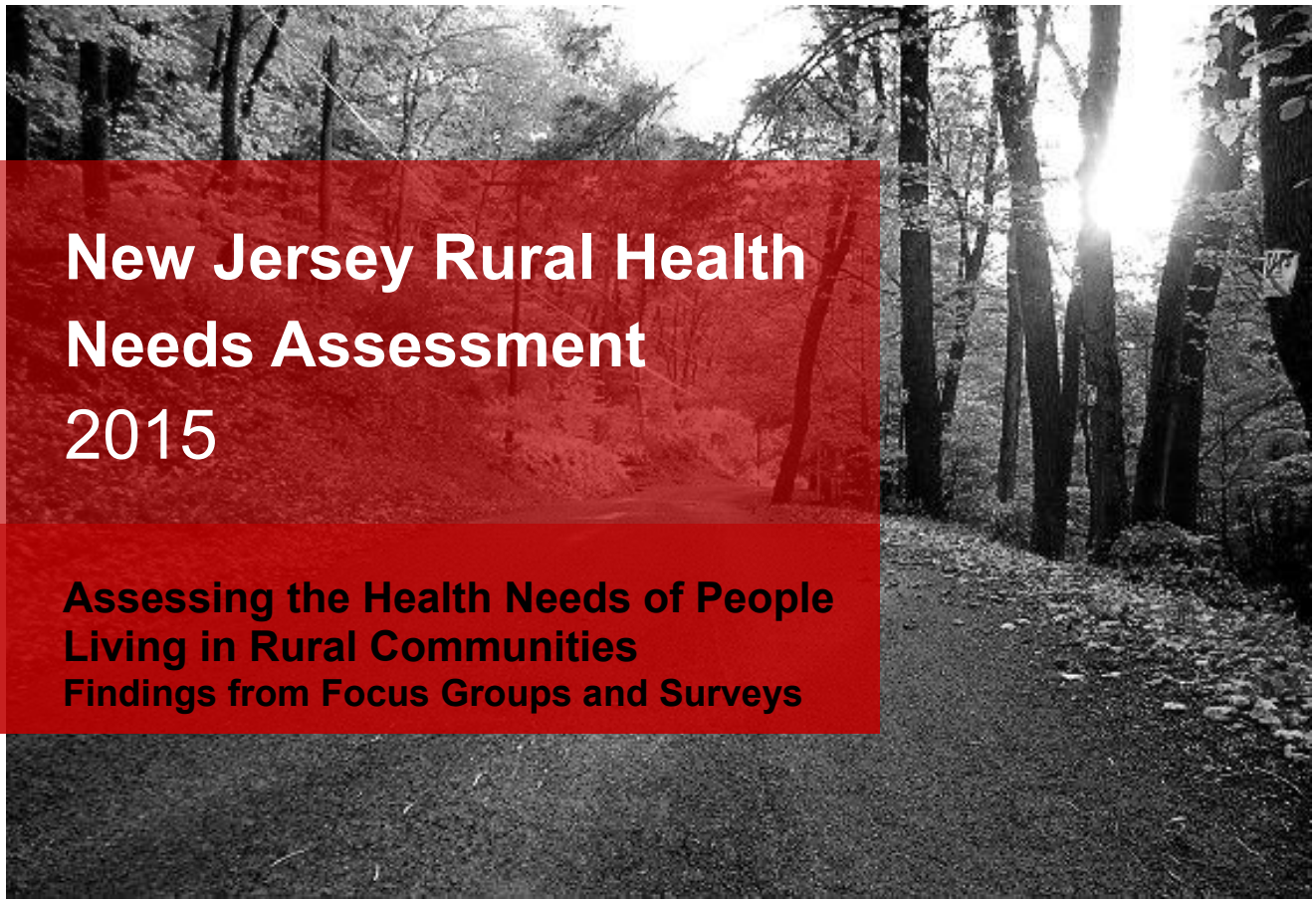

New Jersey Rural Health Needs Assessment 2015

Assessing the Health Needs of People Living in Rural Communities

Findings from Focus Groups and Surveys

RUTGERS
School of Social Work

New Jersey Rural Health Needs Assessment 2015

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METHODS AND SAMPLE

To further describe the areas of need illustrated by the county and municipal level statistical data, focus groups with NJ rural health and healthcare service providers were conducted throughout the state. Providers consisted of staff at federally-qualified health centers, public health departments, prevention coalitions, and various community service providers. A sample of 17 individuals from seven organizations located throughout the state participated. Findings were analyzed using standard content analysis procedures and reported by region (northern, central and southern).

CLIENT DEMOGRAPHICS

Providers serving rural communities were asked to describe the populations they serve. Many stated that rural clients are usually blue-collar, financially unstable families. The northern and central area respondents reported large portions of the clients who commuted significant distances for work which results in them having less time to attend to healthcare issues. Rural clients consisted of all ages (although a larger elderly population was reported in the northern region). Many providers, particularly in the southern region, reported serving farmworkers and migrant farmworkers. All providers reported serving growing Spanish-speaking population. The clients with lower incomes were described as having less education. Providers also reported seeing clients from neighboring counties, as well as the county in which their services were located. Many clients have multiple chronic conditions and some are very sick due to delayed care.

CLIENT ACCESS TO HEALTH FACILITIES

Focus groups also explored issues related to access to health facilities. The majority of providers stated that clients in rural communities find their services via word of mouth or by searching online. One provider stated:

> *"One client will say there's a really nice doctor there that they like and that you need to go there. So by word of mouth usually."*

The southern and central providers had staff to do outreach into their local communities, however the northern providers felt that they were limited in what outreach they could do, given organizational constraints. Many providers also receive referrals from hospitals, insurance, or managed care organizations.

> *"The collaboration in this county is tremendous from agency to agency. It's very common for people to call and say, 'The hospital told me to call you'…. We form tasks groups as well."*

This is especially true in the north where outreach strategies are limited. For a few communities, the provider was the only available option to clients in the area.

BARRIERS TO CLIENT ACCESS

When asked about the barriers that may prohibit clients from accessing their services, providers most frequently cited issues with transportation and/or distance to service. One provider stated:

> *"Transportation and distance to services. The nearest hospital in this county is 30 minutes away by car… Here things are spread out. The grocery store could be a half hour drive each way. If you don't have a car, you're stuck."*

Congruently, another provider stated:

> *"Transportation. Many areas of the county do not have bus service and a taxi ride to the hospital, or even for groceries, is very expensive. Most [clients] try to get someone they know to take them. However, that person may get a job call at the last minute and leave them without transportation for their doctor visit or whatever."*

For clients without private transportation, getting to a facility is exceedingly difficult as both public transportation and Medicare/Medicaid funded transport are unreliable. Many facilities reported not having specialists on-site (due to understaffing and lack of funding to attract specialists). One provider reported that pediatrics was no longer offered in the county's only hospital. As a result, for those with transportation, the long drives to specialist providers serve as a deterrent to maintain appointments. Without private transportation, seeing a specialist is often impossible.

In addition to transportation, providers also stated that the unstable living conditions and finances of clients often make it difficult for clients to follow a care plan, afford medication, or manage a health condition. One provider stated;

> *"Once they get here and they find out they're sick… like with diabetics, that medicine and equipment ain't cheap. So when they see they have to purchase that stuff or follow a certain diet, they don't follow it. They are limited in what they can eat."*

Compounding the impact of financial instability, many providers stated that many different traditional rural cultures do not emphasize prevention or prioritize of healthy behaviors, making clients resistant to behavior change.

COMMON HEALTH ISSUES IN RURAL AREAS

Providers reported multiple health conditions that they encounter frequently with rural populations (See Table 1). Chronic diseases were the most common condition that providers stated they treated on a regular basis (particularly diabetes and cancer).

> *"We get a lot of diabetes and hypertension."*

Mental health issues were common (particularly depression). Substance abuse was also common (particularly heroin, alcohol, and prescription drugs).

> *"There's very little in the way of mental health care in this county. A follow-up appointment may be two months away … and it's often difficult to get an appointment."*

> *"We have a lot of heroin out here… and prescription medications. There's a lot of alcohol too…. There's no in-county treatment centers… there's no long term rehab…"*

Regarding dental health, tooth decay and poor dental hygiene were common health issues.

> *"Cavities are rampant… There needs to be community water fluoridation."*

TABLE 1. PROVIDER REPORTED COMMON RURAL HEALTH ISSUES

Health Issues	
▪ Diabetes	▪ Alcohol abuse and homelessness in older men
▪ High blood pressure	▪ Tooth decay, cavities, periodontal disease
▪ Obesity, inadequate nutrition, food insecurity	▪ Heroin abuse, and to a lesser extent methamphetamine and pain medication abuse
▪ Heart disease	▪ Bipolar and other severe and persistent mental illness
▪ Stress/ depression	▪ Post-traumatic stress disorder
▪ Lyme's disease	▪ Melanoma (for migrant workers-skin problems from working out in the sun)
▪ Hepatitis C	▪ Cancer (particularly breast cancer in Northern NJ)
▪ Rashes from pesticides (particularly for migrant and farm workers)	▪ Hematological issues
▪ Post-partum depression in young women (esp. in Southern NJ)	▪ Gastrointestinal Issues
▪ Asthma	▪ Poor dental hygiene
▪ Developmental delays	
▪ Multiple mental health issues (esp. in Northern NJ)	
▪ High autism prevalence (esp. in Northern NJ)	

EFFECTIVE PROVIDER PRACTICES

Providers were asked about the practices they use in their work with clients that they find to be effective in serving rural communities. Offering services after working hours and taking the services to clients (e.g., mobile health services) were the most common responses. Many found having patient counselors or educators to be effective when working with rural populations. These positions can assist with issues such as transportation, paperwork and basic health education to encourage engagement and treatment compliance. Some sites found that scheduling follow-up appointments upon discharge was effective at ensuring continuity of care. They also found that having staff stay in positions long-term was effective in being able to know the local culture and to link patients to resources. One provider said:

> *"Everyone in our office lives here. We are invested in the community. We are tied to it"*

The sites that were able to have specialists work on-site found that it was effective, so their rural clients didn't have to travel far for services.

CHALLENGES FOR HEALTHCARE SERVICE DELIVERY

Providers cited several issues that make it difficult to deliver services to rural populations. Primarily, participants indicated lack of funding as an obstacle in being able (1) to provide after-hours service, (2) to offer competitive salaries to attract providers and specialists, and (3) hiring more staff to expand services. One provider stated:

> *"It's hard to attract people to this position to offer more services when they can go to a neighboring county and make $15,000 more."*

They also cited issues with insurance, including situations in which reimbursements rates are unrealistically low, or locally-accessible providers do not participate in a client's insurance plan. Many focus group participants also stated that their low-income clients couldn't pay for specialists and testing diagnostics, whether insured or uninsured. Providers also stated that the distance services are from certain communities limit the amount of outreach and client-visit services they can do. Lastly, providers stated that a lack of adequate technology and technical support also hindered service delivery.

RECOMMENDATIONS

Providers were also asked about what types of support the state could provide to help them better serve rural communities. The following recommendations were distilled from those discussions:

- Increase funding to FQHC's and health departments to enable providers to offer more specialist services, see more clients, attract and retain staff, and hire patient navigators to link clients to services. One provider explained the advantages of having patient navigators:

> *"I think it would be great for each primary care office to have a patient navigator who meets with each patient that the PCP would like to refer to a specialist office and for each specialty office to have a navigator that receives report from the referring office. The PCP's navigator can assess for barriers to the patient's care, compliance with care and financial limitations which may impede the process or slow the process for care. The PCP navigator could then report to the specialist navigator and coordination of care and services will be implemented at once therefore, alleviating stress and barriers at the onset and provide a smooth process for the patient to follow and adhere to the physician plan for care and treatment."*

- Enhance transportation options for rural communities (outside of Medicaid/Medicare transport), such as public transportation or medical taxi services, to increase access to services.
- Fund and develop programs that bring services to clients, such as mobile food pantries.
- Create marketing campaigns to increase awareness of county services and to increase knowledge of health issues in rural communities.
- Initiate policy changes to improve reimbursement for dental providers to increase access to dental care and to fluoridate more community water sources to decrease dental health issues.

TABLE 2: KEY FINDINGS-PROVIDER INTERVIEWS

Client Barriers to Care	Common Health Issues	Recommendations
▪ Transportation ▪ Distance to services ▪ Lack of specialty services ▪ Rural culture doesn't emphasize good health ▪ Can't afford testing and specialty care	▪ Diabetes ▪ High blood pressure ▪ Obesity, inadequate nutrition, food insecurity ▪ Heart disease ▪ Cancer ▪ Lyme's disease ▪ Hepatitis C ▪ Asthma ▪ Developmental delays ▪ Multiple mental health issues ▪ Alcohol and heroin abuse ▪ Tooth decay, poor dental hygiene	▪ Increase funding to FQHC's and health departments ▪ Enhance transportation options for rural communities ▪ Fund and develop programs that bring services to clients ▪ Create marketing campaigns for county services to increase community awareness. ▪ Initiate health education campaigns to increase community awareness and knowledge of health issues ▪ Improve reimbursement for dental providers and fluoridate more community water sources.

What Consumers Say About Rural Health

METHODS AND SAMPLE

To further explore the health needs of rural residents, interviews were conducted with rural residents throughout the state. The survey that was administered was adapted from the Center for Rural Health Works Community Needs Assessment. A sample of 287 individuals from northern, central and southern municipalities responded to a brief healthcare survey that describes use and accessibility. Respondents were given the option of filling out the survey independently or having the survey read to them. Surveys were administered in Spanish when needed. Basic analyses included frequencies and means. Analysis of variance (ANOVA) was conducted to explore regional differences, as well as differences related to insurance type. When statistically-significant differences were identified, post hoc tests were computed using the Dunnet's C procedure. This test is designed to compare the mean for each group to the mean for other groups (in this case either based on region or insurance type).

POPULATION DEMOGRAPHICS

A total of 287 people completed brief patient health surveys in rural communities throughout New Jersey. As indicated in Table 3 below, 90 surveys were completed in northern counties (primarily Warren and Sussex), 73 were completed in central counties (primarily Burlington, Hunterdon, Monmouth, and Ocean) and 120 were completed in southern counties (primarily Cape May, Atlantic, Salem, Cumberland and Gloucester). Because insurance status often influences healthcare experiences, information on subjects' insurance type was also collected. As shown in Table 3 below, 45% of all respondents reported having private insurance while 38% had public insurance[1]. Ten percent of respondents indicated having both public and private insurance while 9% of respondents were uninsured. There are some regional differences. Respondents in the north most frequently had public insurance (57%) while central and southern respondents most frequently reported having private insurance (55% and 50% respectively). The uninsured population ranged from 7% in the south to 11% in the north.

TABLE 3. POPULATION DEMOGRAPHICS AND INSURANCE STATUS

	All		North		Central		Southern	
	N	Percent	N	Percent	N	Percent	N	Percent
Private	128	45%	23	26%	40	55%	62	50%
Public	108	38%	51	57%	13	18%	44	35%
Both	28	10%	6	7%	13	18%	9	7%
Uninsured	26	9%	10	11%	7	10%	9	7%
	287	102%[2]	90	101%	73	101%	124	99%

[1] Operationally defined as publically available insurance such as 'Obamacare', Medicaid or Medicare

[2] Rounding error causes percent total to fluctuate between 99% and 102%.

FINDINGS

SERVICE UTILIZATION

Appendix 1 summarizes service utilization for all respondents, by region, and by insurance type. Overall, the majority of respondents reported that they utilized dental, specialist, pharmacy and primary medical care services at least once a year. About 86% of respondents reported utilizing pharmacy services and 85% reported utilizing primary care services at least once a year. Slightly fewer reported utilizing dental services (74%) or specialist services (69%) at least once per year.

Service utilization results varied by region (Appendix 1) although no clear pattern of utilization emerged. Respondents from the central region of New Jersey were most likely to have accessed primary care less than once a year (24%) compared to southern (14%) or northern (10%) residents. Central region residents were also the most likely to have accessed specialist care less than once a year (41%) compared to northern (31%) or southern (26%) residents.

Respondents living in central New Jersey were also the most likely to have accessed pharmacy services less than once a year (22%) compared to their northern (14%) and southern (11%) region counterparts. Finally, respondents from northern New Jersey were the most likely to have accessed dental services less than once a year (33%) compared to central (26%) or southern (22%) region residents.

A more consistent pattern of service utilization emerges by insurance type with the uninsured typically utilizing all types of services much less frequently than those with any type of insurance. Among uninsured respondents, 63% utilized pharmacy services, 55% utilized primary care services, 50% utilized dental services and 29% utilized specialist services. (For comparisons with other insurance types see Appendix 1.)

Analysis of variance identified a significant effect on use of dental services by insurance type [$F(3,279)=8.1$, $p=.00$]. Post hoc comparisons using Dunnet's C indicate that the mean score for the uninsured respondents ($M=2.4$, $SD=1.2$) was significantly lower than that of respondents with private insurance ($M=3.3$, $SD=1.0$) and private and public in combination ($M=3.5$, $SD=.99$). There was not a significant difference between the uninsured and those with public insurance only ($M=3.02$, $SD=1.0$). Uninsured respondents were found to use dental services significantly less frequently than respondents who had private insurance or public and private insurance in combination.

A significant effect on use of specialist services by insurance type [$F(3,275)=9.5$, $p=.00$] was also identified through analysis of variance. Post hoc comparisons using Dunnet's C indicate that the mean score for the uninsured respondents ($M=1.7$, $SD=1.01$) was significantly lower than that of all other types of insurance. Respondents with private insurance ($M=2.9$, $SD=1.13$), both private and public insurance ($M=3.3$, $SD=.90$) and public insurance ($M=2.9$, $SD=1.28$) did not differ from each other. Uninsured respondents were found to utilize specialist services less frequently than all other groups.

Analysis of variance also identified a significant effect on the use of pharmacy services by insurance type [F(3,275)=4.7, p=.00]. Post hoc comparisons using Dunnet's C indicate that the mean score for the uninsured respondents (M=3.2, SD=1.0) was significantly lower than that of respondents with all other types of insurance. Respondents with private insurance (M=4.1, SD=1.4), private and public insurance in combination (M=4.3, SD=1.4) and public insurance (M=4.4, SD=1.2) did not differ from each other. Uninsured respondents were found to use pharmacy services less frequently than all other groups.

Finally, analysis of variance also identified a significant effect on the use of primary care services by insurance type [F(3,277)=11.0, p=.00]. Post hoc comparisons using Dunnet's C indicate that the mean score for the uninsured respondents (M=2.6, SD=1.3) was significantly lower than respondents with all other types of insurance. Respondents with private insurance (M=3.5, SD=1.1), private and public insurance in combination (M=3.4, SD=1.1) and public insurance (M=4.0, SD=1.0) did not differ from each other. Uninsured respondents were found to use primary care services less frequently than all other groups.

APPOINTMENT AVAILABILITY

Overall, 93% of survey respondents indicated that they were able to obtain a healthcare appointment when they needed one (Appendix 2). This percentage held steady across all types of respondents (by region and by insurance type) with the exception of respondents who were uninsured. Only 68% of respondents who were uninsured reported that they could obtain a healthcare appointment when one was needed.

REASONS FOR DELAYED HEALTHCARE

Respondents were asked to indicate reasons for delaying receipt of healthcare services. Overall, 51% of respondents reported that they never delayed healthcare services. Of those who did delay services, the most common reasons were lack of money (28%), lack of insurance (24%) and difficulty in getting an appointment quickly (17%) (Appendix 3).

When examining differences by region related to delayed healthcare, the percentage of respondents who reported that they never delayed healthcare services was relatively stable, ranging from 47% in northern regions and 51% in both central and southern regions. Lack of money was the most frequently cited reason for delaying healthcare by respondents in the north (36%) and respondents in the south (25%). Lack of insurance was the most frequently reported reason for delaying healthcare by central New Jersey residents (29%). While little variation by region was evident in the percentage of respondents reporting the unavailability of a nearby doctor/specialist or other reasons, the percentage who reported difficulty in getting an appointment quickly ranged from 14% in northern New Jersey to 21% in southern New Jersey.

More consistent differences emerge when examining reasons for delayed healthcare by insurance type. Only 8% of uninsured respondents reported never delaying healthcare, compared to 68% of respondents with public and private insurance, 62% of respondents with private insurance and 40% of respondents with public insurance. The uninsured population more frequently cited lack of insurance (77%), lack of money (65%), difficulty getting an

appointment quickly (27%) and unavailability of nearby doctor or specialist (15%) as reasons for delaying healthcare.

Among insured respondents, those with public health insurance were consistently more likely to cite lack of money (33%), lack of insurance (31%), difficulty getting an appointment quickly (19%) and unavailability of nearby doctor or specialist (12%) as reasons for delaying healthcare.

ACCESS TO HEALTH SERVICES

Overall, respondents reported high levels of accessibility to dentists, specialists, pharmacies and primary care providers. As indicated in Appendix 4, 62% of all respondents rated dental care as being very accessible while 7% rated it as not at all accessible. Similarly, 52% of all respondents reported that specialist care was very accessible while 7% reported such as as not at all accessible. Pharmacy services were rated as very accessible by 77% of all respondents and not at all accessible by 3% of respondents. Primary care services were rated as very accessible by 70% of respondents and not at all accessible by 4% of respondents. Ratings were relatively consistent across all three geographic regions with the exception of specialist care. While 61% of central region respondents reported that specialist care was very accessible, only 47% of northern region respondents and 46% of southern region respondents indicated that such care was very accessible to them.

As indicated in Appendix 4, differences emerge when service accessibility is compared by insurance type. Uninsured respondents and those with public insurance were consistently less likely to report high levels of accessibility to all types of services. Dental services were very accessible to only 40% of the uninsured population and 54% of the publicly insured population compared to 86% of respondents with public and private insurance and 72% of respondents with private insurance. Specialist care was very accessible to only 20% of uninsured respondents and 39% of publicly-insured respondents compared to 68% of dually-insured respondents and 61% of privately-insured respondents.

About 46% of uninsured respondents reported that pharmacy services were very accessible compared to 74% of those with public insurance, 81% of those with private insurance and 82% of those with public and private insurance. Finally, 33% of uninsured respondents reported that primary care services were very accessible compared to 67% of those with public insurance, 74% of those with private insurance and 86% of those with public and private insurance.

Analysis of variance confirmed a statistically-significant effect on accessibility of dental services by insurance type [$F(3,276) = 23.74$, $p = .00$]. Post hoc comparisons using Dunnet's C indicate that the mean score for the uninsured ($M = 3.4$, $SD = 2.5$) and public insurance groups ($M = 5.6$, $SD = 1.8$) were significantly different than each other as well as different from those with private insurance ($M = 6.4$, $SD = 1.3$) and private and public in combination ($M = 6.6$, $SD = 1.2$). There was not a significant difference between respondents with private and public/private combination insurance types. Uninsured respondents and those with public insurance had significantly less access to dental services.

Analysis of variance also identified a statistically-significant effect on accessibility of specialist services by insurance type [F(3,270)=20.13, p=.00]. Post hoc comparisons using Dunnet's C indicate that the mean score for uninsured respondents (M=3.4, SD=2.4) was significantly lower than that of respondents with all other types of insurance. Respondents with private insurance (M=6.0, SD=1.6), private and public insurance in combination (M=6.3, SD=1.3) and public insurance (M=5.5, SD=1.6) did not differ from each other. Uninsured respondents had significantly less access to specialist services than all other groups.

A significant effect on accessibility of pharmacy services by insurance type [F(3,272)=11.3, p=.00] was also identified. Post hoc comparisons using Dunnet's C indicate that the mean score for uninsured respondents (M=4.9, SD=2.5) was significantly lower than that of respondents with all other types of insurance. Respondents with private insurance (M=6.6, SD=1.1), private and public insurance in combination (M=6.6, SD=1.1) and public insurance (M=6.4, SD=1.29) did not differ from each other. The uninsured report significantly less access to pharmacy services compared to all respondents with all other types of insurance.

Lastly, there was a significant effect on accessibility of primary care services by insurance type [F(3,275)=20.2, p=.00]. Post hoc comparisons using Dunnet's C indicate that the mean score for the uninsured respondents (M=4.1, SD=1.5) was significantly lower than the mean score for respondents with all other types of insurance. Respondents with private insurance (M=6.5, SD=1.2), private and public insurance in combination (M=6.7, SD=1.0) and public insurance (M=6.3, SD=1.3) did not differ from each other. Uninsured respondents reported significantly less access to primary care services compared to respondents with all other types of insurance.

AFFORDING PRESCRIPTION MEDICATION

Among all respondents, 84% reported being able to afford prescription medication (Appendix 5). The percentage of respondents able to afford prescription medication varied from 77% in the northern region of the state to 87% in the southern region. Only 31% of uninsured respondents indicated that they were able to afford prescription medication compared to 81% of those with public insurance, 89% with public and private insurance, and 93% of those who were privately insured.

FINANCIAL DIFFICULTY PAYING MEDICAL BILLS

As indicated in Appendix 6, 34% of respondents reported having difficulty paying medical bills. This percentage was highest among northern region respondents (51%) ut similar for central (30%) and southern (27%) respondents. About 63% of uninsured respondents and 46% of publicly-insured respondents reported difficulty paying medical bills. Comparatively, 26% of respondents with both public and private insurance, and 21% of respondents with private insurance reported financial difficulty paying medical bills.

REASONS FOR SELECTING HEALTHCARE FACILITY

Overall, the most common reason for selecting the current healthcare facility was physician referral (34%). Other important reasons included a convenient location (30%), insurance (30%), and quality of care (25%). Insurance concerns were the primary influence on facility selection

among northern residents (48%), while physician referral was the most frequently cited reason for central (30%) and southern (29%) respondents.

While physician referral was the most frequently cited reason for selecting a healthcare facility regardless of insurance type, uninsured respondents were the least likely (15%) to make the choice based on quality of care compared to those with public insurance (19%), private insurance (26%) and both public and private insurance (31%).

About 7% of respondents indicated selecting their last healthcare facility for an "other" reason. Frequent responses included difficulty caused by insurance or underinsurance (40%), transportation (20%), inconvenient (20%).

SERVICES MOST RECENTLY ACCESSED

The services most recently accessed by all respondents included physicians (57%), lab work (37%), radiology (26%), other outpatient services (13%), emergency room (10%), inpatient (9%), other (7%), rural health clinics (6%), and oncology (3%). Other services were mostly specialty care including dentistry, physical therapy, obstetrics-gynecology, cardiology, urology, and endocrinology.

As indicated in Appendix 8, service usage was relatively consistent across regions with a few exceptions. Northern New Jersey respondents were more likely to utilize rural health clinics (12%) than their central (1%) or southern (5%) counterparts. Central New Jersey respondents were more likely to utilize inpatient services (16%) compared to those in southern (7%) or northern (3%) regions. Finally, southern New Jersey respondents were more likely to utilize emergency room services (11%) than respondents from the north (7%) or central (9%) regions.

When examining differences in service access by insurance type, respondents with both public and private insurance were the most likely to access radiology services (36%), laboratory services (43%), physician services (68%), inpatient services (14%) and other services (11%).

SATISFACTION WITH HEALTH SERVICES

Statewide, 85% of survey respondents reported some level of satisfaction with the healthcare services that they receive (Appendix 9). Regional differences were minimal, with the percentage expressing satisfaction ranging from 76% in the central region to 85% in the southern region and 88% in the northern region.

Differences in satisfaction with health services were more notable by insurance type. All respondents with both public and private insurance (100%) reported being satisfied with their health services. Satisfaction was also reported by 87% of respondents with private insurance and 81% of respondents with public insurance. Among uninsured respondents, only 58% expressed satisfaction with health services.

Analysis of variance identified a significant effect on satisfaction with services by insurance type [$F(3, 268)=8.2$, $p=.00$). Post hoc comparisons using Dunnet's C indicated a significant difference between groups on satisfaction with services received in the last year. Mean scores for

uninsured respondents (M=4.8, SD=1.8) and those with public insurance (M=5.8, SD=1.5) were significantly lower from those for respondents with both public and private insurance (M=6.7, SD=.53). Mean scores for respondents with private insurance only (M=6.1, SD=1.4) were significantly different from respondents with private and public insurance in combination and the uninsured but were not significantly different from mean scores for respondents with public insurance. Satisfaction with services was greatest for people with both types of insurance compared to all other groups. People with no insurance reported the lowest level of satisfaction with medical services.

CONCERNS IN RURAL COMMUNITIES

When asked to describe the most pressing health concern for the rural community in which they live, respondents most frequently cited affordability followed by accessibility. Subjects included bills from physicians and clinics, the cost of insurance, and the increasing cost of co-payments in their description of the high costs of services. Among respondents who selected an "other" concern, common answers included insurance (9%), quality of care (7%), availability of specialists (5%), and affordability of care (4%). Less frequently cited responses included accessibility of care, proximity of care, waiting times, the need for prevention and/or education in the community, and more help for immigrant families.

One person summarized community health concerns as follows:

> *"There is not enough, clinics and specialist are limited to certain areas, accessibility isn't there, it could take three months to see a specialist. Affordability is a big concern."*

REQUEST FOR ADDITIONAL SERVICES

The most common response for services needed in rural areas was 'more basic healthcare.' People most frequently indicated that their communities needed more clinics, physicians, and/or basic services. The second most frequently-identified need was for specialists to be more accessible in proximity and/or a reduced waiting period for specialist care. Dentistry was the most frequently cited specialty service need, followed by obstetrics-gynecology. Other service requests included improved quality, reduced insurance premiums, programs for special populations, preventative healthcare services, addiction and mental health services, podiatry, audiology, and vision care. A handful of respondents suggested a need for affordable fitness options and alternative therapies.

TABLE 4: KEY FINDINGS-RESIDENT SURVEYS

Barriers to Care	Access and Utilization	Recommendations
▪ Transportation ▪ Lack of money ▪ Lack of insurance ▪ Unable to obtain timely appointment	▪ Minor regional differences ▪ Significant differences by insurance type with uninsured populations having the lowest access and utilization ▪ Issues with accessing primary care, some specialized care and dental care ▪ Lack of prevention and education services	▪ Increase efforts to enroll uninsured into insurance plans ▪ Utilize navigators to assist with insurance enrollment, service coordination and health education/prevention services ▪ Expand awareness of services and consider providing an array of mobile services to the most isolated populations

APPENDICES

Appendix 1. Service Utilization

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
N	287	90	73	124	125	108	28	26
Dentist (Mean)	**3.2**	**2.9**	**3.2**	**3.2**	**3.3**	**3.0**	**3.5**	**2.4**
Never	10%	10%	12%	10%	7%	10%	4%	35%
Once every other year	16%	23%	14%	12%	15%	17%	15%	15%
Once a year	25%	34%	18%	26%	20%	37%	12%	31%
2-3 times a year	45%	30%	50%	49%	54%	32%	62%	19%
Once a month	4%	3%	6%	3%	4%	4%	8%	0%
Once a week	0%	0%	0%	0%	0%	0%	0%	0%
Specialist (Mean)	**2.9**	**2.8**	**2.7**	**3.0**	**2.9**	**2.9**	**3.3**	**1.7**
Never	22%	22%	31%	17%	19%	20%	7%	67%
Once every other year	9%	9%	10%	9%	7%	14%	4%	4%
Once a year	38%	47%	27%	41%	47%	31%	48%	25%
2-3 times a year	24%	15%	4%	26%	21%	25%	37%	4%
Once a month	6%	7%	1%	7%	7%	9%	4%	0%
Once a week	1%	0%	0%	0%	0%	1%	0%	0%
Pharmacy (Mean)	**4.2**	**4.0**	**3.9**	**4.4**	**4.1**	**4.4**	**4.3**	**3.2**
Never	9%	8%	19%	4%	8%	5%	11%	32%
Once every other year	5%	6%	3%	7%	8%	1%	0%	5%
Once a year	8%	15%	4%	7%	10%	9%	4%	9%
2-3 times a year	24%	35%	19%	19%	24%	25%	26%	23%
Once a month	46%	26%	51%	56%	43%	50%	48%	27%
Once a week	8%	10%	4%	8%	7%	9%	11%	5%
Primary Care Doctor (Mean)	**3.6**	**3.8**	**3.2**	**3.8**	**3.5**	**4.0**	**3.4**	**2.6**
Never	6%	3%	13%	4%	5%	2%	11%	27%
Once every other year	9%	7%	11%	10%	11%	8%	18%	18%

Appendix 1. Service Utilization

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
N	287	90	73	124	125	108	28	26
Once a year	24%	22%	32%	23%	30%	18%	27%	27%
2-3 times a year	42%	46%	38%	38%	40%	40%	18%	18%
Once a month	17%	18%	6%	25%	13%	30%	9%	9%
Once a week	2%	3%	1%	1%	2%	3%	0%	0%

Appendix 2. Appointment Availability

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
Able to Obtain Appointment When Needed								
Yes	93%	93%	93%	91%	94%	94%	100%	68%
No	7%	7%	7%	9%	7%	6%	0%	32%

Appendix 3. Reasons for Delayed Healthcare

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
Reason for Delayed Healthcare								
Lack of insurance	24%	27%	29%	23%	14%	31%	7%	77%
Lack of money	28%	36%	27%	25%	21%	33%	11%	65%
Unavailability of nearby doctor or specialist	11%	12%	11%	11%	11%	12%	7%	15%
Difficulty in getting an appointment quickly	17%	14%	16%	21%	17%	19%	11%	27%
Other	6%	6%	6%	6%	3%	6%	11%	12%
Never delayed healthcare (n/a)	51%	47%	51%	51%	62%	40%	68%	8%

Appendix 4. Service Accessibility

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
Dentist (Mean)	**5.9**	**5.6**	**5.9**	**6.1**	**6.4**	**5.6**	**6.6**	**2.5**
Not at all accessible (1)	7%	8%	9%	5%	2%	6%	0%	44%
(2)	2%	1%	3%	3%	2%	3%	4%	4%
(3)	2%	4%	1%	2%	1%	4%	0%	4%
Somewhat accessible (4)	9%	14%	11%	6%	6%	15%	7%	8%
(5)	5%	7%	1%	6%	3%	8%	0%	12%
(6)	12%	12%	9%	14%	15%	12%	4%	8%
Very accessible (7)	62%	54%	66%	65%	72%	54%	86%	20%
Specialist (Mean)	**5.6**	**5.6**	**5.8**	**5.6**	**6.0**	**5.5**	**6.3**	**2.4**
Not at all accessible (1)	7%	8%	7%	6%	4%	4%	0%	40%
(2)	1%	1%	0%	3%	1%	1%	4%	4%
(3)	4%	1%	4%	6%	3%	4%	4%	8%
Somewhat accessible (4)	11%	12%	15%	10%	7%	18%	4%	20%
(5)	10%	15%	4%	10%	10%	14%	4%	4%
(6)	15%	16%	9%	19%	14%	20%	18%	4%
Very accessible (7)	52%	47%	61%	46%	61%	39%	68%	20%
Pharmacy (Mean)	**6.4**	**6.3**	**6.4**	**6.4**	**6.6**	**6.4**	**6.6**	**2.5**
Not at all accessible (1)	3%	5%	4%	2%	2%	2%	0%	21%
(2)	1%	1%	0%	2%	0%	1%	4%	4%
(3)	2%	1%	1%	2%	1%	2%	0%	4%
Somewhat accessible (4)	4%	2%	4%	5%	4%	1%	4%	13%
(5)	4%	5%	3%	6%	5%	7%	0%	0%
(6)	9%	11%	7%	9%	7%	10%	11%	13%
Very accessible (7)	77%	75%	80%	74%	81%	75%	82%	46%
Primary Care Doctor (Mean)	**6.2**	**6.2**	**6.2**	**6.2**	**6.5**	**6.3**	**6.7**	**2.6**
Not at all accessible (1)	4%	5%	6%	2%	2%	2%	0%	29%
(2)	2%	2%	1%	2%	2%	1%	4%	8%

Appendix 4. Service Accessibility

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
(3)	1%	1%	1%	2%	0%	3%	0%	4%
Somewhat accessible (4)	5%	4%	6%	5%	4%	5%	0%	13%
(5)	5%	8%	3%	6%	6%	7%	4%	4%
(6)	13%	9%	11%	16%	12%	16%	7%	8%
Very accessible (7)	70%	71%	71%	67%	74%	67%	86%	33%

Appendix 5. Affording Prescription Medication

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
Able to Afford Prescription Medication								
Yes	84%	77%	81%	87%	93%	81%	89%	31%
No	16%	23%	19%	13%	7%	19%	11%	69%

Appendix 6. Financial Difficulty Paying Medical Bills

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
Experience financial difficulty paying medical bills								
Yes	34%	51%	30%	27%	21%	46%	26%	63%
No	66%	49%	72%	73%	79%	54%	74%	38%

Appendix 7. Reasons for Selecting Healthcare Facility

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
Reason for Selecting Healthcare Facility								
Doctoral referral	34%	40%	30%	29%	31%	34%	39%	27%
Closer, more convenient	30%	40%	22%	24%	30%	30%	21%	23%
Insurance	30%	48%	26%	15%	30%	30%	14%	15%
Quality of care	25%	28%	19%	22%	26%	19%	36%	15%
Availability of specialist care	15%	7%	8%	11%	11%	16%	21%	12%
Other	7%	3%	8%	7%	8%	7%	0%	4%

Appendix 8. Services Used During Visit

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
Services Used During Visit								
Radiological imaging (x-rays, MRI, CT scan, ultrasound, mammogram)	26%	26%	23%	25%	24%	27%	36%	8%
Laboratory	37%	37%	34%	33%	33%	37%	43%	19%
Other outpatient services	13%	11%	14%	14%	11%	14%	14%	15%
Physician services	57%	57%	59%	57%	66%	48%	68%	42%
Rural health clinics	6%	12%	1%	5%	6%	8%	4%	4%
Inpatient services	9%	3%	16%	7%	10%	5%	14%	8%
Emergency room (ER)	10%	7%	9%	11%	6%	12%	7%	15%
Oncology	3%	6%	0%	3%	2%	6%	0%	0%
Other	7%	6%	10%	4%	6%	5%	11%	4%

Appendix 9. Satisfaction with Services

	All	Location			Insurance Type			
		Northern	Central	Southern	Private	Public	Both	Uninsured
Satisfaction with Services Mean	**5.9**	**6.1**	**5.8**	**5.9**	**6.1**	**5.8**	**6.7**	**4.8**
Very dissatisfied	1%	0%	1%	2%	2%	1%	0%	0%
Dissatisfied	3%	3%	3%	4%	2%	5%	0%	10%
Somewhat dissatisfied	5%	4%	10%	4%	4%	4%	0%	29%
Neutral	6%	5%	10%	6%	6%	10%	0%	5%
Somewhat satisfied	8%	11%	4%	7%	7%	8%	4%	10%
Satisfied	27%	25%	25%	29%	28%	27%	19%	29%
Very satisfied	50%	52%	47%	49%	52%	46%	77%	19%