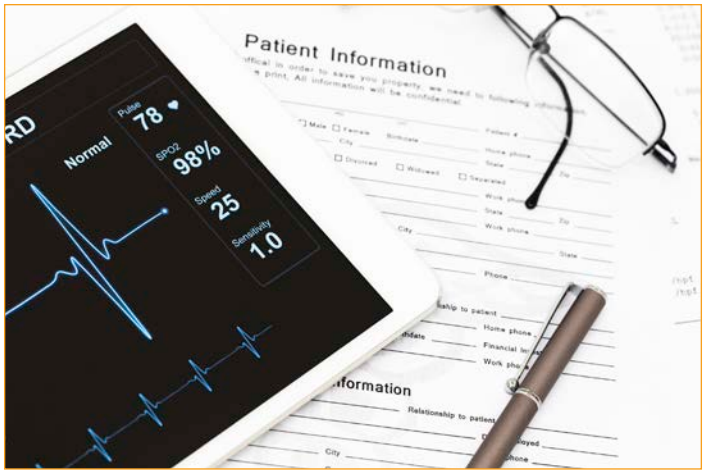
Del Norte & Adjacent Tribal Lands

Selected Findings from the Community Health & Wellness Survey

Senior Residents



CCRP
California Center for Rural Policy

by The California Center for Rural Policy, Humboldt State University

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- Smith River Rancheria
- Resighini Rancheria
- Karuk Tribe
- Yurok Tribe
- Hoopa Valley Tribe

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Executive Summary

The Community Health and Wellness Survey was conducted in Del Norte County and Adjacent Tribal Lands by the California Center for Rural Policy (CCRP) in the spring of 2013.

The purpose to this survey was to examine the wellness of residents in Del Norte and Adjacent Tribal Lands. This report specifically focuses on food security and health care. This was done using questions from several sources including the United States Department of Agriculture (USDA). This report is on data concerning survey respondents who were aged 64 and older.

The findings presented in this report are based on responses from 655 respondents living in Del Norte County and Adjacent Tribal Lands. These findings compare Del Norte County data to California data and national data collected by the U.S Census Bureau.

The main findings by topic are:

Poverty

- 13.3% of the 410 respondents who provided adequate data to determine the Federal Poverty Limit (FPL) had an income level below the FPL threshold.

Food Security

- 10% of household that lived in poverty experienced hunger.
- 44% of seniors who lived in poverty worried that their food would run out.
- 46% of seniors who lived in poverty could not afford to eat balanced meals.
- 40% of seniors who lived in poverty indicated that their food did not last and they did not have enough money to get more.
- 7% of seniors obtained food from a food bank and 4% obtained food from CalFresh

Healthcare

- 6.5% of senior respondents indicated that they did not get the healthcare they needed.
- 93% of seniors had Medicare.
- 78% of seniors had a personal healthcare provider.
- 80% of seniors had a source of medical care that they usually used.
- 20% of seniors were not able to get a needed referral.
- 53% of seniors who lived in poverty did not have a dental exam in the past year.

Introduction

Background

Health starts were we live, learn, work and play. Health and wellness are affected by factors that are associated with place. Economic conditions in communities can influence health by affecting access to employment opportunities and health insurance. Social conditions in communities can influence health by providing resources for individuals in need, by controlling advertisement of behaviors that pose health risks like drinking and smoking and by creating programs to encourage healthy behaviors like daily physical activity. Physical conditions in communities can influence health by ensuring good quality of the air and water, by providing safe environments, and increasing access to healthy foods. The community in which we live affects our health status and even our longevity.[1-4]

Understanding the important role that place has in wellness, The California Endowment selected 14 communities in California to invest resources.[5] The criteria for selection included communities that have poor health outcomes but that also have potential for change. The California Endowment selected the 14 sites based partially on their social capital. Social capital is the collective forces of individuals, agencies and networks that can be mobilized to elicit change. Del Norte County and Adjacent Tribal Lands (DNATL) was selected as one of the 14 sites to invest resources because The California Endowment recognized that the community had the "potential to inspire policy change to create a healthy environment for all Californians".[5] The California Endowment provided funding through the Building Healthy Communities Initiative to create avenues for change that promote health in those 14 communities.

During the initial stage of the Building Healthy Communities project in DNATL, it became apparent that there were many community health indicators that could be used to measure community health, but baseline data were not available for DNATL. Through a community engagement process, a list of health indicators were identified and it was determined that baseline data was needed. From this list, the Community Health & Wellness Survey (CHWS) was created. The CHWS included measures of social determinants of health including the built environment, neighborhood cohesiveness, education level, income level, employment, food security, and quality health care. The CHWS was designed to provide a baseline measurement of determinants of health that are associated with place. Accurate baseline information about community health and wellness is critical for understanding and improving upon conditions that impact health and wellness.

The survey was developed after engagement with the DNATL community and support for the survey was sought through community agencies. Efforts were made to encourage widespread participation with particular attention to populations that are generally underrepresented in survey research. Meetings with tribal council members provided an opportunity to introduce the survey and address questions and concerns. All tribal councils in the area, including Elk Valley Rancheria, Smith River Rancheria, Resighini Rancheria, Karuk Tribe, Yurok Tribe, and Hoopa Valley Tribe provided endorsement of the survey. The surveys were made available at each tribal office. The Hmong community was engaged through an elected clan representative. The survey was translated to Hmong and was distributed to Hmong families through the clan representative. The survey was also translated to Spanish. The survey was endorsed by many area agencies, including the County of Del Norte, First 5 Del Norte, Del Norte Community Health Center, Del Norte School District, Del Norte Health Care District, Coastal Connections, and United Indian Health Services. Efforts were made to engage the community in developing, distributing and supporting the survey. Community input and endorsement for the survey was sought and underrepresented groups were provided targeted recruitment to take the survey.

The CHWS was developed to provide baseline data regarding community health indicators in DNATL. The survey results can be used to prioritize development of programs to promote improvement in determinants with the poorest outcomes. Administration of the survey in the future will allow change in social determinants to be tracked. The ultimate goal of understanding the social determinants of a community of wellness is to reduce health inequities and to "create social and physical environments that promote good health for all".[6]

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2. Meijer, M., Rohl, J., Bloomfield, K., and Grittne, U. (2012). Do neighborhoods affect individual mortality? A systematic review and meta-analysis of multilevel studies. Social Science & Medicine. 74 (8), 1204–12.
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4. Renalds, A. Smith, T.H., and Hale, P.J. (2010). A systematic review of built environment and health. Family Community health, 33(1), 68-78.
5. The California Endowment. (2015). Selecting Sites. Retrieved from http://www.calendow.org/places/.
6. Healthy People 2020. (2015). Retrieved from http://www.healthypeople.gov/.

Methods

Survey Design and Sample

In the spring of 2013, a cross-sectional survey of a random sample of adults residing in Del Norte County and Adjacent Tribal Lands was conducted. An eight-page self-administered survey was developed by project administrators at the California Center for Rural Policy at Humboldt State University, in collaboration with the Building Healthy Communities Learning and Evaluation Advisory Committee in Del Norte County. The survey tool was designed to measure social determinants of health with questions about the neighborhood/built environment, social/community context, education, financial well-being, health/health care and services (including concepts of patient centered medical home and food security).

Many of the questions were based on existing surveys (National Survey of Children's Health, Behavioral Risk Factor Surveillance Survey, American Housing Survey, American Community Survey, National Health and Nutrition Examination Survey, National Center for Safe Routes to School, California Health Interview Survey, and Rural Health Information Survey) and new questions were developed as needed to inquire about social determinants of health not previously explored in this rural area of California.

The survey contained a combination of quantitative and qualitative responses. The first section of the survey contained questions specific to the adult completing the survey and their household. The second section contained questions specific to children in the household. Surveys were translated into Spanish and Hmong. Survey methods and questions were approved by the Humboldt State University Institutional Review Board.

Survey booklets with cover letters and questions in English and Spanish were mailed to all households and all post office box holders in Del Norte County and Adjacent Tribal Lands (including Hoopa, Orleans, Somes Bar, and Happy Camp). This was a bulk mailing through the U.S. Postal Service, so surveys were addressed to "residential customer" or "box holder." The cover letter requested someone in the household 18 or older to complete the survey and for only one survey to be completed per household. A self-addressed stamped envelope was included for returning the survey. Two weeks after sending the survey, a reminder post card in English, Spanish, and Hmong was sent. An incentive of a potential to win a $250 cash prize was offered.

Efforts were made to encourage widespread participation with particular attention to populations that are generally underrepresented in survey research. Meetings with tribal council members provided an opportunity to introduce the survey and address questions and concerns. All tribal councils in the area (Elk Valley Rancheria, Smith River Rancheria, Resighini Rancheria, Karuk Tribe, Yurok Tribe, and Hoopa Valley Tribe) provided endorsement, and their endorsement was stated in the cover letter. Some tribes opted to take extra steps to encourage participation among tribal members. For example, Elk Valley Rancheria sent an advance letter to tribal members encouraging participation. Resighini Rancheria and the Yurok Tribe coordinated personal contact with households to provide any needed assistance with completing the survey. The survey was also endorsed by the County of Del Norte, First 5 Del Norte, Del Norte Community Health Center, Del Norte School District, Del Norte Health Care District, Coastal Connections, and United Indian Health Services.

The Hmong community was engaged through contact with the elected clan representative and his assistant. A meeting was called with the clan leaders and surveys translated into Hmong were hand delivered to the clan

leaders for distribution to the clan families. Hmong families could either complete the survey in Hmong or English (received in the mail).

In the weeks prior to mailing the survey, a community media campaign was initiated to raise awareness about the survey and encourage participation. This included radio announcements with local voices, newspaper articles, posters, and announcements via social media networks. The Del Norte County Unified School District also sent a letter home to parents encouraging their participation in the survey.

Survey assistors were available to provide assistance to anyone requesting it. Assistors were available in person or by phone and could provide assistance in English, Spanish, or Hmong.

Analyses

Categorical Variables

Categorical variables have a limited number of possible values. These values do not have an intrinsic order. Gender is an example of a categorical variable. Frequencies (*p*) were calculated for categorical data. This provides the number of individuals in each category. Confidence intervals for frequency data were calculated and reported when possible. Confidence interval (*CI*) provides information about the uncertainty associated with the frequency data. The *CI* provides the probability that the frequency reported in the study includes the true value of the frequency. A 95% *CI* was reported. This means that the probability of observing a frequency outside this reported range is less than five percent. Wide confidence intervals indicate that the frequency being reported is less accurate when compared to frequency data with narrow *CI*.

Chi-square test of independence (χ^2) was used to determine whether two categorical variables were related. The assumptions for the Chi-square test (χ^2) were tested. The first assumption was that the variables were categorical, with two or more categories in each of the variables. For example, two categories exist for the categorical variable gender: male and female. Categorical data may have more than two categories, as in survey responses where several response options are offered (e.g. yes, no and maybe). The second assumption for the Chi-square test is that the minimum number of individuals that fall into the cross section of the categorical data must be five or more cases. For example, the number of males that answer "yes" versus "no" for a survey question, must be five or more.

When a comparison was made of two categorical variables, where each variable had only two categories, Yate's Correction of Continuity was applied to the χ^2 value to correct the overestimation of the Chi-square value.

The χ^2 value was used to determine if there was a statistically significant relationship between the categorical variables. Fischer's exact test (*FET*) for significance level was reported. A significance level (ρ) of .05 was selected for the acceptable error rate for the χ^2 tests. The ρ value represents the probability that chance could explain the result. A ρ of less than .05 indicates that there is less than a five percent chance of claiming there is a relationship between variables, when none really exists. This accepted chance of error exists for every comparison made. When multiple comparisons are made, the total risk of error increases. Since this study's purpose was descriptive in nature, the ρ was not adjusted for the multiple comparisons performed.

Odds ratio (*OR*) was reported for frequency data. The *OR* represents the odds that a particular outcome that occurred in one group, will also occur in another group. For instance, *OR* for the frequency of food insecurity in households that have incomes who live in poverty when compared to household that have higher incomes were reported. When *OR* are greater than one, the condition (e.g., poverty) is associated with higher odds of the outcome (e.g., hunger). Ninety-five percent *CI* were calculated and reported for *OR*. Odds ratios that had a 95% *CI* that spans zero were interpreted as lacking evidence for an association of the condition and the outcome.

Demographics

Of the 1741 surveys returned, 655 of the respondents indicated that they were age 65 years or older. This survey sampled a wider area than Del Norte County, as it included surrounding Tribal Lands (DNATL). Since no data exists that exactly overlaps the geographic area sampled, data from Del Norte County was used for comparative analysis.

Education

The sample of seniors who returned surveys represents just under 16% of the population of senior citizens in Del Norte County.[1] The mean age of the senior respondents was 74.4 years ± 7.2 years. More women than men returned completed surveys (65.3% were female and 34.7% were male). The senior respondents indicated that their ethnicity was Caucasian more often than any other ethnicity (89.9% Caucasian, 9.1% American Indian, 2.1% Hispanic/Latino/Spanish, and 0.3% Black/African American). Approximately two-thirds of senior aged respondents indicated that they had attended college or graduated from college (68.7%). A minority of the senior respondents indicated that they were high school graduates (14.7%), obtained a general education development (GED) certificate (3.2%), or did not complete high school (5.2%). The seniors who returned this survey had higher than expected prevalence of being at least a high school graduate (88.0% versus 76.3%) or earning at least a bachelor's degree (32.9% vs 17.8%) when compared to the U.S. Census data for Del Norte County in 2013.[2] The majority of respondents in this age group identified themselves as retired (82.6%). The results from this survey may be biased in that females and higher educated individuals may have been overrepresented in our sample when compared to the Del Norte population at large.

Exhibit 1: Highest Education Level Attained

Highest Education Level Attained	Percent (n = 628)
Did Not Complete High School	5.2%
High School Certificate	3.2%
High School Graduate	14.7%
Some College	35.8%
College Graduate	32.9%

Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands – 2013 This analysis was for the survey question, "What is the highest level of education that you have completed?".

Household Size

The majority (87.9%) of the seniors were from a two person household (47.7%) or from a one person household (40.2%). Only 3 of the 655 senior aged respondents indicated that they had children under the age of 18 living in their home (< 1%).

Income

Respondents were asked about their gross income. The average income of the respondents over the age of 64 years was $38,809 per year. There was a wide range of reported gross income, ranging from $0 to $300,000 per year. The median reported income was $30,000 per year.

Federal Poverty Limit

Poverty is based on household income level adjusted from family size and age of family members. As family size increases, the income level at which poverty is defined increases. In 2013, for a single person under the age of 64, an income of $12,119 was the threshold for poverty. For a family of three children and one adult under the age of 64 years, an income of $23,707 was set as the threshold for poverty.

The U.S. Census Bureau sets income threshold to determine poverty level.[1] The threshold varies by family size and composition. This is known as the federal poverty limit (FPL).[2] For this study, the information for self-reported gross income, family size and composition was used to determine the FPL for each respondent. Of the 655 senior respondents, 510 provided adequate data to determine FPL. Of the respondents providing adequate information to calculate FPL, 13.3% (n = 66) were below the FPL, and 86.7% were above the FPL (n = 442). Households whose income falls below 200% of the FPL are considered low income, and 31.8% of the seniors were low-income. Our findings indicate that 45.1% of seniors who completed this survey live in poverty or in low income households.

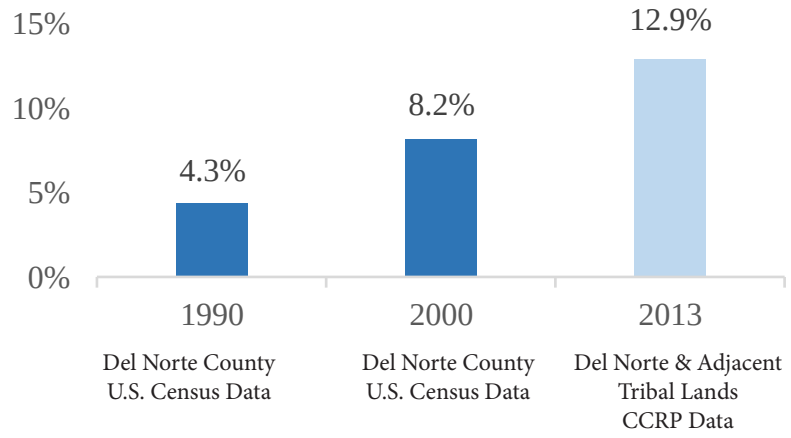
Exhibit 2: Senior Respondents by Federal Poverty Limit

Income	Age Group
Percent of Federal Poverty Limit	n = 510
< 100%	13.3%
100 – 199%	31.8%
200 – 299%	20.2%
≥ 300%	34.7%

Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands - 2013. Income Level was calculated using the Federal Poverty Limit (FPL). The FPL threshold as defined by the U.S. Census Bureau is determined using household income, family size and age of family members.

Poverty

Exhibit 3: Senior Poverty Rates Over Time



Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands 2013 and U.S. Census Bureau . (2013). American Community Survey 5-Year Estimates 2009 - 2013

Survey data collected in a national sampling of seniors found that 9.5% of seniors had income levels under the FPL.[3] In California seniors the rate of poverty has been reported to be 8% in 2013.[4] Our results indicate that a larger percent of the population aged 65 or older in DNATL has an income level that is below the federal poverty limit when compared to national or California estimates (12.9% versus 8% and 9.5% for DNATL and national data respectively).

In Del Norte county, the prevalence of poverty in this age group seems to be increasing, as the prevalence of poverty has been previously reported by the U.S. Census Bureau to be 4.3% in the year 1990 and 8.2% in the year 2000.[5]

1. U.S. Census Bureau. (2013). Preliminary Estimates of Weighted Average Poverty Thresholds for 2013. Retrieved from http://www.census.gov/hhes/www/poverty/data/threshld/.
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Employment Status

The work status of people 65 years and older has been changing on a national level. In 1990, national data revealed that 17.6% of men in this age range were in the labor force.[1] The prevalence of labor force participation has increased since 1990, as twenty years later a larger portion of people aged 65 or older continued to work (20.8%).[1]

Men

In this study, 224 males over the age of 64 years responded to the survey. In this group of respondents, 12.6% of the men indicated they were either self-employed or working for a buisness. An additional 2.2% of the men over the age of 65 considered themselves unemployed. The data from this study found that the males over the age of 64 were employed less often than is seen on a national level. The difference in employment rates for seniors in the DNATL when compared to seniors on national level may be due to availablility of age-appropriate jobs. The major employers in the county include Pelican Bay State Prison, Sutter Coast Hospital, Cresent City Nursing and Rehabilitation, Hambro Forest Products, and commercial farms.[2] Many positions in the largest employers in Del Norte County require physical labor. Hence, available jobs may not be a good match for seniors' capabilities. Del Norte County has a higher rate of unemployment than is seen on a national level (11.6% versus 7.4%), and the overall lack of employment opportunities in this county likely contributes to the higher than expected rate of unemployment seen in the DNATL seniors.[3,4]

Exhibit 5: Employment Status of Senior Men

Employment Status	Percent (n = 219)
Employed by a Business	5.9%
Self-Employed	6.7%
Seeking Employment	0.7%
Retired	83.7%

Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands – 2013. This analysis is for the survey question, "Which of the following best describes your current employment situation?".

Women

Exhibit 6: Employment Status of Senior Women

Employment Status	Percent (n = 404)
Employed by a Business	7.3%
Self-Employed	3.6%
Seeking Employment	1.8%
Retired	82.6%
Homemaker	2.2%

Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands – 2013. This analysis is for the survey question, "Which of the following best describes your current employment situation?".

In this study, 413 females over the age of 64 responded to the survey. In this group of respondents, 53.6% of the women indicated they were either self-employed or working for a buisness. An additional 6.5% of the middle-aged women considered themselves unemployed. The BLS indicates that the unemployment rate in Del Norte County in 2013 was 11.8%.[1] The difference in our findings when compared to the BLS may be due to the age of this group of survey responders. The lower unemployment rates in the middle-aged survey responders may be due to a portion of the group was no longer participating in the work force. In fact, 17.6% of the group indicated that they were retired, 5.0% indicated that the were homemakers, and 17.1% percent of the middle-aged indicated that they were disabled. The BLS calculates unemployement rate by using the number of individuals who are unemployed and looking for work in the numerator and the number of people who are employed in the denominator. Using the BLS method to calculate unemployement rate in the survey respondents, there is a 9.3% uneployment rate (20

1. National Institute on Aging. (2007). Growing older in America: the health & retirement study. NIH Publication No 07-5757.
2. Employment Development Department. (2013). Major Employers in Del Norte County. Retrieved from http://www.labormarketinfo.edd.ca.gov/majorer/countymajorer.asp?CountyCode=000015.
3. US Bureau of Labor Statistics. (2015). Local Area Unemployment Statistics Map. Retrieved at http://data.bls.gov/map/MapToolServlet?survey=la&map=county&seasonal=u&datatype=unemployment&year=2014&period=M09&state=06.
4. US Bureau of Labor Statistics (2015). Labor Force Statistics from the Current Population Survey. Retrieved from http://data.bls.gov/timeseries/LNS14000000
5. Social Security Administration. (2014). SSI Recipients by State and County 2013. Retrieved at http://www.ssa.gov/policy/docs/statcomps/ssi_sc/.

unemployed who are looking for work ÷216 employed). There was a difference in prevalance of employment status by middle-aged group categories. Unemployment rate as calculated by the BLS method was different among the middle-age groups (middle-age groups: Early p = 9.4%, Middle p = 18.4%, and late p = 6.3%). The highest rate of unemployment was in the 55-59 year age group. Lack of employment opportunities may contribute to the high rates of poverty/low-income households in DNATL. The work status for senior aged women has also been changing in the past few decades. National level labor force data for women in this age group reveals that the prevalance of women over the age of 64 in the work force has increased from 8.4% in 1990 to 12.5% in 2010.[1] In this study, 10.9% of the female respondents over the age of 64 indicated that they were still working. Like the men in this survey, the women over the age of 64 who responded to the survey were less likely to be employed when compared to national data.

Disability

A small percent of both the male survey respondents and the female survey respondents over the age of 64 years indicated that they were disabled (4.9% and 5.2%, respectively). Using U.S. Census Bureau data along with Social Security Insurance data, rates of disability for individuals 65 years and older were calculated.[4] The national rate for disability in this age group was estimated to be 11.7% (SSI recipients N = 558,218 and population estimate N = 4,791,565).[3] Using this same method to estimate the regional disability, the prevalence of disablity in Del Norte County was estimated to be 8% (SSI recipients - 335 and population estimate - 4153). The respondents to this survey had lower prevalence of disability than expected when compared to estimates from SSI data for both national data and regional data.

1. National Institute on Aging. (2007). Growing older in America: the health & retirement study. NIH Publication No 07-5757.
2. Employment Development Department. (2013). Major Employers in Del Norte County. Retrieved from http://www.labormarketinfo.edd.ca.gov/majorer/countymajorer.asp?CountyCode=000015.
3. US Bureau of Labor Statistics. (2015). Local Area Unemployment Statistics Map. Retrieved at http://data.bls.gov/map/MapToolServlet?survey=la&map=county&seasonal=u&datatype=unemployment&year=2014&period=M09&state=06.
4. US Bureau of Labor Statistics (2015). Labor Force Statistics from the Current Population Survey. Retrieved from http://data.bls.gov/timeseries/LNS14000000
5. Social Security Administration. (2014). SSI Recipients by State and County 2013. Retrieved at http://www.ssa.gov/policy/docs/statcomps/ssi_sc/.

Food Security

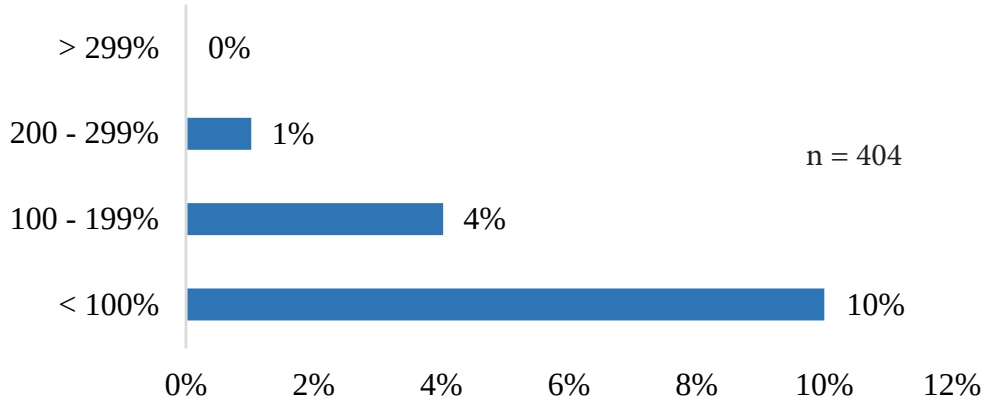
Hunger in the House

Food security was assessed using a number of survey questions. These questions queried respondents about their family's food situation in the past 12 months. A question included in the survey was used to identify the highest risk level, Very Low Food Security. [1] This question evaluated hunger. Only 18 of the 655 respondents over the age of 64 provided an affirmative response, indicating there were individuals in their household that experienced hunger in the past 12 months (2.8%). There was a higher frequency of presence of hunger in households that had an income level below the poverty limit when compared to those seniors with an income level above the FPL ($\chi^2 = 9.8(1)$, $\rho = .002$).

Why Evaluate Food Security in the Elderly?

Food-insecure elderly persons have significantly lower intakes of energy and macronutrients like protein, carbohydrate, and saturated fat. Food-insecure elderly persons also have lower intake of essential micronutrients like niacin, riboflavin, vitamins B-6 and B-12, magnesium, iron and zinc. Food-insecure elderly persons have lower body fat and body mass index when compared to food-insecure individuals. In addition, food-insecure elderly persons are more likely to report fair/poor health status when compared to food-secure individuals.

Exhibit 6: Hunger in Seniors by Household Income



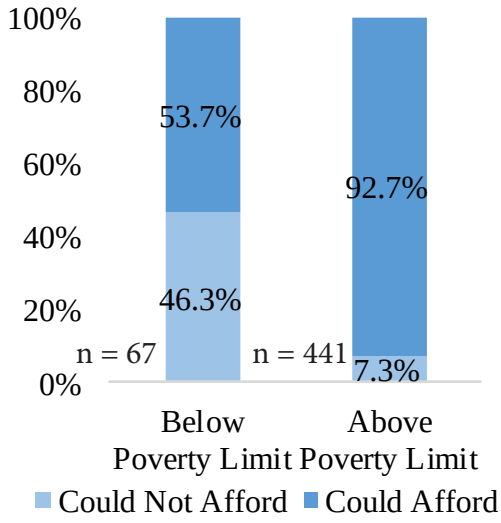
Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands – 2013. This analysis was for the question, "In the past 12 months were you or people living in your household ever hungry because you couldn't afford enough food. The analysis was restricted to respondents who answered yes or no.

The United States Department of Agriculture (USDA) developed a schemata that describes categories of food security status of households.1 Households that do not have problems with accessing adequate food, do not have reduced quality or desirability of food, and do not have any worries or anxiety about food are classified as having High Food Security. Households that have worry or anxiety about food, but have adequate resources to buy food and do not reduce the quality of the food they eat are classified as having Marginal Food Security. Households that worry about food and have to alter the quality or desirability of food are classified as having Low Food Security. Households that have hunger or lack the resources to purchase enough food are classified as having Very Low Food Security.

Quality of Food

Food security was also assessed using a survey question that evaluated the quality of food availability. A significantly higher portion of the seniors whose income was below the FPL indicated that they could not afford to eat balanced meals when compared to the seniors whose income was above the FPL (46.3% versus 7.3%) ($\chi^2 = 77.9(1)$, $\rho < .001$). Seniors whose income level was below the poverty limit were 11 times more likely to be unable to afford to eat balanced meals FPL (*OR* = 11.0, CI [6.0, 20.1]).

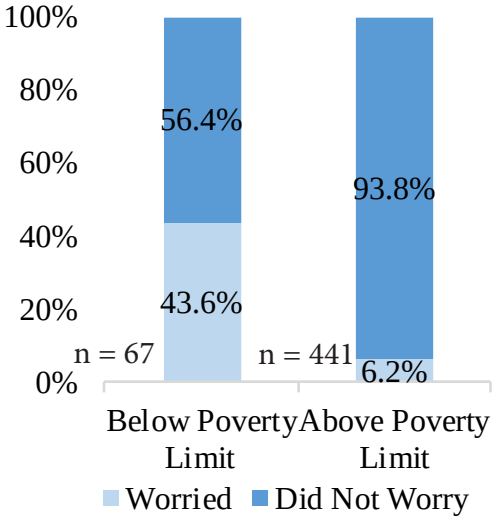
Exhibit 7: Ability to Afford Balanced Meals in Senior Households by Household Income



Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands - 2013. This analysis was for the question, "In the past 12 months how often did the following statement describe your family's food situation: We could not afford to eat balanced meals?". The analysis was restricted to respondents who answered "never true" coded as never true, "often true" coded as true, and "sometimes true" coded as true.

Anxiety about Supply of Food

Exhibit 8: Worry about Food Running Out in Senior Households by Household Income



Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands - 2013. This analysis was for the question, "In the past 12 months how often did the following statement describe your family's food situation: We worried whether our food would run out before we got money to but more?". The analysis was restricted to respondents who answered " never true" coded as not true, "often true" coded as true, and "sometimes true" coded as true.

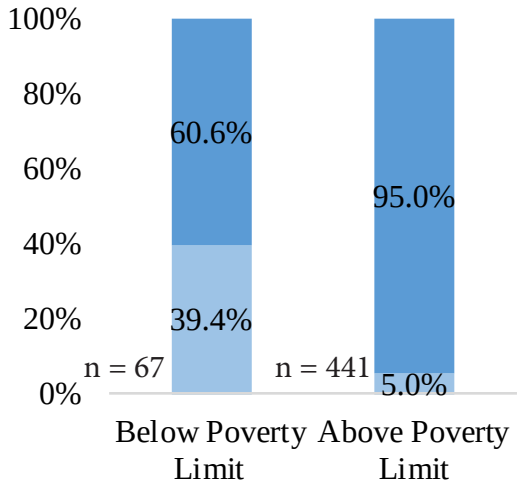
One survey question was used to evaluate individuals with some level of food insecurity from individuals with a high level of food security. This question queried the respondents as to worry about adequate supply of food. When individuals indicated that they never worry about food running out, they are considered to have a high level of food security.[1] Most of the respondents who were over the age of 65 responded that they "never worried" that food would run out (90.7%). On the other hand, one in eleven seniors who responded to this survey indicated they had some worry about food. This finding is similar to others who have reported that 1 in 12 adults over the age of 60 had some level of food insecurity.[3]

The level of household food security has been shown to be different among income levels.[4] The prevalence of worry about food differed when seniors' household income level was taken into account. Seniors who had an income level below the FPL indicated that they worried that food would run out more often when compared to seniors who had an income level that put them above the FPL ($\chi 2 = 75.6(1)$, $\rho < 0.001$). Seniors who had an income level below the FPL had almost 11 times the risk of worrying about food when compared to seniors who have an income level that was above the FPL (*OR* = 10.8, CI [5.9, 19.9]). Thus, the prevalence of worry about food was higher for seniors who lived in poverty when compared to seniors who had an income level that put them above the FPL.

Quantity of Food

Food security was also assessed by evaluating adequate access to food. Access to food was assessed by having the participants respond to the following statement: "The food that we bought just didn't last, and we didn't have enough money to get more food." Over nine percent of the seniors indicated that food did not last and they did not have enough money to get more. This means almost one in ten seniors experience food shortage in the household. The survey results revealed that food shortage is more common in households with income below the FPL when compared to households with income above the FPL ($\chi^2 = 75.3(1)$, $\rho < .001$). Over a third of the seniors below the FPL indicated that this statement was either "often true" or "sometimes true" (39.4%). Seniors whose income placed them below the poverty limit were over 12 times more likely to indicate that the food they bought just did not last (*OR* = 12.4, CI [6.4, 23.8]).

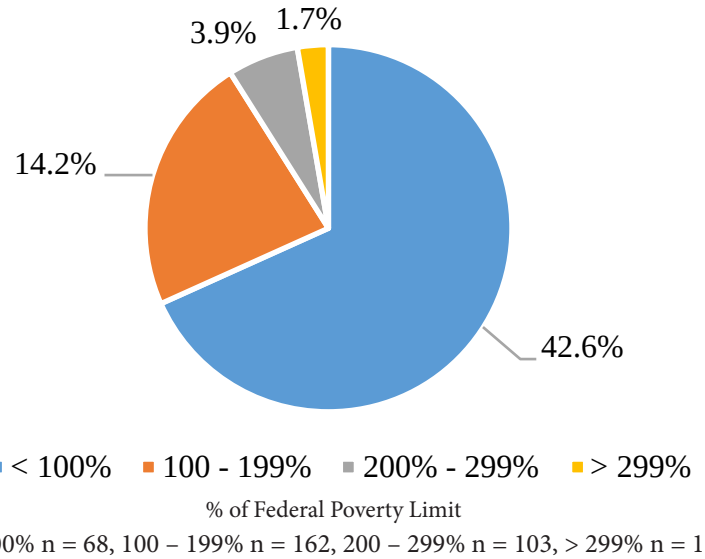
Exhibit 8: Food Lasting in Senior Households by Household Income



Source: Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands 2013
This analysis was for the question, "In the past 12 months how often did the following statement describe your family's food situation: The food that we bought just didn't last, and we didn't have enough money to get more food?". The analysis was restricted to respondents who answered "never true" or "often true" coded as true, and "sometimes true" coded as true.

Food Security Categories

Exhibit 10: Less than Optimal Food Security in Senior Households by Household Income



< 100% n = 68, 100 – 199% n = 162, 200 – 299% n = 103, > 299% n = 177

Source: Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands 2013. This analysis was for the questions regarding food security and represents those seniors who have Very Low, Low, or Marginal Food Security, as defined by the USDA

The distribution of seniors into the various food security categories as defined by the USDA was assessed. We did find a different distribution pattern of food security between seniors who lived in households with an income level above the poverty limit when compared to seniors who lived in households with an income level below the FPL. However, there were less than five individuals in a few of the categories, and statistical testing of these differences could not be performed.

To allow for analysis of differences between the prevalence of food security category by income level, food security categories were collapsed. Very low Food Security, Low Food Security, and Marginal Food Security were combined into a group reflecting less than optimal food security. There was a significant difference in prevalence of households with High Food Security versus the combined lower levels of food security, when poverty was taken

into account (χ^2 =70.6(1), $\rho < .001$). Over 40% of the seniors whose income level was below the FPL threshold did not live in households with High Food Security, and this was true for only 6.8% of seniors whose income level was above the FPL. As expected food insecurity was more common in seniors who lived in households supported by incomes at a lower percent of the FPL when compared to seniors whose income was higher percent of FPL.

1. USDA. (2014). Measurement. Retrieved at http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx#security.
2. USDA. (2015). Key Statistics and Graphs: Food Security of U.S. Households 2013. Retrieved at http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx#foodsecure.
3. Feeding America and National Foundation to End Senior Hunger. (2013). Retrieved from http://www.nfesh.org/wp-content/uploads/2013/05/Senior-Hunger-Research.pdf
4. Ziliak, J.P. and Haist, M. (2013). The Causes, Consequences and Future of Senior Hunger in America. University of Kentucky Center for Poverty Research. Retrieved from http://www.mowaa.org/document.doc?id=13.

Funding Sources for Food

Exhibit 10: Funding Sources used to Obtain Food by Seniors

Resources for Food Purchases	Percent (n = 611)
Cash	69%
SSI/SSDI	31%
Food Bank	7%
CalFresh	4%
Calworks	2%
WIC	1%

Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands - 2013. This analysis was for the questions regarding funding sources used to purchase food. More than one response could be selected.

The survey asked respondents to indicate which types of funding sources were used to purchase or obtain food. Cash was the most prevalent funding resource to obtain food (69%).

Access to Food

Sixty-six percent of the respondents indicated that access to fresh fruits and vegetables were available to them in their neighborhood or community. The average time to get to a grocery store was 17 min (S.D. ± 18 min). The average travel time to the grocery store found in this study agrees with others who have found an 18 min travel time in other rural communities.[1] The range of time that participants indicated that it took them to get to a grocery store was 0 – 120 minutes, with a median time of 10 minutes. Although some Del Norte residents have a long trek to the nearest grocery store, half of the seniors indicated that their travel time to the grocery store was less than 10 minutes.

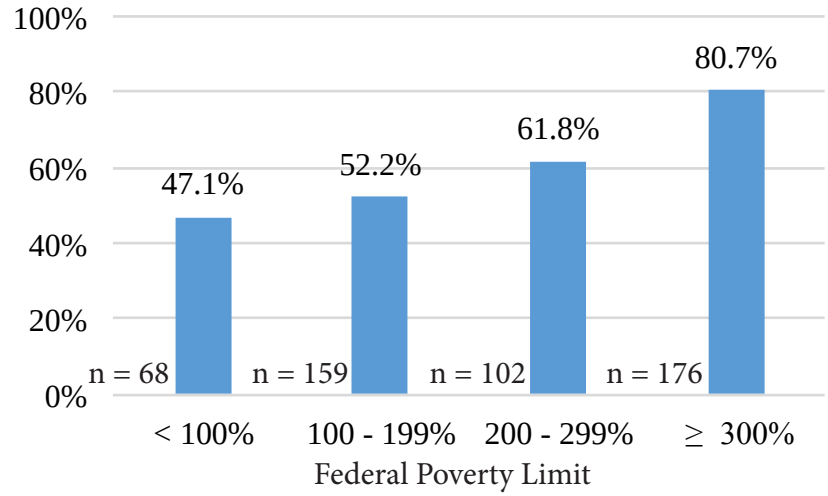
1. Bitto, E., Morton, L.W., Oakland, M.J., & Sand, M. (2003). Grocery store access patterns in rural food deserts. Journal for the Study of Food and Society, 6, (2), 35-48.

Dental Health

Access to dental health care was evaluated using a number of questions on the survey. Only 61.8% of the seniors indicated that they had a seen a dentist for any reason in the past 12 months. The Centers for Disease Control (CDC) reports the same results, with 61.8% of adults over the age of 64 having seen a dentist in the previous year.[1] Almost one-third of the seniors indicated that they did not have a particular dentist or dental clinic that they receive care (28.7%). Despite recommendations for twice a year dental cleaning, only slightly greater than one-half (51.5%) of the senior survey respondents indicated that they had had at least one dental cleaning in the past year. Medicare does not cover dental care that is needed to preserve the health of teeth.[2] Dental cleaning, oral exams and care of dental caries are not covered by Medicare and may account for the lower frequency of dental care encounters when compared to the medical care encounters (61.1% versus 95.1%). Although there are supplemental insurance packages to provide dental coverage, these plans may not be affordable to all seniors.

Oral health has an impact of sense of well-being. Dental disease can impact the ability to chew foods and can limit food selection, leading to poor nutrition in seniors. Oral health can influence overall health as dental decay and periodontal disease create a portal for entry of infections. Tooth loss can create psychological distress due to body image disturbance.[1]

Exhibit 12: Seniors who have had a Dental Visit in the Past Year by Household Income



Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands - 2013. This analysis was for the survey question "During the past 12 months, did you see a dentist for any kind of dental care, including check-ups, dental cleanings, x-rays, or filling cavities?".

The results from this study did reveal a statistical difference in the percentage of seniors who had a dental care encounter in the past year when income level was taken into account ($\chi^2 = 39.12$ (3), $\rho < 0.001$). The CDC has also reported an income level related difference in dental care.[1] Our study results indicate that the prevalence of having a dental cleaning in the past year was not different between seniors who had an income that placed them above the poverty limit when compared to seniors who had an income that placed them below the poverty limit. While over one-half of the seniors had received some dental care in the past year, there was lower use of dental care for seniors whose income was below FPL when compared to seniors whose income was ≥ 200% of FPL.

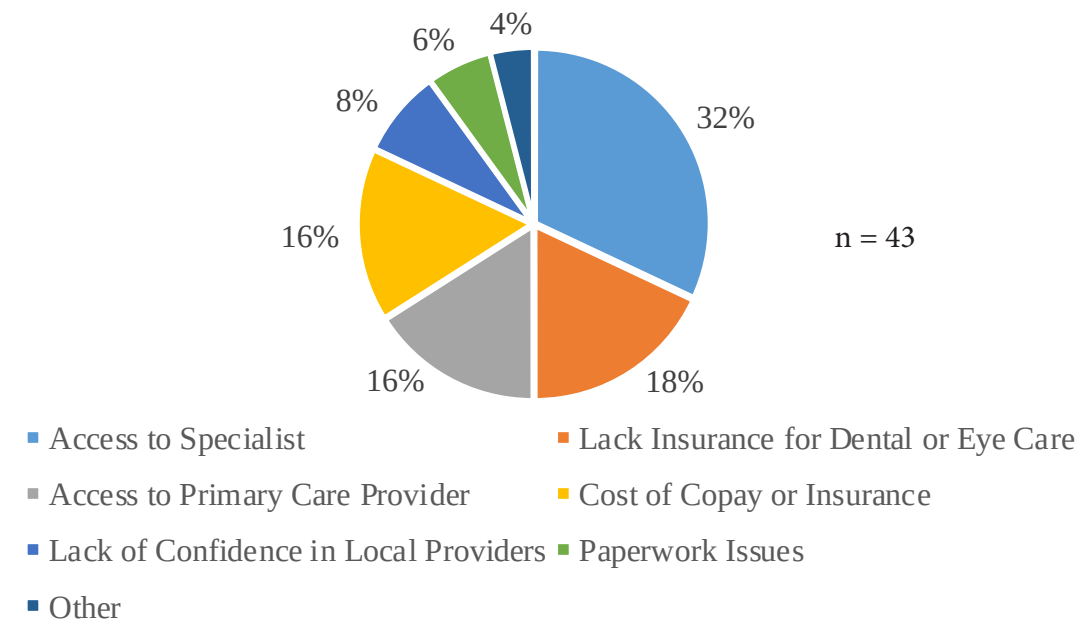
1. Department of Health and Human Services. (2000). Oral Health in America: A Report of the Surgeon General- executive Summary. Rockville, MD: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health. Retrieved from http://www.nidcr.nih.gov/Data-Statistics/SurgeonGeneral/Report/ExecutiveSummary.htm#challenge
1. CDC. (2014). Oral and Dental Health. Retrieved at http://www.cdc.gov/nchs/fastats/dental.htm.
2. Centers for Medicare & Medicaid Services. (2013). Medicare Dental Coverage. Retrieved at http://www.cms.gov/Medicare/Coverage/MedicareDentalCoverage/index.html?redirect=/MedicareDentalcoverage/

Health Care

Meeting Health Care Needs

Participants answered the question, "Within the past 12 months, were you able to get the healthcare (including mental healthcare) you needed?" A minority or respondents, 6.5% (n = 43), indicated that they were not able to get the care that they needed. The comments regarding the reasons why respondents were not able to obtain the healthcare they needed were evaluated. These responses could be grouped into three topics, including the following: 1.) cost of care (due to co-pay or due to no insurance coverage for primary care, dental care or eye care), 2.) access to care (due to insufficient primary care providers and due to no specialist care in the area), and 3.) lack of confidence in the local medical providers.

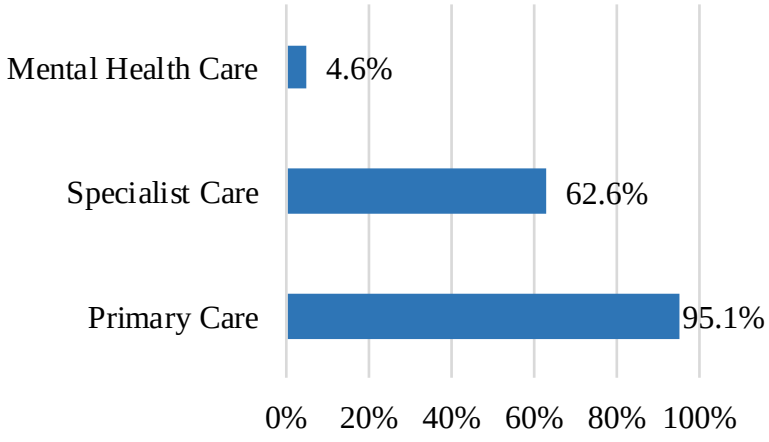
Exhibit 13: Reasons given by Seniors for Unmet Medical Needs



Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands - 2013. This analysis was for the qualitative survey question "Explain why you were not able to get the healthcare (including mental healthcare) you needed in the past 12 months."

Health Encounters

Exhibit 14: Types of Health Care Received



Source: California Center for Rural Policy. (2015). Community Health and Wellness Survey Del Norte and Adjacent Tribal Lands - 2013. This analysis was for the survey questions: 1) "During the past 12 months, did you see a doctor, nurse, other health care professional for any kind of medical care, including sick care, well-check-ups, physical exams, and hospitalizations?, 2) "Mental health professionals include psychiatrists, psychologists, psychiatric nurses, clinical social workers, and therapists/counselors. During the past 12 months, have you received any treatment or counseling from a mental health professional?", 3) " Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care. During the past 12 months, did you see a specialist (other than a mental health professional)?".

Respondents provided information regarding encounters with primary care medical providers, specialists, mental health providers and dental care providers. Most of the seniors indicated that had seen their primary care provider for either sick or well care in the past 12 months (95.1%). There was no statistical difference in prevalence of seeing a medical provider the past year when seniors whose income placed them above the poverty limit were compared to seniors whose income placed them below the poverty limit. A small minority of the respondents indicated that they had seen a mental health specialist in the past year (4.6%). Of those receiving mental health care, 56.7% indicated that they were either very satisfied or somewhat satisfied with the services received. Most of the seniors indicated that they were seen by a specialist in the past 12 months (62.6%). The senior respondents to this survey indicated a high prevalence of at least annual access to primary care medical providers and specialty medical providers, but utilization of mental health care was much lower.

Travel Time

The distance to medical care or dental care can represent a barrier to receiving timely services for seniors who live in rural areas. National travel data indicates that the average distance travelled for a medical or dental visit is longer for rural residents when compared to urban residents.[1] Others have found that 24% of rural residents travel 13 to 50 miles for medical care.[2] Our data shows that 29% of seniors in DNATL travel at least 1 hour to get to medical appointments. The average travel time to see a medical provider in this study was 29 minutes (± 52 minutes). The indicated travel time to the medical appointments ranged from 1 to 480 minutes. The median travel time to medical appointments was 15 min. Data from the 2001 National Household Travel Survey indicates that the average trip for medical or dental care was 22 minutes for rural residents.[1] Eleven percent of the seniors in this study indicated that transportation was an issue in meeting their health care needs. These findings indicate that seniors in DNATL travel a greater distance to obtain medical and/or dental care when compared to national data for urban residents. Further, for a minority of seniors transportation represents a barrier to obtaining needed medical care.

1. Probost, J.S., Laditka, S.B, Wang, J., & Johnson, A. O. (2006). Mode of Travel and actual Distance traveled for medical or Dental Care by Rural and Urban Residents. South Carolina Rural Health Research Center. Retrieved at http://rhr.sph.sc.edu/report/SCRHRC_ModeofTravel_Exec_Sum.pdf.
2. Edelman, M.A. & Menz, B.L. (1996). Selected comparisons and implication of a national rural and urban survey of health care access, demographics, and policy issues. Journal of Rural Health 12 (93), 197-205.

Medical Insurance

Of the 623 individuals that responded to the insurance questions, only six (1%) indicated that they did not have insurance. The majority of the seniors in this survey had Medicare (93%). A large portion of the survey respondents had dual insurance coverage by Medicare and private insurance (39%) or Medicare and Medi-Cal (14%). It is estimated that 20% of individuals with Medicare are eligible for dual enrollment in Medi-Cal.[1] Given the prevalence of poverty in the survey respondents was higher when compared to national estimates, it would be expected that the prevalence of seniors with both Medical and Medicare in this study would also be higher than that seen at a national level. However, the prevalence of seniors with dual insurance or Medicare and Medi-Cal was less than expected. It is uncertain why these survey respondents had lower than expected dual enrollment in Medicare and Medi-Cal. Followup is needed to evaluate whether low-income seniors in DNATL are receiving adequate medical insurance coverage.

1. The Henry J. Kaiser Family Foundation. (2015) Dual Enrollment in Medicaid managed Care, by Plan Type. Retrieved http://kff.org/search/?s=dual+enrollment&tab=-data&facets[post_type][]=state-indicator.

Patient Centered Medical Home

Quality of medical care has been linked to number of variables. These variables have been clustered into a concept known as Patient Centered Medical Home (PCMH). The National Survey of Children's Health (NSCH) has created a PCMH measure that is a composite of five components.[1] These components include the following:

1. There is a personal care provider
2. There is a usual source of care
3. Referrals are obtained when needed
4. There is care coordination when needed.
5. Care is family-centered

1. The Henry J. Kaiser Family Foundation. (2015) Dual Enrollment in Medicaid managed Care, by Plan Type. Retrieved http://kff.org/search/?s=dual+enrollment&tab=-data&facets[post_type][]=state-indicator.

Personal Care Provider

The Rural Healthy People[1-3] rated access to quality health services as the top ranking rural health priority. Having a personal care provider is seen as a vital component to the concept of medical home. A personal care provider was defined by American Academy of Pediatrics[4] as a health provider who is familiar with the patient's health history. Of the 655 senior respondents, 564 indicated that they had a personal care provider (87.6%). Others have shown that in rural communities only 78% of rural residents have a usual primary care provider.[2] The results from this study revealed that the seniors in DNATL have greater access to a personal care provider than previously reported from national data for rural residents of all ages.

1. Bolin, J.N., Bellamy, G. (2010). Rural Healthy People 2020. Retrieved from http://sph.tamhsc.edu/srhrc/docs/rhp2020.pdf.
2. Gamm, L. Hutchinson, Bellamy, G. et al. (2002). Rural Healthy People 2010: Identifying rural health priorities and modes of practice. Journal of Rural Health 18 (1), 9-14.
3. Gamm, L.D., Hutchinson, L.L., Dabney, B. J. and Dorsey, A. M. eds. (2003) Rural Health People 2010: A Companion Document to Healthy People 2010. Volume 1. College Station, Texas: The Texas A&M University System Health Science Center, School of Rural Public Health, Southwest Rural Health research Center.
4. American Academy of Pediatrics. (2002). The Medical Home. Pediatrics. 110 (10), 184-186.

Usual Place of Care

Another component of medical home pertains to access to a usual source of care. The majority of seniors in the survey indicated that they had a usual source of care that was not the emergency department, urgent care center, or a retail clinic (79.9%). The prevalence of having a usual source of care was lower than others have reported for rural residents (89%).[1] More seniors had a personal care provider than those who had a usual source of care. These findings may indicate that timely access to the personal care provider is not available in the area. When asked how often they were able to access care that they need right away, only 30.5% indicated that needed care was 'always' available. Further, 24% of the seniors indicated that urgent care was 'never' or only 'sometimes' received as soon as they needed it. Timely access to care was delayed in routine care as well. Only 38.9% of the seniors indicated that they were 'always' able to get appointments for check-ups as soon as they thought one was needed. The response to these questions indicate that routine and urgent care needs of DNATL seniors are not being met by the regional primary care medical practices.

Del Norte County, like other rural regions, has a long history of primary care provider shortage.[2] When a shortage of providers exists, then patients resort to alternate points of access to the medical system when they are in need of care. This primary care provider shortage exists despite having outpatient clinics in the county operated by Sutter Coast Hospital and by Open Door Clinics. Both of these ambulatory clinics are recognized as serving patient needs in a medically underserved area by the Health Resources and Services Administration (HRSA). This recognition allows the medical providers that staff the clinics to be eligible for student loan reimbursement. Despite the financial incentives to draw health practitioners to underserved areas, rural regions like DNATL continue to struggle to recruit sufficient numbers of health care providers to serve the needs of their communities.

1. Gamm, L. Hutchinson, Bellamy, G. et al. (2002). Rural Healthy People 2010: Identifying rural health priorities and modes of practice. Journal of Rural Health 18 (1), 9-14.
2. Love, M. Eschker, E., VanArsdale, J. West, J. Porter, M. Pollom, J. (2007). Del Norte County Health Care provider recruiting and retention Plan. Humboldt State University: California Center for Rural Policy.

Referrals

The third component of medical home addresses the ability to obtain needed referrals. The majority of the seniors indicated that it was not difficult to get the referral for specialist care when it was needed (79.5%). This finding appears to be incongruent with the qualitative analysis of responses regarding access to necessary healthcare. This analysis revealed that access to specialist care was a frequent cause of unmet medical needs. A possible answer to this conundrum may lie in the analysis of the referral process. In most cases, a primary care provider evaluates a patient and decides if a referral to a specialist would be beneficial. If specialist's intervention is deemed to have merit, then the primary care initiates the referral process (i.e., the patient obtains a referral). The second step for those needing a referral is accessing the services of the specialist. National data reveals specialty care in rural areas is insufficient to meet the needs of rural communities,[1] and DNATL is no different.[2] The seniors from this study indicated that they had unmet medical needs because they were not able to engage the services of a cardiologist; an ear, nose and throat specialist; an oncologist; a podiatrist; or a psychiatrist, as providers of these specialties were not in practice in Del Norte County.[2] Although the majority of seniors indicated that they were able to obtain referrals when needed, there is some question as to whether they were able to access specialty care when needed. To obtain a more clear picture as to unmet medical needs, it is suggested that a follow up question be included in future surveys that evaluates both access to the referral process and access to the specialty care.

1. Gamm, L. Castillo, G. and Pittman, S. (2003). Access to quality health services in rural areas – primary care: a literature review. Rural Heathy People 2010. Retrieved at http://sph.tamhsc.edu/centers/rhp2010/03Volume2accessprimarycare.pdf.
2. Love, M. Eschker, E., VanArsdale, J. West, J. Porter, M. Pollom, J. (2007). Del Norte County Health Care provider recruiting and retention Plan. Humboldt State University: California Center for Rural Policy.

Family Centered Care

The fourth component of a medical home addresses the concept of family centered care. This component consists of questions that asks the respondents about their relationship with their Personal Care Provider. The questions ask if their provider makes them feel like a partner in care, if their provider listens to them carefully, if their provider spends enough time with them, if their provider gives them enough information about their health condition, and if their provider is sensitive to their values and customs. A person is deemed as having family centered care if they feel that these actions 'always' or 'usually' occur. Most of the seniors indicated that they experienced these family centered ideals 'always' or 'usually' with their healthcare provider (91.1%).

Effective Care Coordination

The fifth component of a medical home evaluates care coordination. Care coordination was assessed in individuals who had seen both a primary care provider and at least one specialists in the past 12 months. If the survey respondent indicated that that they 'always' or 'usually' got as much help as they wanted with arranging or coordinating their care, they were considered as having effective care coordination. The majority of seniors who may have needed care coordination obtained the support that they needed (81.8%).

Medical Home

In the seniors who returned the survey, only 58% of them met the NSCH criteria as having a medical home in all five components of this construct. Given the findings of this survey, it appears that timely access to personal care providers is limiting quality care in DNATL. In addition, a portion of the senior population could benefit from coordination of care. Recruitment for additional medical health professionals to fill these roles in DNATL is essential to improving quality of health care in the area.

Appendix

Del Norte & Adjacent Tribal Lands Community Health & Wellness Survey

Dele vuelta a la hoja para espanol

Thank you for completing this important survey to help us understand and improve health and healthcare in your community. Participation in this survey is voluntary, anonymous, and confidential. Please have an adult (18 or older) in your household complete the survey and return it in the postage paid envelope by **May 30, 2013**. **Only complete one survey per household**. Answer the following questions about yourself. If you have children, please also complete the child section.

1) Within the past 12 months, were you able to get the healthcare (including mental healthcare) you needed?
☐ Healthcare not needed ☐ Yes ☐ No → If No, please explain why_____
_____

2) What types of health insurance do you have? ***Please check all that apply.***
☐ None
☐ Private insurance
☐ Medicare
☐ Medi-Cal
☐ Other government plans such as: Healthy Families, Family Planning Access Care and Treatment (PACT), County Medical Service Program (CMSP).
☐ Other (please explain)_____

3) A personal doctor or nurse is a health professional who knows you well and is familiar with your health history. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician's assistant. Do you have one or more persons you think of as your personal doctor or nurse?
☐ Yes ☐ No ☐ Don't Know

4) Is there a place that you USUALLY go to when you are sick or you need advice about your health?
☐ No ☐ Don't Know

☐ Yes → **If Yes,** What kind of place do you go to **most often**? ***Please check one.***
☐ Doctor's Office/Health Center/Clinic/Indian Clinic
☐ Hospital Outpatient Department
☐ Hospital Emergency Room or Urgent Care
☐ Retail Store Clinic or "Minute Clinic"
☐ School (Nurse, Athletic Trainer, Etc.)
☐ Friend/Relative
☐ Mexico/Other Locations out Of United States
☐ Oregon
☐ Some Other Place_____
☐ Do Not Go to One Place Most Often
☐ Don't Know

5) During the past 12 months did you see a doctor, nurse, or other health care professional for any kind of medical care, including sick care, well-check-ups, physical exams, and hospitalizations?
☐ Yes ☐ No ☐ Don't Know
If No or Don't Know skip to question #12

6) During the past 12 months, when you phoned to get an appointment for care you needed **right away**, how often did you get an appointment as soon as you thought you needed?
☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know ☐ Does Not Apply

7) During the past 12 months, when you phoned to get an appointment for a **check-up or routine care**, how often did you get an appointment as soon as you thought you needed?
☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know ☐ Does Not Apply

8) During the past 12 months, how often did your doctors or other health care providers help you feel like a partner in your care?
☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know

9) During the past 12 months, how often did your doctors or other health care providers listen carefully to you?
☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know

10) During the past 12 months, how often did your doctors or other health care providers spend enough time with you?
☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know

11) Information about your health or health care can include things such as the causes of any health problems, how to care for yourself now, and what changes to expect in the future. During the past 12 months, how often did you get the specific information you needed from your doctors or other health care providers?
☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know

12) When you are seen by doctors or other health care providers (including mental health), how often are they sensitive to your family's values and customs?
☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know ☐ Does Not Apply

13) During the past 12 months, did you need a referral to see any doctors or receive any services?

☐ No ☐ Don't Know
☐ Yes → **If Yes,** How difficult was it to get the referral? ***Please check one.***
☐ Not difficult ☐ Slightly difficult ☐ Very difficult ☐ Don't Know

14) Mental health professionals include psychiatrists, psychologists, psychiatric nurses, clinical social workers, and therapists/counselors. During the past 12 months, have you received any treatment or counseling from a mental health professional?
☐ Yes ☐ No ☐ Don't Know

15) Overall, how satisfied are you with the mental health services in your community?
☐ Very Satisfied ☐ Somewhat Satisfied ☐ Somewhat Dissatisfied ☐ Very Dissatisfied
☐ Don't Know

16) Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care. During the past 12 months, did you see a specialist (other than a mental health professional)?
☐ Yes ☐ No ☐ Don't Know

17) Does anyone help you arrange or coordinate your care among the different doctors or services that you use?
☐ Yes ☐ No ☐ Don't Know ☐ Does Not Apply

18) During the past 12 months, how often did you get as much help as you wanted with arranging or coordinating your care?
☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know ☐ Does Not Apply

19) Overall, how satisfied are you with the communication among your doctors and other health care providers?
☐ Very Satisfied ☐ Somewhat Satisfied ☐ Somewhat Dissatisfied ☐ Very Dissatisfied
☐ Don't Know ☐ No Communication Needed or Wanted

20) Do you regularly go outside your county for health services?
☐ Yes ☐ No

21) During the past 12 months, did you see a dentist for any kind of dental care, including check-ups, dental cleanings, x-rays, or filling cavities?
☐ Yes ☐ No

22) Is there a particular dentist or dental clinic that you usually go to if you need dental care or dental advice?
☐ Yes ☐ No ☐ Do Not Go to One Place Most Often

23) To the best of your knowledge when did you last have your teeth cleaned at a dentist's office?
☐ Within the past year ☐ 1-2 years ago ☐ 2-5 years ☐ 5 or more years ago
☐ Don't Know ☐ Never

24) What county do you live in?

☐ Del Norte ☐ Humboldt ☐ Siskiyou ☐ Other_____

25) What town or community/village do you live in? _____

26) What zip code do you live in?_____

27) What type of building/structure do you live in? ***Please check one.***

☐ House ☐ Duplex ☐ Building with 3 or more units
☐ Mobile home/trailer ☐ Other _____

28) Do you own or rent your home? ***Please check one.***

☐ Owned or being bought by someone in household ☐ Rent ☐ Other arrangement

29) In your home, do you currently have Internet access?

☐ No ☐Yes →**If Yes,** what type(s) of Internet access? ***Please check all that apply.***

☐ Cable modem from Charter Communications ☐ Satellite
☐ DSL from Frontier, AT&T or Verizon ☐ Cellular broadband
☐ Tsunami or other wireless company ☐ Don't Know
☐ Dial-up ☐ Other _____

30) In your home, do you currently have phone access?

☐ No ☐Yes →**If Yes,** what type(s) of phone access? ***Please check all that apply.***

☐ Land line from Frontier, AT&T or Verizon ☐ VoIP
☐ Charter Communications ☐ Don't Know
☐ Cellular ☐ Other _____

31) What is your primary mode of transportation? ***Please check one.***

☐ Walk ☐ Bicycle ☐ Public Transportation ☐ Car/Truck ☐ Other_____

32) Approximately how long does it usually take to get to the following places from your home?

The store where you usually buy food? _____ (specify minutes or hours)
The place you usually go for healthcare (if applicable)? _____(specify minutes or hours)
The place you usually go for dental care (if applicable)? _____(specify minutes or hours)

33) How many automobiles, vans, and trucks are kept at home for use by members of your household?

☐ None ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 or more

34) Is transportation a problem in meeting the health needs of you or your family?

☐ No ☐ Yes →If Yes, please explain why_____

35) Please indicate how much you agree with the following statements:

	Mostly True	Mostly False	Don't Know
a) My neighbors and I talk about community problems and how to solve them.	☐	☐	☐
b) The sidewalks, trails, and crosswalks in my neighborhood/community are in good condition.	☐	☐	☐
c) During bad weather, there are public indoor facilities my neighbors and I can use close by.	☐	☐	☐
d) There are clean parks, playgrounds or green spaces that I feel safe going to in my neighborhood/community.	☐	☐	☐
e) There are places in my neighborhood/community where I can get fresh fruits and vegetables year-round.	☐	☐	☐

36) **In your home** do you currently have:

	Yes	No	Don't Know
a) A computer?	☐	☐	☐
b) Hot and cold running water?	☐	☐	☐
c) A flush toilet?	☐	☐	☐
d) A bathtub or shower?	☐	☐	☐
e) A sink with a faucet?	☐	☐	☐
f) A stove or range?	☐	☐	☐
g) A refrigerator?	☐	☐	☐
h) A washing machine?	☐	☐	☐
i) A clothes dryer?	☐	☐	☐
j) A source of electricity?	☐	☐	☐
k) A working electrical outlet or wall plug in every room?	☐	☐	☐
l) Exposed wiring?	☐	☐	☐
m) Holes in the floor?	☐	☐	☐
n) Open cracks or holes in the inside walls or ceilings?	☐	☐	☐
o) Holes or open cracks or crumbling in the foundation?	☐	☐	☐
p) Water leaks (from inside or outside)?	☐	☐	☐
q) Broken windows?	☐	☐	☐
r) Mold on an area greater than the size of a dollar bill?	☐	☐	☐

37) In the last 12 months were you or people living in your household ever hungry because you couldn't afford enough food?
☐ Yes ☐ No ☐ Don't Know

38) Please indicate how often the following statements describe your/your family's food situation.

In the last 12 months:	Often True	Sometimes True	Never True	Don't Know
a) We worried whether our food would run out before we got money to buy more.	☐	☐	☐	☐
b) The food that we bought just didn't last, and we didn't have enough money to get more food.	☐	☐	☐	☐
c) We couldn't afford to eat balanced meals.	☐	☐	☐	☐

39) In the last 12 months, which of the following resources did members of your household use to purchase or obtain food?
Please check all that apply

☐ Cash from employment or savings
☐ Cash or benefits from SSI/SSDI
☐ WIC coupons
☐ Cash or benefits from TANF or CalWORKS
☐ CalFresh (formerly called food stamps)
☐ Local Food Bank
☐ Other_____

40) Please indicate how often the following statements describe your situation this past year.

In the last 12 months:	**Always**	**Usually**	**Sometimes**	**Never**	**Does Not Apply**
a) How often did you feel lonely or isolated?	☐	☐	☐	☐	☐
b) How often did you get the social and emotional support you needed?	☐	☐	☐	☐	☐
c) How often did **you** feel safe from violence (physical, verbal or sexual) in **your home**?	☐	☐	☐	☐	☐
d) How often did you feel **your family** was safe from violence (physical, verbal or sexual) in **your home**?	☐	☐	☐	☐	☐
e) How often did **you** feel safe from violence (physical, verbal or sexual) in your **neighborhood/community**?	☐	☐	☐	☐	☐
f) How often did you feel **your family** was safe from violence (physical, verbal or sexual) in your **neighborhood/community**?	☐	☐	☐	☐	☐
g) How often were you worried or stressed about having enough money to pay your rent/mortgage?	☐	☐	☐	☐	☐
h) How often were you worried or stressed about having enough money to buy nutritious meals?	☐	☐	☐	☐	☐

41) In the last 12 months how often did you participate in cultural activities (such as festivals, ceremonies, music, dance)?
☐ None ☐ 1-4 times ☐ 5-11 times ☐ 12 or more times ☐ Don't know

42) In the past 12 months, how often did you do any unpaid volunteer work or community service?
☐ None ☐ 1-4 times ☐ 5-11 times ☐ 12 or more times ☐ Don't know

43) In what year were you born?_____

44) What is your gender? ☐ Male ☐ Female ☐ Other _____

45) Are you of Hispanic, Latino, or Spanish origin? ☐ Yes ☐ No

46) What is your race? ***Please check all that apply.***
☐ White ☐ Black/African American ☐ Asian→describe_____
☐ American Indian →print name of enrolled tribe_____
☐ Other_____

47) Which of the following best describes your current employment situation? ***Please check one.***
☐Employed by an organization/company/business ☐Unemployed, looking for work ☐Disabled
☐Self-employed ☐Unemployed, not looking for work ☐Homemaker
☐Retired ☐Student ☐Other _____

48) What is your best estimate of your household's total income **per year** before taxes? _____

49) Including yourself, how many people are supported by the household income reported in the previous question?
Number of people_____

50) How many people total (including yourself) currently live in your household? _____*people*

51) Of the people living in your household, how many are: 0-5 years old?_____ 25 to 64 years old?____
6 to 17 years old?_____ 65 years or older? ____
18 to 24 years old? _____

52) What is the highest level of education that you have completed? ***Please check one.***

☐ Did not complete high school
☐ GED/ High School certificate
☐ High school graduate
☐ Vocational training
☐ Some college (no degree)
☐ Associate degree
☐ Bachelor's Degree
☐ Master's Degree
☐ Graduate or professional training beyond Master's Degree.
☐ Other _____

Thank you for your time. Please complete the child section if you have children under 18 in your household.

Child Section

If you have a child under 18 years of age living in your household,
please answer the following questions to help us better understand their needs**.**
If you have more than one child please complete this for the child that had the most recent birthday.

C1) How old is the child that you are answering these questions for? _____Years _____Months

C2) Within the past 12 months, were you able to get your child the healthcare (including mental healthcare) they needed?

☐ Healthcare not needed ☐ Yes ☐ No → If No, please explain why_____
_____

C3) What types of health insurance does your child have? ***Please check all that apply.***

☐ None
☐ Private insurance
☐ Medicare
☐ Medi-Cal
☐ Other government plans such as: Healthy Families, Family Planning Access Care and Treatment (PACT), County Medical Service Program (CMSP).
☐ Other (please explain)_____

C4) A personal doctor or nurse is a health professional who knows you well and is familiar with your health history. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician's assistant. Does your child have one or more persons you think of as their personal doctor or nurse?

☐ Yes ☐ No ☐ Don't Know

C5) Is there a place that your child USUALLY goes when he/she is sick or you need advice about his/her health?

☐ No ☐ Don't Know

☐Yes →**If Yes,** What kind of place does he/she go to **most often**? ***Please check one.***

☐Doctor's Office/Health Center/Clinic/Indian Clinic
☐Hospital Outpatient Department
☐Hospital Emergency Room or Urgent Care
☐Retail Store Clinic or "Minute Clinic"
☐School (Nurse, Athletic Trainer, Etc.)
☐Friend/Relative
☐Mexico/Other Locations out Of United States
☐Oregon
☐Some Other Place_____
☐Does Not Go to One Place Most Often
☐Don't Know

C6) During the past 12 months did your child see a doctor, nurse, or other health care professional for any kind of medical care, including sick-child care, well-child check-ups, physical exams, and hospitalizations?

☐ Yes ☐ No ☐ Don't Know

If No or Don't Know skip to question #C12

C7) During the past 12 months, how many times did your child see a doctor, nurse, or other health care provider for *preventive* medical care such as a physical exam or well-child checkup? _____times ☐Don't Know

C8) During the past 12 months, how often did your child's doctors or other health care providers help you feel like a partner in his/her care?

☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know

C9) During the past 12 months, how often did your child's doctors or other health care providers listen carefully to you?

☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know

C10) During the past 12 months, how often did your child's doctors or other health care providers spend enough time with him/her?

☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know

C11) Information about a child's health or health care can include things such as the causes of any health problems, how to care for a child now, and what changes to expect in the future. During the past 12 months, how often did you get the specific information you needed from your child's doctors or other health care providers?

☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know

C12) When your child is seen by doctors or other health care providers (including mental health), how often are they sensitive to your family's values and customs?

☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know ☐ Does Not Apply

C13) During the past 12 months, did your child need a referral to see any doctors or receive any services?

☐ No ☐ Don't Know

☐Yes →**If Yes,** How difficult was it to get the referral? ***Please check one.***

☐ Not difficult ☐ Slightly difficult ☐ Very difficult ☐ Don't Know

C14) Mental health professionals include psychiatrists, psychologists, psychiatric nurses, clinical social workers, and therapists/counselors. During the past 12 months, has your child received any treatment or counseling from a mental health professional?

☐ Yes ☐ No ☐ Don't Know

C15) Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care. During the past 12 months, did your child see a specialist (other than a mental health professional)?

☐ Yes ☐ No ☐ Don't Know

C16) Does anyone help you arrange or coordinate your child's care among the different doctors or services that he/she uses?

☐ Yes ☐ No ☐ Don't Know ☐ Does Not Apply

C17) During the past 12 months, how often did you get as much help as you wanted with arranging or coordinating your child's care?

☐ Always ☐ Usually ☐ Sometimes ☐ Never ☐ Don't Know ☐ Does Not Apply

C18) Overall, how satisfied are you with the communication among your child's doctors and other health care providers?

☐ Very Satisfied ☐ Somewhat Satisfied ☐ Somewhat Dissatisfied ☐ Very Dissatisfied
☐ Don't Know ☐ No Communication needed or wanted

C19) Do your child's doctors or other health care providers need to communicate with his/her child care providers/early intervention program, school, or special education program?

☐ No ☐ Don't Know

☐Yes ➞**If Yes,** Overall, how satisfied are you with that communication? ***Please check one.***

☐ Very Satisfied ☐ Somewhat Satisfied ☐ Somewhat Dissatisfied ☐ Very Dissatisfied
☐ Don't Know ☐ No Communication needed or wanted

C20) During the past 12 months, did your child have a toothache, decayed teeth, or unfilled cavities?

☐ Yes ☐ No ☐ Don't Know

C21) Is there a particular dentist or dental clinic that your child USUALLY goes to if he/she needs dental care or dental advice?

☐ Yes ☐ No ☐Does Not Go To One Place Most Often

C22) During the past 12 months, did your child see a dentist for any kind of dental care, including check-ups, dental cleanings, x-rays, or filling cavities?

☐ Yes ☐ No ☐ Don't Know

C23) During the past 12 months, how many times did your child see a dentist for *preventive* dental care, such as check-ups and dental cleanings? _____times ☐Don't Know

C24) Has your child received dental care through the Mobile Dental Van at their school?

☐Yes ☐ No ☐ Does not apply (child not in school) ☐ Don't Know

C25) Does your child attend school?

☐Yes ➞**If Yes, what school? _____** ☐ No➞ **If No, you are finished with the survey.**

C26) On most days, how does your child **arrive** at school?

☐ Walk ☐ Family vehicle (only children in your family)
☐ Bike or Skate ☐ Carpool (children from other families)
☐ School Bus ☐ Other _____

C27) On most days, how does your child **leave** from school?

☐ Walk ☐ Family vehicle (only children in your family)
☐ Bike or Skate ☐ Carpool (children from other families)
☐ School Bus ☐ Other _____

C28) How far does your child live from school?

☐ Less than ¼ mile ☐ 1 mile up to 2 miles
☐ ¼ mile up to ½ mile ☐ More than 2 miles ➞ about how many miles? _____
☐ ½ mile up to 1 mile ☐ Don't know

C29) How long does it normally take your child to get to school?

☐ Less than 5 minutes ☐ 11-20 minutes
☐ 5-10 minutes ☐ More than 20 minutes➞ about how many minutes?_____
☐ Don't know

End of survey. Thank you for your time.
Please return the survey in the enclosed postage paid envelope with your raffle entry.

CCRP
California Center for Rural Policy

Join us online...

Please join us in an on-line discussion about senior health in Del Norte and Adjacent Tribal Lands. Contribute to the living document by commenting on the research findings, sharing innovative programs and discussing policy implications. To read comments and post your own, please visit our website, www.humboldt.edu/ccrp.

Join us in the community...

The California Center for Rural Policy will continue to share research results with the community through briefs, reports and meetings. We plan to engage the community in dialogue about potential solutions and policy recommendations to address identified problem areas. We hope you will join us as we work together to improve health in our region. If you would like to receive information from CCRP please contact us to get on our mailing list: (707) 826-3400 or ccrp@humboldt.edu

Join us in collaboration...

CCRP welcomes opportunities to collaborate with community partners for more in-depth research on this topic.

The California Center for Rural Policy at Humboldt State University is a research center committed to informing policy, building community, and promoting the health and well-being of rural people and environments.

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