August 2008 Research Brief

Health Insurance Disparities in the Redwood Coast Region

CCRP
California Center for Rural Policy

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Lack of health insurance or inadequate health insurance are significant barriers to receiving health care services.[1,2] Results from the Rural Health Information Survey, 2006, indicate that insurance status plays an important role in whether or not people are able to get needed health care and receive recommended preventive health screenings. Results from the survey indicate that:

- 21% of respondents under age 65 are uninsured.
- Respondents with Medi-Cal were significantly less likely than respondents with private insurance to have received recommended screening for breast cancer, colorectal cancer and diabetes, despite being equally likely to have had a general check-up within the past 4 years.
- Uninsured respondents were significantly less likely than respondents with private insurance or Medi-Cal to have received recommended screening for breast cancer, cervical cancer, colorectal cancer and diabetes.
- Uninsured respondents or those with Medi-Cal were significantly more likely to report an inability to get needed health care compared to respondents with private insurance.
- Respondents with Medi-Cal were 2.2 times more likely to have visited an ER for their health in the prior year compared to respondents with private insurance.
- Respondents with Medi-Cal were significantly more likely to report poor or fair health compared to respondents with private insurance.
- The respondents most likely to be uninsured were poor, unemployed or self employed, under the age of 65, living in Humboldt or Mendocino counties and living in areas with low population density.

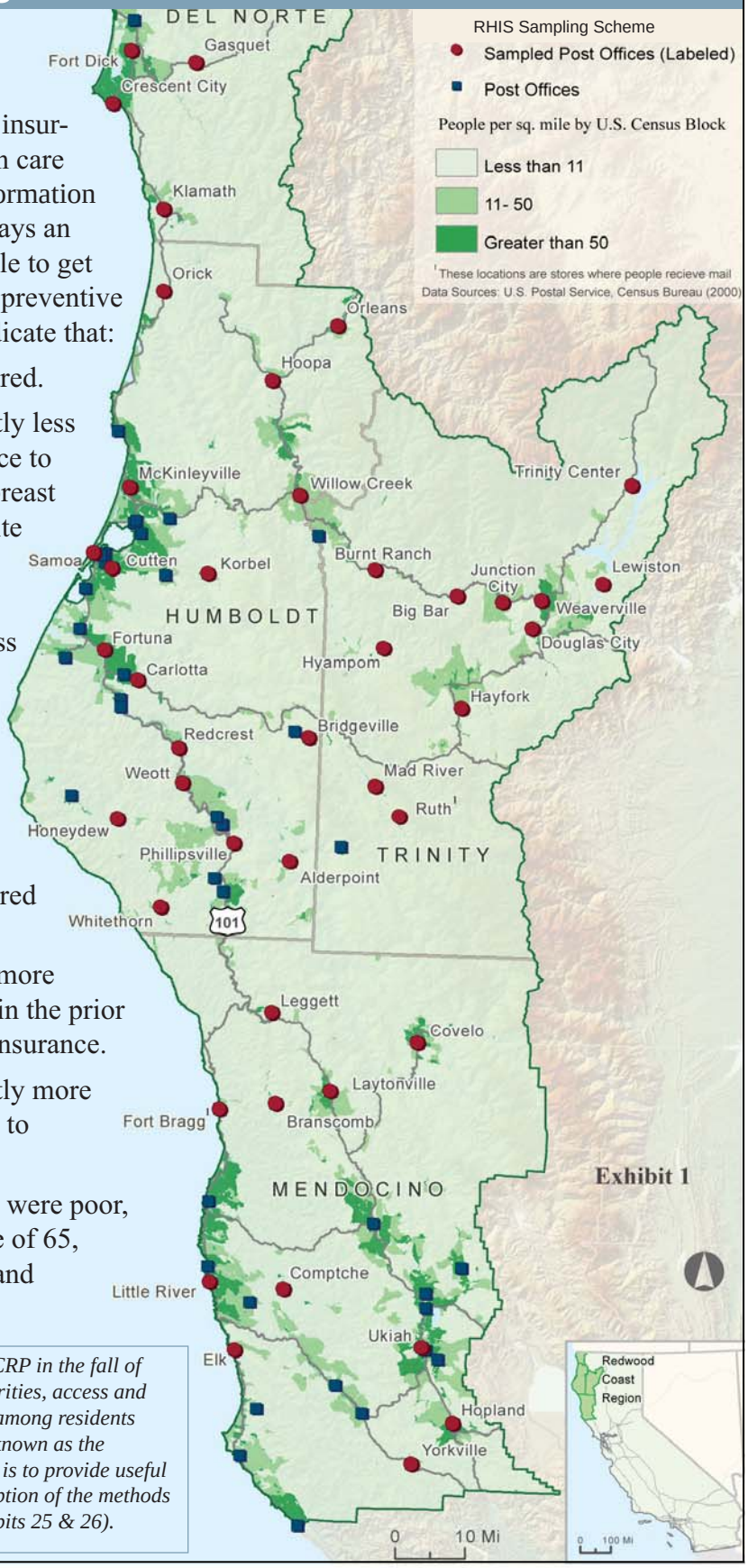


Exhibit 1

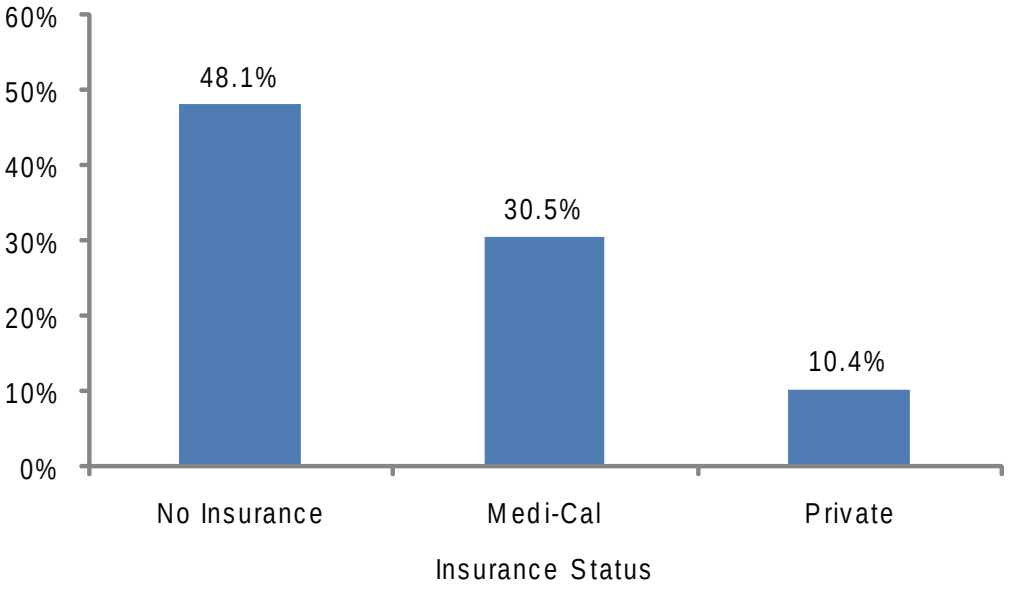
The Rural Health Information Survey was conducted by CCRP in the fall of 2006. The purpose of the survey was to assess health disparities, access and utilization of healthcare, and other determinants of health among residents in Del Norte, Humboldt, Trinity and Mendocino counties (known as the Redwood Coast Region - Exhibit 1). The goal of the survey is to provide useful information for planning and policy development. A description of the methods and sample demographics is at the end of this report (Exhibits 25 & 26).

Insurance Status and Access to Health Care: Ability to get Needed Health Care

Among the respondents who reported having no health insurance, 48.1% reported an inability to get needed health care in the prior 12 months.

Respondents without health insurance were 4.6 times more likely to report an inability to get needed health care than respondents with private insurance. Respondents with Medi-Cal insurance were 2.9 times more likely to report an inability to get needed health care than respondents with private insurance. Of the respondents with Medi-Cal insurance, 30.5% reported an inability to get needed health care compared to 10.4% of respondents with private insurance. All of these differences are statistically significant (Exhibits 2 & 3). Further analysis accounting for differences in population density did not show population density to be a confounder in the relationship between insurance status and ability to get needed health care. These findings suggest that obtaining needed health care depends upon not only having insurance, but also upon the type of insurance you have.

Exhibit 2: Percent of Respondents Reporting an Inability to get Needed Health Care* within Each Insurance Status (n = 2,079)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

Exhibit 3: Number of Respondents in Each Insurance Status who were Unable to get Needed Health Care*(n = 2,079)

Insurance		Unable to Get Needed Health Care	
	Frequency	Frequency	%
None	360	173	48.1
Medi-Cal	315	96	30.5
Private	1404	146	10.4

Source: Rural Health Information Survey, 2006, California Center for Rural Policy

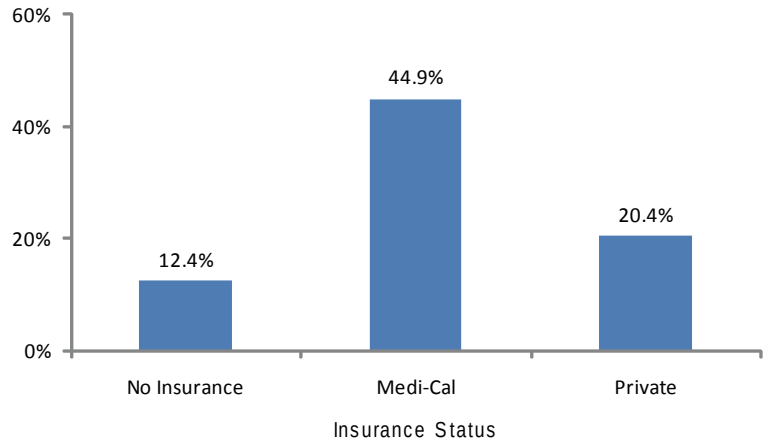
*This analysis was for the question "Within the past 12 months, were you able to get the health care (including mental health care) you needed? The analysis was restricted to respondents who answered "yes" or "no" to the question and reported their insurance status as "None", "Medi-Cal" or "Private".

Insurance Status and Access to Health Care: Use of the Emergency Department

Respondents with Medi-Cal insurance were 2.2 times more likely to have visited an ER for their health in the prior year compared to respondents with private insurance.

Among the respondents with Medi-Cal insurance, 44.9% reported visiting an ER for their own health in the prior year. This is significantly higher than the respondents with private insurance who visited an ER (20.4%) and the respondents with no insurance who visited an ER (12.4%). All of these differences are statistically significant (Exhibits 4 & 5). Analysis accounting for differences in population density only showed that respondents with Medi-Cal living in areas with more than 50 people per square mile were significantly more likely to use the ER than respondents with Medi-Cal living in areas with less than or equal to 50 people per square mile.

Exhibit 4: Percent of Respondents who Reported Visiting an ER for Their Health in the Last Year by Insurance Status*



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

Exhibit 5: Number of Respondents who Reported Visiting an ER for Their Health in the Last Year by Insurance Status*

Insurance		Visited an ER for Health	
	Frequency	Frequency	%
None	477	59	12.4
Medi-Cal	345	155	44.9
Private	1605	327	20.4

Source: Rural Health Information Survey, 2006, California Center for Rural Policy

*This analysis was for the question "During the past 12 months did you visit a hospital emergency room for your own health?" The analysis was restricted to respondents who answered "yes" or "no" to the question and reported their insurance status as "None", "Medi-Cal" or "Private".

Why study Insurance?

Numerous studies have shown that lack of health insurance or inadequate health insurance are significant barriers to receiving health care services, particularly preventive health services.[1,2] Lack of health insurance is associated with a lower likelihood of having a "medical home" or usual source of care, which translates to less preventive care and inadequate management of chronic conditions.[2]

Screening, early detection and treatment can prevent morbidity and mortality from many conditions. Early detection through screening has been demonstrated to reduce mortality from breast, cervical and colorectal cancer,[3] yet a recent US-based analysis found that uninsured and Medicaid-insured individuals were significantly less likely to receive recommended cancer screenings compared to the privately insured.[2]

Furthermore, uninsured and Medicaid-insured patients had substantially increased risks of presenting with advanced-stage cancers at diagnosis compared to patients with private insurance.[2]

Thus, it is apparent that access to preventive health services is associated with both the presence and type of health insurance.

This Research Brief explores the presence and type of health insurance among residents of the Redwood Coast Region and the association with access to health care and preventive services.

Insurance Status and Access to Health Care: Preventive Health

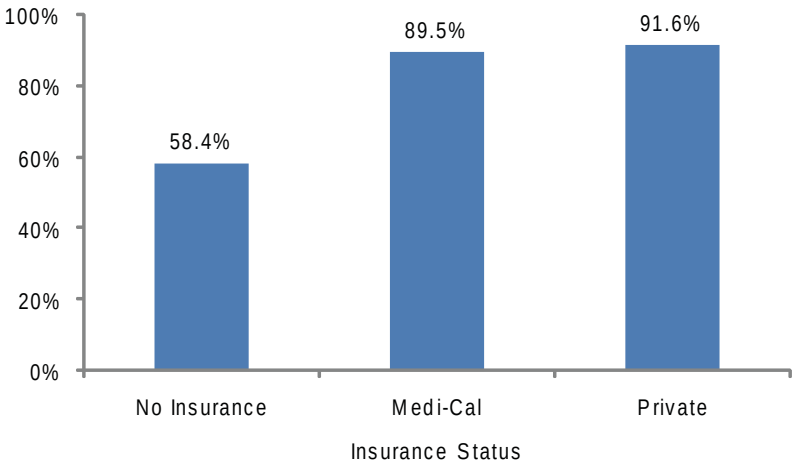
General Check-up

Respondents were significantly more likely to have had a general check-up within the past 4 years if they had private insurance or Medi-Cal rather than no insurance.

Of the uninsured respondents, 58.4% reported having a routine check-up within the past 4 years. This is significantly lower than respondents with private insurance (91.6%) or Medi-Cal (89.5%) who reported having a routine check-up within the past 4 years. The difference between private insurance and Medi-Cal was not statistically significant (Exhibit 6).

Population density was not found to be a confounder in the relationship between insurance status and routine check-up.

Exhibit 6: Percent of Respondents within each Insurance Status who had a Routine Check-up* in the Past 4 Years (n = 2,189)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

*This analysis was for the question "How long has it been since you last visited a doctor or healthcare provider for a routine check-up? A routine check-up is a general physical exam, not an exam for a specific injury, illness or condition" The analysis was restricted to respondents who reported their insurance status as "None", "Medi-Cal" or "Private".

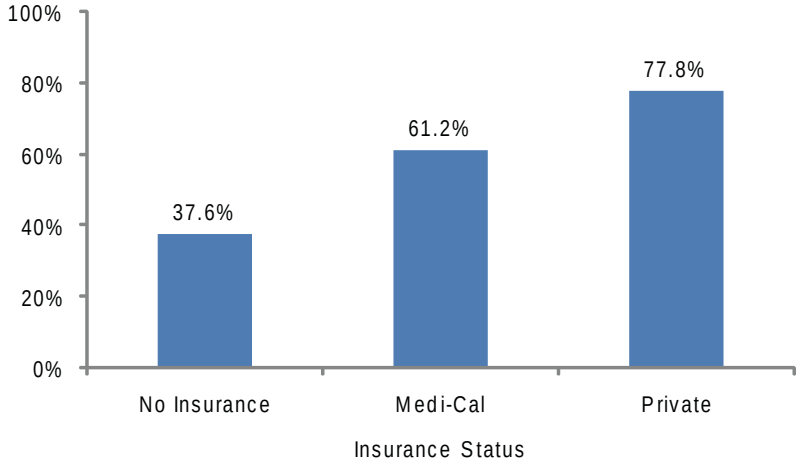
Breast Cancer Screening

Women respondents age 40 to 64 were significantly more likely to have received a mammogram in the past 2 years if they had private insurance rather than Medi-Cal or no insurance.

Over three-quarters (77.8%) of women age 40 to 64 years who had private health insurance had received a mammogram in the past 2 years compared with 61.2% of women with Medi-Cal and 37.6 of uninsured women (all differences are statistically significant) (Exhibit 7).

Population density was not found to be a confounder in the relationship between insurance status and breast cancer screening.

Exhibit 7: Percent of Women Age 40-64 who had a Mammogram* in Past 2 Years within Each Insurance Status (n = 999)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

*This analysis was for the question "To the best of your knowledge, when did you last have a mammogram?" The analysis was restricted to women age 40-64 who reported their insurance status as "None", "Medi-Cal" or "Private". Women who answered "don't know" or "not applicable" were excluded from the analysis.
Note: some women use thermography as an alternate method of screening for breast cancer. In this analysis, seven of the women who had not received a mammogram in the past two years had received thermography in the past two years– not enough to make any significant difference in the percent of women without screening.

Insurance Status and Access to Health Care: Preventive Health *cont.*

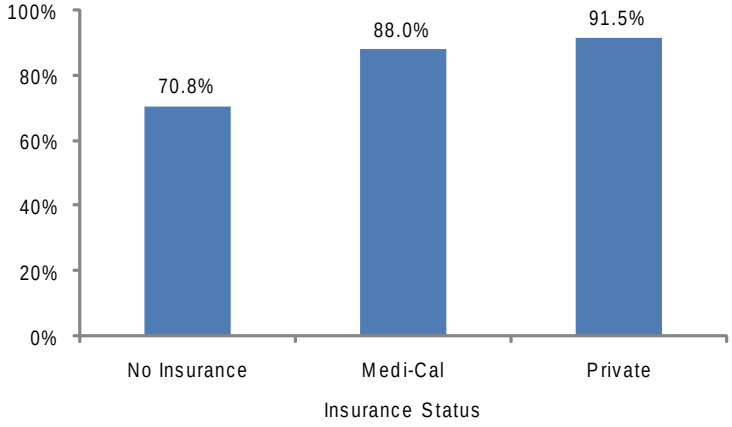
Cervical Cancer Screening

Women respondents age 18 to 64 were significantly more likely to have received a Pap test in the past 5 years if they had private insurance or Medi-Cal rather than no insurance.

Of the women age 18 to 64 who had private health insurance, 91.5% had received a Pap test in the past 5 years, which did not differ significantly from the women with Medi-Cal (88%). Uninsured women were significantly less likely to have received a Pap test in the past 5 years (70.8%) compared to women with private insurance or Medi-Cal (Exhibit 8).

Respondents with Medi-Cal living in areas with less than 11 people per square mile were significantly less likely to have received a Pap test than those living in areas with greater than or equal to 11 people per square mile.

Exhibit 8: Percent of Women Age 18-64 who had a Pap Test* in Past 5 Years within Each Insurance Status (n = 1,263)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

*This analysis was for the question "To the best of your knowledge, when did you last have a Pap Smear?" The analysis was restricted to women age 18-64 who reported their insurance status as "None", "Medi-Cal" or "Private". Women who answered "don't know" or "not applicable" were excluded from the analysis.
Note: Most authorities recommend a Pap test every 3 years if there is no history of abnormal Pap tests. The time frame of 5 years was chosen in this analysis because the answers to this question were in time intervals that did not allow for 3 years to be isolated.

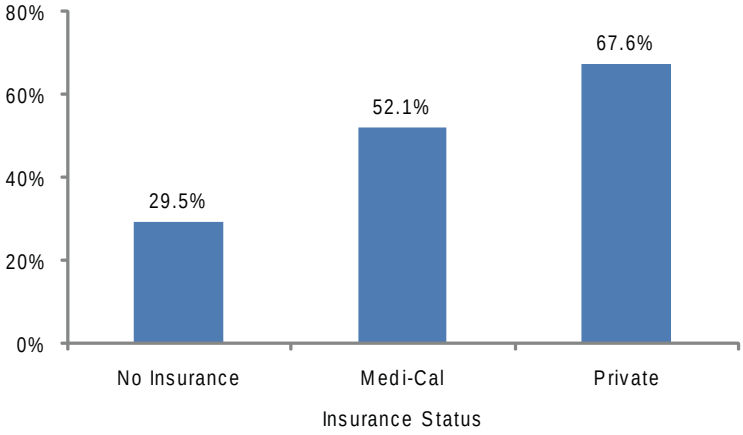
Colorectal Cancer Screening

Respondents age 50 to 64 were significantly more likely to have had a recommended colorectal cancer screening test if they had private insurance rather than Medi-Cal or no insurance.

Approximately two-thirds (67.6%) of respondents age 50 to 64 who had private health insurance had received a recommended colorectal cancer screening test compared with 52.1% of respondents with Medi-Cal and only 29.5% of those who were uninsured (all differences are statistically significant) (Exhibit 9).

Population density was not found to be a confounder in the relationship between insurance status and colorectal cancer screening.

Exhibit 9: Percent of Respondents Age 50-64 who had a Recommended Colorectal Cancer Screening Test* within Each Insurance Status (n = 1,091)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

*This analysis was for the question "To the best of your knowledge, when did you last have a Colonoscopy or Sigmoidoscopy (tube inserted through rectum to look for signs of cancer or other problems)?" and "To the best of your knowledge, when did you last have a Fecal Blood Test (feces/poop is put on cards and sent to lab to look for blood)" The analysis was restricted to respondents age 50-64 who reported their insurance status as "None", "Medi-Cal" or "Private". Respondents were considered to have received a recommended colorectal cancer screening test if they had a fecal occult blood test in the past year or a colonoscopy/sigmoidoscopy in the past 10 years. Respondents who answered "don't know" or "not applicable" were excluded from the analysis.

Insurance Status and Access to Health Care: Preventive Health *cont.*

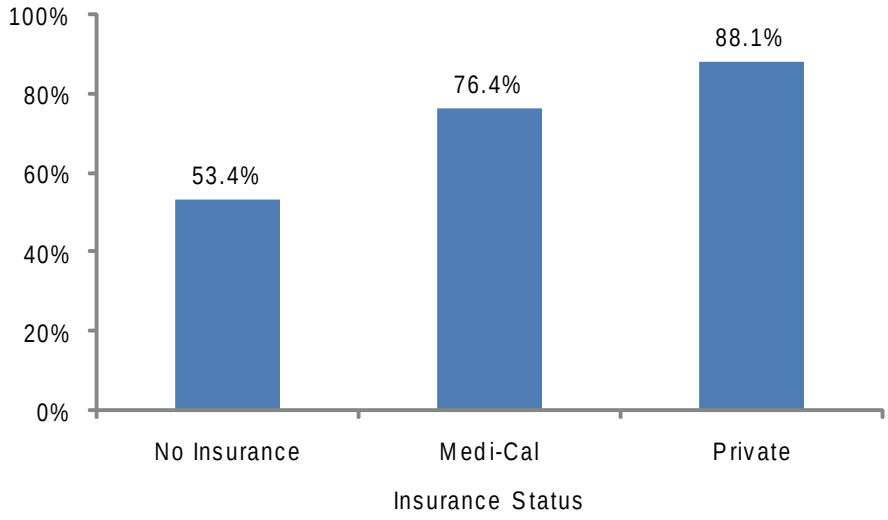
Diabetes Screening

Respondents over age 45 were significantly more likely to have had their blood sugar checked within the past 5 years if they had private insurance rather than Medi-Cal or no insurance.

A high percentage (88.1%) of respondents over age 45 who had private health insurance had their blood sugar checked within the past 5 years compared with 76.4% of respondents with Medi-Cal and only 53.4% of those who were uninsured (all differences are statistically significant) (Exhibit 10).

Population density was not found to be a confounder in the relationship between insurance status and screening for diabetes.

Exhibit 10: Percent of Respondents over age 45 within each Insurance Status who had their Blood Sugar Checked within the Past 5 Years (n = 1,427)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

*This analysis was for the question "To the best of your knowledge, when did you last have a your blood sugar checked". The analysis was restricted to respondents age 45 or older who reported their insurance status as "None", "Medi-Cal" or "Private". Respondents who indicated they had a diagnosis of diabetes or answered "don't know" or "not applicable" were excluded from the analysis.
Note: The American Diabetic Association recommends screening for diabetes every 3 years after age 45 in people without risk factors. The time frame of 5 years was chosen in this analysis because the answers to this question were in time intervals that did not allow for 3 years to be isolated.

What does it mean to be statistically significant?

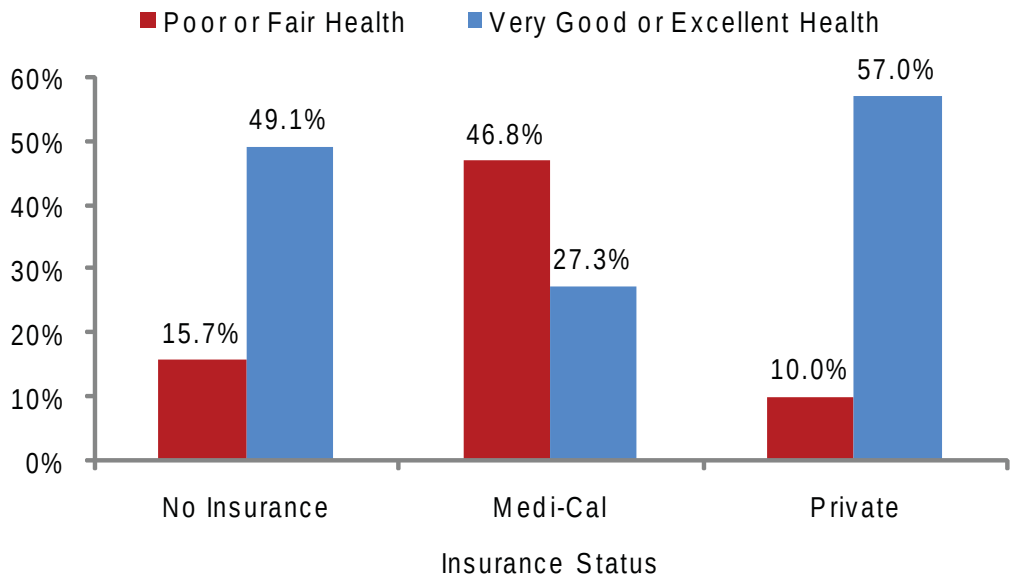
Whenever comparisons are made between groups there is always the possibility of finding a difference simply by chance. In research we like to find "true" differences and not differences that have occurred by chance. By convention, most researchers use a *P*-value of <.05 to determine if a difference is significant. This means there is less than a 5% probability that the difference observed has occurred by chance alone.

Insurance Status and Perceptions of Health

Respondents with Medi-Cal were 4.7 times more likely to report poor or fair health compared to respondents with private insurance and 3 times more likely to report poor or fair health compared to respondents with no insurance.

Nearly half (46.8%) of the respondents with Medi-Cal reported poor or fair health compared to 15.7% of respondents without insurance and 10% of respondents with private insurance. Conversely, over half (57%) of the respondents with private insurance reported very good or excellent health compared to 49.1% of respondents with no insurance and only 27.3% of respondents with Medi-Cal. All differences are statistically significant (Exhibit 11). Respondents who reported their health as good did not differ between the three insurance groups.

Exhibit 11: Respondents' Perceptions of General Health within Each Insurance Status (n = 2,422)



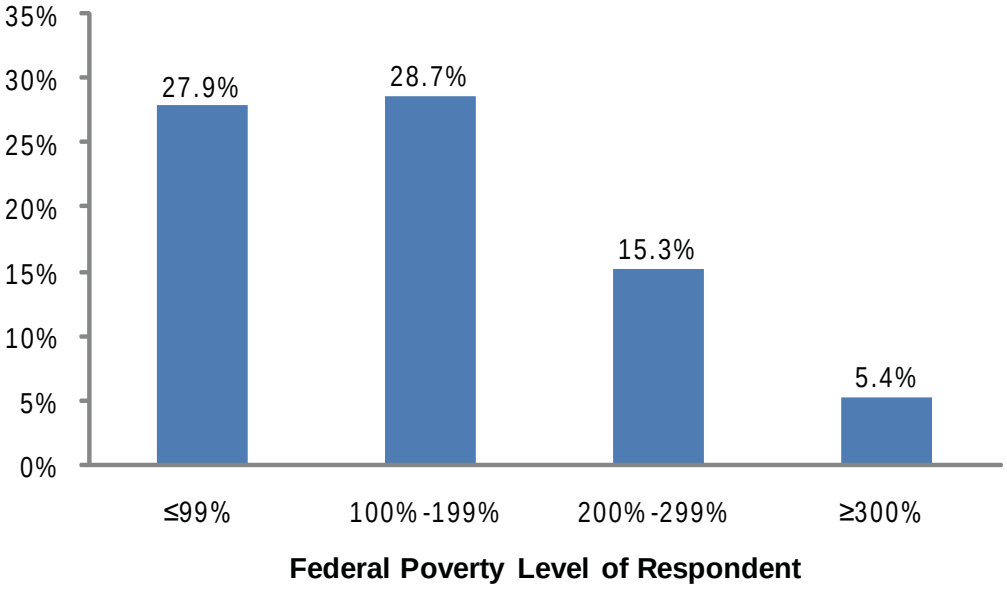
Source: Rural Health Information Survey, 2006, California Center for Rural Policy

Lack of Health Insurance: The Impact of Poverty

Respondents living in poverty were 5.2 times more likely to be uninsured than respondents living at or above 300% poverty.

Respondents living in the poorest households (≤99% federal poverty level- FPL*) and respondents living at 100%-199% FPL were equally likely to be uninsured (27.9% and 28.7% respectively). Of the respondents living in low income households (<200% FPL), 28.4% were uninsured compared to only 8.6% of respondents living in households not considered low income (≥200% FPL) (statistically significant difference). There also was a significant difference between individuals living between 200%-299% FPL and individuals living above 300% FPL (Exhibits 12 & 13). For all poverty levels the primary reasons reported for not having insurance were cost (77%) and employment issues (9.5%). Low income respondents also mentioned needing assistance with the application process. A frequently mentioned problem was making too much money to qualify for public insurance, but not enough to purchase private insurance.

Exhibit 12: Percent of Uninsured Respondents within each Federal Poverty Level* (n = 2,561)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

"Don't make enough to buy and make too much to get help. The curse of the working poor."

– Humboldt County Resident

"Can't afford it and with 2 jobs and no dependents, I don't qualify for Medi-Cal."

– Mendocino County Resident, 200-299% FPL

Exhibit 13: Number of Respondents without Health Insurance by Federal Poverty Level*

Federal Poverty Level*		No Health Insurance	
	Frequency	Frequency	%
≤99%	416	116	27.9
100%-199%	645	185	28.7
200%-299%	491	75	15.3
≥300%	1009	54	5.4
Total	2561	430	16.8

Source: Rural Health Information Survey, 2006, California Center for Rural Policy

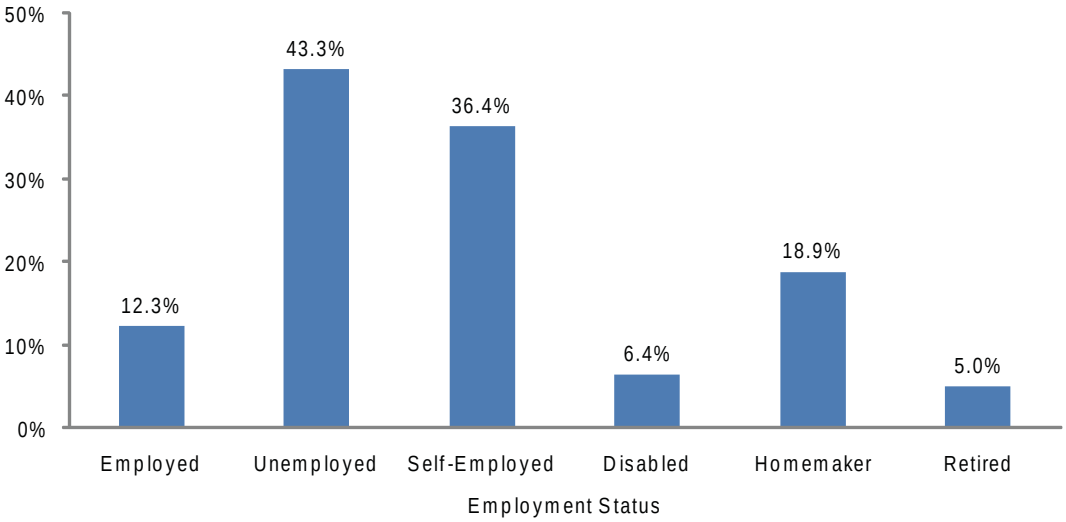
* The Federal Poverty Level (FPL) varies by household size. For a family of four (two adults, two children) the 2006 Federal Poverty Level (100% FPL) was $20,444, 200% FPL was $40,888 and 300% FPL was $61,332.

Lack of Health Insurance: The Impact of Employment

Self-employed respondents were 3 times more likely to be uninsured than respondents employed by a company or business. Self-employed and unemployed respondents were equally likely to be uninsured.

Among the self-employed respondents, 36.4% were uninsured, which is not significantly different from the unemployed respondents (43.3%). Among the respondents who were employed, 12.3% were uninsured (Exhibits 14 & 15). Commonly mentioned reasons for not having insurance among the employed respondents were either the employer does not offer insurance or the employee does not qualify because they don't work enough hours or have not worked at the job long enough.

Exhibit 14: Percent of Uninsured Respondents within each Employment Status (n= 2,930)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

"I don't make enough money. I'm self employed."

– Del Norte County Resident, 100-199% FPL

"Had insurance with work- became disabled, work comp stopped paying."

– Mendocino County Resident, ≤99% FPL

"Job has no benefits. I don't earn enough to buy my own insurance."

– Trinity County Resident, 100-199% FPL

Exhibit 15: Number of Respondents without Health Insurance by Employment Status (n= 2,930)

Employment Status		No Health Insurance	
	Frequency	Frequency	%
Employed*	985	121	12.3
Unemployed	134	58	43.3
Self-employed	588	214	36.4
Disabled	250	16	6.4
Homemaker	143	27	18.9
Retired	830	41	4.9
Total	2930	477	16.3

Source: Rural Health Information Survey, 2006, California Center for Rural Policy
*Employed by a company or business

Exhibit 16

CCRP Rural Health Information Survey:
Percent of Respondents Without Health Insurance[1], 2006

Study Methods: The Rural Health Information Survey (RHIS) was conducted by the California Center for Rural Policy in the fall of 2006. A total of 23,606 surveys were mailed to a random sample of post office box holders in the four counties of Del Norte, Humboldt, Trinity and Mendocino. The total number of returned surveys was 3,003 for an overall response rate of 12.7%.

DEL NORTE
Fort Dick
Gasquet
Crescent City
Klamath
Orick
Orleans
Yreka
HUMBOLDT
McKinleyville
Hoopa
Willow Creek
Trinity Center
Korbel
Samoa
Cutten
Burnt Ranch
Junction City
Lewiston
Big Bar
Weaverville
Fortuna
Carlotta
Hyampom
Douglas City
Hayfork
Redding
Bridgeville
TRINITY
Redcrest
Weott
Mad River
Honeydew
Ruth
Phillipsville
Alderpoint
Red Bluff
Whitethorn
Leggett
Covelo
Laytonville
Fort Bragg
Branscomb
MENDOCINO
Little River
Comptche
Ukiah
Elk
Hopland
Clearlake
Yorkville

Percent of Respondents Without Health Insurance

- 30 - 45
- 25 - 29
- 20 - 24
- 15 - 19
- 10 - 14
- 5 - 9
- Low sample size[2]

Public Lands

- National Forests, National & State Parks

[1] Data derived from RHIS survey question (6): What types of health insurance do you have? Percentages are shown for survey respondents of each sampled post office.

[2] Post offices with less than 20 survey resposes were not included in analysis due to statistical instability.

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GIS and Cartography: R. Degagne (2007) Revised June 2008
Data Sources: ESRI; U.S. Postal Service; CCRP Rural Health Information Survey 2006 (Revised June 2008).

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http://www.humboldt.edu/~ccrp

Exhibit 17

CCRP Rural Health Information Survey:
Percent of Respondents Without Health Insurance[1], 2006

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Total Population Below Poverty Level
Percent by Census Tract

- 29 - 44
- 23 - 28
- 17 - 22
- 14 - 16
- 9 - 13
- 5 - 8

Data Source: U.S. Census Bureau 2000

Percent of Respondents Without Health Insurance

- 30 - 45
- 25 - 29
- 20 - 24
- 15 - 19
- 10 - 14
- 5 - 9
- △ Low Sample Size[2]

[1] Data derived from RHIS survey question (6):
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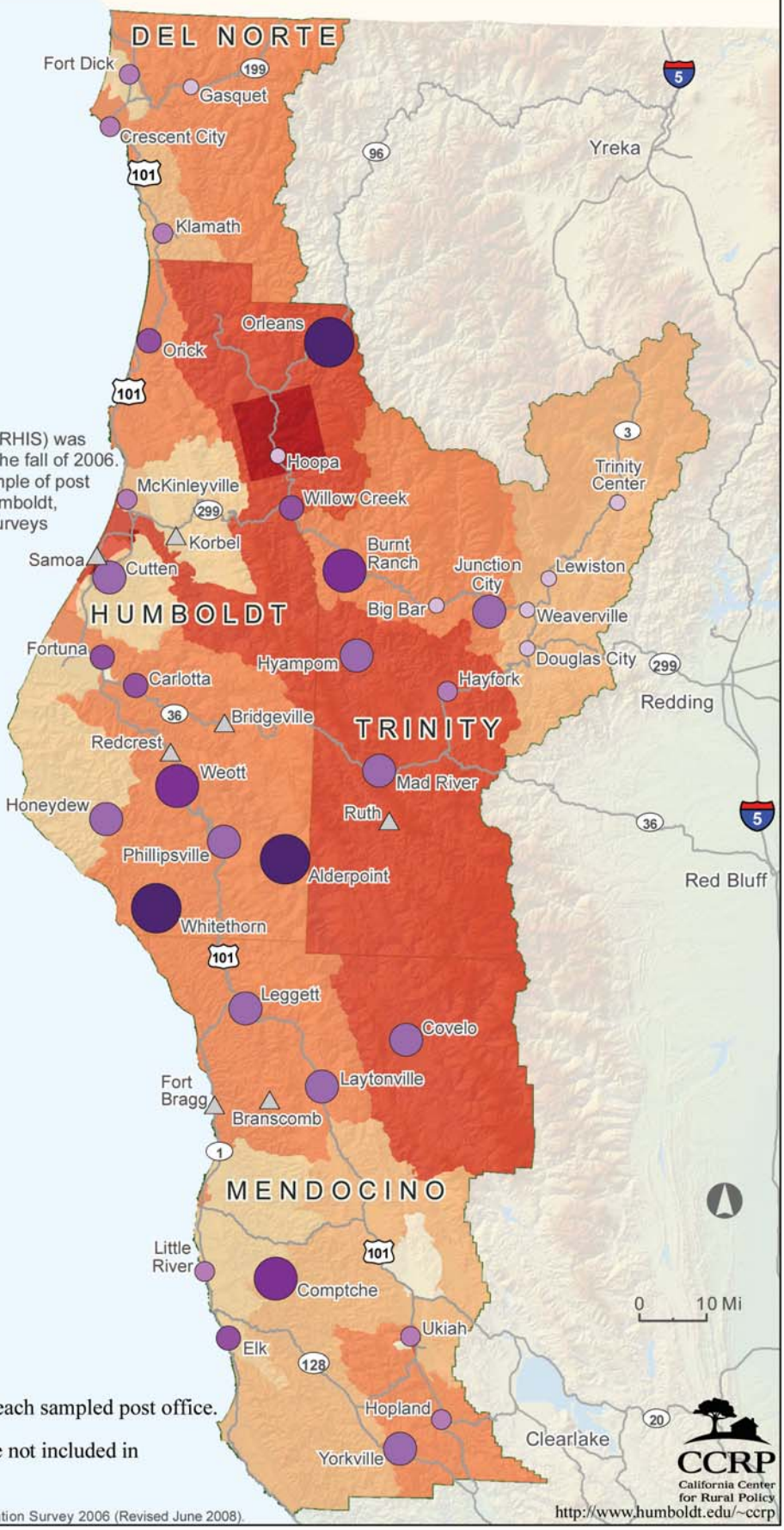

GIS and Cartography: R. Degagne and N. Ramirez (2008)
Data Sources: ESRI; U.S. Postal Service; CCRP Rural Health Information Survey 2006 (Revised June 2008).

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http://www.humboldt.edu/~ccrp

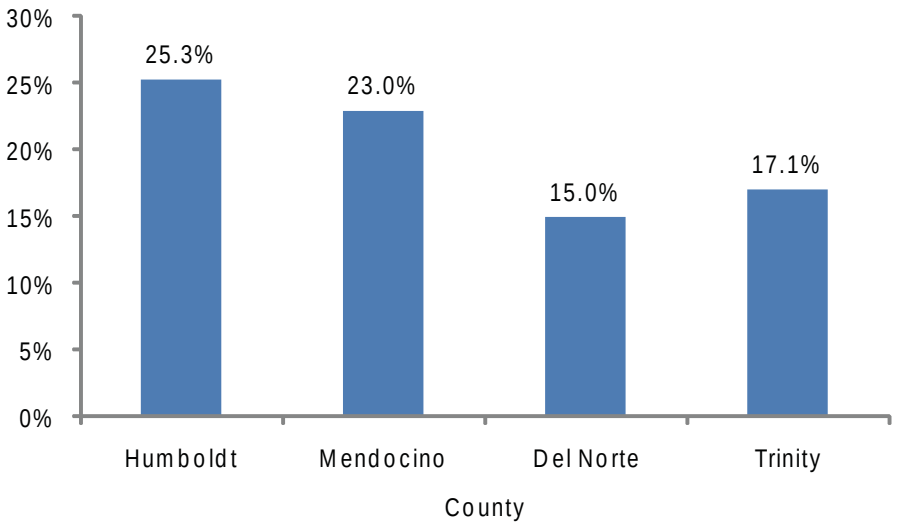
Lack of Health Insurance: The Impact of Place

Respondents from Humboldt and Mendocino Counties were significantly more likely to be uninsured than respondents from Del Norte and Trinity Counties.

Of the respondents age 18 to 64 from Humboldt County, 25.3% were uninsured, which is not significantly different from Mendocino County (23%). Del Norte and Trinity County had lower percentages of uninsured respondents (15.0% and 17.1% respectfully- not significantly different from one another) (Exhibits 18 & 19). For all four counties the top reasons reported for not having insurance were cost and employment issues.

These findings were compared to findings from the California Health Interview Survey (CHIS), 2005.[4] For each county, the Rural Health Information Survey (RHIS) found estimates of uninsured to be slightly higher than CHIS found. While the 95% confidence intervals from CHIS and RHIS overlap for each county, the 95% confidence intervals from RHIS are narrower and tend to have a higher upper limit. The narrower confidence intervals are due to the larger sample sizes, which allows for a more precise estimate. This suggests that the percent of the population that is uninsured in each county is higher than what is estimated by CHIS (Exhibit 19).

Exhibit 18: No Health Insurance by County: Age 18-64 (n = 2,181)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

Exhibit 19: Number of Respondents without Health Insurance by County: Age 18-64

County		No Insurance		Comparison with CHIS, 2005
	Frequency	Frequency	% (95% CI)	% (95% CI)
Humboldt	684	173	25.3 (22.1-28.6)	22.4 (17.7-27.1)
Mendocino	557	128	23.0 (19.5-26.5)	21.4 (15.8-27)
Del Norte	313	47	15.0 (11-19)	12.4 (8.1-16.6)*
Trinity	627	107	17.1 (14.2-20)	12.4 (8.1-16.6)*
Total	2181	455	21.0 (19.3-22.7)	18.3 (15.5-21.1)

Source: Rural Health Information Survey, 2006, California Center for Rural Policy

CHIS data was accessed from <http://www.chis.ucla.edu/main/default.asp>
*CHIS combines the counties of Del Norte, Trinity, Siskiyou, Lassen, Modoc, Plumas and Sierra

"It is too expensive and I make just $100 a month more than Medi-Cal allows. A lot of people are in the same bind."

– Humboldt County Resident, 100-199% FPL

"Health insurance would take more than 50% of my net income."

– Trinity County Resident, 100-199% FPL

"Cost too much - can't afford - need to feed my family."

– Mendocino County Resident

Lack of Health Insurance: The Impact of Place *cont.*

Analysis on a sub-county level revealed drastic differences between communities.

Depending on the sampled community, the percent uninsured ranged from a low of 5% in Gasquet and Trinity Center to a high of 44% in Alderpoint. The GIS maps on pages 10 & 11 show the percent of respondents without health insurance in each sampled community. It is interesting to note that the areas with the highest poverty levels do not necessarily have the highest levels of uninsured. This is likely due to the fact that people in poverty are eligible for publicly funded insurance, whereas people who make too much to qualify for publicly funded insurance, but not enough to purchase private insurance are likely to end up being uninsured (Exhibits 16 & 17).

The least populated areas (≤50 people per square mile) had a higher percentage of uninsured respondents (18.4%) than the more populated areas (>50 people per square mile) (13.1%). This difference is statistically significant (Exhibits 20 & 21).

Exhibit 20: No Health Insurance by Population Density (n = 2,944)

Source: Rural Health Information Survey, 2006, California Center for Rural Policy

Exhibit 21: Number of Uninsured Respondents by Population Density

Population Density		No Insurance	
	Frequency	Frequency	%
≤50 people per square mile	1808	333	18.4
>50 people per square mile	1136	149	13.1
Total	2944	482	16.4

Source: Rural Health Information Survey, 2006, California Center for Rural Policy

"Property exceeds Medi-Cal limits, can't afford private insurance."

– Humboldt County Resident, 100-199% FPL

"Can't afford premiums and don't qualify for Medi-Cal."

– Del Norte County Resident, 100-199% FPL

"Too expensive even when offered by employers."

– Humboldt County Resident, ≤99% FPL

"Medi-Cal expired, dislike amount of paperwork needed to re-apply."

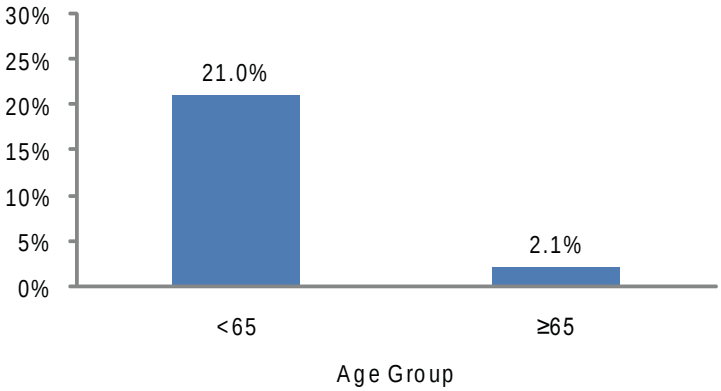
– Humboldt County Resident, 100-199% FPL

Lack of Health Insurance: The Impact of Age

Respondents under 65 years of age were 10 times more likely to be uninsured than respondents who were 65 years or older.

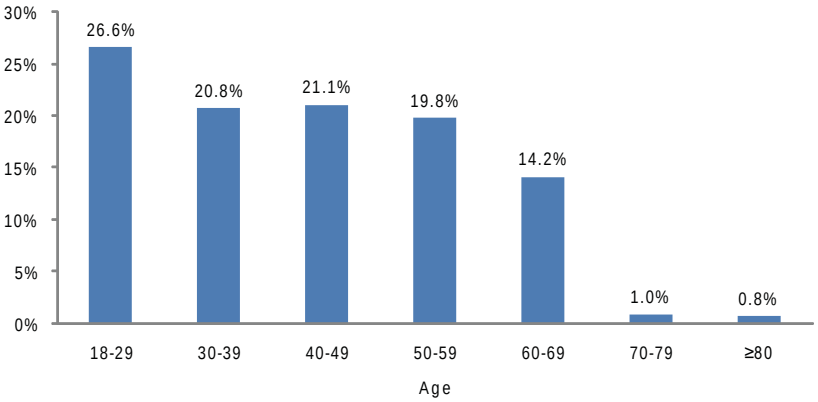
Of the respondents who were under 65 years of age, 21% had no health insurance compared to only 2.1% of respondents who were 65 years or older (Exhibit 22). Among the respondents under 65 years of age there was no significant difference between age groups (18-29, 30-39, 40-49, 50-59 years) with respect to being uninsured (Exhibits 23 & 24). The fact that individuals become eligible for Medicare at the age of 65 is the likely explanation for why individuals 65 years or older are significantly less likely to be uninsured compared to those who are under the age of 65. However, it is apparent that despite being eligible for Medicare, there are still some over the age of 65 who are uninsured. For all ages, the primary reason reported for not having insurance was cost. Uninsured respondents 65 years or older also mentioned preexisting conditions (3.6%), distrust in the "system" (3.6%), employment issues (1.8%) and disability (1.8%) as reasons for being uninsured.

Exhibit 22: Percent of Uninsured respondents within the Age Groups of Under 65 and Over 65 (n= 2,890)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

Exhibit 23: Percent of Uninsured Respondents within each Age Group (n= 2,890)



Source: Rural Health Information Survey, 2006, California Center for Rural Policy

Exhibit 24: Number of Respondents without Health Insurance by Age

Age		No Health Insurance	
	Frequency	Frequency	%
18-29	173	46	26.6
30-39	240	50	20.8
40-49	455	96	21.1
50-59	930	184	19.8
60-69	656	93	14.2
70-79	310	3	1.0
≥80	126	1	0.8
Total	2890	473	16.4

Source: Rural Health Information Survey, 2006, California Center for Rural Policy

Discussion

There are clearly disparities in health insurance and access to health care in the Redwood Coast Region.

Having no insurance or having Medi-Cal insurance appear to be significant barriers to accessing primary care and preventive services. Medi-Cal insured individuals rate their health more poorly and are significantly more likely to use the emergency room than uninsured or privately insured individuals. A concerning finding is that despite Medi-Cal and privately insured individuals being equally likely to have had a general check-up within the past four years, those with Medi-Cal insurance were significantly less likely to have received recommended screening for breast cancer, colorectal cancer and diabetes. This relationship exisits even when accounting for different population densities, so it appears that the lower preventive screenings among Medi-Cal recipients is due to factors related to the insurance rather than factors related to population density, such as distance.

These findings are consistent with findings from the National Health Interview Survey, which showed that uninsured and Medicaid insured individuals were significantly less likely to receive recommended cancer screenings compared to privately insured individuals.[2] These findings highlight the fact that having insurance does not necessarily equate to having access to primary care. While the reasons for this are multiple and complex, a primary reason may be low provider participation in Medi-Cal. California's Medi-Cal reimbursement rates are among the lowest in the nation and physician participation in Medi-Cal is lower than in any other state resulting in more than half of Medi-Cal insured individuals reporting difficulties finding a doctor. [5,6,7] These disparities in access to care based on insurance status underscore the importance of working towards universal coverage.

Unfortunately, the situation is likely to worsen. In July, 2008 the Department of Health Care Services (DHCS) cut Medi-Cal payment rates by 10%. These cuts could have devastating effects for Medi-Cal beneficiaries and on the health care system in general. A coalition of health care providers led by the California Medical Association (CMA) has filed a class action lawsuit. The suit alleges that the state has failed to set rates at a level that ensures Medi-Cal patients have access to health care providers.[8]

The importance of having a medical home or usual source of care cannot be overemphasized. A medical home provides continuous and comprehensive care, which is associated with better health outcomes and lower cost. A medical home is important for preventing disease, identifying disease in early stages when it is still treatable, and managing chronic diseases. It has been estimated that if every American had a medical home, health care costs would decrease by 5.6%- a national savings of $67 billion dollars per year, with an improvement in quality of health care.[9] The emergency department is not an appropriate medical home. It is estimated that over 80% of all Medi-Cal and uninsured patient visits to the emergency department could have been treated in a non-emergency care environment.[10] Thus, it is important to increase access to primary care providers in our communities.

Having accurate estimates of the uninsured in our communities can help document the extent of the problem and help determine if programs and policies aimed at decreasing the uninsured are making a difference. This study provides important information for policymakers and advocates who are working to improve insurance coverage in the Redwood Coast Region.

This research was intended to give a snapshot of health insurance in the Redwood Coast Region. If there is interest from the community, CCRP can collaborate with community partners to seek funding for more in-depth research on this topic.

Next Steps

Join us online...

Please join us in an on-line discussion about insurance in our region.

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.

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Limitations

This study provides information about the respondents of the survey and does not necessarily describe the population in general. However, this is the largest study ever conducted in this rural region of California.

Health Insurance status is self reported and reflects the insurance status at the time that the respondent completed the survey. While this is one point in time, it provides an estimate of the percentage of people who may be experiencing difficulties accessing health care due to insurance status.

Methods and Demographics

Exhibit 25: Methods

The Rural Health Information Survey was conducted by the California Center for Rural Policy in the fall of 2006. The purpose of the survey was to assess health disparities, access and utilization of healthcare, and other determinants of health among residents in rural Northern California with the goal of providing useful information for planning and policy development.

A four-page self-administered survey was developed by project administrators at CCRP. The survey instrument was based on existing surveys (Behavioral Risk Factor Surveillance Survey, California Health Interview Survey, Canadian Community Health Survey and Mendocino Community Health Survey). New questions were developed as needed to inquire about areas of rural health not previously explored, such as access to transportation, phones, computers and Internet as well as skills for responding to emergency medical situations.

A total of 23,606 surveys were mailed to a random sample of adults residing in the four counties of Humboldt, Del Norte, Trinity and Mendocino. The sampling strategy employed the use of a Geographic Information System (GIS) to map the population density for Zip Code Tabulation Areas (ZCTA)[11] with an overlay of the locations of post offices. All of the post offices in low population density areas (<11 people per square mile) were selected (total post offices = 24; total post office boxes = 8165). Post offices located in higher population density areas (≥11 people per square mile) were randomly selected (total post offices = 19; total post office boxes = 15,441) (Exhibit 1).

The total number of returned surveys was 3,003 for an overall response rate of 12.7%. A total of 2,950 surveys provided usable responses for analysis. Responses were analyzed with SPSS version 14.0. Chi Square was used to test for differences between groups with a *P*-value less than .05 considered statistically significant. When multiple comparisons were made adjustments were made to account for alpha inflation.

Sample Demographics are presented in Exhibit 26.

A total of 41.4% of the sample lives in a low-income household (<200% FPL).

Exhibit 26: Sample Demographics

Characteristics	Frequency	Percent
Federal Poverty Level[12]		
≤99% Poverty	416	16.2
100%-199%	645	25.2
200%-299%	491	19.2
≥300%	1009	39.4
Total	2561	100
Ethnicity		
White	2459	84.2
African American	7	0.2
Latino/Latina	34	1.2
Asian	13	0.4
Native American	148	5.1
Multiracial	173	5.9
Other	87	3.0
Total	2921	100
Gender		
Female	1882	64.1
Male	1053	35.9
Other	2	0.1
Total	2937	100
Age (mean = 55.3)		
18-29	173	6.0
30-39	240	8.3
40-49	455	15.7
50-59	930	32.2
60-69	656	22.7
70-79	310	10.7
≥ 80	126	4.4
Total	2890	100
County of Residence		
Del Norte	421	14.3
Humboldt	880	29.8
Trinity	940	31.9
Mendocino	705	23.9
More than 1 of above	4	0.1
Total	2950	100

Source: Rural Health Information Survey, 2006, California Center for Rural Policy.

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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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