A Multimodal Assessment of Stakeholder Perceptions of Maternal and Child Health Needs in Idaho

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Prepared for the Idaho
Department of Health and Welfare

by

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Executive Summary

The Maternal and Child Health (MCH) Title V legislation requires a 5-year needs assessment from all 59 recipient States and jurisdictions in order to determine the comprehensive and current needs of the State's/jurisdiction's mothers, children, women, adolescents and children and adolescents with special health care needs. Feedback from the constituencies served by each Title V program and the providers/stakeholders serving them enables prioritization of services most appropriate and effective for a given State or jurisdiction. This report is prepared as part of the mandated 2015 Title V needs assessment for the State of Idaho. The results of the needs assessment will guide the State in identification of MCH populations most in need and what resources might be brought to bear to improve their health and well being. Of particular importance will be guidance from the needs assessment in the selection of State Performance Measures for the unique circumstances of the target populations in Idaho. Given the Title V Transformation 3.0 changes to be implemented by HRSA beginning 2015, it is anticipated that the needs assessment will provide timely and useful information as Idaho participates in this important process of programmatic change.

The information provided in this report involves a depiction of data relevant to MCH issues in Idaho. Three approaches were used to collect data: 1) retrieval of secondary/archival data sources; 2) surveys of Idaho residents, consumers of MCH services, and providers of MCH services; and 3) interviews of key informants and stakeholders.

Key findings from each of the three methods of data collection and the additional analyses are presented below.

Method One: Secondary/Archival Data

Pregnant Women, Children, and Infants

- **Between 2008 and 2012, live births to Idaho residents decreased by 8.8%. Still, in 2012, Idaho's birth rate (14.4 per 1,000 residents) was nearly 14% higher than the national average (12.6)**
- **6.5% of Idaho babies were low birth weight in 2012, a rate nearly 19% below the national average (8.0%)**
    - **Teen mothers (8.4%) and mothers 35 and older (9.9%) had the highest rates of low birth weight among Idaho mothers**
- **Preterm births in 2012 were also 11% lower in Idaho (10.3%) than the national average (11.6%)**
- **Infant mortality was approximately 13% less common in Idaho in 2012 (5.3 per 1,000 live births) than nationally (6.1). The infant mortality rate has also fallen nearly 30% between 2000 (7.5) and 2012 (5.3)**
- **Idaho is very close to the national average in incidence of SIDS, but 28% higher in the incidence of infant death from birth defects and 20% lower in the incidence of infant death from short gestation and low birth weight**

- **Teen pregnancy has dropped considerably in Idaho, from 45.3 per 1,000 in 2002 to 34.1 in 2012 (a 25% reduction). Live births to teen mothers have fallen by nearly one-third from 2008 (41.2 per 1,000 females aged 15-19 years) to 2012 (28.3)**

Children

- **Although the total number of children increased by over 14,000 between 2008 and 2012, children as a percentage of the population decreased slightly (from 27.0% to 26.7%), mirroring a national trend**
- **The percentage of Idaho children in 2012 who were racial or ethnic minorities (24%) was considerably below the national average (47%)**
- **Although the percentage of Idaho children being up to date on key vaccinations series (e.g., up to date on the 4:3:1:3:3:1 by 24 months) has increased by 18% since 2008, Idaho still lags behind the national average**
- **The suicide rate of Idaho youth age 10-19 (19.1 per 100,000) is 84% higher than the national average (10.4), and fifth-highest in the U.S.**
- **Idaho's reported child abuse and neglect cases (three per 1,000 children) were 25% lower than the national average (four per 1,000), and also 25% lower than in 2008**

Children and Youth with Special Health Care Needs (CYSHCNs)

- **Idaho's population of CYSHCNs is 12.7% of the children/youth living in the state, which is lower than the national average of 15.1%**
- **On some measures, Idaho's CYSHCNs fare better than CYSHCNs nationally; for example, per-pupil spending on special education in Idaho is 11% higher than the national average**
- **On other measures, Idaho's CYSHCNs fare worse than CYSHCNs nationally. For example:**
    - **Fewer Idaho CYSHCNs (46.3%) are covered by private insurance than the national average (51.7%)**
    - **Idaho CYSHCNs were 39% more likely than the national average to have gone without health insurance at some point in 2010**
    - **Fewer Idaho CYSHCNs (45.4%) had adequate insurance to pay for needed health services in 2010 than the national average (52.9%)**
    - **A higher percentage of Idaho CYSHCNs (18.5%) missed 11 or more days of school due to illness than the national average (15.5%)**

Direct Health Care Services

- **Idaho faces a chronic shortage of health professionals. Of Idaho's 44 counties:**
    - **41 (or 93%) are federally-designated Primary Care Health Professional Shortage Areas**
    - **42 (or 95%) are federally-designated Dental Health Professional Shortage Areas**
    - **44 (or 100%) are federally-designated Mental Health Professional Shortage Areas**

- **Idaho is among the last in the nation for the number of primary care physicians per capita, and also suffers a severe shortage of specialists (including being last in the nation, per capita, for internists, pediatricians, and psychiatrists)**

Method Two: Survey Data

General Population Survey

- **A total of 102 adult Idahoans completed at least a portion of the survey**
  - **Approximately 80% of the respondents were older than age 46. Nearly 70% were women, and nearly all were permanent Idaho residents**
  - **The respondents' most common counties of residence were Ada (nearly 20%), Bingham (over 9%), Canyon (over 5%), and Payette (over 5%) Counties. Idaho Health Regions 4 (nearly 24%) and 7 (nearly 20%) were best represented among the respondents. A plurality of the respondents lived in counties classified as urban (over 42%), followed by frontier (nearly 30%) and rural (nearly 28%) counties**

- **Factors considered most important in affecting community quality of life included:**
  - **Being a good place to raise children (nearly 46%)**
    - **Younger respondents > older respondents**
  - **Having safe neighborhoods (nearly 41%)**
  - **Having a clean environment (nearly 34%)**
    - **District 1 > District 3**
  - **Having good access to health care (nearly 31%)**
  - **Having low crime (nearly 27%)**
  - **Having affordable housing (nearly 26%)**

- **Risky behaviors considered to most seriously impact community health included:**
  - **Drug abuse (over 60%)**
    - **Older respondents > younger respondents**
  - **Alcohol abuse (over 55%)**
  - **Poor eating habits (nearly 35%)**
    - **Younger respondents > older respondents**
  - **Tobacco use (nearly 31%)**

- **Health issues considered most important in the community included:**
  - **Overweight/obesity (nearly 50%)**
  - **Substance abuse (nearly 38%)**
  - **Cancer (nearly 29%)**
  - **Mental health problems (nearly 27%)**
    - **Younger respondents > older respondents**

- **Issues considered to have most important impact on health of pregnant women included:**
    - **Harmful substances such as tobacco, alcohol, and illegal drugs (nearly 49%)**
    - **Prenatal care (nearly 40%)**
    - **Health insurance (nearly 34%)**
    - **Nutrition (nearly 34%)**
    - **Partner involvement (nearly 27%)**
    - **Support from family and friends (nearly 21%)**

- **Issues considered to have most important impact on health of infants and young children included:**
    - **Home environment (nearly 38%)**
    - **Getting immunizations to prevent disease (nearly 32%)**
    - **Parenting (nearly 32%)**
    - **Access to health care (nearly 29%)**
    - **Child abuse/neglect (nearly 29%)**
    - **Nutrition (nearly 25%)**

- **Issues considered to have most important impact on health of youth included:**
    - **Use of substances such as alcohol, tobacco, or drugs (over 63%)**
    - **Home environment (nearly 38%)**
    - **Physical activity (nearly 26%)**
    - **Relationships with friends/peers (nearly 21%)**
        - **Male respondents > female respondents**
    - **Parenting techniques used on the child (nearly 21%)**

<u>Consumer Survey</u>

- **Usable data were collected from 265 respondents**
    - **The modal age category of the respondents was 36-45, with 60% of the respondents between 18-45 years of age. All respondents were permanent residents of Idaho, with nearly 45% residing in Ada County and substantial numbers of respondents also living in Canyon (nearly 11%), Bannock (nearly 10%), Twin Falls (more than 6%), and Kootenai (6%) Counties. The largest group of respondents lived in District 4 (over 46%), with reasonable representation from District 6 (over 13%), 3 (nearly 13%), and 5 (nearly 11%). Nearly 88% lived in counties classified as urban**
    - **The median estimated annual income category was $60,000-$69,000, with the modal income category over $100,000. The respondents were overwhelmingly White (nearly 89%), married (over 79%), and female (over 87%). Nearly 67% reported being a parent/caregiver of a child under the age of 18, with nearly 39% reporting being a parent or guardian of at least one CYSHCN. Nearly 9% reported either being pregnant or giving birth to a child within the past year**

- **Issues considered to be most important for the health of women aged 18-44 included:**
  - **Adequate health insurance (nearly 59%)**
    - **Respondents with CYSHCNs > respondents without CYSHCNs**
  - **Access to mental health services (nearly 48%)**
    - **Respondents with CYSHCNs > respondents without CYSHCNs**
  - **Good nutrition (over 32%)**
  - **Increasing physical activity or exercise (over 28%)**
    - **Male respondents > female respondents**
    - **District 3 > District 5 and East Districts (i.e., Districts 6 and 7)**

- **Issues considered to be most important for the health of pregnant women and infants included:**
  - **Adequate health insurance (nearly 39%)**
  - **Prenatal care (over 33%)**
  - **Avoiding harmful substances such as alcohol, tobacco, and illegal drugs (31%)**
    - **Male respondents > female respondents**
    - **District 5 > all other districts**
    - **Rural/frontier respondents > urban respondents**
  - **Pregnancy and parent education (28%)**
  - **Access to mental health services (nearly 25%)**
    - **Urban respondents > rural/frontier respondents**
  - **Regular doctor visits for routine check-ups and preventive care (nearly 22%)**
    - **District 5 < all other districts**
    - **Respondents with CYSHCNs > respondents without CYSHCNs**

- **Issues considered to be most important for the health of young children included:**
  - **Healthy parenting and home environment (49%)**
    - **North Districts (i.e., Districts 1 and 2) and East Districts (i.e., Districts 6 and 7) > District 4**
  - **Immunizations (nearly 40%)**
    - **Respondents without CYSHCNs > respondents with CYSHCNs**
  - **Regular doctor visits for routine check-ups and preventive care (over 31%)**
    - **District 4 and North Districts > all other districts**
    - **Urban respondents > rural/frontier respondents**
  - **Access to adequate health insurance (nearly 30%)**
    - **Male respondents > female respondents**
    - **Respondents with CYSHCNs > respondents without CYSHCNs**
  - **Child abuse and neglect (28%)**

- **Issues considered to be most important for the health of teens included:**
  - **Teen sexual health (e.g., prevention of STDs and pregnancy) (over 43%)**
    - **Respondents without CYSHCNs > respondents with CYSHCNs**
  - **Access to mental health services (nearly 42%)**

        - **Respondents with CYSHCNs > respondents without CYSHCNs**
    - **Use of substances such as alcohol, tobacco, and illegal drugs (nearly 40%)**
        - **North Districts (i.e., Districts 1 and 2) > all other districts**
    - **Bullying (over 31%)**
        - **Female respondents > male respondents**
        - **North Districts < all other districts**
        - **Lower-income respondents > higher-income respondents**
        - **Respondents with CYSHCNs > respondents without CYSHCNs**

- **With respect to parents/guardians of CYSHCNs:**
    - **The most common types of medical specialists seen by their CYSHCN included developmental specialists (69%), speech therapists (60%), psychiatric specialists (54%), and physical therapists (44%)**
    - **More than half (nearly 59%) had not missed a medical specialist appointment for their CYSHCN due to travel-related reasons**
    - **Two-thirds traveled 30 or fewer miles to visit their CYSHCN's medical specialist, although 15% had to travel more than 100 miles; nearly all travel involved use of a personal vehicle**
    - **Nearly 53% reported that their CYSHCN visited his or her medical specialist more than four times per year**
    - **The most common sources of health insurance for CYSHCNs were public insurance (such as Medicaid, CHIP, Medicare, Indian Health Services, or Military) or a combination of public or private insurance (40% each). Nineteen percent used private insurance (such as Blue Cross, Aetna, or other insurance provided by an employer), and only 1% had no insurance**
    - **An overwhelming majority (85%) reported that the closest medical specialist accept their CYSHCN's health insurance**

- **Issues considered to be the greatest problems with receiving quality health care for CYSHCNs included:**
    - **Cost of health care (over 60%)**
        - **Respondents without CYSHCNs > respondents with CYSHCNs**
    - **Access to community resources (55%)**
    - **Lack of medical specialists in the respondents' areas (nearly 50%)**
        - **Respondents with CYSHCNs > respondents without CYSHCNs**

- **Needs considered to be the greatest for CYSHCNs included:**
    - **Access to specialty care (nearly 40%)**
    - **Inclusive school-based programs (over 32%)**
        - **Respondents with CYSHCNs > respondents without CYSHCNs**
    - **Early intervention for CYSHCNs (nearly 32%)**
        - **Respondents without CYSHCNs > respondents with CYSHCNs**
    - **Helping families coordinate care for their CYSHCN (nearly 31%)**
    - **Early identification of special health care needs**
        - **Respondents without CYSHCNs > respondents with CYSHCNs**

Provider Survey

- **Issues considered to be the biggest challenges with serving CYSHCNs included:**
  - **Family issues (e.g., parents complying with provider recommendations, parental involvement) (over 57%)**
  - **Available resources (e.g., lack of specialist services in a rural area, availability of resources when needed) (nearly 36%)**
  - **Access to care/getting available care (e.g., getting to available care, access to specialty ancillary services) (over 32%)**
  - **Lack of sub-specialists (nearly 29%)**
  - **Knowledge of available resources (25%)**

- **Issues considered to be common challenges for pediatric patients included:**
  - **Family issues/problems (e.g., poor communication between parents in split households, divorce placing children "in the middle") (nearly 56%)**
  - **Obesity (over 44%)**
  - **Immunization (e.g., access) problems (nearly 41%)**
  - **Mental health (37%)**
  - **Poor diet (nearly 26%)**

- **Issues considered to be common challenges for pregnant patients and women aged 18-44 included:**
  - **Problems with prenatal care (e.g., prenatal care education, few obstetrician providers) (40%)**
  - **Mental health (32%)**
  - **Health care costs (28%)**
  - **Lifestyle issues (e.g., not living an active lifestyle, poor diet) (24%)**
  - **Available resources (24%)**

Method Three: Key Informant Interviews

- **Nineteen key informants completed interviews**
  - **Key informants included district health department directors and key staff (e.g., Women's Health Program coordinators, WIC coordinators, Tribal Health Program employees, and directors of non-governmental health and service agencies that provide services to women, children, and CYSHCNs)**

- **Preventive and primary care services considered to be most important for pregnant women, mothers, and infants included:**
  - **Breastfeeding (over 47%)**
  - **Good nutrition (over 41%)**
  - **Prenatal care (over 41%)**
  - **Medical home (over 41%)**

- **Preventive and primary care services considered to be most important for women of reproductive age (i.e., 18-44 years) included:**
    - **Medical home (nearly 46%)**
    - **Regular MD visits (over 36%)**
    - **Dental care (over 36%)**
    - **Family planning (over 36%)**

- **Preventive and primary care services considered to be most important for children under the age of five included:**
    - **Dental care (over 61%)**
    - **Immunizations (over 44%)**
    - **Regular MD visits for routine check-ups**

- **Preventive and primary care services considered to be most important for school-age children (i.e., 5-18 years) included:**
    - **Teen sexual health (nearly 56%)**
    - **Physical activity (over 44%)**
    - **Dental care (nearly 39%)**
    - **Regular MD visits for routine check-ups (over 22%)**
    - **Immunizations (over 22%)**
    - **Substance abuse (over 22%)**

- **Preventive and primary care services considered to be most important for CYSHCNs included:**
    - **Helping families coordinate care for their children (over 44%)**
    - **Lack of medical specialists (over 44%)**
    - **Inclusive school-based programs (over 33%)**
    - **Medical home (over 22%)**

- **Preventive and primary care services considered to be most important for members of all five populations included:**
    - **Regular MD visits for routine check-ups (over 33%)**
    - **Nutrition/healthy eating (nearly 27%)**
    - **Dental care (20%)**

Methodology

The data presented in this report were collected through a variety of different methodologies, including: 1) retrieval of secondary/archival data sources; 2) surveys of Idaho residents, consumers of MCH services, and primary care providers who serve the MCH population; and 3) interviews of key informants and stakeholders. Each methodology yielded data, each of which is described sequentially below.

Method One: Secondary/Archival Data

The first method of data collection involved gathering information broadly related to MCH throughout the State of Idaho. Much of this information was from data that are routinely collected by the Idaho Department of Health and Welfare (IDHW) for a variety of reporting purposes, and many of them are also contained in other reports (summarized in the References section of this document). These data include those collected though vital statistics, Idaho's Pregnancy Risk Assessment Tracking System (PRATS), Idaho's Behavioral Risk Factors Surveillance System (BRFSS), and other state and national surveys and systems.

Method Two: Survey Data

The second method of data collection involved the use of three surveys which targeted different populations and which were administered in a staggered fashion. These surveys will be discussed sequentially in the order they were administered.

General Population Survey

The General Population (GP) survey was designed to collect information on adult Idaho residents' perceptions of important health issues throughout the state. Originally planned as a survey on MCH issues only, it was expanded to include items on other issues of interest to IDHW MCH program administrators. The 10-item survey asked the respondents: 1) their age; 2) whether their permanent address was in Idaho; 3) their county of residence; 4) their gender; 5) what they thought were the three most important factors that impact the quality of life in their community; 6) what they thought were the top three "risky behaviors" that had the most serious impact on the health of people in their community (risky behaviors were defined as behaviors that could lead to poor health); 7) what they thought were the three most important health issues in their community; 8) what they thought were the three most important issues that impact the health of a woman during her pregnancy; 9) what they thought were the three most important issues that impact the health of infants and young children (under the age of 5); and 10) what they thought were the three most important issues that impact the health of youth. The survey was translated into Spanish and both versions were created using the Qualtrics web-based survey software used at the Boise State University Center for Health Policy (CHP).

The research team chose a random sampling procedure in order to have a truly representative sample of Idaho residents; every residential address with a "landline" or mobile phone associated with it had an opportunity of being selected to receive an invitation postcard. Because there were special concerns about health issues residing in geographically isolated regions of the state, the

research team employed a stratified random sampling procedure, with 1,000 residential addresses to be chosen from each of three types of counties in Idaho—urban, rural, and frontier. The definitions used for counties were the same as have been used in peer-reviewed studies on urban-rural-frontier health issues in Idaho (e.g., McDonald, Curtis-Schaeffer, Theiler, & Howard, 2014; McDonald, Harris, & LeMesurier, 2005), and are as follows: 1) an urban county is one with at least one city or town of at least 20,000 people; 2) a rural county is one that has no city or town of at least 20,000 people, but which does not meet the National Center for Frontier Communities' (NCFC; formerly known as the Frontier Education Center) definition of frontier counties (NCFC, 2007); and 3) frontier counties, defined as counties that meet the NCFC definition of frontier counties (NCFC, 2007). The NCFC definition of frontier areas is considered to be the "gold standard" (it has been approved by both the National Rural Health Association and the Western Governors' Association; NCFC, 2009) for measurement of highly rural (i.e., frontier) areas, and uses a complex formula taking into account population density, distance in miles to a service or market area, and travel time in minutes to a service or market area.

The research team contracted with nationally-recognized sampling supply firm Scientific Telephone Samples (STS) to generate 1,000 residential addresses from each type of county in the state; thus 1,000 addresses were generated each from the nine counties classified as urban (i.e., Ada, Bannock, Bonneville, Canyon, Kootenai, Latah, Madison, Nez Perce, and Twin Falls Counties), the nine counties classified as rural (i.e., Bingham, Bonner, Franklin, Gem, Jefferson, Jerome, Lewis, Minidoka, and Payette Counties), and the 26 classified as frontier (all those not listed as urban or rural). The addresses were generated by matching telephone records with addresses. U.S. postal boxes (i.e., "P.O. boxes") were included, taking into account the reliance on the Postal Service in many frontier communities. To control for age, education level, political preference, race, and other systematic differences associated with use of landline and mobile phones (Keter, Christian, & Dimock, 2010), STS generated half of the residences within each stratum (i.e., within each county type) by phone type (i.e., half were landline users and half were mobile phone users), and ensured that no addresses were included in multiple sampling frames (e.g., in an urban and a frontier county, in the landline and mobile phone frames within a county).

A postcard was created that offered a brief description of the survey and invited the recipients to type the web address bit.ly/idahohealth to access the survey. Although the postcard was written in English, a statement in Spanish informed Spanish-language speakers that a version of the survey was available in Spanish (translated by MD Translation Services). The 3,000 survey invitations were mailed out; 14 were returned due to invalid addresses, thus it can be surmised that 2,986 surveys reached a household in Idaho. A total of 102 residents completed at least some of the items on the survey, for a response rate of 3.4%; this response rate yielded a confidence interval (or "margin of error") of 9.7%. All responses were made to the English-language version of the survey.

MCH Consumers Survey

The second survey method was designed to gather perspectives on health issues from adults who: 1) used MCH-related services (e.g., WIC); 2) who had children who used MCH-related services

(e.g., immunizations); or 3) were associated with organizations that represent or advocate for families with children and youth with special health care needs, or CYSHCNs. The survey was developed collaboratively between the research team and IDHW staff, and vetted through several stakeholders familiar with the MCH consumer population. The survey included 26 items grouped into three sections: Demographics, MCH, and CYSHCNs. In the nine-item Demographics section, the respondents were asked to indicate: 1) their age; 2) whether their permanent address was in Idaho; 3) their county of residence; 4) their gender; 5) their income category; 6) their race/ethnicity; 7) their marital status; 8) whether they had children; and 9) whether they were pregnant or had a baby in the past year. In the four-item MCH section, the respondents were asked: 1) what they thought were the three issues that most needed to be addressed in their community to improve the health of women aged 18 to 44; 2) what they thought were the three issues that most needed to be addressed in their community in order to improve the health of pregnant women and infants; 3) what they thought were the three issues that most needed to be addressed in their community in order to improve the health of young children; and 4) what they thought were the three issues that most need to be addressed in their community in order to improve the health of older children and teens.

All adult respondents were prompted to answer each of the questions in the first two sections of the survey. The third section, CYSHCN, contained several items that were for all respondents and a greater number that were only for respondents who identified themselves as a parent or guardian of at least one CYSHCN (examples of such children were listed, and included those needing prescription medication for medical, behavioral, or other health conditions, or those requiring more medical care, mental health, or educational services than is typical for most children of the same age). Respondents were asked to indicate: 1) whether they had one or more CYSHCN (all respondents); 2) the age of their CYSHCN(s) (parents/guardians of CYSHCNs only); 3) what types of medical specialists their CYSHCN had visited in the past two years (if respondents indicated more than one medical specialist, for the remaining items they were asked to answer thinking of the medical specialist they have the most difficulty in visiting; parents/guardians of CYSHCNs only); 4) whether traveling to visit their CYSHCN's medical specialist presented their family with difficulty (parents/guardians of CYSHCNs only); 5) whether their CYSHCN had ever missed an appointment with his or her specialist for travel-related reasons (parents/guardians of CYSHCNs only); 6) how many miles they had to travel to visit their CYSHCN's medical specialist (parents/guardians of CYSHCNs only); 7) how they traveled to visit their CYSHCN's medical specialist (response options included personal vehicle, air, train, and bus; parents/guardians of CYSHCNs only); 8) how many times per year their CYSHCN visits his or her medical specialist (parents/guardians of CYSHCNs only); 9) whether and how their CYSHCN is covered by insurance (parents/guardians of CYSHCNs only); 10) whether their CYSHCN's health insurance is accepted by the closest medical specialist (parents/guardians of CYSHCNs only); 11) what they thought was the biggest problem with getting quality health care for CYSHCNs in Idaho (all respondents); 12) and they thought were the top three needs for children and youth with special health care needs in Idaho (all respondents).

In early October, MCH program administrators from IDHW distributed a link to the Consumer survey to its many partners, including:

- Early Childhood Coordinating Council
- Idaho Council on Developmental Disabilities
- Public Health District Directors
- Idaho Health and Wellness Collaborative for Children
- Idaho Hunger Relief Task Force
- Idaho Parents Unlimited
- Idaho Perinatal Project
- MCH medical home coordinators, staff, and partners
- Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Steering Committee and local implementing agencies
- Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)-state and local agencies

Members of these organizations were asked to send the link to people using their services or belonging to their organizations, as these would likely be people eligible to complete the survey. The survey remained open for nearly four weeks, and by the date of closure, 303 individuals initiated a survey. Thirty-five respondents failed to complete items beyond the demographics section, and therefore they were not included in the analyses. Three cases had corrupted data (when exported to SPSS, the files were filled with codes of "-99," which typically means a data entry error), and they also were excluded from analysis. Thus, 265 usable surveys remained for analytical purposes.

One important methodological distinction between the Consumers survey and the GP survey regards the classification of counties as urban, rural, and frontier for categorization and comparative analyses. As noted earlier, for the GP survey, the stratification of surveys was performed by CHP staff according to the NCFC (2007; 2009) guidelines for distinguishing between rural and frontier counties; these guidelines are used by the CHP in other projects as well. For the Consumers survey, which was conducted largely through IDHW, the MCH program administrators asked that the classification of counties follow the guidelines used by the State of Idaho, which are the same for the classification of urban counties but different for rural and frontier counties. In the Idaho guidelines, unlike the NCFC guidelines, there is no formula taking into account population density, distance in miles to a service or market area, and travel time in minutes to a service or market area; a frontier county is simply one that has fewer than six residents per square mile. Using the Idaho guidelines, in the Consumer survey, 10 of the counties classified as frontier in the GP survey (using the NCFC guidelines) were classified as rural. These counties included Bear Lake, Benewah, Blaine, Boundary, Cassia, Elmore, Fremont, Gooding, Teton, and Washington.

MCH Providers Survey

The third survey effort was designed to gather perspectives on health issues from people who provide MCH-related services to eligible populations. Rather than conducting a separate survey, IDHW MCH program administrators chose to embed some items related to providers' perceptions of issues regarding MCH into a routine survey of primary care providers (PCPs) in

Idaho. This routine survey, conducted annually by IDHW's Bureau of Rural Health and Primary Care, asks PCPs a number of questions related to their practice, and is conducted in an ongoing (i.e., "rolling") fashion throughout each year. The MCH-related questions that were added to the survey asked the PCPs: 1) whether they serve children with special health care needs; 2) what they thought were the largest barriers to serving children with special health care needs; 3) what they thought were the common challenges for pediatric patients; and 4) what they thought were the common challenges for pregnant patients and women ages 18-44.

Data collection was well underway when the decision was made to embed the MCH items on new surveys conducted by the Bureau of Rural Health and Primary care. Data had already been collected from 21 of Idaho's 44 counties, so the data captured on MCH issues comes only from interviews of PCPs in 23 counties. The data used for the purposes of this project were collected between early June and the end of September, 2014. Data from 65 providers were available for analysis, 52 of which reported serving CYSHCNs.

Method Three: Key Informant/Stakeholder Interviews

The third method of data collection involved surveys of key informants and stakeholders who were identified precisely because it was believed that they could uniquely comment on issues important to MCH in Idaho. The six interview questions, which were jointly developed by the research team and IDHW MCH program administrators, asked the key informants/stakeholders about their perceptions of the most important needs for preventive and primary care services in their area (defined as health district, city, or county) for the following populations: 1) pregnant women, mothers, and infants; 2) women of reproductive age (ages 18-44); 3) children under the age of five; 4) school-age children, from five to 18 years of age; and 5) CYSHCNs. The final question asked the key informants/stakeholders whether there was any other information they would like to share regarding pregnant women, children, or CYSHCNs in their area.

Individuals invited to participate in the key informant interviews included Public Health District Directors and members of key stakeholder groups including: Tribal Health Department Directors, Idaho Parents Unlimited, Idaho Primary Care Association, Idaho Refugee Program, and the Idaho Head Start Association. Individuals who consented to the interview were sent a list of interview questions, and they were then contacted and interviewed by a member of the research team. Four of the individuals were unavailable for telephone interviews, however they submitted written answers to the interview questions.

The majority of interviews were conducted by telephone and each interview lasted approximately 30 minutes. The interviewer used a semi-structured interview technique, using the interview questions to guide the conversation about the primary and preventive health care needs of the Title V MCH target population groups. The interviewer asked follow-up and clarifying questions to better understand and ensure the priority health care needs for each group were identified. Responses to the interview and follow-up questions were summarized by the interviewer during the interview and a general summary of each interview was written immediately after the interview was completed by the interviewer.

The completed interviews were first coded by a member of the research team using the items contained in the Consumer Survey. Interviewee responses corresponding to specific items on the survey were tallied for each of the five MCH target groups. The interviews were then coded for each MCH target group for needs cited but not included in the Consumer Survey. A content analysis procedure was used to identify themes among the coded interview comments. Final tables were compiled for each item as well as the most frequently cited concerns and issues for all items and across all groups.

Nineteen key informant interviews were completed during August and September 2014. Key informant interviews were completed with five of seven Public District Health Department Directors or key staff members (i.e., Women's Health Program Coordinators, WIC Program Coordinators, etc.), three tribal health program employees from two different Idaho Tribal Health Departments, and directors of non-governmental health and service agencies that provide services to women, children, and CYSHCNs.

Results

Secondary/Archival Data

The data in the section is gleaned from multiple sources and intended to portray information related broadly to multiple indicators of maternal and child health. Wherever possible, comparative information is presented to show changes in key indicators between 2008, the most recent data used for the previous Idaho MCH needs assessment, and 2012, the most recent data available for the current needs assessment.

Pregnant women, mothers, and infants

Births

Between 2008 and 2012, the number of live births to Idaho residents decreased 8.8% from 25,156 to 22,941. As of 2012, this was the second-lowest number of resident births recorded in Idaho from 2005 (IDHW, 2014a).

The 2012 birth rate for Idaho was 14.4 per 1,000 residents, a 2.1% increase from 14.1 in 2011 (IDHW, 2014). Idaho's 2012 birth rate in was nearly 14% higher than the national birth rate (12.6%) for the same year (National Center for Health Statistics [NCHS], 2013).

Low Birthweight

Idaho compared favorably against the U.S. as a whole with respect to both low birth weight (less than 2,500 grams) and preterm birth (gestation less than 37 completed weeks) rates in 2012. Whereas 8.0% of babies born nationally in 2012 were low birth weight, in Idaho the figure was 6.5% (or nearly 19% lower). The 6.5% was a slight increase in Idaho, from 6.1% in 2011. Teen mothers (aged 15 to 19) and older mothers (aged 35 and older) had higher rates (8.4% and 9.9%, respectively) of low birth weight than Idaho mothers overall (IDHW, 2014a).

Idaho also compared favorably against the U.S. as a whole for preterm birth. Whereas 10.3% of Idaho infants were born preterm in 2012 (up slightly from 10.1% in 2011), 11.6% of live births nationally were preterm (IDHW, 2014a).

Infant Mortality

Infant mortality in Idaho seems lower than the U.S. average, based upon the most recent data available. Whereas the U.S. infant mortality rate was 6.1 per 1,000 live births in 2011 (NCHS, 2012), in Idaho it was 5.3 in 2012 (IDHW, 2014a). Although infant mortality rates have fluctuated slightly in Idaho in recent years, the current 2012 rate is nearly 30% lower than the 7.5 rate reported for 2000.

For both the U.S. and Idaho, the leading causes of infant death include birth defects (U.S.: 4,984 deaths; 126.1 deaths per 100,000 live births; Idaho: 37 deaths; 161.3 deaths per 100,000 live births), disorders related to short gestation and low birth weight (U.S.: 4,116 deaths; 104.1 per

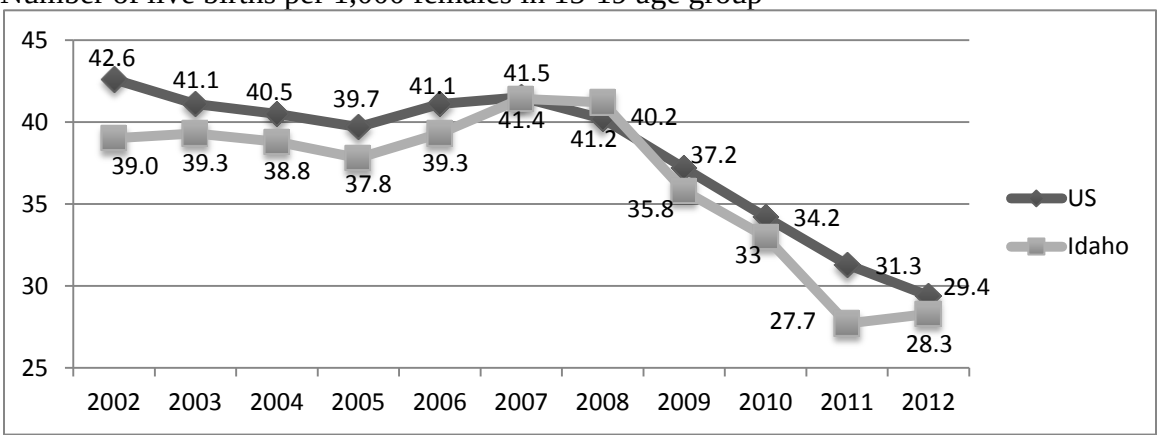
100,000 live births; Idaho: 19 deaths; 82.8 deaths per 100,000 live births), and sudden infant death syndrome (SIDS) (U.S.: 1,711 deaths; 43.3 deaths per 100,000 live births; Idaho:10 deaths; 43.6 deaths per 100,000 live births) (IDHW, 2014a; NCHS, 2012). Thus, although Idaho was very similar to the U.S. as a whole in terms of SIDS incidence, it was nearly 28% higher in the incidence of infant death from birth defects and over 20% lower in the incidence of infant death from short gestation and low birth weight.

Teen Pregnancy

The rate of pregnancies per 1,000 females (including live births, induced terminations, and reportable stillbirth) of Idaho teens under the age of 20 has dropped considerably. Whereas the teen pregnancy rate was 45.3 per 1,000 in 2002, it had dropped to 34.1 in 2012 (IDHW, 2014a). Of the pregnancies among teens aged 15-19 in 2012, 82.1% resulted in live birth, 16.9% resulted in induced termination, and less than 1% were stillbirths. The live birth rate has also dropped considerably; as seen below in Figure 1, there were 39.0 live births per 1,000 females in Idaho in 2002, but the rate fell to 28.3 in 2012 (a decrease of more than 27%). The drop has been most noteworthy since 2008, when it was 41.2 live births per 1,000 females aged 15-19. Also as seen in Figure 1, Idaho teen birth rates have been similar to, though typically slightly lower than, the national average.

Figure 1. U.S. and Idaho Teen Live Birth Rates, 15-19 Years-Olds 2002-2012

Number of live births per 1,000 females in 15-19 age group



Note. The data in this figure are gleaned from IDHW (2014a) and NCHS (2013).

Preconception Health

Preconception health care focuses on screening for health conditions and eliminating or reducing risk factors that could impact a woman and her fetus if she becomes pregnant, such as family planning, folic acid consumption, healthy weight, management of mental health and chronic conditions, prescription medication use, and substance use behaviors (e.g., tobacco, alcohol, and drug use). Preconception health is considered to be important for any woman of reproductive age even if she is not planning on becoming pregnant.

According to 2012 resident population estimates, there were 309,836 women of reproductive age in Idaho (females aged 15 to 44) (IDHW, 2014a). Among Idaho women aged 18 and older who gave birth in 2012, 32.6% had unintended pregnancies, which is slightly lower than in 2011 (33.2%) (IDHW, 2014b). Since 2003 the percentage of live births reported as unintended pregnancies has remained relatively constant at approximately 35% (IDHW, 2014b). In 2012 49.3% of births were to Idaho mothers with normal weight (i.e., with a Body Mass Index or BMI of 18.5 to 24.9), which is slightly lower than in 2011 (50.1%). In 2012 14.4% of Idaho mothers smoked in the three months prior to becoming pregnant. This percentage dropped to 8.0% in the final three months of pregnancy (IDHW, 2013; 2014b). According to the most recent national data, in 2008, the overall smoking prevalence during the three months prior to pregnancy was 23.0%, and the overall prevalence of smoking during the last three months of pregnancy was 12.8% (CDC, 2013b). In 2011 3.4% of Idaho mothers reported drinking alcohol during the last trimester of pregnancy, a percentage that has stayed fairly steady for a decade (IDHW, 2014b).

Children

Although the number of children ages 0 through 17 years in Idaho has increased by 14,013 between 2008 (412,640) and 2012 (426,653), children as a percentage of the total population has decreased slightly from 27.0% to 26.7% (IDHW, 2014; Kids Count Data Center, 2011). During the same period, the percentage of children age 0 through 17 years in the U.S. has decreased from 24.4% to 23.5% (ChildStats.gov, 2013).

In 2012, 24% of the population of Idaho children age 0 through 17 was a member of a racial or ethnic minority group—a figure much lower than the national 47% (Kids Count Data Center, 2014).

The 2012 National Immunization Survey (NIS) indicated that 71.4% of Idaho's 19 to 35-month-olds were up-to-date by 24 months of age for the 4:3:1:3:3:1 immunization series, which includes four doses of DTaP vaccine (Diphtheria, Tetanus and Pertussis), three doses of Polio vaccine, one dose of MMR vaccine (Measles, Mumps and Rubella), three doses of Hib vaccine (Haemophilus Influenza Type B), three doses of Hepatitis B vaccine and one dose of Varicella (chicken pox) vaccine. Although this is a significant improvement (over 18%) over the 60.0% Idaho rate of up-to-date 4:3:1:3:3:1 immunization series vaccinations in 2008, Idaho still lags slightly behind the national percentage of 73% (CDC, 2013a; IDHW, 2010).

The impact of the low 4:3:1:3:3:1 immunization series vaccination rate is likely reflected in high rates of vaccine-preventable diseases. Although its vaccination rate had improved between 2008 and 2012, Idaho still recorded a huge increase in cases of pertussis between those years (from 40 in 2008 to 235 in 2012) (IDHW, n.d.). On the other hand, Idaho also reported no cases of mumps in 2012, for the first time in years (IDHW, n.d.).

Accidents are the leading cause of death for Idaho children ages one through nine. For youth age 10 through 19, intentional self-harm is the second leading cause of death (IDHW, 2014a). Idaho's rate of suicide deaths among youth age 15 through 19 was 19.1 per 100,000 in 2012, which is 84% higher than the national youth suicide rate of 10.4 deaths per 100,000, and 5th-highest in the U.S. (American Foundation for Suicide Prevention, n.d.). The 2013 Youth Risk

Behavior Survey (YRBS) results reported that nearly 16% of Idaho youth attending traditional high schools reported seriously considering suicide, 13% made a plan, and 7% reported making at least one attempt; nearly 3% made an attempt that resulted in an injury (CDC, 2013). Nationwide, the YRBS results were quite similar; 17% of youth seriously considered suicide, nearly 14% made a plan, 8% made at least one attempt, and nearly 3% of students had made a suicide attempt that resulted in an injury (CDC, 2013).

Since 2008, reported child abuse and neglect cases have decreased approximately 25% in Idaho, from four cases per 1,000 children in 2008 to three cases per 1,000 in 2011. The 2011 rate of three cases per 1,000 is also 25% lower than the 2011 national average, which is four cases per 1,000 children.

Children and Youth with Special Health Care Needs (CYSHCNs)

According to the 2009/2010 National Survey of Children (and Youth) with Special Health Care Needs (NSCYSHCN) Idaho's percentage of CYSHCNs is lower than national rate in all three categorized age groups. Whereas 7.2% of Idaho children aged 0-5 have been identified as CYSHCNs, the 9.3% of children nationwide have been so identified. The same patterns are found for children in the 6-11 (Idaho: 13.7%; U.S.: 17.7%) and 12-17 (Idaho: 17.9%; U.S.: 18.4%). Collapsed across all three categorized age groups, 12.7% of Idaho youth are CYSHCNs, compared to 15.1% of youth nationally (U.S. Department of Health and Human Services, 2013).

According to the Catalyst Center (2014), Idaho's per-student special education spending ($1,977) in 2010 was more than 11% higher than the national average ($1,774). The Catalyst Center also reported that in 2010, a greater percentage of Idaho CYSHCNs (38.4%) were enrolled in Medicaid than the national average (35.9%); on the other hand, a smaller percentage of Idaho CYSHCNs (46.3%) were covered by private insurance than the national average (51.7%). Furthermore, Idaho CYSHCNs (just under 13%) were nearly 39% more likely than U.S. CYSHCNs overall (just over 9%) to have gone without health insurance coverage at some point in 2010. Idaho's CYSHCNs (45.4%) were also 14% less likely than CYSHCN nationally (52.9%) to have adequate insurance (public or private) to pay for needed health services (Catalyst Center, 2014).

Title V funds are used to import metabolic and genetic physicians from Oregon to provide much of the needed specialty services to Idaho's CYSHCNs. The 2009/2010 NSCYSHCN also lists some CYSHCN-related areas in which Idaho continues to rate below the national average. For example, whereas 18.6% of Idaho's CYSHCNs missed 11 or more days of school due to illness, 15.5% of CYSHCNs did so nationwide. Also, whereas 72.1% of Idaho children were screened early and continuously for special health needs, 78.6% of U.S. children were (Catalyst Center, 2014; U.S. Department of Health and Human Services, 2013).

Direct Health Care Services

The availability of direct health care services is one of Idaho's largest, if not the largest, MCH challenges. Of Idaho's 44 counties, 41 are federally designated as Primary Care Health Professional Shortage Areas (HPSAs); the exceptions are Ada, Blaine, and Bonneville Counties

(though it is noteworthy that portions of the latter two counties were designated as Primary Care HPSAs) (Idaho Department of Labor, 2012/2013). Forty-two counties are Dental HPSAs, with the exception of Ada County and a portion of Blaine County. All 44 are Mental HPSAs (Rural Assistance Center, 2012). Idaho (at 88.9) also ranks near the bottom of the 50 states and the District of Columbia (the national average is 127.8) for the number of primary care physicians 100,000, and also ranks 17th (at 49.6) in the nation (the national average is 38.0) for the number of family and general practice physicians per 100,000 population (Idaho Department of Labor, 2012/2013). In addition to primary care, Idaho suffers from a lack of specialists in a number of different fields, ranking 47th nationally for obstetricians and gynecologists per 100,000 persons, and 51st (i.e., the worst) for internists, pediatricians, and psychiatrists per 100,000 persons (Association of American Medical Colleges, 2013; Idaho Department of Labor, 2012/2013).

General Population Survey

Demographics

Respondent age

The first item on the survey asked respondents' to identify their age, using seven age-range categories. As seen below in Table GP1, the modal age of the respondents was in the 56-65 range, with approximately 78% of the respondents being at least 46 years of age. Because there were so few respondents in several age categories, for the purposes of comparative analyses, the respondents were re-categorized into two groups: Younger adults ranging in age from 18-45 (21 respondents, or 21.6% of the known adult sample), which corresponds closely to what are commonly considered "reproductive years," and older adults (66, or 68.4% of the known adult sample), who were 46 years or older.

Table GP1: Respondent Age

Age Category	Number of Cases	Percentage of Total Cases
Under 18 years old	1	1.0
18-25 years old	1	1.0
26-35 years old	7	7.1
36-45 years old	13	13.3
46-55 years old	15	15.3
56-65 years old	32	32.7
Over 65 years old	29	29.6

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 98 people who responded to this item.

Permanent residence in Idaho

All respondents were asked to indicate whether they were permanent residents of Idaho. Of those who responded to this item (one respondent did not), 99.0% reported being permanent residents and 1.0% reported not being permanent residents.

County of Residence

All respondents were asked to indicate in which of Idaho's 44 counties they lived. As seen below in Table GP2, the largest single group of respondents—nearly one in five—resided in Ada County. Other counties represented by at least 5% of the total sample included Bingham (over 9%), Canyon (over 5%), and Payette (over 5%) Counties. Thirteen counties were represented by only one respondent (or 1%) each, and 11 counties were not represented by any respondents.

Table GP2: Respondent County of Residence

County	Number of Cases	Percentage of Cases	County	Number of Cases	Percentage of Cases
Ada	19	19.6	Gem	2	2.1
Adams	2	2.1	Gooding	4	4.1
Bannock	4	4.1	Idaho	2	2.1
Bear Lake	1	1.0	Jefferson	3	3.1
Benewah	1	1.0	Jerome	2	2.1
Bingham	9	9.3	Kootenai	4	4.1
Blaine	1	1.0	Latah	1	1.0
Boise	2	2.1	Lemhi	2	2.1
Bonner	2	2.1	Lewis	0	0.0
Bonneville	3	3.1	Lincoln	0	0.0
Boundary	0	0.0	Madison	0	0.0
Butte	1	1.0	Minidoka	3	3.1
Camas	0	0.0	Nez Perce	4	4.1
Canyon	5	5.2	Oneida	3	3.1
Caribou	1	1.0	Owyhee	0	0.0
Cassia	4	4.1	Payette	5	5.2
Clark	0	0.0	Power	1	1.0
Clearwater	1	1.0	Shoshone	1	1.0
Custer	0	0.0	Teton	0	0.0
Elmore	1	1.0	Twin Falls	0	0.0
Franklin	1	1.0	Valley	1	1.0
Fremont	1	1.0	Washington	0	0.0

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 97 people who responded to this item.

Health District

Although the respondents were not asked any questions about the health district that they lived in, the research team coded the data for district region by using the county of residence identified by the respondents. As seen below in Table GP3, Districts 4 (Central) and 7 (Eastern) were best represented among the respondents (at nearly 24% and nearly 20%, respectively), whereas Districts 1 (Panhandle) and 2 (North Central) were the least well represented (at just over 8% each).

Table GP3: Respondent Health District		
Health Region Type	**Number of Cases**	**Percentage of Total Cases**
District 1 (Panhandle)	8	8.2
District 2 (North Central)	8	8.2
District 3 (Southwest)	14	14.4
District 4 (Central)	23	23.7
District 5 (South Central)	14	13.9
District 6 (Southeastern)	11	11.3
District 7 (Eastern)	19	19.6

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 97 people who indicated their county of residence.

Region type

Although the respondents were not asked any questions about the type of region that they lived in, the research team coded the data for region type by using the county of residence identified by the respondents. As seen below in Table G4, a plurality (over 42%) of the respondents reported living in a county classified as urban, followed by smaller percentages in counties classified as frontier (nearly 30%) and rural (nearly 28%). Because the same number of surveys (1,000) was sent to residents in each type of region, it is perhaps noteworthy that people in urban areas seemed more inclined to participate in the survey than people in rural and frontier areas.

Table GP4: Respondent Region Type		
Region Type	**Number of Cases**	**Percentage of Total Cases**
Urban	41	42.3
Rural	27	27.8
Frontier	29	29.9

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 97 people who indicated their county of residence.

Respondent gender

All respondents were asked to indicate their gender. Of those who responded to this item (four did not), 63.9% reported being women and 36.1% reported being men.

Perceptions

In each analysis of respondents' perceptions, the same basic analytic strategy was used. First, frequencies and percentages were calculated for all people who responded to an item. Then, comparative analyses were conducted to determine whether perceptions systematically varied as a function of the demographic characteristics gender and age category (i.e., younger or older adults). Finally, comparative analyses were conducted to determine whether perceptions systematically varied as a function of the geographic characteristics health region (i.e., the health

district the respondents lived in) and region type (whether the respondents lived in an urban, rural, or frontier area).

Perception of most important factors affecting community quality of life

All respondents were asked what they thought were the three most important factors that impact the quality of life. They were presented with 15 response options (see Table GP5), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other issue they felt was important. As seen below in Table GP5, among the 15 listed response options, the most commonly selected factors affecting community quality of life included: 1) good place to raise children (nearly 46%); 2) safe neighborhoods (nearly 41%); 3) clean environment (nearly 34%); 4) access to health care (nearly 31%); 5) low crime (26.7%); and 6) affordable housing (25.7%). Among the same 15 listed response options, the least often selected factors affecting community quality of life included: 1) low infant death rates (0%); 2) low adult death rates and low school dropout rates (both 1%); 3) low levels of child abuse (2%); and 4) low unemployment (5%).

Table GP5: Most Important Factors Affecting Community Quality of Life

Factor	Number of Cases	Percentage of Total Cases
Good place to raise children	46	**45.5**
Low crime	27	26.7
Safe neighborhoods	41	**40.6**
Low level of child abuse	2	2.0
Good schools	15	14.9
Access to health care	31	30.7
Parks and recreation	15	14.9
Clean environment	34	**33.7**
Affordable housing	26	25.7
Low unemployment	5	5.0
Healthy economy	7	6.9
Healthy behaviors and lifestyles	17	16.8
Low adult death rates	1	*1.0*
Low infant death rates	0	*0.0*
Low school dropout rates	1	*1.0*

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 101 people who responded to this item. Because respondents could choose up to three factors, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of 11 respondents, or 11% of all who responded to this item, selected at least one "Other" factor as one of the three most important factors that impact the quality of life in their communities. These "Other" factors were subjected to a content analysis procedure to identify common themes. Four themes emerged in the at least two of the responses. The most common

theme, identified in four comments, was that good people are a most important factor affecting community quality of life. Other themes expressed as most important factors affecting community quality of life included outdoor recreation (three comments), low population density (two comments), and a conservative political climate (two comments).

There were no statistically significant differences by which male and female respondents selected most important factors affecting community quality of life. There was one statistically significant difference in the rate by which younger and older respondents selected a most important factor affecting community quality of life. This difference involved the factor "Good place to raise children," and was accounted for by a greater percentage of younger adults (76.2%) selecting a good place to raise children as a most important factor affecting community quality of life than older adults (39.5%), χ^2 (df = 1) = 8.90, $p < .01$.

There was one statistically significant difference in the rates by which respondents in different health districts selected most important factors affecting community quality of life, χ^2 (df = 6) = 16.26, $p < .05$. This result was primarily accounted for by respondents in District 1 (85.7%) more often selecting "Clean environment" as a most important factor affecting community quality of life than respondents in District 3 (7.1%). There were no statistically significant differences in the rates by which respondents in urban, rural, and frontier region types selected most important factors affecting community quality of life.

Perception of risky behaviors impacting health in the community

All respondents were asked what they thought were the top three "risky behaviors" (defined as behaviors that could lead to poor health) that have the most serious impact on the health of people in their communities. They were presented with 12 response options (see Table GP6), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other risky behavior they felt seriously impacted the health of people in their community. As seen below in Table GP6, among the 12 listed response options, the most commonly selected risky behaviors seriously impacting community health included: 1) drug abuse (over 60%); 2) alcohol abuse (over 55%); 3) poor eating habits (nearly 35%); and 4) tobacco use (nearly 31%). Among the same 12 listed response options, the least often selected risky behaviors seriously impacting community health included: 1) exposure to contagious disease (0%); 2) not wearing seatbelts (nearly 6%); and 3) exposure to dangerous chemicals (nearly 7%).

Table GP6: Risky Behaviors Seriously Impacting Community Health		
Risky Behavior	**Number of Cases**	**Percentage of Total Cases**
Alcohol abuse	56	**55.4**
School dropout	14	13.9
Drug abuse	61	**60.4**
Lack of exercise	20	19.8
Poor eating habits	35	**34.7**
Not getting shots to prevent disease	11	10.9
Tobacco use	31	30.7
Not using seatbelts	6	*5.9*
Risky sexual behavior	14	13.9
Exposure to dangerous chemicals	7	*6.9*
Exposure to contagious disease	0	*0.0*
Not seeking professional medical care	19	18.8

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 101 people who responded to this item. Because respondents could choose up to three factors, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of three respondents, or 3% of all who responded to this item, selected at least one "Other" factor as one of the top three "risky behaviors" that have the most serious impact on the health of people in their communities. These "Other" factors were subjected to a content analysis procedure to identify common themes. Upon analysis, none of the comments listed constituted a "risky behavior" and instead expressed personal beliefs that were unrelated to the question asked.

There were no statistically significant differences in the rates by which male and female respondents selected top risky behaviors seriously impacting community health. There were, however, statistically significant differences in the rates by which older and younger respondents selected two top risky behaviors in the community. The first of these showed that a greater percentage of older respondents (71.1%) selected drug abuse as a top risky behavior seriously impacting community health than younger respondents (33.3%), χ^2 (df = 1) = 10.03, $p < .01$. The second showed that a greater percentage of younger respondents (61.9%) selected poor eating habits as a top risky behavior seriously impacting community health than older respondents (28.9%), χ^2 (df = 1) = 7.75, $p < .01$.

There were no statistically significant differences in the rates by which respondents selected risky behaviors seriously impacting community health, either by health district or region type.

<u>Perception of most important health issues in the community</u>

All respondents were asked what they thought were the three most important health issues in their community. They were presented with 18 response options (see Table GP7), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other issue they felt was important. As seen below in Table GP7, among

the 18 listed response options, the most commonly selected most important health issues in the community included: 1) overweight/obesity (nearly 50%); 2) substance abuse (nearly 38%); 3) cancer (nearly 29%); and 4) mental health problems (nearly 27%). Among the same 18 listed response options, the least often selected most important health issues in the community included: 1) infectious diseases (2%); 2) respiratory/lung disease (3%); 3) dental problems (4%); 4) teenage pregnancy (nearly 6%); and 5) lack of preventative health care screenings (nearly 8%).

Table GP7: Most Important Health Issues in the Community		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Cancer	29	**28.7**
Child abuse/neglect	8	7.9
High blood pressure	13	12.9
Dental problems	4	*4.0*
Diabetes	15	14.9
Overweight/obesity	50	**49.5**
Heart disease/stroke	10	9.9
Mental health problems	27	26.7
Accidents and motor vehicle crashes	14	13.9
Substance abuse	38	**37.6**
Respiratory/lung disease	3	*3.0*
Suicide	9	8.9
Teenage pregnancy	6	5.9
Lack of access to health care	15	14.9
Diet and nutrition	13	12.9
Lack of preventative health care screenings	8	7.9
Infectious diseases	2	*2.0*

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 101 people who responded to this item. Because respondents could choose up to three factors, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of eight respondents, or 8% of all respondents, selected at least one “Other” factor as one of the three most important health issues in their communities. These “Other” factors were subjected to a content analysis procedure to identify common themes. Only one theme was identified in the comments of more than one person; two people reported that affordable health care was a most important health issue in the community (one other person commented on lack of access to *good* health care, which is likely a related but not identical issue). The remaining comments either listed a specific condition or medical procedure (e.g., “Alzheimer’s/Dementia,” “Joint replacement”) or expressed personal comments that were unrelated to the question asked.

There was one statistically significant difference in the rate by which male and female respondents selected a most important health issues in the community. This difference involved the issue “Teenage pregnancy,” and was accounted for by a greater percentage of males (14.3%)

selecting teenage pregnancy as a most important health issue in the community than females (1.6%), χ^2 (df = 1) = 6.19, $p < .05$. There was also one statistically significant difference in the rate by which younger and older respondents selected a most important health issue in the community. This difference involved the issue "Mental health problems," and was accounted for by a greater percentage of younger respondents (52.4%) selecting mental health problems as a most important health issue in the community than older respondents (21.1%), χ^2 (df = 1) = 8.04, $p < .01$.

There were no statistically significant differences in the rates by which respondents in different health district selected most important health issues in the community. There were, however, statistically significant differences in the rates by which respondents in urban, rural, and frontier region types responded on two most important health issues in the community. The first of these showed that a greater percentage of rural (22.2%) and frontier (20.0%) respondents selected high blood pressure as a most important health issue in the community than urban respondents (2.4%), χ^2 (df = 2) = 7.38, $p < .05$. The second showed that a greater percentage of frontier respondents (10.3%) selected respiratory/lung disease as a most important health issue in the community than both urban and rural respondents (both 0%), χ^2 (df = 2) = 7.26, $p < .05$.

Perception of most important issues impacting health of pregnant women

All respondents were asked what they thought were the three most important issues that impact the health of a woman during her pregnancy. They were presented with 16 response options (see Table GP8), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other issue they felt was important. As seen below in Table GP8, among the 16 listed response options, the most commonly selected most important health issues for pregnant women included: 1) harmful substances such as tobacco, alcohol, and illegal drugs (nearly 49%); 2) prenatal care (nearly 40%); 3) health insurance and nutrition (both nearly 34%); 4) partner involvement (nearly 27%); and 5) support from family and friends (nearly 21%). Among the same 16 response options, the least often selected most important health issues for pregnant women included: 1) sleep (1%); 2) dental care (2%); 3) breastfeeding and prenatal vitamins (both 3%); 4) healthy weight gain (nearly 6%); and 5) family planning services (nearly 8%).

Table GP8: Most Important Health Issues for Pregnant Women		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Health insurance	34	**33.7**
Prenatal care	40	**39.6**
Regular doctor visits	14	13.9
Breastfeeding	3	*3.0*
Mental health	9	8.9
Support from family and friends	21	20.8
Nutrition	34	**33.7**
Exercise	10	9.9
Sleep	1	*1.0*
Harmful substances (e.g., tobacco, alcohol, illegal drugs)	49	**48.5**
Partner involvement	27	26.7
Pregnancy and parent education	10	9.9
Family planning services	8	7.9
Dental care	2	*2.0*
Healthy weight gain	6	5.9
Prenatal vitamins	3	*3.0*

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 101 people who responded to this item. Because respondents could choose up to three factors, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of two respondents, or 2% of all respondents, selected at least one "Other" issue as one of the three most important health issues that impact the health of a woman during her pregnancy. Each comment expressed personal beliefs that were unrelated to the question asked.

There were no statistically significant differences in the rates by which male and female respondents selected most important health issues for pregnant women. There was, however, one statistically significant difference in the rate by which younger and older respondents selected a most important health issue for pregnant women. This difference involved mental health, and was accounted for by a greater percentage of younger respondents (28.9%) selecting mental health as a most important health issue for pregnant women than older respondents (3.9%), χ^2 (df = 1) = 11.85, $p < .01$.

There was one statistically significant difference in the rate by which respondents in different health districts selected a most important health issue for pregnant women. This difference involved healthy weight gain, and was accounted for by a greater percentage of respondents in Districts 5 (28.6%) and 7 (10.5%) selecting healthy weight gain as a most important health issue for pregnant women than respondents in the other five health districts (all 0%), χ^2 (df = 6) = 16.93, $p < .05$. There were no statistically significant differences in the rates by which respondents in urban, rural, and frontier areas selected most important health issues for pregnant women.

Perception of most important issues impacting health of infants and young children

All respondents were asked what they thought were the three most important issues that impact the health of infants and young children (defined as those under the age of five years). They were presented with 19 response options (see Table GP9), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other issue they felt was important. As seen below in Table GP9, among the 19 listed response options, the most commonly selected most important health issues for infants and young children included: 1) home environment (nearly 38%); 2) getting immunizations to prevent disease and parenting (both nearly 32%); 3) access to health care and child abuse/neglect (both nearly 29%); and 4) nutrition (nearly 25%). Among the same 19 response options, the least often selected most important health issues for infants and young children included: 1) dental care, prematurity or being born too early, and mother's health during pregnancy (all 1%); 2) screening for disorders such as newborn screening and preventing diseases or conditions that may lead to an infant's death (both 2%); 3) parent support services such as home visiting (3%); and 4) community services such as food stamps and WIC, and breastfeeding (both nearly 6%).

Table GP9: Most Important Health Issues for Infants and Young Children

Health Issue	Number of Cases	Percentage of Total Cases
Access to child care (e.g., day care)	13	12.9
Access to health care	29	**28.7**
Regular doctor visits	11	10.9
Community services (e.g., food stamps, WIC)	6	5.9
Parent support services (e.g., home visiting)	3	*3.0*
Getting immunizations to prevent disease	32	**31.7**
Child abuse/neglect	29	**28.7**
Breastfeeding	6	5.9
Nutrition	25	24.8
Healthy weight	12	11.9
Parenting	32	**31.7**
Home environment	38	**37.6**
Screening for disorders (e.g., newborn screening)	2	*2.0*
Screening for healthy development	8	7.9
Poverty	19	18.8
Dental care	1	*1.0*
Prematurity or being born too early	1	*1.0*
Mother's health during pregnancy	1	*1.0*
Preventing diseases or conditions that may lead to an infant's death	2	*2.0*

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 101 people who responded to this item. Because respondents could choose up to three factors, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of two respondents, or 2% of all respondents, selected at least one “Other” issue as one of the three most important health issues that impact the health of infants and young children. These comments expressed personal beliefs that were unrelated to the question asked.

There were no statistically significant differences in the rates by which respondents selected most important health issues for infants and young children, either by gender or age category.

There were also no statistically significant differences in the rates by which respondents selected most important health issues for infants and young children, either by health district or region type.

Perception of most important issues impacting health of youth

All respondents were asked what they thought were the three most important issues that impact the health of youth. They were presented with 18 response options (see Table GP10), as well as the opportunity to select up to three “Other” options. Those who selected an “Other” option were asked to specify what other issue they felt was important. As seen below in Table GP10, among the 18 listed response options, the most commonly selected most important health issues for youth included: 1) use of substances such as alcohol, tobacco, or drugs (over 63%); 2) home environment (nearly 38%); 3) physical activity (nearly 26%); and 4) relationships with friends/peers and parenting techniques used on the child (both nearly 21%). Among the same 18 response options, the least often selected most important health issues for youth included: 1) dental care; 2) regular doctor visits, intentional self-harm, and accidents (all 4%); and 3) wearing seat belts or using car seats and sexual health such as the prevention of sexually transmitted disease and pregnancy (both 5%).

Table GP10: Most Important Health Issues for Youth		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Violence	7	6.9
Substance use (e.g., alcohol, tobacco, drugs)	67	**66.3**
Dental care	1	*1.0*
Nutrition	12	11.9
Physical activity	26	**25.7**
Access to health care	11	10.9
Regular doctor visits	4	*4.0*
Home environment	38	**37.6**
Relationships with friends/peers	21	20.8
Bullying	17	16.8
Mental health	10	9.9
Education	10	9.9
Getting immunizations to prevent disease	9	8.9
Parenting techniques used on the child	21	20.8
Wearing seat belts or using car seats	5	*5.0*
Sexual health (e.g., sexually transmitted disease and pregnancy prevention)	5	*5.0*
Intentional self-harm	4	*4.0*
Accidents	4	*4.0*

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 101 people who responded to this item. Because respondents could choose up to three factors, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of three respondents, or 3% of all respondents, selected at least one “Other” issue as one of the three most important health issues that impact the health of youth. Two respondents expressed personal beliefs that were unrelated to the question asked, however one—expressing that poverty is a most important health issue for youth—was related to the question.

There was one statistically significant difference in the rate by which male and female respondents selected a most important health issue for youth. This difference involved relationships with friends/peers, and was accounted for by a greater percentage of male respondents (34.3%) selecting relationships with friends/peers as a most important health issue for youth than female respondents (14.5%), χ^2 (df = 1) = 5.16, $p < .05$. There were no statistically significant differences in the rates by which younger and older adults selected most important health issues for youth.

There were no statistically significant differences in the rates by which respondents selected most important health issues for youth, either by health district or region type.

Consumer Survey

Respondent age

The first item on the survey asked respondents to identify their age, using five range categories. As seen below in Table C1, the modal age of the respondents was in the 36-45 range, with 60% of the respondents being between 18-46 years of age, which corresponds closely to what are commonly considered "reproductive years."

Table C1: Respondent Age

Age Category	Number of Cases	Percentage of Total Cases
Under 18 years old	0	0.0
18-25 years old	12	4.5
26-35 years old	70	26.4
36-45 years old	77	29.1
46-55 years old	61	23.0
56-65 years old	42	15.8
Over 65 years old	3	1.1

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100.

Permanent residence in Idaho

All respondents were asked to indicate whether they were permanent residents of Idaho. All respondents (i.e., 100%) reported themselves as permanent Idaho residents.

County of Residence

All respondents were asked to indicate in which of Idaho's 44 counties they lived. As seen below in Table C2, the largest single group of respondents—nearly 45%—resided in Ada County. Other counties represented by at least 5% of the respondents included Canyon (nearly 11%), Bannock (nearly 10%), Twin Falls (more than 6%), and Kootenai (6%) Counties. Thirteen counties were represented by only one respondent (or 0.4%) each, and 15 counties were not represented by any respondents.

Table C2: Respondent County of Residence					
County	**Number of Cases**	**Percentage of Cases**	**County**	**Number of Cases**	**Percentage of Cases**
Ada	119	44.9	Gem	3	1.1
Adams	0	0.0	Gooding	0	0.0
Bannock	26	9.8	Idaho	1	0.4
Bear Lake	1	0.4	Jefferson	0	0.0
Benewah	0	0.0	Jerome	8	3.0
Bingham	3	1.1	Kootenai	16	6.0
Blaine	2	0.8	Latah	5	1.9
Boise	2	0.8	Lemhi	0	0.0
Bonner	0	0.0	Lewis	2	0.8
Bonneville	5	1.9	Lincoln	0	0.0
Boundary	0	0.0	Madison	4	1.5
Butte	1	0.4	Minidoka	1	0.4
Camas	0	0.0	Nez Perce	10	3.8
Canyon	28	10.6	Oneida	0	0.0
Caribou	1	0.4	Owyhee	1	0.4
Cassia	1	0.4	Payette	1	0.4
Clark	0	0.0	Power	2	0.8
Clearwater	1	0.4	Shoshone	0	0.0
Custer	0	0.0	Teton	0	0.0
Elmore	1	0.4	Twin Falls	17	6.4
Franklin	1	0.4	Valley	1	0.4
Fremont	0	0.0	Washington	1	0.4

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100.

Health District

Although the respondents were not asked any questions about the health district that they lived in, the research team coded the data for health district by using the county of residence identified by the respondents. As seen below in Table C3, District 4 (over 46%) was best represented among the respondents, followed distantly by Districts 6, 3, and 5 (at just over 13%, just under 13%, and nearly 11%, respectively). Districts 7, 2, and 1 were the least well represented (at over 3%, 6%, and just over 7%, respectively). For the purpose of comparative analyses, Districts 1 and 2 were combined (as “North Districts”) to represent the northern part of the state (comprising over 13% of the respondents) and District 7 was added to District 6 (as “East Districts”) to represent the eastern part of the state (comprising nearly 17% of the respondents).

Table C3: Respondent Health District		
Health District	**Number of Cases**	**Percentage of Total Cases**
District 1 (Panhandle)	16	6.0
District 2 (North Central)	19	7.2
District 3 (Southwest)	34	12.8
District 4 (Central)	123	46.4
District 5 (South Central)	29	10.9
District 6 (Southeastern)	35	13.2
District 7 (Eastern)	9	3.4

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100.

Region type

Although the respondents were not asked any questions about the type of region that they lived in, the research team coded the data for region by using the county of residence identified by the respondents. As seen below in Table C4, nearly 88% of the respondents reported living in a county classified as urban, whereas nearly 9% and nearly 4% reported living in counties classified as rural and frontier, respectively. For the purposes of comparative analyses, respondents in rural and frontier counties were reclassified as "Rural/Frontier" respondents (comprising nearly 13% of all respondents).

Table C4: Respondent Region Type		
Region Type	**Number of Cases**	**Percentage of Total Cases**
Urban	232	87.5
Rural	23	8.7
Frontier	10	3.8

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100.

Annual income

All respondents were asked to indicate their estimated annual income for the previous year, using the 11 income categories seen below in Table C5. As seen below in Table C5, the single largest group of respondents reported an estimated family income over $100,000. The median income category was $60,000-$69,999. For the purposes of comparative analyses, the six cases of respondents reporting an estimated family income of under $10,000 were added to the next higher income group, creating a category of "Less than $20,000" (comprising 8% of all respondents).

Table C5: Respondent Estimated Family Income		
Income Category	**Number of Cases**	**Percentage of Total Cases**
Under $10,000	6	2.3
$10,000 to $19,999	15	5.7
$20,000 to $29,999	28	10.6
$30,000 to $39,999	25	9.5
$40,000 to $49,999	24	9.1
$50,000 to $59,999	25	9.5
$60,000 to $69,999	21	8.0
$70,000 to $79,999	14	5.3
$80,000 to $89,999	15	5.7
$90,000 to $99,999	21	8.0
Over $100,000	70	26.5

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 264 people who responded to this item.

Race/Ethnicity

All respondents were asked to indicate their race/ethnicity. They were presented with eight response options (see Table C6), including an "Other race" option. Those who selected the "Other race" option were asked to specify what other race/ethnicity they believed best fit them. As seen below in Table C6, among the eight listed response options, nearly 89% of the respondents reported themselves to be White. The only other race/ethnicity categories reported by more than 1% of the respondents were Hispanic, Latino, or of other Spanish origin (over 6%) and Multiracial (nearly 3%).

Table C6: Respondent Race/Ethnicity		
Race/Ethnicity Category	**Number of Cases**	**Percentage of Total Cases**
White	234	88.6
Black or African American	1	0.4
American Indian or Alaska Native	2	0.8
Asian	1	0.4
Native Hawaiian or Other Pacific Islander	1	0.4
Hispanic, Latino, or of Spanish origin	17	6.4
Multiracial	7	2.7
Other race	1	0.4

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 264 people who responded to this item.

The one respondent who selected the "Other race" option did not choose to specify what other race/ethnicity he or she believed best fit him or her.

Marital status

All respondents were asked to indicate their marital status. They were presented with five options (see Table C7). As seen below in Table C7, over 79% of the respondents reported that they were currently married, followed distantly by those who reported being either never married or divorced (over 10% and over 9%, respectively).

Table C7: Respondent Marital Status

Marital Status Category	Number of Cases	Percentage of Total Cases
Currently married	210	79.2
Widowed	1	0.4
Divorced	24	9.4
Separated	3	1.1
Never married	27	10.2

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100.

Respondent gender

All respondents were asked to indicate their gender, and all did so; 87.2% of the respondents reported being women, and 12.8% reported being men.

Parent/caregiver status

All respondents were asked whether they were a parent or caregiver of a child or children under the age of 18. Of those who responded to this item, 66.7% reported being a parent/caregiver of a child or children under the age of 18, and 33.3% reported not being such a parent/caregiver.

Pregnant/recent mother

Those respondents who indicated being women on a previous item were presented with an additional item which asked them whether they were currently pregnant or had a baby in the last year. Of those who responded to this item, 8.7% reported being pregnant or having had a child in the last year, and 91.3% reported not being pregnant or a recent mother.

Perception of most important issues related to the health of women aged 18 to 44

All respondents were asked what they thought were the three most important issues that needed to be addressed in their community to improve the health of women aged 18 to 44. They were presented with 10 response options (see Table C8), as well as the opportunity to select up to three “Other” options. Those who selected an “Other” option were asked to specify what other issue they felt was important. As seen below in Table C8, among the 10 listed response options, the most commonly selected most important health issues for women aged 18 to 44 included: 1) adequate health insurance (nearly 59%); 2) access to mental health services (nearly 48%); 3) good nutrition (over 32%); and 4) increasing physical activity or exercise (over 28%). Among

the same response options, the least often selected most important health issues for women aged 18 to 44 included: 1) stopping smoking or tobacco use (14%); 2) avoiding harmful substances such as illegal drugs or abusing prescription medications (over 17%); and 3) access to family planning services (over 20%).

Table C8: Most Important Health Issues for Women Aged 18 to 44		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Adequate health insurance	156	**58.9**
Regular doctor visits for routine check-ups and preventive care	65	24.5
Access to mental health services	127	**47.9**
Good nutrition	85	**32.1**
Increasing physical activity or exercise	75	28.3
Stopping smoking or tobacco use	37	*14.0*
Avoiding harmful substances such as illegal drugs or abusing prescription medications	46	*17.4*
Access to family planning services	54	*20.4*
Access to dental care	55	20.8
Access to a "medical home" or health care provider that provides comprehensive, continuous, and compassionate care	64	24.2

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Because respondents could select up to three issues, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of 22 respondents, or 8.3% of all respondents, selected at least one "Other" issue as one of the three most important issues that need to be addressed in their community to improve the health of women aged 18 to 44. These "Other" factors were subjected to a content analysis procedure to identify common themes. As seen below in Table C9, nine themes emerged in at least two of the responses. The most common theme, identified in four comments (over 18% of all people who gave at least one response to this item), was that parent education was a most important health issue for women aged 18 to 44. The second-most common themes, mentioned by three respondents (nearly 14%) each, were that improvement of workplace policies, services for children with disabilities and their mothers, and screening for home violence and child abuse, were most important issues for women aged 18 to 44.

Table C9: "Other" Most Important Health Issues for Women Aged 18 to 44		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Parent education	4	18.2
Improvement of workplace policies	3	13.6
Services for children with disabilities and their mothers	3	13.6
Screening for home violence and child abuse	3	13.6
Affordable medical care for those in "Medicare coverage gap"	2	9.1
Counseling services	2	9.1
Transportation needs	2	9.1
Additional medical services	2	9.1
Free family planning services and products	2	9.1

Note. The percentages in this table are calculated out of the 22 people who responded to this item. Because multiple response themes could be coded for each individual, the total percentages in this table may exceed 100.

There were five statistically significant differences in which male and female respondents selected most important health issues for women aged 18-44. The first involved the factor "Increasing physical activity or exercise," and was accounted for by a higher percentage of male respondents (44.1%) selecting increasing physical activity or exercise as a most important factor for women aged 18-44 than female respondents (26.0%), χ^2 (df = 1) = 4.81, $p < .05$. The second involved the factor "stopping smoking or tobacco use," and was accounted for by a higher percentage of male respondents (26.5%) selecting stopping smoking or tobacco use as a most important factor for women aged 18-44 than female respondents (12.1%), χ^2 (df = 1) = 5.08, $p < .05$. The third involved the factor "Access to family planning services," and was accounted for by a higher percentage of female respondents (22.5%) selecting access to family planning services as a most important factor for women aged 18-44 than male respondents (5.9%), χ^2 (df = 1) = 5.05, $p < .05$. The fourth involved the factor "Access to dental care," and was accounted for by a higher percentage of female respondents (22.9%) selecting access to dental care as a most important factor for women aged 18-44 than male respondents (5.9%), χ^2 (df = 1) = 5.25, $p < .05$. The fifth involved the factor "Access to a 'medical home' or health care provider that provides comprehensive, continuous, and compassionate care," and was accounted for by a higher percentage of male respondents (38.2%) selecting access to a medical home as a most important factor for women aged 18-44 than female respondents (22.1%), χ^2 (df = 1) = 4.22, $p < .05$.

There were four statistically significant differences in which respondents in different health districts selected most important health issues for women aged 18-44. The first involved the factor "Regular doctor visits for routine check-ups and preventive care," and was primarily accounted for by a higher percentage of respondents in the North Districts (i.e., Districts 1 and 2) (37.1) selecting regular doctor visits as a most important factor for women aged 18-44 than respondents in District 3 (8.8%) and District 5 (13.8%), χ^2 (df = 4) = 9.88, $p < .05$. The second involved the factor "Access to mental health services," and was primarily accounted for by a higher percentage of respondents in District 3 (79.4%) selecting access to mental health services as a most important factor for women aged 18-44 than respondents in District 5 (24.1%) and the

East Districts (i.e., Districts 6 and 7) (27.3%), χ^2 (df = 4) = 30.59, $p < .001$. The third involved the factor "Access to dental care," and was primarily accounted for by a higher percentage of respondents in the North Districts (31.4%), East Districts (29.5%), and District 3 (29.4%) selecting access to dental care as a most important factor for women aged 18-44 than respondents in District 5 (6.9%) and District 4 (15.4%), χ^2 (df = 4) = 11.53, $p < .05$. The fourth involved the factor "Access to a 'medical home' or health care provider that provides comprehensive, continuous, and compassionate care," and was primarily accounted for by a higher percentage of respondents in District 5 (51.7%) selecting a medical home as a most important factor for women aged 18-44 than respondents in any other region (the next-closest was District 4, at 23.6%), χ^2 (df = 4) = 15.28, $p < .01$.

There were two statistically significant differences in which respondents at different income levels selected most important health issues for women aged 18-44. The first involved the factor "access to dental care," and was primarily accounted for by a higher percentage of lower income respondents (e.g., 52.4% of those with estimated family incomes under $20,000) selecting access to dental care as a most important factor for women aged 18-44 than higher income respondents (e.g., less than 10% of those with estimated family incomes of at least $80,000), χ^2 (df = 9) = 33.23, $p < .001$. The second involved the factor "Access to a 'medical home' or health care provider that provides comprehensive, continuous, and compassionate care," and was accounted for by a higher percentage of higher income respondents (e.g., 42.9% and 35.7% for those with estimated family incomes of $90,000-$99,999 and over $100,00, respectively) selecting access to a medical home as a most important factor for women aged 18-44 than lower income respondents (e.g., 9.5% and 14.3% of those with estimated family incomes of under $20,000 and $20,000-$29,999, respectively), χ^2 (df = 9) = 17.41, $p < .05$.

There were four statistically significant differences in which respondents with and without CYSHCNs selected most important health issues for women aged 18-44. The first involved the factor "Adequate health insurance," and was accounted for by a higher percentage of respondents with a CYSHCN (66.3%) selecting adequate health insurance as a most important factor for women aged 18-44 than respondents without a CYSHCN (53.8%), χ^2 (df = 1) = 4.04, $p < .05$. The second involved the factor "access to mental health care services," and was accounted for by a higher percentage of respondents with a CYSHCN (62.4%) selecting access to mental health services as a most important factor for women aged 18-44 than respondents without a CYSHCN (38.8%), χ^2 (df = 1) = 13.85, $p < .001$. The third involved the factor "stopping smoking or tobacco use," and was accounted for by a higher percentage of respondents without a CYSHCN (17.5%) selecting stopping smoking as a most important factor for women aged 18-44 than respondents without a CYSHCN (6.9%), χ^2 (df = 1) = 5.96, $p < .05$. The fourth involved the factor "Access to a 'medical home' or health care provider that provides comprehensive, continuous, and compassionate care," and was accounted for by a higher percentage of respondents without a CYSHCN (28.8%) selecting access to a medical home as a most important factor for women aged 18-44 than respondents with a CYSHCN (17.8%), χ^2 (df = 1) = 4.00, $p < .05$.

Perception of most important issues related to the health of pregnant women and infants

All respondents were asked what they thought were the three most important issues that need to be addressed in their community to improve the health of pregnant women and infants. They were presented with 18 response options (see Table C10), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other issue they felt was important. As seen below in Table C10, among the 18 listed response options, the most commonly selected most important health issues for pregnant women and infants included: 1) access to adequate health insurance (nearly 39%); 2) prenatal care (33%); 3) avoiding harmful substances such as alcohol, tobacco and drugs (31%); 4) pregnancy and parent education (28%); 5) access to mental health services (nearly 25%); and 6) regular doctor visits for routine check-ups and preventive care (nearly 22%). Among the same listed 18 listed response options, the least often selected most important health issues for pregnant women and infants included: 1) premature births and prenatal vitamin use (both over 2%); 2) access to adequate hospital care for newborns (nearly 3%); and 3) safe sleep practices (just over 3%).

Table C10: Most Important Health Issues for Pregnant Women and Infants

Health Issue	Number of Cases	Percentage of Total Cases
Access to adequate health insurance	101	**38.7**
Prenatal care	87	**33.3**
Premature births	6	*2.3*
Reducing unnecessary cesarean (c-section) deliveries	26	10.0
Regular doctor visits for routine check-ups and preventive care	57	21.8
Access to adequate hospital care for newborns	7	*2.7*
Increasing breastfeeding	45	17.2
Access to mental health services	64	24.5
Making sure a woman is healthy before getting pregnant	46	17.6
Good nutrition and physical activity during pregnancy	50	19.2
Healthy weight gain during pregnancy	18	6.9
Avoiding harmful substances (e.g., alcohol, tobacco/smoking, and drugs)	81	**31.0**
Prenatal vitamin use	6	*2.3*
Pregnancy and parent education	73	28.0
Dental care during pregnancy	16	6.1
Safe sleep practices (e.g., placing baby on back to sleep)	8	*3.1*
Screening for disorders (e.g., newborn screening)	21	8.0
Access to a "medical home" or health care provider that provides comprehensive, continuous, and compassionate care	52	19.9

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 261 people who responded to this item. Because respondents could select up to three issues, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of 16 respondents, or 6.1% of all respondents, selected at least one "Other" issue as one of the three most important issues that need to be addressed in their community to improve the health of pregnant women and infants. These "Other" factors were subjected to a content analysis procedure to identify common themes. As seen below in Table C11, three themes emerged in at least two of the responses. The most common theme, identified in five comments (over 31% of all people who gave at least one response to this item), was that free family planning services and products was a most important health issue for pregnant women and infants. The second-most common theme, mentioned by three respondents (nearly 14%), was that parent education was a most important issue for pregnant women and infants.

Table C11: "Other" Most Important Health Issues for Pregnant Women and Infants

Health Issue	Number of Cases	Percentage of Total Cases
Free family planning services and products	5	31.3
Parent education	3	13.6
Improvement of social support policies	2	9.1

Note. The percentages in this table are calculated out of the 16 people who responded to this item. Because multiple response themes could be coded for each individual, the total percentages in this table may exceed 100.

There were three statistically significant differences in which male and female respondents selected most important health issues for pregnant women and infants. The first involved the factor "Increasing breastfeeding," and was accounted for by a higher percentage of female respondents (19.3%) selecting increasing breastfeeding as a most important factor for pregnant women and infants than male respondents (3.0%), χ^2 (df = 1) = 5.35, $p < .05$. The second involved the factor "Avoiding harmful substances (e.g., alcohol, tobacco/smoking, and drugs)," and was accounted for by a higher percentage of male respondents (54.5%) selecting avoiding harmful substances as a most important factor for pregnant women and infants than female respondents (27.6%), χ^2 (df = 1) = 9.76, $p < .01$. The third involved the factor "Access to a 'medical home' or health care provider that provides comprehensive, continuous, and compassionate care," and was accounted for by a higher percentage of male respondents (33.3%) selecting access to a medical home as a most important factor for pregnant women and children than female respondents (18.0%), χ^2 (df = 1) = 4.26, $p < .05$.

There were three statistically significant differences in which respondents in different health districts selected most important health issues for pregnant women and infants. The first involved the factor "Regular doctor visits for routine check-ups and preventive care," and was primarily accounted for by a lower percentage of respondents in District 5 (3.6%) selecting regular doctor visits as a most important factor for pregnant women and infants than respondents in any other region (the next-closest was the East Districts combining Districts 6 and 7, at 13.6%), χ^2 (df = 4) = 13.38, $p < .05$. The second involved the factor "Good nutrition and physical activity during pregnancy," and was primarily accounted for by higher percentages of respondents in the East Districts (29.5%) and Districts 3 (29.4%) and 5 (28.6%) selecting good nutrition and physical activity during pregnancy as a most important factor for pregnant women and infants than respondents in District 4 (11.7%) and the North Districts (i.e., Districts 1 and 2) (14.3%), χ^2 (df =

4) = 11.86, $p < .05$. The third involved the factor "Avoiding harmful substances (e.g., alcohol, tobacco/smoking, and drugs)," and was primarily accounted for by a higher percentage of respondents in District 5 (53.6%) selecting avoiding harmful substances as a most important factor for pregnant women and children than respondents in another other region (the next-closest was District 3, at 35.3%), χ^2 (df = 4) = 10.44, $p < .05$.

There were four statistically significant differences in which respondents in urban and rural/frontier counties selected most important health issues for pregnant women and infants. The first involved the factor "Access to mental health services," and was accounted for by a greater percentage of respondents in urban counties (26.6%) selecting access to mental health services as a most important factor for pregnant women and infants than respondents in rural/frontier counties (9.4%), χ^2 (df = 1) = 4.5, $p < .05$. The second involved the factor "Good nutrition and physical activity during pregnancy," and was accounted for by a higher percentage of respondents in rural/frontier counties (34.4%) selecting good nutrition and physical activity during pregnancy as a most important factor for pregnant women and infants than respondents in urban counties (17.0%), χ^2 (df = 1) = 5.45, $p < .05$. The third involved the factor "Healthy weight gain during pregnancy," and was accounted for by a higher percentage of respondents in rural/frontier counties (15.6%) selecting healthy weight gain during pregnancy as a most important factor for pregnant women and children than respondents in urban counties (5.7%), χ^2 (df = 1) = 4.33, $p < .05$. The fourth involved the factor "Avoiding harmful substances (e.g., alcohol, tobacco/smoking, and drugs)," and was accounted for by a higher percentage of respondents in rural/frontier counties (46.9%) selecting avoiding harmful substances as a most important factor for pregnant women and infants than respondents in urban counties (28.8%), χ^2 (df = 1) = 4.28, $p < .05$.

There were two statistically significant differences in which respondents at different income levels selected most important health issues for pregnant women and infants. The first involved the factor "Regular doctor visits for routine check-ups and preventive care," χ^2 (df = 9) = 17.42, $p < .05$. Interestingly, there was no discernible pattern to characterize the differences; some respondents in lower income groups and higher income groups selected regular doctor visits as being a most important health issue for pregnant women and infants at a fairly high rate (e.g., 39.3% for those with estimated family incomes between $20,000-$29,999 and 28.6% of those between $90,000-$99,999) and some respondents in lower and higher income groups selected regular doctor visits at much lower levels (e.g., 4.5% for those with estimated family incomes between $40,000-$49,999 and 14.3% of those over $100,000). The second involved the factor "Access to a 'medical home' or health care provider that provides comprehensive, continuous, and compassionate care," and was accounted for by a higher percentage of higher income respondents (e.g., 28.6% and 30.0% for those with estimated family incomes of $90,000-$99,999 and over $100,00, respectively) selecting access to a medical home as a most important factor for women aged 18-44 than lower income respondents (e.g., 4.8% and 17.9% of those with estimated family incomes of under $20,000 and $20,000-$29,999, respectively), χ^2 (df = 9) = 18.73, $p < .05$.

There were three statistically significant differences in which respondents with and without CYSHCNs selected most important health issues for pregnant women and infants. The first involved the factor "Regular doctor visits for routine check-ups and preventive care," and was

accounted for by a higher percentage of respondents with a CYSHCN (31.7%) selecting regular doctor visits as a most important factor for women aged 18-44 than respondents without a CYSHCN (15.6%), χ^2 (df = 1) = 9.35, $p < .01$. The second involved the factor "Screening for disorders (Newborn screening)," and was accounted for by a higher percentage of respondents with a CYSHCN (14.9%) selecting screening for disorders as a most important factor for women aged 18-44 than respondents without a CYSHCN (3.8%), χ^2 (df = 1) = 10.31, $p < .01$. The third involved the factor "Access to a 'medical home' or health care provider that provides comprehensive, continuous, and compassionate care," and was accounted for by a higher percentage of respondents without a CYSHCN (24.4%) selecting access to a medical home as a most important factor for women aged 18-44 than respondents with a CYSHCN (12.9%), χ^2 (df = 1) = 5.14, $p < .05$.

Perception of most important issues related to the health of young children

All respondents were asked what they thought were the three most important issues that need to be addressed in their community to improve the health of young children (defined as those under the age of five). They were presented with 12 response options (see Table C12), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other issue they felt was important. As seen below in Table C12, among the 12 listed response options, the most commonly selected most important health issues for young children included: 1) healthy parenting and home environment (49%); 2) immunizations (nearly 40%); 3) regular doctor visits for routine check-ups and preventive care (over 31%); 4) access to adequate health insurance (nearly 30%); and 5) child abuse and neglect (28%). Among the same 12 listed response options, the least often selected most important health issues for young children included: 1) child safety and injury prevention (over 7%); 2) reducing exposure to second hand smoke (over 10%); 3) dental care (over 14%); and 4) access to a medical home (over 15%).

Table C12: Most Important Health Issues for Young Children		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Access to adequate health insurance	78	29.9
Regular doctor visits for routine check-ups and preventive care	82	**31.4**
Immunizations	103	**39.5**
Child abuse and neglect	73	28.0
Increasing physical activity	50	19.2
Childhood obesity	57	21.8
Child safety and injury prevention	19	7.3
Regular screening and services for healthy development	64	24.5
Dental care	37	14.2
Healthy parenting and home environment	128	**49.0**
Reducing exposure to second hand smoke (e.g., smoking around children or smoking in household)	27	10.3
Access to a "medical home" or health care provider that provides comprehensive, continuous, and compassionate care	40	15.1

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 261 people who responded to this item. Because respondents could select up to three issues, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of 18 respondents, or 6.9% of all respondents, selected at least one "Other" issue as one of the three most important issues that need to be addressed in their community to improve the health of young children. These "Other" factors were subjected to a content analysis procedure to identify common themes. As seen below in Table C13, four themes emerged in at least two of the responses. The most common theme, identified in nine comments (50% of all people who gave at least one response to this item), was that services and early interventions for CYSHCNs was a most important health issue for young children. The second-most common theme, mentioned by five respondents (nearly 23%), was that nutrition was a most important issue for young children.

Table C13: "Other" Most Important Health Issues for Young Children		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Services and early interventions for CYSHCNs	9	50.0
Nutrition	5	22.7
Mental health services	3	13.6
Parent education	2	9.1

Note. The percentages in this table are calculated out of the 18 people who responded to this item. Because multiple response themes could be coded for each individual, the total percentages in this table may exceed 100.

There were three statistically significant differences in which male and female respondents selected most important health issues for young children. The first involved the factor "Access to adequate health insurance," and was accounted for by a higher percentage of male respondents (45.5%) selecting access to adequate health insurance as a most important factor for young children than female respondents (27.6%), χ^2 (df = 1) = 4.37, $p < .05$. The second involved the factor "childhood obesity," and was accounted for by a higher percentage of male respondents (39.4%) selecting childhood obesity as a most important factor for young children than female respondents (19.3%), χ^2 (df = 1) = 6.82, $p < .01$. The third involved the factor "Regular screening and services for healthy development," and was accounted for by a higher percentage of female respondents (27.2%) selecting regular screening and services as a most important factor for young children than male respondents (6.1%), χ^2 (df = 1) = 6.96, $p < .01$.

There were two statistically significant differences in which respondents in different health districts selected most important health issues for young children. The first involved the factor "Regular doctor visits for routine check-ups and preventive care," and was primarily accounted for by higher percentages of respondents in District 4 (40.0%) and the North Districts (i.e., Districts 1 and 2) (34.3%) selecting regular doctor visits as a most important factor for young children than respondents in any other district (the next-closest was the East Districts combining Districts 6 and 7, at 22.7%, with District 5 the lowest at 17.9%), χ^2 (df = 4) = 10.02, $p < .05$. The second involved the factor "Healthy parenting and home environment," and was primarily accounted for by higher percentages of respondents in the East Districts (65.9%) and North Districts (60.0%) selecting healthy parenting and home environment as a most important factor for young children than respondents in District 4 (39.2%), χ^2 (df = 4) = 11.40, $p < .05$.

There were two statistically significant differences in which respondents in urban and rural/frontier counties selected most important health issues for young children. The first involved the factor "Regular doctor visits for routine check-ups and preventive care," and was accounted for by a higher percentage of respondents living in urban counties (34.1%) selecting access to regular doctor visits as a most important factor for young children than respondents in rural/frontier counties (12.5%), χ^2 (df = 1) = 6.06, $p < .05$. The second involved the factor "Child safety and injury prevention," and was accounted for by a higher percentage of respondents in rural/frontier counties (18.8%) selecting child safety and injury prevention as a most important factor for young children than respondents in urban counties (5.7%), χ^2 (df = 1) = 7.11, $p < .01$.

There were two statistically significant differences in which respondents with and without CYSHCNs selected most important health issues for young children. The first involved the factor "Access to adequate health insurance," and was accounted for by a higher percentage of respondents with a CYSHCN (40.6%) selecting access to adequate health insurance as a most important factor for young children than respondents without a CYSHCN (23.1%), χ^2 (df = 1) = 9.02, $p < .01$. The second involved the factor "Immunizations," and was accounted for by a higher percentage of respondents without a CYSHCN (48.8%) selecting immunizations as a most important factor for young children than respondents with a CYSHCN (24.8%), χ^2 (df = 1) = 14.93, $p < .001$.

Perception of most important issues related to the health of teens

All respondents were asked what they thought were the three most important issues that need to be addressed in their community to improve the health of teens. They were presented with 12 response options (see Table C14), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other issue they felt was important. As seen below in Table C14, among the 12 listed response options, the most commonly selected most important health issues for teens included: 1) teen sexual health such as prevention of STDs and pregnancy (over 43%); 2) access to mental health services (nearly 42%); 3) use of substances such as alcohol, tobacco, and drugs (nearly 40%); and bullying (over 31%). Among the same 12 listed response options, the least often selected most important health issues for teens included: 1) injury prevention (nearly 7%); 2) dental care (nearly 11%); 3) immunizations (12%); and 4) access to a medical home (nearly 14%).

Table C14: Most Important Health Issues for Teens		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Access to adequate health insurance	76	29.3
Regular doctor visits for routine check-ups and preventive care	48	18.5
Immunizations	31	*12.0*
Substance use (e.g., alcohol, tobacco, drugs)	103	**39.8**
Dental care	28	*10.8*
Obesity	48	18.5
Increasing physical activity	68	26.3
Bullying	81	31.3
Access to mental health services	108	**41.7**
Injury prevention (e.g., seatbelt use)	17	*6.6*
Teen sexual health (e.g., STD and pregnancy prevention)	112	**43.2**
Access to a "medical home" or health care provider that provides comprehensive, continuous, and compassionate care	35	13.5

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 259 people who responded to this item. Because respondents could select up to three issues, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of 16 respondents, or 6.2% of all respondents who selected at least one health issue for teens, selected at least one "Other" issue as one of the three most important issues that need to be addressed in their community to improve the health of teens. These "Other" factors were subjected to a content analysis procedure to identify common themes. As seen below in Table C15, four themes emerged in at least two of the responses. The most common theme, identified in four comments (25% of all people who gave at least one response to this item), was that services for children with special needs was a most important health issue for teens. The second-

most common themes, mentioned by three respondents (nearly 19%) each, were that improving the school environment and nutrition were most important issues for teens.

Table C15: "Other" Most Important Health Issues for Teens		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Services for children with special needs	4	25.0
Improving school environment	3	18.8
Nutrition	3	18.8
Substance abuse and mental health screenings	2	12.5

Note. The percentages in this table are calculated out of the 16 people who responded to this item. Because multiple response themes could be coded for each individual, the total percentages in this table may exceed 100.

There were five statistically significant differences in which male and female respondents selected most important health issues for teens. The first involved the factor "Access to adequate health insurance," and was accounted for by a higher percentage of male respondents (46.9%) selecting access to adequate health insurance as a most important factor for teens than female respondents (26.9%), χ^2 (df = 1) = 5.41, $p < .05$. The second involved the factor "Immunizations," and was accounted for by a higher percentage of male respondents (25.0%) selecting immunizations as a most important factor for teens than female respondents (10.1%), χ^2 (df = 1) = 5.88, $p < .05$. The third involved the factor "Dental care," and was accounted for by a higher percentage of female respondents (12.3%) selecting dental care as a most important factor for teens than male respondents (0.0%), χ^2 (df = 1) = 4.43, $p < .05$. The fourth involved the factor "Obesity," and was accounted for by a higher percentage of male respondents (34.4%) selecting obesity as a most important factor for teens than female respondents (16.3), χ^2 (df = 1) = 6.07, $p < .05$. The fifth involved the factor "Bullying," and was accounted for by a higher percentage of female respondents (33.9%) selecting bullying as a most important factor for teens than male respondents (12.5%), χ^2 (df = 1) = 5.99, $p < .05$.

There were three statistically significant differences in which respondents in different health districts selected most important health issues for teens. The first involved the factor "Substance use (e.g., alcohol, tobacco, drugs)" and was primarily accounted for by a higher percentage of respondents in the North Districts (i.e., Districts 1 and 2) (71.4%) selecting substance use as a most important factor for teens than respondents in any other region (the next-closest was the East Districts combining Districts 6 and 7, at 45.5%, with District 3 the lowest at 29.4%), χ^2 (df = 4) = 20.25, $p < .001$. The second involved the factor "Bullying," and was primarily accounted for by a lower percentage of respondents in the North Districts (11.4%) selecting bullying as a most important factor for teens than respondents in any other district (the next-closest was District 5 at 28.6%, with the East Districts the highest at 43.2%), χ^2 (df = 4) = 10.18, $p < .05$. The third involved the factor "Access to mental health services," and was primarily accounted for by higher percentages of respondents in District 3 (58.8%) and District 4 (51.7%) selecting access to mental health services as a most important factor for teens than respondents in any other district (the next-closest was District 5 at 35.7%, with the East Districts the lowest at 18.2%), χ^2 (df = 4) = 23.05, $p < .001$.

There was one statistically significant difference in which respondents at different income levels selected most important health issues for teens. This involved the factor "Bullying," χ^2 (df = 9) = 33.79, $p < .001$. Although there was not a clear linear trend across the data, this result appears to be accounted for by greater percentages of respondents in lower income categories (e.g., 61.9% of those with estimated family incomes less than $20,000 and 52.0% of those between $30,000-$39,999) selecting bullying as a most important factor for teens than respondents in higher income categories (e.g., 13.0% of those with estimated family incomes over $100,000 and 23.8% of those between $90,000-$99,999).

There were five statistically significant differences in which respondents with and without CYSHCNs selected most important health issues for teens. The first involved the factor "Access to adequate health insurance," and was accounted for by a higher percentage of respondents with a CYSHCN (38.0%) selecting access to adequate health insurance as a most important factor for teens than respondents without a CYSHCN (23.9%), χ^2 (df = 1) = 5.89, $p < .05$. The second involved the factor "Immunizations," and was accounted for by a higher percentage of respondents without a CYSHCN (17.6%) selecting immunizations as a most important factor for teens than respondents with a CYSHCN (3.0%), χ^2 (df = 1) = 12.44, $p < .001$. The third involved the factor "Bullying," and was accounted for by a higher percentage of respondents with a CYSHCN (43.0%) selecting bullying as a most important factor for teens than respondents without a CYSHCN (23.9%), χ^2 (df = 1) = 10.42, $p < .01$. The fourth involved the factor "Access to mental health services," and was accounted for by a higher percentage of respondents with a CYSHCN (51.0%) selecting access to mental health services as a most important factor for teens than respondents without a CYSHCN (35.8%), χ^2 (df = 1) = 5.80, $p < .05$. The fifth involved the factor "Teen sexual health (e.g., STD and pregnancy prevention)," and was accounted for by a higher percentage of respondents without a CYSHCN (49.7%) selecting teen sexual health as a most important factor for teens than respondents with a CYSHCN (33.0%), χ^2 (df = 1) = 6.96, $p < .01$.

Parent of CYSHCN

All respondents were asked whether they were a parent or guardian of one or more CYSHCNs. Of those who responded to this item, 38.7% (101 respondents) reported being the parent or guardian of one or more CYSHCNs, and 61.3% reported being not being such a parent or guardian.

Several additional analyses were performed to determine whether parents/guardians of CYSHCNs differed systematically from those who were not parents/guardians of CYSHCNs in terms of their demographic characteristics. It was found that a much higher percentage of parents/guardians of CYSHCNs were female (43.4%) than male (6.1%), χ^2 (df = 1) = 16.96, $p < .001$. It was also found that much higher percentages of parents/guardians of CYSHCNs reported lower estimated annual family incomes than those who were not such a parent or guardian (e.g., 16.8% vs. 2.5% at the below $20,000 level, 13.9% vs. 8.8% at the $20,000-$29,999 level, and 14.9% vs. 6.3% at the $30,000-$39,999 level); on the other hand, those who were not parents/guardians of CYSHCNs (38.4%) were much more likely than those who were such parents or guardians (8.9%) to report the highest income level (over $100,000), χ^2 (df = 9) = 50.48, $p < .001$. The distribution of those who were and were not parents/guardians of

CYSHCNs also differed across health regions; whereas parents/guardians of CYSHCNs constituted the minority of the respondents in all other regions, they were a clear majority (67.6%) of the respondents in Region 3.

Medical Specialists Seen by CYSHCN in the Past Two Years

All respondents who identified themselves as a parent/guardian of one or more CYSHCNs were asked to identify the types of medical specialist seen by their CYSHCN (or their oldest CYSHCN, if they had more than one CYSHCN) in the past two years. They were presented with 13 different types of medical specialists (see Table C16) to select among, as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other type of specialist had been seen by their CYSHCN. As seen below in Table C16, among the 12 listed response options, the most commonly selected types of medical specialists seen by CYSHCNs were: 1) developmental specialists (69%); 2) speech therapists (60%); 3) psychiatric specialists (54%); and 4) physical therapists (44%). Among the same 12 listed response options, the least often selected types of medical specialists seen by CYSHCNs included: 1) oncologists (2%); 2) metabolic specialists (8%); 3) pulmonologists (10%); and 4) cardiologists and geneticists (both 13%).

Table C16: Types of Medical Specialists Seen by CYSHCNs in the Past Two Years

Medical Specialist Type	Number of Cases	Percentage of Total Cases
Cardiologist	13	13.0
Developmental	69	**69.0**
Geneticist	13	13.0
Metabolic	8	*8.0*
Orthopedic	24	24.0
Psychiatric	54	**54.0**
Neurologic	36	36.0
Pulmonologist	10	*10.0*
Oncologist	2	*2.0*
Physical Therapist	44	**44.0**
Orthodontist	19	19.0
Speech Therapist	60	**60.0**

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 100 people who responded to this item. Because respondents could select up as many types of medical specialists as their CYSHCNs had seen in the past two years, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of 53 respondents, or 52.5% of all respondents who indicated being a parent/guardian of at least one CYSHCN, selected at least one "Other" option as one of the types of medical specialists seen by their CYSHCNs in the past two years. These "Other" types of specialists are summarized in Table C17. The most commonly reported types of specialists among the "Other"

responses included: 1) occupational therapists (nearly 53%); 2) gastroenterologists (over 15%); and 3) endocrinologists; and 4) psychologists/neuropsychologists (over 13% each).

Table C17: "Other" Types of Medical Specialists Seen by CYSHCNs in the Past Two Years		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Occupational therapist	28	52.8
Gastroenterologist	8	15.1
Endocrinologist	7	13.2
Psychologist/Neuropsychologist	7	13.2
Ophthalmologist	5	9.4
Counseling	4	7.5
Urologist	4	7.5
Behavioral and developmental therapist	4	7.5
Hematologist	2	3.8
Neurosurgeon	2	3.8
Hearing specialist	2	3.8

Note. The percentages in this table are calculated out of the 53 people who responded to this item. Because multiple response themes could be coded for each individual, the total percentages in this table may exceed 100.

Difficulty Visiting Medical Specialists

All respondents who identified themselves as a parent/guardian of one or more CYSHCNs were asked several questions related to whether they had experienced difficulties visiting medical specialists for their CYSHCNs. Those respondents whose CYSHCN had more than one medical specialist were asked to answer the questions thinking of the medical specialist they had the most difficulty in visiting.

The first question asked the respondents whether their CYSHCN had ever missed an appointment with his or her specialist for travel-related reasons. Among those who responded to this item, 41.4% reported that their CYSHCN had missed an appointment due to travel-related reasons, whereas 58.6% reported that their CYSHCN had not missed an appointment for such a reason.

The second question asked the respondents to report how many miles they had to travel to visit their CYSHCN's medical specialist, with four distance options to choose from. As seen below in Table C18, over two-thirds of the respondents reported that they did not have to travel more than 30 miles to visit their CYSHCN's medical specialist, meaning nearly one-third had to travel further than 30 miles. It seems noteworthy that 15% of the respondents reported having to travel at least 100 miles to visit their CYSHCN's medical specialist—with two-thirds of those reporting having to travel more than 250 miles.

Table C18: Distance Traveled to Visit Medical Specialist		
Distance in Miles	**Number of Cases**	**Percentage of Total Cases**
0 – 30	68	68.0
31 – 99	17	17.0
100 – 250	5	5.0
More than 250	10	10.0

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 100 people who responded to this item.

The third question asked the respondents to report how they travel to visit their CYSHCN's medical specialist, with four travel mode options to choose from, as well as an "Other" option. As seen below in Table C19, the mode of travel used by nearly all of the respondents was personal vehicle, with one respondent each reporting using air or bus. No respondents reported using a train to visit their CYSHCN's medical specialist.

Table C19: Mode of Travel to Visit Medical Specialist		
Mode of Travel	**Number of Cases**	**Percentage of Total Cases**
Personal vehicle	99	99.0
Air	1	1.0
Train	0	0.0
Bus	1	1.0

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Because respondents could select more than one mode of travel, the cumulative percentage exceeds 100. Percentages are calculated out of the 100 people who responded to this item.

The fourth question asked the respondents to report how many times per year their CYSHCN visits his or her medical specialist, with six numerical options to choose from. As seen below in Table C20, nearly 53% of the respondents reported that their CYSHCN visits his or her medical specialist more than four times per year.

Table C20: Number of Times Per Year Visiting Medical Specialist		
Number of Times Per Year	**Number of Cases**	**Percentage of Total Cases**
Less than once	4	4.0
Once	7	7.1
Twice	21	21.2
Three times	8	8.1
Four times	7	7.1
More than four times	52	52.5

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 99 people who responded to this item.

The fifth question asked the respondents to report on the source(s) of their CYSHCN's health insurance, with four insurance options (including a "No health insurance option") to choose

from. As seen below in Table C21, the largest groups of respondents (40% each) reported that their CYSHCN was covered by public insurance or a combination of both public and private insurance. Less than 20% of the respondents' CYSHCNs were covered by private insurance only, and only one had no health insurance at all.

Table C21: Source of CYSHCN Health Insurance		
Source of Health Insurance	**Number of Cases**	**Percentage of Total Cases**
Public insurance (such as Medicaid, CHIP, Medicare, Indian Health Services, or Military)	40	40.0
Private insurance (such as Blue Cross, Aetna, or other insurance provided by an employer)	19	19.0
Both public and private insurance	40	40.0
No health insurance	1	1.0

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 100 people who responded to this item.

The sixth question asked the respondents whether their CYSHCN's health insurance was accepted at the closest medical specialist. Among those who responded to this item, 85.0% reported that "Yes, the closest medical specialist accepts my child's health insurance," whereas 7% reported that "No, I have to travel to a more distant provider who will accept my child's health insurance." Eight percent reported that they did not know whether their child's health insurance was accepted at the closest medical specialist.

Greatest problems with receiving quality health care for CYSHCNs

All respondents were asked what they thought were the three greatest problems with receiving quality health care for CYSHCNs. They were presented with six response options (see Table C22), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other problems they believed existed. As seen below in Table C22, among the six listed response options, the most commonly selected greatest problems with receiving health care for CYSHCNs included: 1) cost of health care (over 60%); 2) access to community resources (55%); and 3) lack of medical specialists in the respondents' areas (nearly 50%). Among the same six listed response options, the least often selected greatest problems with receiving quality health care for CYSHCNs included: 1) lack of health providers in the respondents' areas (nearly 26%); and 2) lack of affordable health insurance (42%).

Table C22: Greatest Problems with Receiving Quality Health Care for CYSHCNs		
Problem	**Number of Cases**	**Percentage of Total Cases**
Cost of health care	148	**60.4**
Lack of health care providers in my area	63	*25.7*
Lack of medical specialists in my area	122	49.8
Lack of affordable health insurance	103	42.0
Distance to travel to receive health care services	95	*38.8*
Access to community resources	135	**55.0**

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 245 people who responded to this item. Because respondents could select up to three issues, the cumulative percentage exceeds 100. The two highest percentages are presented in bold, and the two lowest percentages are presented in italics.

A total of 69 respondents, or 28.2% of all respondents who selected at least one greatest problem with receiving quality health care for CYSHCNs, selected at least one "Other" issue as a largest problem. These "Other" issues were subjected to a content analysis procedure to identify common themes. As seen below in Table C23, 13 themes emerged in at least two of the responses. The most common theme, identified in nine comments (13% of all people who gave at least one response to this item), was that lack of health insurance was one of the largest problems with receiving quality health care for CYSHCNs. The second-most common theme, mentioned by six respondents (nearly 9%), was that lack of providers was one of the largest problems with receiving quality health care for CYSHCNs.

Table C23: "Other" Greatest Problems with Receiving Quality Health Care for CYSHCNs		
Problem	**Number of Cases**	**Percentage of Total Cases**
Lack of health insurance coverage	9	13.0
Lack of providers	6	8.7
Lack of services for autism	5	7.2
Parent education, advocacy, and support	4	5.8
Mental health	4	5.8
Lack of services for older children	4	5.8
Coordinated health care	4	5.8
Transportation	4	5.8
Lack of Psychosocial Rehabilitation Services	3	4.3
More supportive work policies (flexible hours to care for a CYSHCN)	3	4.3
Immunization	3	4.3
Cost of lodging	2	2.9
Hearing specialist	2	2.9

Note. The percentages in this table are calculated out of the 69 people who responded to this item. Because multiple response themes could be coded for each individual, the total percentages in this table may exceed 100.

There was one statistically significant difference in which respondents in different health districts selected greatest problems with receiving quality health care for CYSHCNs. This involved the factor "Distance to travel to receive health care services" and was primarily accounted for by higher percentages of respondents in the North Districts (i.e., Districts 1 and 2) (54.5%) and District 5 (53.8%) selecting distance to travel to receive health care services as a greatest problem with receiving quality health care for CYSHCNs than respondents in District 4 (29.2%), χ^2 (df = 4) = 10.49, $p < .05$.

There was one statistically significant difference in which respondents in urban and rural/frontier counties selected greatest problems with receiving quality health care for CYSHCNs. This involved the factor "Distance to travel to receive health care services," and was accounted for by a higher percentage of respondents in rural/frontier counties (56.7%) selecting distance to travel to receive health care services as a greatest problem with receiving quality health care for CYSHCNs than respondents in urban counties (36.3%), χ^2 (df = 1) = 4.61, $p < .05$.

There was one statistically significant difference in which respondents at different income levels selected greatest problems with receiving quality health care for CYSHCNs. This involved the factor "Lack of affordable health insurance," χ^2 (df = 9) = 21.43, $p < .05$. There was no clear, discernible pattern of percentages in the results. The three estimated annual income levels in which respondents most often selected lack of affordable health insurance as a greatest problem with receiving quality health care for CYSHCNs were $60,000-$69,999 (75.0%), $80,000-$89,999 (57.1%), and $20,000-$29,999 (53.8%). The three estimated annual income levels in which respondents least often selected lack of affordable health insurance as a greatest problem with receiving quality health care for CYSHCNs were $90,000-$99,999 (15.3%), $70,000-$79,999 (23.1%), and $40,000-$49,999 (30.0%).

There were four statistically significant differences in which respondents with and without CYSHCNs selected greatest problems with receiving quality health care for CYSHCNs. The first involved the factor "Cost of health care," and was accounted for by a higher percentage of respondents without a CYSHCN (72.3%) selecting cost of health care as a greatest problem with receiving quality health care for CYSHCNs than respondents with a CYSHCN (42.3%), χ^2 (df = 1) = 22.09, $p < .001$. The second involved the factor "Lack of health providers in my area," and was accounted for by a higher percentage of respondents with a CYSHCN (33.0%) selecting lack of health providers in my area as a greatest problem with receiving quality health care for CYSHCNs than respondents without a CYSHCN (20.9%), χ^2 (df = 1) = 4.45, $p < .05$. The third involved the factor "Lack of medical specialists in my area," and was accounted for by a higher percentage of respondents with a CYSHCN (61.9%) selecting lack of medical specialists as a greatest problem with receiving quality health care for CYSHCNs than respondents without a CYSHCN (41.9%), χ^2 (df = 1) = 9.34, $p < .01$. The fourth involved the factor "Lack of affordable health insurance," and was accounted for by a higher percentage of respondents without a CYSHCN (50.7%) selecting lack of affordable health insurance as a greatest problem with receiving quality health care for CYSHCNs than respondents with a CYSHCN (28.9%), χ^2 (df = 1) = 11.44, $p < .01$.

Greatest needs for CYSHCNs

All respondents were asked what they thought were the three greatest needs for CYSHCNs. They were presented with six response options (see Table C24), as well as the opportunity to select up to three "Other" options. Those who selected an "Other" option were asked to specify what other need they believed existed. As seen below in Table C24, among the six listed response options, the most commonly selected greatest needs for CYSHCNs included: 1) access to specialty care (nearly 40%); 2) inclusive school-based programs (over 32%); 3) early intervention for CYSHCNs (nearly 32%); 4) helping families coordinate care for their CYSHCN (nearly 31%); and 5) early identification of special health care needs (nearly 28%). Among the same six listed response options, the least often selected greatest needs for CYSHCNs included: 1) access to home care services (over 9%); 2) awareness of maltreatment or abuse (over 11%); 3) access to a "medical home" or health care provider that provides comprehensive, coordinated, continuous, and compassionate care (nearly 12%); 4) developmental, social, or emotional screening (over 12%); and 5) access to condition-specific health information (nearly 14%).

Table C24: Greatest Needs for CYSHCNs

Need	Number of Cases	Percentage of Total Cases
Access to adequate health insurance	59	24.2
Access to specialty care	97	**39.8**
Access to condition-specific health information	34	13.9
Inclusive school-based programs	79	**32.4**
Inclusive community programs	60	24.6
Access to home care services	23	*9.4*
Early identification of special health needs	68	27.9
Developmental, social, or emotional screening	30	12.3
Early intervention for CYSHCNs	77	**31.6**
Awareness of maltreatment or abuse	27	*11.1*
Provider capacity and education for CYSHCNs	51	20.9
Helping families coordinate care for their CYSHCN	75	30.7
Access to a "medical home" or health care provider that provides comprehensive, coordinated, continuous, and compassionate care	29	*11.9*

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 244 people who responded to this item. Because respondents could select up to three issues, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

A total of 23 respondents, or 9.4% of all respondents who selected at least one greatest need for CYSHCNs, selected at least one "Other" issue as one of the greatest needs of CYSHCNs. These "Other" needs were subjected to a content analysis procedure to identify common themes. As seen below in Table C25, five themes emerged in at least two of the responses. The most

common theme, identified in three comments (13% of all people who gave at least one response to this item), was that parent education and support was one of the greatest needs for CYSHCNs.

Table C25: "Other" Greatest Needs for CYSHCNs		
Health Issue	**Number of Cases**	**Percentage of Total Cases**
Parent education and support	3	13.0
Lack of qualified providers	2	8.7
Mental health services	2	8.7
Coordinated health care	2	8.7
Transportation	2	8.7

Note. The percentages in this table are calculated out of the 23 people who responded to this item. Because multiple response themes could be coded for each individual, the total percentages in this table may exceed 100.

There were three statistically significant differences in which male and female respondents selected greatest needs for CYSHCNs. The first involved the factor "Access to adequate health insurance," and was accounted for by a higher percentage of male respondents (45.2%) selecting access to adequate health insurance as a greatest need for CYSHCNs than female respondents (21.1%), χ^2 (df = 1) = 8.53, $p < .01$. The second involved the factor "Provider capacity and education to care for CYSHCNs," and was accounted for by a higher percentage of female respondents (23.5%) selecting provider capacity and education to care for CYSHCNs as a greatest need for CYSHCNs than male respondents (3.2%), χ^2 (df = 1) = 6.71, $p < .05$. The third involved the factor "Access to a 'medical home' or health care provider that provides comprehensive, coordinated, continuous, and compassionate care," and was accounted for by a higher percentage of male respondents (25.8%) selecting access to a medical home as a greatest need for CYSHCNs than female respondents (9.9%), χ^2 (df = 1) = 6.57, $p < .05$.

There were three statistically significant differences in which respondents at different income levels selected greatest needs for CYSHCNs. The first involved the factor "Access to specialty care," χ^2 (df = 9) = 17.03, $p < .05$. There was no clear, discernible pattern of percentages in the results. The three estimated annual income levels in which respondents most often selected access to specialty care as a greatest need for CYSHCNs were over $100,000 (51.5%), $70,000-$79,999 (50.0%), and $20,000-$29,999 (48.1%). The three estimated annual income levels in which respondents least often selected access to specialty care as a greatest need for CYSHCNs were $60,000-$69,999 (10.0%), $80,000-$89,999 (16.7%), and under $20,000 (30.0%). The second involved the factor "Access to condition-specific health information," and was primarily accounted for by higher percentages of respondents in lower estimated annual income groups (e.g., 30%, 22.2%, and 21.7% for those in the under $20,000, $20,000-$29,999, and $30,000-$39,999 income groups, respectively) selecting access to condition-specific health information than respondents in higher income groups (e.g., 4.5%, 9.5%, and 8.3% for those in the over $100,000, $90,000-$99,999, and $80,000-$89,999 income groups, respectively), χ^2 (df = 9) = 17.46, $p < .05$. The third involved the factor "Inclusive school-based programs," χ^2 (df = 9) = 25.75, $p < .01$. There was no clear, discernible pattern of percentages in the results. The three estimated annual income levels in which respondents most often selected access to inclusive

school-based programs as a greatest need for CYSHCNs were under $20,000 (55.0%), $20,000-$29,999 (51.9%), and $80,000-$89,999 (50.0%). The three estimated annual income levels in which respondents least often selected access to specialty care as a greatest need for CYSHCNs were $70,000-$79,999 (8.3%), $50,000-$59,999 (17.4%), and $30,000-$39,000 (17.4%).

There were five statistically significant differences in which respondents with and without CYSHCNs selected greatest needs for CYSHCNs. The first involved the factor "Access to condition-specific health information," and was accounted for by a higher percentage of respondents with a CYSHCN (20.4%) selecting access to condition-specific health information as a greatest need for CYSHCNs than respondents without a CYSHCN (9.6%), χ^2 (df = 1) = 5.72, $p < .05$. The second involved the factor "Inclusive school-based programs," and was accounted for by a higher percentage of respondents with a CYSHCN (42.9%) selecting inclusive school-based programs as a greatest need for CYSHCNs than respondents without a CYSHCN (25.3%), χ^2 (df = 1) = 8.21, $p < .01$. The third involved the factor "Inclusive community programs," and was accounted for by a higher percentage of respondents with a CYSHCN (31.6%) selecting inclusive community programs as a greatest need for CYSHCNs than respondents without a CYSHCN (19.9%), χ^2 (df = 1) = 4.38, $p < .05$. The fourth involved the factor "Early identification of special health needs," and was accounted for by a higher percentage of respondents without a CYSHCN (34.9%) selecting early identification of special health needs as a greatest need for CYSHCNs than respondents with a CYSHCN (17.3%), χ^2 (df = 1) = 9.02, $p < .01$. The fifth involved the factor "Early intervention for young CYSHCNs," and was accounted for by a higher percentage of respondents without a CYSHCN (41.1%) selecting early identification of special health needs as a greatest need for CYSHCNs than respondents with a CYSHCN (17.3%), χ^2 (df = 1) = 15.31, $p < .001$.

Provider Survey

<u>Biggest problems with serving CYSHCNs</u>

The first MCH-related question posed to providers asked them to identify what they perceived to be the biggest challenges with serving CYSHCNs. A total of 28 providers (or 43.1% of the 65 providers who responded to the survey within the data collection period) reported at least one biggest challenge to serving CYSHCNs (23 others either responded "N/A" or listed no specific challenge). The respondents' comments were subjected to a content analysis procedure to identify common themes. As seen below in Table P1, seven themes emerged in at least two of the responses. The most common theme, identified in 16 comments (57% of all people who gave at least one response to this item), was that family issues (e.g., parents complying with provider recommendations, parental involvement, communication among parent, child, and provider) represent a large challenge to serving CYSHCNs. Other common themes were that available resources (e.g., lack of specialist services in a rural area, availability of resources when needed, community resource availability) and accessing available care (e.g., getting to available care, access to specialty ancillary services) were large challenges to serving CSHNCs.

Table P1: Biggest Challenges Serving CYSHCNs		
Challenge	**Number of Cases**	**Percentage of Total Cases**
Family issues	16	57.1
Available resources	10	35.7
Access to care/getting available care	9	32.1
Lack of sub-specialists	8	28.6
Knowledge of available resources	7	25.0
Care coordination	3	10.7
Costs	3	10.7

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 28 providers who responded to this item. Because respondents could report multiple challenges, the cumulative percentage exceeds 100.

Common challenges for pediatric patients

The second MCH-related question posed to providers asked them to identify what they perceived to be common challenges for pediatric patients. A total of 27 providers (or 41.5% of the 65 providers who responded to the survey within the data collection period) reported at least one common challenge for pediatric patients (24 others either responded "N/A" or listed no specific challenge). The respondents' comments were subjected to a content analysis procedure to identify common themes. As seen below in Table P2, 13 themes emerged in at least two of the responses. The most common theme, identified in 15 comments (56% of all people who gave at least one response to this item), was that family issues/problems (e.g., poor communication between parents in split households, divorce placing children "in the middle," single parent homes) represent a large challenge to pediatric patients. Other common themes were that obesity (44%), immunization problems (41%), and mental health (37%) were common challenges to pediatric patients.

Table P2: Common Challenges for Pediatric Patients		
Challenge	**Number of Cases**	**Percentage of Total Cases**
Family issues/problems	15	55.6
Obesity	12	44.4
Immunization problems	11	40.7
Mental health	10	37.0
Poor diet	7	25.9
Decreased exercise	5	18.5
Problems with access to care	4	14.8
Affordable care	3	11.1
Drug abuse	3	11.1
Over-prescription of antibiotics	3	11.1
Overuse of electronic media	2	7.4
Chronic pediatric illnesses	2	7.4
Annual screening	2	7.4

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 27 providers who responded to this item. Because respondents could report multiple challenges, the cumulative percentage exceeds 100. The three highest percentages are presented in bold, and the three lowest percentages are presented in italics.

Common challenges for pregnant patients and women aged 18-44

The third MCH-related question posed to providers asked them to identify what they perceived to be common challenges for pregnant patients and women aged 18-44. A total of 25 providers (or 38.5% of the 65 providers who responded to the survey within the data collection period) reported at least one common challenge for pregnant patients and women aged 18-44 (26 others either responded "N/A" or listed no specific challenge). The respondents' comments were subjected to a content analysis procedure to identify common themes. As seen below in Table P3, 13 themes emerged in at least two of the responses. The most common theme, identified in 10 comments (40% of all people who gave at least one response to this item), was that problems with prenatal care (e.g., prenatal care education, few obstetrician providers, single pregnant mothers with lacking support) represent a large challenge for pregnant patients and women aged 18-44. Other common themes were that mental health (32%), health care costs (28%), and lifestyle issues (e.g., not living an active lifestyle, poor diet, lack of proper exercise) were common challenges to these populations.

Table P3: Common Challenges for Pregnant Patients and Women Aged 18-44		
Challenge	**Number of Cases**	**Percentage of Total Cases**
Problems with prenatal care	10	40.0
Mental health	8	32.0
Health care costs	7	28.0
Lifestyle issues	6	24.0
Available resources	6	24.0
Obesity	5	20.0
STIs	5	20.0
Diabetes	4	16.0
Wellness care	4	16.0
Birth control	3	12.0

Note. Percentages are rounded to the first decimal place, so the total percentage may not equal 100. Percentages are calculated out of the 25 providers who responded to this item. Because respondents could report multiple challenges, the cumulative percentage exceeds 100.

Key Informant Interviews

Nineteen key informant interviews were completed during August and September 2014. Key informant interviews were completed with five of seven Public District Health Department Directors or key staff members (i.e., Women's Health Program Coordinators, WIC Program Coordinators, etc.), three tribal health program employees from two different Idaho Tribal Health Departments, and directors of non-governmental health and service agencies that provide services to women, children, and CYSHCNs.

The same analytic strategy was used for each key informant interview item. As discussed in the Methodology section of this report, interviewees' comments were first compared against items on the Consumer survey to determine whether they matched any of the key themes listed there. Then, the interviewees' comments that did not match any of the themes on the Consumer survey were analyzed and tallied. The responses to the individual items, and then the responses collapsed across all items and for all groups, are presented in Tables KI1-KI7 below.

<u>Most important preventive and primary care services needs for pregnant women, mothers, and infants</u>

All interviewees were asked to provide their perceptions of the most important needs for preventive and primary care services for pregnant women, mothers, and infants in their respective organization's service area. As seen below in Table KI1, among the 17 interviewees who answered this question, the most commonly identified needs for this population included: 1) breastfeeding (just over 47%); 2) good nutrition, prenatal care, and a medical home (all over 41%); 3) avoiding harmful substances (over 29%); and 4) dental care and home visiting (both nearly 24%).

Table KI1: Most Important Needs for Preventive and Primary Care Services of Pregnant Women, Mothers and Infants in Respondent Service Area		
Needs Cited from Consumer Survey	**Number of Cases**	**Percentage of Total Interviewees**
Breastfeeding	8	47.1
Good nutrition	7	41.2
Prenatal care	7	41.2
Medical home	7	41.2
Avoiding harmful substances	5	29.4
Dental care	4	23.5
Mental health	2	11.8
Needs Cited but Not Included in Consumer Survey		
Home visiting	4	23.5
Family planning	3	17.6
Immunization	3	17.6
Chronic disease (obesity, diabetes)	3	17.6
Child abuse/domestic violence	2	11.8
Refugee health	2	11.8

Note. Percentages are calculated out of the 17 interviewees who responded to this item.

Most important preventive and primary care services needs for women of reproductive age

All interviewees were asked to provide their perceptions of the most important needs for preventive and primary care services for women of reproductive age (18-44 years of age) in their respective organization's service area. As seen below in Table KI2, among the 11 interviewees who answered this question, the most commonly identified needs for this population included: 1) a medical home (nearly 46%); and 2) regular MD visits, dental care, and family planning (all over 36%).

Table KI2: Most Important Needs for Preventive and Primary Care Services of Women of Reproductive Age (18-44) in Respondent Service Area		
Needs Cited from Consumer Survey	**Number of Cases**	**Percentage of Total Interviewees**
Medical home	5	45.5
Regular MD visit	4	36.4
Dental care	4	36.4
Family planning	4	36.4
Substance abuse	2	18.2
Needs Cited but Not Included in Consumer Survey		
Weight loss	1	9.1
Vaccinations	1	9.1

Note. Percentages are calculated out of the 11 interviewees who responded to this item.

Most important preventive and primary care services needs for women of reproductive age

All interviewees were asked to provide their perceptions of the most important needs for preventive and primary care services for children under the age of five in their respective organization's service area. As seen below in Table KI3, among the 11 interviewees who answered this question, the most commonly identified needs for this population included: 1) a medical home (nearly 46%); 2) regular MD visits, dental care, and family planning (both over 36%); and 3) early intervention/child care (over 33%).

Table KI3: Most Important Needs for Preventive and Primary Care Services for Children under the Age of Five in Respondent Service Area

Needs Cited from Consumer Survey	Number of Cases	Percentage of Total Interviewees
Dental care	11	61.1
Immunizations	8	44.4
Regular MD visit for routine check ups	4	22.2
Child safety	2	11.1
Child abuse/domestic violence	2	11.1
Regular screening	2	11.1
Healthy parenting	2	11.1
Medical home	2	11.1
Obesity	1	5.5
Reducing exposure to second-hand smoke	1	5.5
Needs Cited but Not Included in Consumer Survey		
Nutrition/healthy eating	7	38.9
Early intervention/child care	6	33.3
Home visiting	1	5.5

Note. Percentages are calculated out of the 18 interviewees who responded to this item.

Most important preventive and primary care services needs for school-age children

All interviewees were asked to provide their perceptions of the most important needs for preventive and primary care services for school-age children (5-18 years of age) in their respective organization's service area. As seen below in Table KI4, among the 18 interviewees who answered this question, the most commonly identified needs for this population included: 1) nutrition/healthy eating (over 61%); 2) teen sexual health (nearly 56%); 3) school nurses (50%); 4) physical activity (over 44%); and 5) dental care (nearly 39%).

Table KI4: Most Important Needs for Preventive and Primary Care Services for School-Age Children (5-18) in Respondent Service Area		
Needs Cited from Consumer Survey	**Number of Cases**	**Percentage of Total Interviewees**
Teen sexual health	10	55.6
Physical activity	8	44.4
Dental care	7	38.9
Regular MD visit for routine check ups	4	22.2
Immunization	4	22.2
Substance abuse	4	22.2
Adequate health insurance	3	16.7
Obesity	3	16.7
Mental health	3	16.7
Medical home	2	11.1
Injury prevention	1	5.6
Needs Cited but Not Included in Consumer Survey		
Nutrition/healthy eating	11	61.1
School nurse	9	50.0
Behavioral interventions	4	22.2
After school programs	1	5.6

Note. Percentages are calculated out of the 18 interviewees who responded to this item.

Most important preventive and primary care services needs for school-age children

All interviewees were asked to provide their perceptions of the most important needs for preventive and primary care services for children with special health care needs in their respective organization's service area. As seen below in Table KI5, among the nine interviewees who answered this question, the most commonly identified needs for this population included: 1) helping families coordinate care for their child(ren) and addressing a lack of medical specialists (both over 44%); 2) inclusive school-based programs (over 33%); and 3) a medical home (over 22%).

Table KI5: Most Important Needs for Services for Children with Special Health Care Needs in Respondent Service Area		
Needs Cited from Consumer Survey	**Number of Cases**	**Percentage of Total Interviewees**
Helping families coordinate care for their child(ren)	4	44.4
Lack of medical specialists	4	44.4
Inclusive school-based programs	3	33.3
Medical home	2	22.2
Cost of care	1	11.1
Lack of health care provider	1	11.1
Transportation	1	11.1

Note. Percentages are calculated out of the nine interviewees who responded to this item with specific suggestions and/or concerns. Eight interviewees stated that their organizations do not provide services to children with special health care needs, and as a result they declined to respond to this item.

Most important preventive and primary care services for members of all five populations

All interviewees were asked to provide their perceptions of the most important needs for all five of the populations that were asked about individually in prior questions. As seen below in Table KI6, among the 15 interviewees who answered this question, the most commonly identified needs for these populations included: 1) regular MD visits for routine check-ups (over 33%); 2) nutrition/healthy eating (nearly 27%); 3) dental care (20%); 4) housing and obesity (both over 13%).

Table KI6: Most Important Needs for Preventive and Primary Care Services of Pregnant Women, Children or Children with Special Health Care Needs in Respondent Service Area		
Needs	**Number of Cases**	**Percentage of Total Interviewees**
Regular MD visits for routine check-ups	5	33.3
Nutrition/healthy eating	4	26.7
Dental care	3	20.0
Housing	2	13.3
Obesity	2	13.3
Child care	1	6.7
Physical activity	1	6.7
Transportation for children with special needs	1	6.7
Medical marijuana	1	6.7
Unified electronic record	1	6.7
Immunizations	1	6.7
Family planning	1	6.7

Note. Percentages are calculated out of the 15 interviewees who responded to this item with specific issues or concerns.

Common themes across items and populations

An examination of responses to all items, addressing all populations, was performed to identify themes that commonly appeared throughout the interviews. As seen below in Table KI7, two themes were much more common (mentioned nearly 40 times each) than any of the others; nutrition/healthy eating and dental care clearly were perceived as important needs for all MCH target groups. A medical home and regular MD visits for routine check-ups were both mentioned with some frequency (18 and 17 times, respectively), but less than half as often as nutrition/healthy eating and dental care.

Table KI7: Cumulative MCH Health Needs Across all MCH Target Groups

MCH Needs	Number of Citations by Interviewees
Nutrition/healthy eating	39
Dental care	39
Medical home	18
Regular MD visit for routine check ups	17
Substance abuse	11
Obesity	9
Immunizations/Vaccinations	9
Physical activity	9
Mental health	5
Child abuse/domestic violence	4

Conclusions

Common themes across the General Population survey, the Consumer survey, the Provider survey, and the key informant interviews.

As should be clear from reading the results from the different methods of data collection, many questions that were asked to survey respondents and key informants during interviews attempted to capture information about similar MCH domains. For example, most or all methodologies included questions about perceived needs related to pregnant women, infants, young children, youth and teens, women of reproductive age, and CYSHCNs. After all data were collected from the General Population, Consumer, and Provider surveys, as well as the key informant interviews, the questions addressing each of these MCH target groups were identified (see Table CO1 below). Then, the most common responses regarding needs for each target groups were assessed in an attempt to discern common themes. As seen below in Table CO1, the most common themes to emerge regarding needs for pregnant women and infants were prenatal care, health insurance, and efforts to prevent or treat substance abuse for pregnant women. The most common themes emerging for the needs of infants and young children included immunizations, access to and use of routine care, and a healthy home environment. Regarding youth and teens, the most common themes for needs included prevention/treatment of substance abuse, efforts to increase physical activity, and promoting sexual health. For women of reproductive age, the

most commonly identified needs included health insurance/addressing health care costs, preventing or treating mental health problems, and increasing access to a medical home/routine care. Finally, the most common themes that emerged regarding needs for CYSHCNs were improving access to care, specialists, and community resources, and the availability of inclusive school programs.

CO1: Identified Themes for MCH Target Groups				
Pregnant Women & Infants (GP8;C10;KI1)	**Infants & Young Children (GP9;C12;P2;KI3)**	**Youth/Teens (GP10;C14;KI4)**	**Women 18-44 (C8;P3;KI2)**	**Children & Youth with Special Health Care Needs (C22;P1;KI5)**
Prenatal care (3)	Immunizations (4)	Substance abuse (2)	Health insurance/health care costs (2)	Access to care, specialists and community resources (5)
Health insurance (2)	Access and use of routine care (3)	Physical activity (2)	Mental health (2)	Inclusive school programs (2)
Substance abuse (2)	Home environment (2)	Sexual health (2)	Medical home/routine care (2)	Family issues (1)
Breastfeeding (1)	Healthy weight (1)	Home environment (1)	Nutrition (1)	Early intervention (1)
Nutrition (1)		Mental health (1)	Prenatal care (1)	Cost of care (1)
		Dental care (1)	Dental care (1)	Coordination of care (1)

Note. The letters and numbers within parentheses in denote the items from which the themes were identified (e.g., GP8 is the eighth item on the General Population survey, C10 is the 10th item on the Consumer survey, and KI1 is the first item on the Key Informant interview protocol).

A broad, comprehensive view of perspectives concerning needs for MCH target groups is inherently valuable, however, it was also considered important to conduct some additional analyses to determine whether there were systematic differences in perspectives about needs for these groups as a function of gender, health district, region type (i.e., urban, rural, or frontier), household income level, and whether or not respondents had a CYSHCN living with them. Some differences were found as a function of one or several of these variables in the General Population and Consumer surveys (the only surveys on which respondent demographic information was captured). Some of the differences seemed rather random or spurious in nature, in that they did not show a systematic pattern of disparate perceptions across multiple related items. However, a few did seem to reveal such a pattern. These included:

- Parents of CYSHCNs expressed differed views on a number of issues from respondents who were not parents of CYSHCNs. Specifically, compared to those who were not parents of CYSHCNs, they: 1) considered regular doctor visits to be more important for pregnant women and infants; 2) considered adequate insurance more important for young

children, and less often considered immunizations as important for the same population; 3) considered sexual health less important for youth/teens, but believed access to mental health services and prevention of bullying to be more important for the same population; 4) considered adequate health insurance and access to mental health services to be more important; and 5) more often considered lack of medical specialists a major problem for CYSHCNs, and less often considered cost of health care a major problem for the same population; they also more often considered inclusive school-based programs and early identification of special health care needs to be major needs for CYSHCNs, and less often considered early intervention to be a major need for the same population

- Respondents in urban areas expressed different views on several issues than respondents in rural and frontier areas. Specifically, compared to rural and frontier respondents, they: 1) considered access to mental health care to be more important for pregnant women and infants, and less often considered prevention/treatment of substance use as important for the same population; 2) considered regular doctor visits to be more important for young children
- Respondents in the North Districts (i.e., Districts 1 and 2) expressed different views on several issues than those in other districts. Compared to those in most or all of the other districts, they: 1) considered healthy parenting/good home environment and regular doctor visits to be more important for young children; and 2) considered prevention/treatment of substance use to be more important for youth/teens, and less often considered prevention of bullying to be a problem for the same population

Limitations

There were several noteworthy limitations of the data used as part of this MCH needs assessment. These include: 1) somewhat out-of-date information in the review of secondary/archival data; 2) a low response rate (and consequently large confidence interval or margin of error) to the General Population survey; 3) survey respondents who differed from the general population in several ways; 4) a discrepancy between the definitions of "rural" and "frontier" in the General Population and Consumer surveys; and 5) a suspected lack of diversity among survey respondents. Each of these will be discussed in greater detail below.

In an ideal world, needs assessments would be populated with data from the year when the needs assessment was performed. Although most of the research described in this report was performed in the latter half of 2014, some of the secondary data sources were from several years earlier—and therefore may not provide the most up-to-date portrayal of issues related to MCH in Idaho. Although members of the evaluation team reported the most recent data sources they could find, many of the data sources themselves were from 2011, 2012, or 2013, and some of these sources reported on data from prior to the year they were published (for example, a report issued in 2012 might contain data gathered in 2011). Thus, it is possible that changes in some key areas (for example, access to health insurance) have occurred since the "most recent" data became available.

As noted earlier in this report, the response rate to the General Population survey, at 3.4%, was very low. Although response rates are often relatively low to unsolicited mail and online surveys (e.g., Hikmet & Chen, 2003) the evaluation team had hoped for at least a 20% response rate to

the 3,000 invitations that were sent; this would have resulted in 600 surveys received, which would have yielded a confidence interval (or margin of error) of 4—which would be very close to the scientific gold standard of 3 (Davis, n.d.). With only 102 responses received, the margin of error was much higher at 9.7%. As a result of possible non-response bias stemming from low levels of participation, as well as the wide confidence interval, the results of the General Population survey should be interpreted with caution.

Researchers generally feel most comfortable with the generalizability of their results when those who respond to their surveys are highly representative of the greater population in which they are members. This was not always the case with the respondents to our survey. For example, over two-thirds of the respondents to the General Population survey were at least 46 years old, and well over half were at least 56 years old; thus, the results of this survey may be skewed in the direction of the perspectives of older residents. Women were also overrepresented in the respondents to both of the surveys; women constituted 64% and 87% of the respondents to the General Population and Consumer surveys, respectively. Although a gender difference in response rate is fairly common, it would have been desirable to have a more equitable distribution of men and women. The respondents to the Consumer survey also differed from the general population of Idahoans. Perhaps not surprisingly given how they were recruited (i.e., through provider and advocacy organizations), a much higher percentage (nearly 39%) of respondents (compared to the general population) were parents of CYSHCNs. More surprising was how unrepresentative the Consumer survey respondents were with respect to household income; nearly 27% of the respondents reported a household income over $100,000, whereas less than 10% of the respondents earned less than $20,000. Thus, the perceptions reported were likely skewed in the direction of the perspectives of respondents of higher-income households.

The discrepancy between definitions of "rural" and "frontier" counties was unexpected, though it could have been identified with a bit of foresight. As noted earlier, CHP researchers (including the first author of this report) for years have used the classifications of urban, rural, and frontier counties developed by the NCFC, as these are considered the "gold standard" among rural health researchers. The CHP evaluation team, when developing mailing lists, used these classifications without thinking to check with the IDHW MCH program administrators. When the Consumer survey was conducted, the CHP evaluation team first coded respondents by the NCFC classifications, when IDHW MCH program administrators noticed the discrepancy and asked that these respondents be recoded according to the classifications used by the State of Idaho, which has 10 of the NCFC's frontier counties classified as rural. Members of the evaluation team considered backtracking and recoding the General Population respondents by the State of Idaho classifications, but ultimately decided against it, as it would have changed the stratified nature of the sample—more heavily weighting rural counties over frontier counties. Although it is unfortunate that all county classifications were not fully aligned across the two surveys, it is highly unlikely that the shift in county classifications affected any of the comparative analyses between region types (especially given that ultimately the rural and frontier respondents were collapsed into a rural/frontier category in the Consumer Survey).

The evaluation team and MCH program administrators made a deliberate effort to encourage participation by members of diverse populations. For example, targeted outreach was made to tribal representatives to have members of their respective tribes complete surveys or participate

in key informant interviews. Both the General Population and Consumer surveys were made available in English and Spanish, as well. Three of the 19 persons (or nearly 16%) who completed key informant interviews were from tribal health departments, and this was an encouraging result, however no General Population or Consumer surveys were completed in the Spanish language. The latter result calls into question whether the effort to have a diverse sample of participants was achieved.

Final comments

Although there were several limitations in the data gathered to support this needs assessment, they were balanced by many strengths, including a multi-modal methodology that included probability sampling in the General Population survey (meaning every Idaho household had an equal likelihood, within geographic strata, of being selected and having an opportunity to contribute to the information gathered), a deliberate (though not completely successful) attempt to gather perspectives from a diverse population, and the synthesis of archival and primary data that was both qualitative and quantitative. The data collected and summarized in this report will hopefully be helpful in guiding decisions regarding prioritization of services to MCH target groups throughout the state, helping ensure that Idaho's women, children, and CYSHCNs are served in a way that maximizes their health, well-being, and quality of life.

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