6 months, did you need transportation help from a non-family member to get your child to a medical appointment or to get a prescription filled?

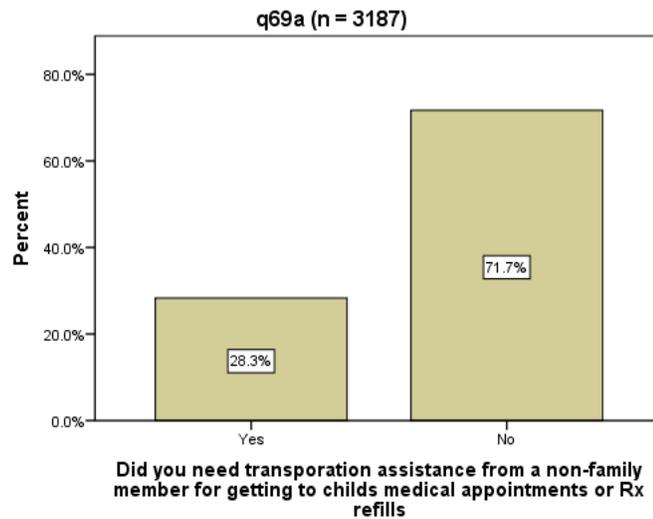


Figure CA-80 shows the relationship between the child’s ethnicity and whether transportation help was needed for the named services. The highest proportions reported were caregivers of Hispanic and non-Hispanic Black children at 37.0% and 34.0%, respectively, while Non-Hispanic White children had the lowest reported need for this service at 15.6% of respondents.

**Figure CA-80** – In the last 6 months, did you need transportation help from a non-family member to get your child to a medical appointment or to get a prescription filled?

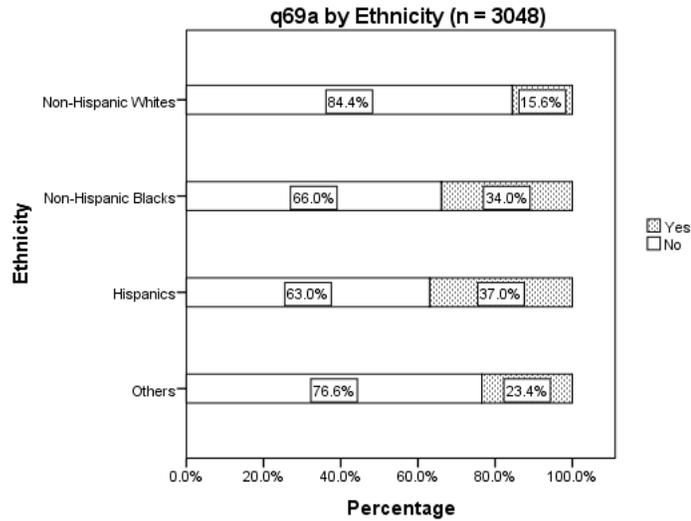


Figure CA-81 shows how preferred caregiver language associates with need for transportation assistance. The gap between languages was not as great as in some previous questions with 38.8% of Spanish-prefering caregivers having reported that transportation assistance was needed whereas 24.0% of English-prefering caregivers reported the same.

**Figure CA-81** – In the last 6 months, did you need transportation help from a non-family member to get your child to a medical appointment or to get a prescription filled?

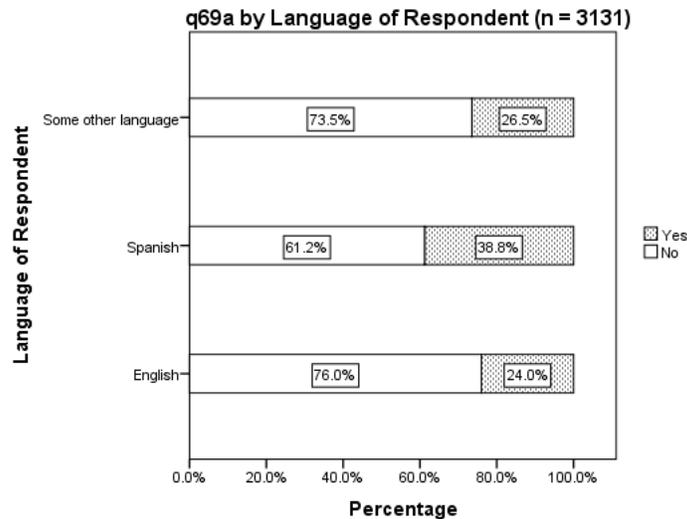
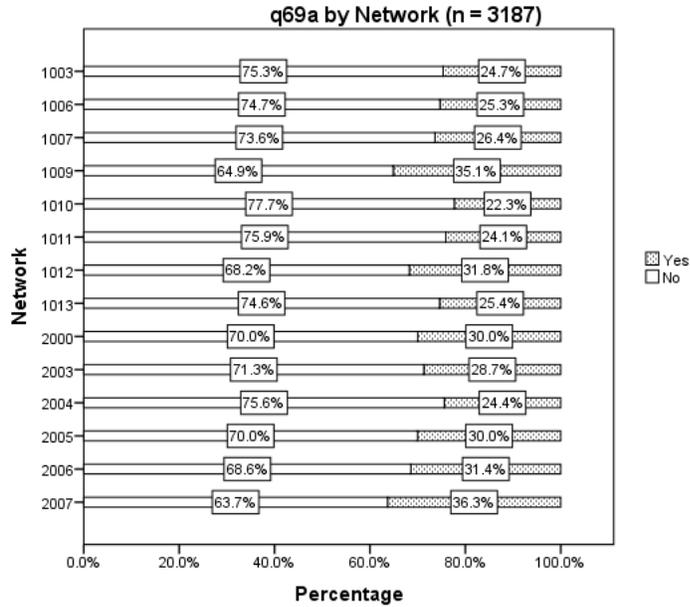


Figure CA-82 shows the relationship between the CCNC network that provides care to the child and the caregiver’s response to needing transportation assistance to get to a medical appointment or to fill a prescription. The responses were reasonably flat

across the networks. Respondents with children enrolled in the Northern Piedmont Community Care (2007) network reported the largest proportion, where 36.3% of caregivers needed this assistance. The lowest proportion needing help was seen in the Carolina Community Health Partnership (1010), where 22.3% of caregivers gave this response.

**Figure CA-82** – In the last 6 months, did you need transportation help from a non-family member to get your child to a medical appointment or to get a prescription filled?



**Getting Transportation Assistance (q69b)**

Question 69b asks of those caregivers who needed transportation assistance in the last 6 months for a medical need (n=902) how often they were able to get this help. Responses to this inquiry were somewhat “flatter” than previous similar inquiries and this need was met less often. Figure CA-83 reveals that only 52.2% of those caregivers who said they needed transportation assistance always received it while 33.3% only sometimes or never received it.

**Figure CA-83** – In the last 6 months, 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?

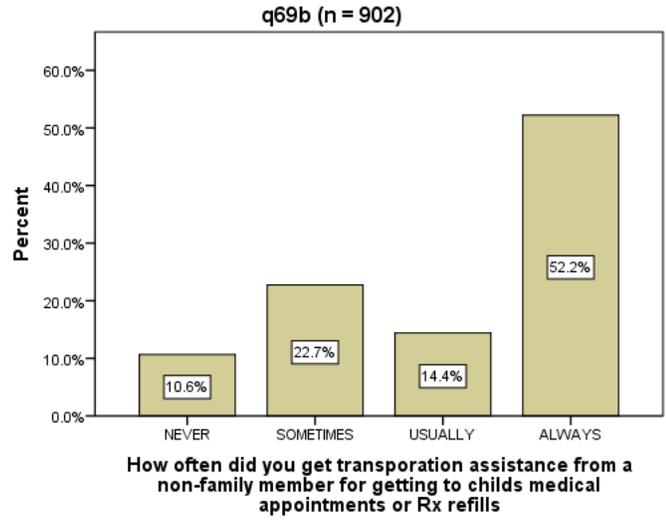
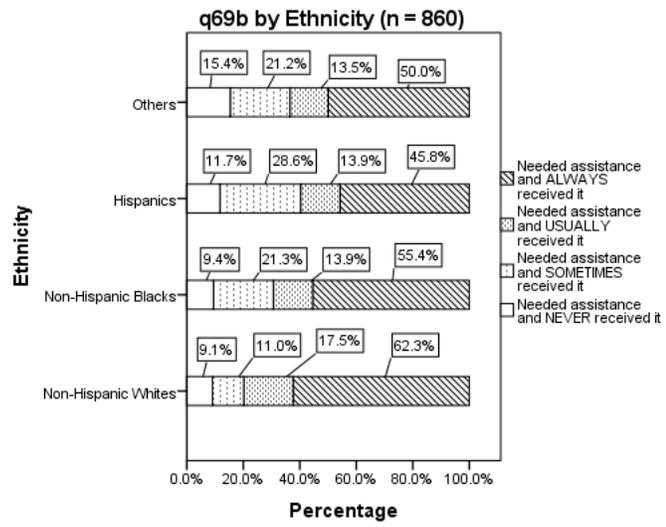


Figure CA-84 shows the relationship between the child’s ethnicity and how often transportation help was accessed. Caregivers of Non-Hispanic White children reported the highest proportion that always received this assistance at 62.3% with only 20.1% reporting they sometimes or never received it. Caregivers of Hispanic children had the lowest proportion getting transportation help at 45.8% but a very large proportion, 40.3%, reported that they only sometimes or never received this assistance.

**Figure CA-84** – In the last 6 months, 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?

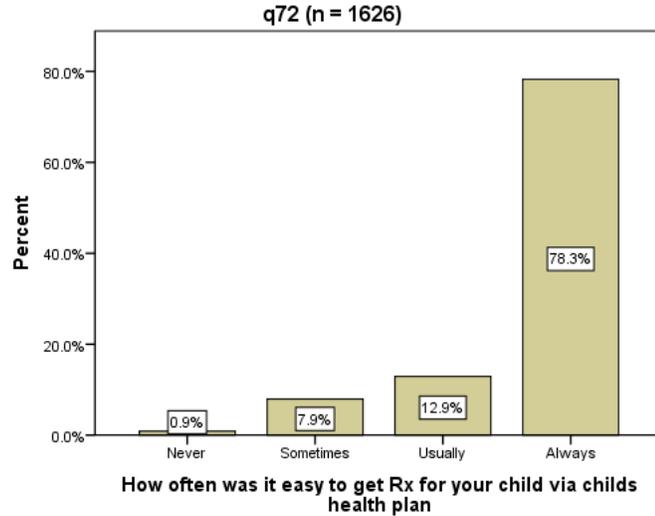


**Ease of Getting Prescriptions Filled (q72)**

Question 72 asked caregivers that reported filling prescriptions for the child in the last 6 months (n=1,626) how often it was easy to get the medicine through his or her health plan. Figure CA-85 reports great access to this service with 91.2% having responded it was always easy to get prescriptions filled. No statistically significant

bivariate relationships between this question and any of the demographic or context variables were observed.

**Figure CA-85** – In the last 6 months, how often was it easy to get needed prescription medicine for your child through his or her health plan?



**Assistance Filling Prescriptions (q73)**

Question 73 was asked of caregivers who indicated they had filled prescriptions for the child in the last 6 months (n=1,604). Caregivers were asked if anyone from the child's health plan, doctor's office, or clinic had helped get the child's prescription medicines. Figure CA-86 indicates that 55.9% had received assistance in filling prescriptions.

**Figure CA-86** – Did anyone from your child's health plan, doctor's office, or clinic help you get your child's prescription medicines?

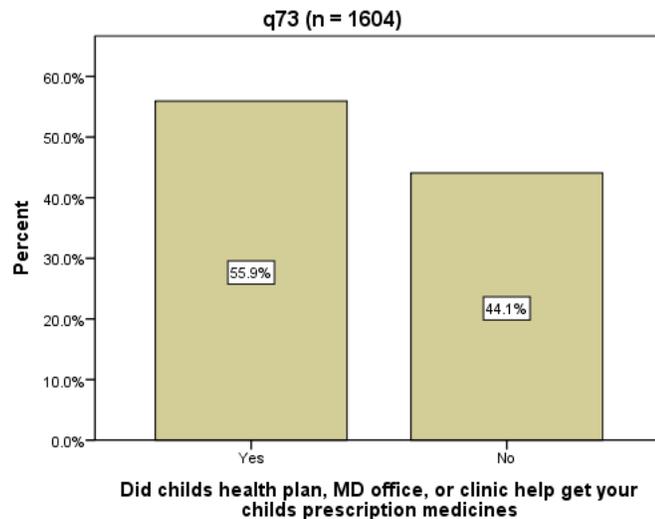
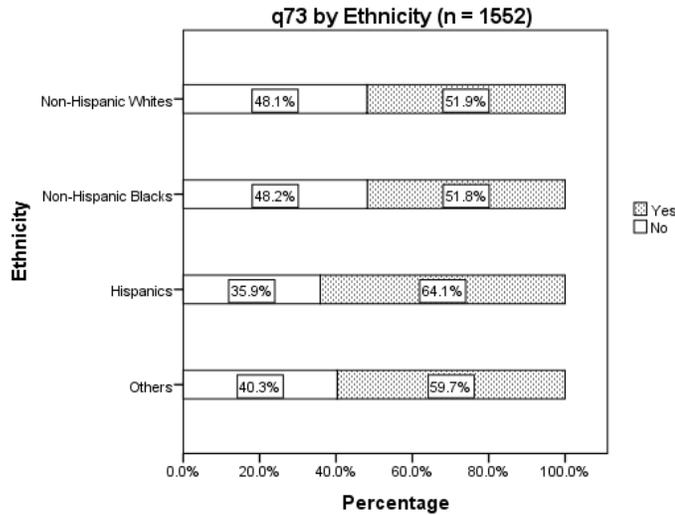


Figure CA-87 shows the relationship between the child's ethnicity and whether the caregiver received help in filling prescriptions. Among Hispanics, 64.1% of the caregivers reported getting this type of assistance. The gap between Hispanic and non-

Hispanics is narrower than many other questions in that the proportion of caregivers of Non-Hispanic Black and White children needing assistance with prescriptions only drops down to 51.8% and 51.9%, respectively.

**Figure CA-87** – Did anyone from your child’s health plan, doctor’s office, or clinic help you get your child’s prescription medicines?



The language gap in receiving prescription assistance is also narrower than some other questions (Figure CA-88) with 66.0% of Spanish-prefering caregivers having reported getting assistance from the plan or provider while 53.0% of English-prefering caregivers reporting same. The 83.3% of those preferring some other language that responded yes is mitigated by very small cell size.

**Figure CA-88** – Did anyone from your child’s health plan, doctor’s office, or clinic help you get your child’s prescription medicines?

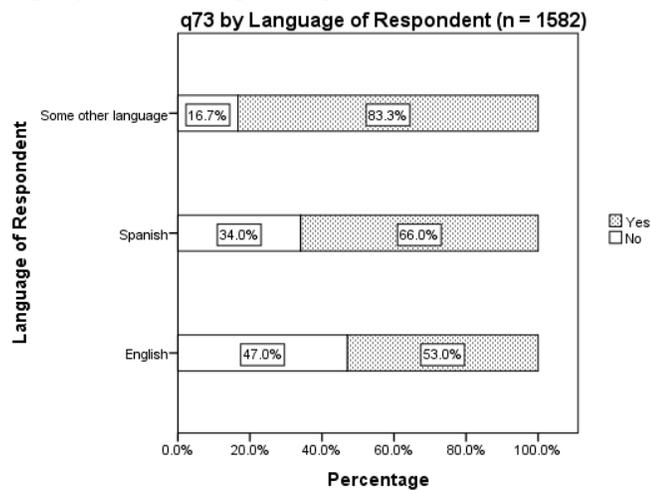


Figure CA-89 shows the relationship between the CCNC network which cares for the child and whether assistance getting prescriptions filled was received. The Carolina

Community Health Partnership (1010) had the lowest proportion (44.0%) that received this form of assistance and Community Care Partners of Greater Mecklenburg (1009) had the highest proportion at 69.1%.

**Figure CA-89** – Did anyone from your child’s health plan, doctor’s office, or clinic help you get your child’s prescription medicines?

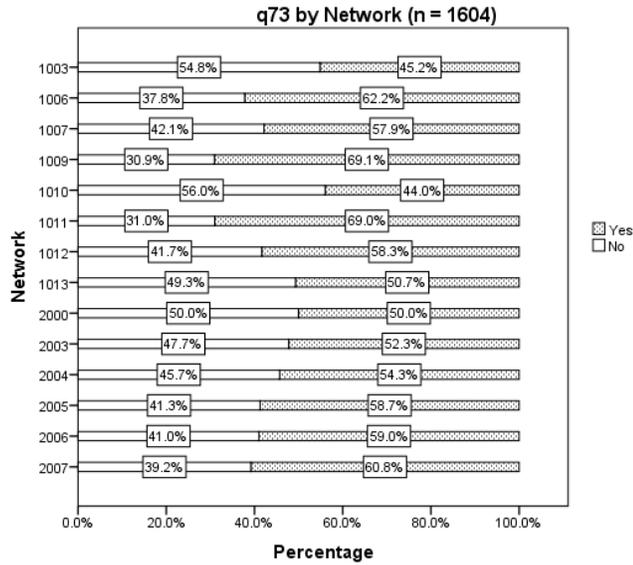
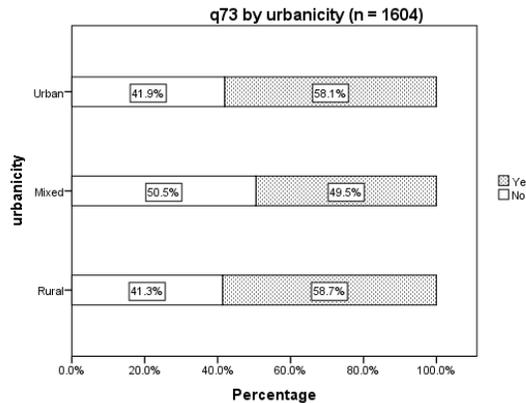


Figure CA-90 describes how receiving help getting the child’s prescriptions varied across differing levels of rurality. The Mixed urbanicity areas had the lowest proportion of caregivers that reported getting this assistance (49.5%) whereas the highest proportion was in the Rural areas at 58.7%.

**Figure CA-90** – Did anyone from your child’s health plan, doctor’s office, or clinic help you get your child’s prescription medicines?



**Satisfaction**

Both the child and the caregiver need to be satisfied with the care received to maximize the probability that patients and parents complete recommended actions to maximize health. Patients being treated under Medicaid managed care will have less autonomy over a range of health care choices. This can negatively affect satisfaction. In this section, a wide range of questions about satisfaction with care provided were asked in an attempt to unearth broad problems as well as any disparities that may be present.

As has been seen in all question domains so far, the child’s ethnicity is the demographic variable that most often produced significant relationships with 18 of 24 questions showing ethnicity to be significantly associated with satisfaction (see Appendix I). In most cases, and as in other domains, caregivers of Hispanic children reported being less satisfied than caregivers of non-Hispanic children. Question 70 on satisfaction with the health plan did produce a movement away from that trend, as caregivers of Hispanic children were significantly more satisfied than caregivers for children of other ethnic groups. As in earlier question domains, preferred caregiver language often (but not always) tracked the child’s ethnicity trends, with English and Spanish-preferring having the same relative satisfaction relationship as responses by caregivers of Non-Hispanic and Hispanic children (9 of 24 questions had significant relationships).

The next most prevalent demographic variable (7 significant relationships) was age of the child. No consistent trends with the child’s age are seen as some of the questions are communication based and the child’s ability to communicate at all can be confounded with questions related to quality of communication.

Table CS-1 provides the satisfaction domain questions asked in the survey.

**Table CS-1 – Satisfaction Questions**

No.	Question
q8	In the last 6 months, 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?
q11	In the last 6 months, how often did you have your questions answered by your child’s doctors or other health providers?
q12	In the last 6 months, did your child’s doctors or other health providers tell you there was more than one choice for your child’s treatment or health care?
q13	In the last 6 months, did your child’s doctors or other health providers talk with you about the pros and cons of each choice for your child’s treatment or health care?
q14	In the last 6 months, when there was more than one choice for your child’s treatment or health care, did your child’s doctor or other health providers ask you which choice was better for your child?
q15	Using any number from 0-to-10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child’s health care in the last 6 months?
q26	In the last 6 months, did you get the help you needed from your child’s doctors or other health providers in contacting your child’s school or daycare?
q40	In the last 6 months, how often did your child’s personal health provider explain things in a way that was easy to understand?
q41	In the last 6 months, how often did you have a hard time speaking with or

	understanding your child’s personal health provider because you spoke different languages?
q42	In the last 6 months, how often did your child’s personal health provider listen carefully to you?
q43	In the last 6 months, how often did your child’s personal health provider show respect for what you had to say?
q44	Is your child able to talk with doctors about his or her health care?
q45	In the last 6 months, how often did your child’s personal health provider explain things in a way that was easy for your child to understand?
q47	In the last 6 months, how often did your child’s health provider spend enough time with your child?
q48	In the last 6 months, did your child’s personal health provider talk with you about how your child is feeling, growing, or behaving?
q51	Using any number from 0-to-10, where 0 is the worst possible and 10 is the best possible, what number what you use to rate your child’s personal health provider?
q55	Does your child’s personal health provider understand how these medical, behavioral, or other health conditions affect your child’s day-to-day life?
q56	Does your child’s personal health provider understand how these medical, behavioral, or other health conditions affect your family’s day-to-day life?
q61	Using any number from 0-to-10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate the specialist your child saw most often in the last 6 months?
q66	In the last 6 months, how often did office staff at your child’s health plan, doctor’s office, or clinic give you the information or help that you needed?
q67	In the last 6 months, how often did office staff at your child’s health plan, doctor’s office, or clinic treat you and your child with courtesy and respect?
q68a	In the last 6 months, did your child’s health provider or health plan give you forms to fill out?
q70	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 Carolina Access, Medicaid, or Health Check plan?

**Discussions with Health Providers about Illness Prevention** (q8)

Question 8 asked the caregivers how often in the last 6 months the child’s health provider discussed specific things that could be done to prevent illness in the child. Despite how important illness prevention is, only 44.2% of caregivers reported always speaking with the health provider about this topic while 40.0% only sometimes or never had these important discussions. Figure CS-1 (n=2,242) provides the results.

**Figure CS-1** – In the last 6 months, 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?

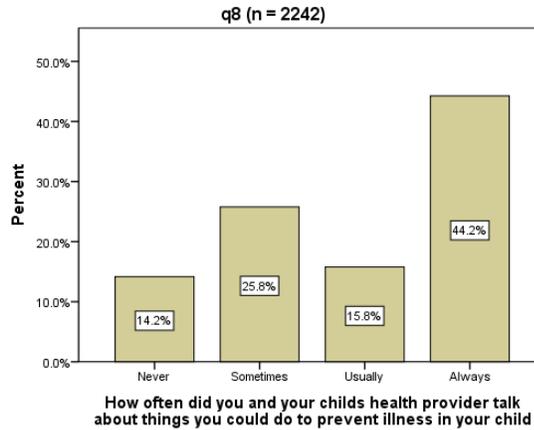


Figure CS-2 shows the relationship between the child’s ethnicity and the caregiver’s response to q8. Virtually identical proportions of caregivers (64.4% and 63.9%, respectively) of Non-Hispanic Whites and Non-Hispanic Black children reported usually or always discussing illness prevention with a health provider. Only 49.7% of caregivers of Hispanic children reported having had these conversations.

**Figure CS-2** – In the last 6 months, 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?

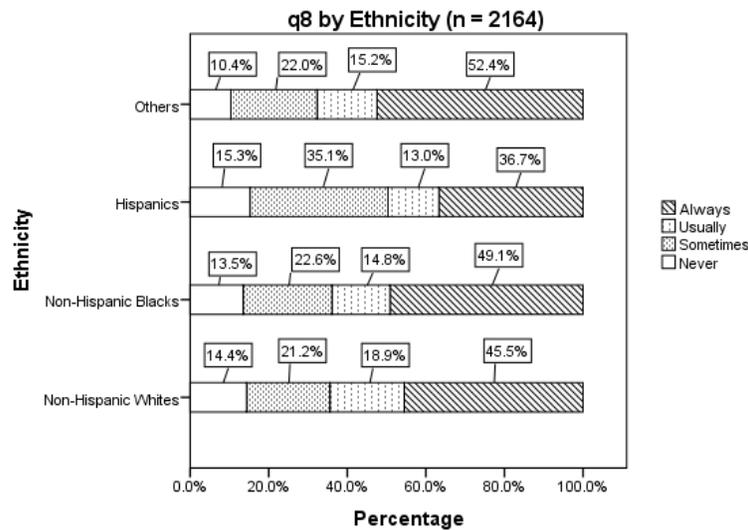


Figure CS-3 reveals how conversations about illness prevention varied by the preferred language of the caregiver. The gap between Spanish and English is very similar to the gap between Hispanic and non-Hispanic in that only 45.1% of caregivers who preferred Spanish reported having usually or always had conversations with health provider on illness prevention whereas 64.8% of caregivers preferring English reported the same.

**Figure CS-3** – In the last 6 months, 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?

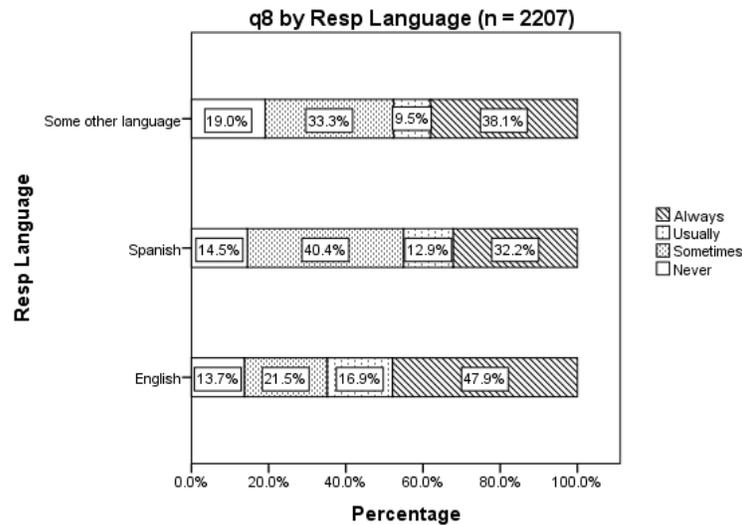
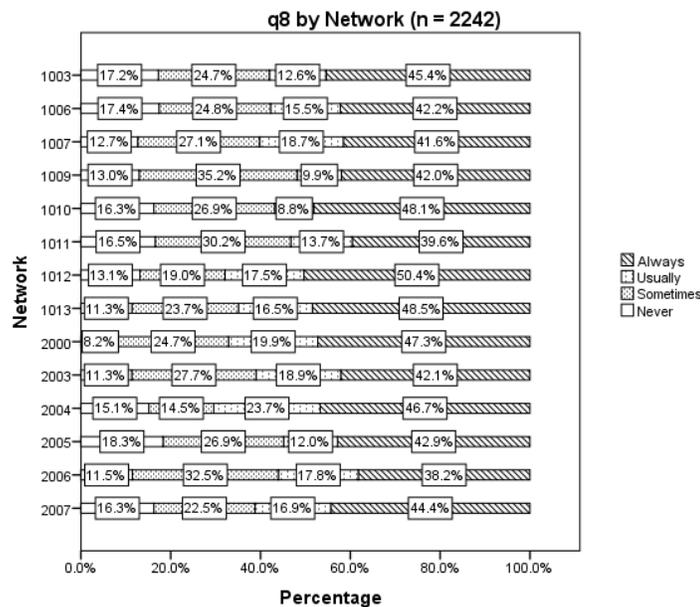


Figure CS-4 shows the relationship between the CCNC network in which the child lives and whether specific things to prevent illness were discussed with a health provider. Community Care of the Lower Cape Fear (2004) had the highest proportion of caregivers that reported this type of communication at 70.4% whereas only 51.9% of caregivers associated with the Community Care Partners of Greater Mecklenburg reported having discussed preventive care with their child’s providers.

**Figure CS-3** – In the last 6 months, 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?



**Getting Questions Answered by Health Providers (q11)**

Question 11 asked the caregivers how often in the last 6 months their questions were answered by their child’s health providers. Figure CS-5 (n=2,245) indicates a very positive response with 86.5% of caregivers reporting that questions were usually or always answered.

**Figure CS-5** – In the last 6 months, how often did you have your questions answered by your child’s doctors or other health providers?

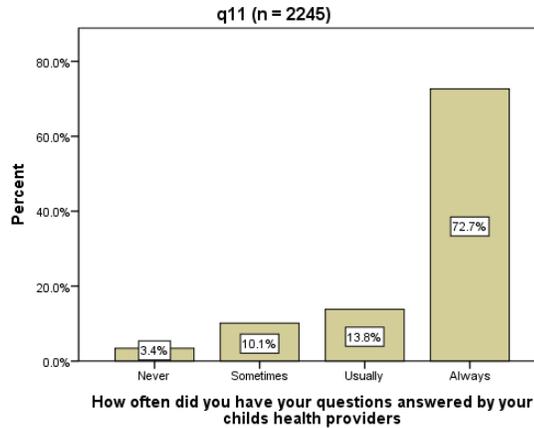
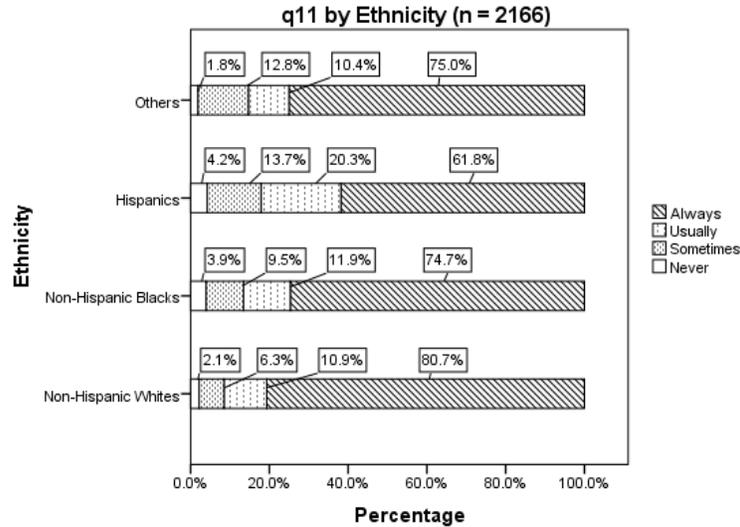


Figure CS-6 shows the relationship between the child’s ethnicity and the caregiver’s response to q11. Although 80.7% of caregivers of White Non-Hispanic children reported that their questions were always answered, only 61.8% of caregivers of Hispanic children reported the same result. Other significant results include 17.2% of caregivers of Non-Hispanic White children reporting their question were sometimes or usually answered as compared to 34.0% of Hispanic children caregivers reporting the same.

**Figure CS-6** – In the last 6 months, how often did you have your questions answered by your child’s doctors or other health providers?



**Providers Offering Treatment Choices (q12)**

Question 12 asked the caregivers if, in the last 6 months they had been told by their child’s health provider that there was more than one choice of treatment or health care, with examples of these choices explained to the respondent as including medicine, surgery, or other treatments. Figure CS-7 (n=2,200) indicates that just under half of caregivers (48.0%) reported being told of these types of choices. Although it seems a negative that only one-half of the caregivers reported being given these choices, it is unknown how many of the children in question had any condition requiring that any choices be made.

**Figure CS-7** – 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?

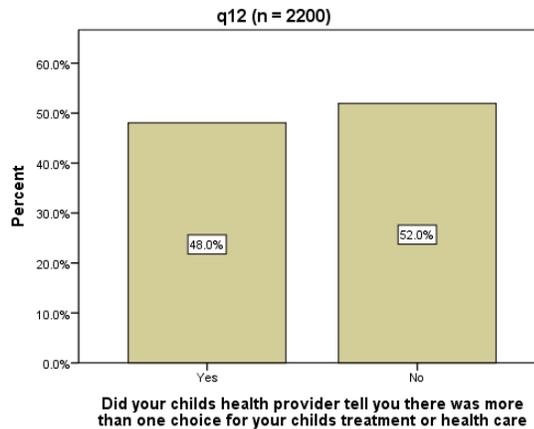


Figure CS-8 shows the relationship between the child’s age and the caregiver’s response to q12. At 56.9%, the caregivers of 2-5 year-olds had the highest proportion that reported not being told of multiple options for the child’s treatment whereas only 48.8% of caregivers of 6-8 year-old children reported not being told of multiple choices.

**Figure CS-8** – 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?

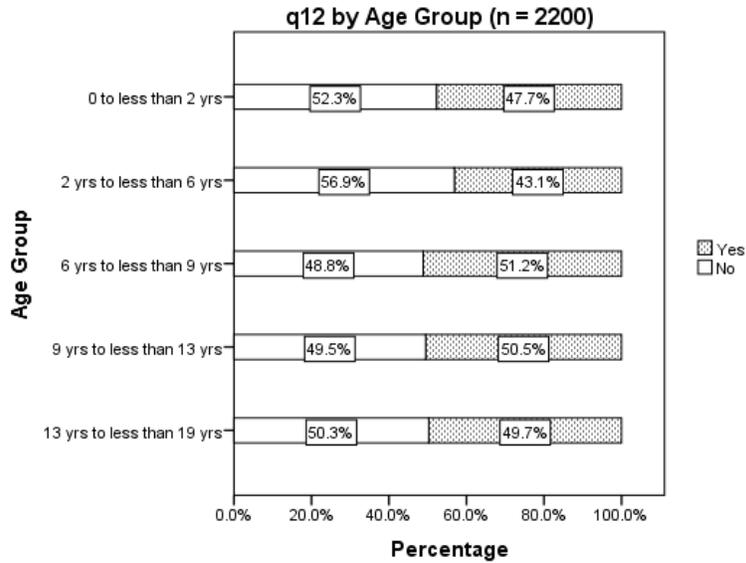


Figure CS-9 shows how responses to q12 varied with ethnicity of the child. Caregivers of Hispanic children had the lowest proportion indicating they had been offered choices about the child’s treatment at 38.7%. Children of Other and White Non-Hispanic ethnicity were reported to have the highest proportions that were offered treatment choices by providers at 56.5% and 52.3%, respectively.

**Figure CS-9** – 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?

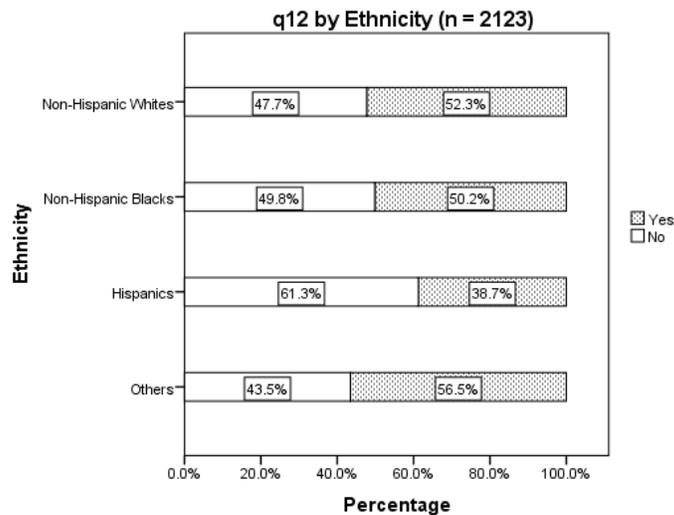
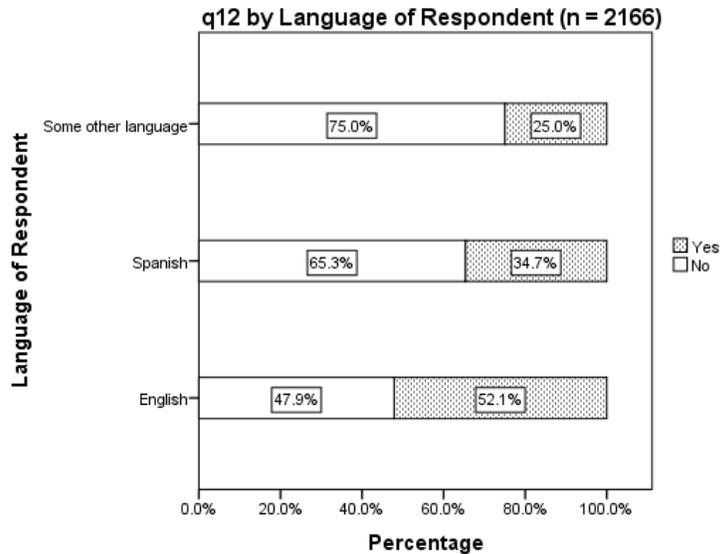


Figure CS-10 reveals a slightly wider English/Spanish language split in responses to q12 than was observed in the Non-Hispanic/Hispanic ethnicity breakdown. The English-preferring caregivers had the highest proportion that reported being given treatment choices by providers at 52.1% whereas only 34.7% of Spanish-preferring caregivers reported the same.

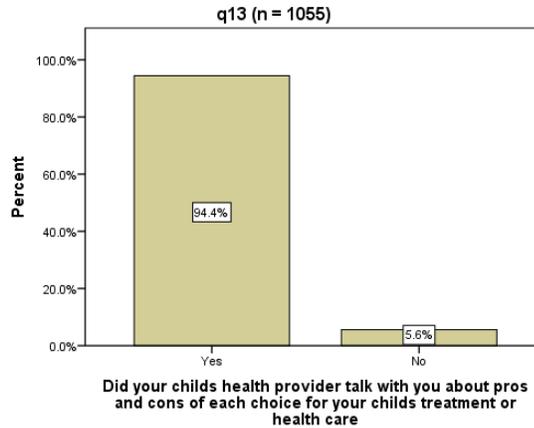
**Figure CS-10** – In the last 6 months, did your child’s doctor or other health provider tell you there was more than one choice for your child’s treatment or health care?



**Discussing Pros and Cons of Treatment Options (q13)**

Question 13 asked the caregivers if, in the last 6 months any of the child’s health providers had talked to them about the pros and cons of each treatment choice. This was asked of the 1,055 caregivers who indicated in question 12 that treatment choices had been discussed. Figure CS-11 reveals that 94.4% of these caregivers report having been alerted to the pros and cons of different choices. No significant bivariate relationships were observed with any of the demographic or context variables.

**Figure CS-11** – In the last 6 months, did your child’s doctor or other health providers talk with you about the pros and cons of each choice for your child’s treatment or health care?



**Seeking Caregivers Input on Treatment Choices (q14)**

Question 14 asked the caregivers if, in the last 6 months, when there was more than one treatment choice for the child, did the child's health providers seek the caregiver's opinion as to which was best for the child. Figure CS-12 (n=1,048) indicates that 86.8% of caregivers responded that health providers had asked their input as to which treatment choice was best for the child.

**Figure CS-12** – In the last 6 months, 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?

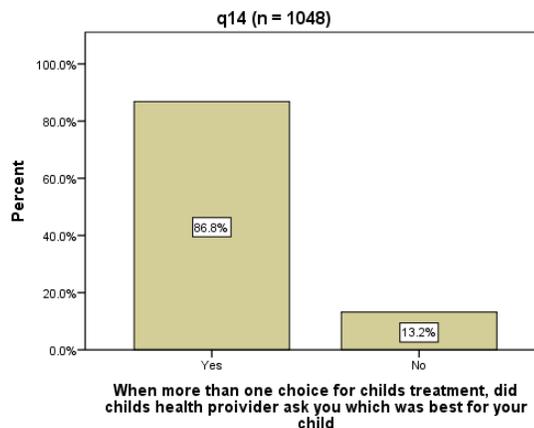
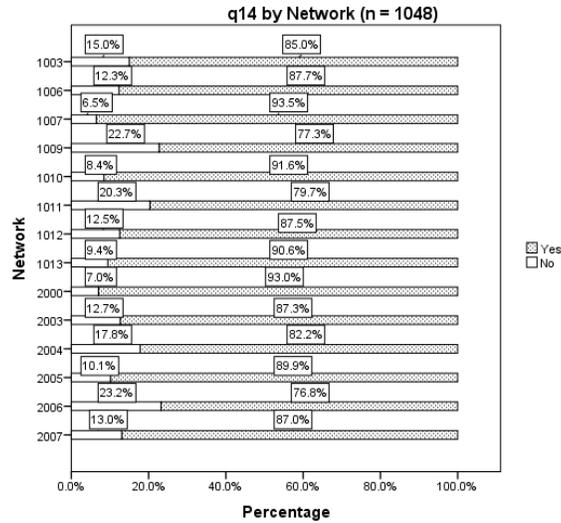


Figure CS-13 shows the relationship between the CCNC network that enrolled the child and whether the caregiver was asked for input on treatment choices. Community Care of Western North Carolina (1007) had the largest proportion (93.5%) of caregivers that indicated their input on choices had been sought whereas only 76.8% of caregivers whose children were associated with Northwest Community Care (2006) reported the same.

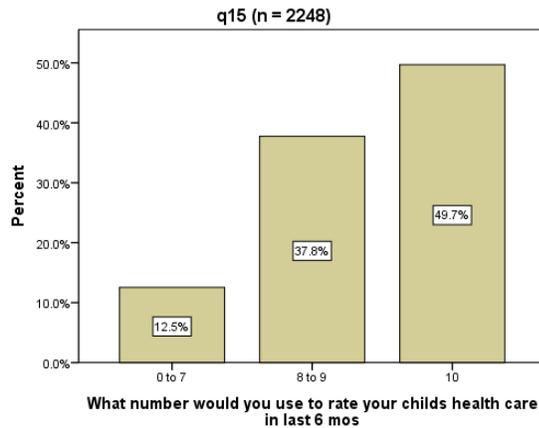
**Figure CS-13** – In the last 6 months, when there was more than one choice for your child's treatment or health care, did your child's doctor or other health provider ask you which choice was best for your child?



**Total Satisfaction With the Child’s Care (q15)**

Question 15 asked the caregivers to rate the child’s health care in the last 6 months, using a scale of 0 (worst possible) to 10 (best possible). Figure CS-14 (n=2,248) reveals that 49.7% of caregivers indicated the child received the best care possible (rating of 10), 37.7% of caregivers indicated a rating of 8-9, and the balance (12.6%) rated the care at 7 or below.

**Figure CS-14** – Using any number from 0-to-10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child’s health care in the last 6 months?



The relationship between the child’s ethnicity and the caregiver’s response to q15 is shown in Figure CS-15. Caregivers who reported their child’s ethnicity as “other” had the lowest proportion reporting a rating of 10 at 36.6%. On the other hand, caregivers of Non-Hispanic Black children had the highest proportion reporting a 10 rating at 52.5%. A noteworthy observation related to this question was that the differences between Hispanics and Non-Hispanics were not as pronounced compared to many of the survey questions analyzed thus far.

**Figure CS-15** - Using any number from 0-to-10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child's health care in the last 6 months?

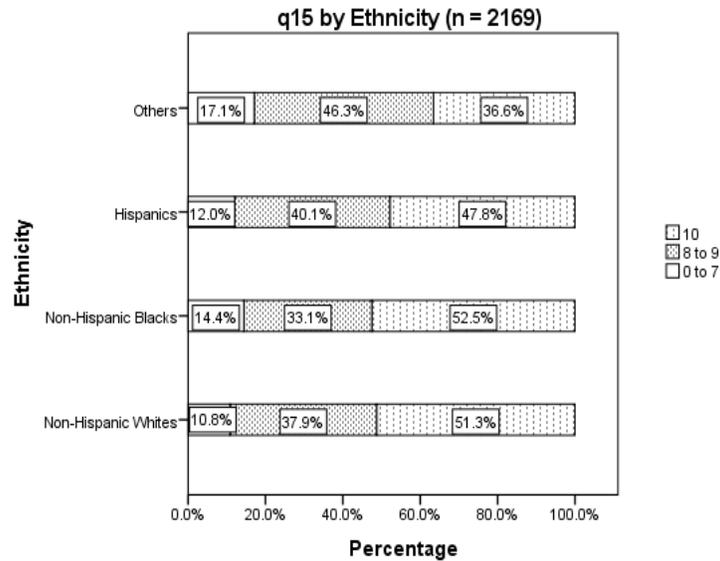


Figure CS-16 shows the relationship between preferred language of the caregiver and his/her rating of all health care for the child. Only 9.4% of caregivers who preferred Spanish gave ratings in the 0-7 range for the child's care. At the other end of the rating scale, virtually identical proportions of English and Spanish-speaking caregivers rated their child's care as the best possible (10) at 50.1% and 48.3%, respectively.

**Figure CS-16** - Using any number from 0-to-10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child's health care in the last 6 months?

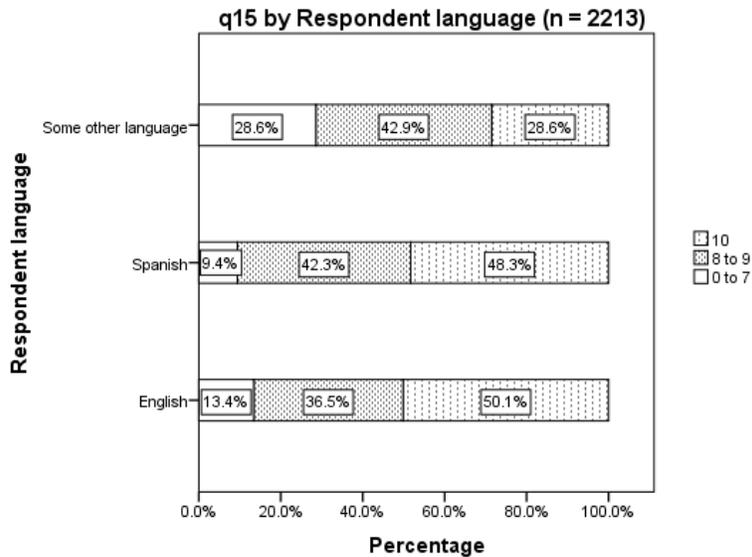
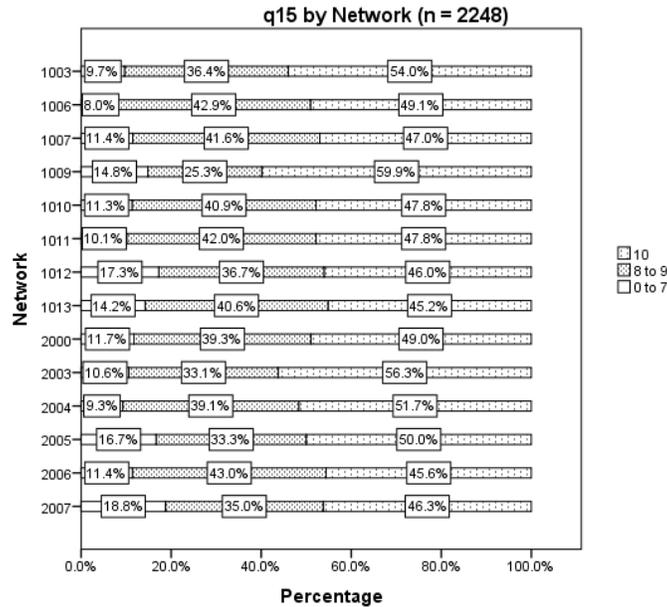


Figure CS-17 shows the relationship between the CCNC network in which the child lives and the caregiver’s response to q15. Northern Piedmont Community Care (2007) had the highest proportion (18.8%) of caregivers that indicated a rating in the 0-7 range while caregivers of enrollees in the Community Care of the Lower Cape Fear network (2004) had the lowest proportion (9.3%) in this range. Caregivers with children enrolled in the Community Care Partners of Greater Mecklenburg network (1009) had the highest proportion (59.9%) that reported a 10 rating for the child’s care.

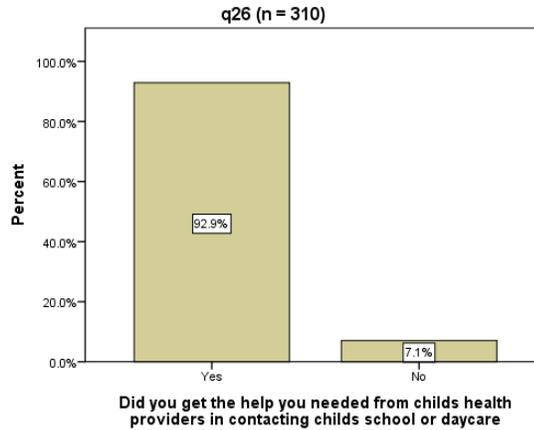
**Figure CS-17** - Using any number from 0-to-10, where 0 is the worst health care possible and 10 is best health care possible, what number would you use to rate your child’s health care in the last 6 months?



**Assistance Contacting the Child’s School or Daycare (q26)**

Question 26 asked the 310 caregivers who indicated a need for help to contact a school or daycare in the last 6 months (n=310) about their child’s health or health care whether they received this assistance. Figure CS-18 shows that the overwhelming majority (92.9%) indicated they did receive this needed help. No significant bivariate relationships were observed between this question and any of the demographic or context variables.

**Figure CS-18** – In the last 6 months, did you get the help you needed from your child’s doctors or other health providers to contact a school or daycare center about your child’s health or health care?



Questions 40-48 were asked of caregivers who indicated that the child had seen his or her personal health provider at least once in the last 6 months.

**Explanations That Were Easy to Understand (q40)**

Question 40 asked the caregivers how often, in the previous 6 months, the child's personal health provider explained things in a way that was easy to understand. Figure CS-19 (n=1,998) indicates that 92.5% of caregivers reported that explanations were easy to understand with the balance reporting explanations were sometimes or never easy to understand.

**Figure CS-19** – In the last 6 months, how often did your child's personal health provider explain things in a way that was easy to understand?

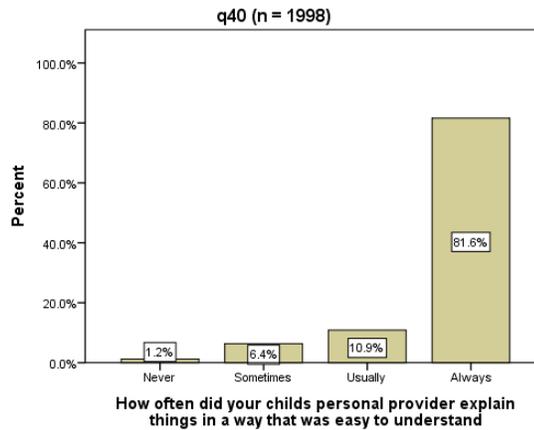
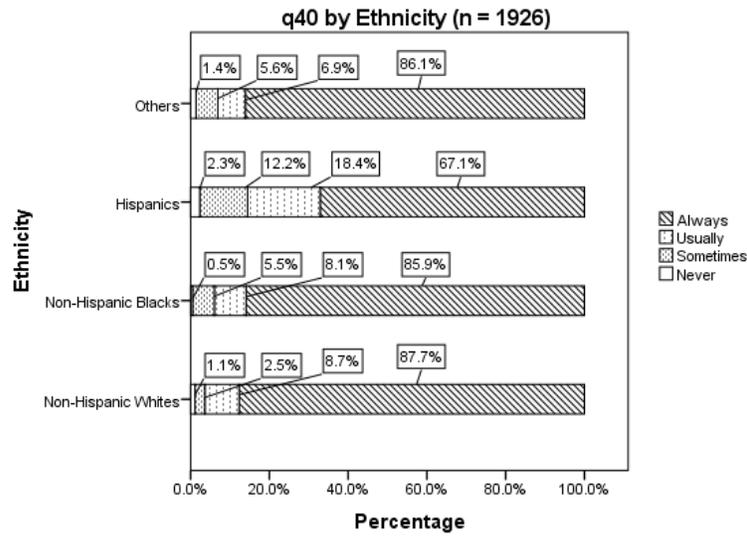


Figure CS-20 reveals that only 67.1% of caregivers of Hispanic children indicated that providers gave explanations that were easy to understand whereas a minimum of 85.9% of caregivers across the other child ethnic categories reported the same. Only 3.6% of caregivers of Non-Hispanic White children reported that explanations were sometimes or never easy to understand whereas 14.5% of caregivers of Hispanic children reported the same.

**Figure CS-20** – In the last 6 months, how often did your child’s personal health provider explain things in a way that was easy to understand?



**Language Barriers to Understanding Health Providers (q41)**

Question 41 asked the caregivers how often, in the last 6 months, they had difficulty understanding the child’s personal health provider because they spoke different languages. Figure CS-21 (n=1,998) indicates that 83.9% of caregivers never had this problem, 8.3% sometimes had it, but that 5.2% of caregivers always had difficulty understanding the child’s provider due to speaking different languages.

**Figure CS-21** – In the last 6 months, how often did you have a hard time speaking with or understanding your child’s personal health provider because you spoke different languages?

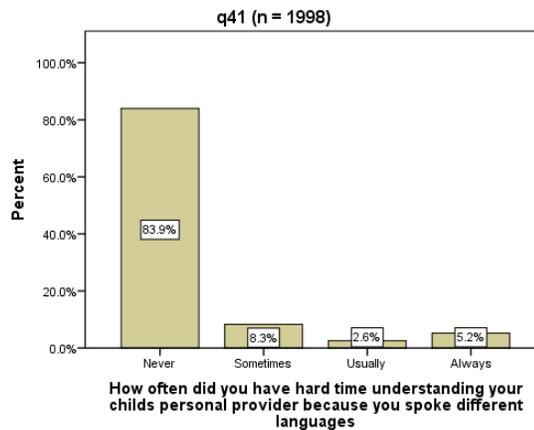


Figure CS-22 shows the relationship between the child’s age and caregiver responses to q41. Caregivers of 13-18 year-old children had the lowest proportion that reported sometimes or always having problems understanding the child’s health provider due to speaking different languages, at 5.6% and 2.9%, respectively. Looking across the full range of data, problems due to language were generally reported as being present less

often as the age of the child increased. Caregivers of 0-1 year-old children had results that countered this trend, but earlier statements of the time lag between sample draw and survey fielding causing this segment to be under-represented could have played a role.

**Figure CS-22** – In the last 6 months, how often did you have a hard time speaking with or understanding your child’s personal health provider because you spoke different languages?

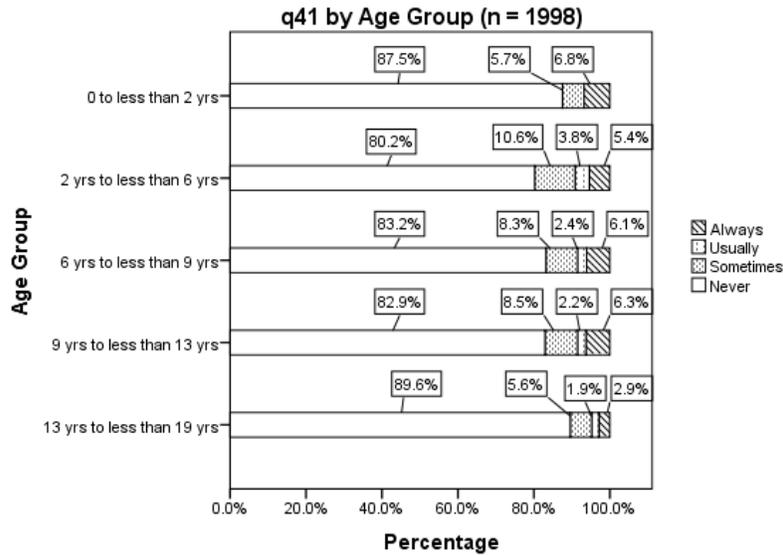


Figure CS-23 denotes how the child’s ethnicity was related to the caregiver’s reported difficulty in understanding health providers due to speaking different languages. Not surprisingly, a much lower proportion of caregivers of Hispanic children (59.0%) reported never having problems than of Non-Hispanic Blacks or Whites (93.3% and 95.3%, respectively). Of perhaps greater concern is the observation that 18.3% of caregivers of Hispanic children reported usually or always having language-based communication problems. Only 2.7% and 3.1%, respectively, of caregivers of Non-Hispanic White and Black children reported usually or always having communication troubled based on speaking different languages.

**Figure CS-23** – In the last 6 months, how often did you have a hard time speaking with or understanding your child’s personal health provider because you spoke different languages?

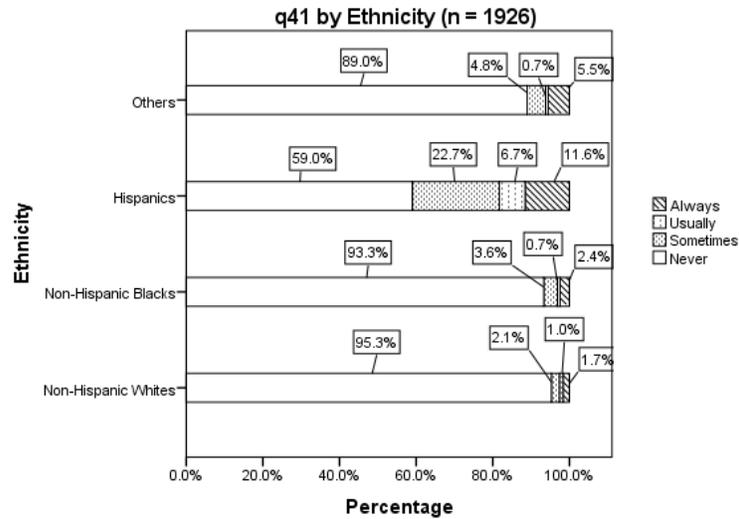


Figure CS-24 shows the relationship between the preferred caregiver language and difficulty understanding the child’s provider due to language obstacles. Although this bivariate relationship was not statistically significant due to the occurrence of too few cases in some of the cells, the magnitude of the disparity warrants mention as 25.0% of Spanish-prefering caregivers reported usually or always experiencing language-based communication problems with their child’s personal health provider whereas only 3.1% of English-prefering caregivers reported the same difficulty.

**Figure CS-24** – In the last 6 months, how often did you have a hard time speaking with or understanding your child’s personal health provider because you spoke different languages?

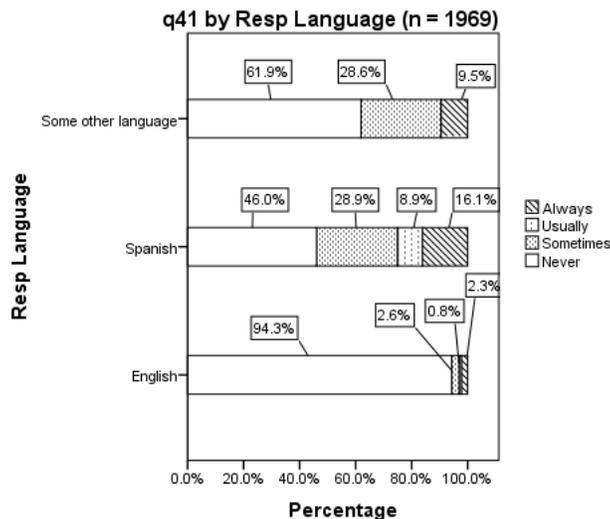
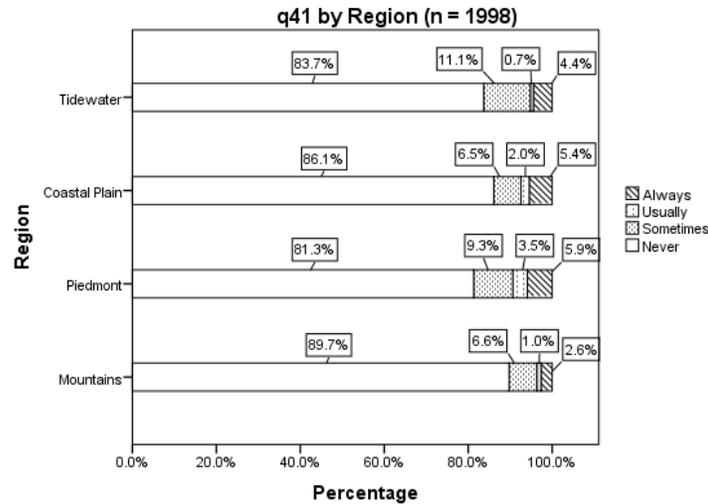


Figure CS-25 denotes how state geographic region was associated with responses to q41. Caregivers of Piedmont region children reported the highest proportion of usually or always having problems due to speaking different languages (9.4%) whereas only 3.6% of caregivers of Mountain region children reported the same level of difficulty.

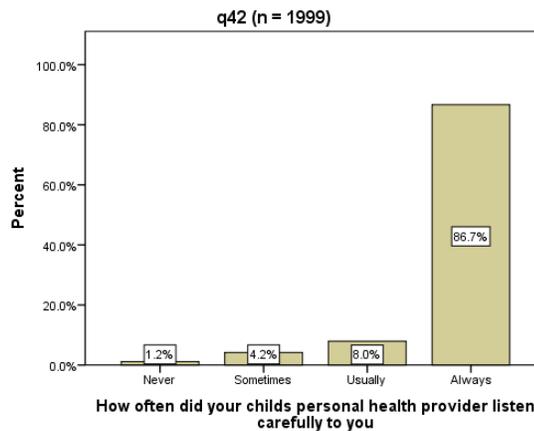
**Figure CS-25** – In the last 6 months, how often did you have a hard time speaking with or understanding your child’s personal health provider because you spoke different languages?



**Health Providers Listening to Caregivers (q42)**

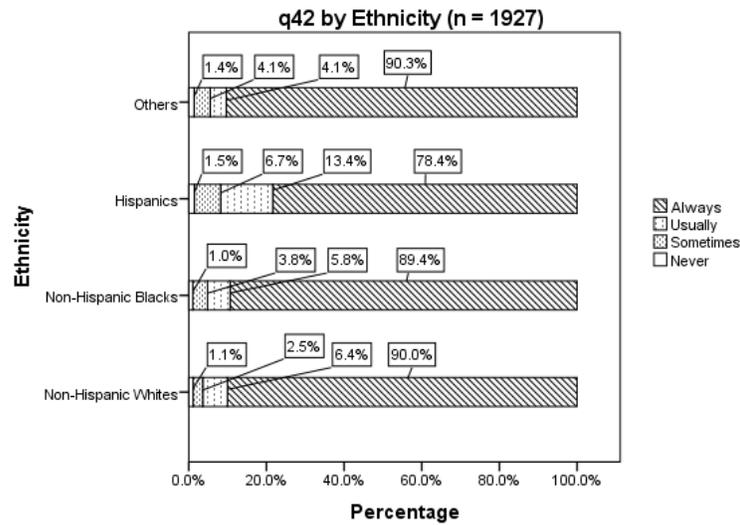
Question 42 asked the caregivers how often, in the last 6 months, the child’s personal health provider listened carefully to what the caregiver had to say. Figure CS-26 (n=1,999) indicates that providers are doing well with 86.7% of caregivers having responded that the providers always listened carefully.

**Figure CS-26** – In the last 6 months, how often did your child’s personal health provider listen carefully to you?



Although Figure CS-26 indicates that results for providers listening to caregivers were quite good in aggregate, Figure CS-27 indicates that differences along the child’s ethnic lines remained. While 78.4% of caregivers of Hispanic children reported the child’s personal health provider always listened carefully, 89.4%, 90.0%, and 90.3%, respectively, of those caring for Non-Hispanic Blacks, Whites, and of other ethnic distinction provided the same response.

**Figure CS-27** – In the last 6 months, how often did your child’s personal health provider listen carefully to you?



**Personal Health Provider Showing Respect (q43)**

Question 43 asked the caregivers how often, in the last 6 months, the child’s personal health provider showed respect for what the caregiver had to say. Figure CS-28 (n=1,966) indicates that providers were at least as good at showing respect as they were at listening, with 88.8% of caregivers reporting they were always shown respect.

**Figure CS-28** – In the last 6 months, how often did your child’s personal health provider show respect for what you had to say?

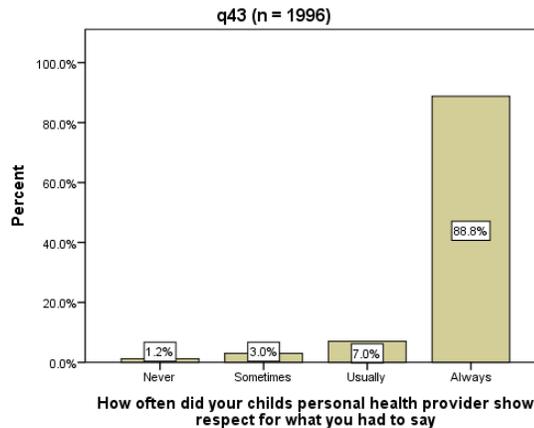
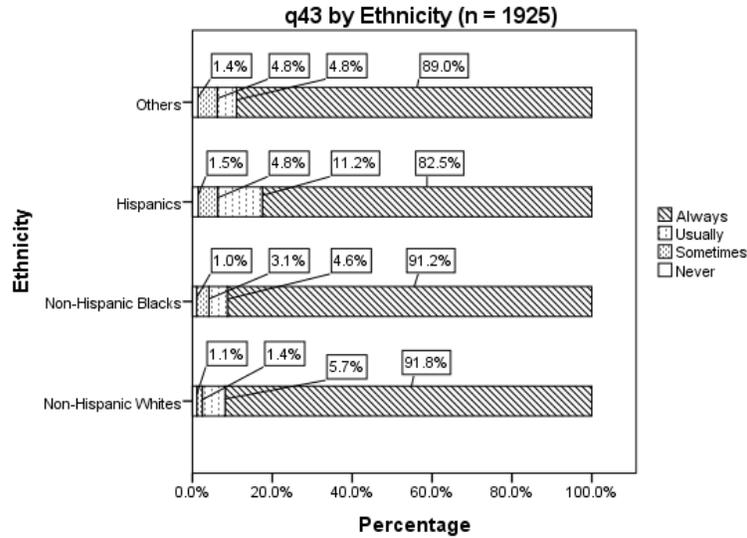


Figure CS-29 shows the relationship between the child’s ethnicity and the responses to q43. Once again, differences along ethnic lines were observed. Specifically, 82.5% of caregivers of Hispanic children reported always being shown respect whereas 91.2% and 91.8%, respectively, of caregivers of Black and White children provided the same response.

**Figure CS-29** – In the last 6 months, how often did your child’s personal health provider show respect for what you had to say?



***Child’s Ability to Talk With Doctors (q44)***

Question 44 asked the caregiver if the child was able to talk with doctors about his or her health care. Figure CS-30 (n=1,983) indicates that 75.7% of caregivers responded that the child was able.

**Figure CS-30** – Is your child able to talk with doctors about his or her health care?

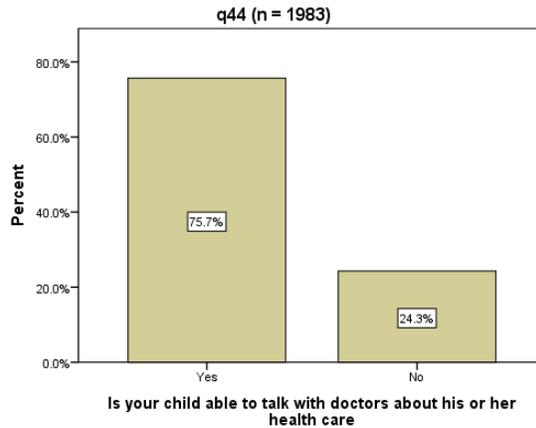


Figure CS-31 describes how caregivers of children of different ages responded to q44. Over 94% of the 0-1 years and 47.9% of the 2-5 year-olds were reported to be unable to communicate with doctors about health care. This phenomenon may not be limited to health care and could extend into other areas of the child’s life at these ages. A large jump in ability to communicate is seen in the 6-8 year-olds where only 13.8% were reported unable to discuss health care with doctors. By the late teens (13-18 years old), only 5.5% are reported being unable to communicate with health providers.

**Figure CS-31 – Is your child able to talk with doctors about his or her health care?**

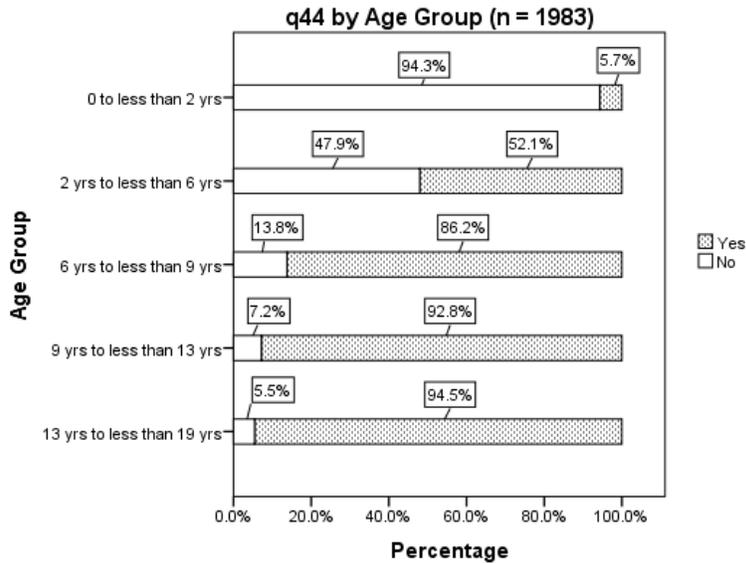


Figure CS-32 shows the relationship between the child’s ethnicity and caregiver responses to q44. A significant portion of caregivers of Hispanic children (29.5%) reported that the child could not communicate with health providers about their health whereas the lowest proportion providing this response were caregivers of White Non-Hispanic children (21.4%).

**Figure CS-32 – Is your child able to talk with doctors about his or her health care?**

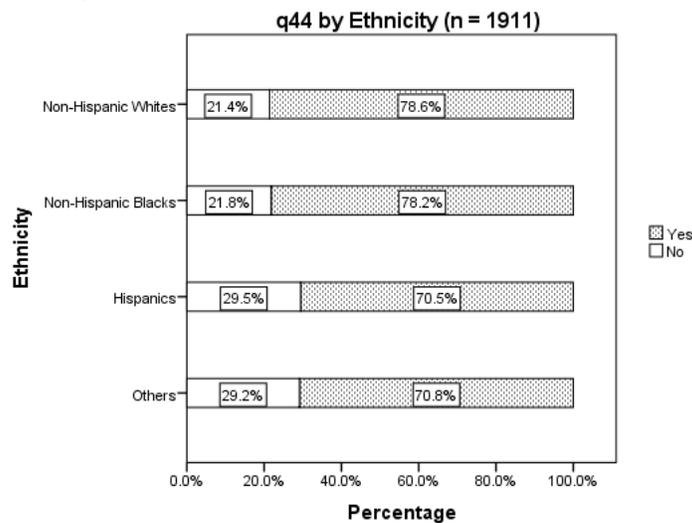
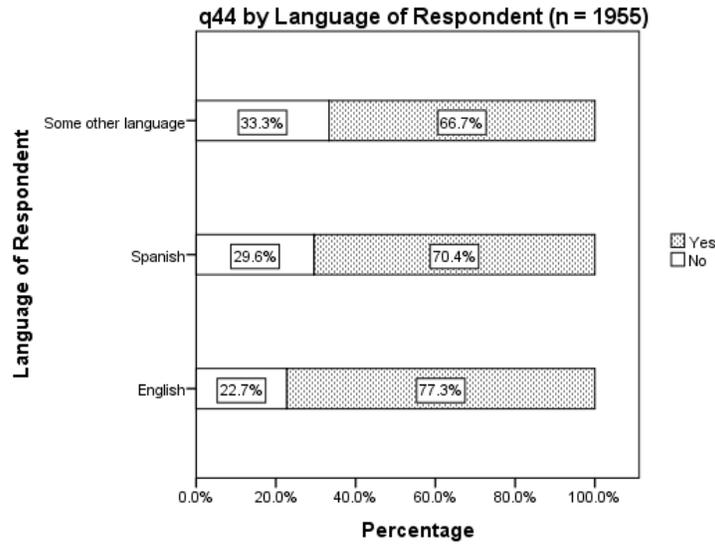


Figure CS-33 relates how caregiver-preferred language was related to the child’s ability to talk with doctors about health care. Almost identical to the relationship with the child’s Hispanic ethnicity, 29.6% caregivers who prefer Spanish reported their child as having trouble communicating with the provider whereas only 22.7% of English-prefering caregivers gave the same response.

**Figure CS-33** – Is your child able to talk with doctors about his or her health care?



***Explanations Easy for the Child to Understand (q45)***

Question 45 was asked of caregivers who had indicated in q44 that the child was able to talk to doctors about health care (n=1,497). Q45 asked how often, in the last 6 months, the child’s personal health provider explained things in a way that was easy for the child to understand. Figure CS-34 indicates the proportion reporting that explanations were always easy to understand (73.3%) is around 10% lower than previous, similar communication questions.

**Figure CS-34** – In the last 6 months, how often did your child’s personal health provider explain things in a way that was easy for your child to understand?

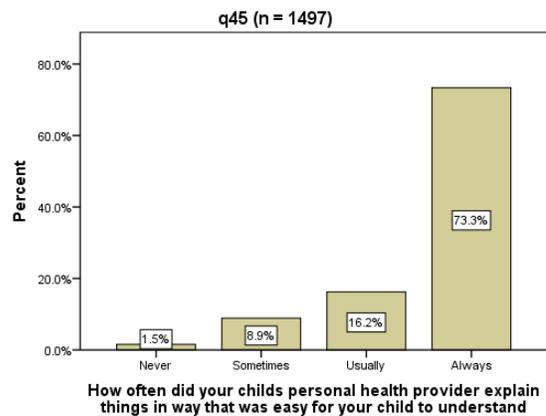
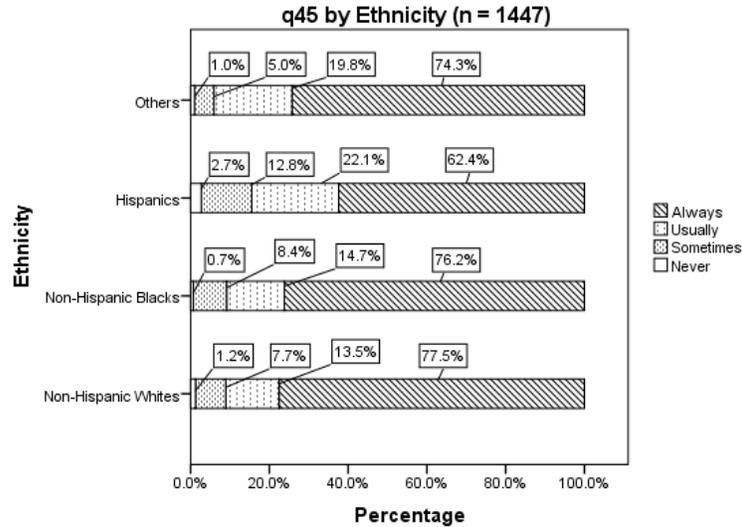


Figure CS-35 shows the relationship between the child’s ethnicity and responses to q45. Continuing a frequently seen trend, 62.4% of caregivers of Hispanic children reported that the provider always communicated in a manner that the child could understand whereas 76.2% and 77.5%, respectively, of caregivers of Non-Hispanic Blacks and Whites reported the same response.

**Figure CS-35** – Is your child able to talk with doctors about his or her health care?



**Provider Spending Enough Time With the Child (q47)**

Question 47 asks caregivers how often, in the last 6 months, the child’s personal health provider spent enough time with the child (n=1,987). Figure CS-36 shows that only 68.7% of caregivers reported the provider always spent enough time with the child with 15.1% indicating the doctor sometimes or never spent enough time.

**Figure CS-36** – In the last 6 months, how often did your child’s personal health provider spend enough time with your child?

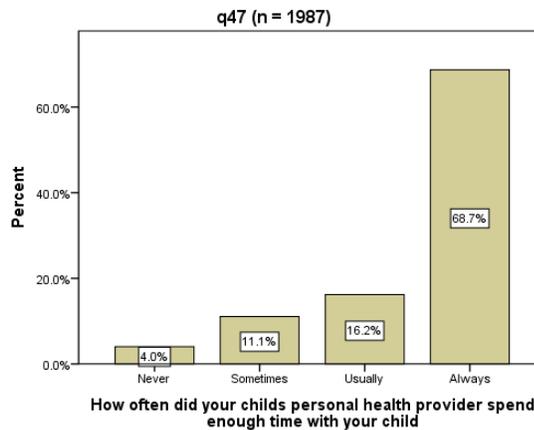


Figure CS-37 denotes how caregiver responses to q47 varied by the child’s age. Caregivers of the youngest (0-1 years old) and oldest (13-18 years old) children reported the highest proportion of caregivers that always spent enough time at 75.0 and 75.6%, respectively, with the responses for the intermediate age children ranging from 63.0% to 68.0%. Caregivers of children 6-8 years old reported the greatest proportion of caregivers (18.7%) that sometimes or never spent enough time.

**Figure CS-37** – In the last 6 months, how often did your child’s personal health provider spend enough time with your child?

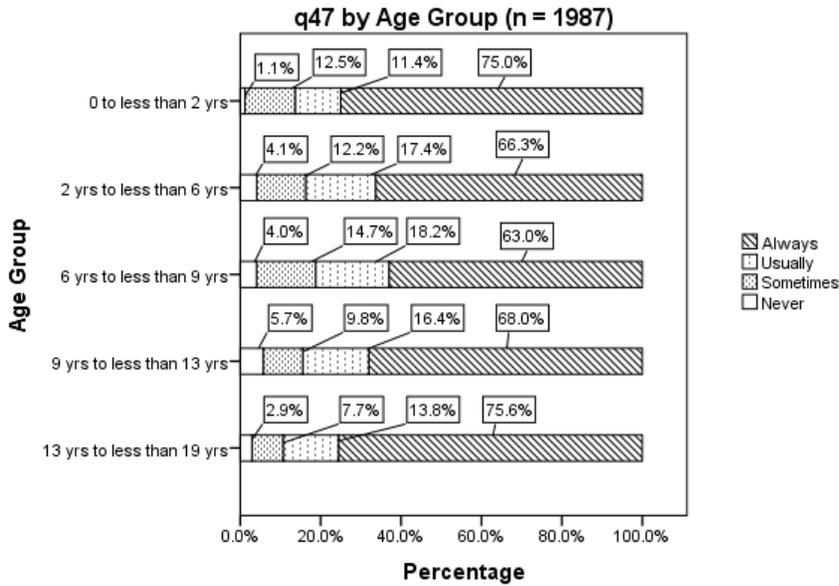
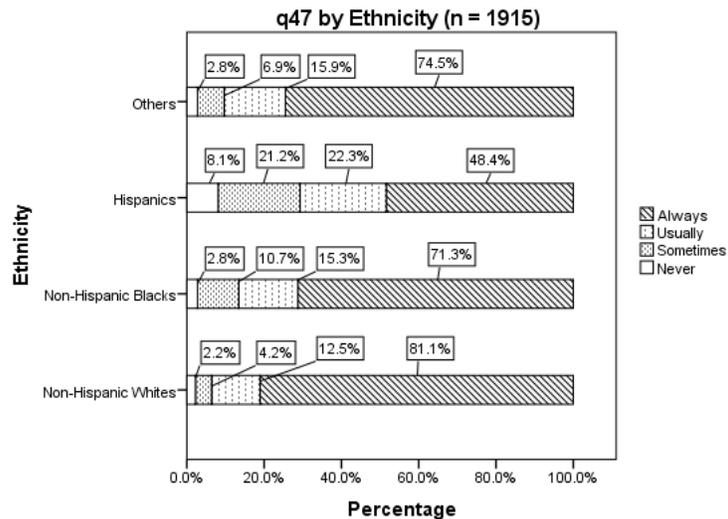


Figure CS-38 shows the relationship between the child’s ethnicity and caregiver responses to q47. Only 48.4% of caregivers of Hispanic children reported the provider always spending enough time with the child whereas 81.1% of caregivers of White Non-Hispanic children reported the same. Caregivers of Non-Hispanic Black and of Other ethnic distinction reported intermediate values, but these values approximated those of Whites as opposed to Hispanics.

**Figure CS-38** – In the last 6 months, how often did your child’s personal health provider spend enough time with your child?



***Inquiries About the Child’s Development (q48)***

Question 48 asked 1,995 caregivers if, in the last 6 months, their child’s personal health provider had spoken about how the child was feeling, growing, or behaving.

Figure CS-39 indicates that only 10.0% reported having not been asked about these issues.

**Figure CS-39** – In the last 6 months, did your child’s personal health provider talk with you about how your child is feeling, growing, or behaving?

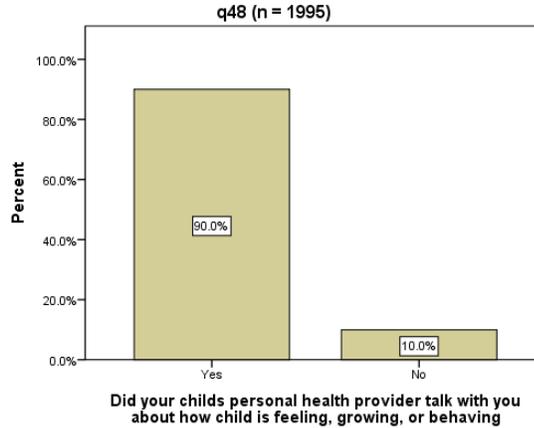


Figure CS-40 shows the relationship between the child’s age and responses to q48. A steady trend was observed where smaller proportions of caregivers were asked about the child’s development as the age of the child increased. The responses ranged from only 2.3% of caregivers of children aged 0-1 years old not being asked up to 14.5% of caregivers of children 13-18 years not being asked by a provider about the child’s development.

**Figure CS-40** – In the last 6 months, did your child’s personal health provider talk with you about how your child is feeling, growing, or behaving?

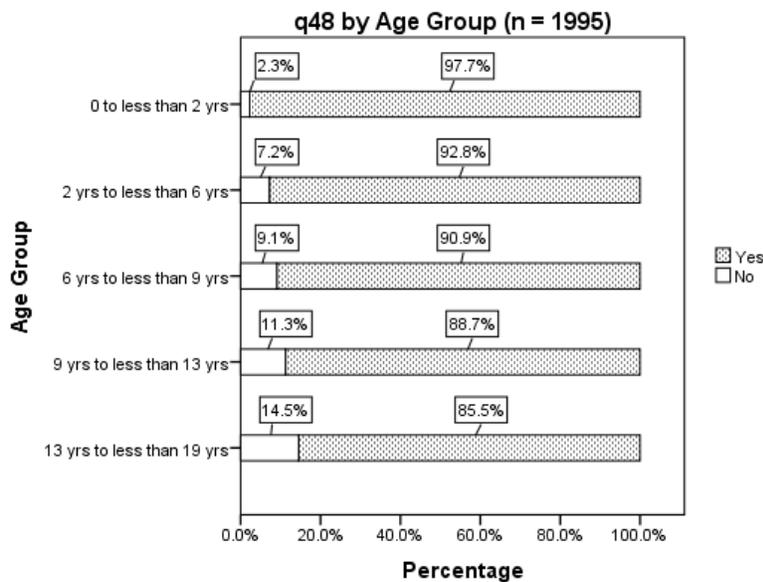
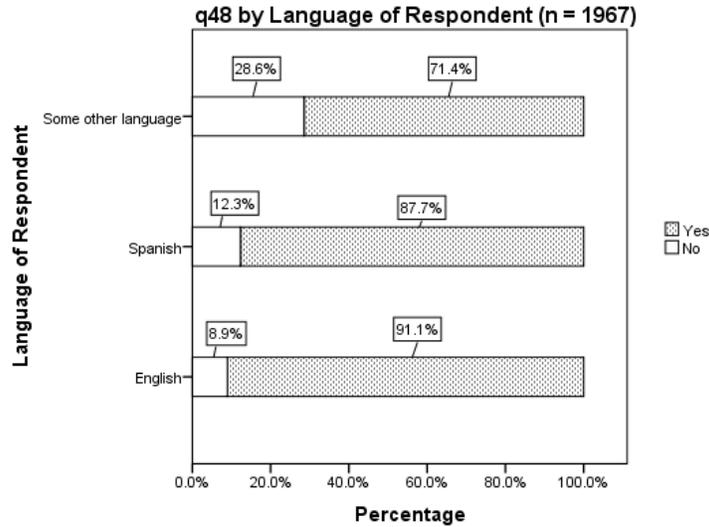


Figure CS-41 describes how caregiver responses to q48 varied with the preferred language of the caregiver. Although a higher proportion of Spanish-preferring caregivers

reported not being asked about the child’s development than of those preferring English, the difference was smaller than many of the other satisfaction questions (12.3% for Spanish-preferring caregivers vs. 8.9% that preferred English). The proportion of those preferring a language other than English or Spanish that responded that the health provider did not ask how the child was feeling growing, or behaving was highest among the language subgroups.

**Figure CS-41** – In the last 6 months, did your child’s personal health provider talk with you about how your child is feeling, growing, or behaving?



**Rating of Child’s Personal Health Provider (q51)**

Question 51 asked the caregivers who had indicated earlier that their child had a personal health provider (n=2,516) to rate their child’s personal health provider on a scale from zero (worst) to 10 (best). Figure CS-42 indicates that 60.5% of caregivers gave their child’s personal health provider the highest rating possible, with an additional 32.9% having rated the provider at 8-9.

**Figure CS-42** – Using any number from 0-10, where 0 is the worst provider possible and 10 is the best, what number would you use to rate your child’s personal health provider?

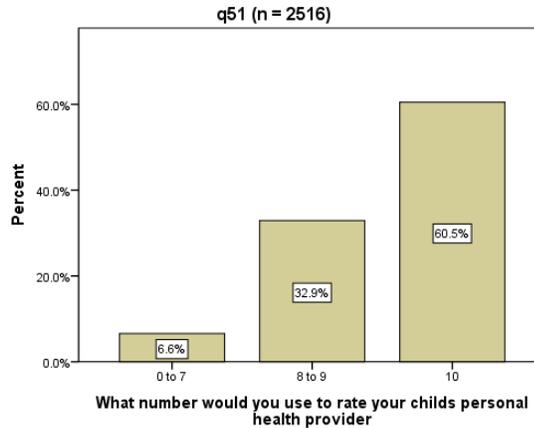


Figure CS-43 shows the relationship between the child’s ethnicity and the caregiver’s rating of the child’s personal health provider. The proportion of caregivers of Hispanic children who gave a rating of “10” to the provider was lowest at 54.0% compared to the 66.0% of caregivers of Non-Hispanic White Children who gave this rating. Much of the variation in ratings of less than “10” was attributable to ratings of “8-9” as the proportion of “0-7” ratings was fairly steady across the different ethnic groups.

**Figure CS-43** – Using any number from 0-10, where 0 is the worst provider possible and 10 is the best, what number would you use to rate your child’s personal health provider?

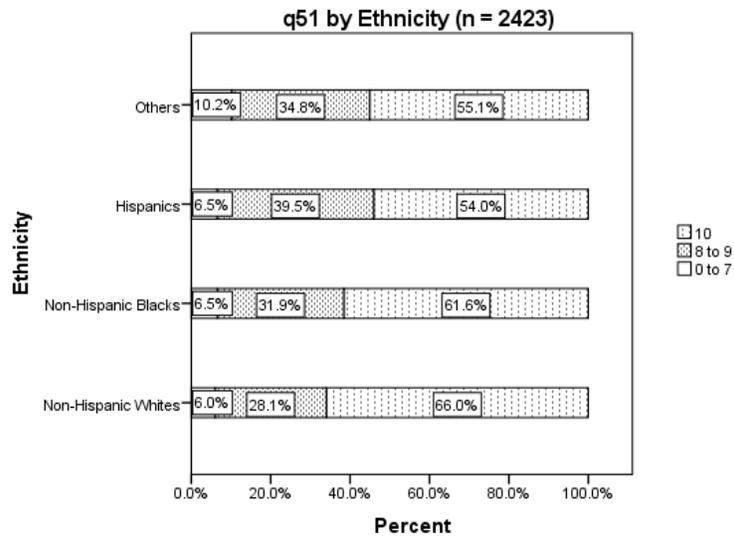
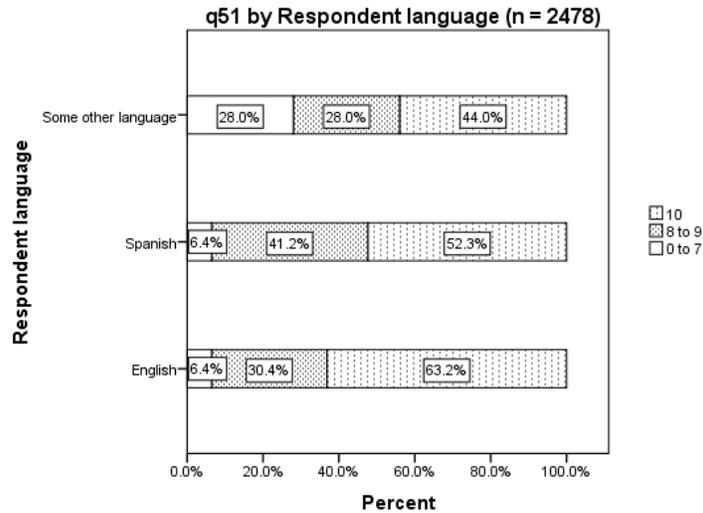


Figure CS-44 shows how caregiver ratings of the child’s personal health provider varied with caregiver-preferred language. Caregivers preferring Spanish and “other” languages reported the smallest proportions of “10” ratings (52.3% and 44.0%, respectively). Meanwhile, among caregivers preferring English, 63.2% reported a rating of “10.” Identical proportions (6.4%) of caregivers that preferred English and Spanish rated the child’s provider in the “0-7” range. A very large proportion (28.0%) of caregivers that preferred another language rated the provider in the “0-7” range. However

this observation is somewhat skewed by the relatively small number of observations occurring in the cross-tabulation that were attributable to this cell.

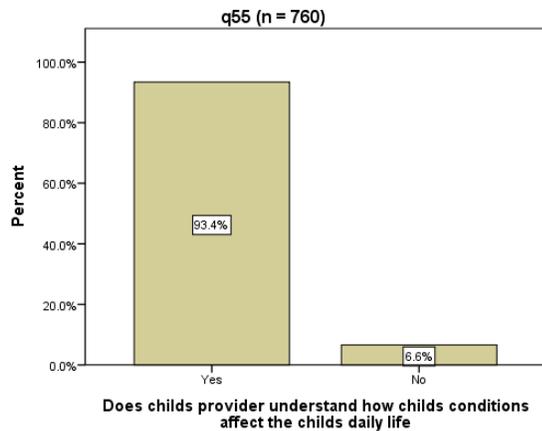
**Figure CS-44** – Using any number from 0-10, where 0 is the worst provider possible and 10 is the best, what number would you use to rate your child’s personal health provider?



**Provider Understanding Impact of Long-Term Health Issues on the Child’s Life (q55)**

Question 55 was asked of caregivers who had indicated that their child had a medical, behavioral, or other health condition that had lasted for more than 3 months (n=760). Q55 asked if the child’s personal health provider understands how these conditions affect the child’s day-to-day life, with 93.4% of caregivers indicating that the personal health provider does understand as shown in Figure CS-45. No significant bivariate relationships were observed between responses to this question and any of the demographic or context variables.

**Figure CS-45** – Does your child’s personal health provider understand how these medical, behavioral, or other health conditions affect your child’s day-to-day life?



**Provider Understanding Impact of Long-Term Health Issues on the Family's Life (q56)**

Question 56 (n=759) asked caregivers if the child's health provider understands how medical, behavioral, or other health conditions lasting longer than 3 months affect the family's day-to-day life. Figure CS-46 indicates that 90.6% of caregivers said that the provider does understand.

**Figure CS-46** – Does your child's personal health provider understand how these medical, behavioral, or other health conditions affect your family's day-to-day life?

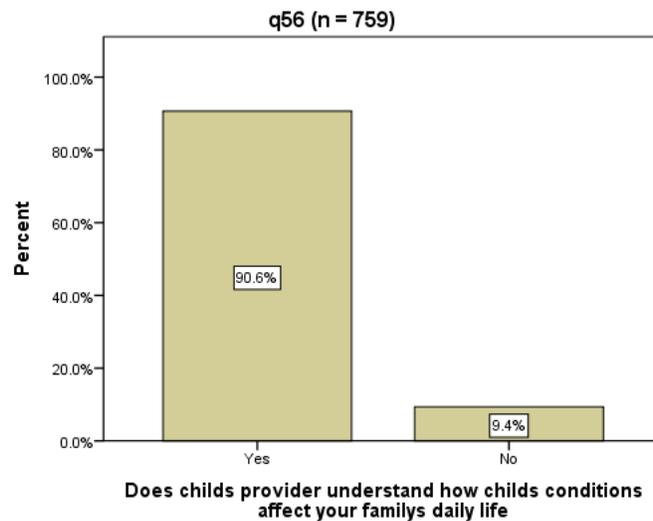
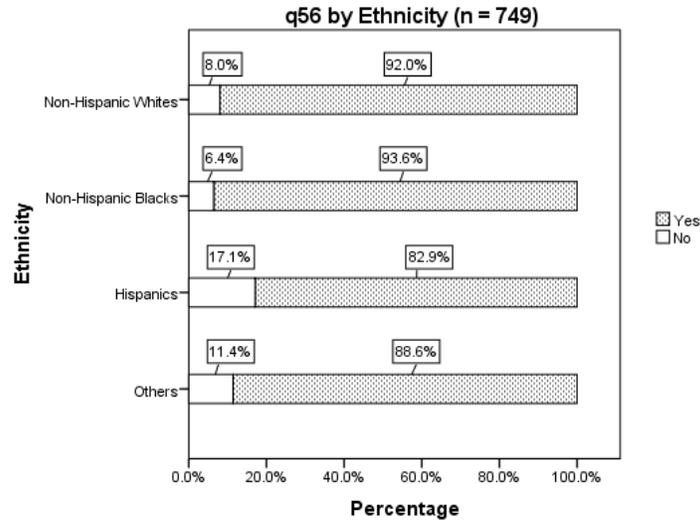


Figure CS-47 shows the relationship between the child's ethnicity and the responses to q56. Caregivers of Hispanic children had the lowest proportion that reported the provider understands (82.9%) whereas 93.6% of caregivers of Non-Hispanic Blacks reported that the provider understands.

**Figure CS-47** – Does your child's personal health provider understand how these medical, behavioral, or other health conditions affect your family's day-to-day life?



**Rating of Child’s Most Often Seen Specialist (q61)**

Question 61 asked the caregivers whose child had seen a specialist in the last 6 months (n=528) to rate the specialist seen most often on a scale of 0 (worst) to 10 (best). Figure CS-48 indicates that 59.5% of caregivers gave the specialist seen most often a rating of “10,” with 27.1% assigning the specialist a rating of either 8 or 9. These results are slightly lower than those reported for the child’s personal health provider.

**Figure CS-48** – We want to know your rating of the specialist your child saw most often in the last 6 months. Using any number from 0-10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate the specialist?

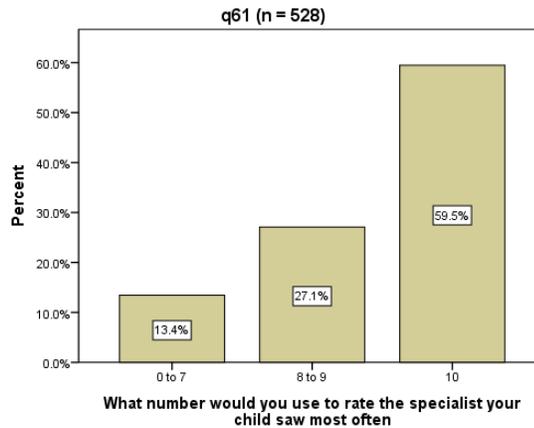
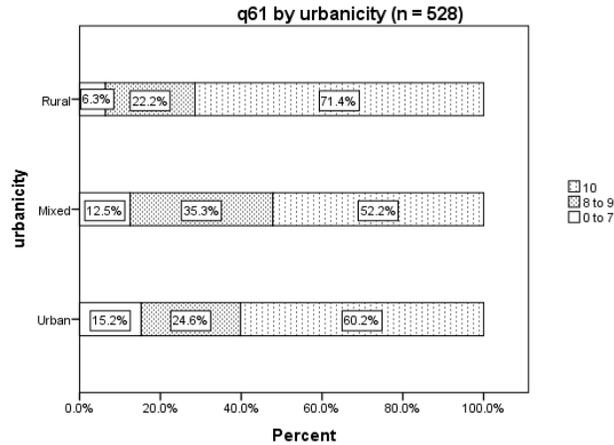


Figure CS-49 shows the relationship between urbanity and caregiver responses to q61. The highest proportion (71.4%) reporting a rating of “10” were caregivers of children living in rural areas whereas caregivers of children living in rural/urban mixed had the lowest proportion at 52.2%. The highest proportion reporting a score of “0-7” were caregivers of urban children (15.2%).

**Figure CS-49** – We want to know your rating of the specialist your child saw most often in the last 6 months. Using any number from 0-10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate the specialist?



**Staff at Provider Office or Health Plan Providing Information or Help (q66)**

Question 66 asked caregivers how often in the last 6 months, provider or health plan office staff had given them needed help or information. This question was asked of 641 caregivers who had indicated earlier they had tried to get this type of assistance. Figure CS-50 indicates very similar results to earlier satisfaction measures in that 68.6% of caregivers reporting always getting this needed help with 18.7% reporting usually getting it.

**Figure CS-50** – In the last 6 months, how often did the office staff at your child’s health plan, doctor’s office, or clinic give you the information or help that you needed?

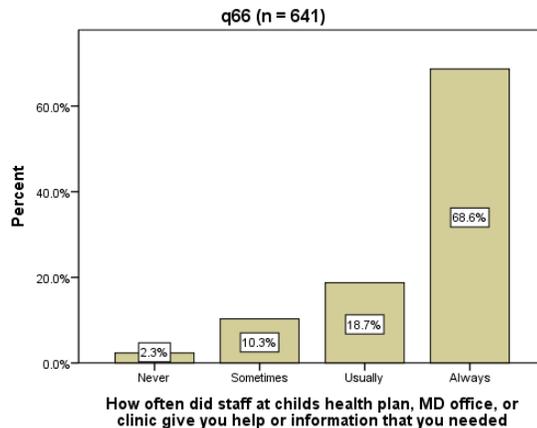
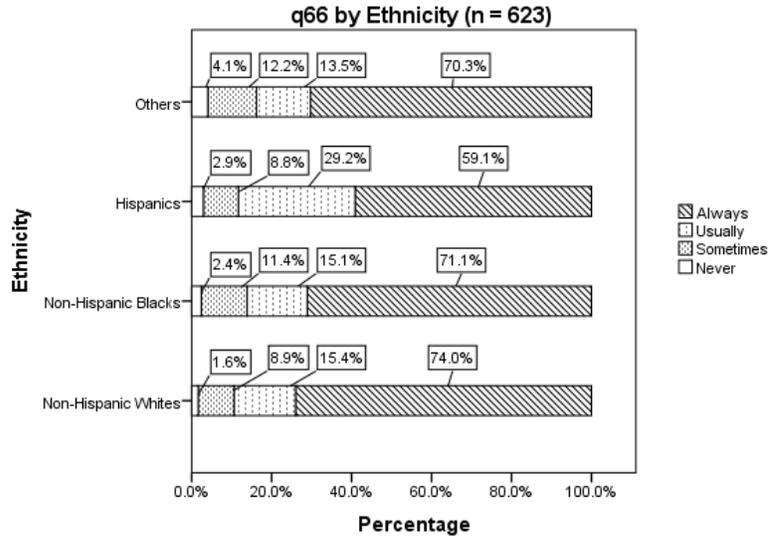


Figure CS-51 describes the relationship between the child’s ethnicity and caregiver responses to q66. Responses of “always” varied from a low of 59.1% of caregivers of Hispanic children to a high of 74.0% of caregivers of Non-Hispanic White children. However, it should be noted that 29.2% of caregivers of Hispanic children reported “usually” receiving needed help or information from office staff, which brought

the sum of the “always” and “usually” proportions more in line with those of Non-Hispanic Whites and Blacks.

**Figure CS-51** – In the last 6 months, how often did the office staff at your child’s health plan, doctor’s office, or clinic give you the information or help that you needed?



**Being Treated with Courtesy and Respect (q67)**

Question 67 asked all caregivers (n=3,165) how often in the last 6 months, did office staff at the child’s health plan or provider treat the caregiver and child with courtesy and respect. Results here are not quite as high for similar questions asked earlier about providers (q42 and q43), but still very positive with 81.0% of caregivers having reported that they and the child were always treated with respect by office staff with only 8.6% reporting sometimes or never.

**Figure CS-52** – In the last 6 months, how often did staff at your child’s health plan, doctor’s office, or clinic treat you and your child with courtesy and respect?

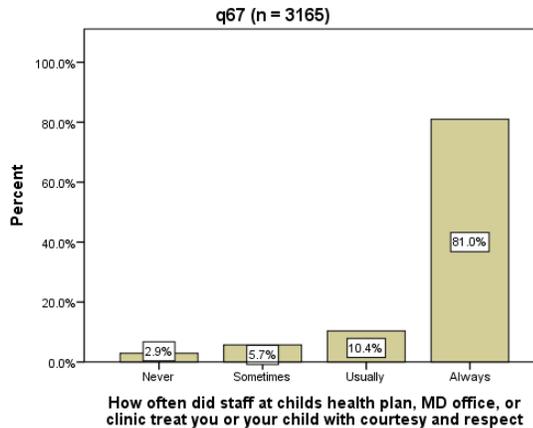
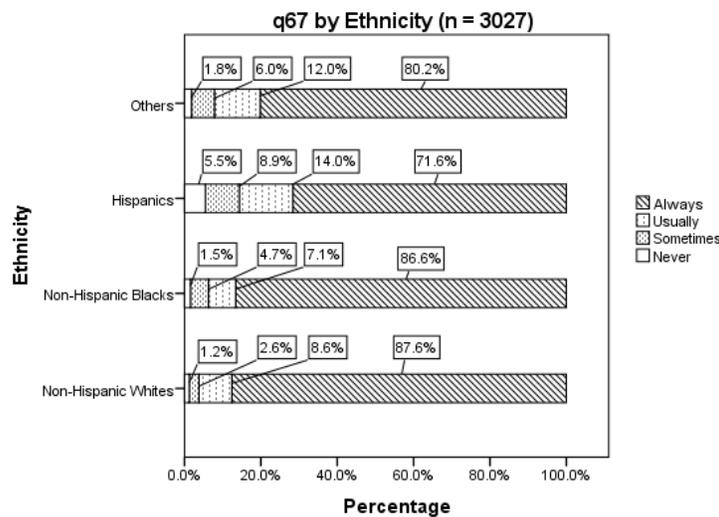


Figure CS-53 shows the relationship between the child’s ethnicity and the caregivers’ response to q67. As has often been seen, great divides are seen with ethnicity. While 87.6% of caregivers of Non-Hispanic White children reported respectful treatment always being the case, only 71.6% of caregivers of Hispanic children reported the same. Of equal concern is that 1.2%-1.8% of non-Hispanic children reported never being treated courteously compared to 5.5% of caregivers of Hispanic children reporting the same.

**Figure CS-53** – In the last 6 months, how often did staff at your child’s health plan, doctor’s office, or clinic treat you and your child with courtesy and respect?



***Were caregivers given any forms to fill out by the health plan or providers (q68a)***

Question 68a asks all the caregivers (n=3,191) if they had been given any forms in the last 6 months to fill out by their health plan or providers. Figure CS-54 indicates that 84.3% of all caregivers indicated they had been given forms to fill out.

**Figure CS-54** – In the last 6 months, did your child’s health provider or health plan give you any forms to fill out?

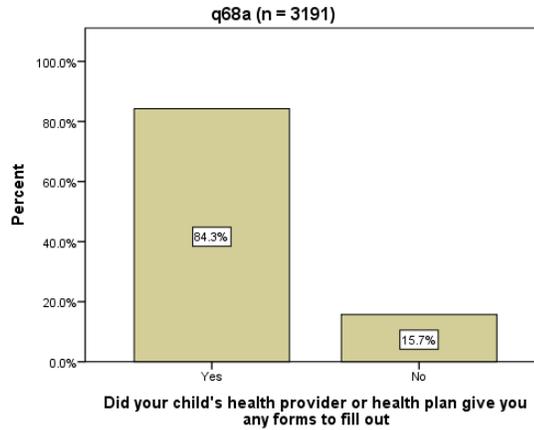


Figure CS-55 shows the relationship between the child’s age and whether caregivers indicated they had been given forms to fill out. The general observation is that caregivers of the youngest two groups (0-1 and 2-5 years old) had the highest proportion that reported being asked to fill out forms (89.6% and 88.6%, respectively).

**Figure CS-55** – In the last 6 months, did your child’s health provider or health plan give you any forms to fill out?

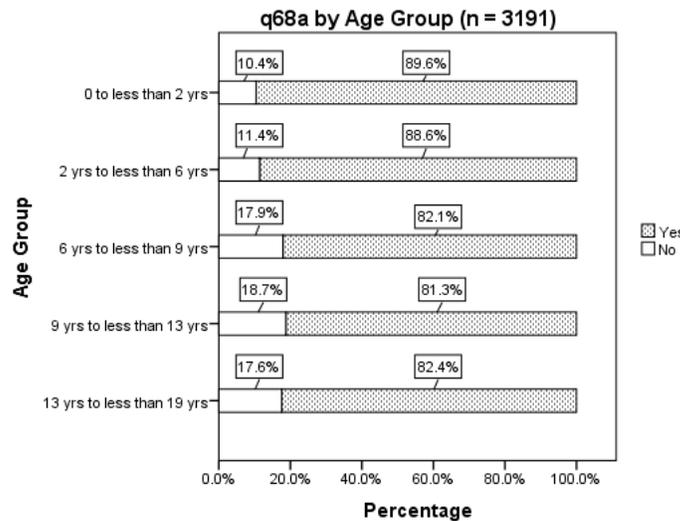
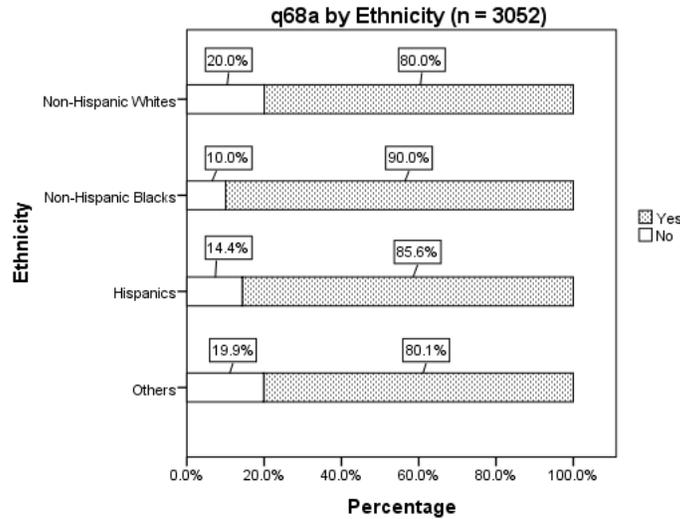


Figure CS-56 shows the relationship between the child’s ethnicity and the caregiver response to q68a. Caregivers of Non-Hispanic Whites and Hispanic children indicated that they filled out forms in proportions of 80.0% and 85.6%, respectively. In the meantime, 90.0% of caregivers of Non-Hispanic Black children reported having filled out forms.

**Figure CS-56** – In the last 6 months, did your child’s health provider or health plan give you any forms to fill out?



**Ease of Filling out Forms (q68b)**

Question 68b asked those who indicated that they had been asked to fill out forms (n=2,689) how often the forms had been easy to fill out. Figure CS-57 reveals that 86.6% of all those who completed forms indicated they were usually or always easy to complete.

**Figure CS-57** – In the last 6 months, how often were any forms from your child’s health provider or health plan easy to fill out?

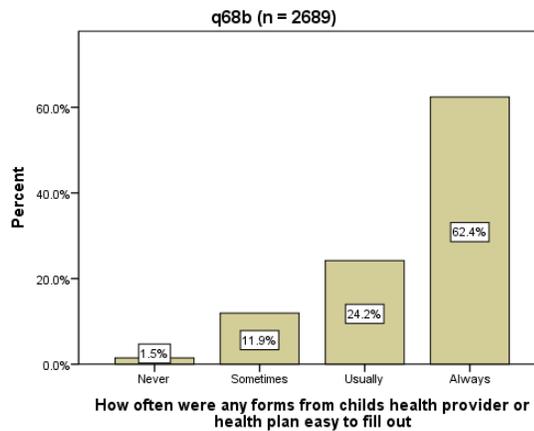


Figure CS-58 shows the relationship between the child’s ethnicity and caregiver responses to how often forms were easy to fill out and indicates that only 78.6% of caregivers of Hispanic children usually or always found these forms easy to fill out. Conversely, caregivers of the other three child ethnic distinctions hovered right around 91% (90.8-91.9) in finding the forms usually or always easy.

**Figure CS-58** – In the last 6 months, how often were any forms from your child’s health provider or health plan easy to fill out?

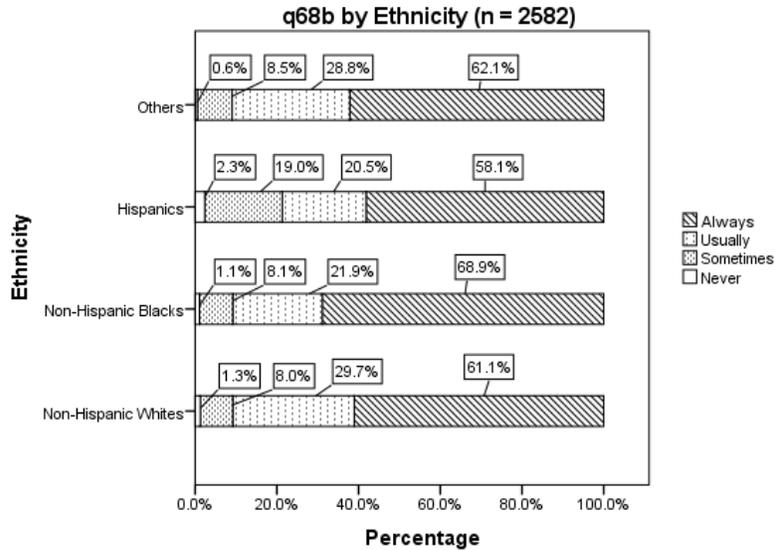
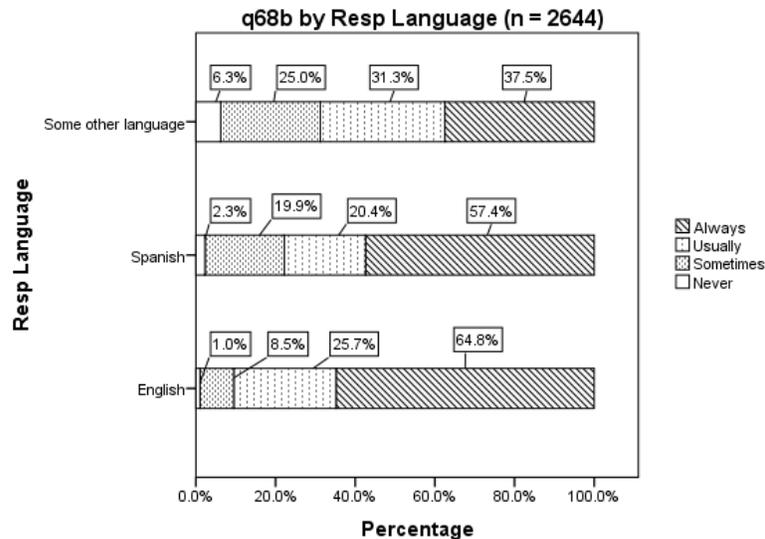


Figure CS-59 shows the relationship between the primary language spoken by the caretaker and responses to q68b. Spanish-speaking caregivers report forms being usually or always easy to fill out 78.6% of the time whereas 91.5% of English-speaking caregivers reported the same response. The results for Hispanic vs. non-Hispanic children and Spanish vs. English speaking caregivers are consistent with many previous satisfaction questions.

**Figure CS-59** – In the last 6 months, how often were any forms from your child’s health provider or health plan easy to fill out?



**Health Plan Satisfaction (q70)**

Question 70 asked all caregivers to rate their child’s health plan on a scale of 0 (worst possible) to 10 (best possible). Figure CS-60 indicates that 65.0% of the caregivers rated the plan at “10,” whereas 27.0% gave a rating of “8-9.” Although this

continues a trend of general satisfaction on this rating scale with multiple aspects of health care, the health plan received the highest proportion of “10” responses.

**Figure CS-60** – Using any number from 0-10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate your child’s Carolina Access, Medicaid, or Health Check plan?

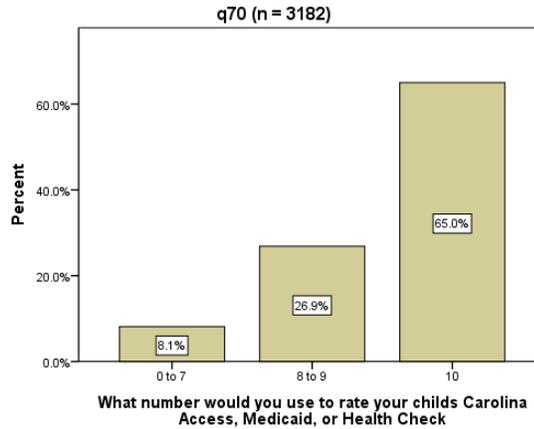


Figure CS-61 shows the relationship between the child’s age and the caregiver’s reported rating of the child’s health plan. A general trend of somewhat lower satisfaction with the child’s health plan in the older age groups is observed. Caregivers of 13-18 year-olds had the highest proportion of reporting “8-9” ratings (31.8%) and the lowest proportion of reporting “10” ratings (58.9%).

**Figure CS-61** – Using any number from 0-10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate your child’s Carolina Access, Medicaid, or Health Check plan?

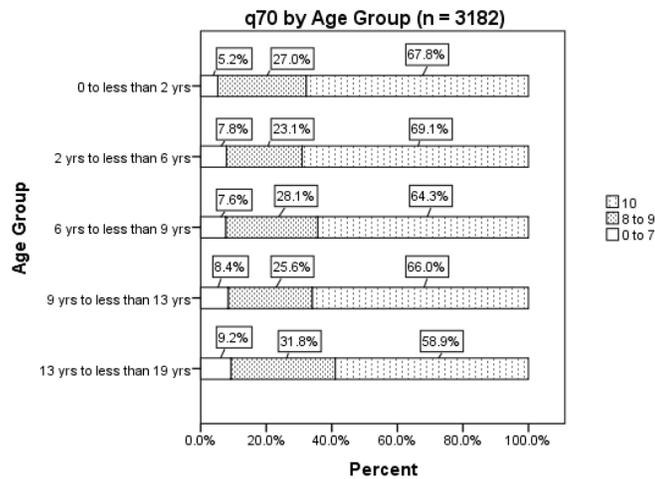


Figure CS-62 shows the relationship between the child’s sex and caregiver response to q70. Nearly two-thirds (66.8%) of caregivers of male children reported a rating of “10” for their child’s health plan whereas 63.1% of caregivers of female children provided the same rating of “10.”

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

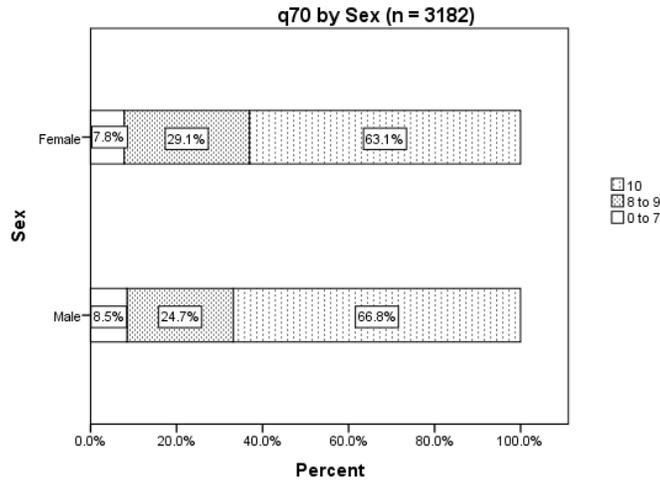


Figure CS-63 shows how the caregiver’s rating of the child’s health plan varied across the different child ethnicity descriptions. In a shift from many previous measures of satisfaction, the proportion (70.7%) of caregivers of Hispanic children rating their child’s plan at “10” was highest among the ethnic subpopulations. This subgroup also had the lowest proportion (5.0%) of “0-7” ratings of their child’s plan among the various ethnic groupings. The greatest proportion (10.7%) of caregivers to rate the plan “0-7” occurred among the caregivers of Non-Hispanic Black children.

**Figure CS-63** – Using any number from 0-10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate your child’s Carolina Access, Medicaid, or Health Check plan?

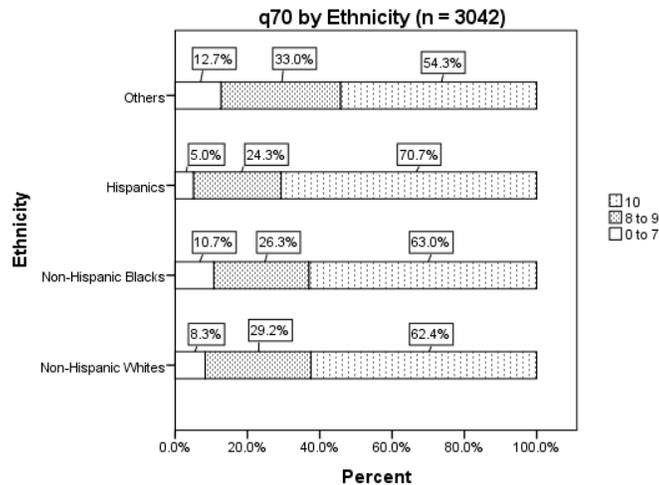


Figure CS-64 shows the relationship between preferred caregiver language preference and responses to q70. As was seen in the previous question, and distinct from most satisfaction questions, the highest proportion (72.9%) of Spanish-preferring

caregivers rated their child’s plan a score of “10,” whereas 62.0% of English-preferring caregivers rated their child’s health plan with a score of “10.” Only 37.5% of caregivers that preferred another language gave their child’s health plan a 10 rating. However, this observation is clouded by the relatively small number of cases in this cell of the cross-tabulation. At the other end of the rating scale, only 3.2% of Spanish-preferring caregivers rated their child’s plan “0-7” whereas 10.0% of English-preferring caregivers and 21.9% of caregivers preferring another language rated their child’s plan at this ranking.

**Figure CS-64** – Using any number from 0-10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate your child’s Carolina Access, Medicaid, or Health Check plan?

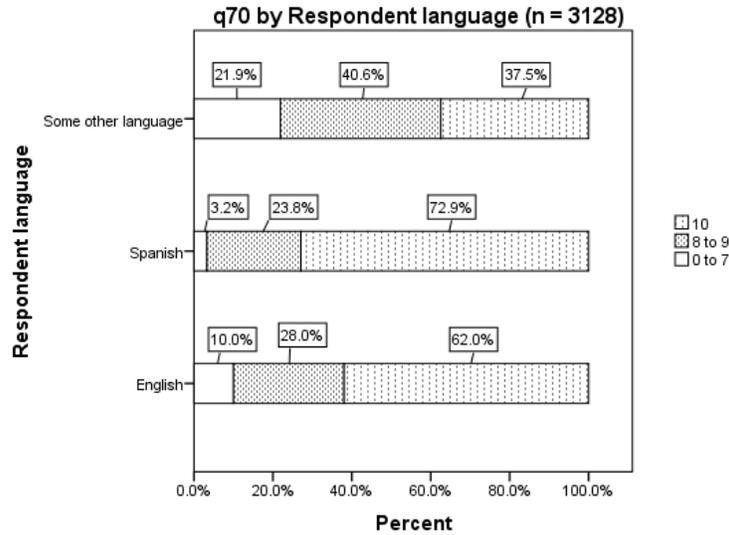
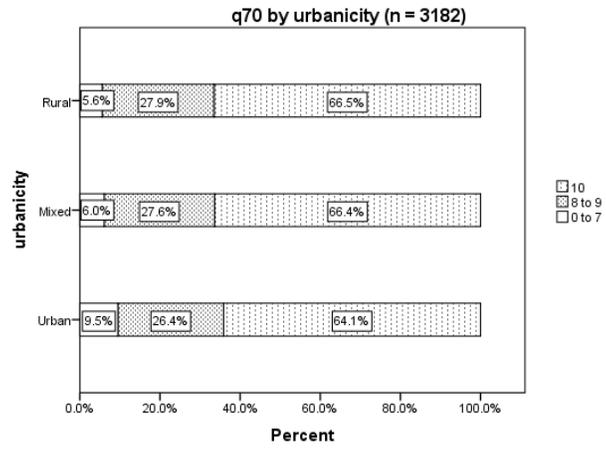


Figure CS-65 shows how caregivers’ rating of the child’s health plan varied with urbanicity. Profiles across the differing levels were not strong, but urban caregivers had the largest proportion that reported a 0-7 rating (9.5%) whereas rural caregivers had the smallest proportion reporting the same rating (5.6%).

**Figure CS-65** – Using any number from 0-10, where 0 is the worst possible and 10 is the best possible, what number would you use to rate your child’s Carolina Access, Medicaid, or Health Check plan?



**Health Status**

A total of 22 health status questions assessed a range of physical and emotional issues and the needs of the client population, generally using one of two basic types of question methodologies. In the first, the caregiver was asked if the child had a specific type of health issue in the previous six months. The other method involves a cycle of three questions that asks about some observation or need of the child, follows up with an inquiry as to whether it is due to a medical or emotional condition, and finally asks if the condition is expected to last at least 12 months.

As in other question domains, the child’s ethnicity and preferred caregiver language were statistically significant 17 and 14 times, respectively, with results of the English/Spanish split frequently aligning with Non-Hispanic/Hispanic split. Across the board, Hispanics reported better health status than Non-Hispanics. Unlike other question domains, however, the Non-Hispanics (Blacks and Whites) did not respond in unison. The responses of Whites and Blacks often shifted around but were always of poorer health status than Hispanics.

The age (16 questions) and sex (11 questions) of the child enrollee presented as significant predictors more often than in other domains. Health status was generally reported worse for older children and consistently, male children were reported to have worse health status than females.

An interesting pattern was seen related to CCNC network with significant results seen in 6 questions. In 4 of these questions, the Carolina Community Health Partnership network (1010) had the highest proportion of children reported to have a health problem. In 3 questions, Community Care Partners of Greater Mecklenburg counties (1009) had the lowest proportion of children reported to have a health problem.

Table CHS-1 provides the satisfaction domain questions asked in the survey.

**Table CHS-1 – Health Status Questions**

<b>No.</b>	<b>Question</b>
q2	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?
q9	In the last 6 months, did you have any questions or concerns about your child’s health or health care?
q27	Special 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?
q30	In the last 6 months, did you get or try to get special therapy such as physical, occupational, or speech therapy for your child?
q33	In the last 6 months, did you get or try to get treatment or counseling for your child for an emotional, developmental, or behavioral problem?
q54	Does your child have any medical, behavioral, or other health conditions that have lasted for more than 3 months?
q71	In the last 6 months, did you get or refill any new prescription medicines for your child?
q81	In general, how would you rate your child’s overall health?
q82	Other than vitamins, does your child currently need or use medicine prescribed

	by a doctor, nurse, or physician assistant?
q83	Is this because of any medical, behavioral, or other health condition?
q84	Is this a condition that has lasted or is expected to last at least 12 months?
q85	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?
q86	Is this because of any medical, behavioral, or other health conditions?
q87	Is this a condition that has lasted or is expected to last at least 12 months?
q88	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?
q89	Is this because of any medical, behavioral, or other health conditions?
q90	Is this a condition that has lasted or is expected to last at least 12 months?
q91	Does your child need or get special therapy such as physical, occupational, or speech therapy?
q92	Is this because of any medical, behavioral, or other health conditions?
q93	Is this a condition that has lasted or is expected to last at least 12 months?
q94	Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs to get treatment or counseling?
q95	Is this a condition that has lasted or is expected to last at least 12 months?

***Need for Urgent Care (q2)***

Question 2 asked all caregivers (n=3,176) how often in the last 6 months their child had a condition requiring care right away. Figure CHS-1 indicates that 27.5% of caregivers indicated urgent service was required for their child in an emergency room, clinic, or doctor’s office.

**Figure CHS-1** – 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?

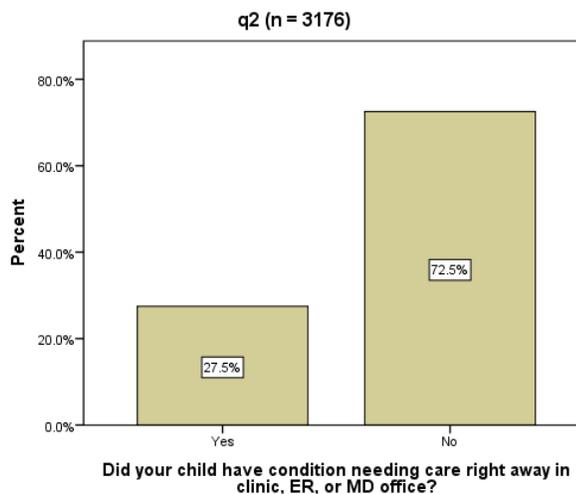


Figure CHS-2 shows the relationship between the child’s ethnicity and the caregiver’s response to q2. Caregivers of Non-Hispanic Whites and Hispanics reported

the extremes of urgent care need with 35.2% of caregivers of Non-Hispanic White children needing this level of care whereas only 20.4% of Hispanic children were reported to have the same need. Non-Hispanic Black children were reported to have urgent care need at a proportion almost identical (27.8%) to the population average (27.5%).

**Figure CHS-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?

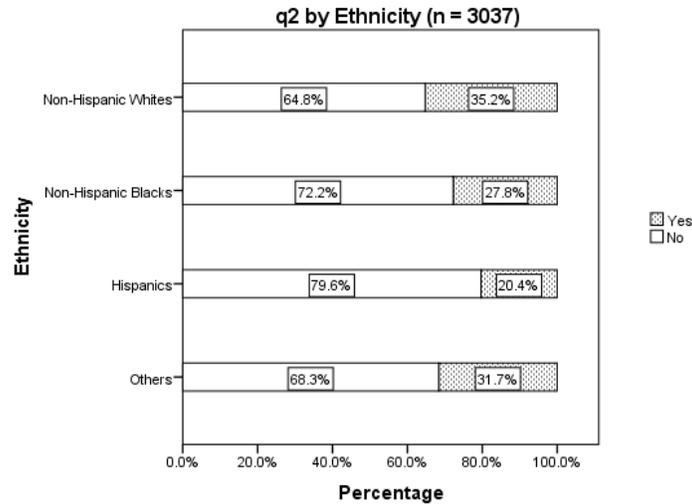


Figure CHS-3 demonstrates how the caregiver’s preferred language is related to responses on how often the child needed urgent care. Only 18.1% of caregivers who preferred Spanish reported their child having needed urgent care whereas 31.8% of English-preferring caregivers reported the same need. Although the number reporting preference for another language was small, their proportion of 20.6% was very close to the Spanish-preferring respondents.

**Figure CHS-3** – 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?

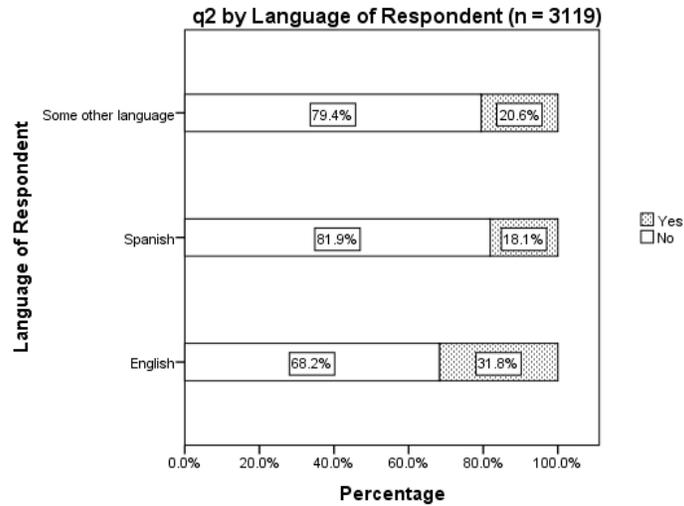
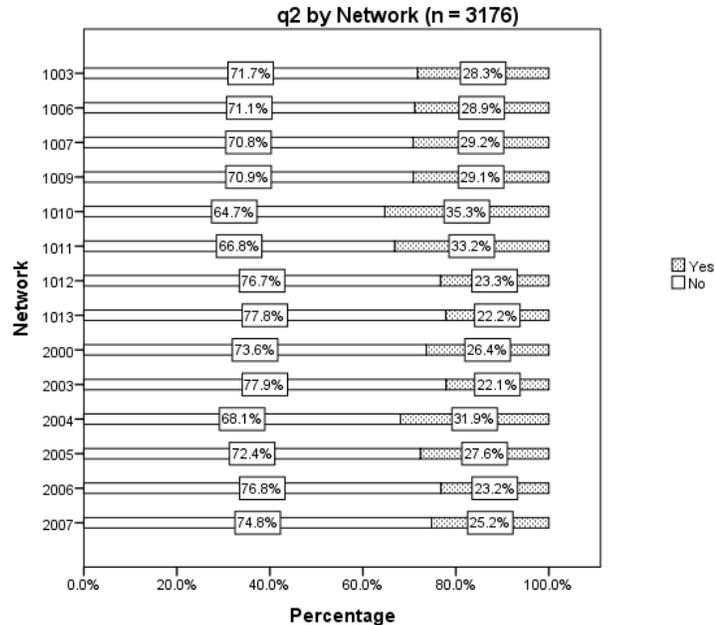


Figure CHS-4 indicates that the Carolina Community Health Partnership (1010) had the highest proportion of caregivers reporting a child needing urgent care at 35.3%, whereas the Community Care of Southern Piedmont (2003) had the lowest proportion reporting the same at 22.1%

**Figure CHS-4** – 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?



**Caregiver Concerns About the Child’s Health or Health Care (q9)**

Question 9 was asked of caregivers who had reported at least one non-emergency visit to a physician (n=2,252) for the child and it asked if in the last 6 months they had

any questions or concerns about the child’s health or health care. Figure CHS-5 indicates that 32.2% of caregivers indicated they did have these concerns.

**Figure CHS-5** - In the last 6 months, did you have any questions or concerns about your child’s health or health care?

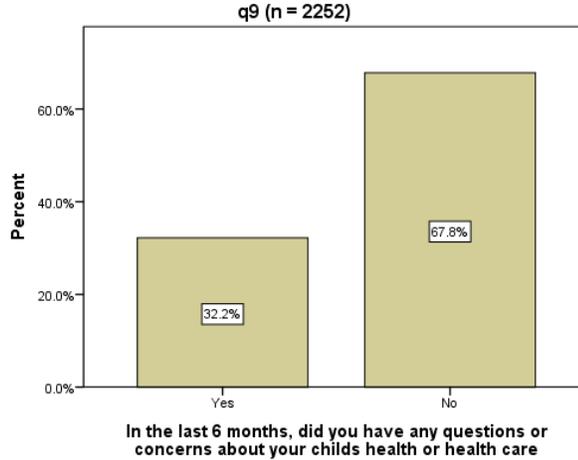


Figure CHS-6 shows how the child’s age is related to the caregiver’s response to having had concerns about the child’s health or health care. A general trend of less expressed concern was seen for older children, with caregivers of children under 2 reporting the greatest proportion having concerns at 41.3% and reducing to 28.4% of caregivers of 13-18 year-olds who had the same concerns.

**Figure CHS-6** - In the last 6 months, did you have any questions or concerns about your child’s health or health care?

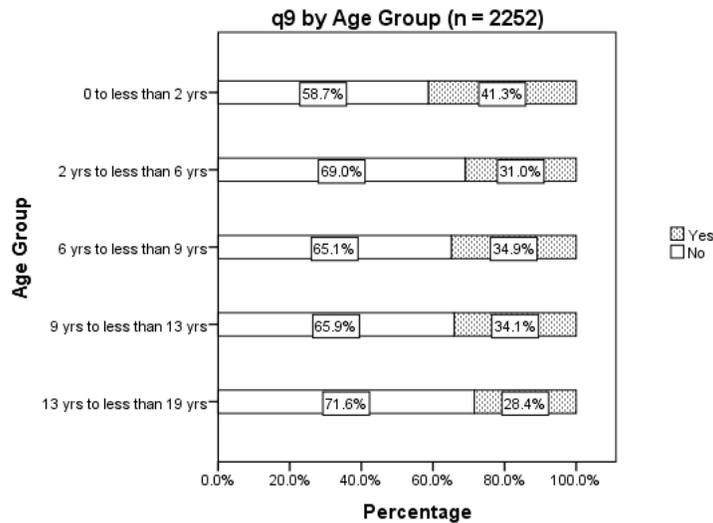
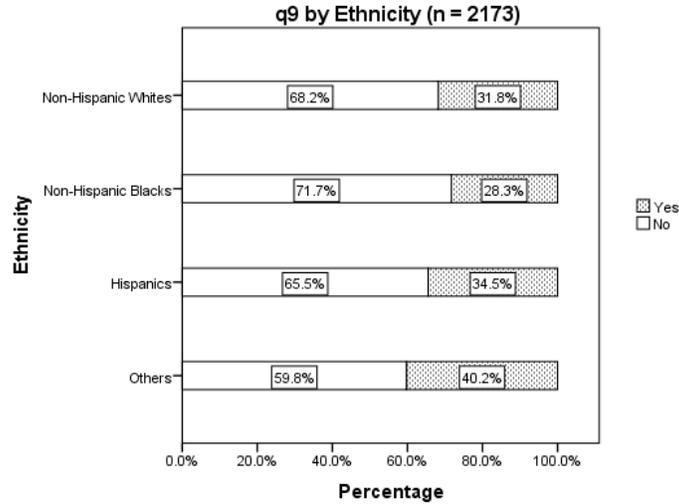


Figure CHS-7 indicates how caregiver responses to q9 varied with the child’s ethnicity. The lowest proportion reporting questions about their child’s health were

caregivers of Non-Hispanic Black children at 28.3% with the caregivers of children of Other ethnicity reporting the highest proportion with concerns at 40.2%.

**Figure CHS-7** - In the last 6 months, did you have any questions or concerns about your child's health or health care?



**Child's Need for Special Equipment (q27)**

Question 27 asked all caregivers (n=3,194) if in the last 6 months they had gotten or tried to get special equipment or devices (e.g., a walker, wheelchair, nebulizer, feeding tubes, or oxygen equipment) for their child. Figure CHS-8 reveals that 6.6% of caregivers indicated they had made such an effort.

**Figure CHS-8** - In the last 6 months, did you get or try to get any special medical equipment or devices for your child?

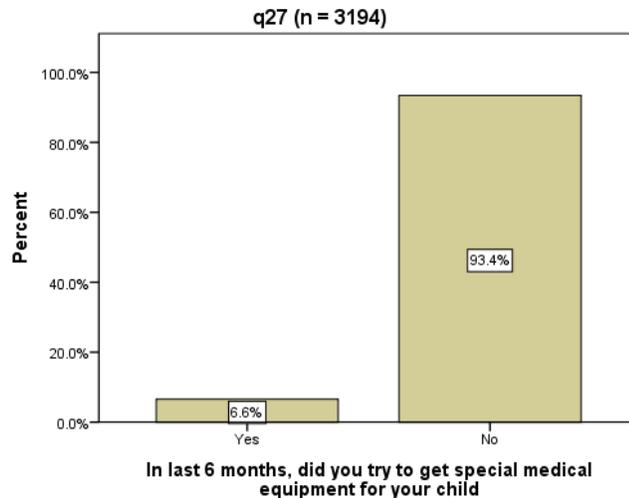


Figure CHS-9 shows the relationship between age of the child and the caregiver's indication as to the need for special equipment. The caregivers of under 2 year-old

children reported a relatively large proportion (15.7%) needing special devices compared to other age groupings. There was no discernible trend across age groups although the smallest proportion of children who needed this equipment was reported among the oldest group (5.0%).

**Figure CHS-9** - In the last 6 months, did you get or try to get any special medical equipment or devices for your child?

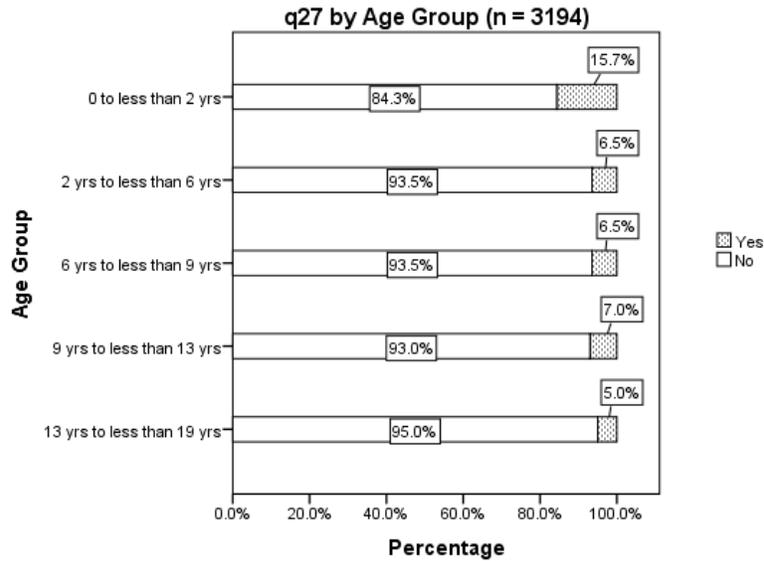


Figure CHS-10 indicates that a greater proportion of male than female children were reported to need special equipment at 7.9% and 5.2%, respectively.

**Figure CHS-10** - In the last 6 months, did you get or try to get any special medical equipment or devices for your child?



Figure CHS-11 indicates that the proportions of Hispanic and Non-Hispanic Black children with need of special equipment were 4.8% and 9.2%, respectively. Those

of Other ethnicity were slightly higher at 9.5%, but the small number of respondents in this ethnic group diminishes the statistical significance of this observation.

**Figure CHS-11** - In the last 6 months, did you get or try to get any special medical equipment or devices for your child?

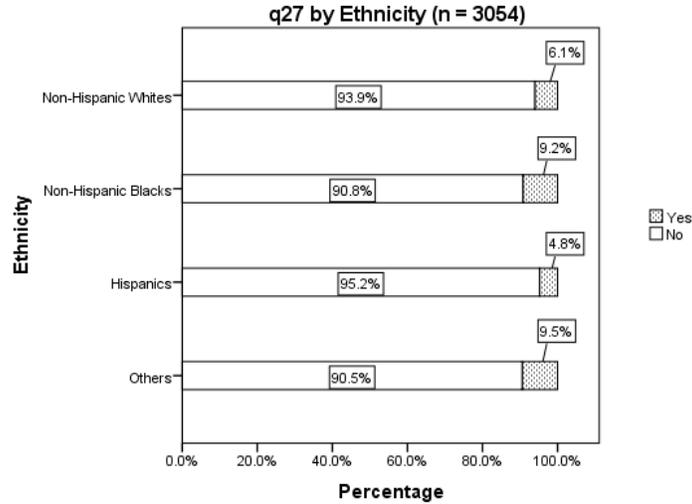
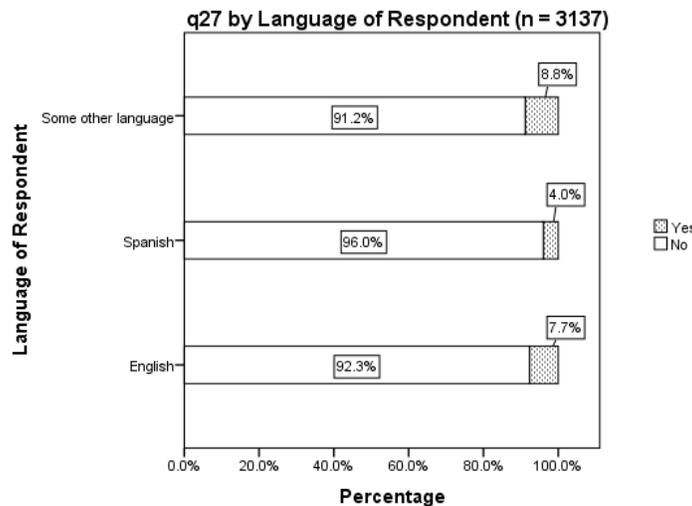


Figure CHS-12 reveals that Spanish-prefering caregivers reported the lowest proportion (4.0%) of children needing special equipment. On the other hand, the proportion of English-prefering caregivers reporting this need was 7.7%. Once again, a large proportion (8.8%) of caregivers that prefer another language reported this need, but the small number of respondents in this ethnic subgroup diminished the statistical significance of this observation.

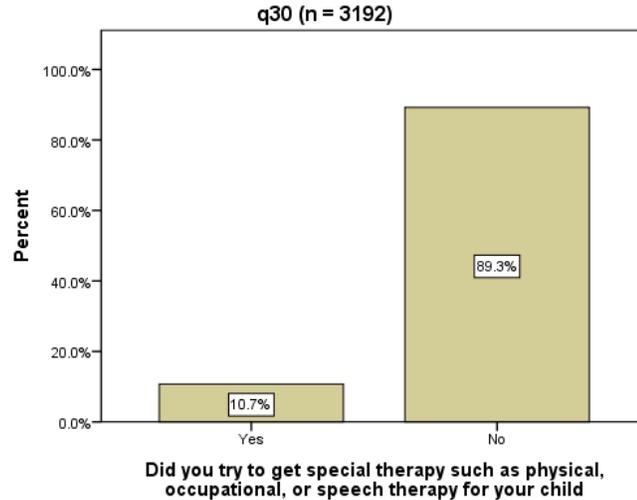
**Figure CHS-12** - In the last 6 months, did you get or try to get any special medical equipment or devices for your child?



**Need for Special Therapy (q30)**

Question 30 asked all caregivers (n=3,192) if they had gotten or tried to get special therapy for their child such as physical, occupational, or speech therapy in the last 6 months. Figure CHS-13 reveals that 10.7% of children were reported to have needed one or more of these services.

**Figure CHS-13** - In the last 6 months, did you get or try to get special therapy such as physical, occupational, or speech therapy for your child?



The bivariate results for the relationship between age and the need for therapy are shown in Figure CHS-14. The proportions reported to need special therapy was particularly noteworthy for three age cohorts: 0-1 year olds (3.5%), 2-5 year olds (12.9%), and 13-18 year olds (8.0%), respectively. With the exception of the youngest age group, a clear trend of generally reduced need for these types of therapy services was observed for older children. To understand this more clearly, one probably needs more detailed information on the specific types of therapy required for each individual.

**Figure CHS-14** - In the last 6 months, did you get or try to get special therapy such as physical, occupational, or speech therapy for your child?

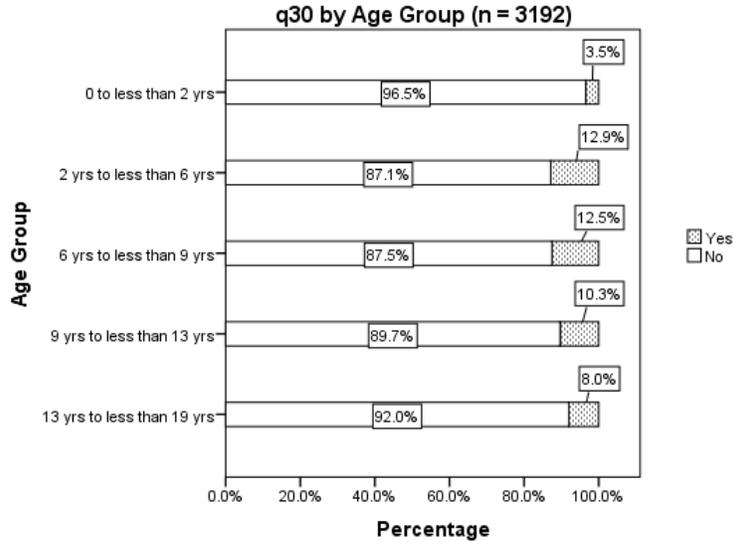


Figure CHS-15 reveals a significant difference in reported need based on the child’s gender, with 13.1% and 8.3% of males and females, respectively, needing one or more of these types of special therapies in the previous 6 months.

**Figure CHS-15** - In the last 6 months, did you get or try to get special therapy such as physical, occupational, or speech therapy for your child?

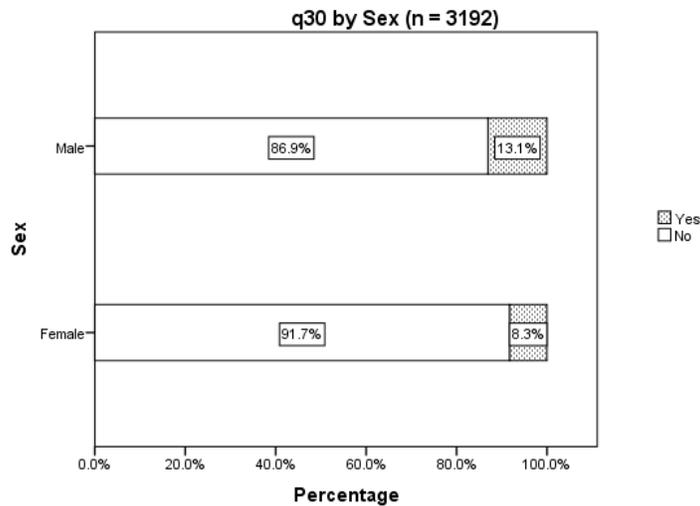


Figure CHS-16 shows the relationship between ethnicity and caregiver responses to q30. Children in the “Other” ethnic subgroup were reported to have the greatest need for these therapy services with 17.7% of respondents indicating this need. The proportions of responses for the other three ethnic subgroups were more similar and ranged from 9.2% to 11.1%.

**Figure CHS-16** - In the last 6 months, did you get or try to get special therapy such as physical, occupational, or speech therapy for your child?

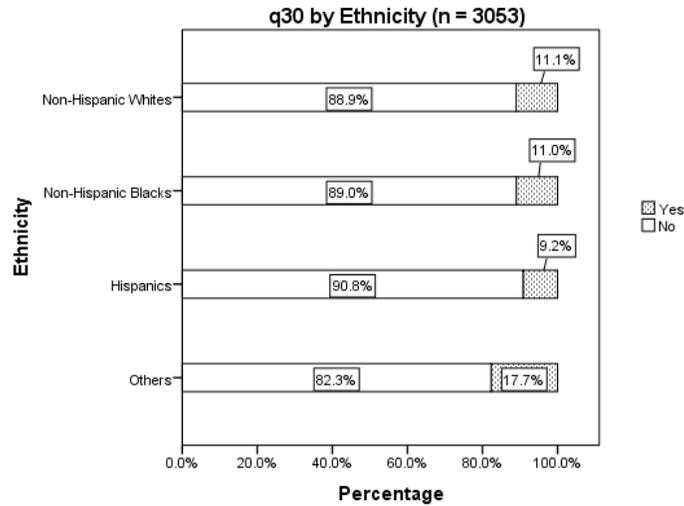
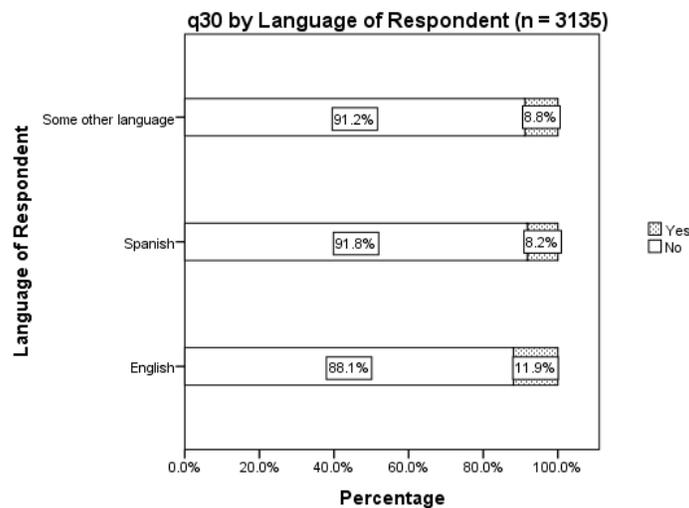


Figure CHS-17 describes how the child’s reported need for therapy services varied with preferred language of the caregiver. The most prominent finding was caregivers who preferred Spanish reported the lowest proportion (8.2%) of children needing special therapy.

**Figure CHS-17** - In the last 6 months, did you get or try to get special therapy such as physical, occupational, or speech therapy for your child?



**Treatment for Mental Health Needs (q33)**

Question 33 asked all caregivers (n=3,192) if they got or tried to get treatment for the child for an emotional, developmental or behavioral problem in the last 6 months. Figure CHS-18 reveals that 14.2% of children had treatment or counseling sought on their behalf.

**Figure CHS-18** - In the last 6 months, did you get or try to get treatment or counseling for your child for an emotional, developmental, or behavioral problem?

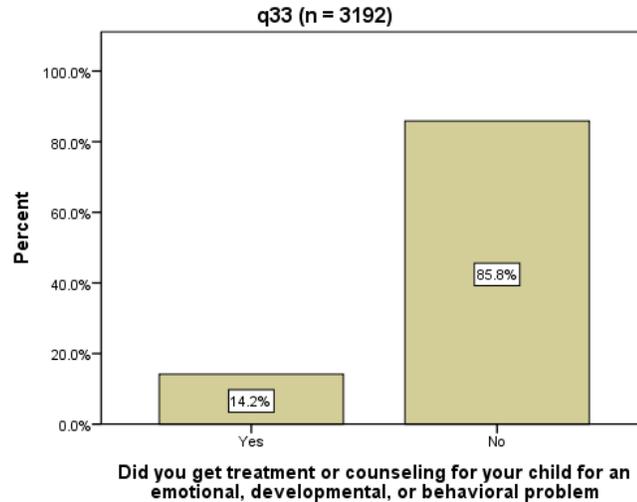


Figure CHS-19 shows how reported need for mental health treatment varied with the child's age. A solid trend of increasing need with age is seen, with a sizeable step up from 5.8% of 2-5 year-olds reported to have this need increasing to 15.4% of the 6-8 year-olds needing this treatment. The largest proportion (20.9%) needing this treatment was reported for 13-18 year-olds.

**Figure CHS-19** - In the last 6 months, did you get or try to get treatment or counseling for your child for an emotional, developmental, or behavioral problem?

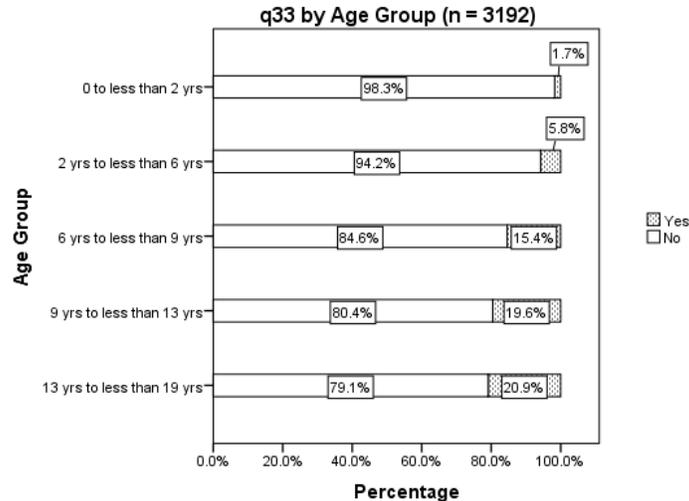


Figure CHS-20 indicates that the child's sex/gender was significantly associated with reported need for mental health services, with males reported to need more. The proportion of male children reported to have needed mental health services was 17.3% whereas 10.8% of female children were reported to have this need.

**Figure CHS-20** - In the last 6 months, did you get or try to get treatment or counseling for your child for an emotional, developmental, or behavioral problem?

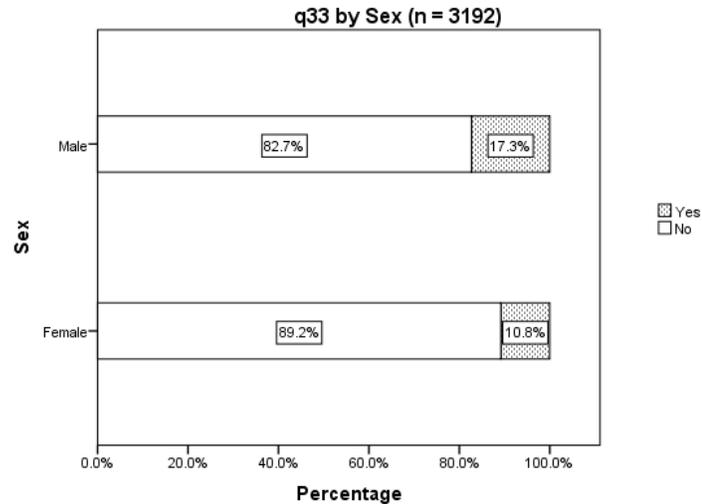


Figure CHS-21 indicates that the smallest proportion of children among the ethnic subgroups reported to have needed mental health services were Hispanics at 7.9%. Both Non-Hispanic Blacks (15.2%) and Whites (19.6%) were reported to need these services in much greater numbers. Although children of Other ethnicity were reported to have a high proportion (19.4%) of children needing help, this value’s statistical significance is diminished by the small number of cases in this ethnic subgroup.

**Figure CHS-21** - In the last 6 months, did you get or try to get treatment or counseling for your child for an emotional, developmental, or behavioral problem?

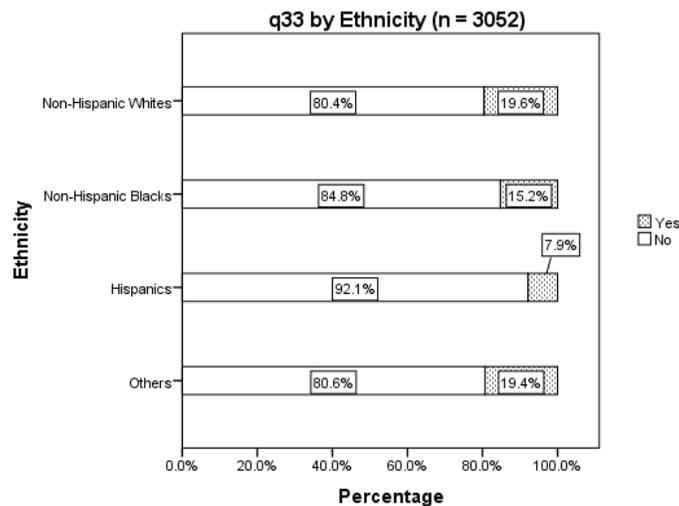
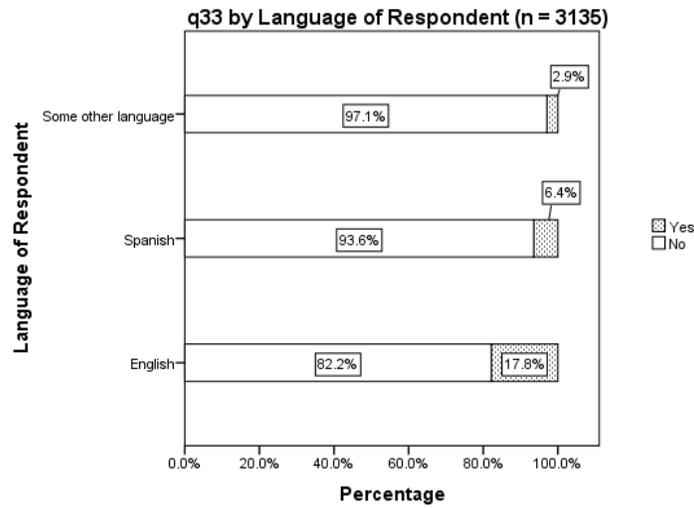


Figure CHS-22 indicates a wide gap between reported need for mental health services of children based on preferred caregiver language. Only 6.4% of children of Spanish-preferred caregivers were reported to need mental health services whereas 17.8% of English-preferred caregivers reported the same for their child. The high proportion (19.6%) among respondents preferring a different language can be discounted in statistical terms due to the small number of Other language observations.

**Figure CHS-22** - In the last 6 months, did you get or try to get treatment or counseling for your child for an emotional, developmental, or behavioral problem?



**Medical, Behavioral, or Other Medical Conditions Lasting > 3 months (q54)**

Question 54 was presented to caregivers who had indicated that the child had a personal health provider (n=2,508) and asked whether the child had a medical, behavioral, or other health condition that had lasted longer than 3 months. Figure CHS-23 indicates that 30.6% of caregivers reported that the child had a notable condition that had lasted longer than 3 months.

**Figure CHS-23** - Does your child have any medical, behavioral, or other health conditions that have lasted for more than 3 months?

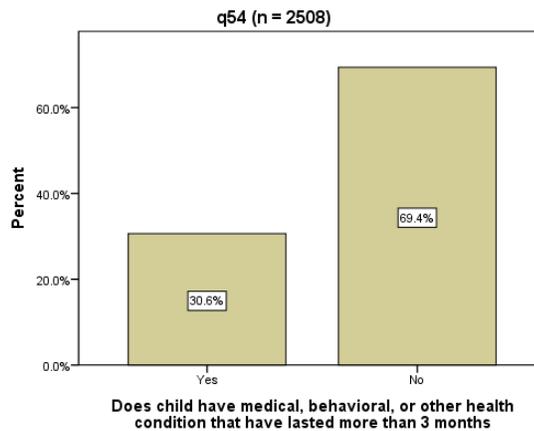


Figure CHS-24 reveals that the proportion of children reported to have long-term medical conditions increased as the age of the child increased. Specifically, 16.1% and 19.9%, respectively, of 0-1 and 2-5 year-old children were reported to have conditions lasting longer than 3 months while 38.3% and 38.4%, respectively, of 9-12 and 13-18 year-olds were reported to have these long-term conditions.

**Figure CHS-24** - Does your child have any medical, behavioral, or other health conditions that have lasted for more than 3 months?

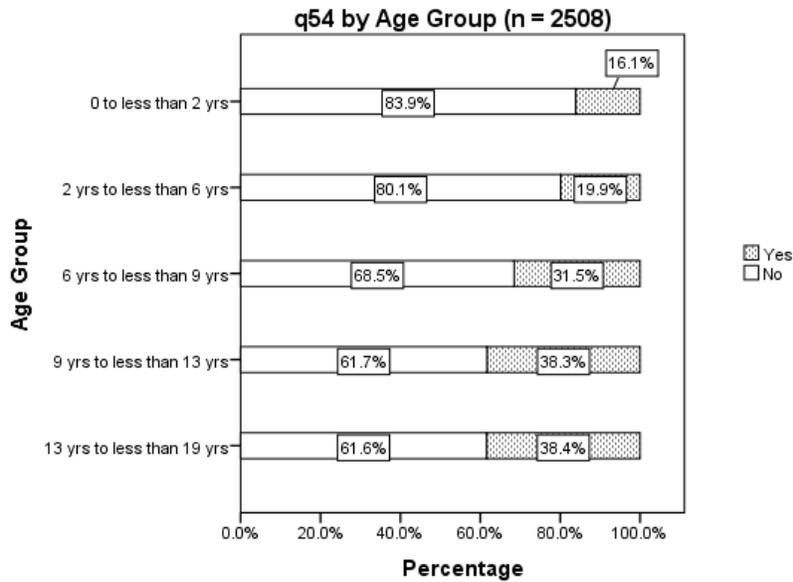


Figure CHS-25 indicates that a significantly higher proportion of male children (34.9%) were reported to have lingering medical, behavioral or other health conditions whereas only 26.2% of females were reported to have the same issues.

**Figure CHS-25** - Does your child have any medical, behavioral, or other health conditions that have lasted for more than 3 months?

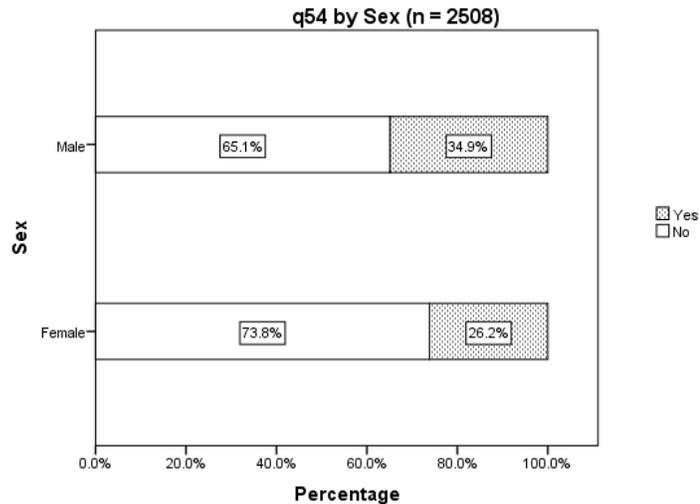


Figure CHS-26 shows the relationship between the child’s ethnicity and caregiver responses to q54. The findings reveal that 40.5% of Non-Hispanic white children were reported to have an ailment lasting more than 3 months, whereas only 18.4% of Hispanic children were reported to have an ailment of similar duration. Additionally, 29.2% of Non-Hispanic Black children were reported to have an ailment lasting this long.

**Figure CHS-26** - Does your child have any medical, behavioral, or other health conditions that have lasted for more than 3 months?

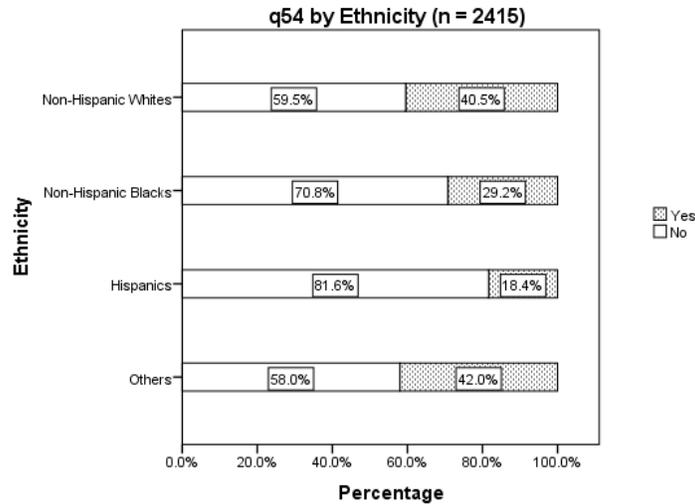


Figure CHS-27 indicates a wide gap in reported chronic illness when considering the preferred language of the caregiver. Nearly 4 in 10 children (36.8%) of English-speaking caregivers were reported to have a malady lasting longer than 3 months whereas only 12.3% of the children of Spanish-speaking caregivers were reported the same.

**Figure CHS-27** - Does your child have any medical, behavioral, or other health conditions that have lasted for more than 3 months?

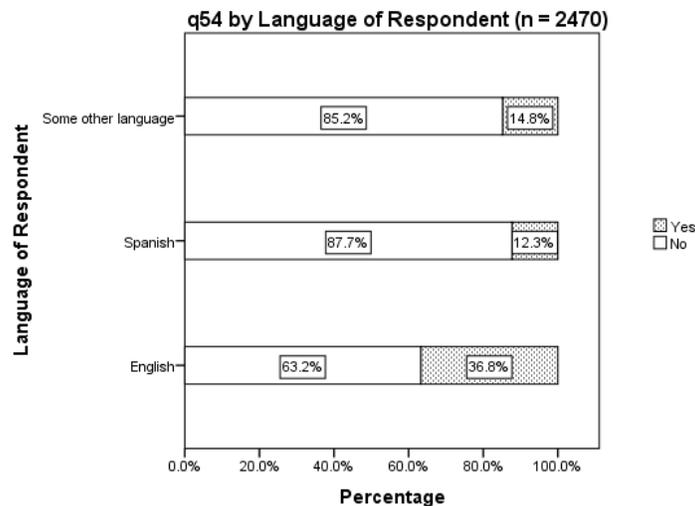
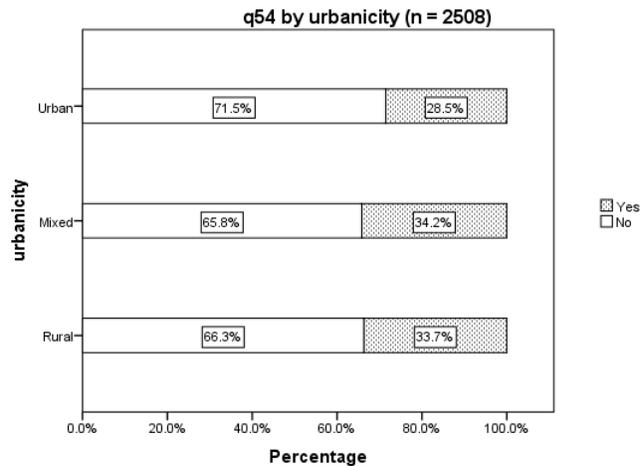


Figure CHS-28 reveals that living in an urban area resulted in a lower proportion (28.5%) of reported chronic illness. This compares to 33.7% and 34.7%, respectively, of children living in rural and mixed areas reported to have a chronic ailment.

**Figure CHS-28** - Does your child have any medical, behavioral, or other health conditions that have lasted for more than 3 months?



**Child’s Recent Prescription Activity (q71)**

Question 71 asked all caregivers (n=3,173) if they had gotten or refilled any prescription medications for the child in the previous 6 months. Figure CHS-29 indicates that just over half (51.4%) of children were reported to have had prescriptions filled on their behalf by the caregiver.

**Figure CHS-29** – In the last 6 months, did you get or refill any prescription medicines for your child?

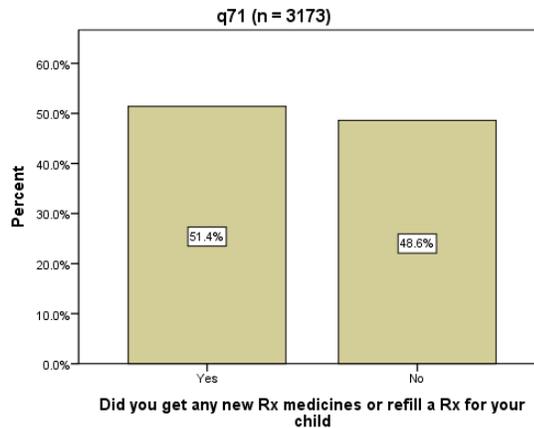


Figure CHS-30 indicates a modest trend upward in reported prescription utilization in older children. The lowest proportion (43.8%) reported to have filled prescriptions for the child were the caregivers of 2-5 year olds whereas the highest proportion (60.0%) was observed in the 13-18 year old age group.

**Figure CHS-30** – In the last 6 months, did you get or refill any prescription medicines for your child?

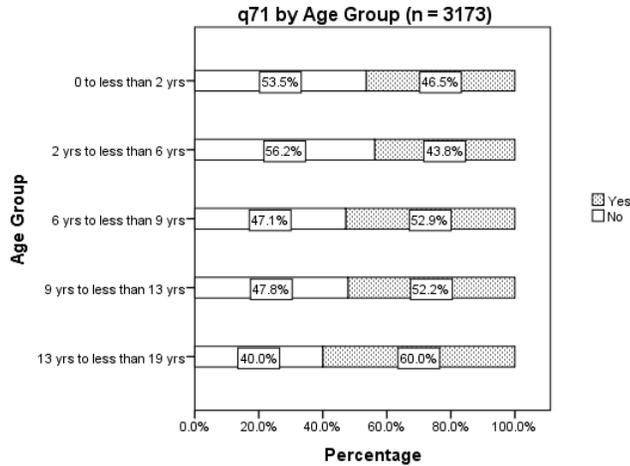


Figure CHS-31 reveals a large gap between Hispanic and Non-Hispanic White children with regards to prescription drug use in the last 6 months. Specifically, 63.0% of the caregivers of Non-Hispanic White children reported filling prescriptions whereas only 38.7% of Hispanic children had prescriptions filled on their behalf.

**Figure CHS-31** – In the last 6 months, did you get or refill any prescription medicines for your child?

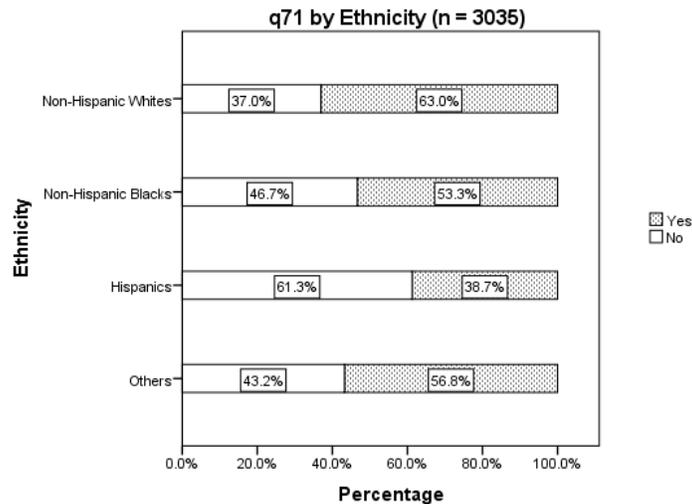


Figure CHS-32 indicates a wide gap in reported prescription drug use with respect to the caregiver's preferred language. Specifically, 58.6% of caregivers preferring English reported filling prescriptions for the child whereas only 35.9% of caregivers preferring Spanish reported the same.

**Figure CHS-32** – In the last 6 months, did you get or refill any prescription medicines for your child?

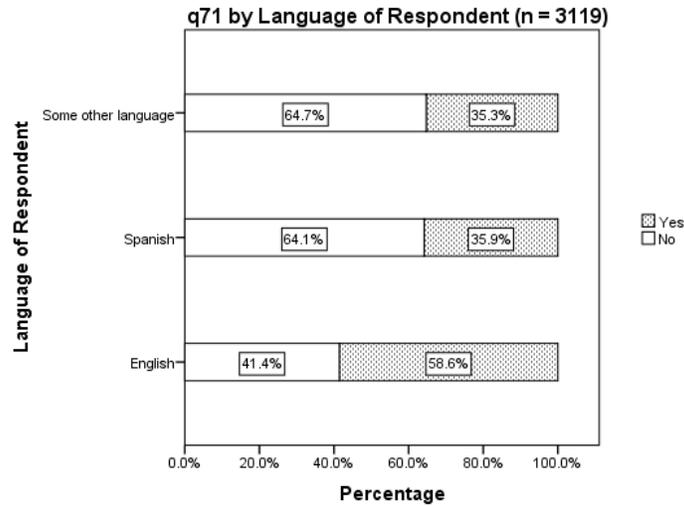


Figure CHS-33 shows the relationship between the child’s CCNC network and responses to Q71. The most noteworthy observations were that the Carolina Community Health Partnership network (1010) had the highest proportion (69.3%) needing prescriptions filled whereas the lowest proportion occurred in the Northern Piedmont Community Care network (2007) where only 42.5% of children had prescriptions filled or refilled on their behalf.

**Figure CHS-33** – In the last 6 months, did you get or refill any prescription medicines for your child?

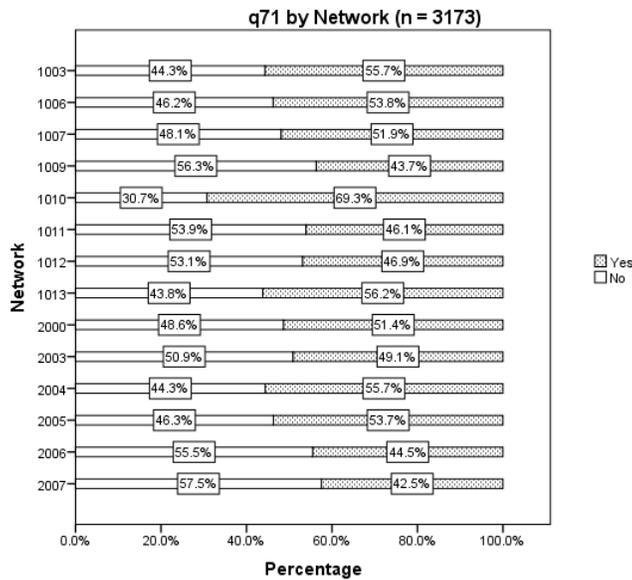
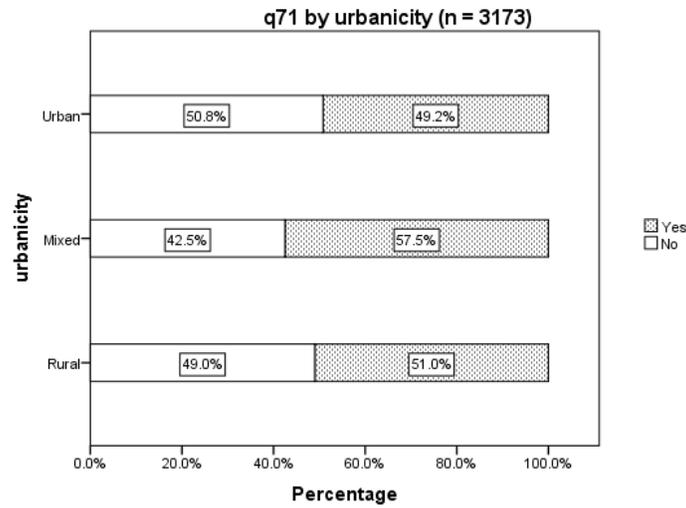


Figure CHS-34 indicates that the highest proportion of children (57.5%) living in counties of mixed urbanicity were reported to have needed prescriptions filled in the last 6 months. By contrast, the proportion of children who had prescriptions filled in the urban and rural counties was approximately 50%.

**Figure CHS-34** – In the last 6 months, did you get or refill any prescription medicines for your child?



**Rating of Child’s Overall Health (q81)**

Question 81 asked all caregivers (n=3,154) how they would rate their child’s overall health. Figure CHS-35 indicates that 71.8% of caregivers rated the child’s health as very good or excellent whereas only 7.1% rated the child’s health as fair or poor.

**Figure CHS-35** – In general, how would you rate your child’s overall health?

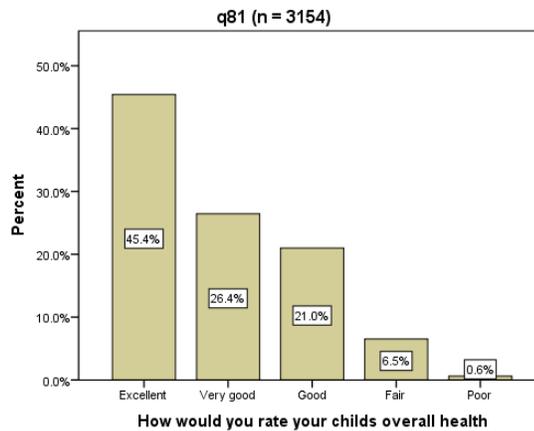


Figure CHS-36 shows how the caregiver-assessed overall health of the child varied across the child’s age. A visual assessment of the figure indicates that reported health is generally poorer as age increases. Children between 0-1 year old had the highest proportion reported to be in excellent health (56.4%) while children 2-5 years old had the lowest proportion reported to be in poor health (0.1%). Children between 13-18 years old had the lowest proportion reported to be in excellent health (37.2%) and were among the highest proportions reported to be in poor health (1.3%).

**Figure CHS-36** – In general, how would you rate your child’s overall health?

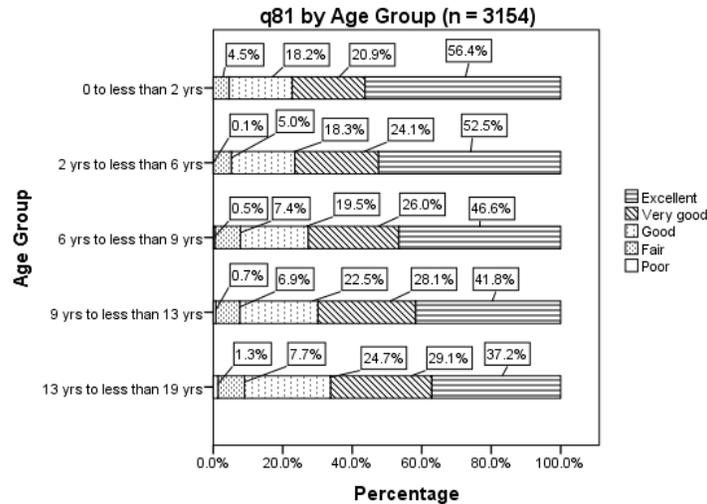


Figure CHS-37 shows the relationship between the child’s ethnicity and the rating of overall health. Caregivers of Hispanic children reported the lowest proportion in good or excellent health (67.7%) whereas caregivers of Non-Hispanic White reported the highest proportion in good or excellent health (77.1%).

**Figure CHS-37** – In general, how would you rate your child’s overall health?

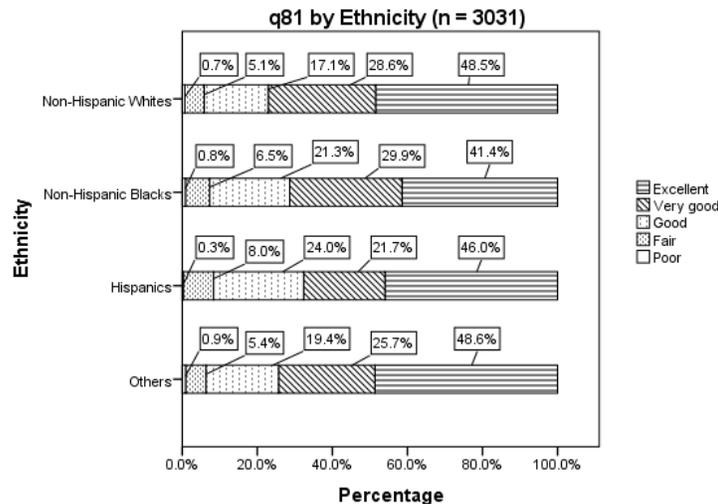
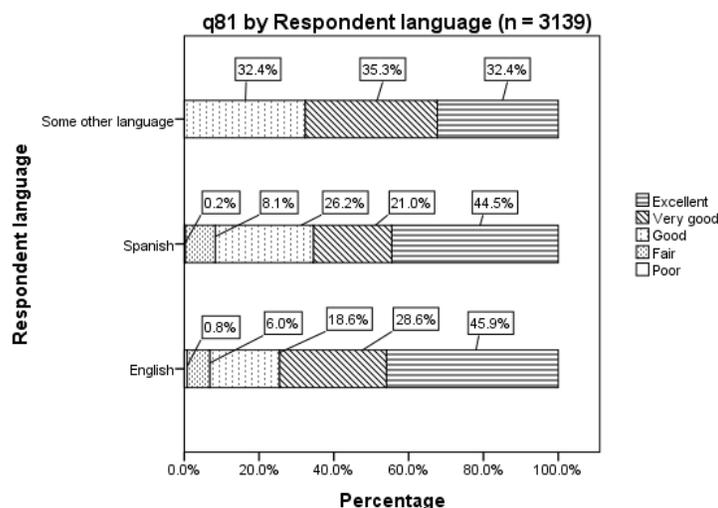


Figure CHS-37 indicates results that generally overlap the results observed on the previous health status question. Caregivers that prefer Spanish reported the lowest significant proportion of children in good or excellent health (65.5%) whereas those preferring English reported the highest (74.5%).

**Figure CHS-38** – In general, how would you rate your child’s overall health?



**Current Prescription Needs (q82)**

Question 82 asked all caregivers (n=3,147) if the child currently needed any medicine prescribed by a health provider, except for vitamins. Figure CHS-39 indicates that 36.0% of caregivers indicated the child was currently using medication prescribed by a provider.

**Figure CHS-39** – Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant?

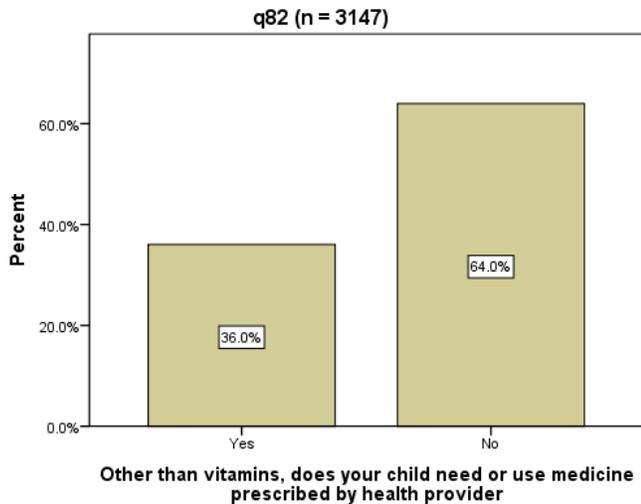


Figure CHS-40 shows the relationship between the age of the child respondent and the caregiver’s response to q82. The primary finding appears to be a greater need for prescriptions as the age of the child increased. For example, caregivers reported that 20.0% of 0-1 year-olds needed prescriptions and that proportion gradually increased to a high of 56.1% among 13-18 year-olds.

**Figure CHS-40** – Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant?

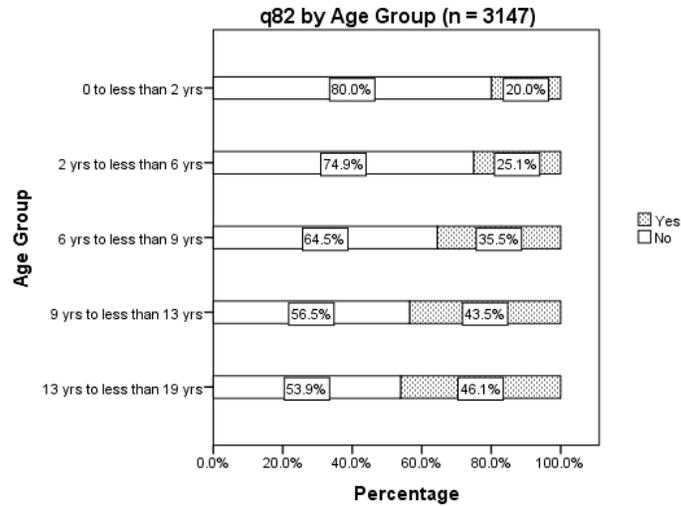


Figure CHS-41 indicates a statistically significant difference between male and female children with respect to q82. Specifically, 38.0% of male children were reported to currently need non-vitamin prescription medications while 34.0% of female children were reported to have the same need.

**Figure CHS-41** – Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant?

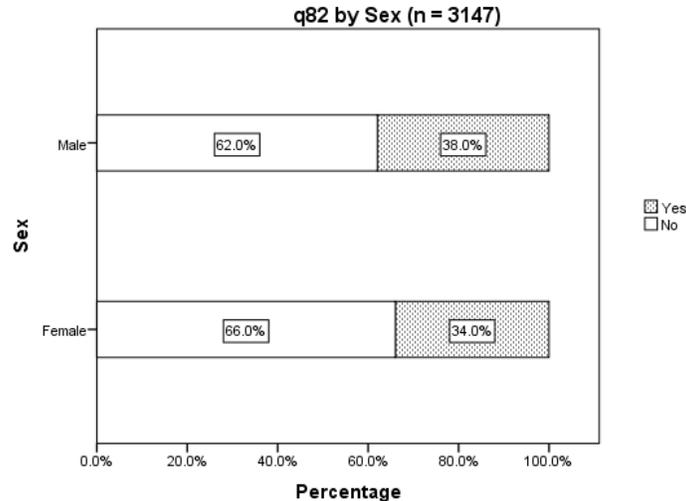


Figure CHS-42 reports differences with responses to q82 based on the child's ethnicity. Consistent with other measures of health status, a much lower proportion of Hispanic children (20.8%) were reported to currently need prescriptions. By contrast, 43.4% and 46.8%, respectively, of the Non-Hispanic Black and White children were reported to currently need prescriptions.

**Figure CHS-42** – Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant?

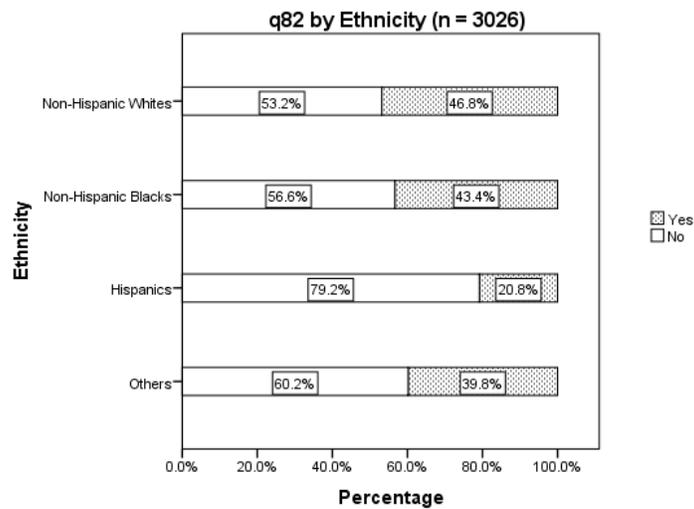


Figure CHS-43 indicates a similar split for the relationship between q82 and the preferred language of the caregiver that was observed among Non-Hispanics and Hispanics in the discussion of ethnicity. Specifically, 44.8% of English-prefering caregivers reported the child needed prescription drugs whereas only 16.2% of Spanish-prefering caregivers reported the same.

**Figure CHS-43** – Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant?

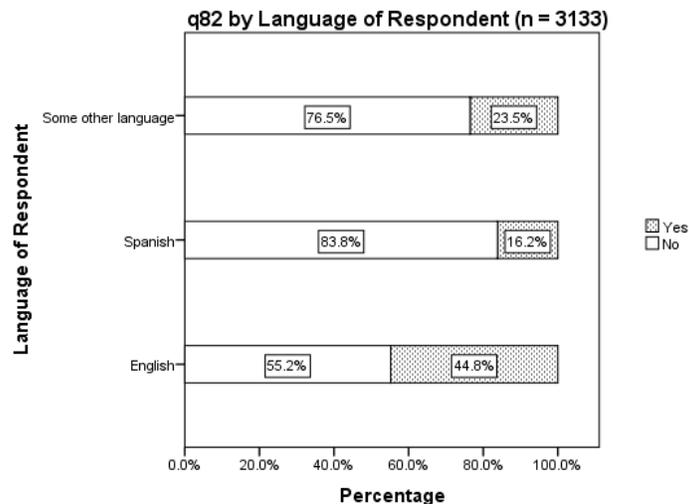


Figure CHS-44 indicates the relationship between whether the child was reported to currently need prescription medicine and the network in which the child is enrolled. A large difference was seen between the network with the lowest proportion of caregivers indicating that the child needed prescriptions at (26.7% in the Community Care of Wake/Johnson Counties network (1011)) compared to the network with the highest reported need at 50.7% in the Carolina Community Care Health Partnership (1010).

**Figure CHS-44** – Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant?

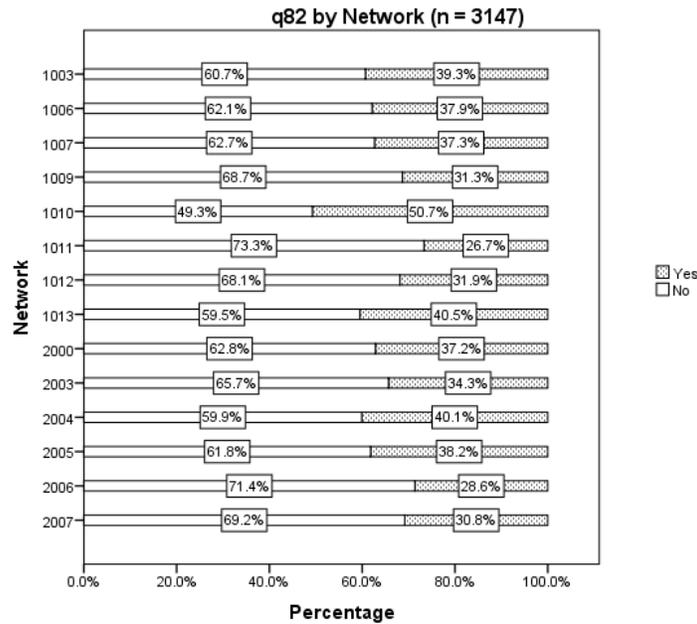
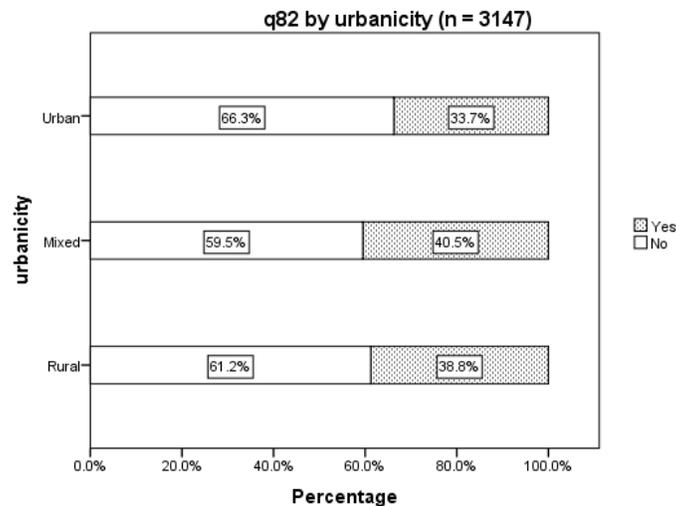


Figure CHS-45 shows the relationship between the urbanicity of the county in which the child lives and the reported current need for prescription medication. Children in counties of mixed urbanicity were reported to have the highest proportion currently needing prescription medicine at 40.5%. On the other hand, caregivers of urban-residing children reported the lowest need at 33.7%.

**Figure CHS-45** – Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant?



**Current Prescription Needed for Any Health Condition? (q83)**

Question 83 was asked of all caregivers who indicated that the child was currently taking a non-vitamin medication prescribed by a health provider (n=1,125). Caregivers

were asked if the medication was for any medical, behavioral, or other health condition with 80.6% responding that the medication the child was currently taking was for one of these reasons.

**Figure CHS-46** – Is the child’s current prescribed medication being taken for any medical, behavioral, or other health condition?

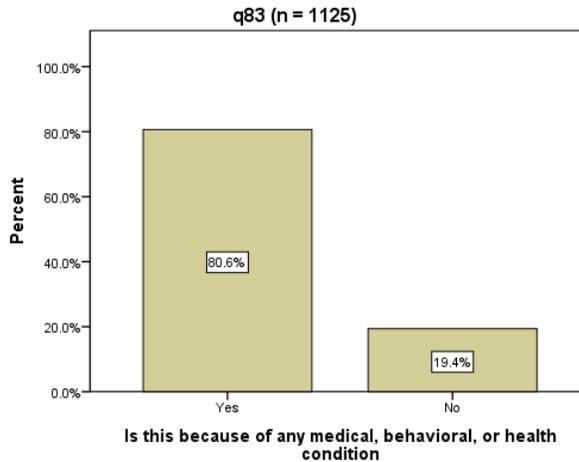


Figure CHS-47 shows the variation in responses to q83 across the child’s age. With the exception of the 2-5 year-olds, 72.8% of which were reported to be taking medication for one of these types of condition, the profile across age was quite flat, ranging from 81.8% of 0-1 year-olds to 83.6% of 9-12 year-olds.

**Figure CHS-47** – Is the child’s current prescribed medication being taken for any medical, behavioral, or other health condition?

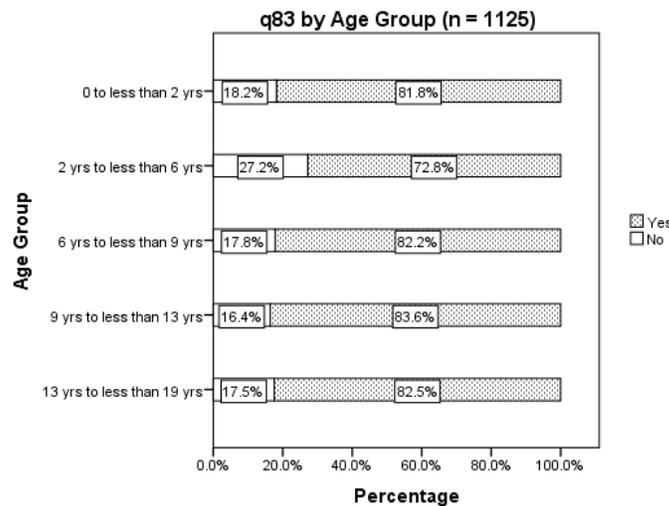


Figure CHS-48 reveals the relationship between whether the child is taking prescription medication for any health condition and the child’s sex. A higher proportion of male (84.4%) compared to female (76.1%) children were reported to be taking prescription medication for one of these reasons.

**Figure CHS-48** – Is the child’s current prescribed medication being taken for any medical, behavioral, or other health condition?

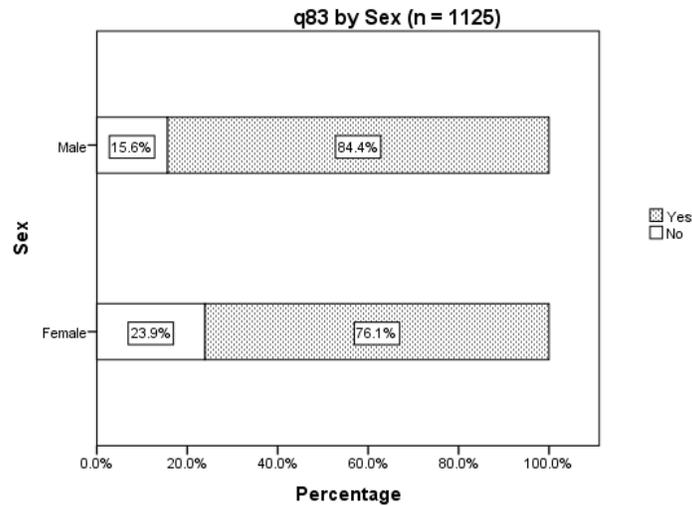


Figure CHS-49 demonstrates that 87.6% of Non-Hispanic White children were reported to take prescription medication for one of the indicated health conditions whereas only 66.2% of Hispanic children were reported to be taking prescription medication for the same reason. The proportion of Non-Hispanic Black children reported to take prescription medicines for one of the indicated health reasons lands almost exactly between these two values at 78.6%.

**Figure CHS-49** – Is the child’s current prescribed medication being taken for any medical, behavioral, or other health condition?

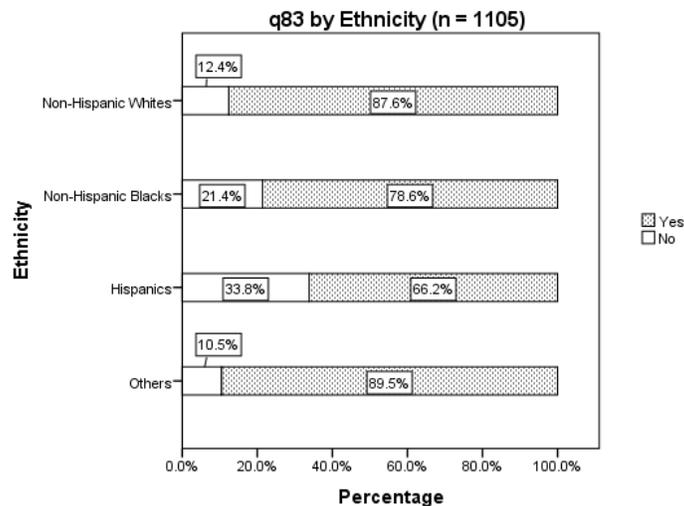


Figure CHS-50 shows the relationship between responses to q83 and the language preferred by the caregiver. A substantial proportion (84.0%) of the children of English-prefering caregivers were reported to have used prescription medicines for one of the

indicated health conditions whereas only 59.3% of the children of Spanish-prefering caregivers reported the same.

**Figure CHS-50** – Is the child’s current prescribed medication being taken for any medical, behavioral, or other health condition?

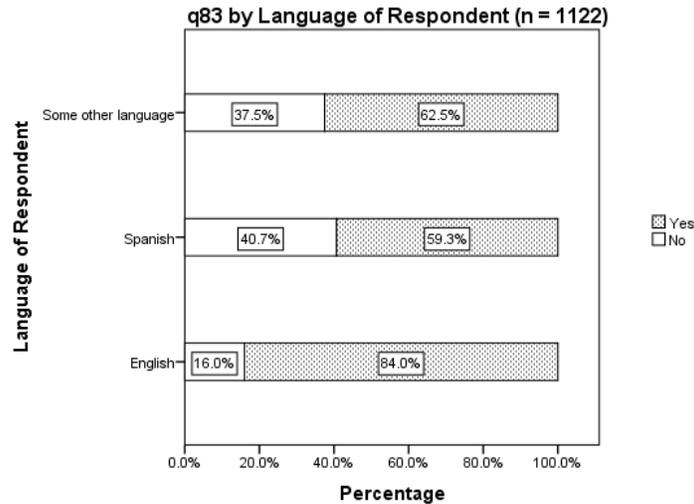
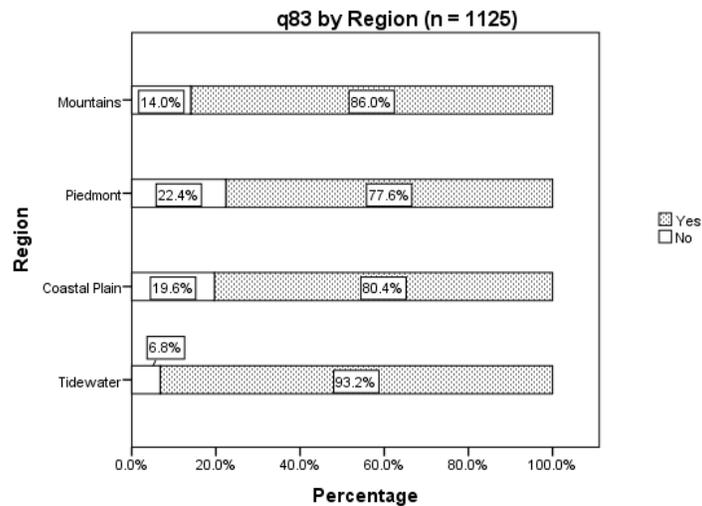


Figure CHS-51 demonstrates that 93.2% of children living in the Tidewater region were reported by the caregiver to have currently been on medication for one of the indicated health reasons. Additionally, the region with the lowest proportion of children reported to be taking medication for any of the indicated health reasons was the Piedmont region at 77.6%.

**Figure CHS-51** – Is the child’s current prescribed medication being taken for any medical, behavioral, or other health condition?



**Condition Lasting at Least 12 Months? (q84)**

Question 84 asked the caregivers who gave an affirmative response to q83 (n=878) if the child's condition requiring medication had lasted or is expected to last at least 12 months. Figure CHS-52 indicates that almost 91% of caregivers indicated that the child had a condition lasting 12 months or more.

**Figure CHS-52** – Is the child's condition for which he is currently taking medication one that has lasted or is expected to last for at least 12 months?

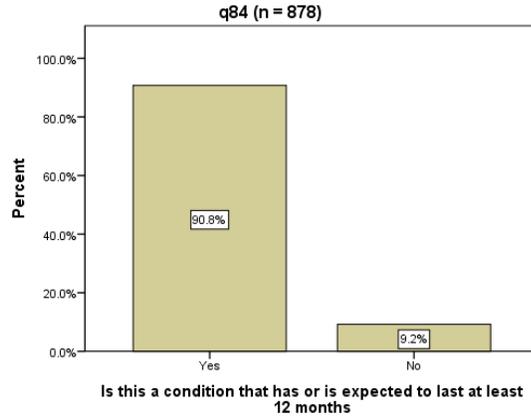


Figure CHS-53 examines the bivariate relationship between the age of the child and q84. At 55.6%, children less than 2 years old were reported to have the lowest prevalence of the specified health conditions that lasted at least 12 months. By contrast, this observation was much more prevalent in the older groups, and tended to increase with age, with 86.3% of the caregivers of 2-5 year-olds and 94.2% of the caregivers of 13-18 year-olds reporting yes.

**Figure CHS-53** – Is the child's condition for which he is currently taking medication one that has lasted or is expected to last for at least 12 months?

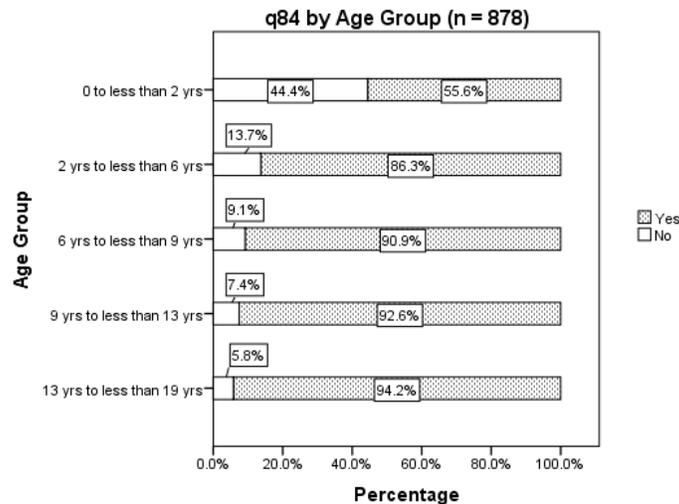
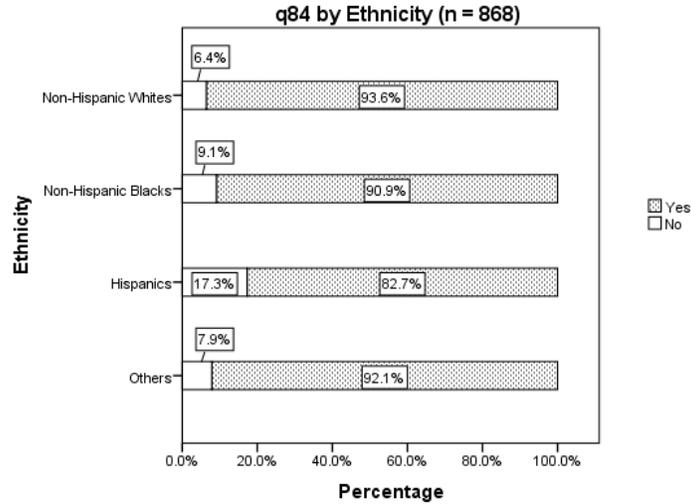


Figure CHS-54 indicates that, consistent with many other health status questions, Hispanic children are reported to have a lower prevalence of a condition lasting 12

months or more with 82.7% reporting this result. Reports of the same health status ranged from 90.9% for Black children to 93.6% for White children.

**Figure CHS-54** – Is the child’s condition for which he is currently taking medication one that has lasted or is expected to last for at least 12 months?



**Using More Medical/Educational Services Than Other Children (q85)**

Question 85 asked all caregivers (n=3,115) if the child needed or used more medical care, mental health services, or more educational services than is usual for most children of the same age. Figure CHS-55 indicates that 20.6% of caregivers reported this higher than normal need for their children.

**Figure CHS-55** – 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?

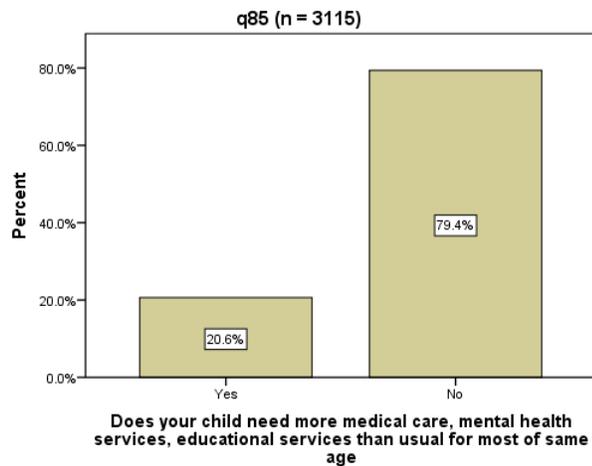


Figure CHS-56 reveals a general age-related upward trend in the child reporting to have need for more services than other children do. Caregivers of children less than 2 and 2-5 years of age reported the lowest need at 11.8% and 11.6%, respectively. Children

in the 9-12 and 13-18 year old age groupings were reported to have the greatest need at 26.0 and 27.7%, respectively.

**Figure CHS-56** – 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?

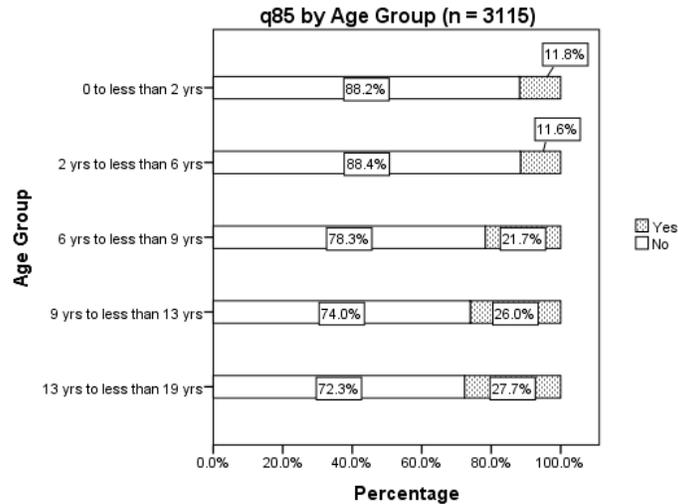


Figure CHS-57 indicates that a significantly greater proportion of male children (23.7%) compared to female children (17.4%) were reported to need more services than children of similar age.

**Figure CHS-57** – 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?

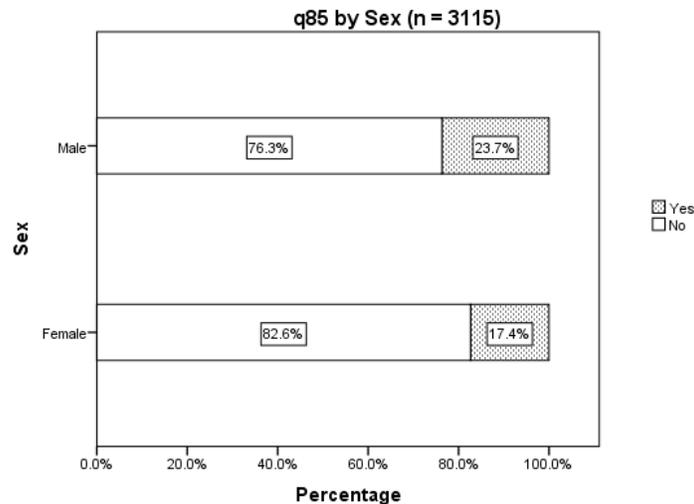


Figure CHS-58 displays the results of q85 according to the ethnicity of the child. Results for the ethnic subgroups reveal that only 11.1% of Hispanic children were

reported to have greater need for services compared to Non-Hispanic Blacks and Non-Hispanic Whites at 25.8% and 26.6%, respectively.

**Figure CHS-58** – 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?

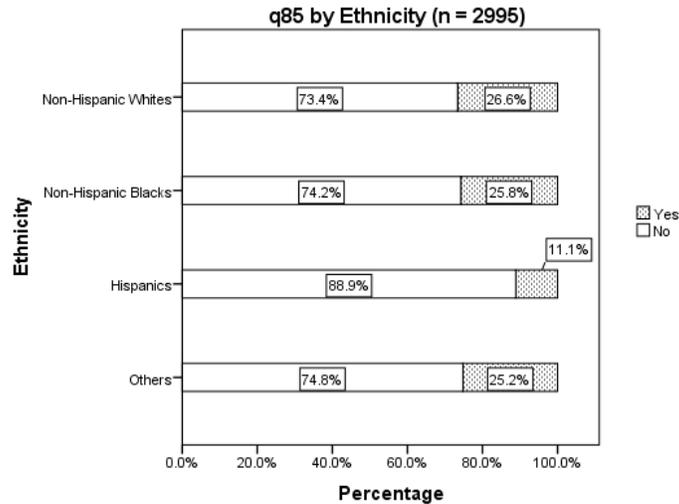
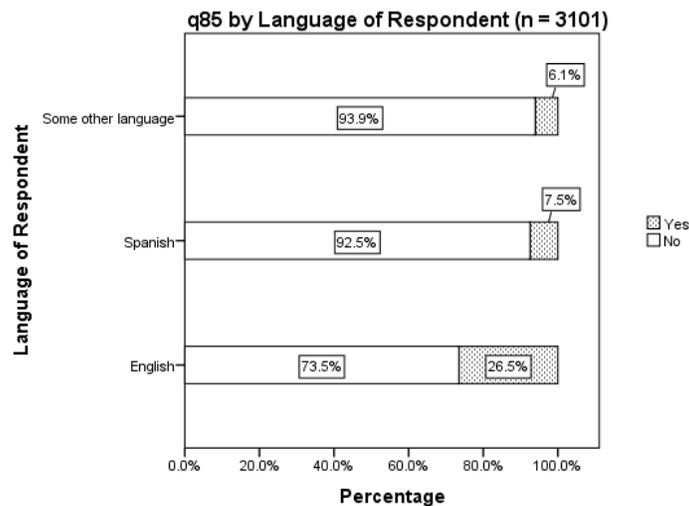


Figure CHS-59 shows a statistically significant variation with regard to the caregiver’s preferred language that mimics the Hispanic/Non-Hispanic split observed with ethnicity. Only 7.5% of Spanish-speaking caregivers reported the child having greater need for these services whereas 26.6% of English-speaking caregivers provided the same response.

**Figure CHS-59** – 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?



The results for q85 across the CCNC networks in which the child is enrolled are displayed in Figure CHS-60. The Carolina Community Health Partnership network (1010) had the highest proportion of children reported to need more than usual services at 27.1% whereas the Community Care Plan of Eastern Carolina network (2000) had the lowest proportion reporting the same response at 14.6%.

**Figure CHS-60** – 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?

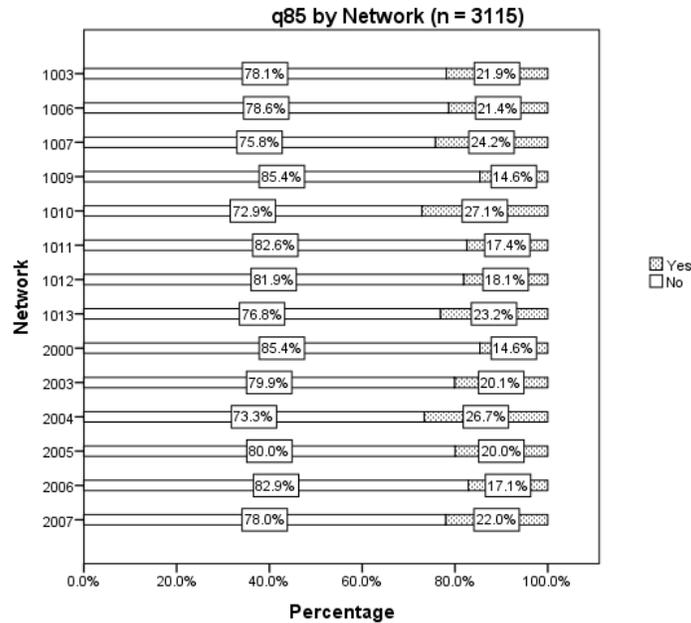
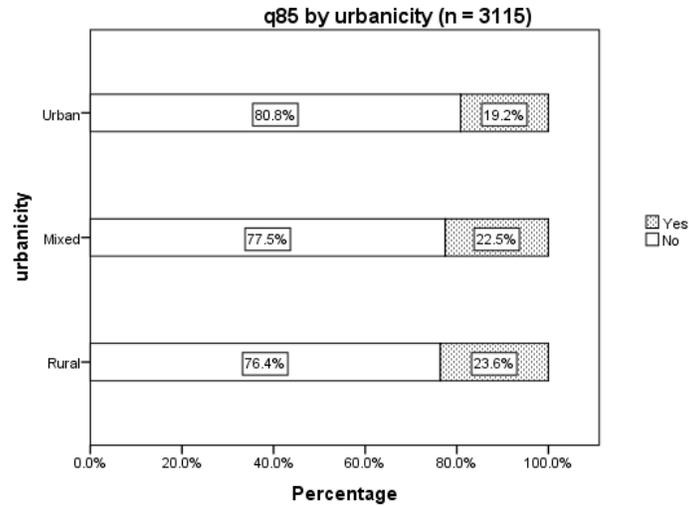


Figure CHS-61 notes minor differences in responses to q85 across the level of urbanicity of the county in which the child lives. The lowest proportion of children reported to need more than normal service support was 19.2% and was observed in urban counties whereas 23.6% of children in rural counties were reported by caregivers to have the same need.

**Figure CHS-61** – 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?



**More Than Normal Service Use Due to a Health Condition? (q86)**

Question 86 was asked of the respondents who responded that the child had needed more than normal levels of one or more of several services (n=629). Q86 specifically asked if the elevated need was due to a medical, behavioral, or other health condition. Figure CHS-62 indicates that the increased need was attributable to one of these conditions for 83.9% of children.

**Figure CHS-62 – Is this because of any medical, behavioral, or other health condition?**

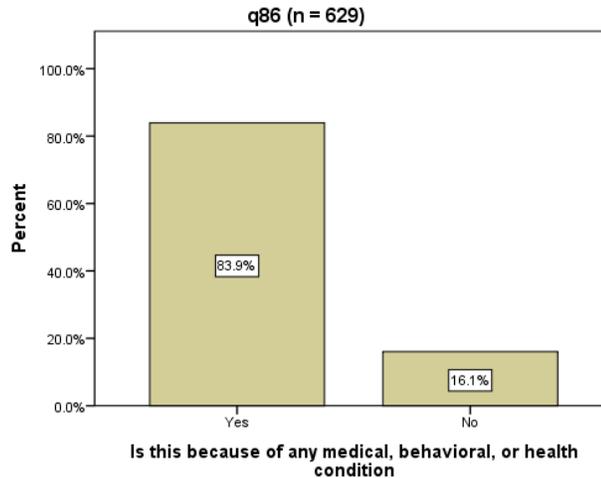
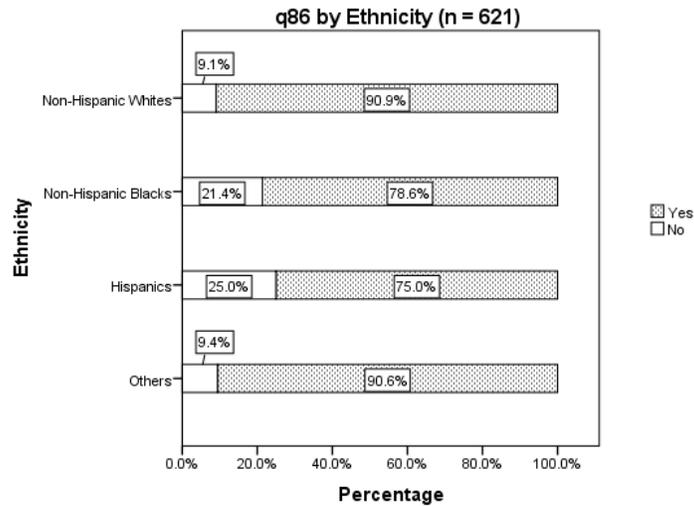


Figure CHS-62 reveals that 90.9% of Non-Hispanic White children were reported to have had a medical-related condition that caused them to required more services than other similarly aged children whereas only 75.0% of caregivers of Hispanic children reported the same result. Somewhat unexpectedly, Non-Hispanic Black children had a similar proportion (78.6%) that required these services to that of Hispanic children. This observation differs from many of the other questions where Non-Hispanic Black and White children are often reported to have similar results.

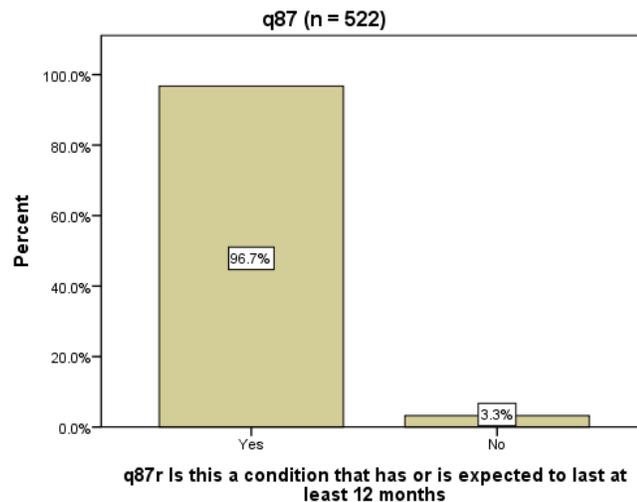
**Figure CHS-63** – Is this because of any medical, behavioral, or other health condition?



**Medical/Behavioral Health Condition Lasting at Least 12 months? (q87)**

Question 87 asked caregivers that responded “yes” to q86 (n=629) if the medical condition that seemed worse in their child than others had been present for at least 12 months. Figure CHS-64 indicates that the overwhelming majority of caregivers (96.7%) indicated that the child’s condition had lasted at least 12 months. No significant bivariate relationships with any context or demographic variables were observed.

**Figure CHS-64** – Is this a condition that has lasted or is expected to last at least 12 months?



**More Limited Than Other Children (q88)**

Question 88 asked all caregivers (n = 3,118) if the child was limited in any way in the ability to do the things most children of the same age do. Figure CHS-65 indicates that 16.8% of caregivers reported that the child did have significant limitations.

**Figure CHS-65** – 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?

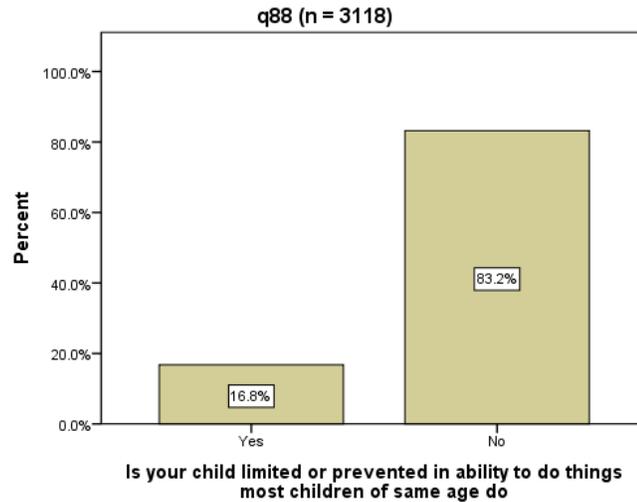


Figure CHS-66 indicates that, with the exception of children under 2 years old, limitations are generally more prevalent among older children. For instance, 11.1% of 2-5 year old children were reported to have these limitations whereas 21.1% and 20.9%, respectively, of 9-12 year old and 13-18 year old children were reported to have the same limitations.

**Figure CHS-66** – 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?

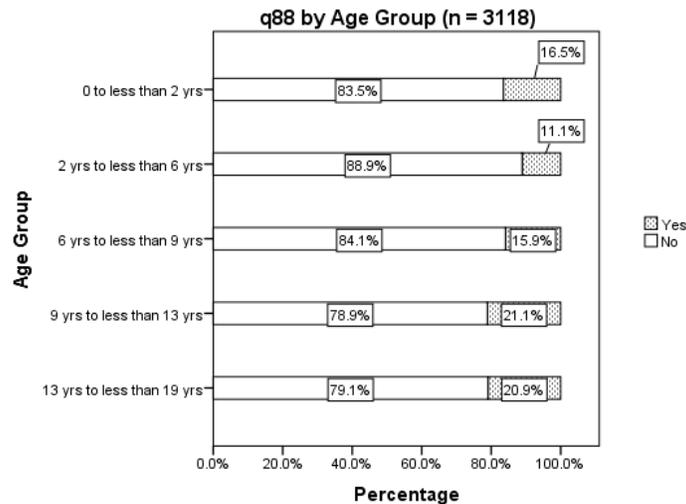


Figure CHS-67 indicates significantly different responses to q88 based on the child’s sex with 19.4% of male children reported to have these limitations whereas only 14.0% of female children were reported to have the same issues.

**Figure CHS-67** – 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?

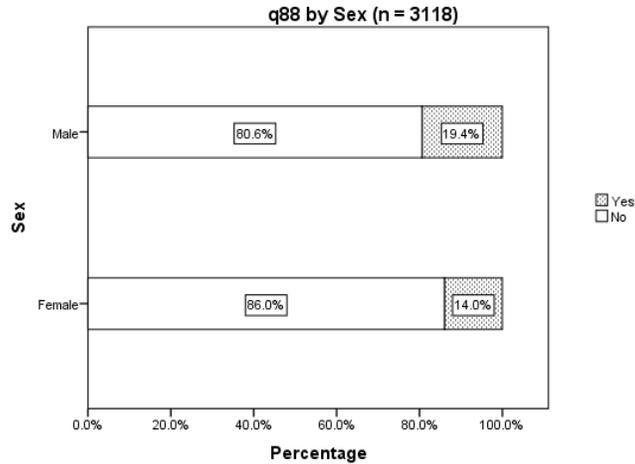


Figure CHS-68 indicates that the highest prevalence for activity limitations was in Black Non-Hispanic children with 21.5% reported to have this issue compared to children of other ethnic subgroups whereas only 13.3% of Hispanic children were reported to have the same problem.

**Figure CHS-68** – 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?

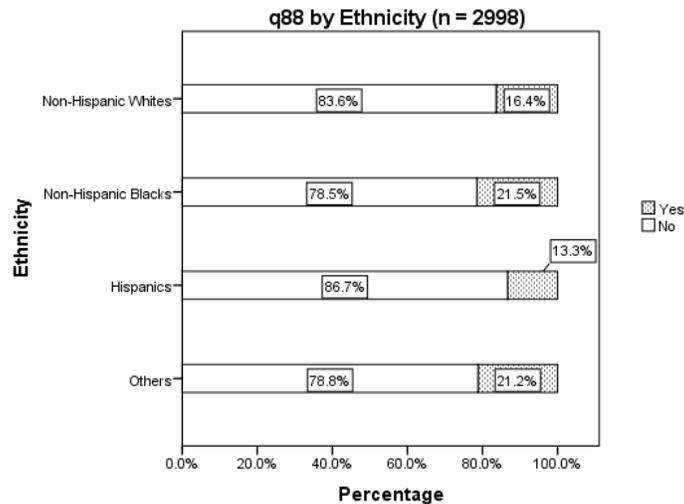
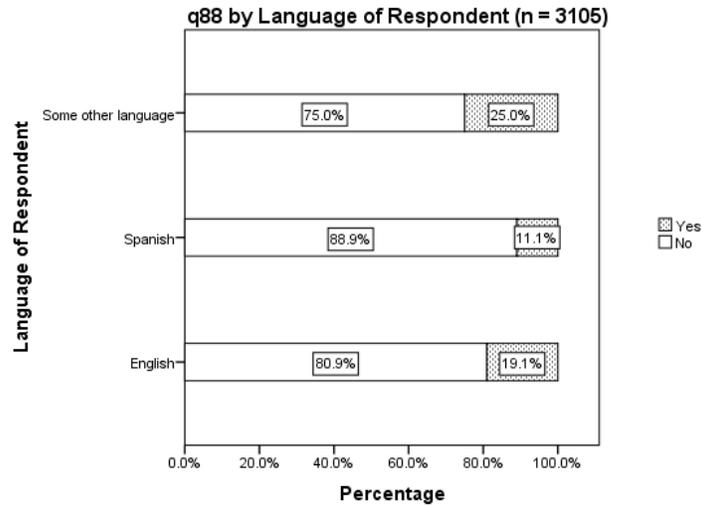


Figure CHS-69 reveals that 19.1% of caregivers that preferred English reported the child had substantial limitations whereas only 11.1% of Spanish-preferring caregivers gave the same report on the child.

**Figure CHS-69** – 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?



**Limitation Caused by Medical, Behavioral, or Other Health Condition (q89)**

Question 89 was asked of caregivers who indicated in q88 that the child had greater limitations on activity than other children of the same age (n=512). Q89 asked if the limitation was because of a medical, behavioral, other health conditions. Figure CHS-70 reveals these conditions were the source of activity limitations for 66.8% of those children with limitations.

**Figure CHS-70** – Is this activity limitation because of any medical, behavioral, or other health condition?

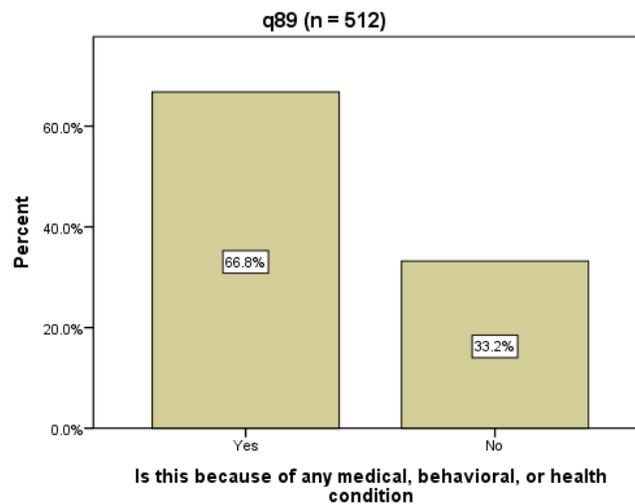


Figure CHS-71 shows an upward trend in the proportion of affirmative responses as age increases. The results ranged from a low of 18.8% for 0-1 year olds to greater than 70% for children older than 9 years of age.

**Figure CHS-71** – Is this activity limitation because of any medical, behavioral, or other health condition?

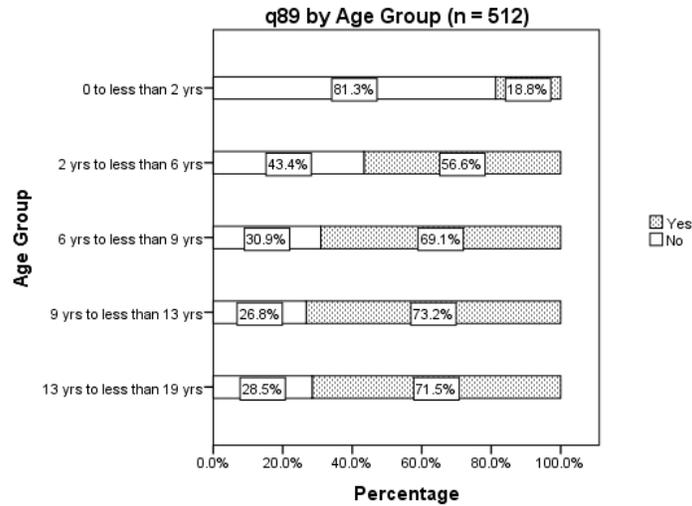


Figure CHS-72 shows how responses to q80 vary across the child’s sex. Male children with limitations on activities were reported to have a medical/behavioral factor as the cause in 70.7% of observations whereas only 61.1% of caregivers of female children reported the same response.

**Figure CHS-72** – Is this activity limitation because of any medical, behavioral, or other health condition?

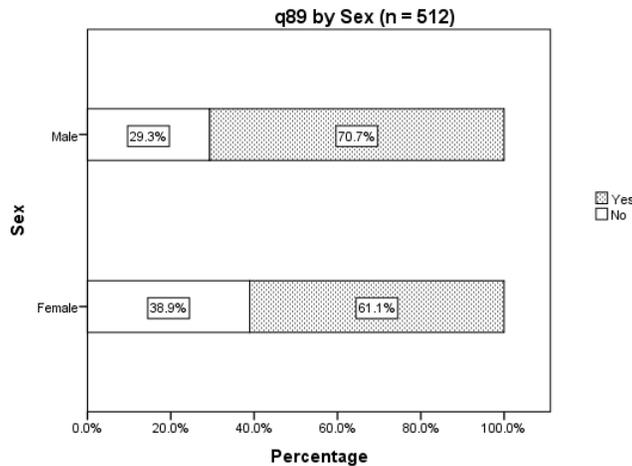


Figure CHS-73 indicates a wide range of responses to q89 across the three major ethnic categories. While the caregiver indicated medical or behavioral reasons as the source of activity limitations in 88.3% of Non-Hispanic White children, only 42.0% of Hispanic children were cited as having the same sources of limitation. Meanwhile, Non-Hispanic Black children were reported to have medical factors as cause for activity limitation by 64.5% of caregivers.

**Figure CHS-73** – Is this activity limitation because of any medical, behavioral, or other health condition?

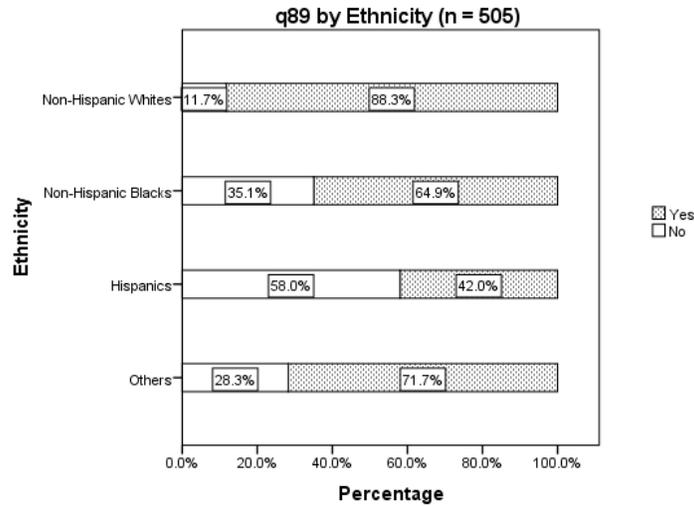


Figure CHS-74 reveals that children of English-preferring caregivers were more than twice as likely to have activities limited by a medical or behavioral factor as were children of Spanish-preferring caregivers (76.9% vs. 31.3%). The responses reported by those preferring another language should be tempered by the fact that there were a small number of respondents within this category.

**Figure CHS-74** – Is this activity limitation because of any medical, behavioral, or other health condition?

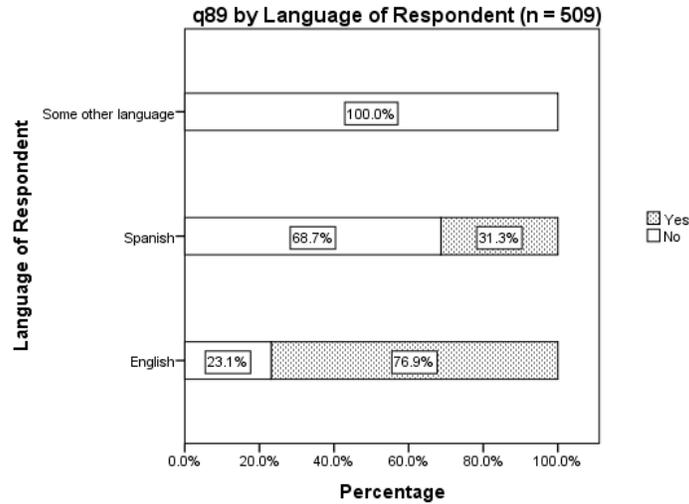


Figure CHS-75 shows a wide range of responses to q89 across the CCNC networks. The Community Care of the Lower Cape Fear network (2004) had the highest proportion of its children for whom a positive response to q89 was reported at 83.8%. The Community Care Partners of Greater Mecklenburg network (1009) had the lowest proportion of its children (46.7%) reported to have a medical or behavioral condition as the cause for the child’s limited activity compared to other children.

**Figure CHS-75** – Is this activity limitation because of any medical, behavioral, or other health condition?

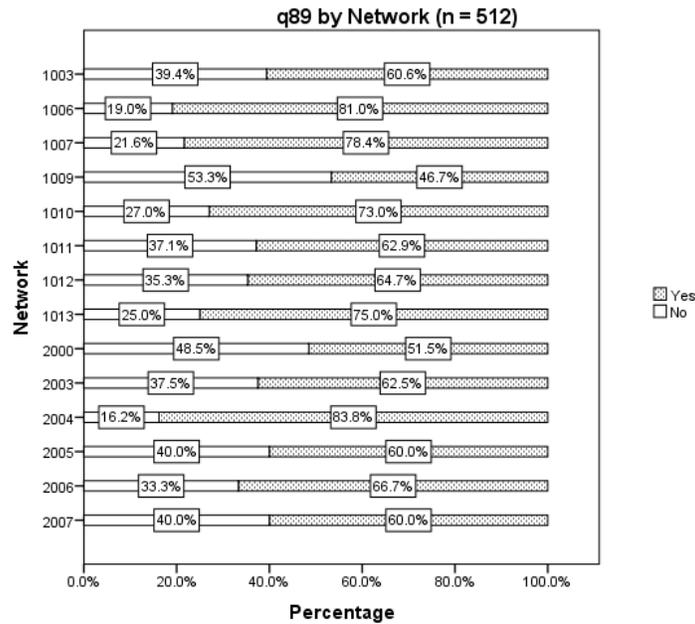
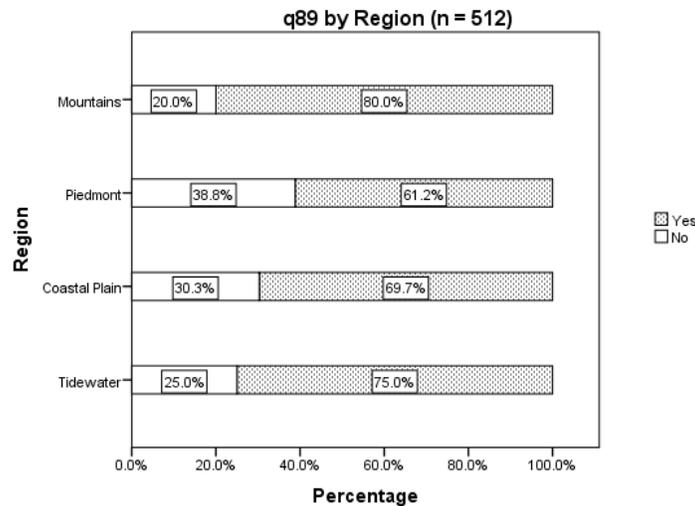


Figure CHS-76 shows how responses to q89 varied across the four geographic regions of the state. Eight in 10 caregivers living in the Mountain region reported a medical or behavioral cause for the child’s limited activity while 61.2% of children living in the Piedmont region were reported to have the same causes of limited activity.

**Figure CHS-76** – Is this activity limitation because of any medical, behavioral, or other health condition?

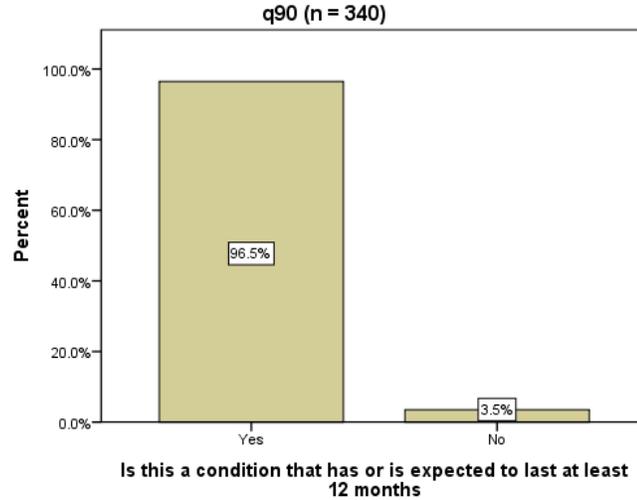


**Activity Limiting Medical Condition Lasting 12 Months or More (q90)**

Question 90 asked the caregivers that responded yes to q89 (n=340) if the medical condition that limited the child’s activities had lasted or is expected to last at least 12 months. Figure CHS-77 indicates that 96.5% of caregivers responded that the condition

in question was one of at least 12 months duration. No significant bivariate relationships with demographic or context variables were observed.

**Figure CHS-77** – Is the medical condition that limits activity one that has lasted or is expected to last for at least 12 months?



**Child's Need for Special Therapy (q91)**

Question 91 was asked of all caregivers (n=3,141) and sought to determine if the child received special physical, occupational, or speech therapy. Figure CHS-78 shows that 11.4% of caregivers indicated an affirmative response.

**Figure CHS-78** – Does your child need or get special therapy such as physical, occupational, or speech therapy?

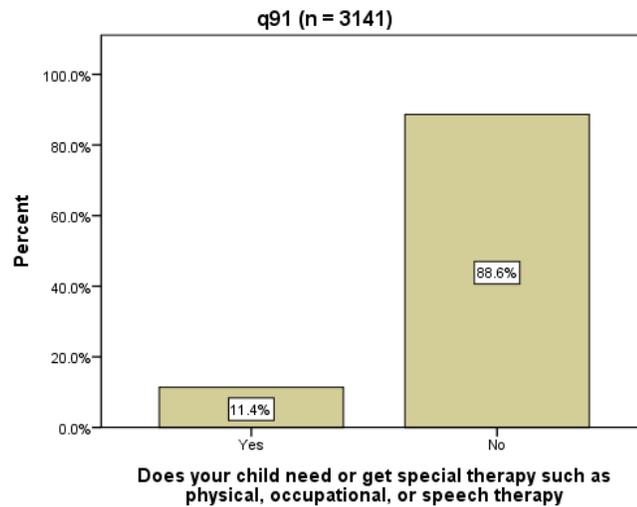


Figure CHS-79 indicates an erratic trend in responses to q91 as age increases. For instance, the lowest proportions of reported needs for special therapy were seen at the extremes of age (4.5% for children under 2 year-olds and 9.0% of 13-18 year olds,

respectively) with the peak of affirmative responses observed at 15.3% in the 6-8 year age group.

**Figure CHS-79** – Does your child need or get special therapy such as physical, occupational, or speech therapy?

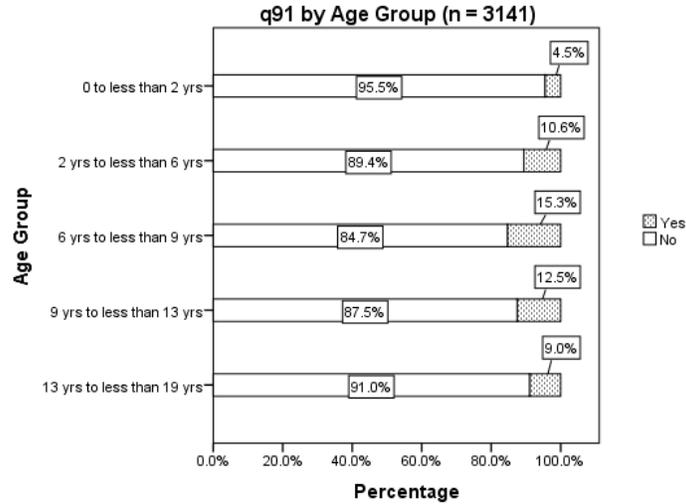


Figure CHS-80 shows the impact of the child’s sex on responses to q91. While 14.7% of male children were reported to need physical, occupational, or speech therapy, only 7.9% of female children were reported to have the same need.

**Figure CSH-80** – Does your child need or get special therapy such as physical, occupational, or speech therapy?

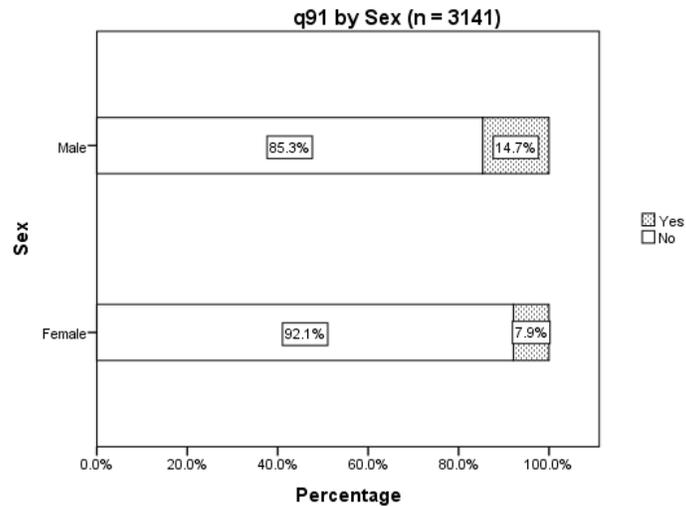


Figure CHS-81 shows that ethnicity was significantly associated with responses to q91. While 14.6% of Non-Hispanic White children were reported to need some special therapy, only 7.4% of Hispanics were reported to have the same need.

**Figure CHS-81** – Does your child need or get special therapy such as physical, occupational, or speech therapy?

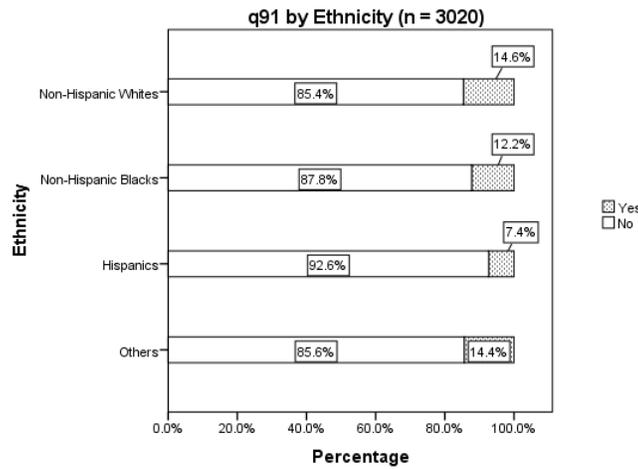
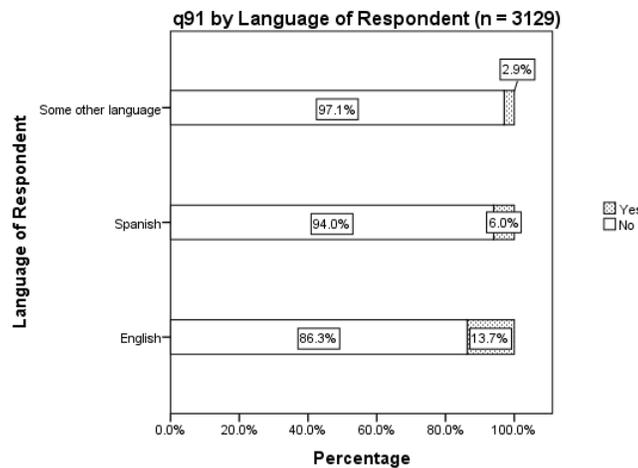


Figure CHS-82 reveals that caregivers that preferred English were over twice as likely to report that the child needed special therapy than caregivers that preferred Spanish (13.7% vs. 6.0%). This English/Spanish language ratio closely mirrors the White/Hispanic ethnicity ratio observed in the previous section.

**Figure CHS-82** – Does your child need or get special therapy such as physical, occupational, or speech therapy?



**Therapy Result of Medical, Behavioral, or other Health Condition (q92)**

Question 92 asked caregivers if the special therapy that was noted as being needed in q91 was due to a medical, behavioral, or other health condition (n=347). Figure CHS-83 indicates that 69.2% of the therapy needed was due to one of the causes noted in the question.

**Figure CHS-83** – Is this special therapy the result of any medical, behavioral, or other health condition?

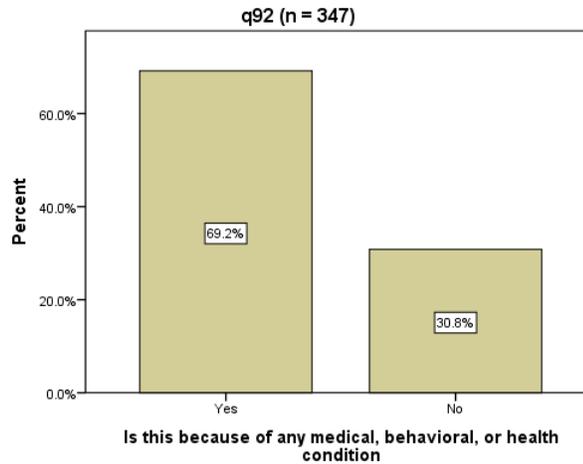
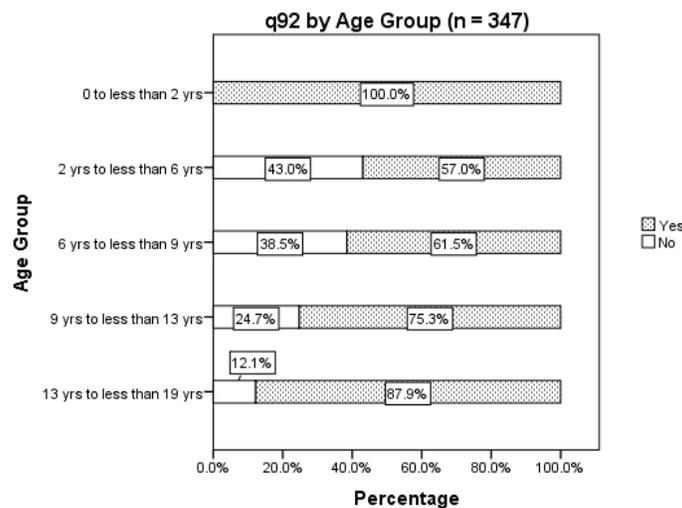


Figure CHS-84 shows how responses to q92 varied by the child’s age. Once again, the result for the 0-1 year olds should be interpreted in the context of the relatively small number of respondents in this age group partially attributable to the survey’s skip pattern. Therefore, the general profile is one of increasing proportions of caregivers indicating that the needed therapy is attributable to one of the noted health conditions as age increases. For example, the observed proportion of affirmative responses for children in the 2-5 year old group was 57.0% compared to the 87.9% observed in the 13-18 year old age group.

**Figure CHS-84** – Is this special therapy the result of any medical, behavioral, or other health condition?

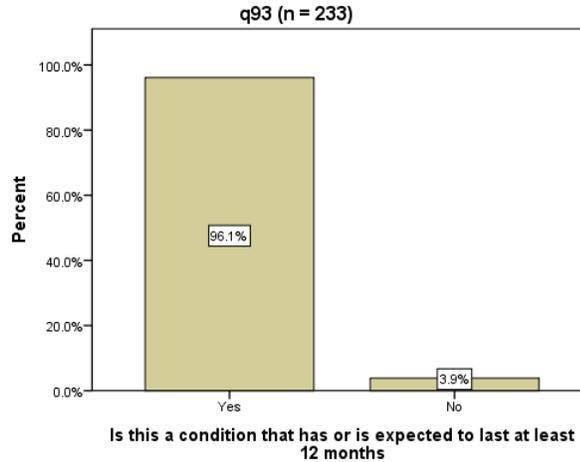


**Is Special Therapy the Result of a Condition Expected to last at Least 12 Months (q93)**

The caregivers who indicated that the child needed special therapy (q91) and that a medical/behavioral reason was the cause (q92) were asked if the condition is expected to last at least 12 months in question 93 (n=233). Figure CHS-85 indicates that 96.1% of caregivers indicated that the child’s condition was expected to last at least 12 months. No

statistically significant bivariate relationships between q93 responses and the demographic or context variables were seen.

**Figure CHS-85** – Is the medical or behavioral health condition requiring therapy expected to last at least 12 months?



**Emotional, Development or Behavioral Issue That Requires Treatment or Counseling (q94)**

Question 94 asked all the caregivers (n=3,139) if the child had any kind of emotional, developmental, or behavioral problem for which he or she needed or got treatment or counseling. Figure CHS-86 indicates that 16.0% of children do have one of these types of problems.

**Figure CHS-86** – Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs or gets treatment or counseling?

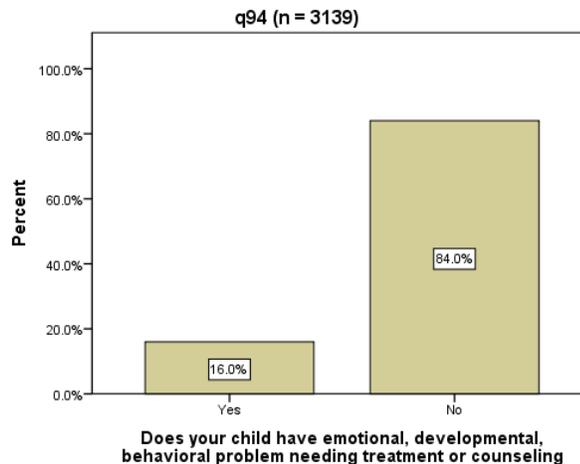


Figure CHS-87 shows a trend in responses to q94 with older children having greater reported prevalence of conditions that need mental health-related treatment or counseling. For example, 2.7% of the caregivers of children under the age of 2 years

responded affirmatively compared to 24.1% for 13-18 year-olds. These responses could be influenced by the steadily increasing expectations of cognitive ability with age.

**Figure CHS-87** – Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs or gets treatment or counseling?

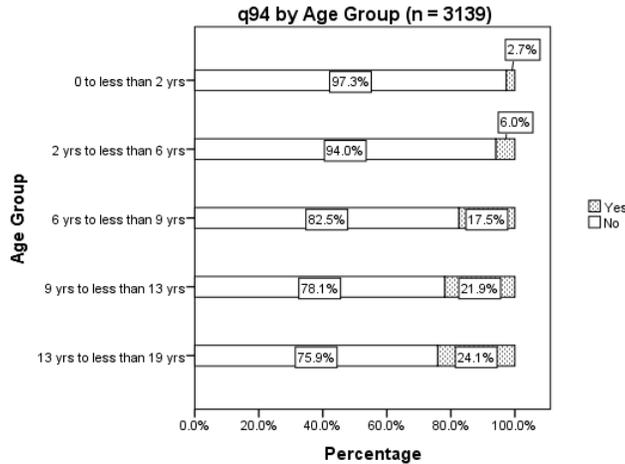


Figure CHS-88 indicates that the reported prevalence of conditions needing mental health treatment or counseling is nearly twice as great for male children as for females (20.5% vs. 11.2%).

**Figure CHS-88** – Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs or gets treatment or counseling?

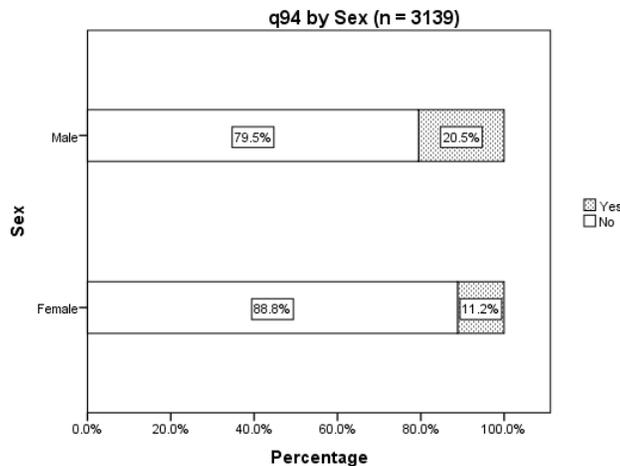
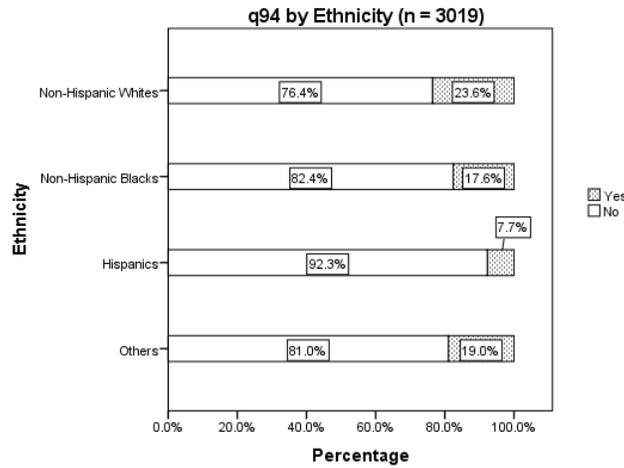


Figure CHS-89 shows how responses to q94 vary with the child's ethnicity. Most noteworthy was the difference observed between Non-Hispanic Whites and Hispanics, with reported prevalence of conditions warranting treatment or counseling for White children being nearly three times as high as that of Hispanics (23.6% vs. 7.7%).

**Figure CHS-89** – Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs or gets treatment or counseling?



As is often the case across all question domains for this survey, the caregiver’s language preference tracks the child’s ethnicity in terms of prevalence. Figure CHS-90 denotes that 20.7% of English-preferring caregivers reported the child having a condition needing mental/behavioral health treatment whereas only 5.6% of caregivers preferring Spanish reported the same.

**Figure CHS-90** – Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs or gets treatment or counseling?

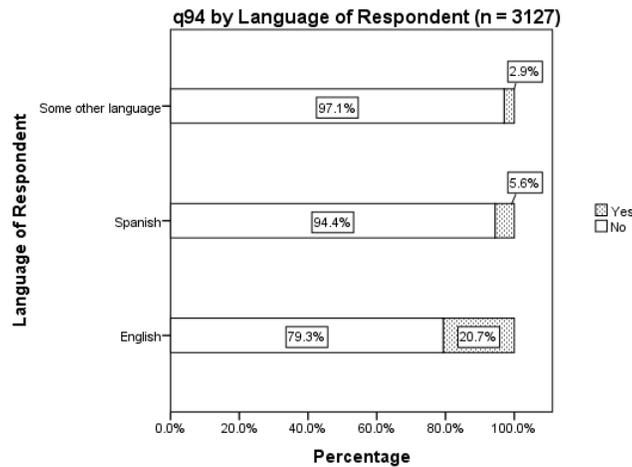


Figure CHS-91 shows the relationship between CCNC network in which the child is enrolled and the caregiver response to q94. The Carolina Collaborative Community Care network (1013) had the highest proportion of children (21.5%) that were reported to have conditions needing mental health treatment and the Community Care Partners of Mecklenburg network (1009) had the lowest at 9.4%.

**Figure CHS-91** – Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs or gets treatment or counseling?

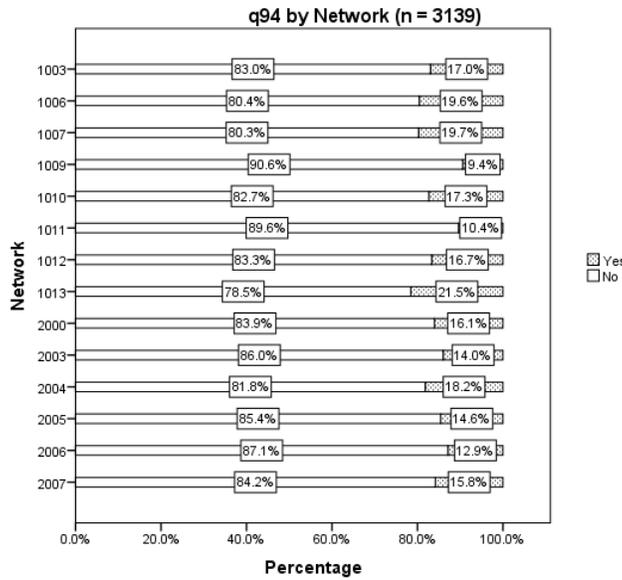
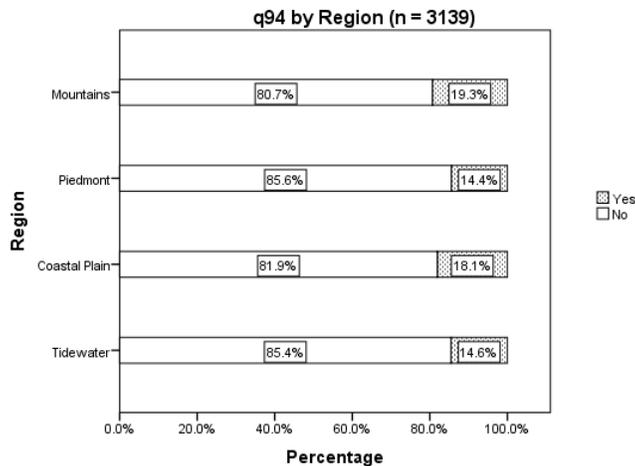


Figure CHS-92 depicts the relationship between q94 and the child enrollee’s region of residence and reveals that caregivers in the Mountain region reported the highest prevalence of children with conditions needing mental health treatment (19.3%) while the Piedmont region reported the lowest prevalence at 14.4%.

**Figure CHS-92** – Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs or gets treatment or counseling?

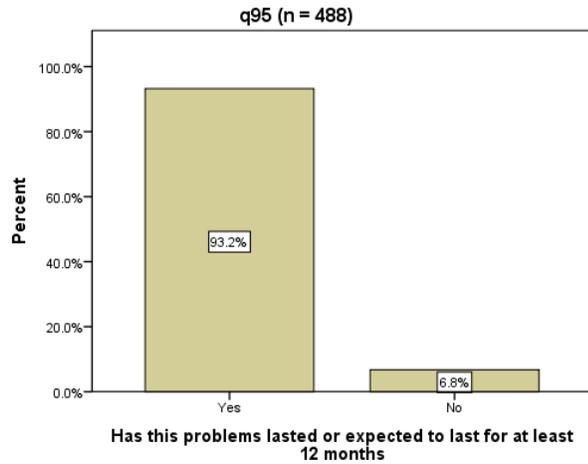


***Emotional or Behavioral Condition Expected to last at Least 12 Months (q95)***

Question 95 asked if the condition for which the child needs treatment was expected to last 12 months (n=488). Consistent with other questions on how long a reported medical condition had or was expected to last, 93.2% of caregivers indicated

that the child's behavioral health ailment was expected to last at least 12 months. In terms of bivariate relationships, none of the demographic or context variables were statistically significant when analyzed with q95.

**Figure CHS-93** – Is this emotional condition that requires treatment expected to last at least 12 months?



**Utilization**

Over time Andersen (1995) has developed a theoretical model that incorporates a number of predictor variables, including the utilization of health services, to explain health outcomes. The need for health care, which can be *perceived* need or *evaluated* need, is usually correlated with an individual’s health status and may serve to predict utilization of health services. The Andersen framework, however, also attempts to explain the roles of access to care and customer satisfaction in the utilization of health care. Thus, there is a solid theoretical basis linking the previously discussed domains of access, satisfaction, and health status to utilization.

The utilization questions here are often part of sequences of questions that also inquired about health status, access, and/or satisfaction. When a response to a previous question significantly reduced the number of respondents to which a utilization question was asked, this information is provided.

A number of statistically significant relationships were observed between the survey’s utilization questions and the demographic and context variables. The child’s age, ethnicity, and the language preferred by the adult respondent were significant in 4 of 8 questions. The child’s ethnicity and the language preferred by the adult respondent exhibited substantial overlap in the relationships seen with the questions. The CCNC network was next most frequent variable associated with significant relationships with occurrences: its significance was observed in 3 questions. Age, sex, region, and urbanity produced a significant relationship in only one of the utilization questions and the same question generated the significant finding for each of those variables.

Table CU-1 provides the list of utilization domain questions asked in the child’s survey.

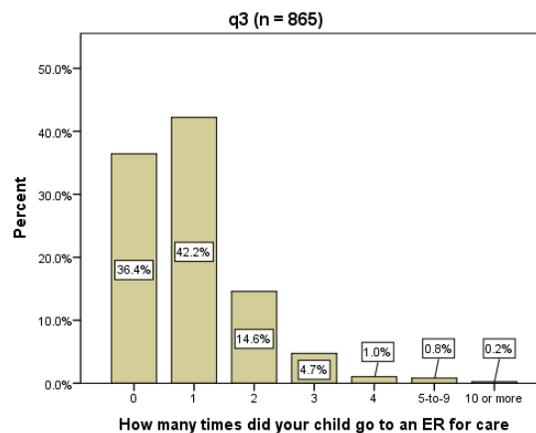
**Table CU-1 – Utilization Questions**

No.	Question
Q3	In the last 6 months, how many times did your child go to an emergency room for care?
Q7	In the last 6 months, <b>not</b> 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?
Q22	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?
Q25	In the last 6 months, did you need your child’s doctors or other health providers to contact a school or daycare center about your child’s health or health care?
Q36	In the last 6 months, did your child get care from more than one kind of health provider or use more than one kind of service?
Q39	In the last 6 months, how many times did your child visit his or her personal health provider for care?
Q49	In the last 6 months, did you call your child’s personal health provider’s office <b>after</b> regular office hours to get help or advice for your child?
Q60	How many specialists has your child seen in the last 6 months?

**Emergency Room Visits (q3)**

Question 3 asked how many times the child had been to an emergency room (ER) in the past 6 months, with the univariate results (n=865) shown in Figure CU-1. It was asked only of those respondents who indicated that the child had needed some type of urgent service in the previous 6 months. Children making one visit to the emergency room constituted the largest proportion (42.2%) among respondents indicating the need for emergent care, while 36.4% reported to have had no ER visits. Completing the description of children and ER visits, 14.6% had “2 visits,” 4.7% “3 visits,” 1% “4 visits,” 0.8% “5-9 visits,” with 0.2% reporting 10 or more ER visits in the previous 6 months. None of the demographic or context variables were statistically significant in terms of bivariate relationships associated with q3.

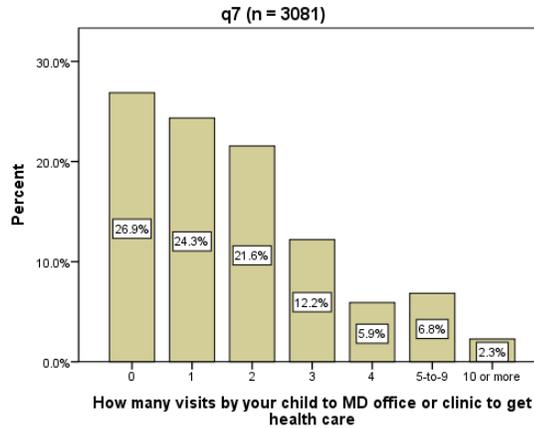
**Figure CU-1** -In the last 6 months, how many times did your child go to an emergency room for care?



**Number of Doctor/Clinic Visits (q7)**

Question 7 asked how many times the child had been to a doctor’s office or clinic for health care, with the univariate results (n=3,081) shown in Figure CU-2. Respondents indicated that 26.9% of the children had no visits, 24.3% “1 visit,” 21.6% “2 visits”, 12.2% “3 visits”, 5.9% “4 visits,” 6.8% between 5 and 9 visits, and the remainder of 2.3% reported 10 or more visits to a doctor’s office or clinic.

**Figure CU-2** -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 for health care?



The bivariate relationship between q7 and the child's age is shown in Figure CU-3. Children who were 0 to 1 year of age were the least prevalent with 0 visits (15.6%) and the most prevalent to have had 3 and 5-9 visits (21.1% in each case). By contrast, older age groups were reported to have 0 visits in larger proportions (> 25% prevalence for each age group). Paradoxically, the likelihood of the child having visited the doctor's office 10 or more times was greatest in the older age groupings.

Another important finding occurred with the 2-5 year-olds, who were the most prevalent with 1 visit at 28.5%. One should interpret this finding carefully due to the expectation that a number of doctor visits for children in the younger age groups may be well-visit checkups.

**Figure CU-3** -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 for health care?

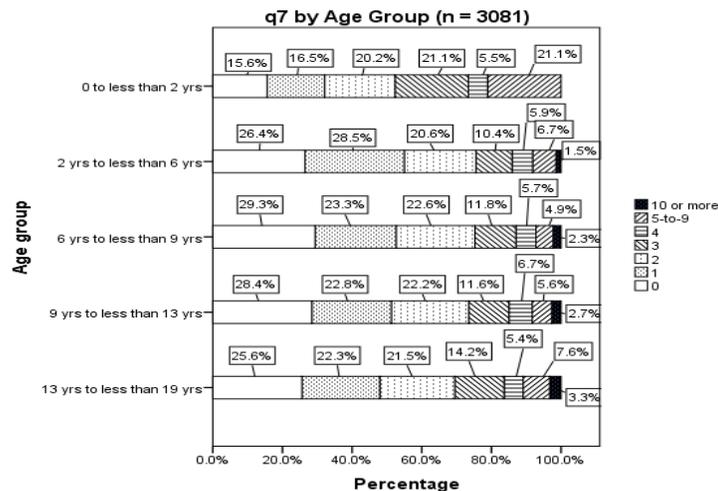
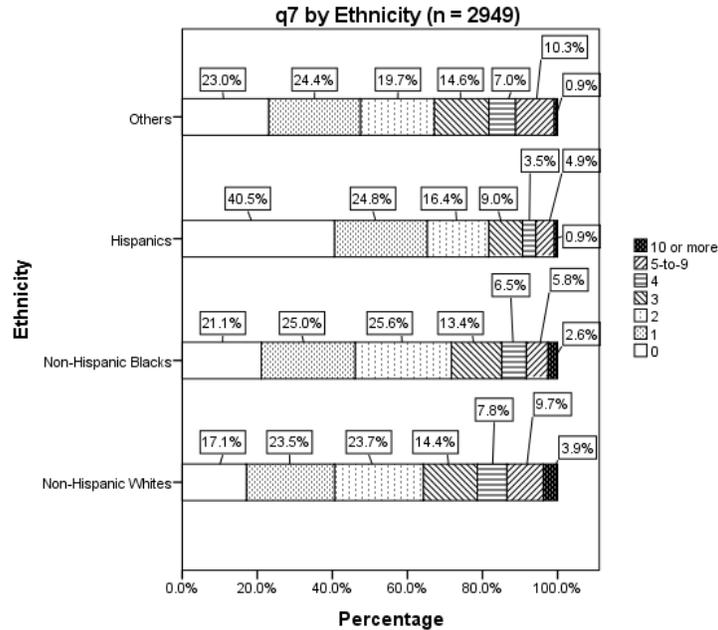


Figure CU-4 shows the relationship between the child's ethnicity and the number of visits to a doctor's office/clinic. The most notable observation is that the caregivers of Hispanic children reported the fewest visits. Hispanic children had the greatest prevalence of no visits (40.5%), which was almost double that of the other ethnic

subgroups. They also had the lowest prevalence in all visit counts greater than 2. Non-Hispanic White children generally had more visits with 21.4% reporting 4 or more visits.

**Figure CU-4** - 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 for health care?



The relationship between the caregiver's preferred language and the number of doctor/clinic visits, shown in Figure CU-5, overlapped the results for ethnicity. Those caregivers who preferred Spanish reported their children being the least prevalent having 2 visits or more as well as the most prevalent in 0 visits (43.5%). Children of respondents who preferred English were most prevalent in 4 of the 6 visit categories of 1 or more, while also being least prevalent in having not been to the doctor at all.

**Figure CU-5** - 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 for health care?

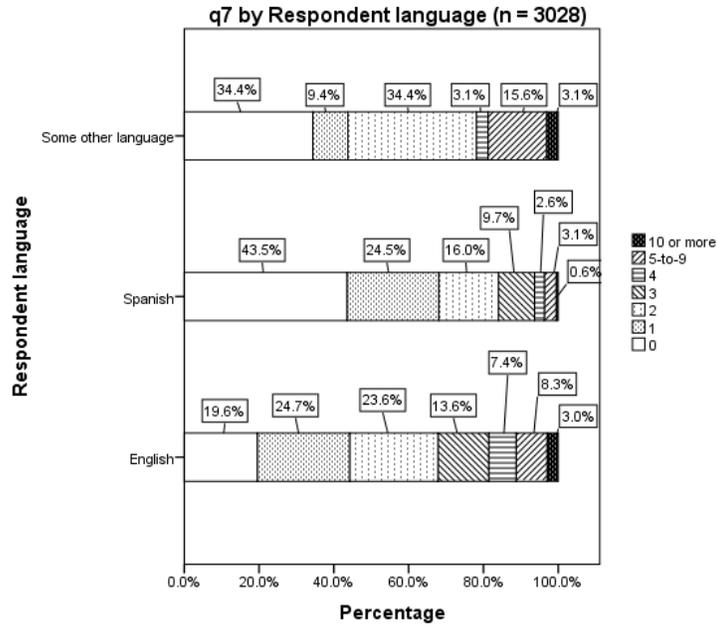


Figure CU-6 shows the relationship between CCNC network and reported doctor's office/clinic visits. One of the more noteworthy observations was that the Community Care of Wake/Johnson Counties network (1011) had the largest proportion (35.6%) of children with no doctor/clinic visits. By contrast, the Carolina Community Health Partnership network (1010) had the largest proportion of children with more than 2 visits (40.3%).

**Figure CU-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 for health care?

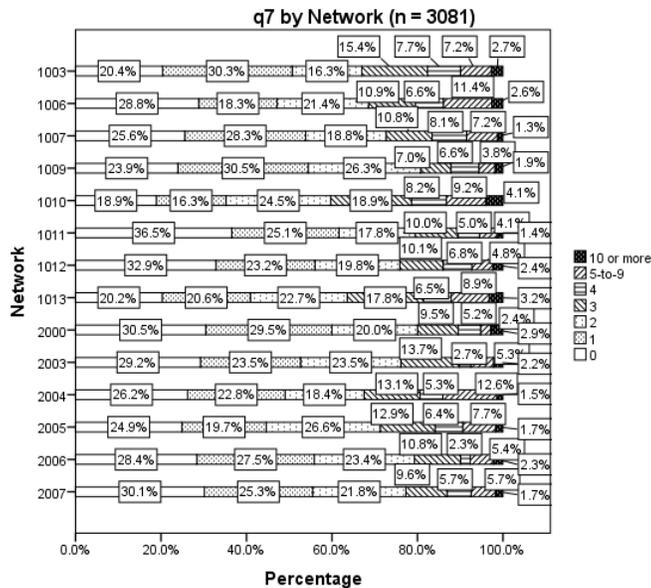
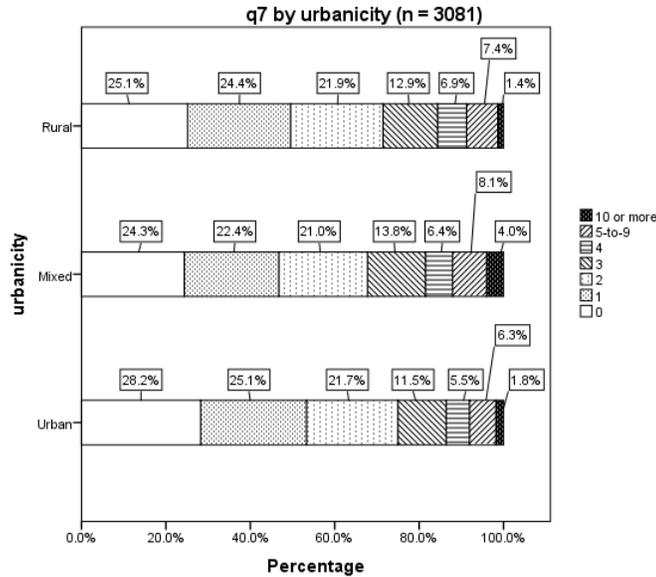


Figure CU-7 shows the relationship between the urbanicity value assigned to the resident county of each respondent and the reported number of doctor’s office/clinic visits. The prevalence of having visited the doctor’s office or clinic more than 2 times was smallest (25.0%) among children living in counties categorized as urban. Meanwhile, children living in counties categorized as “mixed” visited the doctor’s office or clinic 10 or more times in the greatest proportion (4.0%).

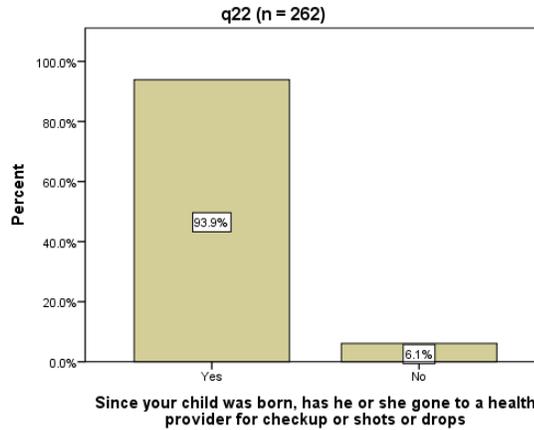
**Figure CU-7** - In the last 6 months, not counting the times your child went to an emergency room, how many times did he or she go to a doctor’s office or clinic for health care?



**Preventive Care (q22)**

Question 22 asked if the child had gone to a doctor or other health provider for a check-up or for shots or drops. This question, whose univariate results are shown in Figure CU-8, was only asked of those respondents whose child was 2 years old or younger (n=262). The dominant answer was yes (93.9%). No significant bivariate relationships between the demographic or context variables and this question were observed.

**Figure CU-8** –Since your child was born, has he or she gone to a health provider for checkup or for shorts or drops?



**Help Contacting Child’s School or Daycare (q25)**

Question 25 asked if the respondent needed the child’s health providers to contact the school or daycare about the child’s health or healthcare in the previous 6 months. This question was asked of those who had previously indicated any visit to a physician and that the child was in school or daycare (n = 2,126). This question, with univariate results shown in Figure CU-9, resulted in 14.8% of the respondents having needed this assistance.

**Figure CU-9**-In the last 6 months, did you need your child’s doctor or other health provider to contact a school or daycare center about his/her health or health care?

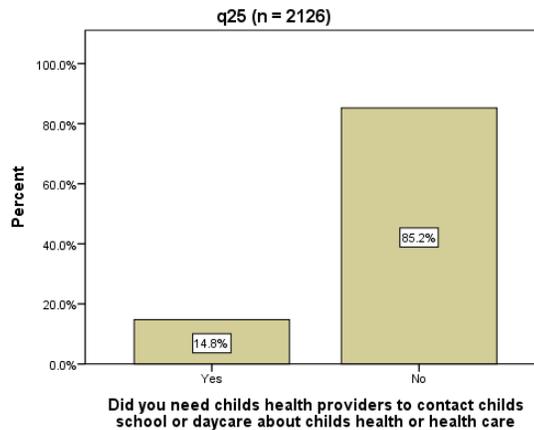
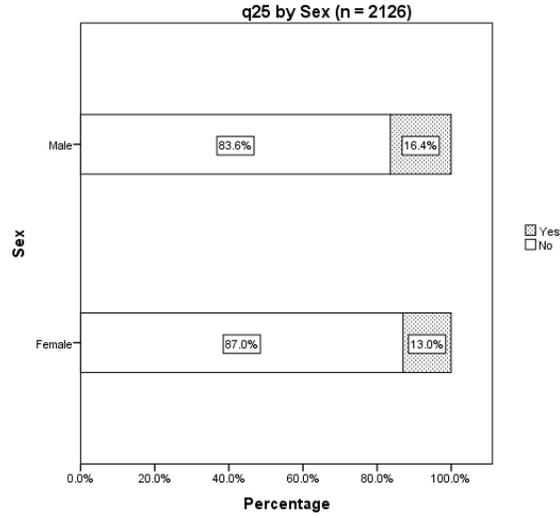
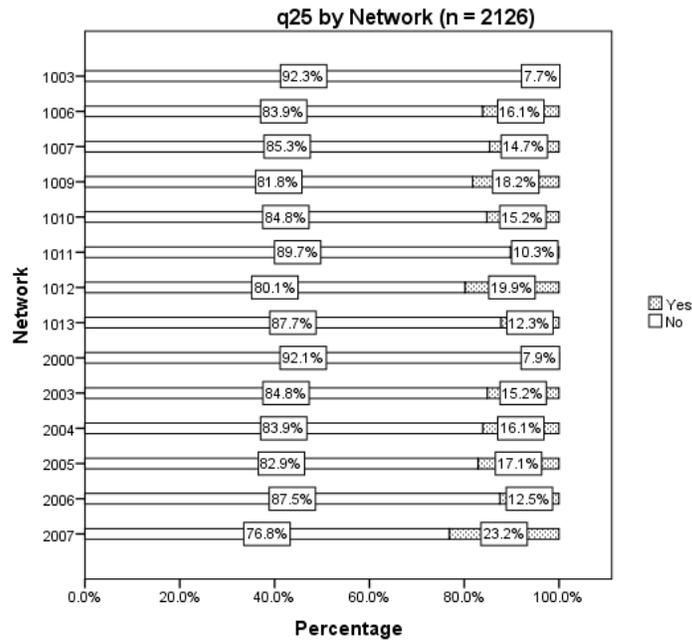


Figure CU-10 shows the relationship between the sex of the child and q25 results. Caregivers reported that male children were more likely to use this service (16.4%) than were female children (13.0%). Although the magnitude of this difference was not that large, the relationship was statistically significant. Figure CU-11 shows the relationship between the child’s CCNC network and q25. As measured by percentages, the Community Health Partners network (1003) and the Community Care Plan of Eastern Carolina (2000) had the fewest children needing this assistance (7.7% and 7.9%, respectively). The caregivers of children enrolled in the Northern Piedmont Community Care network (2007) reported most frequently that they needed someone to contact their child’s school or daycare about a health issue (23.2%).

**Figure CU-10**-In the last 6 months, did you need your child’s doctor or other health provider to contact a school or daycare center about his/her health or health care?



**Figure CU-11**-In the last 6 months, did you need your child’s doctor or other health provider to contact a school or daycare center about his/her health or health care?



**Using Health Care from Multiple Sources (q36)**

Question 36 asked if the child received care from more than one kind of health care provider or used more than one kind of health care service during the last 6 months. Univariate results are shown in Figure CU-12 (n=3,177) indicating that 21.7% of children used care from multiple sources or of multiple types.

**Figure CU-12**-In the last 6 months, did your child get care from more than one kind of health provider or use more than one kind of health service?

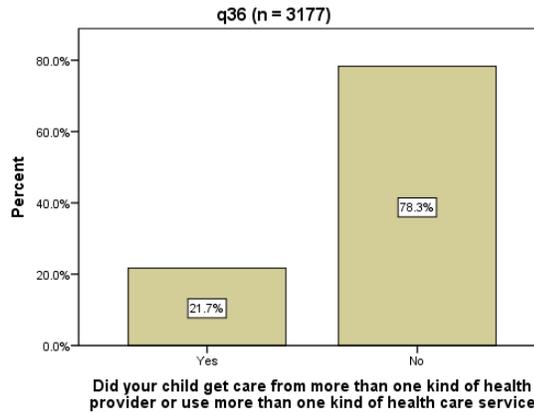
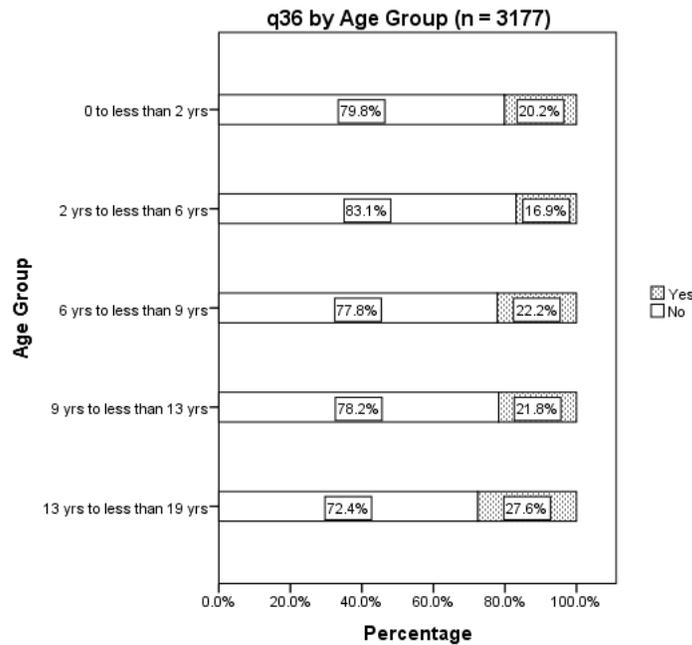


Figure CU-13 shows the relationship between the child’s age and the use of more than one type of health service or provider. Children between 2 and 5 years old were reported to use more than one service least often (16.9%) while children between 13 and 18 years old were reported to use this level of service most often (27.6%). Figure CU-14 shows the relationship between the child’s sex and q36. Although the magnitude of the difference was relatively small, male children were reported to use more than one kind of health provider or service in greater numbers (23.2%) than were female children (20.1%).

**Figure CU-13**-In the last 6 months, did your child get care from more than one kind of health provider or use more than one kind of health service?



**Figure CU-14**-In the last 6 months, did your child get care from more than one kind of health provider or use more than one kind of health service?

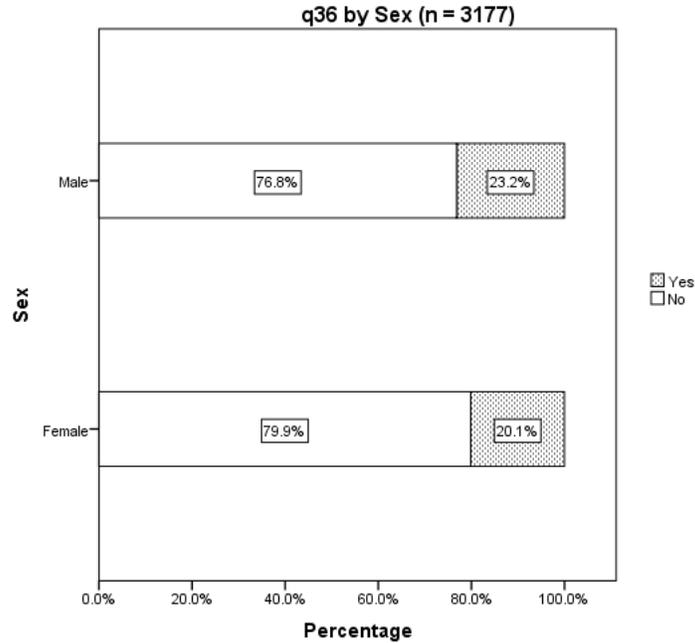


Figure CU-15 shows the relationship between the child’s ethnicity and the use of multiple services or providers. Non-Hispanic Whites used multiple services or providers in much greater proportions (33.1%) than did Hispanics (12.5%).

**Figure CU-15**-In the last 6 months, did your child get care from more than one kind of health provider or use more than one kind of health service?

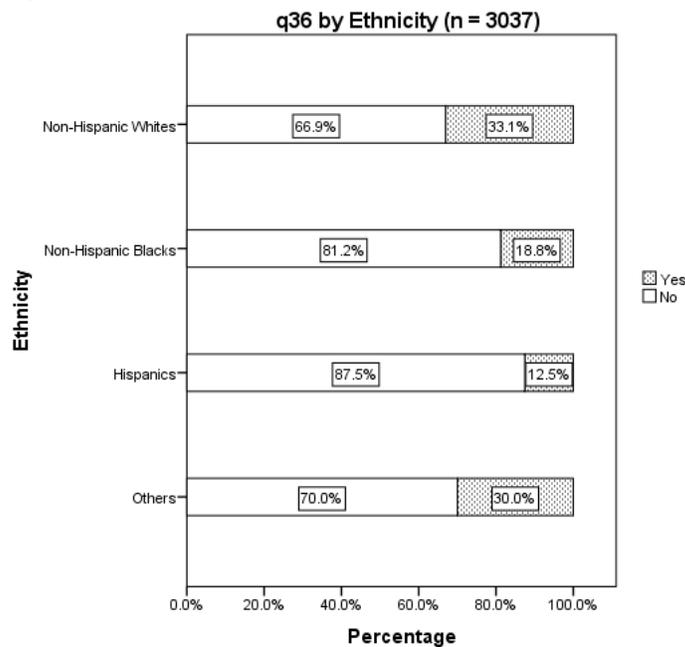


Figure CU-16, which relates the adult respondent’s preferred language to the use of multiple services, again overlapped the ethnicity results. Where the adult respondent

preferred Spanish, only 10.2% of children used this level of care compared to 27.1% of children with English-preferring adult respondents.

**Figure CU-16**-In the last 6 months, did your child get care from more than one kind of health provider or use more than one kind of health service?

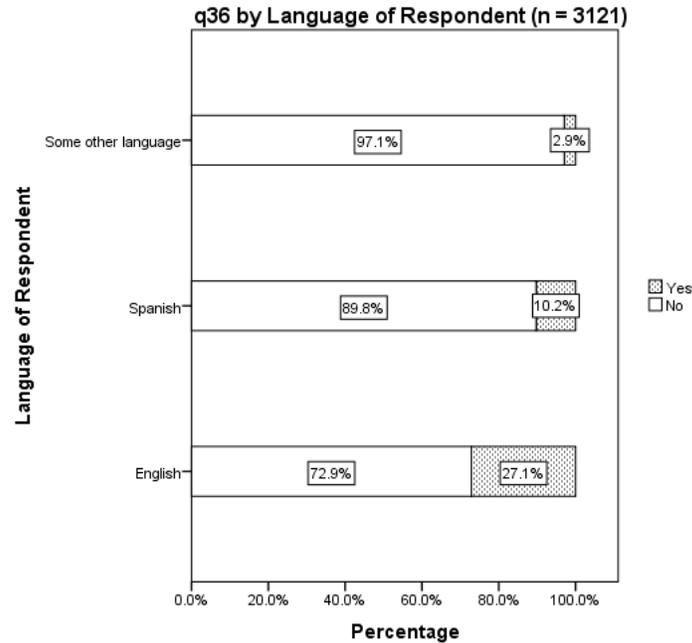


Figure CU-17 shows the results of the bivariate relationship between geographic region and the use of multiple services or providers. In this case, 27.9% of children in the Mountain reported were reported to have used multiple services or providers compared to approximately 20% of children in the state’s other regions.

**Figure CU-17**-In the last 6 months, did your child get care from more than one kind of health provider or use more than one kind of health service?

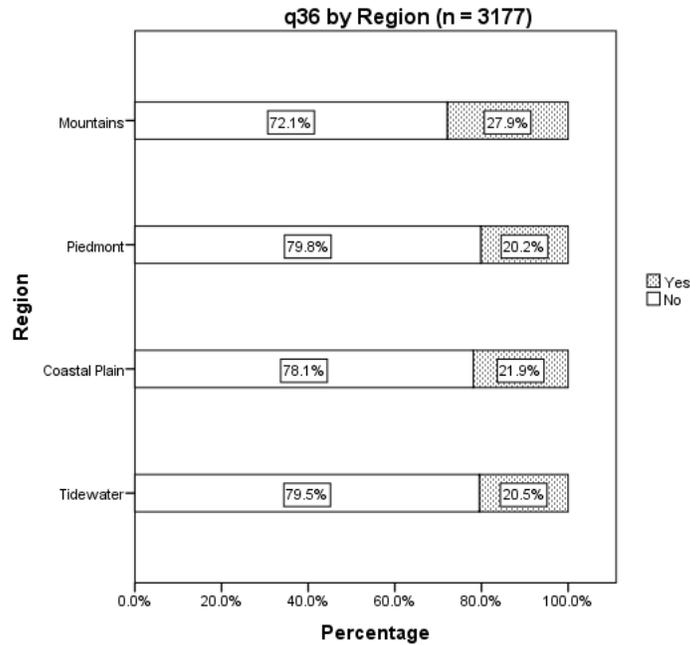
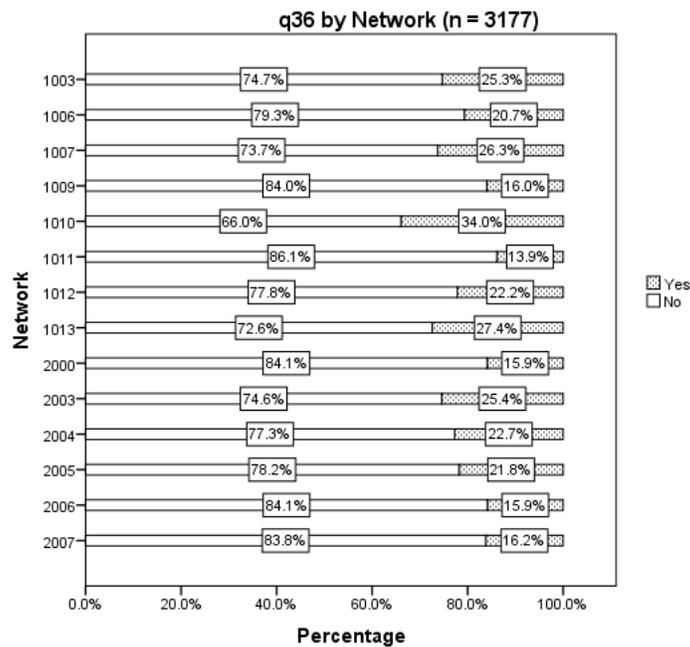


Figure CU-18 contains the results for analyzing the bivariate relationship of q36 and the CCNC networks. The Carolina Community Health Partnership network (1010) had the largest proportion of children (34.0%) that used multiple services or providers and the Community Care of Wake/Johnston Counties network (1011) had the smallest proportion of children (13.9%) that used them.

**Figure CU-18**-In the last 6 months, did your child get care from more than one kind of health provider or use more than one kind of health service?



**Number of Visits to Personal Health Provider (q39)**

Question 39 asked how many times in the last 6 months the child visited his/her personal health provider (PHP). This question was asked of those respondents who noted that their child had a personal health provider (n = 2,474). Figure CU-19 shows the univariate results with the most frequent response being “1” time, reported for 29.5% of children. This was followed by “2” and “no” visits reported for 23.7% and 19.2% of children, respectively. Respondents also reported that 13.1% had “3 visits,” 6.1% had “4,” 6.2% had “5-9,” and 2.2% had “10 or more.”

**Figure CU-19**-In the last 6 months, how many times did your child visit his or her personal health provider for care?

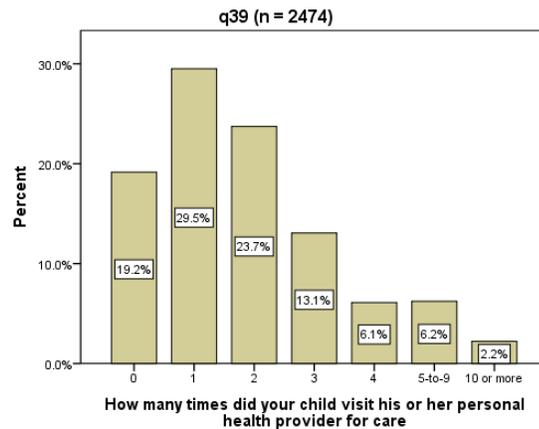


Figure CU-20 shows the relationship between the child’s age and the number of visits to the PHP. The 0-1 year old age group was particularly noteworthy compared to other age groups. For example, this age group had the smallest proportion (22.6%) of children who visited their PHP less than two times. At the other end of the utilization scale, this age group had the largest proportion (34.3%) of children who visited their PHP four or more times.

**Figure CU-20**-In the last 6 months, how many times did your child visit his or her personal health provider for care?

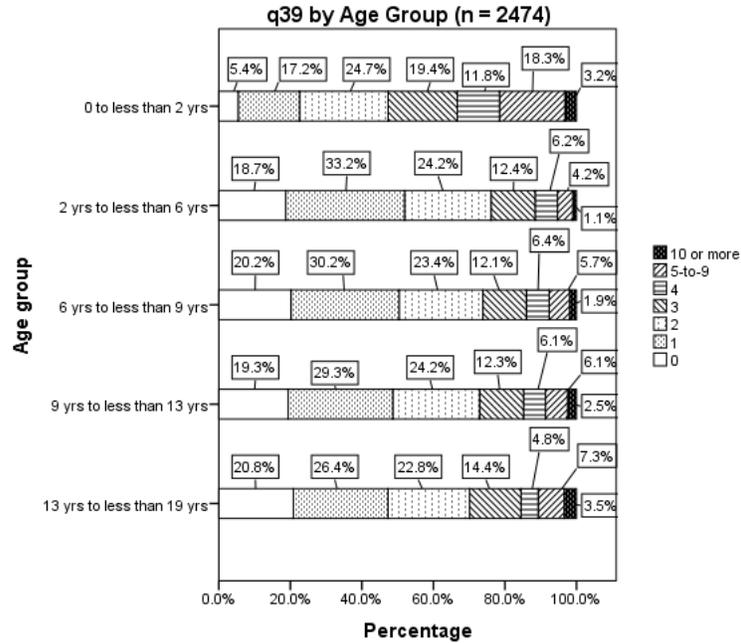


Figure CU-21 shows the relationship between the child’s ethnicity and the number of visits to the PHP. The trend for Non-Hispanic Whites to utilize more care than Hispanics and Non-Hispanics Blacks (which was especially evident in a similar physician service question [q7]) is generally present here but not as strong. Among the ethnic subgroups, Non-Hispanic Whites made five or more visits to the PHP in greater proportions (11.1%) than either Non-Hispanic Blacks (8.3%) or Hispanics (5.4%). By the same token, Hispanics had the greatest proportion of no visits to the PHP (24.8%) followed by Non-Hispanic Whites (17.1%) and Non-Hispanic Blacks (16.0%).

**Figure CU-21**-In the last 6 months, how many times did your child visit his or her personal health provider for care?

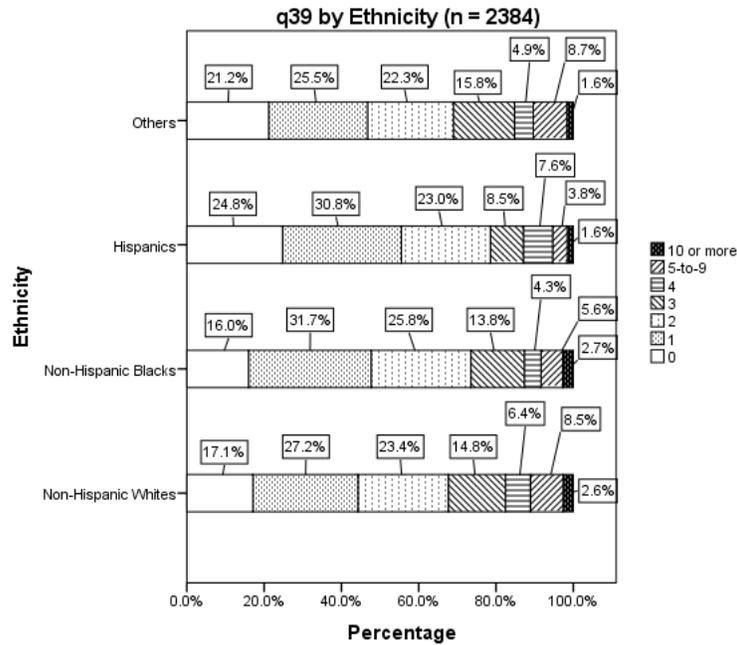
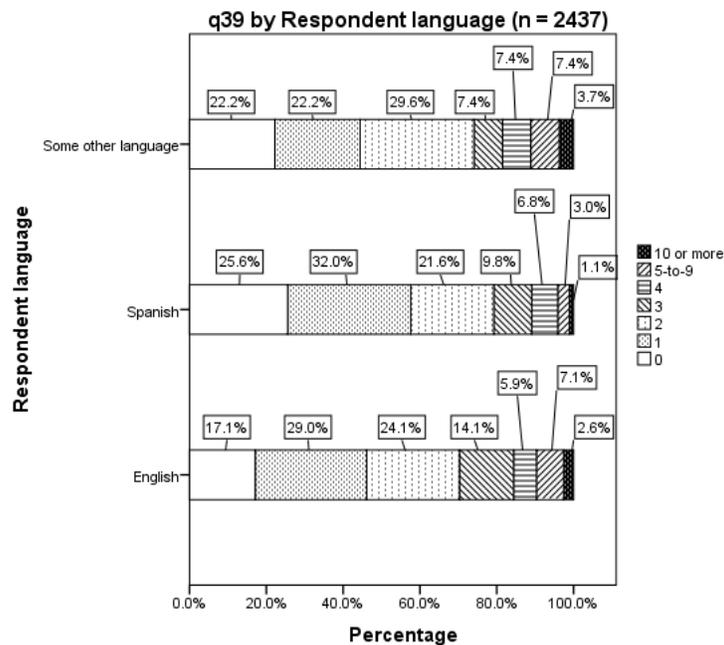


Figure CU-22 shows the results for the association of the caregiver’s preferred language and q39. Children of those respondents preferring English had the lowest proportion of no visits (17.1%), while children of respondents preferring Spanish had the greatest (25.6%). Children whose parents preferred Spanish were least prevalent in both the “5-9 visit” category (3.0%) and the “10 or more visits” category (1.1%).

**Figure CU-22**-In the last 6 months, how many times did your child visit his or her personal health provider for care?



**Seeking Provider Help after Hours (q49)**

Question 49 asked if the adult respondent phoned his/her child's personal provider's office AFTER regular hour for help or advice. It was asked of those who had seen their PHP in the previous 6 months. Figure CU-23 shows the univariate results (n=1,992) with 23.9% stating that they had sought this assistance.

**Figure CU-23-**In the last 6 months, did you call your child's personal health provider's office after regular office hours to get help or advice for your child?

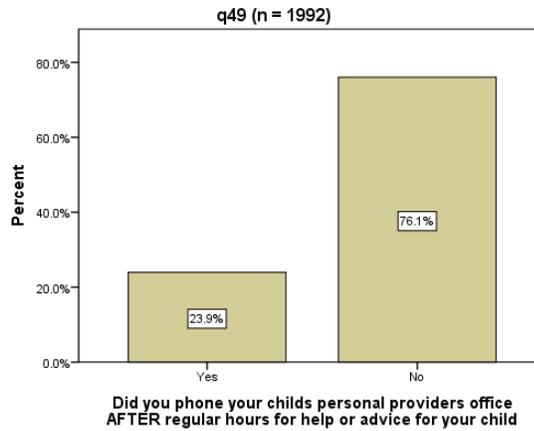


Figure CU-24 indicates that the enrolled child's age group that sought after hours assistance most often (40.9%) was the 0-1 year-olds while the 13-18 year-olds sought it least often (19.0%). The general trend observed was that the use of this assistance decreased with age.

**Figure CU-24-** In the last 6 months, did you call your child's personal health provider's office after regular office hours to get help or advice for your child?

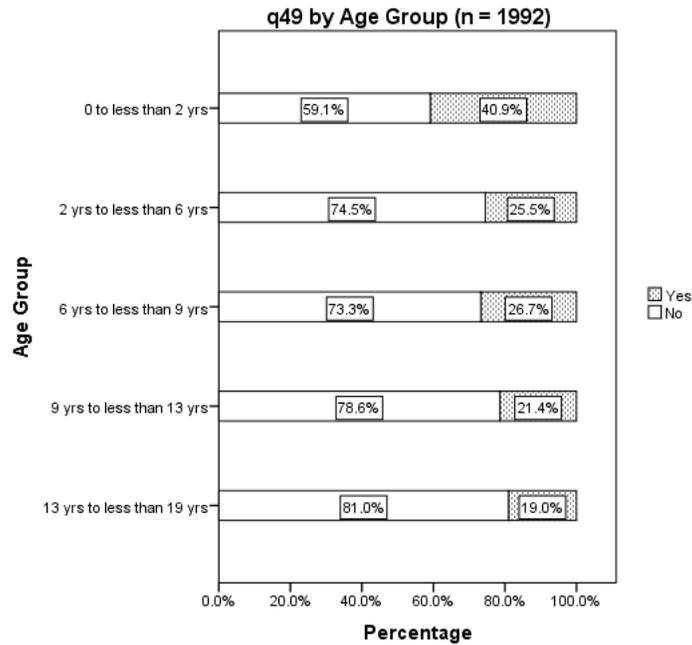


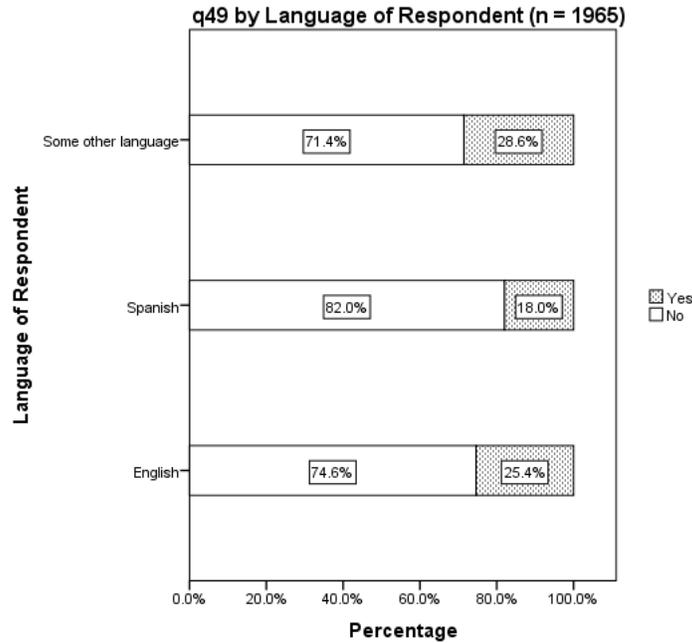
Figure CU-25 shows the relationship between the child’s ethnicity and the reported use of after-hours physician office services. Those of “other” ethnicity reported the most use of this service at 33.8% while Hispanics reported the lowest proportion of use at 20.2%.

**Figure CU-25-** In the last 6 months, did you call your child’s personal health provider’s office after regular office hours to get help or advice for your child?



In similar manner to earlier questions, Figure CU-26 shows that Spanish language-preferring adult respondents reported the lowest children's use of these services at 18.0%.

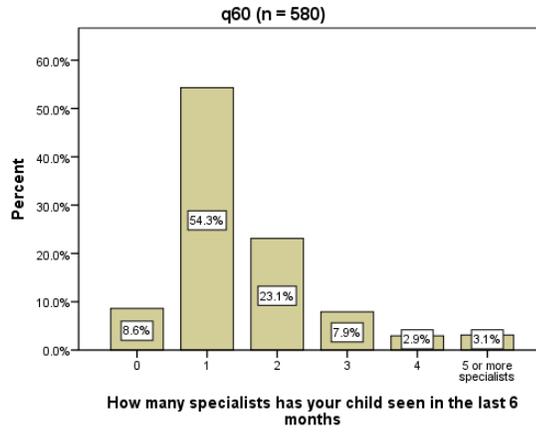
**Figure CU-26-** In the last 6 months, did you call your child's personal health provider's office after regular office hours to get help or advice for your child?



**Number of Specialists Seen (q60)**

Figure CU-27 shows the univariate responses (n=580) to question 60, which asks how many specialists the child had seen in the last months. This question was posed only to the those adults whose children had needed specialist care. The majority of respondents (54.3%) indicated that one specialist had been seen, with 23.1% seeing 2 specialists being the next most prevalent response. The balance of responses follow: 8.6% said no specialists were seen, 7.9% reported 3 specialists were seen, 2.9% reported 4 specialists, and 3.1% saw 5 or more. No statistically significant bivariate results were seen for any of the demographic or contextual variables.

**Figure CU-27-**How many specialists has your child seen in the last 6 months?



## 4 INTERPRETING THE RESULTS OF THE CHILD SURVEY

A total of eighty-seven survey questions across four major dimensions – access to care, satisfaction with care, health status, and utilization of health services – evaluated either the child enrollee’s or adult respondent’s experience with North Carolina Medicaid’s Community Care of North Carolina (CCNC) delivery system.<sup>12</sup> The access dimension represented the largest proportion of survey items with thirty-three questions (37.9%), followed in descending order by the twenty-four satisfaction questions (27.6%), twenty-two health status questions (25.3%) and eight utilization questions (9.2%). Each of the survey questions was subsequently analyzed in terms of its bivariate statistical significance with a handful of demographic and context variables. These variables included the enrollee’s age, sex, ethnicity, care network, region of residence within North Carolina, and the degree of urbanicity of the county of residence, as well as the adult respondent’s primary language spoken in the household.

The results of the analyses of the responses that have been reported in the previous chapter indicate that the majority of the adult respondents to the Child survey believed that their children received the needed care with minimal problems and a high degree of satisfaction. Nearly 9 in 10 of these respondents indicated that they either usually or always received timely care for their child enrollees and a similar proportion rated their child’s personal health provider a score of 8 or better on a 0 through 10 scale. However, the survey also revealed significant differences among Hispanic respondents compared to their non-Hispanic counterparts. These ethnicity-based differences were consistently observed across each of the major dimensions of the survey and are discussed in greater detail in the ensuing paragraphs.

### Access

Thirty-three survey questions asked respondents about various aspects related to what the authors characterized as access to care or services. Twenty-one (63.6%) of these questions achieved bivariate statistical significance with the enrollee’s ethnicity. By contrast the adult respondent’s primary language ranked second, but only nine survey questions (27.3%) were statistically significant when analyzed with this variable.

The patterns of the responses offered by the adult caregivers of the child enrollees to the access questions suggest that access for most recipients was not a problem.. For example:

- Approximately 80% of respondents reported that their child had one person that the caregiver thought of as the child’s personal health provider (q38).
- Slightly more than three-quarters of caregivers (77.7%) reported that they were “always” able to secure the care for their child when the child needed care right away (q4).
- Overall, approximately 16% of respondents indicated that they needed an interpreter for assistance speaking with their child’s health providers. Among

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<sup>12</sup> The survey also included five questions that evaluated the respondent’s “trust” with the child’s provider as well as three questions that assessed the respondent’s use of computers, the internet, and social media, respectively. The analysis of these questions will appear in a separate, subsequent volume.

these respondents, a large proportion (82%) indicated that they “always” or “usually” received this assistance when needed (q16 and q17).

- Almost one in five (18.2%) caregivers reported making appointments with specialist physicians in the previous 6 months. Just over three-quarters of respondents (77.2%) who made appointments with specialists found it “usually” or “always” easy to do so (q57 and q58).
- A large proportion of respondents (70.4%) reported that their child had the same personal health provider as they did prior to joining a CCNC network (q52). This probably reflects the success that CCNC has had at recruiting a large percentage of the state’s physicians into the network.
- Only 52.2% of those caregivers who said they needed transportation assistance “always” received it while 33.3% only “sometimes” or “never” received it.
- A large percentage (91.2%) of the caregivers who reported filling prescriptions for their children in the last 6 months indicated that it was “always” easy to do so.

These findings are remarkably consistent with responses on the 2007 Child survey. In contrast, there was considerable variation in the responses of respondents within the Hispanic subpopulation compared to other ethnicities for the access questions. In almost all cases, the responses of Hispanic caregivers related to the access questions were less favorable than their non-Hispanic counterparts. For example, fewer caregivers of Hispanic children compared to non-Hispanic respondents reported that care was always available quickly enough, that they had made appointments with their child’s doctor’s office, and that they had one person that they thought of as the child’s personal health provider. Additionally, Hispanic respondents reported needing an interpreter for assistance for themselves and for their children when speaking with their child’s health provider in much larger proportions than non-Hispanic respondents. Hispanics also reported more frequently that when seeing specialist physicians, the specialist seen most often was also considered to be the child’s personal health provider. Language barriers presumably account for some of these access-related disparities, because the language variable was also a significant predictor in a number of the bivariate analyses.

In terms of the need for interpreter services for caregivers, it should be noted that this need appeared to be more prevalent in the urban counties when compared to less urban counties and in the Piedmont region of the state when compared to other regions. This information may be especially important to health plan administrators with respect to effectively targeting resources to those areas and subgroups demonstrating the greatest need for this service. Coincidentally, the proportion of Hispanic respondents surveyed was greater in the urban counties and in the Piedmont region of the state compared to other areas of the state (see Table 4-1, Distribution of Enrollee Ethnicity among Survey Participants by Urbanicity and Region).

Access to behavioral health services is another important consideration for evaluating a child’s health plan. Although the number of children requiring treatment for behavioral, emotional, or developmental problems was relatively small, the ease of accessing these services was fairly high, with 73% of caregivers reporting that it was

**Table 4-1: Distribution of Child Enrollee Ethnicity among Survey Participants by Urbanicity and Region (percent)**

<i>Urbanicity</i>	Non-Hispanic Whites	Non-Hispanic Blacks	Hispanics	Others
Urban	49.7	66.4	70.1	61.3
Mixed	32.6	20.2	18.8	23.0
Rural	17.7	13.5	11.1	15.8
<i>Region</i>				
Mountains	26.3	2.7	12.6	14.4
Piedmont	49.0	54.7	63.8	41.4
Coastal Plain	16.5	34.0	19.1	38.7
Tidewater	8.2	8.6	4.5	5.4

“always” or “usually” easy to arrange. Hispanic respondents reported more difficulties, but this observation was seldom statistically significant, perhaps due to the small number of respondents reporting need of these services.

### **Satisfaction**

The research team identified twenty-four survey questions that focused on caregivers’ satisfaction with their child’s providers and health plan. Four of these items (q15, q51, q61, q70) were structured on a 0-to-10 rating scale (0 worst and 10 best) to elicit respondent ratings of satisfaction with regard to the child’s health care, the child’s personal health provider, the child’s specialist provider (if applicable), and the child’s health plan. The remaining questions elicited information with respect to respondent satisfaction in terms of: (a) the health provider’s willingness to communicate and the effectiveness of that communication, (b) the health provider’s ability to empathize with the respondent’s and child’s needs, concerns, and the impact of the child’s condition on the family’s day-to-day life, and (c) the interactions between caregivers and the child’s health plan or office staff.

Generally speaking, respondents rendered favorable ratings for their child’s health providers and health plan. In terms of the statistically significant bivariate relationships, the enrollee’s ethnicity resulted in the greatest number of occurrences within the group, with eighteen survey questions (75%) achieving this level. As was the case for the access questions, the adult respondent’s primary language was next with eight occurrences (33.3%).

The results of the 2012 satisfaction survey are again very positive in a number of ways. For example, when asked to rate the child’s health care, greater than 87% of caregivers responded with a rating of 8 or higher on the 0-to-10 scale. Similarly, 93% of caregivers rated their child’s personal health provider with a score of 8 or more and 87% reported similar ratings for the child’s most often seen specialist. In terms of the health plan’s ratings, 92% of respondents reported a rating of 8 or greater. These 2012 findings regarding satisfaction are very similar to responses on the 2007 survey. Clearly, satisfaction with care and with the delivery system continues to be very high in the population at-large. However, the experience within the Hispanic subpopulation was less impressive. Ratings of 10 for several of these questions occurred in smaller proportions within the Hispanic subpopulation, although this finding was not always statistically

significant. On the other hand, Hispanic respondents rated the child's health plan with a score of 10 in greater proportions than any other ethnic subgroup.

Eleven survey items (q8, q11, q40, q41, q42, q43, q45, q47, q66, q67, q68b) were structured with an answer set of "Never," "Sometimes," "Usually," and "Always" and focus on the frequencies of satisfaction reported by the respondent. With one notable exception, all questions of this type revealed favorable responses of satisfaction by at least 70% of respondents. The lone exception was q8, which asked respondents if they discussed illness prevention with their child's health provider. Forty percent of respondents indicated that these discussions "sometimes" or "never" occurred. This observation was particularly prevalent in the Hispanic subpopulation, where greater than 50% of respondents reported that this "sometimes" or "never" occurred.

Nine satisfaction questions (q12, q13, q14, q26, q44, q48, q55, q56, q68a) were structured with "Yes/No" answer choices. Again, the responses to all but one question indicate high levels of satisfaction by large proportions of respondents. The possible exception involved responses to q12, which asked respondents if their child's health providers had told them that there was more than one choice of treatment or health care for their child. Forty-eight percent of respondents reported being informed of multiple choices; however, it was unclear how many children had any condition requiring these choices. What is clear is that the proportion of Hispanics claiming that they had been informed of these choices was only 39%, which adversely impacted the overall percentages related to this survey item.

The satisfaction portion of the survey reveals at least two distinct opportunities to improve program performance and enrollee satisfaction. First, the disparities between Hispanics and other ethnic subgroups in terms of satisfaction suggest that initiatives that enhance communication with the Hispanic community should improve satisfaction-related outcomes. Second, based on the feedback of the survey's respondents, it appears that discussions related to illness prevention and available treatment options either do not occur on a consistent basis or, if they do occur, are not being effectively communicated to the child's caregivers. Therefore, initiatives that improve the effectiveness of the communication between health provider and child caregiver may be warranted. Moreover, the aforementioned differences in ethnicity and language may be a contributing factor to suboptimal communication. Any initiatives focused on improved communication and outreach with the Hispanic community may have the additional benefit of resolving this apparent shortcoming.

### **Health Status**

Twenty-two of the survey questions were designated by the UNC Charlotte research team as pertaining to the enrolled child's health status. In terms of the bivariate relationships, the enrollee's ethnicity ranked first with seventeen statistically significant relationships. However, the enrollee's age and sex, as well as the adult respondent's primary language spoken in the home, also registered a relatively large number of statistically significant occurrences.

For the most part, the adult caregiver respondents rated their child's health favorably. For example, when asked to rate their child's health as "excellent," "very good," "good," "fair," or "poor," less than 1% rated the child's health as poor (q81). By

the same token, 93% of respondents rated the child's health status as "good" or better. This distribution of responses was quite consistent with responses observed to a similar question in the 2007 Child Survey. This finding was reinforced by the fact that nearly three-fourths of children in 2012 did not have a condition requiring care right away (q2) and about two-thirds of the adult respondents did not have concerns about the child's health (q9). However, despite these favorable numbers, less than half of respondents (~45%) rated the child's health as "excellent" (q81).

Most of the health status questions conformed to the binary "Yes/No" structure and followed a systematic skip pattern whereby respondents were initially asked if a particular health condition applied to their child. The follow-up questions obtained information related to the anticipated duration of the condition and, in one instance, asked what impact the condition had in relation to the child's standing with their age-appropriate peers. Thus, a profile of the child's functional status, especially in relation to other children of the same age, and the degree of chronicity of the condition emerges.

The pattern of responses to a number of these conditions was remarkably similar to the observations obtained in the 2007 survey. In 2012 approximately 10% of respondents reported that their child needed physical, occupational, or speech therapy (q30, q91) and about 7% reported the need for special medical equipment (q27). Although the number of children experiencing the need for treatment or special services was relatively small, the overwhelming majority (> 90%) of those affected indicated that the condition responsible for the need for special equipment or a special service was expected to last at least 12 months (q84, q87, q90, q93, q95). Additionally, among respondents who stated that they think of one person as the child's personal health provider, 31% reported that their enrolled child had a medical, behavioral, or other health condition that had persisted longer than 3 months.

The distribution of responses related to the need for prescription drugs and behavioral health services among the child enrollees differs markedly from other types of health services, but is again similar to responses observed in the 2007 survey. For example, slightly more than half (51%) of respondents in 2012 indicated that they obtained a new or refilled an existing prescription in the 6 months prior to the survey (q71) and nearly 15% of respondents reported that they sought treatment or counseling for a behavioral or emotional problem (q33). Meanwhile, nearly 8 in 10 respondents claimed that their child did not need more medical care or mental health services than what is considered usual for most children of the same age (q85) and 17% of respondents reported that their child was limited or prevented in terms of ability to do things that most children of the same age typically do (q88).

Several patterns emerged from the bivariate relationships associated with the health status items in the survey. For example, the health status of male children was generally worse than that of female children. Also, as was the case for questions in the access and satisfaction dimensions, the ethnicity variable and the primary language spoken in the home as reported by the adult respondent generated a number of statistically significant relationships. In fact, seventeen (77.3%) and fourteen (63.6%) of the twenty-two health status questions analyzed with the ethnicity and language variables, respectively, were significant. The key findings with these variables are summarized as follows:

- Smaller proportions of Hispanic (ethnicity) and Spanish speaking (language) respondents indicated that their child had a condition requiring care right away (q2),
- Hispanic respondents had questions or concerns about their child’s health or health care in greater proportions than non-Hispanics (q9),
- Hispanic (ethnicity) and Spanish-speaking (language) respondents reported obtaining or trying to obtain special medical equipment (q27) and special therapy (q30) for their children in smaller proportions than non-Hispanics,
- Smaller numbers of Hispanics and Spanish-speaking respondents reported trying to get treatment or counseling for their child’s emotional and/or behavioral problem (q33),
- Hispanic respondents reported that the child’s medical, behavioral, or other health conditions persisted longer than 3 months in smaller proportions than non-Hispanics (q54),
- Respondents whose primary language spoken in the home was English reported in greater numbers that their child’s medical, behavioral, or other health conditions persisted longer than 3 months than respondents whose primary language was not English (q54),
- Hispanic respondents and those respondents claiming that English was not the primary language spoken in the household reported using new or refilled prescription medicines in smaller proportions than their respective counterparts (q71),
- Ratings of “excellent” or “very good” overall health were more prevalent among non-Hispanic whites compared to the other ethnic subpopulations and in those households where English was the primary language spoken in the home (q81). The difference between non-Hispanic whites and Hispanics was particularly noteworthy,
- Hispanic respondents and respondents claiming a language other than English as the predominant language spoken in the home reported the need or use for medical care, mental health services, or educational services in smaller proportions compared to their respective subgroups (q85),
- Non-Hispanic black children were limited in their ability to do things most children of the same age can do in greater proportions than other ethnic subgroups (q88), whereas Hispanic children were reported to have these limitations in smaller proportions than other ethnic subgroups (q88),
- Hispanics were reported in smaller numbers to have an emotional, developmental, or behavioral problem for which they needed or received treatment or counseling (q94).

Generally speaking, these findings suggest that Hispanic children might have been healthier than their non-Hispanic peers. However, this suggestion should be tempered by the responses to q81, where Hispanic children were less likely to be rated in “excellent” health by their adult caregivers. Cultural differences in reporting health status may explain some of these differences (see “Closing Discussion”).

Sixteen of the twenty-two health status questions (72.7%) generated significant relationships when paired with the child's age grouping. As a general rule, health status was reportedly worse among children in the older age groups. For example:

- Increases in the age of the child resulted in larger proportions of respondents trying to get treatment or counseling for the child's emotional or behavioral problems (q33),
- The adult respondents reported new or refilled prescription medicines in progressively greater proportions among older child enrollees (q71),
- Ratings of "excellent" overall health were less prevalent among the older age groupings. However, ratings of "very good" overall health were more prevalent in the older age cohorts (q81),
- The need and use of more medical care, mental health services, and educational services were reported in greater numbers for enrollees in the older age groups compared to younger ages (q85). This may be related to q87 as proportionately more of the older enrollees were reported to have conditions expected to last for at least 12 months,
- Children were limited in their ability to do things most children of the same age can do in greater proportions among the older age groupings (q88),
- Children in older age groupings were reported in greater numbers to have an emotional, developmental, or behavioral problem for which they needed or received treatment or counseling (q94).

A possible explanation for the fairly consistent finding that reported health status was worse among children in the older age groupings may be linked to q87. The findings associated with this question indicated that among those children needing more medical care or mental health services than usual, a condition lasting at least 12 months was often responsible and that this pairing was more prevalent among children in the more advanced age groupings. Thus, it appears that the greater reported frequency of chronic conditions occurring in the older age groupings may impact self-reported health status in general.

The care network variable failed to achieve statistical significance to any great extent among any of the major dimensions of analysis. In the case of health status, however, it is worth noting that a couple of networks stood apart from the others. Specifically, larger proportions (>30%) of respondents with children enrolled in the Carolina Community Health Partnership, the Community Care of Wake/Johnston Counties, and Community Care of the Lower Cape Fear networks indicated that their child experienced a condition requiring care right away in the 6-month period prior to the survey (q2). Additionally, enrollees in the Carolina Community Health Partnership network were reported to have obtained new or refilled prescription medicines in significantly larger proportions than enrollees in other care networks (q71), while respondents of enrollees in this and the Community Care of the Lower Cape Fear network reported that their children needed or used more medical care, more mental health services, or more educational services than usual for most children of the same age (q85). These findings may point to a potential "high acuity" problem, where the health problems of enrollees in these networks may be inherently more complex, thus

confounding cross-network comparisons. By contrast, respondents of children in the Community Care Partners of Greater Mecklenburg network reported in smaller proportions that their children's limitations to do things that most children of the same age do were the result of a medical, behavioral, or other health condition (q89) and that their children had any emotional, developmental, or behavioral problems for which they needed or received treatment or counseling (q94). These findings may be partially explained by the relatively high percentage of Hispanic enrollees in this care network compared to the proportions of Hispanics in other care networks and the overall tendency of the respondents of Hispanic children to report better health status (see Table 4-2). Therefore, the observed effect may be attributable to the findings associated with ethnicity (vis-à-vis care network) that have been well documented in previous sections of this document. A thorough examination of medical claims data pertaining to the relevant networks by plan administrators may assist in validating these findings.

In terms of the urbanicity and region variables, very few significant bivariate relationships were observed. Among those that were significant:

- Respondents with children living in urban areas reported that the child's medical, behavioral, or other health conditions persisted longer than 3 months in smaller proportions than non-urban residents (q54),
- Respondents of enrollees in urban areas reported in smaller numbers that their children needed or used more medical care, more mental health services, or more educational services than usual for most children of the same age (q85),
- Respondents of children living in the Piedmont region reported in smaller proportions that their children's limitations to do things that most children of the same age do were the result of a medical, behavioral, or other health condition (q89),
- Children living in the Piedmont and Tidewater regions were reported in smaller numbers to have an emotional, developmental, or behavioral problem for which they needed or received treatment or counseling (q94).

It is noteworthy that among the three values of the urbanicity variable – urban, mixed, and rural – the percentage of Hispanics was greatest within the urban category. Similarly, among the four values of the Region variable – Mountains, Piedmont, Coastal Plain, and Tidewater – the percentage of Hispanics was greatest within the Piedmont region. Thus, the bivariate observations described for the region and urbanicity variables as they pertain to health status, as well as those previously appearing in the discussion of access, may be attributable to the enrollee's ethnicity (see Table 4-1).

### **Utilization**

The research team identified eight survey items pertaining to service utilization. Four questions (q3, q7, q39, q60) required the respondent to report a count of the number of times the child used the service (emergency room, a doctor's office or clinic, visits to the personal health provider, and the number of specialists seen in the previous 6 months). The remaining questions were structured with the "Yes/No" answer format and asked respondents if their child had visited the health provider for check-ups or immunizations, if the child had received care from more than one type of health provider, if the child's health provider was needed to contact the child's school or daycare

regarding a health matter, and if the child’s personal health provider was contacted after hours for health advice pertaining to the child.

Among children who needed some type of urgent service in the previous 6 months, the responses for number of emergency room visits were clustered at the lowest

**Table 4-2: Distribution of Child Enrollee Ethnicity among Survey Participants by CCNC (percent)**

<i>Network</i>	Non-Hispanic Whites	Non-Hispanic Blacks	Hispanics	Others
Community Health Partners (1003)	43.7	22.7	28.8	4.8
Access Care Network Sites and Counties (1006)	41.5	18.8	31.0	8.7
Community Care of Western North Carolina (1007)	54.6	6.2	30.0	9.3
Community Care Partners of Greater Mecklenburg (1009)	10.3	34.3	47.1	8.3
Carolina Community Health Partnership (1010)	60.3	20.6	12.7	6.4
Community Care of Wake/Johnston Counties (1011)	20.0	24.3	48.6	7.1
Partnership for Community Care (1012)	22.2	31.4	40.7	5.7
Carolina Collaborative Community Care (1013)	19.4	47.9	17.8	14.9
Community Care Plan of Eastern Carolina (2000)	22.2	48.1	23.6	6.0
Community Care of Southern Piedmont (2003)	41.4	16.8	36.2	5.6
Community Care of the Lower Cape Fear (2004)	38.6	31.4	21.3	8.7
Community Care of the Sandhills (2005)	28.2	26.1	35.5	10.3
Northwest Community Care (2006)	36.1	13.9	46.3	3.7
Northern Piedmont Community Care (2007)	12.1	46.0	40.9	0.9

number of frequencies, with 36% reporting that their child had no emergency room visits and 42% stating that their child made one visit to the emergency room. As expected, the proportion of respondents reporting that their child had visited the emergency room decreased as the number of emergency room visits increased. However, it is worth noting that of the 865 respondents (or ~ 27% of all survey respondents) who responded that their child needed some type of urgent service in the previous 6 months, almost 64% reported their child made one or more visits to the emergency room. This observation, coupled with the fact that nearly 15% of respondents reported that they sought treatment or counseling for their child for a behavioral or emotional problem, warrants further examination, perhaps with the use of medical claims data, to rule out the possibility that the emergency room was utilized as a source of care for emergency mental health care, a phenomenon that is especially prevalent in recent years in some areas of the state (Gordon, 2013).

A pattern similar to emergency room utilization was observed with regard to the number of visits made to *any* doctor’s office or clinic and also when respondents were

questioned about the number of visits to the child's *specific* personal health provider. Nearly three-fourths of survey respondents reported that their enrolled child made at least one visit to a doctor's office in the 6-month period prior to the survey while nearly 80% of respondents who stated that their child had one provider that they considered to be their personal health provider had at least one visit. The child's age played a role in these observations, with the youngest children most likely to have made at least one visit. On the other hand, Hispanic children and the children of adult respondents who preferred to use Spanish as the primary language in the home were more likely to have not visited a doctor or the child's personal health provider in the previous 6 months.

In terms of receiving care from more than one kind of health provider or using more than one kind of health service, the survey revealed that just over one in five children (21.7%) required multiple providers or services. Among those requiring multiple providers or services, a familiar pattern was observed whereby smaller proportions of younger, Hispanic, and the children of Spanish-preferring adult respondents used multiple providers and services. These findings within the utilization domain are remarkably consistent with those observed for the ethnic subgroups and age cohorts within the health status and other dimensions – Hispanics and younger children apparently need and use less health care services than their respective comparison groups

With regards to the context variables, the care network variable generated some interesting bivariate relationships with the utilization questions, especially when considered in the context of reported health status. For example, adult respondents with children enrolled in the Community Care of the Lower Cape Fear network had the largest proportion (12.6%) of children visiting a physician 5-9 times. This is consistent with the previously described finding that children in this network needed or used more medical care, more mental health services, or more educational services than usual for most children of the same age and that children in this network experienced in relatively large numbers a condition requiring care right away in the 6-month period prior to the survey. Interestingly, relatively large numbers of children in the Community Care of Wake/Johnston Counties network were reported to experience a condition requiring care right away in the 6-month period prior to the survey. Yet this CCNC had the largest proportion (35.6%) of children with no doctor or clinic visits. This may be explained by the fact that this network had the smallest proportion of children that required multiple services. It is also worth noting that among the ethnic subgroups, Hispanics represented the largest proportion (48.6%) of respondents in this network, therefore enhancing the possibility that the observations linked to the care network may actually be attributable to ethnicity (see Table 4-2).

The final discussion point in the utilization section is the finding that most respondents (~80%) reported that their child did not need to make an appointment with a specialist physician, but among those who reported that they did need to make this appointment, nearly 9% indicated that their child did not see a specialist.

### **Closing Discussion**

The primary message to plan administrators revealed by the bivariate relationships in this survey of the adult caregivers of child enrollees is the impact of ethnicity and language on each of the specific dimensions of care. Clearly, these variables are major drivers of the survey's empirical observations. It also seems reasonable to infer

that health status greatly impacts the utilization of health care services and, perhaps to a lesser extent, influences access and satisfaction. For example, one might safely assume that the better health status ratings reported for Hispanic enrollees translates to less utilization of health services. What is not so clear, however, is the theoretical basis that might explain the underlying findings. Therefore, a few possibilities are briefly mentioned here in an attempt to address this shortcoming.

In terms of the survey's findings relating to self-reported health status and ethnicity, Marmot et al. (1984) and Rosenwaike (1991) describe the *positive selectivity hypothesis*. In the context of this survey's respondents, the theory contends that Hispanic immigrants are likely to report better health status than U.S.-born Hispanics due to a selection bias, whereby healthier and more robust individuals are more likely to entertain the notion of migration. Although this may not appear at first glance to apply to child enrollees, it should be re-emphasized that the adult caregivers, many of whom may be first-generation immigrants to the U.S., were responding to the survey and their survey responses may have been shaped by this experience.

Cho et al. (2004) suggest that the positive selectivity hypothesis may work in tandem with the *cultural buffering hypothesis* (or the *negative acculturation hypothesis*), which implies that compared to the United States, other cultures are characterized by values that promote stronger family and social support networks, better nutrition, and avoidance of risky behaviors (Hummer et al., 1999a; Hummer, Rogers, Nam and Le Clere, 1999b; Landale, Oropesa and Gorman, 1999a; Landale et al., 1999b; Weeks and Rumbaut, 1991; Scribner, 1996; Scribner and Dwyer, 1989). However, as immigrants become more acculturated with longer duration in the United States, these advantages in health status are gradually lost. In accordance with this theory and given the context of the survey respondents, the adult caregiver respondents may not be "sufficiently acculturated" to report diminished health status for their dependent children.

In addition to these possible explanations linking health status to ethnicity, Hispanics encounter barriers to access related to acculturation and language. Wells et al. (1989) suggest that recent arrivals to the United States are more likely to be isolated from mainstream U.S. society and to be unfamiliar with the U.S. health system, thereby interfering with their ability to obtain appropriate and timely care. Meanwhile, Ruiz et al. (1992) and DuBard and Gizlice (2008) document the difficulties Hispanics with limited English proficiency experience when seeking and obtaining health care while others (David and Rhee, 1998; Morales et al., 1999; Timmins, 2002) have demonstrated adverse outcomes, including decreased use of primary care, attributable to language barriers between providers and patients.

In their chapter titled "Access to and Quality of Health Care" appearing in *Hispanics and the Future of America*, Escarce and Kapur (2006) cite a number of authors who advance other barriers to access to care that may routinely apply to Hispanic subpopulations. Among these are large distances to medical care providers, low numbers of Hispanic health care providers, cultural differences between patients and providers that compromise patients' ability to recognize symptoms of disease or alter thresholds for seeking care. Another factor is racism, which the authors defined as "people being treated worse than others because of their race or ethnicity"; 30% of Hispanics consider racism as a "major problem" in health care (Lillie-Blanton et al., 2000). Of particular

relevance to the Child survey are the findings of Flores et al. (1998, cited by Escarce and Kapur, p. 424):

“parents of low-income Hispanic children report that low affordability, language problems, transportation problems, long waiting times in the office, poor communication with providers, and lack of cultural understanding by clinic staff are obstacles to access that occasionally caused them not to bring their children in for care. Language barriers, in particular, may cause Spanish speakers not to seek needed care.”

In spite of the high overall marks reported for satisfaction by all survey respondents, there appear to be at least five areas where opportunities exist for improved service delivery that should resonate with plan administrators. The first involves enhanced outreach initiatives to Hispanic Medicaid enrollees and their adult caregivers. The results of the Child survey consistently indicate that this subpopulation reported significantly different outcomes in terms of less access and lower levels of satisfaction than their non-Hispanic counterparts. Other areas for possible service improvement involve the provider’s communication with the child’s adult caregivers and access to specialty care. Namely, it appears that efforts to raise the profile of illness prevention and to elaborate upon the various treatments and care options available to caregivers would be well received. Additionally, plan administrators may need to focus initiatives and resources that ensure that all children requiring specialty care are actually seen by a specialty care provider. Finally, priority should be assigned to maintenance of the database of telephone numbers employed by state administrators to contact both adult and child beneficiaries. In its current state, this database is plagued with a number of missing or invalid telephone numbers. This is particularly important for this population as the telephone was identified by respondents in the 2006-2007 survey as the preferred method of communicating with plan administrators in the event of an emergency (Brandon, Schoeps, Smith, 2008).

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## Appendix A

### Demographic, Region, and Urbanicity Characteristics, Adult and Child

<u>Gender/Sex</u>	<b>Adult</b>			<b>Child</b>		
	Sampling Frame	Sample	Respondents	Sampling Frame	Sample	Child Enrollees (Survey)
Female	66.9%	67.3%	69.3%	48.9%	49.1%	48.7%
Male	33.1%	32.7%	30.7%	51.1%	50.9%	51.3%
N/n =	<b>148,140</b>	<b>42,000</b>	<b>3,202</b>	<b>448,424</b>	<b>28,000</b>	<b>3,199</b>
<u>Age Group</u>	Sampling Frame	Sample	Respondents	Adult Respondents		%age
19-24	10.8%	11.3%	6.7%	<=24		6.9%
25-34	17.3%	18.0%	11.2%	25-34		40.3%
35-44	16.3%	16.9%	15.3%	35-44		33.5%
45-54	18.9%	18.7%	20.9%	45-54		11.5%
55-64	17.8%	17.6%	24.2%	55-64		5.4%
65-74	10.3%	9.7%	14.1%	>=65		2.4%
>=75	8.7%	7.8%	7.4%			
N/n =	<b>148,140</b>	<b>42,000</b>	<b>3,202</b>			<b>3,130</b>
<u>Age Group</u>				Sampling Frame	Sample	Child Enrollees (Survey)
0-1 yrs	<b>N/A</b>			8.9%	8.7%	3.6%
2-5 yrs				32.3%	31.5%	30.9%
6-8 yrs				17.1%	17.3%	19.8%
9-12 yrs				20.1%	20.8%	21.9%
13+ yrs				21.6%	21.7%	23.9%
N/n =				<b>448,424</b>	<b>28,000</b>	<b>3,199</b>
<u>Race</u>	Sampling Frame	Sample	Respondents	Sampling Frame	Sample	Child Enrollees (Survey)
Black	44.9%	41.8%	39.1%	36.0%	45.2%	29.6%
Other	8.8%	9.0%	7.0%	21.6%	19.7%	14.5%
White	45.4%	49.2%	54.0%	42.4%	35.1%	56.0%
N/n =	<b>148,140</b>	<b>42,000</b>	<b>3,191</b>	<b>448,424</b>	<b>28,000</b>	<b>3,059</b>
<u>Region</u>	Sampling Frame	Sample	Respondents	Sampling Frame	Sample	Child Enrollees (Survey)
Mountains	14.4%	14.3%	14.3%	12.8%	13.6%	14.2%
Piedmont	45.3%	55.8%	55.2%	53.6%	56.9%	55.5%
Inner Coastal Plain	26.6%	24.3%	24.1%	25.7%	22.3%	23.5%
Tidewater	9.3%	5.6%	6.5%	7.9%	7.2%	6.8%
N/n =	<b>148,140</b>	<b>42,000</b>	<b>3,202</b>	<b>448,424</b>	<b>28,000</b>	<b>3,199</b>
<u>Urbanicity</u>	Sampling Frame	Sample	Respondents	Sampling Frame	Sample	Child Enrollees (Survey)
Urban	58.9%	61.7%	60.8%	64.5%	64.4%	62.5%
Mixed	22.7%	23.9%	23.5%	21.4%	22.8%	23.4%
Rural	18.4%	14.4%	15.7%	14.1%	12.8%	14.1%
N/n =	<b>148,140</b>	<b>42,000</b>	<b>3,202</b>	<b>448,424</b>	<b>28,000</b>	<b>3,199</b>

**Appendix B: The Child Survey**

**2012 North Carolina Medicaid Survey**

**Version: CAHPS 4.0**  
**Child Medicaid Questionnaire**

**Language: English**

INTRODUCTION: “Hello, this is \_\_\_\_\_ and I am calling from 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 the *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 CAROLINA ACCESS, MEDICAID or HEALTH CHECK. Is that right?  
<sup>1</sup>  Yes  
<sup>2</sup>  No → If No, Thank you.

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### **Your Child's Health Care in the Last 6 Months**

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**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?  
<sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #5**
3. In the last 6 months, how many times did your child go to an emergency room for care?  
 None  
 1  
 2  
 3  
 4  
 5 to 9  
 10 or more
4. In the last 6 months, when your child **needed care right away**, how often did your child get care as soon as you thought he or she needed?  
<sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
5. In the last 6 months, **not** counting the times your child needed care right away, did you make any appointments for your child's health care at a doctor's office or clinic?  
<sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #7**

6. In the last 6 months, **not** counting the times your child needed care right away, how often did you get an appointment for health care at a doctor's office or clinic as soon as you thought your child needed?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
7. 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?
- None → **If None, go to question #24**  
 1  
 2  
 3  
 4  
 5 to 9  
 10 or more
8. In the last 6 months, 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?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
9. In the last 6 months, did you have any questions or concerns about your child's health or health care?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #11**
10. In the last 6 months, how often did your child's doctors or other health providers make it easy for you to discuss your questions or concerns?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

11. In the last 6 months, how often did you have your questions answered by your child's doctors or other health providers?
- <sup>1</sup>  Never
  - <sup>2</sup>  Sometimes
  - <sup>3</sup>  Usually
  - <sup>4</sup>  Always
12. 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?
- <sup>1</sup>  Yes
  - <sup>2</sup>  No → **If No, go to question #15**
13. In the last 6 months, 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?
- <sup>1</sup>  Yes
  - <sup>2</sup>  No
14. In the last 6 months, 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?
- <sup>1</sup>  Yes
  - <sup>2</sup>  No
15. Using any number from 0-to-10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child's health care in the last 6 months?
- <sup>00</sup>  0 Worst health care possible
  - <sup>01</sup>  1
  - <sup>02</sup>  2
  - <sup>03</sup>  3
  - <sup>04</sup>  4
  - <sup>05</sup>  5
  - <sup>06</sup>  6
  - <sup>07</sup>  7
  - <sup>08</sup>  8
  - <sup>09</sup>  9
  - <sup>10</sup>  10 Best health care possible

16. An interpreter is someone who repeats or signs what one person says in a language used by another person. In the last 6 months, did you need an interpreter to help you speak with your child's doctors or other health providers?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #18**
17. In the last 6 months, when you needed an interpreter to help you speak with your child's doctors or other health providers, how often did you get one?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
18. In the last 6 months, did **your child** need an interpreter to help him or her speak with doctors or other health providers?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #20**
19. In the last 6 months, when **your child** needed an interpreter to help him or her speak with doctors or other health providers, how often did your child get one?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
20. Is your child 2 years old or younger?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #24**
21. 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?
- <sup>1</sup>  Yes  
<sup>2</sup>  No
22. 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?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #24**

23. Did you get an appointment for your child's visit for a check-up, or for shots or drops, as soon as you thought he or she needed it?
- <sup>1</sup>  Yes  
<sup>2</sup>  No
24. Is your child now enrolled in any kind of school or daycare?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #27**
25. In the last 6 months, did you need your child's doctors or other health providers to contact a school or daycare center about your child's health or health care?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #27**
26. In the last 6 months, did you get the help you needed from your child's doctors or other health providers in contacting your child's school or daycare?
- <sup>1</sup>  Yes  
<sup>2</sup>  No

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## Specialized Services

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27. 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?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #30**
28. In the last 6 months, how often was it easy to get special medical equipment or devices for your child?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
29. 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?
- <sup>1</sup>  Yes  
<sup>2</sup>  No

30. In the last 6 months, did you get or try to get special therapy such as physical, occupational, or speech therapy for your child?
- <sup>1</sup> Yes  
<sup>2</sup> No → **If No, go to question #33**
31. In the last 6 months, how often was it easy to get this therapy for your child?
- <sup>1</sup> Never  
<sup>2</sup> Sometimes  
<sup>3</sup> Usually  
<sup>4</sup> Always
32. Did anyone from your child's health plan, doctor's office, or clinic help you get this therapy for your child?
- <sup>1</sup> Yes  
<sup>2</sup> No
33. In the last 6 months, did you get or try to get treatment or counseling for your child for an emotional, developmental, or behavioral problem?
- <sup>1</sup> Yes  
<sup>2</sup> No → **If No, go to question #36**
34. In the last 6 months, how often was it easy to get this treatment or counseling for your child?
- <sup>1</sup> Never  
<sup>2</sup> Sometimes  
<sup>3</sup> Usually  
<sup>4</sup> Always
35. Did anyone from your child's health plan, doctor's office, or clinic help you get this treatment or counseling for your child?
- <sup>1</sup> Yes  
<sup>2</sup> No
36. 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?
- <sup>1</sup> Yes  
<sup>2</sup> No → **If No, go to question #38**

37. In the last 6 months, 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?

<sup>1</sup>  Yes

<sup>2</sup>  No

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### Your Child's Personal Health Provider

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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.

38. 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.

<sup>1</sup>  Yes

<sup>2</sup>  No → **If No, go to question #57**

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

None → **If None, go to question #51**

1

2

3

4

5 to 9

10 or more

40. In the last 6 months, how often did your child's personal health provider explain things in a way that was easy to understand?

<sup>1</sup>  Never

<sup>2</sup>  Sometimes

<sup>3</sup>  Usually

<sup>4</sup>  Always

41. In the last 6 months, how often did you have a hard time speaking with or understanding your child's personal health provider because you spoke different languages?

<sup>1</sup>  Never

<sup>2</sup>  Sometimes

<sup>3</sup>  Usually

<sup>4</sup>  Always

42. In the last 6 months, how often did your child's personal health provider listen carefully to you?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
43. In the last 6 months, how often did your child's personal health provider show respect for what you had to say?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
44. Is **your child** able to talk with doctors about his or her health care?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #46**
45. In the last 6 months, how often did your child's personal health provider explain things in a way that was easy for **your child** to understand?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
46. In the last 6 months, how often did your child have a hard time speaking with or understanding doctors or other health providers because they spoke different languages?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
47. In the last 6 months, how often did your child's personal health provider spend enough time with your child?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always

48. In the last 6 months, did your child's personal health provider talk with you about how your child is feeling, growing, or behaving?
- <sup>1</sup>  Yes  
<sup>2</sup>  No
49. In the last 6 months, did you call your child's personal health provider's office **after** regular office hours to get help or advice for your child?
- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #51**
50. In the last 6 months, when you called after regular office hours, how often did you get the help or advice you needed for your child?
- <sup>1</sup>  Never  
<sup>2</sup>  Sometimes  
<sup>3</sup>  Usually  
<sup>4</sup>  Always
51. 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
52. 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 #54**  
 No
53. 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

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

<sup>1</sup> Yes

<sup>2</sup> No → **If No, go to question #57**

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

<sup>1</sup> Yes

<sup>2</sup> No

56. 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?

<sup>1</sup> Yes

<sup>2</sup> No

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### Getting Health Care From a Specialist

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**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.**

57. 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 try to make any appointments for your child to see a specialist?

<sup>1</sup> Yes

<sup>2</sup> No → **If No, go to question #63**

58. In the last 6 months, how often was it easy to get appointments for your child with specialists?

<sup>1</sup> Never

<sup>2</sup> Sometimes

<sup>3</sup> Usually

<sup>4</sup> Always

59. In the last 6 months, 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?

<sup>1</sup> Yes

<sup>2</sup> No

60. How many specialists has your child seen in the last 6 months?
- None → **If None, go to question #63**
  - 1 specialist
  - 2
  - 3
  - 4
  - 5 or more specialists
61. 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
62. In the last 6 months, was the specialist your child saw most often the same doctor as your child's personal doctor?
- Yes
  - No

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## Your Child's Health Plan

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**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.**

63. In the last 6 months, did you try to get any kind of care, tests, or treatment for your child through his or her health provider or health plan?
- Yes
  - No → **If No, go to question #65**
64. In the last 6 months, how often was it easy to get the care, tests, or treatment you thought your child needed through his or her health provider or health plan?
- Never
  - Sometimes
  - Usually
  - Always

65. In the last 6 months, did you try to get information or help from office staff at your child's health provider or health plan?
- <sup>1</sup>  Yes
- <sup>2</sup>  No → **If No, go to question #67**
66. In the last 6 months, how often did office staff at your child's health plan, doctor's office, or clinic give you the information or help that you needed?
- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always
67. In the last 6 months, how often did office staff at your child's health plan, doctor's office, or clinic treat you and your child with courtesy and respect?
- <sup>1</sup>  Never
- <sup>2</sup>  Sometimes
- <sup>3</sup>  Usually
- <sup>4</sup>  Always
68. In the last 6 months, how often were any forms from your child's health provider or health plan easy to fill out?
- <sup>1</sup>  Did not fill out forms
- <sup>2</sup>  Filled out forms and it was never easy
- <sup>3</sup>  Filled out forms and it was sometimes easy
- <sup>4</sup>  Filled out forms and it was usually easy
- <sup>5</sup>  Filled out forms and it was always easy
69. In the last 6 months, 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?
- <sup>1</sup>  Did not need any assistance
- <sup>2</sup>  Needed assistance and never received it
- <sup>3</sup>  Needed assistance and sometime received it
- <sup>4</sup>  Needed assistance and usually received it
- <sup>5</sup>  Needed assistance and always received it
70. 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

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### Prescription Medicines

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

- <sup>1</sup> Yes
- <sup>2</sup> No → **If No, go to question #74**

72. In the last 6 months, how often was it easy to get prescription medicines for your child through his or her health plan?

- <sup>1</sup> Never
- <sup>2</sup> Sometimes
- <sup>3</sup> Usually
- <sup>4</sup> Always

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

- <sup>1</sup> Yes
- <sup>2</sup> No

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### Trust in Your Child's Provider

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Please think about the health provider that your child usually sees when he or she is sick or when you need advice about your child's health.

74. Is this health provider a male or female?

- <sup>1</sup> Male
- <sup>2</sup> Female

75. What is the race of this health provider?

- <sup>1</sup> White
- <sup>2</sup> Black or African-American
- <sup>3</sup> Asian
- <sup>4</sup> Native Hawaiian or other Pacific Islander
- <sup>5</sup> American Indian or Alaska Native
- <sup>6</sup> Other

76. I think my child's health provider 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

77. I trust my child's health provider 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

78. I sometimes think that my child's health provider might perform unnecessary tests or procedures.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Neither Agree/Disagree
- 4 Somewhat Disagree
- 5 Strongly Disagree

79. 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

80. My child's health provider always pays full attention to what I am trying to tell him or her.

- 1 Strongly Agree
- 2 Somewhat Agree
- 3 Neither Agree/Disagree
- 4 Somewhat Disagree
- 5 Strongly Disagree

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## About Your Child and You

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

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

82. 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 #85**

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

- 1 Yes
- 2 No → **If No, go to question #85**

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

- 1 Yes
- 2 No

85. 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 #88**

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

- 1 Yes
- 2 No → **If No, go to question #88**

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

- 1 Yes
- 2 No

88. 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 #91**

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

- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #91**

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

- <sup>1</sup>  Yes  
<sup>2</sup>  No

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

- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #94**

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

- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #94**

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

- <sup>1</sup>  Yes  
<sup>2</sup>  No

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

- <sup>1</sup>  Yes  
<sup>2</sup>  No → **If No, go to question #96**

95. Has this problem lasted or is it expected to last for at least 12 months?

- <sup>1</sup>  Yes  
<sup>2</sup>  No

96. What is **your child's** age?

- <sup>1</sup>  Less than 1 year old

\_\_\_\_\_ YEARS OLD (*record value rounded to nearest year*)

97. Is your child male or female?

- <sup>1</sup>  Male  
<sup>2</sup>  Female

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

- <sup>1</sup>  Yes, Hispanic or Latino  
<sup>2</sup>  No, not Hispanic or Latino

99. What is your child's race? Please indicate one or more.

- <sup>1</sup> White
- <sup>2</sup> Black or African-American
- <sup>3</sup> Asian
- <sup>4</sup> Native Hawaiian or other Pacific Islander
- <sup>5</sup> American Indian or Alaska Native
- <sup>6</sup> Other

100. What is **your** age?

- <sup>0</sup> Under 18
- <sup>1</sup> 18 to 24
- <sup>2</sup> 25 to 34
- <sup>3</sup> 35 to 44
- <sup>4</sup> 45 to 54
- <sup>5</sup> 55 to 64
- <sup>6</sup> 65 to 74
- <sup>7</sup> 75 or older

101. Are you male or female?

- <sup>1</sup> Male
- <sup>2</sup> Female

102. What is the highest grade or level of school that you have completed?

- <sup>1</sup> 8th grade or less
- <sup>2</sup> Some high school, but did not graduate
- <sup>3</sup> High school graduate or GED
- <sup>4</sup> Some college or 2-year degree
- <sup>5</sup> 4-year college graduate
- <sup>6</sup> More than 4-year college degree

103. What language do you mainly speak at home?

- <sup>1</sup> English
- <sup>2</sup> Spanish
- <sup>3</sup> Some other language

104. What language does your child mainly speak at home?

- <sup>1</sup> English
- <sup>2</sup> Spanish
- <sup>3</sup> Some other language

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

- English
- Spanish
- Some other language

106. How are you related to the child?

- Mother or father
- Grandparent
- Aunt or uncle
- Older sibling
- Other relative
- Legal guardian

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### Communication and Computer Use

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107. Do you use the internet on a regular basis by using a computer or "smart" cell phone?

- Yes, use computer
- Yes, use "smart" cell phone
- Yes, use both computer and "smart" cell phone
- No, do not use the internet on a regular basis

108. Why do you use the internet on a regular basis? Choose all answers that describe your internet use.

- To play games
- To send and receive e-mail
- To send and receive text messages on a cell phone
- To send and receive instant messages
- To find news and current events
- To communicate on Facebook, Twitter, Linked-In, MySpace or Other Social Media
- Other

109. In general, how often do you use the internet?

- Daily
- Several Times/Week
- Once/Week
- A few times/month
- Once/month or less often

**Thank you for your participation.**

## Appendix C: Modifications of CAHPS Survey Items

### Adult survey

“personal health provider” substituted for “personal doctor” in Q21, Q23, Q25, Q26, Q27, Q28, Q29, Q30, Q31, Q38, Q40, Q41, Q42.

“nurse practitioner” and “physician assistant” added as options in Q22.

“Did anyone from your doctor’s office, clinic, or CAROLINA ACCESS/MEDICAID help coordinate your care from other health providers who were not your personal health provider?” substituted for “did anyone from your health plan, doctor’s office, or clinic help coordinate your care among these doctors or other health providers?” in Q36.

“health provider or health plan” substituted for “health plan” in Q56, Q57, Q61.

“help from office staff at your health provider or health plan” substituted for “help from your health plan’s customer service” in Q58.

“office staff at your health plan, doctor’s office, or clinic” substituted for “your health plan’s customer service” in Q59, Q60.

Merged “did your health plan give you any forms to fill out” and “how often were the forms from your health plan easy to fill out” to read “how often were any forms from your child’s health provider or health plan easy to fill out” in Q61.

“health provider” substituted for “doctor or health provider” in Q72.

### Child survey

“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” substituted for “does your child have a personal doctor?” in Q38.

“personal health provider” substituted for “personal doctor” in Q39, Q40, Q41, Q42, Q43, Q45, Q47, Q48, Q51, Q52, Q53, Q55, Q56.

“doctors or other health providers” substituted for “personal doctor” in Q46.

“call your child’s personal health provider’s” substituted for “phone your child’s personal doctor’s” in Q49.

“called” substituted for “phoned” in Q50.

“among these specialists” substituted for “among these doctors or health providers” in Q59.

“health provider or health plan” substituted for “health plan” in Q63, Q64, Q65.

“office staff” substituted for “customer service” in Q65, Q66, Q67.

“health plan, doctor’s office, or clinic” substituted for “health plan” in Q66, Q67.

Merged “did your child’s health plan give you any forms to fill out” and “how often were the forms easy to fill out” to read “how often were any forms from your child’s health provider or health plan easy to fill out” in Q68.

“doctor, nurse, or physician assistant” substituted for “doctor” in Q82.

**Appendix D-1 CCNC Networks by Region (Child Survey Sampling Frame)**

<i>Network</i>	<b>Sampling Frame</b>	Mountain	Piedmont	Coastal Plain	Tidewater
Community Health Partners (1003)	12,687	0.0%	99.9%	0.0%	0.0%
Access Care Network Sites and Counties (1006)	94,934	22.7%	36.2%	33.8%	7.3%
Community Care of Western North Carolina (1007)	22,111	99.7%	0.3%	0.0%	0.0%
Community Care Partners of Greater Mecklenburg (1009)	47,343	0.3%	99.5%	0.1%	0.0%
Carolina Community Health Partnership (1010)	10,884	38.2%	61.7%	0.0%	0.0%
Community Care of Wake/Johnston Counties (1011)	37,429	0.2%	74.5%	25.3%	0.1%
Partnership for Community Care (1012)	30,045	0.1%	99.7%	0.2%	0.0%
Carolina Collaborative Community Care (1013)	18,061	0.1%	1.2%	98.7%	0.1%
Community Care Plan of Eastern Carolina (2000)	49,221	0.1%	1.7%	70.5%	27.6%
Community Care of Southern Piedmont (2003)	21,221	0.4%	99.4%	0.2%	0.1%
Community Care of the Lower Cape Fear (2004)	22,253	0.2%	1.8%	31.7%	66.3%
Community Care of the Sandhills (2005)	27,099	0.1%	50.2%	49.4%	0.3%
Northwest Community Care (2006)	31,497	28.5%	70.9%	0.3%	0.2%
Northern Piedmont Community Care (2007)	23,639	0.1%	98.6%	1.1%	0.2%
N =	<b>448,424</b>				

**Appendix D-2 CCNC Networks by Region (Child Survey Sample)**

<i>Network</i>	<b>Sample</b>	Mountain	Piedmont	Coastal Plain	Tidewater
Community Health Partners (1003)	2,000	0.1%	99.9%	0.0%	0.0%
Access Care Network Sites and Counties (1006)	2,000	21.5%	37.1%	33.4%	8.1%
Community Care of Western North Carolina (1007)	2,000	99.5%	0.5%	0.0%	0.1%
Community Care Partners of Greater Mecklenburg (1009)	2,000	0.4%	99.3%	0.3%	0.1%
Carolina Community Health Partnership (1010)	2,000	38.8%	61.2%	0.1%	0.1%
Community Care of Wake/Johnston Counties (1011)	2,000	0.2%	72.1%	27.8%	0.1%
Partnership for Community Care (1012)	2,000	0.1%	99.8%	0.1%	0.1%
Carolina Collaborative Community Care (1013)	2,000	0.2%	1.3%	98.4%	0.2%
Community Care Plan of Eastern Carolina (2000)	2,000	0.1%	1.8%	72.1%	26.1%
Community Care of Southern Piedmont (2003)	2,000	0.4%	99.5%	0.2%	0.0%
Community Care of the Lower Cape Fear (2004)	2,000	0.3%	2.3%	31.3%	66.1%
Community Care of the Sandhills (2005)	2,000	0.3%	52.4%	47.2%	0.3%
Northwest Community Care (2006)	2,000	29.0%	70.5%	0.5%	0.1%
Northern Piedmont Community Care (2007)	2,000	0.1%	98.6%	1.4%	0.1%
n =	<b>28,000</b>				

**Appendix D-3 CCNC Networks by Region (Child Survey Respondents)**

<i>Network</i>	<b>Survey</b>	Mountain	Piedmont	Coastal Plain	Tidewater
Community Health Partners (1003)	232	0.0%	100.0%	0.0%	0.0%
Access Care Network Sites and Counties (1006)	239	18.0%	35.1%	37.2%	9.6%
Community Care of Western North Carolina (1007)	235	99.6%	0.4%	0.0%	0.0%
Community Care Partners of Greater Mecklenburg (1009)	223	0.9%	98.7%	0.4%	0.0%
Carolina Community Health Partnership (1010)	207	39.1%	60.9%	0.0%	0.0%
Community Care of Wake/Johnston Counties (1011)	224	0.0%	70.1%	29.9%	0.0%
Partnership for Community Care (1012)	212	0.0%	100.0%	0.0%	0.0%
Carolina Collaborative Community Care (1013)	249	0.0%	0.8%	99.2%	0.0%
Community Care Plan of Eastern Carolina (2000)	221	0.0%	1.8%	68.8%	29.4%
Community Care of Southern Piedmont (2003)	237	0.4%	99.6%	0.0%	0.0%
Community Care of the Lower Cape Fear (2004)	214	0.5%	2.3%	36.9%	60.3%
Community Care of the Sandhills (2005)	243	0.0%	52.7%	47.3%	0.0%
Northwest Community Care (2006)	229	39.7%	59.4%	0.9%	0.0%
Northern Piedmont Community Care (2007)	234	0.0%	99.6%	0.4%	0.0%
n =	<b>3,199</b>				

**Appendix E-1 CCNC Networks by  
Degree of Urbanicity (Child Sampling  
Frame)**

<i>Network</i>	<b><i>Sampling Frame</i></b>	Urban	Mixed	Rural
Community Health Partners (1003)	12,687	78.2%	21.8%	0.0%
Access Care Network Sites and Counties (1006)	94,934	48.6%	35.4%	16.0%
Community Care of Western North Carolina (1007)	22,111	73.2%	0.5%	26.4%
Community Care Partners of Greater Mecklenburg (1009)	47,343	98.8%	1.0%	0.2%
Carolina Community Health Partnership (1010)	10,884	7.6%	90.0%	2.4%
Community Care of Wake/Johnston Counties (1011)	37,429	97.8%	1.6%	0.6%
Partnership for Community Care (1012)	30,045	97.3%	2.4%	0.4%
Carolina Collaborative Community Care (1013)	18,061	92.0%	5.8%	2.1%
Community Care Plan of Eastern Carolina (2000)	49,221	40.7%	22.9%	36.4%
Community Care of Southern Piedmont (2003)	21,221	44.2%	37.7%	18.2%
Community Care of the Lower Cape Fear (2004)	22,253	68.7%	1.4%	29.9%
Community Care of the Sandhills (2005)	27,099	16.5%	64.7%	18.8%
Northwest Community Care (2006)	31,497	67.8%	18.6%	13.6%
Northern Piedmont Community Care (2007)	23,639	69.0%	17.0%	14.0%
N =	<b>448,424</b>			

**Appendix E-2 CCNC Networks by  
Degree of Urbanicity (Child Sample)**

<i>Network</i>	<b>Sample</b>	Urban	Mixed	Rural
Community Health Partners (1003)	2,000	79.4%	20.7%	0.0%
Access Care Network Sites and Counties (1006)	2,000	49.1%	34.9%	16.0%
Community Care of Western North Carolina (1007)	2,000	73.2%	0.5%	26.3%
Community Care Partners of Greater Mecklenburg (1009)	2,000	98.4%	1.4%	0.2%
Carolina Community Health Partnership (1010)	2,000	7.4%	90.5%	2.2%
Community Care of Wake/Johnston Counties (1011)	2,000	97.8%	1.6%	0.6%
Partnership for Community Care (1012)	2,000	96.9%	2.8%	0.4%
Carolina Collaborative Community Care (1013)	2,000	93.0%	5.3%	1.8%
Community Care Plan of Eastern Carolina (2000)	2,000	41.7%	23.6%	34.8%
Community Care of Southern Piedmont (2003)	2,000	45.5%	36.3%	18.2%
Community Care of the Lower Cape Fear (2004)	2,000	68.7%	1.6%	29.8%
Community Care of the Sandhills (2005)	2,000	15.8%	64.6%	19.7%
Northwest Community Care (2006)	2,000	67.4%	19.5%	13.1%
Northern Piedmont Community Care (2007)	2,000	67.9%	16.5%	15.7%
n =	<b>28,000</b>			

**Appendix E-3 CCNC Networks by  
Degree of Urbanicity (Child Survey  
Respondents)**

<i>Network</i>	<b>Survey</b>	Urban	Mixed	Rural
Community Health Partners (1003)	232	78.0%	22.0%	0.0%
Access Care Network Sites and Counties (1006)	239	37.2%	41.4%	21.3%
Community Care of Western North Carolina (1007)	235	72.8%	0.4%	26.8%
Community Care Partners of Greater Mecklenburg (1009)	223	99.1%	0.9%	0.0%
Carolina Community Health Partnership (1010)	207	6.3%	91.8%	1.9%
Community Care of Wake/Johnston Counties (1011)	224	97.8%	2.2%	0.0%
Partnership for Community Care (1012)	212	97.6%	1.4%	0.0%
Carolina Collaborative Community Care (1013)	249	94.4%	3.2%	2.4%
Community Care Plan of Eastern Carolina (2000)	221	36.7%	22.6%	40.7%
Community Care of Southern Piedmont (2003)	237	45.6%	37.1%	17.3%
Community Care of the Lower Cape Fear (2004)	214	62.1%	2.3%	35.5%
Community Care of the Sandhills (2005)	243	17.3%	60.5%	22.2%
Northwest Community Care (2006)	229	56.8%	28.4%	14.8%
Northern Piedmont Community Care (2007)	234	71.8%	15.0%	13.2%
n =	<b>3,199</b>			

## Appendix F: Child Survey Frequencies

(Frequencies exclude “don’t know” responses and refusals)

*Italics indicate variables that demonstrate statistically significant bivariate relationships at  $p < 0.05$  with the survey question, where  $A$  = enrollee’s age,  $E$  = enrollee’s ethnicity,  $L$  = respondent’s primary language,  $N$  = care network,  $R$  = geographical region of North Carolina where the enrollee resides,  $S$  = enrollee’s sex/gender, and  $U$  = degree of urbanicity of the enrollee’s county of residence.*

Language of conducted survey (n = 3,199)	
English	72.7%
Spanish	27.3%

Question 1: Our records show that your child is now in Carolina Access, Medicaid, or Health Check? Is that right? (n = 3,199)	
Yes	100%
No	0%

Question 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? (n = 3176) <i>E, L, N</i>	
Yes	27.5%
No	72.5%

Question 3: In the last 6 months, how many times did your child go to an emergency room for care? (n = 865)	
None	36.4%
1	42.2%
2	14.6%
3	4.7%
4	1.0%
5 to 9	0.8%
10 or more	0.2%

Question 4: In the last 6 months, when your child needed care right away, how often did your child get care as soon as you thought he or she needed? (n = 866) <i>E, U</i>	
Never	2.3%
Sometimes	8.4%
Usually	11.5%
Always	77.7%

Question 5: In the last 6 months, not counting the times your child needed care right away, did you make any appointments for your child’s health care at a doctor’s office or clinic? (n = 3167) <i>E, L, N</i>	
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Yes	64.2%
No	35.8%

Question 6: In the last 6 months, not counting the times your child needed care right away, how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought your child needed? (n = 2025) *E*

Never	1.6%
Sometimes	14.2%
Usually	13.4%
Always	70.7%

Question 7: 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 = 3081) *A, E, L, N, U*

None	26.9%
1	24.3%
2	21.6%
3	12.2%
4	5.9%
5 to 9	6.8%
10 or more	2.3%

Question 8: In the last 6 months, 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 = 2242) *E, L, N*

Never	14.2%
Sometimes	25.8%
Usually	15.8%
Always	44.2%

Question 9: In the last 6 months, did you have any questions or concerns about your child's health or health care? (n = 2252) *A, E*

Yes	32.2%
No	67.8%

Question 10: In the last 6 months, how often did your child's doctors or other health providers make it easy for you to discuss your questions or concerns? (n = 723) *E, S*

Never	2.9%
Sometimes	13.0%
Usually	15.5%
Always	68.6%

Question 11: In the last 6 months, how often did you have your questions answered by your

child's doctors or other health providers? (n = 2245) <i>E</i>	
Never	3.4%
Sometimes	10.1%
Usually	13.8%
Always	72.7%

Question 12: 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 = 2200) *A, E, L*

Yes	48.0%
No	52.0%

Question 13: In the last 6 months, 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 = 1055)

Yes	94.4%
No	5.6%

Question 14: In the last 6 months, 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 = 1048) *N*

Yes	86.8%
No	13.2%

Question 15: Using any number from 0-to-10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child's health care in the last 6 months? (n = 2248) *E, L, N*

0 Worst Health care possible	0.1%
1	0.2%
2	0.2%
3	0.4%
4	0.7%
5	2.4%
6	2.7%
7	5.9%
8	18.3%
9	19.4%
10 Best health care possible	49.7%

Question 16: An interpreter is someone who repeats or signs what one person says in a language used by another person.

In the last 6 months, did you need an interpreter to help you speak with your child's doctors or other health providers? (n = 2253) *A, E, L, N, R, U*

Yes	15.7%
No	84.3%

Question 17: In the last 6 months, when you needed an interpreter to help you speak with your child's doctors or other health providers, how often did you get one? (n = 353)

Never	2.3%
Sometimes	15.9%
Usually	26.1%
Always	55.8%

Question 18: In the last 6 months, did your child need an interpreter to help him or her speak with doctors or other health providers? (n = 2252) *A, E, L, N, R, U*

Yes	9.2%
No	90.8%

Question 19: In the last 6 months, when your child needed an interpreter to help him or her speak with your doctors or other health providers, how often did your child get one? (n = 207)

Never	5.3%
Sometimes	17.4%
Usually	27.5%
Always	49.8%

Question 20: Is your child 2 years old or younger? (n = 2246)

Yes	11.8%
No	88.2%

Question 21: 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 = 260)

Yes	90.8%
No	9.2%

Question 22: 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 = 262)

Yes	93.9%
No	6.1%

Question 23: Did you get an appointment for your child's visit for a check-up, or for shots or

drops as soon as you thought he or she needed it? (n = 245)

Yes	96.3%
No	3.7%

Question 24: Is your child now enrolled in any kind of school or daycare? (n = 3189)

Yes	67.1%
No	32.9%

Question 25: In the last 6 months, did you need your child's doctors or other health providers to contact a school or daycare center about your child's health or health care? (n = 2126) *N, S*

Yes	14.8%
No	85.2%

Question 26: In the last 6 months, did you get the help you needed from your child's doctors or other health providers in contacting your child's school or daycare? (n = 310)

Yes	92.9%
No	7.1%

Question 27: Special 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 = 3194) *A, E, L, S*

Yes	6.6%
No	93.4%

Question 28: In the last 6 months, how often was it easy to get special medical equipment or devices for your child? (n = 207) *S*

Never	4.8%
Sometimes	12.6%
Usually	15.0%
Always	67.6%

Question 29: 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 = 208) *A, S*

Yes	81.3%
No	18.8%

Question 30: 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 = 3192) *A, E, L, S*

Yes	10.7%
No	89.3%

Question 31: In the last 6 months, how often was it easy to get this therapy for your child? (n = 338) *A, E*

Never	11.5%
Sometimes	15.1%
Usually	16.9%
Always	56.5%

Question 32: Did anyone from your child's health plan, doctor's office, or clinic help you get this therapy for your child? (n = 337)

Yes	67.7%
No	32.3%

Question 33: In the last 6 months, did you get or try to get treatment or counseling for your child for an emotional, developmental, or behavioral problem? (n = 3192) *A, E, L, N, S*

Yes	14.2%
No	85.8%

Question 34: In the last 6 months, how often was it easy to get this treatment or counseling for your child? (n = 446) *E*

Never	9.6%
Sometimes	17.3%
Usually	18.6%
Always	54.5%

Question 35: Did anyone from your child's health plan, doctor's office, or clinic help you get this treatment or counseling for your child? (n = 451) *E*

Yes	62.7%
No	37.3%

Question 36: 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 = 3177) *A, E, L, N, R, S*

Yes	21.7%
No	78.3%

Question 37: In the last 6 months, 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 = 684)

Yes	64.9%
No	35.1%

Question 38: 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.

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 = 3173) *E, L, N, R, U*

Yes	79.5%
No	20.5%

Question 39: In the last 6 months, how many times did your child visit his or her personal health provider for care? (n = 2474) *A, E, L*

None	19.2%
1	29.5%
2	23.7%
3	13.1%
4	6.1%
5 to 9	6.2%
10 or more	2.2%

Question 40: In the last 6 months, how often did your child's personal health provider explain things in a way that was easy to understand? (n = 1998) *E*

Never	1.2%
Sometimes	6.4%
Usually	10.9%
Always	81.6%

Question 41: In the last 6 months, how often did you have a hard time speaking with or understanding your child's personal health provider because you spoke different languages? (n = 1998) *A, E, R*

Never	83.9%
Sometimes	8.3%
Usually	2.6%
Always	5.2%

Question 42: In the last 6 months, how often did your child's personal health provider listen carefully to you? (n = 1999) *E*

Never	1.2%
Sometimes	4.2%
Usually	8.0%
Always	86.7%

Question 43: In the last 6 months, how often did your child's personal health provider show respect for what you had to say? (n = 1996) *E, N, R, S, U*

Never	1.2%
Sometimes	3.0%

Usually	7.0%
Always	88.8%

Question 44: Is your child able to talk with doctors about his or her health care? (n = 1983) *A, E, L*

Yes	75.7%
No	24.3%

Question 45: In the last 6 months, how often did your personal health provider explain things in a way that was easy for your child to understand? (n = 1497) *E*

Never	1.5%
Sometimes	8.9%
Usually	16.2%
Always	73.3%

Question 46: In the last 6 months, how often did your child have a hard time speaking with or understanding doctors or other health providers because they spoke different languages? (n = 1981) *A, E*

Never	82.4%
Sometimes	8.3%
Usually	3.2%
Always	6.1%

Question 47: in the last 6 months, how often did your child's health provider spend enough time with your child? (n = 1987) *A, E*

Never	4.0%
Sometimes	11.1%
Usually	16.2%
Always	68.7%

Question 48: In the last 6 months, did your child's personal health provider talk with you about how your child is feeling, growing, or behaving? (n = 1995) *A, L*

Yes	90.0%
No	10.0%

Question 49: In the last 6 months, did you call your child's personal health provider's office **after** regular office hours to get help or advice for your child? (n = 1992) *A, E, L*

Yes	23.9%
No	76.1%

Question 50: In the last 6 months, when you called after regular office hours, how often did you get the help or advice you needed for your child? (n = 477) *E*

Never	3.8%
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Sometimes	14.0%
Usually	12.8%
Always	69.4%

Question 51: 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 = 2516)  
*E, L*

0 Worst personal health provider possible	0.0%
1	0.2%
2	0.0%
3	0.3%
4	0.1%
5	1.5%
6	1.5%
7	3.1%
8	14.8%
9	18.1%
10 Best personal health provider possible	60.5%

Question 52: Did your child have the same personal health provider **before** the child joined CAROLINA ACCESS, MEDICAID, or Health Check? (n = 2483) *A*

Yes	70.4%
No	29.6%

Question 53: 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 = 766)

Never	5.5%
Sometimes	17.6%
Usually	19.7%
Always	57.2%

Question 54: Does your child have any medical, behavioral, or other health conditions that have lasted for more than 3 months? (n = 2508) *A, E, L, S, U*

Yes	30.6%
No	69.4%

Question 55: Does your child's personal health provider understand how these medical, behavioral, or other health conditions affect your child's day-to-day life? (n = 760)

Yes	93.4%
No	6.6%

Question 56: Does your child's personal health provider understand how your child's medical, behavioral, or other conditions affect your family's day-to-day life? (n = 759) *E*

Yes	90.6%
No	9.4%

Question 57: 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.

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 try to make any appointments for your child to see a specialist? (n = 3190) *E, L, N*

Yes	18.2%
No	81.8%

Question 58: In the last 6 months, how often was it easy to get appointments for your child with specialists? (n = 580) *E*

Never	7.1%
Sometimes	15.7%
Usually	18.8%
Always	58.4%

Question 59: In the last 6 months, 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 = 578) *A*

Yes	75.6%
No	24.4%

Question 60: How many specialists has your child seen in the last 6 months? (n = 580)

0	8.6%
1	54.3%
2	23.1%
3	7.9%
4	2.9%
5 or more	3.1%

Question 61: 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 possible and 10 is the best possible, what number would you use to rate the specialist? (n = 528) *U*

0 Worst specialist possible	0.2%
1	0.4%
2	0.2%
3	0.6%
4	0.6%
5	2.3%

6	2.3%
7	7.0%
8	14.2%
9	12.9%
10 Best specialist possible	59.5%

Question 62: In the last 6 months, was the specialist your child saw most often the same doctor as your child's personal doctor? (n = 526) *E*

Yes	21.5%
No	78.5%

Question 63: In the last 6 months, did you try to get any kind of care, tests, or treatment for your child through his or her health provider or health plan? (n = 3167) *A, E, L, R*

Yes	23.4%
No	76.6%

Question 64: In the last 6 months, how often was it easy to get the care, tests, or treatment you thought your child needed through his or her health provider or health plan? (n = 739) *E*

Never	4.1%
Sometimes	11.9%
Usually	17.3%
Always	66.7%

Question 65: In the last 6 months, did you try to get information or help from office staff at your child's health provider or health plan? (n = 3182) *E, L*

Yes	20.1%
No	79.9%

Question 66: In the last 6 months, how often did office staff at your child's health plan, doctor's office, or clinic give you the information or help that you needed? (n = 641) *E*

Never	2.3%
Sometimes	10.3%
Usually	18.7%
Always	68.6%

Question 67: In the last 6 months, how often did office staff at your child's health plan, doctor's office, or clinic treat you and your child with courtesy and respect? (n = 3165) *E*

Never	2.9%
Sometimes	5.7%
Usually	10.4%
Always	81.0%

Question 68a: In the last 6 months, did your child's health provider or health plan give you any

forms to fill out? (n = 3191) *A, E*

Yes	84.3%
No	15.7%

Question 68b: In the last 6 months, how often were any forms from your child's health provider or health plan easy to fill out? (n = 2689) *E, L*

Filled out forms and it was never easy	1.5%
Filled out forms and it was sometimes easy	11.9%
Filled out forms and it was usually easy	24.2%
Filled out forms and it was always easy	62.4%

Question 69a: In the last 6 months, did you need transportation help from a non-family member to get your child to a medical appointment or to get a prescription filled? (n = 3187) *E, L, N*

Yes	28.3%
No	71.7%

Question 69b: In the last 6 months, 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 = 902) *E*

Needed assistance and never received it	10.6%
Needed assistance and sometimes received it	22.7%
Needed assistance and usually received it	14.4%
Needed assistance and always received it	52.2%

Question 70: 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 Carolina Access, Medicaid, or Health Check Plan? (n = 3182) *A, E, L, S, U*

0 Worst specialist possible	0.2%
1	0.1%
2	0.3%
3	0.2%
4	0.4%
5	1.7%
6	1.8%
7	3.4%
8	12.5%
9	14.4%
10 Best specialist possible	65.0%

Question 71: In the last 6 months, did you get or refill any new prescription medicines for your child? (n = 3173) *A, E, L, N, U*

Yes	51.4%
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No	48.6%
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Question 72: In the last 6 months, how often was it easy to get your prescription medicine for your child through his or her health plan? (n = 1626)

Never	0.9%
Sometimes	7.9%
Usually	12.9%
Always	78.3%

Question 73: Did anyone from your child's health plan, doctor's office, or clinic help you get your child's prescription medicines? (n = 1604) *E, L, N, U*

Yes	55.9%
No	44.1%

Question 74: Please think about the health provider you usually see when your child sees when he or she is sick or when you need advice about your child's health.

Is this personal health provider a male or female? (n = 3123)

Male	42.6%
Female	57.4%

Question 75: What is the race of this health provider? (n = 2934)

White	72.4%
Black	13.9%
Asian	4.6%
Native Hawaiian or other Pacific Islander	0.5%
American Indian or Alaska Native	1.9%
Other/Multi	6.7%

Question 76: I think my child's health provider may not refer him/her to a specialist when needed. (n = 3063) *A, E, N, R, U*

Strongly Agree	15.8%
Somewhat Agree	14.2%
Neither Agree/Disagree	5.0%
Somewhat Disagree	12.8%
Strongly Disagree	52.2%

Question 77: I trust my child's health provider to put my child's medical needs above all other considerations when treating my child's medical problems. (n = 3148) *A, E, L, S*

Strongly Agree	73.8%
Somewhat Agree	19.3%
Neither Agree/Disagree	1.7%

Somewhat Disagree	3.1%
Strongly Disagree	2.2%

Question 78: I sometimes think that my child's health provider might perform unnecessary tests or procedures. (n = 3117) *A, E, N, R*

Strongly Agree	9.8%
Somewhat Agree	10.4%
Neither Agree/Disagree	3.2%
Somewhat Disagree	14.6%
Strongly Disagree	62.0%

Question 79: My child's health provider's medical skills are not as good as they should be. (n = 3085) *A, E, N, R, S, U*

Strongly Agree	8.8%
Somewhat Agree	9.4%
Neither Agree/Disagree	3.1%
Somewhat Disagree	12.4%
Strongly Disagree	66.3%

Question 80: My child's health provider always pays full attention to what I am trying to tell him or her. (n = 3148) *E, R*

Strongly Agree	81.6%
Somewhat Agree	11.8%
Neither Agree/Disagree	0.6%
Somewhat Disagree	3.0%
Strongly Disagree	2.9%

Question 81: In general, how would you rate your child's overall health? (n = 3154) *A, E, L*

Excellent	45.4%
Very Good	26.4%
Good	21.0%
Fair	6.5%
Poor	0.6%

Question 82: Other than vitamins, does your child currently need or use medicine prescribed by a doctor, nurse, or physician assistant? (n = 3147) *A, E, L, N, S, U*

Yes	36.0%
No	64.0%

Question 83: Is this because of any medical, behavioral, or other health condition? (n = 1125) *A, E, L, R, S*

Yes	80.6%
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No	19.4%
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Question 84: Is this a condition that has lasted or is expected to last for at least 12 months? (n = 878) *A, E*

Yes	90.8%
No	9.2%

Question 85: 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 = 3115) *A, E, L, N, S, U*

Yes	20.6%
No	79.4%

Question 86: Is this because of any medical, behavioral, or other health condition? (n = 629) *E*

Yes	83.9%
No	16.1%

Question 87: Is this a condition that has lasted or is expected to last for at least 12 months? (n = 522) *N, R, S, U*

Yes	96.7%
No	3.3%

Question 88: 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 = 3118) *A, E, L, S*

Yes	16.8%
No	83.2%

Question 89: Is this because of any medical, behavioral, or other health condition? (n = 512) *A, E, L, N, R, S*

Yes	66.8%
No	33.2%

Question 90: Is this a condition that has lasted or is expected to last for at least 12 months? (n = 340)

Yes	96.5%
No	3.5%

Question 91: Does your child need or get special therapy such as physical, occupational, or speech therapy? (n = 3141) *A, E, L, S*

Yes	11.4%
No	88.6%

Question 92: Is this because of any medical, behavioral, or other health condition? (n = 347) *A*

Yes	69.2%
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No	30.8%
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Question 93: Is this a condition that has lasted or is expected to last for at least 12 months? (n = 233)

Yes	96.1%
No	3.9%

Question 94: Does your child have any kind of emotional, developmental, or behavioral problem, for which he or she needs or gets treatment or counseling? (n = 3139) *A, E, L, N, R, S*

Yes	16.0%
No	84.0%

Question 95: Is this a condition that has lasted or is expected to last for at least 12 months? (n = 488)

Yes	93.2%
No	6.8%

Question 96: What is your child's age group? (n = 3199)

0 to less than 2 yrs old	3.6%
2 yrs to less than 6 yrs	30.9%
6 yrs to less than 9 yrs	19.8%
9 yrs to less than 13 yrs	21.9%
13 yrs to less than 19 yrs	23.9%

Question 96: What is your child's age? (n = 3199)

Less than 1 year old	0.2%
1	3.4%
2	6.5%
3	8.0%
4	7.6%
5	8.8%
6	7.5%
7	6.2%
8	6.1%
9	5.8%
10	5.9%
11	5.0%
12	5.4%
13	4.1%
14	4.4%
15	4.1%
16	3.4%

17	3.9%
18	3.7%

Question 97: Is your child male or female? (n = 3199)

Male	51.3%
Female	48.7%

Question 98: Is your child of Hispanic or Latino origin or descent? (n = 3199)

Yes, Hispanic or Latino	35.5%
No, Not Hispanic or Latino	64.5%

Question 99: What is your child's race? Please indicate one or more. (n = 3059)

White	56.0%
Black or African American	29.6%
Asian	0.9%
Native Hawaiian or other Pacific Islander	0.3%
American Indian or Alaska Native	1.7%
Other/multi	11.6%

Question 100: What is your age? (n = 3130)

Under 18	0%
18 to 24	6.9%
25 to 34	40.3%
35 to 44	33.5%
45 to 54	11.5%
55 to 64	5.4%
65 to 74	1.8%
75 or older	0.6%

Question 101: Are you male or female? (n = 3150)

Male	9.6%
Female	90.4%

Question 102: What is the highest grade or level of school that you have completed? (n = 3133)

8 <sup>th</sup> grade or less	15.0%
Some high school, but did not graduate	19.6%
High school graduate or GED	31.0%
Some college or 2 year degree	26.8%
4-year college graduate	5.6%
More than 4-year college degree	2.1%

Question 103: What language do you mainly speak at home? (n = 3142)

English	69.3%
Spanish	29.6%
Some other language	1.1%

Question 104: What language does your child mainly speak at home? (n = 3119)

English	76.7%
Spanish	22.6%
Some other language	0.6%

Question 105: What language do you mainly speak when talking with your child's doctor or health provider? (n = 3140)

English	79.6%
Spanish	20.4%
Some other language	0.1%

Question 106: How are you related to the child? (n = 3135)

Mother or Father	87.4%
Grandparent	7.9%
Aunt or Uncle	1.2%
Older Sibling	0.2%
Other Relative	0.2%
Legal Guardian	3.1%

Question 107: Do you use the internet on a regular basis by using a computer or "smart" cell phone? (n = 3139)

Yes, use computer	26.9%
Yes, use 'smart' cell phone	7.2%
Yes, use both computer and "smart" cell phone	24.8%
No, do not use the internet on a regular basis	41.1%

Question 108: Why do you use the internet on a regular basis? Choose all answers that describe your internet use. (n = 1840)

To play games	42.0%
To send and receive e-mail	82.9%
To send and receive text messages on a cell phone	60.4%
To send and receive instant messages	45.2%
To find news and current events	77.6%
To communicate on Facebook, Twitter, Linked-In, MySpace or other social media	67.6%
Other	29.0%

Question 109: In general, how often do you use the internet? (n = 3087)

Daily	35.3%
Several Times/Week	18.3%
Once/Week	6.4%
A few times/month	8.6%
Once/month or less often	31.3%

**Appendix G. Comparison of Enrollees With Phone Numbers to those Without Phone Numbers for Selected Demographic Variables (Adult and Child Sampling Frames)**

	Adult Sampling Frame				Child Sampling Frame			
	With Phone		Without Phone		With Phone		Without Phone	
<i>Gender (Sex)</i>	n	%	n	%	n	%	n	%
Male	27,365	34.4	21,612	31.5	201,484	51.1	27,690	51.0
Female	52,095	65.6	47,068	68.5	192,667	48.9	26,583	49.0
	79,460		68,680		394,151		54,273	
<i>Race</i>								
Asian	1,141	1.4	810	1.2	4,848	1.2	1,412	2.6
Black	32,791	41.3	33,659	49.0	147,900	37.5	13,373	24.6
Native American	1,638	2.1	1,444	2.1	7,380	1.9	389	0.7
Pacific Islander	75	0.1	24	0.0	558	0.1	92	0.2
Unreported	5,194	6.5	4,068	5.9	70,755	18.0	11,587	21.3
White	38,621	48.6	28,675	41.8	162,710	41.3	27,420	50.5
	79,460		68,680		394,151		54,273	
<i>Ethnicity</i>								
Hispanic	2,318	2.9	1,128	1.6	72,336	18.4	11,875	21.9
Not Hispanic	57,385	72.2	43,655	63.6	253,494	64.3	30,408	56.0
Unreported	19,757	24.9	23,897	34.8	68,321	17.3	11,990	22.1
	79,460		68,680		394,151		54,273	
<i>Age</i>								
19-24 yrs	10,689	13.5	5,265	7.7				
25-34 yrs	13,114	16.5	12,524	18.2				
35-44 yrs	12,990	16.3	11,165	16.3				
45-54 yrs	14,087	17.7	13,895	20.2				
55-64 yrs	13,579	17.1	12,734	18.5				
65-74 yrs	8,600	10.8	6,644	9.7				
75 yrs and older	6,401	8.1	6,453	9.4				
	79,460		68,680					
<i>Age</i>								
0 to < 2 yrs					31,732	8.1	8,182	15.1
2 to < 6 yrs					126,683	32.1	18,290	33.7
6 to < 9 yrs					69,013	17.5	7,729	14.2
9 to < 13 yrs					80,876	20.5	9,223	17.0
13 to < 19 yrs					85,847	21.8	10,849	20.0
					394,151		54,273	
<i>Status</i>								
Dual	29,151	36.7	30,088	43.8	0	0.0	0	0.0
Not dual	50,309	63.3	38,592	56.2	394,151	100.0	54,273	100.0
	79,460		68,680		394,151		54,273	
<i>Region</i>								
Mountains	12,302	15.5	9,057	13.2	50,101	12.7	7,111	13.1
Piedmont	36,884	46.4	30,151	43.9	207,246	52.6	33,320	61.4
Coastal Plain	23,906	30.1	23,670	34.5	106,232	27.0	8,810	16.2
Tidewater	6,368	8.0	5,802	8.4	30,572	7.8	5,032	9.3
	79,460		68,680		394,151		54,273	

## Appendix H. Distribution of Survey Disposition Codes and Response Rates

	Final Disposition Codes	ADULT Survey (n)	CHILD Survey (n)
<b>Interview (Category 1)</b>			
Complete interviews	1100	3202	3199
Partial interviews	1200	0	0
<b>Eligible, non-interview (Category 2)</b>			
Refusal	2110	0	1964
Household-level refusal (hard refusal)	2111	2400	0
Break off (hard termination)	2120	368	207
<b>Unknown eligibility, non-interview (Category 3)</b>			
Wrong number	3110	1628	1742
Always busy	3120	53	109
Answering machine-don't know if household is private residence	3140	1258	1372
Unknown phone number	3313	192	71
Language barrier	3900	104	68
<b>Not eligible (Category 4)</b>			
Fax/data line	4200	7	9
Disconnected/Non-working number	4310	3994	2387
Number changed	4410	827	1022
Secondary cell phone (cell phone)	4420	1	3
Business, government office, other organizations	4510	85	0
No eligible respondent/not qualified	4700	1780	1123
<b>Total phone numbers used</b>		12697	10077
I = Complete Interviews (1100)		3202	3199
P = Partial Interviews (1200)		0	0
R = Refusal and break off (2110, 2120)		2768	2171
NC = Non Contact (2200)		0	0
O = Other (2300)		0	0
UH = Unknown Household (3100)		2939	3223
UO = Unknown other (3200-3900)		296	139
<b>Response Rate</b> (I+P)/(I+P) + (R+NC+O) + (UH+UO)		0.348	0.366
<b>Cooperation Rate</b> (I+P)/(I+P)+R+O)		0.536	0.596
<b>Refusal Rate</b> R/((I+P)+(R+NC+O) + UH + UO))		0.301	0.249
<b>Contact Rate</b> (I+P)+R+O / (I+P)+R+O+NC+ (UH + UO)		0.649	0.615

**Appendix I: Frequency Distribution of Statistically Significant Bivariate Relationships by Survey Question Dimension/Domain**

	<i>Age</i>	<i>Ethnicity</i>	<i>Language</i>	<i>Network</i>	<i>Region</i>	<i>Sex</i>	<i>Urbanicity</i>
<b>Access</b> total = 33	8 24.2%	21 63.6%	9 27.3%	7 21.2%	4 12.1%	3 9.1%	5 15.2%
<b>Satisfaction</b> total = 24	7 29.2%	18 75.0%	8 33.3%	4 16.7%	2 8.3%	2 8.3%	3 12.5%
<b>Health Status</b> total = 22	16 72.7%	17 77.3%	14 63.6%	8 36.4%	4 18.2%	12 54.5%	5 22.7%
<b>Utilization</b> total = 8	4 50.0%	4 50.0%	4 50.0%	3 37.5%	1 12.5%	2 25.0%	1 12.5%