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Four State Comparison of Access, Utilization and Quality of Care for SSI Adults and Children

Final Report

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ABSTRACT

This report compares the health status, health care utilization and health care experiences of Medicaid-eligible adults and children with Supplemental Security Income (SSI) in specific regions of Kentucky, New York and Tennessee, and in the state of Oregon. Surveys were conducted by RTI International and Mathematica Policy Research in two rural regions of Kentucky, two regions in New York (New York City and Westchester County), Shelby County in Tennessee (which contains Memphis) and the state of Oregon in 1998-2000. Respondents were eligible for SSI due to mental illness, mental retardation/developmental disability, or physical disability. Virtually all SSI recipients are also eligible for Medicaid, so insurance status was similar across states. Analyzing the survey data, we found that adults and children with SSI generally had access to a usual source of care and did receive care from the same source without unreasonable delays, thus indicating a continuity of care for this vulnerable population. However, adults in Kentucky and Tennessee reported high levels of unmet physician need and adults in Kentucky and Oregon reported high levels of unmet need for prescription medications. Children had lower levels of unmet need. Despite similar insurance coverage, regional variation in health care delivery systems and population characteristics still affected health care experiences of SSI recipients.

EXECUTIVE SUMMARY

The purpose of this report is to compare the health care experiences of people in four different states who qualify for Supplemental Security Income (SSI) due to mental illness, mental retardation/developmental disability, or physical disability and are covered by Medicaid. In order to examine and compare access to care, health care utilization, health status and health satisfaction for both adults and children with SSI, regional surveys were conducted. The original purpose of these surveys was to conduct evaluations of Section 1115 Medicaid demonstrations in specific regions of three states, and in the entire state of Oregon. In previous work on each of the individual regions, it appeared that Kentucky SSI recipients were in poor health, used little care, and were generally satisfied with their access to care. By pooling the data across regions and controlling for observable differences across regions, we intended to see whether these characteristics of Kentucky SSI recipients remained.

Methods

This report presents a comparative analysis of pooled survey data from the five regions. The Kentucky (KY) sample was drawn from two of the eight regions the state was planning to use for managed care plan contracting purposes as a baseline survey; however, managed care was ultimately not implemented there, so a follow-up survey never took place. In New York, the sample was selected from New York City (NYC) and Westchester County (WC). These were two areas where the state intended to implement mandatory managed care for persons with SSI and had voluntary managed care enrollment at the time of the survey. The Oregon (OR) survey was based on a state-wide sample of disabled individuals participating in the Oregon Health Plan (OHP), the state's Medicaid program. The sample for the Tennessee (TN) survey was selected from Shelby County. This county contains Memphis, a large urban city, as well as the highest concentration of SSI recipients in the state. The TN sample was further restricted to the four largest managed care organizations in the county, which include over 90 percent of SSI enrollees in Shelby County.

Respondents were SSI recipients under the age of 65 and enrolled only in Medicaid, not Medicare. Depending on the region, respondents were in either Medicaid fee-for-service or Medicaid managed care. All residents in nursing homes or other facilities were also excluded from the sample. Respondents' reasons for SSI eligibility were obtained from Social Security Administration (SSA) records and were classified into three groups: physical disability (PD), mental retardation/developmental disability (MRDD), or mental illness (MI).

The surveys were conducted in 1998, 1999 and 2000 using computer-assisted telephone interviewing techniques. For children, respondents were either a parent or proxy respondent. The number of adult respondents varied greatly across regions, from 835 in NYC to 1,029 in OR. There were approximately 400 children responding in each state ranging from 397 in OR to 430 in NYC. The response rates for both adults and children ranged from 50-75%.

The survey instruments were identical for KY, NYC and WC and were unique for TN and OR. From the questionnaires, only items that were similar or the same were retained. Reponses for these items were recoded into categories that were compatible across all the surveys. Weighting decisions were made in order to ensure that each region would have an

equal weight in the pooled data, preserving the individual weights within each region so that underlying population differences within regions are included in the pooled data. We used each stratum from each sample to determine the final weights for the pooled data. To use the sampling information in the analyses, we used State's survey commands which incorporate several weights to adjust variances for the effects of unequal weights and unequal probabilities of selection.

Principal Findings: Adults

KY has the highest percentage of recipients who report themselves in poor health, and adults in OR have the highest reports of ADL limitations.

Almost half of the adults in KY, NYC and WC have someone who assists them with arranging nonmedical services.

The most common reason for SSI eligibility in survey respondents in KY, NYC and OR is PD. On the other hand, most recipients in TN are eligible for SSI due to MRDD,[1] while most in WC are eligible due to MI.

The vast majority of recipients in the regions have a usual source of care. Most have been to a physician in the past year.

Compared to the other regions, recipients in KY and TN had the highest percentage of unmet physician need. Recipients in KY and OR had the highest reports of unmet prescription drug need.

The majority of SSI recipients were satisfied with the quality of their medical care across the regions.

Principal Findings: Children

Children in KY were in the poorest health.

Half of the children in KY are eligible for SSI due to MRDD, 27% have a PD and 13% have MI. The distribution in NYC is similar to that of KY. In contrast, nearly half of the children in OR are eligible for SSI because of a PD, nearly one-third because of MRDD and almost one-fifth because of MI. In TN, 60% of the children have MRDD, 23% have a PD and 17% have MI.

Most children report having a usual source of care, and most visited a physician in the past year.

Children in TN had the highest level of unmet need for doctor and dental care. The percentages of unmet need for prescription drugs was similar across KY, OR and TN with

[1] TN had a 1915(c) waiver program for MRDD, which was in operation at the time of the survey.

approximately 11-12% reporting that children had an unmet prescription drug need. Children in NYC had the lowest reported unmet prescription need, at 5.8%.

Respondents were generally satisfied with the quality of children's medical care.

CHAPTER 1
INTRODUCTION

The purpose of this report is to compare the health care experiences of people in four different states who qualify for Supplemental Security Income (SSI) due to mental illness, mental retardation/developmental disability or a physical disability and were covered by Medicaid. Both Medicaid and SSI eligibility and benefit decisions are state-specific. Medicaid is the largest source of insurance for persons with disabilities. In 1997, Medicaid covered 6.8 million non-elderly individuals who qualified for the program due to on disability. Of these people, 78% were eligible for SSI (Schneider, et al., 2000). People with disabilities were found to use more health care services, including specialty and hospital care, have higher prescription drug rates and have an increased need for long-term care compared to the nondisabled population (KCMU, 2001).

In order to examine and compare access to care, health care utilization, health status and health satisfaction for both adults and children with SSI, regional surveys were conducted. The original purpose of these surveys was to conduct evaluations of Section 1115 Medicaid demonstrations in specific regions of three states, and in the entire state of Oregon. The purpose of the Kentucky survey was to examine the effect of implementing managed care in two rural regions of the state through a pre-post analysis. Access to data from the Social Security Administration enabled us to identify respondents' reasons for disability.

Little is known about the characteristics and health care experiences of persons with disabilities in these four states. In state-specific analyses of these survey data, researchers (Coughlin, et al., 2002; Mitchell, et al., 2002; Hill and Wooldridge, 2003) found that the majority of adults with SSI in New York and Tennessee had a usual source of care. This indicates some basic level of access to care, but the question remained as to whether adults were having all of their needs met. Although adults with SSI in New York reported frequent use of services, they still reported high unmet needs (Coughlin, et al., 2002). The results were similar in Tennessee (Hill and Wooldridge, 2003).

Using these survey data, Mitchell, et al. (2001) and Hill and Wooldridge (2003) analyzed access to care for children with SSI in Oregon and Tennessee, respectively. In examining unmet need in Oregon, Mitchell, et al. (2001) found that children with disabilities in managed care reported no significant differences in unmet need for specialty care, dental care and prescription medicine compared to children with disabilities in fee-for-service. Approximately 6% of children in managed care reported unmet specialty care compared to 11% in fee-for-service; about 15% of children had an unmet dental need; and 12% had an unmet need for prescription medication. Similarly, in Tennessee, 10% of children had an unmet physician need and 11% had an unmet prescription drug need. However, a much higher percentage of children in Tennessee (24%) reported an unmet dental need (Hill and Wooldridge, 2003).

1.1 Methods

This report presents a comparative analysis of pooled survey data from five regions. In this section we present methods for sampling, data collection, pooling data, and analysis of cross state patterns.

Sample Selection

Kentucky. The sample was drawn from two of the eight regions Kentucky (KY) had planned to use for managed care plan contracting purposes; however, managed care was ultimately not implemented in these regions. Known as Regions 4 and 8, both are very rural and Region 8 consists largely of Appalachia. Together, the two regions include 39 counties and contain 43% of the state's SSI population who are covered by Medicaid but not by Medicare. A stratified sample of adults aged 18 to 64 and children from birth to 17 was selected from state Medicaid eligibility files.

New York City and Westchester County. In New York, the sample was selected from New York City (NYC) and Westchester County (WC). The counties differed as NYC is an urban area while WC is considered a suburban area. These were also two areas where the state intended to implement mandatory managed care for persons with SSI and had voluntary managed care enrollment at the time of the survey. A stratified sample of adults aged 18 to 64 was selected from state Medicaid eligibility files in both locations. A sample of children from birth to age 17 was drawn in NYC only.

Oregon. The Oregon (OR) survey was based on a statewide sample of disabled individuals participating in the Oregon Health Plan (OHP), the state's Medicaid program. The sampling frame was defined as all persons enrolled in OHP as of January 1998 and who had been enrolled for at least 10 of the previous 12 months. Adults aged 18-64 and children aged 1-17 were selected from the OHP enrollment files.

Tennessee. The sample for the Tennessee (TN) survey was selected from Shelby County. This county contains Memphis, a large urban city, as well as the highest concentration of SSI recipients in the state. The sample was further restricted to the four largest managed care organizations in the county, which include over 90 percent of SSI enrollees in Shelby County. Respondents younger than age 65 were sampled from the TennCare enrollment files.

All States. Respondents were SSI recipients under the age of 65 and enrolled only in Medicaid, not Medicare. Depending on the region, respondents were in either Medicaid fee-for-service or Medicaid managed care. SSI recipients in KY, NYC, OR, TN and WC who were age 65 and older, recipients who were dually eligible for Medicare, and all residents in nursing homes or other facilities were excluded from the sample. Respondents' reason for SSI eligibility was obtained from Social Security Administration (SSA) records and were classified into three groups: physical disability (PD), mental retardation/developmental disability (MRDD), or mental illness (MI). For a small number of recipients the reason for disability was unknown. Where possible, respondents who had an unknown disability according to SSA were classified into one of the three categories by their response to a survey question about the type of disability that makes them eligible for SSI.

Data Collection

The surveys for KY, NYC, WC and TN were conducted by Mathematica Policy Research, Inc. using computer-assisted telephone interviewing techniques (CATI). RTI International conducted the survey for the OHP population, also using CATI. The survey

instruments were identical for KY, NYC and WC and were unique for TN and OR. We were able to combine and compare responses for questions that were the same or similar. For children, respondents were often a parent or proxy respondent.

Table 1-1 indicates the sample sizes and response rates by state for both the adult and child populations. The number of adult respondents varied greatly, from 835 in NYC to 1,029 in OR. KY had many more adults with MI compared to the other regions, because of an oversampling of persons with schizophrenia[2]. There were approximately 400 children responding in each state ranging from 397 in OR to 430 in NYC. The response rate for both adults and children was approximately 60%.

Data Pooling

Because of the varied sampling frames across regions, determining the most appropriate manner to combine the data for cross state comparisons was challenging. From the questionnaires, only items that were similar or the same were retained. Reponses for these items were recoded into categories that were compatible across all the surveys. Weighting decisions were made in order to ensure that each region would have an equal weight in the pooled data. Because of an additional study on schizophrenics in KY, the oversampling of this group was also considered in the weighting decision. We considered alternative weighting schemes that might generalize to estimates that were representative of the state, or original regions. Since the regions are not intrinsically meaningful, we felt that having each region in the data have an equal weight would provide the best comparability. The initial probability of selection in each region was therefore normalized so each region would have the same weight in the final data set. The information contained in the original sample weights was maintained without having regional sample size drive the results from the pooled data. We used each stratum from each sample to determine the final weights for the pooled data. To use the sampling information in the analyses, we used STATA's survey commands which incorporate several weights to adjust variances for the effects of unequal weights and unequal probabilities of selection.

Analysis

Chi-square tests were used to determine the statistical significance of all categorical variables when comparing the regions. We used KY as the comparison region. The rationale for this decision was based on previous research of the individual regions. The surveyed SSI recipients in KY were in poor health, seemed to use relatively little care, and lived in rural areas. This research aimed at finding out whether, controlling for regional and individual characteristics, the SSI recipients in Kentucky remained the least healthy, and the least likely to seek care, despite high reports of unmet need. (Mitchell, Hoover, Bir, 2003). Comparing across regions gave a context for the relationships between access, health status, unmet need and satisfaction with care. We also estimated logistic regressions for certain outcomes like

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[2] As part of this contract, CMS and SAMHSA jointly funded a survey of SSI recipients with schizophrenia in KY. Schizophrenia was chosen as a tracer condition for the survey, after consultation with a technical advisory panel, because there were a sufficient number of people with the disease in KY Regions 4 and 8. RTI was to conduct a pre-post analysis of the implementation of Medicaid managed care on persons with severe mental illness; however, KY ultimately did not implement managed care in these regions.

Table 1-1
Sample sizes for adult and children surveys

	Kentucky	New York City	Oregon	Tennessee	Westchester County
Adults					
Mentally Ill	830	237	323	322	381
Mentally Retarded/Developmentally Disabled	424	296	235	315	190
Physically Disabled	479	302	471	305	382
Total Adults	1,733	835	1,029	942	953
Children					
Mentally Ill	55	54	80	120	--
Mentally Retarded/Developmentally Disabled	213	218	113	150	--
Physically Disabled	157	158	204	136	--
Total Children	425	430	397	406	--
Response Rate	75%	56%	50%	65%	59%

SOURCES:

Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey (NYC and WC) of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare.

probability of having a doctor's visit in the past 3 months, a mental health visit in the past 3 months, an admission within the last year, a dental visit in the past 3 months, or unmet pharmacy need. Factors expected to influence these outcomes include demographic characteristics, health status, type of disability, state, and whether care was provided by a managed care organization.

1.2 Overview of Report

This report consists of four chapters. Chapter 2 compares sociodemographic characteristics, health status and health care utilization of adults in KY to adults in NYC, OR, TN and WC. Chapter 3 is similar but compares the characteristics of children instead of adults in KY, NYC, OR and TN. Chapter 4 summarizes the report and presents conclusions.

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CHAPTER 2
ADULTS

This chapter compares sociodemographic, health status and health care utilization characteristics of adults with SSI in KY, NYC, OR, TN and WC. Each region is compared separately to the KY sample. The five regions vary in terms of the benefits covered by their Medicaid programs, SSI determination processes, whether service delivery occurs in a fee for service or managed care environment, the urban/rural dimension across regions, demographics of the surveyed groups, and the distribution among types of disability. The type of disability that the survey respondents have also varies and may imply varied health care needs.

2.1 Regional Comparisons

Sociodemographic Characteristics

Table 2-1 presents the sociodemographic characteristics of the SSI population across the five regions in the study. The age distribution of the SSI populations across most regions varies. NYC has an older population, as one-third of NYC is aged 55-64. TN and WC have the youngest populations: 35% of TN's and WC's populations are younger than 35. More than half of SSI populations across the regions are female.

The five regions differ in their racial and ethnic composition. The vast majority of KY's population consists of white recipients (94%). Most of the SSI population in NYC is Hispanic, and the majority of SSI recipients in OR are whites (77%). Three-quarters of SSI recipients in TN are African American. In WC 40% of recipients are white, 28% African American and 23% Hispanic.

The educational levels across the regions vary. KY has the highest percentage of recipients who did not graduate high school (61%), followed by TN (58%) and NYC (54%). OR had the highest percentage of recipients with some college education (25%) followed by NYC (22%).

Kentucky has the highest percentage of recipients who are married compared to the other regions: 34% of SSI recipients in KY are married compared to 16% in NYC, 14% in OR, 11% in TN and 9% in WC. Further, KY has the lowest percentage of recipients who have never been married: 25% compared to more than 40% in each of the other regions.

In KY only 2% of SSI recipients are employed, while all other regions have a significantly higher percentage of SSI recipients who have a job. The percentage of SSI recipients with a job ranges from 3.6% in NYC to 13.4% in OR.

Table 2-1
Sociodemographic characteristics of adult SSI recipients in KY, NYC, OR, TN and WC

	Kentucky (N=1,733)	New York City (N=835)	Oregon (N=1,029)	Tennessee (N=942)	Westchester County (N=953)
	(%)	(%)	(%)	(%)	(%)
Age:[a]		***		***	***
18-34	26.3	24.3	28.9	34.6	35.2
35-44	23.0	19.4	24.3	25.2	20.8
45-54	26.2	23.2	24.9	20.6	22.8
55-64	24.5	33.1	21.8	19.5	21.3
Female	61.1	60.1	60.5	57.5	54.4 ***
Race/ethnicity:[a,b]		***	***	***	***
White, non-Hispanic	94.2	21.4	76.7	21.0	40.4
African American, non-Hispanic	2.4	26.3	5.8	75.9	27.5
Hispanic	1.5	45.3	3.8	0.9	23.2
Asian/Pacific Islander	0.0	1.6	4.7	0.2	2.3
American Indian/Alaskan Native	1.1	1.1	5.4	1.2	0.5
Other	0.7	4.4	3.7	0.9	6.2
Education:[a]		***	***	***	***
Less than 12 years	60.5	53.5	35.6	58.1	49.5
High school graduate	22.0	24.3	39.4	29.2	31.3
Some college	17.4	22.2	25.0	12.7	19.2
Marital Status[a]		***	***	***	***
Married	33.6	16.2	14.4	10.7	8.7
Widowed	7.3	7.9	4.6	6.3	4.2
Divorced	26.4	18.7	31.1	16.0	19.6
Separated	8.1	16.2	6.5	13.8	9.7
Never married	24.6	41.0	43.4	53.1	57.8
Working in a job for pay	2.0	3.6 **	13.4 ***	7.8 ***	11.5 ***

NOTES:
[a] Percentage distributions sum to 100 within category by column.
[b] Race and ethnicity were asked as two separate questions. Because some respondents did not answer the question about race but do answer the question about ethnicity, we created one category to report race and ethnicity.
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey (NYC and WC) of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

Health and Functional Status

The health status of recipients in each of the regions is significantly better than the recipients in KY (***Table 2-2***). KY has the highest percentage of recipients who report themselves in poor health: nearly half of recipients in KY consider themselves in poor health compared to less than 30% in NYC, OR, TN and WC. Further, only 19% of recipients in KY rate their health as at least good, while that percentage is more than double in the other regions (39% in NYC, 45% in OR, 49% in TN and 51% in WC). Many recipients reported their health to be worse than it was in the previous year, as over half in each region reported that their health had declined. In KY only 9.4% of respondents thought their health was better than it had been in the previous year, while in the other regions 23-26% reported better health than in the previous year. (This question was not asked on the OR survey.)

We also learned about recipients' functional status through questions about whether they were limited in their Activities of Daily Living (ADL) or in their Instrumental Activities of Daily Living (IADL). Activities of daily living include whether a person needs help or uses special equipment to: bathe, dress, eat, get in or out of chairs, use the toilet, get around indoors. IADLs include having help in meal preparation, eating, cooking, shopping, managing money, using the telephone, doing light housework and managing medications. Although the self-reported health status measures indicated that KY recipients were in poor health, adults in OR have the highest reports of ADL limitations, and TN the lowest. A higher percentage of the population reports having IADLs compared to ADLs. Seventy-five percent of recipients in KY report having an IADL compared to 67% in NYC, 71% in OR, 70% in TN and 59% in WC.

More than 45% percent of SSI recipients in KY, NYC and WC have someone to assist them with arranging their nonmedical services, such as making appointments and providing social service assistance. Adults in OR and TN have significantly lower percentages (24% and 26%, respectively) of recipients who receive assistance in arranging their nonmedical services.

Recipients in our surveys are eligible for SSI due to a number of medical conditions and the distribution of these conditions varies significantly across regions. For example, the most common reason for SSI eligibility in survey respondents in KY, NYC and OR is physical disability. On the other hand, most recipients in TN are eligible for SSI due to MRDD,[3] while most in WC are eligible due to MI.

Usual Source of Care

The vast majority of recipients in the regions have a usual source of care (USC), which is defined as a particular doctor's office, clinic, health center or other place that recipients go to when they are sick or need advice about their health (***Table 2-3***). In KY, NYC and OR, approximately 96% of the recipients have a USC. Although a slightly lower percentage of adults in TN ad WC reported having a USC (94 and 93%, respectively), the differences are too small to be meaningful.

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[3] TN had a 1915(c) waiver program for MRDD, which was in operation at the time of the survey. This may relate to the higher proportion of MRDD SSI recipients in Tennessee relative to other states.

Table 2-2
Health and functional status for adult SSI recipients in KY, NYC, OR, TN and WC

	Kentucky (N=1,733)	New York City (N=835)		Oregon (N=1,029)		Tennessee (N=942)		Westchester County (N=953)	
Health status (%)[a]		***		***		***		***	
Excellent	1.9	5.8		4.3		9.3		9.6	
Very Good	5.4	9.1		14.4		14.3		15.8	
Good	11.9	23.5		26.4		25.1		25.8	
Fair	31.1	32.3		31.1		29.8		28.4	
Poor	49.8	29.3		23.8		21.7		20.3	
Health compared to a year ago (%)[a]		***				***		***	
Better	9.4	23.9		--		25.7		22.6	
Same	37.1	24.8		--		17.0		17.9	
Worse	53.5	51.2		--		57.4		59.5	
One or more ADL limitations [b]	42.3	43.3		56.1	***	29.4	***	38.3	**
Someone who helps you arrange nonmedical services	47.4	49.4		24.3	***	25.8	***	46.9	
Need assistance/special equipment for… [b]									
Bathing	28.8	30.3		39.7	***	17.4	***	26.4	
Dressing	16.9	20.2	*	31.6	***	14.9		17.3	
Eating	5.3	6.9		13.5	***	4.9		7.8	**
Getting in/out bed/ up/down from chair	17.6	17.3		33.5	***	12.4	***	14.1	**
Toileting	10.7	14.3	**	16.3	***	7.4	**	13.9	**
Getting around	19.5	27.3	***	22.0		15.3	***	24.5	***
One or more IADL limitations [c]	75.3	67.3	***	71.1	***	70.1	***	59.2	***
Need Assistance with… [c]									
Meal preparation	39.1	33.2	**	41.7		30.4	***	26.5	***
Shopping	56.6	51.3	*	46.2	***	43.7	***	42.8	***
Managing finances	35.9	31.0	**	39.6	*	41.1	**	28.5	***
Using the telephone	17.8	13.1	***	15.4		14.2	**	10.0	***
Housework	41.0	30.2	***	33.7	***	50.3	***	25.5	***
Managing medications	30.2	24.5	***	31.1		28.0		22.4	***
Type of disability (%)[a]		***		***		***		***	
Mental illness	33.0	35.0		34.9		33.9		41.7	
Mental retardation/developmental disability	28.7	16.1		23.2		36.4		18.8	
Physical disability	38.2	49.0		42.0		29.7		39.5	

NOTES:
[a] Percentage distributions sum to 100 within category by column.
[b] In KY, NY and WC respondents were coded as having an ADL if they responded that they had help, supervision or used special equipment to perform the activity. In OR respondents were coded as having an ADL if they responded that they had help, supervision or used special equipment some of the time or all of the time to perform the activity.
[c] In KY, NY and WC respondents were asked two questions: if they performed the activity and if they received help. If they answered yes to both, they were coded as having an IADL. In OR respondents were coded as having an IADL if they received help or supervision performing the activity some or all of the time. In TN respondents were coded as having an IADL if they received help or supervision conducting an activity.
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey (NYC and WC) of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

Table 2-3
Usual source of care of adult SSI recipients in KY, NYC, OR, TN and WC

	Kentucky (N=1,733)	New York City (N=835)	Oregon (N=1,029)	Tennessee (N=942)	Westchester County (N=953)
	(%)	(%)	(%)	(%)	(%)
Have a usual source of care	96.5	95.9	96.3	94.2 **	93.0 ***
Physician as usual source of care	96.0	97.2	92.5 ***	91.1 ***	94.4 *
Place of usual source of care[a]		***	***	***	***
Private office/HMO	59.4	17.9	68.3	34.5	30.4
Clinic or health center	31.1	40.7	7.8	51.2	36.2
Emergency room	2.3	2.8	2.7	2.6	3.2
Hospital OPD	6.0	35.7	17.1	10.7	26.7
Other	1.3	2.9	4.0	1.1	3.5
See same doctor at usual source[a]		***		***	***
Always	64.9	65.4	--	60.1	59.2
Most of time	24.5	17.3	--	20.7	22.1
Sometimes	8.7	10.0	--	9.1	10.5
Rarely/never	1.9	7.4	--	10.1	8.2
Difficulty speaking/understanding physician					
Always / most of the time	9.9	10.5	--	9.6	7.2 **
Travel time to usual source					
30 minutes or less	75.6	76.0	85.5 ***	78.6	83.2 ***
Waiting time at usual source					
30 minutes or less	47.5	46.3	82.6 ***	57.9 ***	61.3 ***
Days between making appointment and seeing usual source [a]		***		***	***
Same or next day	70.4	57.0	--	49.1	58.8
2-3 days	13.9	9.7	--	22.7	9.0
4-7 days	7.7	9.9	--	12.5	10.6
8 days - 3 weeks	3.6	7.0	--	7.3	6.8
More than 3 weeks	1.6	7.2	--	3.6	4.9
It varies	1.8	6.0	--	1.0	3.9
Never been sick	1.0	3.3	--	3.9	6.0

NOTES:
[a] Percentage distributions sum to 100 within category by column.
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey (NYC and WC) of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

As an indicator of access to care, the fact that well over 90% of respondents in all regions report having a usual source of care is heartening.

Of those with a usual source of care, over 90% have a physician as their USC. Interestingly, the location of the usual source of care differs widely and significantly. For example, 59% of recipients in KY visit a doctor's office or HMO, while 31% go to a clinic. In NYC 41% go to a clinic and 36% use a hospital outpatient department (OPD) as their USC. More than two-thirds of recipients in OR visit a doctor's office, while 17% go to an OPD. Over half in TN use a clinic as their USC and more than one-third a doctor's office, while most go to a clinic, doctor's office or OPD in WC.

At least four out of five SSI recipients see the same physician at their USC most or all of the time. Ten percent of recipients in KY, NYC and TN typically have difficulty understanding their physician, while a significantly lower percentage (7%) has difficulty understanding their physician in WC. (These questions were not asked on the OR survey.)

Travel times to USCs vary across the regions. Almost one-quarter of recipients in both KY, a largely rural area, and NYC, an urban area, travel more than 30 minutes to their USC. Respondents in OR and WC have significantly shorter travel times (less than 30 minutes) (86% and 83%, respectively). Waiting times at their USC differ across the regions as well. Over half of the recipients in KY and NYC wait over 30 minutes at their USC, while adults in OR, TN and WC wait significantly less. For example, 83% of recipients in OR, 58% of recipients in TN and 61% of recipients in WC wait less than 30 minutes. Adults in KY, however, have the shortest wait for an appointment. For example, 70% of SSI recipients in KY can see their USC either the same day or the next day when making an appointment, compared to 57% in NYC, 49% in TN and 59% in WC. A higher percentage of recipients in the other regions also must wait longer than three weeks compared to KY: 2% in KY, 7% in NYC, 4% in TN and 5% in WC. (This question was not asked on the OR survey.)

Utilization of Medical Services for Adult SSI Recipients

KY and NYC have the highest percentage of recipients who have seen a physician in the past year (***Table 2-4***). Ninety-one percent of recipients in KY and NYC have been to a doctor in the past year compared to significantly lower percentages in TN (80%) and WC (88%). (This question was not asked on the OR survey.) Within the past 3 months, a large percentage of respondents in KY and NYC had had a physician visit, 82% and 81%, respectively. Significantly fewer had one in OR (74%), WC (73%) and TN (61%).

Nearly half of KY and NYC recipients have been to the ER in the past year compared to 43% in TN and 46% in WC. (This question was not asked on the OR survey.) In addition, 27% of recipients in KY and NYC have had an inpatient stay compared to significantly fewer in OR (22%), TN (22%) and in WC (24%). Differences between regions for both inpatient and ER visits are 5% or less.

Recipients in KY, OR and TN visited dentists less frequently compared to recipients in NYC and WC. In the past year less than 55% of recipients in KY, OR and TN had been to a dentist compared to nearly 70% in NYC and WC.

Table 2-4
Utilization of services for adult SSI recipients in KY, NYC, OR, TN and WC

	Kentucky (N=1,733)	New York City (N=835)		Oregon (N=1,029)		Tennessee (N=942)		Westchester County (N=953)	
Percent with service during past 12 months:									
Physician visit	91.0	91.1		--		79.9	***	87.5	***
ER visit	48.4	48.4		--		43.1	**	45.5	
Inpatient stay	26.8	27.2		22.1	**	22.1	*	23.6	*
Dental visit	54.6	69.8	***	53.4		53.1		68.4	***
Blood pressure check	93.5	94.3		--		93.2		90.6	***
Pap test (women only)	61.1	85.0	***	--		75.8	***	75.2	***
Percent with service during past 3 months:									
Physician visit	82.1	81.4		74.1	***	60.8	***	73.2	***
Mental health visit	17.7	32.2	***	29.4	***	26.1	***	33.2	***

NOTES:
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.
SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey (NYC and WC) of Disabled Medicaid Recipients, 1999/2000;
Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

Two common preventive health questions were asked on the surveys (except in OR). Over 90% of recipients in each region had their blood pressure checked in the last year. KY had the lowest percentage of women having pap tests in the past year: only 61% of female SSI recipients in KY had a Pap test in the past year compared to 85% in NYC, 76% in TN and 75% in WC.

Unmet Medical Need

Compared to the other regions, recipients in KY and TN had the highest percentage of unmet physician need with just over 20% reporting unmet need (***Table 2-5***). We were unable to compare unmet need with OR because the question in OR focused only on unmet need for specialist care. Only 14% of recipients in NYC and 16% of recipients in WC indicated that they were unable to get physician care that they thought they needed.

Recipients in KY had the lowest percentage of unmet dental need (11%), while adults in TN reported the highest (42%). Recipients in NYC (16%), OR (15%) and WC (21%) all reported significantly higher percentages of unmet dental need compared to KY.

Table 2-5
Unmet need for services of adult SSI recipients in KY, NYC, OR, TN and WC

	Kentucky (N=1,733)	New York City (N=835)	Oregon (N=1,029)	Tennessee (N=942)	Westchester County (N=953)
Percent with unmet need					
Doctor care	22.4	13.7 ***	--	21.8	15.7 ***
Dental care	10.9	15.5 ***	15.1 ***	42.0 ***	21.3 ***
Mental health / substance abuse	7.0	7.3	--	12.0 ***	6.7
Prescription medicine	22.1	11.8 ***	20.5	17.1 ***	10.2 ***

NOTES:
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey (NYC and WC) of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

There were no significant differences in terms of unmet mental health and substance abuse need among KY, NYC and WC (all approximately 7%). Approximately 12% of recipients in TN reported an unmet mental health care or substance abuse need.

A significantly higher percentage of SSI recipients in KY also indicated that they had an unmet prescription drug need compared to recipients in NYC, TN and WC (12%, 17%, 10% versus 22%). There was no significant difference in unmet prescription drug need between KY and OR (22% and 21%, respectively).

Satisfaction with Care

The majority of SSI recipients were satisfied with the quality of their medical care (***Table 2-6***). In each region except WC more than 82% of recipients rated the quality of their health care as good, very good or excellent. Significantly fewer recipients in WC (79%) rated their health care as highly. (This question was not asked on the OR survey.)

Adults in TN were the most satisfied about their ability to get care from specialists. Eighty-one percent of adults in TN, 79% of adults in KY, 76% of adults in OR, 75% of adults in NYC and 61% in WC rated the ease of getting care from specialists as excellent or good. A higher percentage of recipients in KY rated their ability to get care in emergencies as good or better compared to recipients in NYC, TN and WC. Seventy-five percent of recipients in KY rated their ability to get care in an emergency as good, very good or excellent compared to 67% in NYC and 71% in TN and WC. (This question was not asked on the OR survey.)

Table 2-6
Satisfaction of adult SSI recipients with care in KY, NYC, OR, TN and WC

	Kentucky (N=1,733)	New York City (N=835)	Oregon (N=1,029)	Tennessee (N=942)	Westchester County (N=953)
	(%)	(%)	(%)	(%)	(%)
Quality of medical care:[a]					***
Excellent/very good/good	83.3	82.1	--	82.1	78.5
Fair/poor	16.7	17.9	--	17.9	21.5
Ease of getting care from specialists: [a]		*			***
Excellent/very good/good	79.2	75.0	76.1	81.0	60.6
Fair/poor	20.8	25.0	23.9	19.0	39.4
Ease of getting care in emergencies: [a]		***		*	**
Excellent/very good/good	74.8	66.8	--	70.9	70.8
Fair/poor	25.2	33.2	--	29.1	29.2

NOTES:
[a] Percentage distributions sum to 100 within category by column.
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey (NYC and WC) of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

2.2 Regression Results

To understand how various factors interact to predict utilization, prescription need, and receipt of nonmedical assistance, we estimated several logistic regressions. In each of the models we controlled for gender, race and ethnicity, age, health status, type of disability, presence of ADLs, assistance with nonmedical services, urban/rural status, state of residence and whether the beneficiary reported being in managed care. To define Medicaid managed care we use a survey question in OR, NYC and WC that indicates whether a respondent was covered by a managed care plan or not. In TN all respondents were in managed care, and in KY no respondents were in managed care. We present the odds ratios for these models in ***Table 2-7***. In addition to testing coefficients using KY as a reference state, we tested for significant differences between all pairs of states. We report any of the differences that are significant at the 0.01 level.

Table 2-7
Odds ratios from logistic regressions of adults with SSI

	Doctor visit in last 3 months (Model 1)	Mental health visit in last 3 months (Model 2)	Inpatient hospital visit in last year (Model 3)	Dental visit in last year (Model 4)	Unmet pharmacy needs (Model 5)	Assistance with nonmedical services (Model 6)
Sample size	5,062	5,192	5,186	4,793	5,203	5,217
Female	1.61 ***	1.34 ***	1.06	1.09	1.36 ***	0.73 ***
Race/ethnicity						
African American, non-Hispanic	0.94	0.64 ***	1.28 **	0.88	1.10	0.92
Hispanic	1.00	0.89	1.31 **	1.03	0.79	1.51 ***
Other	0.84	0.61 ***	0.75 *	0.96	1.13	1.38 **
Age						
35-44	1.20 *	1.21 *	1.07	0.73 ***	1.03	0.87
45-54	1.49 ***	1.02	0.97	0.51 ***	0.82	0.71 ***
55-64	1.77 ***	0.71 ***	0.87	0.43 ***	0.65 ***	0.78 **
Health status						
Excellent	0.41 ***	1.16	0.45 ***	1.09	0.11 ***	0.96
Very good	0.54 ***	0.93	0.30 ***	1.05	0.29 ***	0.93
Good	0.59 ***	1.09	0.37 ***	1.02	0.51 ***	0.99
Fair	0.90	0.87	0.71 ***	1.00	0.66 ***	0.96
Type of disability						
SMI	0.81 **	10.07 ***	0.82 **	1.11	1.50 ***	1.56 ***
MRDD	0.64 ***	2.01 ***	0.54 ***	1.36 ***	0.97	1.79 ***
Presence of ADL	1.54 ***	1.03	1.45 ***	1.09	1.69 ***	1.98 ***
Assistance with nonmedical services	1.26 ***	1.73 ***	1.35 ***	1.05	0.89	--
Urban	0.88	0.92	1.24	1.54 ***	0.98	0.75

Table 2-7 (continued)
Odds ratios from logistic regressions of adults with SSI

	Doctor visit in last 3 months (Model 1)	Mental health visit in last 3 months (Model 2)	Inpatient hospital visit in last year (Model 3)	Dental visit in last year (Model 4)	Unmet pharmacy needs (Model 5)	Assistance with nonmedical services (Model 6)
State						
NY	1.13	3.48 ***	0.77	1.43 *	0.62 **	1.32
OR	0.75	2.46 ***	0.86	0.68 **	0.74 ***	0.30 ***
TN	0.45 ***	2.56 ***	0.58 *	0.59 **	0.14 ***	0.38 ***
WC	0.88	2.90 ***	0.81	1.21	0.53 ***	1.16
State with Medicaid managed care	1.15	1.08	1.04	1.08	1.48 *	1.40

NOTES:
*** Significantly different at .01 level.
** Significantly different at .05 level.
* Significantly different at .10 level.
" -- " indicates that question was not asked on survey.
Reference Groups: white non-Hispanic beneficiaries, age 18-34, poor health, physical disability, KY.

Model 1: The differences between NY and TN, OR and TN, and WC and TN are significant at the 0.01 level.
Model 2: There were no significant differences between regions at the 0.01 level.
Model 3: There were no significant differences between regions at the 0.01 level.
Model 4: The differences between NY and OR, NY and TN, OR and WC and TN and WC are significant at the 0.01 level.
Model 5: The differences between NY and TN, OR and TN and TN and WC are significant at the 0.01 level.
Model 6: The differences between NY and OR, NY and TN, OR and WC and TN and WC are significant at the 0.01 level. The differences between OR and TN are significant at the 0.10 level.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey (NYC and WC) of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

In the first set of models (models 1-4), we estimated logistic regressions to predict utilization of physician, mental health provider, inpatient hospital and dental services. The results indicated that women were more likely to visit a doctor than men, and the likelihood also increased with age (model 1). Health status was also a predictor of physician visits, as the likelihood of visiting a physician increased as health status decreased. In addition, adults with ADLs and those who need assistance with nonmedical services were more likely to see a doctor. Type of disability was also a predictor, as both adults with MI and MRDD were significantly less likely to go to a physician compared with adults with a PD. Adults in TN were less than half as likely to visit a physician compared to adults in KY. Controlling for the listed covariates, there were still significant differences between all other regions and TN at the 0.01 level.

In predicting utilization of mental health services, the results indicated that women were more likely to see a mental health provider compared to men (model 2). Both African Americans and adults of other races were significantly less likely to visit a mental health provider compared to whites. Age was also a significant, but inconsistent, predictor of mental health visits: while adults aged 35-44 were more likely to visit a mental health provider than those 18-34, adults aged 55-64 were less likely to visit one. Not surprisingly, adults with MI were ten times more likely to see a mental health provider, while adults with MRDD were twice as likely, compared to adults with a PD. Adults who received assistance with nonmedical services were more likely to visit a mental health provider. Also, adults in each state were more than twice as likely as adults in KY to have seen a mental health provider in the past three months. The pairwise comparisons across regions were not significant (with the exception of all regions being significantly different from KY).

We then estimated a model predicting inpatient admissions (model 3). Both African Americans and Hispanics were more likely to have an admission in the past year than whites, while adults of other races were less likely. Adults in poor health or adults who had ADLs were more likely to be an inpatient than adults in better health. In addition, adults with MI and MRDD were less likely to have had an admission than adults with a PD. Those who needed assistance with nonmedical services were more likely than those who did not to have an admission. Adults in TN were less likely than adults in KY to have inpatient admissions.

In model 4 we estimated a model predicting dental visits. Age was a significant predictor: as age increased, adults were significantly less likely to go to the dentist compared to adults ages 18-34. Adults with MRDD were 36% more likely to see a dentist than adults with a PD. Adults who lived in an urban area, compared to a rural area, were more likely to go to the dentist. State of residence was also a significant predictor: while adults in NYC were more likely than those in KY, adults in OR and TN were less likely to visit a dentist. The differences between NYC and OR, NYC and TN, OR and WC and TN and WC were significant at the 0.01 level. The relative availability and willingness of dentists to accept Medicaid may explain these differences.

In model 5 we predict unmet need for prescription drugs. The results indicated that women were more likely than men to have an unmet prescription drug need. Adults aged 55-64 were 35% less likely to have an unmet prescription need compared to adults 18-34. Adults in poorer health (both in terms of self-reported health status and presence of ADLs) were more likely to have an unmet prescription need than those in better health. Adults with MI were 50%

more likely to have an unmet need compared to adults with a PD. State of residence and whether the beneficiary had Medicaid managed care were also significant predictors of unmet pharmacy needs. Adults in each region compared to KY were significantly less likely to have an unmet prescription need. TN was also significantly different from the other regions as there was less unmet need for prescription drugs reported. This result should be considered in the context of the managed care variable across states, which indicates a likelihood of higher unmet need. It is unclear whether managed care in TN or other factors related to TN are more important drivers of unmet need for prescription drugs.

Lastly, we ran a model to estimate the likelihood of adults receiving assistance with nonmedical services. Females were less likely to have assistance with nonmedical needs. Hispanic adults and adults of other races were all more likely to have assistance than whites. Adults aged 45-64 were less likely than younger adults aged 18-34. Both adults with MI and adults with MRDD were more likely to have assistance as were adults with ADLs. Adults in OR and TN were less likely than adults in KY to have assistance. There are significant differences across regions (NY v. OR, NY v. TN, WC v. OR, WC v. TN) that persist even when controlling for observable regional characteristics and health status of the beneficiaries.

The overall comparisons between regions highlight the variation in utilization and access to care that are not a direct result of health status or measurable health service delivery system characteristics. TN had lower rates of physician and dental visits, as well as low reports of unmet need and hospital admissions. NYC and WC have relatively high utilization and reports of unmet need. KY has the lowest mental health utilization, the highest inpatient admission rate across the regions, as well as the highest reported unmet need for prescription drugs.

CHAPTER 3
CHILDREN

The following chapter compares sociodemographic, health status and health care utilization characteristics of children with SSI in KY, NYC, OR and TN (children in WC were not a part of the sample). Again, results for NYC, OR and TN are compared to those of KY. For children, respondents are a parent or proxy respondent.

3.1 Regional Comparisons

Sociodemographic Characteristics

Table 3-1 presents the results for sociodemographic characteristics of children with SSI in KY, NYC, OR and TN. There are no significant differences between children in each of the regions in age. Most are between 13 and 17 years old, with the exception of OR where most are between the ages of 9 and 12. The majority of children in all areas are male.

The distribution of race and ethnicity is significantly different in NYC, OR and TN compared to KY. The vast majority in KY is white. Half of the children in NYC are Hispanic. In Oregon, almost 85% of the children are white, and in TN almost 85% are African American.

There are significant differences in the distribution of the marital status of children's proxies across the regions. The highest percentages of proxies who are married are in KY (56%) followed by OR (46%). OR and KY also have the highest percentage of proxies who are divorced (28% and 23%, respectively). Forty-one percent of proxies in NYC and TN have never been married.

Twenty-nine percent of the proxies in KY and NYC are employed. Significantly more proxies from OR are employed (44%) than in KY.

Health Status

Indicators of children's health status are reported in ***Table 3-2***. There are significant differences in the health status of children across regions. For example, approximately 63% of children in NYC, 80% in OR and 68% of children in TN are in good health or better compared to 45% of children in KY. Children in KY are in the poorest health: 17% of children are in poor health compared to 10% in NYC, 7% in TN and 2% in OR.

Children in the sample are eligible for SSI because of MI, MRDD or a PD, and the type of disability varies significantly among children in KY, OR and TN (there are no significant differences between children in KY and NY). Half of the children in KY have MRDD, 27% have a PD and 13% have MI. In contrast, nearly half of the children in OR are eligible for SSI because of a PD, nearly one-third because of MRDD and almost one-fifth because of a MI. In TN, 60% of the children have MRDD, 23% have a PD and 17% have MI.

Speech and language difficulties also differ in frequency across regions, with TN having the lowest frequency or these reports, at 42%. Kentucky and NY are in the middle of the distribution of the reports (60%) and OR is on the higher end, with 70% reporting speech and

Table 3-1
Sociodemographic characteristics of child SSI recipients in KY, NYC, OR and TN

	Kentucky (N=425)	New York City (N=430)	Oregon (N=397)		Tennessee (N=406)
Age:[a]					
0-3	7.2	9.0	6.2		5.5
4-8	23.5	27.2	26.7		24.1
9-12	29.5	30.5	34.3		31.0
13-17	39.9	33.3	32.9		39.4
Female	35.8	38.3	38.4		37.1
Race/ethnicity:[a,b]		***	*		***
White, non-Hispanic	90.5	6.6	84.1		12.9
African American, non-Hispanic	3.4	36.5	3.9		84.2
Hispanic	3.5	52.7	6.9		1.7
Asian/Pacific Islander	0.2	1.1	1.3		0.6
American Indian/Alaskan Native	1.4	0.7	2.1		0.0
Other/Unknown	1.1	2.5	1.8		0.7
Marital status of child's respondent[a]		***	***		***
Married	56.4	23.0	46.1		17.0
Widowed	5.4	5.9	3.1		5.3
Divorced	22.6	11.5	27.8		16.4
Separated	9.5	19.0	9.8		20.5
Never married	6.1	40.6	13.2		40.9
Child's respondent employed	29.3	29.0	44.4	***	--

NOTES:
[a] Percentage distributions sum to 100 within category by column.
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

Table 3-2
Health and functional status for child SSI recipients in KY, NYC, OR and TN

	Kentucky (N=425)	New York City (N=430)		Oregon (N=397)		Tennessee (N=406)	
Health status:[a]		***		***		***	
Excellent	7.8	13.4		16.4		12.3	
Very Good	12.6	14.2		31.1		20.5	
Good	24.7	34.9		32.5		35.1	
Fair	38.3	27.3		18.0		25.2	
Poor	16.6	10.3		2.1		6.9	
Type of disability[a]				***		***	
Mental illness	12.5	12.5		19.7		17.3	
Mental retardation/developmental disability	50.8	51.2		32.0		59.9	
Physical disability	36.7	36.3		48.3		22.8	
Difficulty with speech/language [b]	61.3	64.3		70.4	***	42.1	***
Developmental delays [b]	48.1	63.4	***	66.1	***	62.9	***

NOTES:

[a] Percentage distributions sum to 100 within category by column.
[b] Asked of children one year or older.
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

language difficulties. Reports of developmental delays show a different pattern, being lowest in KY and similar across the other three regions, with just over 60% reporting developmental delays. Since these numbers are not adjusted for type of disability, and the proportions or MRDD children vary across the regions, these descriptives may not reflect more than different distributions over type of disability.

Usual Source of Care

Very close to all children report having a USC. The estimates range from 96% in TN to 99% in KY (***Table 3-3***). Most children have a physician as their USC. The types of places children have as their USC vary significantly across the regions. For example, 72% of children in OR see doctors at their offices compared to 55% in KY, 41% in TN and 23% in NYC, while half of the children in TN, 47% in NYC, 35% in KY and 5% in OR go to a clinic.

Most children see the same doctor at their USC, although the percentage for NYC and TN is significantly lower than that of KY. In NYC, 80% of children see the same doctor most of the time compared to 87% in KY. In TN only 77% of children see the same doctor most of the time. Between 6 and 8% have difficulty speaking to or understanding their physician due to language differences. (This question was not asked on the OR survey.) Children in TN have the shortest travel time to their USC: 87% travel less than 30 minutes compared to 74-78% in the other regions. Approximately 60% of children wait 30 minutes or less to see their USC, except that in OR, 88% wait 30 minutes or less.

Both NYC and TN vary significantly from KY in terms of the number of days between making an appointment and seeing their USC. Eighty-four percent of children in KY are able to see their USC the same day or the next day compared to only 77% in NYC and 60% in TN. Most children in KY (97%) are able to see their USC within a week compared to 80% in NYC and 87% in TN. (This question was not asked on the OR survey.)

Utilization of Medical Services

Most children visited a physician in the past year (***Table 3-4***). There are no significant differences in the percentage of children who visited a physician in KY versus NYC (93% and 92%, respectively). However, significantly fewer children in TN visited a physician compared in the last year compared to KY (82% versus 93%, respectively). (This question was not asked on the OR survey.) About forty-five percent of children in KY and in NYC visited an emergency room within the past year, but significantly fewer in TN had (32%). (This question was not asked on the OR survey.) Between 19 and 20% of children in KY, NYC and OR had an inpatient visit in the past year, while significantly fewer in TN had (13%). More than 80% of children had dental visits in the past year in KY and NYC, while less than 68% of children in OR and TN did.

The surveys also contained questions about medical care utilization within the past 3 months. Children in TN reported the highest percentage of doctors' visits in the last 3 months: 63% compared to one-third in KY and OR, and 27% in NYC. Approximately 20% of children in KY, NYC, OR and TN have had a mental health visit in the past 3 months.

Table 3-3
Usual source of care and utilization of child SSI recipients in KY, NYC, OR and TN

	Kentucky (N=425)	New York City (N=430)		Oregon (N=397)		Tennessee (N=406)	
Has a usual source of care	99.2	98.2		98.5		96.2	**
Physician as usual source of care	96.2	97.6		100.0	***	89.0	***
Type of usual source: [a]		***		***		***	
Doctor's office/HMO	54.7	23.1		72.2		41.2	
Clinic	34.5	46.5		5.4		50.0	
Emergency room	0.6	3.4		0.6		1.6	
Hospital OPD	8.4	25.0		17.7		6.6	
Other	1.8	1.9		4.2		0.6	
See same doctor at usual source							
Always / most of the time	87.4	79.5	***	89.5		76.6	***
Difficulty speaking/understanding physician							
Always / most of the time	8.0	7.0		--		5.6	
Travel time to usual source							
30 minutes or less	73.7	78.0		77.3		87.1	***
Waiting time at usual source							
30 minutes or less	56.9	59.7		88.1	***	60.4	
Days between making appointment and seeing usual source [a]		***				***	
Same or next day	84.0	77.4		--		59.8	
2-3 days	9.7	7.5		--		17.6	
4-7 days	2.9	5.0		--		9.2	
8 days - 3 weeks	0.9	2.6		--		6.5	
More than 3 weeks	0.7	3.5		--		1.1	
It varies	1.0	2.8		--		1.0	
Never been sick	0.8	1.2		--		4.8	

NOTES:
[a] Percentage distributions sum to 100 within category by column.
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

Table 3-4
Utilization of services for child SSI recipients in KY, NYC, OR and TN

	Kentucky (N=425)	New York City (N=430)	Oregon (N=397)	Tennessee (N=406)
Percent with service during past 12 months:				
Physician visit	93.0	91.8	--	81.5 ***
ER visit	45.2	45.7	--	31.5 ***
Inpatient stay	19.0	18.6	19.6	13.2 **
Dental visit	82.0	84.6	65.9 ***	67.6 ***
Percent with service during past 3 months:				
Physician visit	33.4	26.8 **	32.7	62.9 ***
Mental health visit	21.7	19.9	19.0	18.4

NOTES:
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

Unmet Need

Table 3-5 presents the results for children's unmet physician need, unmet dental care, unmet mental health need and unmet need for prescription medications. There were no significant differences among the regions in unmet need for physicians. Approximately 7% of children in KY had an unmet need for a physician, 6% in NYC and nearly 10% in TN. Children in KY reported the lowest percentage of unmet dental need with 8% compared to 14% in NYC and OR and 24% in TN. There were no significant differences in mental health need across the regions. The percentages of children who needed mental health care or substance abuse treatment ranged from 5% in TN to 9% in NYC. The percentages of unmet need for prescription drugs was similar across KY, OR and TN with approximately 11-12% reporting that children had an unmet prescription drug need. However, significantly fewer children in NYC had an unmet need for prescription drugs (6%).

Table 3-5
Unmet need for services of child SSI recipients in KY, NYC, OR and TN

	Kentucky (N=425)	New York City (N=430)	Oregon (N=397)	Tennessee (N=406)
Doctor care	6.7	6.4	--	9.7
Dental care	8.2	13.9 **	14.4 ***	24.4 ***
Mental health / substance abuse	6.9	8.9	--	4.9
Prescription medicine	11.4	5.8 ***	11.0	11.5

NOTES:
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

Satisfaction with Care

Respondents were generally satisfied with the quality of children's medical care (***Table 3-6***). More than 80% of all respondents in each region rated the quality of their children's medical care good or better, ranging from 84% in NYC to 88% in KY (this question was not asked on the OR survey). Respondents did not rate their ability to get specialist care for their children as highly. Seventy-five percent or more rated their ability to get their children specialist care as good or better in KY, NYC and TN; however, only half in OR rated their ability to get specialist care as at least good. Eighty percent of respondents in KY rated their ability to receive care in emergencies for their children as good or better, compared to 79% in NY and 69% in TN. (This question was not asked on the OR survey).

3.2 Regression Results

To understand determinants of health status, utilization and physician need, controlling for regional differences we estimated six logistic regressions. In each of the models we controlled for gender, race and ethnicity, age, health status (except where predicted), type of disability, urban/rural status, whether the state had Medicaid managed care and state of residence. We present the odds ratios for these models in ***Table 3-7***. In addition to testing coefficients using KY as a reference state, we tested for significant differences between all pairs of states. We report any of the differences that are significant at the 0.01 level.

Table 3-6
Satisfaction of child SSI recipients with care in KY, NYC, OR and TN

	Kentucky (N=425)	New York City (N=430)	Oregon (N=397)	Tennessee (N=406)
Quality of Medical Care:[a]				
Excellent/very good/good	87.5	83.8	--	85.2
Fair/poor	12.5	16.2	--	14.8
Ease of Getting Care from Specialists: [a]		*	***	
Excellent/very good/good	80.9	75.6	49.5	78.1
Fair/poor	19.2	24.4	50.5	21.9
Ease of Getting Care in Emergencies: [a]				***
Excellent/very good/good	80.3	79.2	- -	69.2
Fair/poor	19.7	20.8	- -	30.8

NOTES:

[a] Percentage distributions sum to 100 within category by column.
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
"--" indicates that question was not asked on survey.

SOURCES:

Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

Table 3-7
Odds Ratios from logistic regressions of children with SSI

	Fair or poor health (Model 1)	Doctor visit in last 3 months (Model 2)	Mental health visit in last 3 months (Model 3)	Inpatient Hospital Visit in Last Year (Model 4)	Unmet doctor need (Model 5)	Unmet prescription drug need (Model 6)
Sample Size	1,595	1,588	1,565	1,591	1,205	1,593
Female	0.95	1.04	0.98	1.11	1.10	0.77
Nonwhite	0.91	0.71 *	1.01	0.71	0.50	1.29
Birth to 10 years old	0.91	1.47 ***	0.96	1.52 ***	0.45 ***	1.10
Excellent/very good/good health	--	0.73 **	0.86	0.57 ***	0.36 ***	0.59 ***
Type of Disability						
SMI	0.64 **	3.74 ***	7.01 ***	0.60 **	2.17 **	1.41
MRDD	0.57 ***	1.42 ***	2.22 ***	0.37 ***	2.26 ***	1.16
State with Medicaid managed care	0.95	1.29	1.11	1.38	0.67	0.96
State						
Oregon	0.20 ***	0.93	0.77	0.92	--	1.10
New York	0.56 ***	1.01	0.86	1.35	2.21	0.37 ***
Tennessee	0.49 **	2.25 ***	0.63	0.77	4.82 *	0.93

NOTES:
*** Significantly different from Kentucky at .01 level.
** Significantly different from Kentucky at .05 level.
* Significantly different from Kentucky at .10 level.
" -- " indicates that question was not asked on survey.
Reference Groups: fair/poor health; physical disability; Kentucky.
Model 1: The differences between OR and NY and OR and TN are significant at 0.01 level.
Model 2: The differences between NY and TN and OR and TN are significant at 0.01 level.
Model 3: There were no significant differences between regions at the 0.01 level.
Model 4: The differences between OR and NY are significant at 0.01 level.
Model 5: There were no significant differences between regions at the 0.01 level.
Model 6: There were no significant differences between regions at the 0.01 level.

SOURCES:
Survey of SSI Recipients in Rural Kentucky, 1999; New York Survey of Disabled Medicaid Recipients, 1999/2000; Survey of Oregon Health Plan Recipients (Phase 2), 1998; Survey of SSI Enrollees in TennCare, 1998/1999.

We first estimated a logistic regression to examine factors associated with fair or poor health status in children (model 1). Children with MI and MRDD were significantly less likely to be in fair or poor health compared to children who were physically disabled. In addition, children in every state were less likely to be in fair or poor health compared to children in KY. For example, children in OR were 85% less likely to be in fair or poor health compared to children in KY, while children in both NYC and TN were about 65% less likely to be in fair or poor health. Controlling for the listed covariates, there were significant differences between all other regions and OR at the 0.01 level.

In the second model, we estimated a logistic regression to examine factors associated with children having a physician visit within the last three months (model 2). Children who are nonwhite were almost 30% less likely to have visited a doctor than white children, and children older than 10 years old were significantly less likely to have had a doctor's visit in the past year compared to children younger than 10. Generally healthy children did not visit the doctor as often as children in poorer health. Reason for disability was also a factor in the utilization of physicians. The results indicate that children with MI and children with MRDD were significantly more likely to go to doctor compared to children with a PD. Children in TN were also more likely to go to the doctor compared to children in KY. There were significant differences between TN and the other regions at the 0.01 level.

Results for children having a mental health visit in the past three months are also not surprising (model 3). Children with MI are 7 times as likely to have had a visit, and children with MRDD are twice as likely as physically disabled children to have had a visit in the past three months.

Younger children (birth – age 10) were 50% more likely to have an inpatient visit compared to older children (model 4). Not surprisingly, children who were in better health were significantly less likely to have had an inpatient admission in the past year. Children with MI or MRDD were also less likely than physically disabled children to have had an admission. Children who lived in regions with managed care were more likely than those who did not to have an inpatient visit. The differences between OR and NYC were significant at the 0.01 level.

We estimated a model to predict unmet physician need (model 5). Younger children were less likely than older children to have an unmet need. Not surprisingly, children with excellent, very good or good health were less also likely to have an unmet doctor need compared to children who were in fair or poor health. And, children with MI and MRDD were more than twice as likely to have an unmet doctor need compared to children with a PD.

Lastly, we estimated a model to predict unmet prescription need (model 6). The results indicated that children with generally good health were less likely to have an unmet need for prescription medications compared to children in poorer health. Children in NYC were also 70% less likely to have an unmet need compared to children in KY.

We ran the same series of regressions and included the presence of a speech, language or cognitive difficulty. (Because this question was not asked in a similar manner as other regions, we excluded TN in the models that included this variable.) We found little effect with the inclusion of this variable with the exception of one model: children who had difficulty speaking

or cognitive difficulties were more than twice as likely to have an unmet need for prescription drugs.

CHAPTER 4
CONCLUSIONS

The purpose of this report is to get a more complete picture of the SSI population by describing adults' and children's health care experiences across regions in four states. Overall, the results of these analyses show that adults and children with SSI generally have access to a usual source of care, and do receive care, usually from the same physician, without unreasonable delays. This held true across states and types of disability.

While many adults reported themselves in good health, the results indicated that adult SSI recipients in KY were in the poorest health. This was also true of children in KY. Despite the consistent difference in health status, adults in KY did not necessarily have more service use. Interestingly, although the vast majority of adults in KY had a USC and had seen a physician more often than recipients in other regions, adults in KY also reported the highest percentages of unmet physician need (nearly one-quarter). Adults in KY also reported the highest level of prescription drug need. For children in KY, although their health status was worse than that of children in other regions, their ratings of unmet need were not significantly higher, and they had high physician visit rates. It was children in TN who reported low physician visit rates and high unmet need for physician and dental care as well as prescription medications.

KY had a slightly higher rate of emergency room visits than recipients in other regions, and KY recipients had the highest ratings of their ability to get emergency room care. The difference may be due to the geographic reality that emergency departments are easier to access in rural areas, or due to managed care's tendency to manage ER use more actively.

Most recipients across the regions were satisfied with the medical care they received. However, fewer were satisfied with the specialty care they receive. There were no significant differences between KY and OR, however, NYC and WC rated their specialty care significantly lower than KY (NYC and WC had voluntary managed care at the time of the survey). Overall, the results were similar for children.

Multivariate analyses corroborated these patterns and showed considerable variation across regions even when controlling for gender, race and ethnicity, age, health status, type of disability, state of residence and whether the beneficiary reported being in managed care. The overall comparisons between regions highlight the variation in utilization and access to care that are not a direct result of health status or measurable health service delivery system characteristics. TN had lower rates of physician and dental visits, as well as low reports of unmet need and hospital admissions. NYC and WC have relatively high utilization and reports of unmet need. KY has the lowest mental health utilization, the highest inpatient admission rate across the regions, as well as the highest reported unmet need for prescription drugs.

Additional research needs to be conducted on this population by type of disability. We were able to examine some factors by disability through the regressions. We found that although adults with MI or MRDD were significantly less likely to have a doctor visit in the last three months, they were significantly more likely to have seen a mental health provider compared to adults with a PD. In children, although the physically disabled had worse reported health and

visited the doctor least, they had less unmet need for physicians than children with MI and MRDD.

There are regional variations that remain important in the care and experiences of people on SSI. Although managed care in itself is not a consistent predictor of lower rates of utilization for a population with access barriers, significant attention to policy-actionable variables that affect access and utilization of care is warranted. KY, because of fee-for-service and regional characteristics, does provide challenging health care system for the SSI population. The overall level of access to physicians across regions is a comforting conclusion.

Limitations

There are several limitations to this study. First, the survey instruments in each state were not designed for the sole intention of comparing across states (although there was some effort made during survey design to provide some level of comparability across the surveys). Therefore, in some instances the wording of some questions as well as the options for responses differed. We attempted to create as similar response categories where possible, but we were limited in the number of questions across surveys we could accurately compare. Second, the analyses were not of states but of the area within states that were surveyed (with the exception of OR). Hence, the results are not generalizable at the state level, only at a regional level. And thirdly, although the survey respondents were on SSI and Medicaid, it is possible that they also had private insurance and used Medicaid to provide additional benefits or wraparound care. This is definitely the case for respondents in OR. Although it does not detract from conclusions that access to care is generally good for people on SSI and Medicaid, it is possible that there are two separate populations to consider. People with private coverage in addition to Medicaid and SSI may have better care experiences than those without any private coverage. This is especially likely to be reflected in the care experiences of children with employed parents, and is an avenue for further analysis.

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