

Allegheny County HealthChoices Program

**Demographic and Social Services Factors Associated
With Behavioral Health Claims in
Children and Youth 0-20 years of Age**

presented by



**Allegheny HealthChoices, Inc.
444 Liberty Avenue, Pittsburgh, PA 15222
Phone: 412/325-1100 Fax 412/325-1111**

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AHCI is a contract agency for the Allegheny County Department of Human Services' HealthChoices Program

Executive Summary

Introduction

Concerns about possible racial disparities in HealthChoices members accessing behavioral health care have existed since the beginning of the program. Summaries of data analysis by Allegheny Health Choices, Inc. (AHCI) have indicated that some racial disparities may exist. However, these analyses did not show which factors are associated with any disparities and how large the disparities are. Because national studies do not report a difference on the prevalence of mental illness by race, this is a particularly important issue.

In order to investigate this issue further, AHCI utilized more sophisticated statistical tools to provide additional analyses. By determining which factors are associated with disparities in accessing behavioral health care, the interventions for reducing such disparities become clearer. In this report, the following questions were statistically analyzed using claims data from 2001 and 2002 for enrollees who were 0-20 years old:

1. Are Caucasians more likely than African-Americans to have at least one behavioral health claim within a year? In other words, is race associated with whether enrollees receive at least one service or no service?
2. Are school age children more likely than younger children to have at least one behavioral health claim within a year? Does the likelihood differ if the children are African-American or Caucasian?
3. Are males and females equally likely to have at least one behavioral health claim within a year? Does the likelihood differ when each gender is examined by racial category as well?
4. Are enrollees involved with the juvenile justice system, the Office of Children, Youth and Family Services, or in substitute care more likely than those enrollees not involved in these systems to have at least one behavioral health claim within a year? Does the likelihood differ when the enrollees are African-American or Caucasian?
5. Are enrollees with continuous HealthChoices eligibility for one year more likely than those with less than one year of eligibility to have at least one behavioral health claim within the year? Does the likelihood differ when the enrollees are African-American or Caucasian?

The analysis found that race, age, gender, involvement with social services, and HealthChoices eligibility were all significant factors associated with whether or not members had one or more claims within a year. The likelihood of using at least one HealthChoices service was greater if the enrollee was Caucasian, male, 13-17 years old, eligible for HealthChoices for a full year, and involved in social services.

The analysis involved three parts:

1. The characteristics of HealthChoices enrollees 0-20 years old during 2001 and 2002 were summarized. The 2001 and 2002 populations were very similar. Variables included:
 - Race: Caucasian, African-American, or “Other”;
 - Age: 0-5, 6-12, 13-17, or 18-20 years;
 - Gender: Male or Female;
 - Involvement with the juvenile justice system (JPO): Yes or No;
 - Involvement with the Office of Children, Youth and Family Services (CYF): Yes or No;
 - Placement in substitute care: Yes or No; and
 - HealthChoices eligibility: Full-year eligibility or partial year eligibility.
2. The enrollee population was also divided into categories based on the variables listed above individually or in combination. Using these categories, statistical comparisons were made between the category total and the total within the category that had at least one claim. For example, one would expect that if males represent 50% of those enrolled in HealthChoices, then approximately 50% of the enrollees with claims would be male. These comparisons show whether or not subgroups who receive services are under or over represented based on their numbers in the population. Any statistically significant disparity would suggest a need for further investigation. Because the report focused on racial disparities in particular, each racial category was subdivided by gender, age, eligibility, and social service involvement to allow for more detailed comparisons.
3. A statistical model was also constructed to evaluate the collective relationship among the demographic, social service program, and HealthChoices eligibility variables in determining the likelihood of an enrollee having at least one behavioral health claim within the year. Specifically, the model estimated each variable’s effect on whether or not an enrollee had at least one claim while adjusting for the variation and effect of the remaining model variables. For example, the model estimated the likelihood of a 6-12 year old having at least one claim as compared to the other age groups, while controlling for differences in race, gender, eligibility status, and involvement with social services.

Key Findings

The findings provided an important picture of which groups within all HealthChoices enrollees were more likely to receive at least one behavioral health service in a year. The statistical significance level used throughout this analysis is $p < .05$; all of the findings reported in the following narrative were statistically significant at the $p < .05$ level. When a finding is said to be statistically significant at the .05 level, there are less than 5 chances in 100 that the size of the difference reported in the analysis could have been observed by chance.

Key findings for the year 2002 included*:

Race

Race was a significant factor related to whether or not an enrollee had at least one behavioral health claim. African-Americans represented only 40.6% of HealthChoices enrollees 0-20 years old with at least one claim but were 50% of total enrollees 0-20 years old; Caucasians represented 57.2% of HealthChoices enrollees 0-20 years old with at least one claim but were only 47% of total enrollees 0-20 years old. In other words, Caucasians were 1.58 times more likely than African-Americans to have at least one claim (when race was the only factor examined).

Age and Race

Age was significantly associated with whether or not an enrollee had at least one claim. 82.5% of enrollees 0-20 years old with at least one claim were of school age (6-17 years old) even though 6-17 year olds represented only 56.6% of HealthChoices enrollees 0-20 years old. Only 6.7% of enrollees 0-20 years old with at least one claim were ages 0-5 years while 33.9% of HealthChoices enrollees 0-20 years old were ages 0-5 years. Compared to the 0-5 year old group, the 6-12, 13-17, and 18-20 year old groups were respectively 7.26, 11.18, and 6.47 times more likely to have at least one claim (when age was the only factor examined).

The same pattern persisted when each age category was divided by race. School-age children, whether Caucasian or African-American, had higher rates of having at least one claim than 0-5 year olds. However, within each age category, African-Americans had significantly lower rates of having at least one claim when compared to the corresponding Caucasian age group.

Gender and Race

Gender was significantly associated with whether or not an enrollee 0-20 years old had at least one claim. While each gender was equally represented in this enrollee population, males were 1.67 times more likely than females to have at least one claim (when gender was the only factor examined).

Male and female African-Americans had lower rates of having at least one claim when compared to male and female Caucasians: 16.28% of Caucasian male enrollees and 10.89% of Caucasian female enrollees had at least one behavioral health claim, as opposed to 11.42% of African-American male enrollees and 6.79% of African-American female enrollees. Therefore, racial differences persisted within gender categories.

Social Service Involvement and Race

Children and youth involved with social services were more likely to receive behavioral health services as measured by having at least one claim within a year. However, within each social service category, a smaller proportion of African-Americans accessed at least one behavioral health service within the year. Therefore, racial differences persisted even when youth were involved in social services.

* Because of the similarities between 2001 and 2002 findings, only the 2002 numbers are explored in depth in this report.

Factors Associated with Behavioral Health Claims

- Enrollees who were involved with JPO were more likely to access at least one behavioral health service. However, African-Americans involved with JPO were less likely than Caucasians involved with JPO to have at least one claim.
 - 10.5% of enrollees with at least one behavioral health claim were involved with JPO while only 4.1% of total enrollees were involved with JPO. Enrollees involved with JPO were 3.48 times more likely to have at least one claim (when JPO involvement was the only factor examined).
 - For enrollees in the JPO system, 34.42% of Caucasians had at least one behavioral health claim while only 25.37% of African-Americans had at least one behavioral health claim.
- Enrollees who were involved with CYF were more likely to access at least one behavioral health service within the year. However, African-Americans involved with CYF were less likely than Caucasians involved with CYF to have at least one claim.
 - 34.2% of enrollees with at least one behavioral health claim were involved with CYF while only 14.4% of total enrollees were involved with CYF. Enrollees involved with CYF were 3.85 times more likely to have at least one claim (when CYF involvement was the only factor examined).
 - For enrollees involved with CYF, 33.79% of Caucasians had at least one behavioral health claim while only 23.06% of African-Americans had at least one behavioral health claim.
- Enrollees who were in substitute care (foster homes, group homes, or residential settings) were more likely to access at least one behavioral health service within a year. However, African-Americans in substitute care were less likely than Caucasians in substitute care to have at least one claim.
 - 17.9% of enrollees with at least one behavioral health claim were in substitute care while only 5.4% of total enrollees were in substitute care. Enrollees in substitute care were 5.45 times more likely to have at least one claim (when being in substitute care was the only factor examined).
 - 44.97% of Caucasians in substitute care had at least one behavioral health claim while only 33.56% of African-Americans in substitute care had at least one behavioral health claim.

HealthChoices Eligibility and Race

Enrollees who were eligible for HealthChoices for an entire year were more likely to have at least one behavioral health claim. In other words, enrollees with one year of eligibility were more likely to receive services than those with less than one year of eligibility. 75.3% of enrollees 0-20 years old with at least one claim had a full year of eligibility, while only 61.8% of enrollees 0-20 years old were eligible for a full year. Enrollees with a full year of HealthChoices eligibility were 2.03 times more likely than those with partial-year eligibility to have at least one claim within a year.

Statistical Model Incorporating All Variables (Race, Age, Gender, Social Service Involvement, and Eligibility)

The statistical model combined the demographic, social service program, and HealthChoices eligibility variables to determine their significance as factors associated with an enrollee 0-20 years old having at least one behavioral health claim. When all the variables were included, the model confirmed the findings outlined above for the individual variables.

- Caucasians were more likely to have at least one behavioral health claim, when controlling for all other factors;
- School-age youth were more likely to have at least one behavioral health claim, when controlling for all other factors;
- Males were more likely to have at least one behavioral health claim, when controlling for all other factors;
- Enrollees involved with JPO or CYF, or in substitute care were more likely to have at least one behavioral health claim, when controlling for all other factors;
- Enrollees with a full year of HealthChoices eligibility were more likely to have at least one behavioral health claim, when controlling for all other factors.

So, the likelihood of using at least one HealthChoices service was greater if the enrollee was Caucasian, male, 13-17 years old, eligible for HealthChoices for a full year, and involved in social services.

Discussion and Recommendations

The findings conclusively demonstrated that race, age, gender, involvement in social services, and HealthChoices eligibility status were all significant factors in whether or not an enrollee 0-20 years old accessed at least one behavioral health service within a year. These findings suggest several conclusions and recommendations.

The findings indicated that school-age enrollees (6-17 years old) were more likely than younger children to have at least one claim. The reasons for this difference could include that the mental health needs of children may not be identified until they begin attending school and/or mental health problems become more manifest as children are engaged in more complicated social environments.

Involvement in JPO, CYF and substitute care were each significant factors associated with whether or not enrollees accessed at least one service. With involvement in social services, youth are in a system where assessments and evaluations are occurring regularly. So, it logically follows that youth involved with social services had a higher rate of having at least one behavioral health claim.

Gender also was a significant factor, with males being more likely than females to have accessed at least one service. National studies do not indicate a difference in the prevalence of mental illness between males and females. Therefore, the findings support a further need to investigate possible reasons why females accessed services less than males.

Factors Associated with Behavioral Health Claims

Caucasians and African-Americans demonstrated the same patterns of service access within age, gender, social service involvement, and eligibility categories. However, within each and every category, African-Americans accessed behavioral health services at lower rates than Caucasians. For example, African-American females accessed behavioral health services at lower rates than Caucasian females, CYF-involved African-Americans accessed behavioral health services at lower rates than CYF-involved Caucasians, school-aged African-American children accessed behavioral health services at lower rates than school-aged Caucasian children, etc.

When age, gender, social service involvement, and eligibility were controlled for, Caucasians were 2.28 times more likely than African-Americans to have had at least one behavioral health claim. Since national studies on the prevalence of mental illness do not show differences by race, the expectation is that the likelihood of having a claim should not be significantly different when looking at HealthChoices populations by race. Thus the findings suggest a need to examine more closely possible reasons why African-American enrollees in HealthChoices accessed services significantly less than Caucasians across the board.

Overall, findings indicated that the identification of behavioral health needs and subsequent services does not occur uniformly across the 0-20 year old population. AHCI recommends that points of identification, including but not limited to schools, health centers, primary care physicians, CYF, and JPO, be reviewed to determine more specifically the reasons for the disparities, and in particular, the racial disparities.

Introduction

Concerns about racial disparity within HealthChoices have existed since the inception of the program. In fact, Allegheny HealthChoices, Inc. (AHCI) has descriptively explored this topic on several occasions with the results indicating, at least at face value, that some form of racial disparity exists.

The objective of this report is to take the analysis of racial disparity one step further. Through the use of statistical testing, AHCI has examined factors associated with whether an individual has a claim in the system (i.e., they have used at least one service) while paying particular attention to racial differences. The analysis is very specific. For example, the primary outcome measure is the presence of a claim. There is no weight associated with how many claims were present for a particular consumer or what services were utilized.

In no way is this report to be considered an exhaustive statistical analysis of racial disparity, but rather, it is AHCI's first attempt to more rigorously confirm previous results of our monitoring and oversight activities. In subsequent months, AHCI will be exploring other aspects of this issue in similar types of reports.

Specific Aim

The purpose of this report is to explore the relationship among demographic characteristics such as age and race, the use of certain social services programs, the duration of medical assistance eligibility, and the use of any behavioral health service in Allegheny County by children, adolescents, and young adults (i.e., 0-20 years of age) enrolled in HealthChoices during calendar years 2001 and 2002, with a particular emphasis on racial differences.

For example, do African-American children, ages 0-5 years, have a higher chance of having a claim? Is this influenced by whether or not there is participation in juvenile justice? Substitute care? This report helps outline some of these selected relationships.

Methods

Data Sources/Analytic File

The data used for this study were compiled from Pennsylvania Medicaid enrollment/eligibility files, paid behavioral health claims files, and data provided by the Allegheny County Office of Children, Youth, and Family Services and the juvenile justice system during calendar years 2001 and 2002.

The data files were prepared for analysis considering the following criteria:

- HealthChoices enrollees ≤ 20 years of age in either study year of eligibility;
- Residents of Allegheny County Pennsylvania;
- Greater than zero months of eligibility during either calendar year;
- Duration of eligibility restricted to a maximum of 12 months for enrollees who exceeded this criterion due to retroactive assignment of eligibility; and
- Claim status (i.e., the presence or absence of a claim) was determined by having at least one adjudicated claim during the study year and was used as the primary outcome measure for the analysis.

Study Design

- The relationships among demographic characteristics, use of social services programs, duration of medical assistance eligibility, and the use of any behavioral health service were measured and analyzed to depict a cross-section or “snapshot” of the populations for each study year of eligibility.

Study Variables

- The demographic characteristics considered for analysis included:
 - Race;
 - Age (at end of study year); and
 - Gender.
- The social services programs considered for analysis included:
 - Involvement with the juvenile justice system (JPO);
 - Involvement with the Office of Children, Youth and Family Services (CYF); and
 - Placement in substitute care.

- Duration of medical assistance eligibility was defined as the member month equivalents of adjudicated capitation payment (MMEs) during a given study year and was restricted to range from greater than 0 to 12.
 - One MME is defined as one full month of medical assistance eligibility.
 - A second variable was created from the MMEs to characterize those HealthChoices members as having a full-year (i.e., 12 MMEs) or partial year (i.e., <12 MMEs) of eligibility.
- Claim status based on the presence or absence of an adjudicated behavioral health claim within an eligible study year.

Analytical Strategy

- For each eligibility year, the member and consumer populations were described by demographic characteristics, social program participation, and HealthChoices eligibility status.
- For each level of each study variable, the prevalence (i.e., proportion of enrollees with at least one claim) was calculated along with the unadjusted odds (i.e., likelihood) of having a behavioral health claim.
- For each racial group (i.e., Caucasian, African-American, and other minority), the prevalence of having at least one claim was stratified or subdivided by levels of each of the remaining demographic, social service program, and medical assistance eligibility variables.
 - The percentage differences between the stratified prevalence and the prevalence in the appropriate overall population subgroup were calculated to illustrate the prevalence differences for each combination of race and remaining study variables.
 - For example, the prevalence of a claim for 0-5 year old Caucasians was compared to the prevalence of a claim for the total population of 0-5 year olds to estimate the percentage difference.
- A statistical model (i.e., logistic regression) was used to describe the relationships between the collective set of demographic, social services program, and medical assistance variables and claim status to control for the effect of the complex relationships among all the variables.
 - The odds (i.e., likelihood) of having a claim for each model variable were calculated for each model variable taking into account (i.e., adjusting, or controlling for) the effects of the remaining model variables.

Results

Description of the Study Population

Descriptions of the distribution of demographic characteristics, social service program participation, and medical assistance eligibility status for HealthChoices enrollees 0-20 years of age during calendar years 2001 and 2002 are presented in Table 1 and Charts 1-3 on the following page.

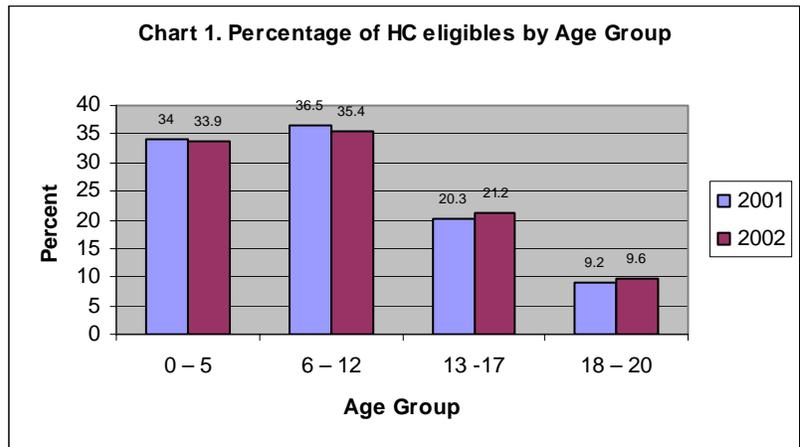
Table 1.
Population Characteristics

	Enrollment Year	
	2001 (n = 76,163)	2002 (n = 78,248)
Mean Age in years (SD)	8.87 (5.80)	8.98 (5.85)
Mean Member Month Equivalent (SD)	9.97 (3.32)	9.97 (3.32)
JPO		
Yes (%)	4.6	4.1
CYF		
Yes (%)	15.1	14.4
Substitute Care		
Yes (%)	5.3	5.4
Eligibility Status		
Full Year (%)	62.2	61.8
Partial Year (%)	37.8	38.2

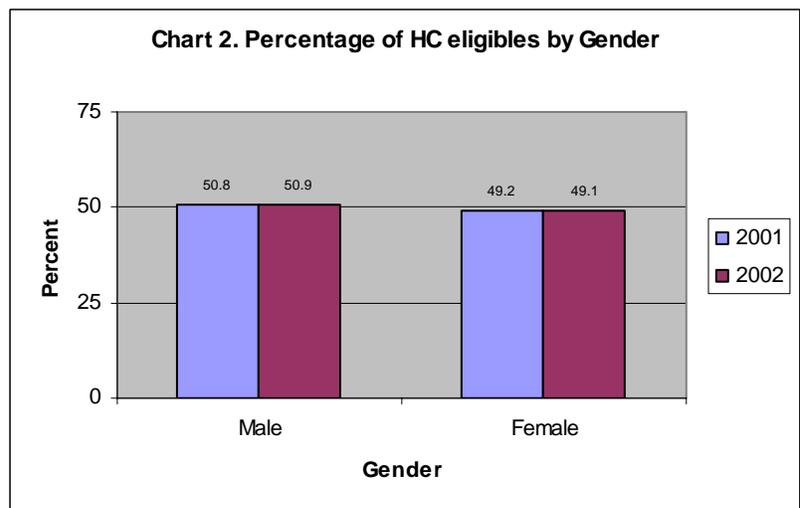
Where: (SD) = standard deviation (or measure of dispersion of the data around the average – a large standard deviation would indicate a large dispersion – which would impact the statistical testing).

The populations are similar for each year with a mean age of approximately 9 years. The highest percentages for each eligibility year's population are represented by enrollees less than or equal to 12 years of age.

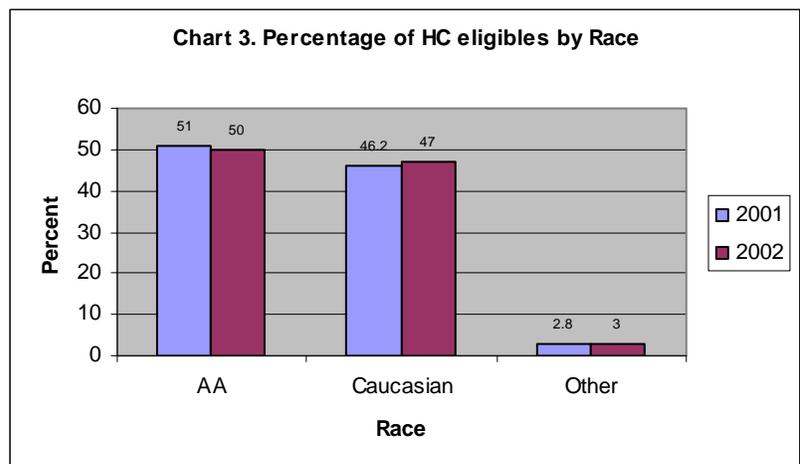
- The mean medical assistance eligibility is approximately 10 months with greater than 60% of people in each study year having a full year of eligibility.



- The populations show similar patterns by gender and race: Males and African-Americans are represented more frequently in each year.



- For both years, the percentage of HealthChoices enrollees involved in the juvenile justice system is less than 5% while the percentage in substitute care is approximately 5%.



- The percentage of HealthChoices enrollees involved with the Office of Children, Youth, and Family Services is 15% and 14% for 2001 and 2002, respectively

Description of the Study Population by Claim Status

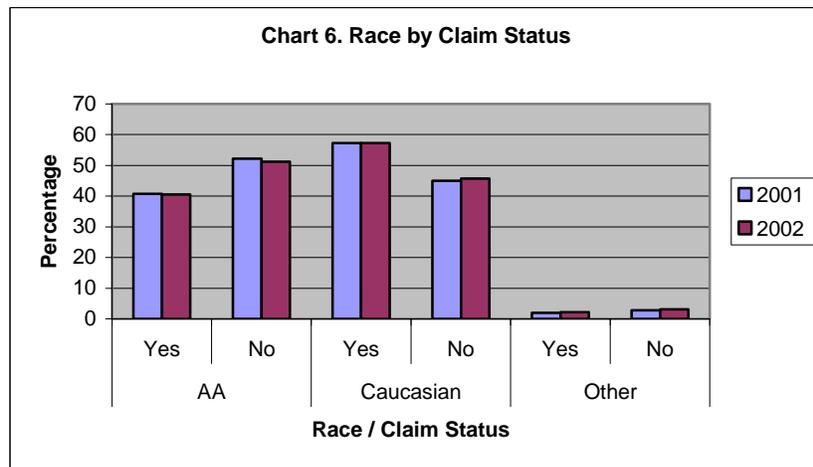
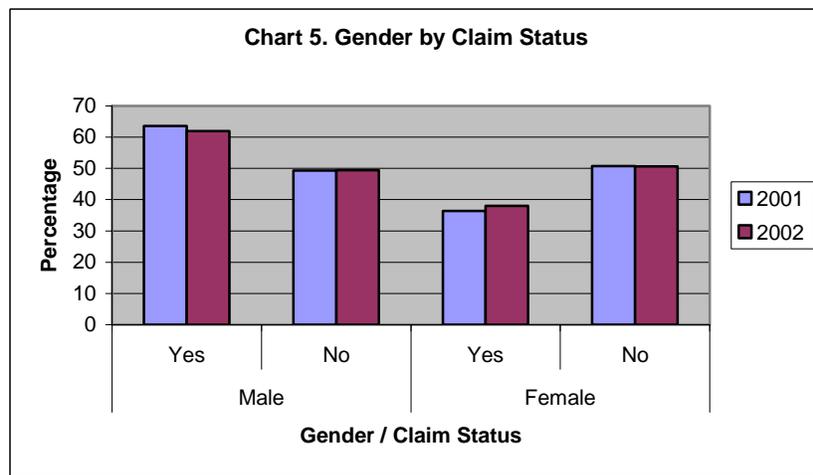
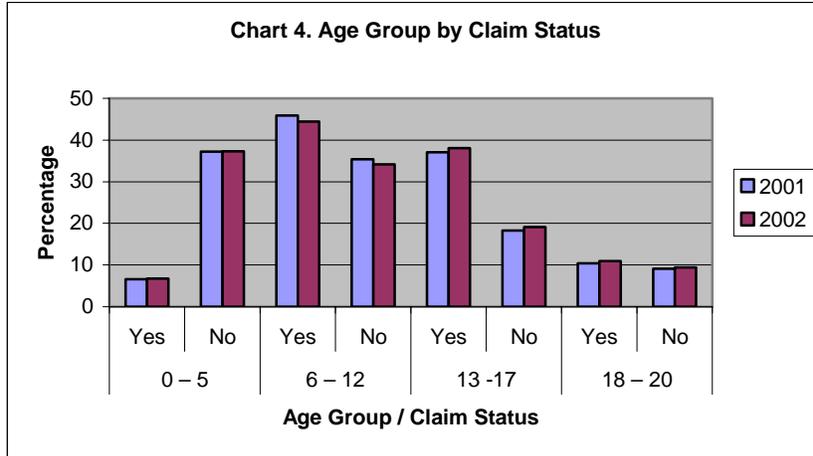
- For eligibility year 2001, 10.5% of consumers had a behavioral health claim. This rose slightly in calendar year (CY) 2002 to 11.2%.
- The distributions of demographic characteristics, social service program participation, and medical assistance eligibility status vary by claim status and are presented in Table 2 and Charts 4-6.

Table 2.
Population Characteristics by Claim Status

	2001 (n = 76,163)		2002 (n = 78,248)	
	Yes (n = 7,959)	No (n = 68,204)	Yes (n = 8,782)	No (n = 69,466)
Mean Age in Years (SD)	12.03 (4.23)	8.50 (5.84)	12.18 (4.25)	8.58 (5.90)
Mean Member Month Equivalent (SD)	10.99 (2.34)	9.85 (3.40)	10.96 (2.37)	9.84 (3.40)
Age				
0 – 5 (%)	6.6	37.2	6.7	37.3
6 – 12 (%)	45.9	35.4	44.4	34.2
13 -17 (%)	37.1	18.3	38.1	19.1
18 – 20 (%)	10.4	9.1	10.9	9.4
Gender				
Male (%)	63.6	49.3	62	49.4
Female (%)	36.4	50.7	38	50.6
Race				
AA (%)	40.8	52.2	40.6	51.2
Caucasian (%)	57.2	45	57.2	45.7
Other (%)	2	2.8	2.2	3.1
JPO				
Yes (%)	12	3.7	10.5	3.2
CYF				
Yes (%)	35.1	12.8	34.2	11.9
Substitute Care				
Yes (%)	17.7	3.9	17.9	3.8
Eligibility Status				
Full Year (%)	75.3	60.6	75.3	60.1
Partial Year (%)	24.7	39.4	24.7	39.9

- All subpopulations of HealthChoices members with and without a claim exhibited statistically significant differences, with a “p-value” of less than 0.05. That is, there are less than five chances in 100 that we would find these same results randomly.
- For both eligibility years, HealthChoices enrollees with at least one claim were older and in the 6-12 and 13-17 year old age groups; male; Caucasian; involved in the juvenile justice system, Children, Youth, and Family Services, and substitute care; and had a full year of medical assistance eligibility compared to those who did not have a behavioral health claim.

Factors Associated with Behavioral Health Claims



- Because of the observed similarity of the population distributions for each calendar year, the remainder of this report will focus only on the analysis of the 2002 HealthChoices population.

Prevalence Rates of a Behavioral Health Claim by Demographic, Social Program Participation and Medical Assistance Eligibility during 2002

Up to this point, the report has just described the sub-populations; however, there appear to be some differences between the subgroup that receives a claim and the one that does not. This next section outlines the prevalence and likelihood of a claim by each of the study variables. This allows for the comparison across categories.

Table 3 on the following page describes the prevalence, or proportion per 100 enrollees, of a claim for each level of the demographic, social services program, and medical assistance eligibility variables.

- 13.66% of Caucasian HealthChoices enrollees had a claim in 2002 compared to 9.11% of African-American and 8.12 “Other” minority enrollees.
 - Caucasians were 1.58 and 1.79 times more likely compared to African-American and “Other” minority HealthChoices members to have a claim.
- With respect to age, the highest prevalence for a claim in 2002 was in the 13-17 year old age group (20.17%); followed by the 6-12 year old group (14.09%), 18-20 year old group (12.76%) and the 0-5 year old group (2.21%).
 - Compared to the 0-5-year old group, the 6-12, 13-17, and 18-20 year old groups were 7.26, 11.18, 6.47 times more likely to have a claim.
- 13.69% of male HealthChoices enrollees had a claim in 2002 compared to only 8.67% of female Health Choices enrollees.
 - Males were 1.67 times more likely to have a claim.
- 28.92% of HealthChoices enrollees involved in the juvenile justice system had a claim in 2002 compared to 10.47% of HealthChoices enrollees not involved in the juvenile justice system.
 - HealthChoices enrollees with juvenile justice system involvement were 3.48 times more likely to have a claim.
- 26.67% of HealthChoices enrollees involved with the Office Children, Youth, and Family Services (CYF) had a claim in 2002 compared to 8.63% of HealthChoices enrollees not involved with CYF.
 - HealthChoices enrollees involved with CYF were 3.85 times more likely to have a claim.
- 37.07% of HealthChoices enrollees in substitute care had a claim in 2002 compared to 9.75% of HealthChoices enrollees not in substitute care.
 - HealthChoices enrollees in substitute care were 5.45 times more likely to have a claim.
- 13.68% of HealthChoices enrollees with a full year of medical assistance eligibility had a claim in 2002 compared to 7.25% of HealthChoices enrollees who had a partial year of eligibility.

Factors Associated with Behavioral Health Claims

- HealthChoices enrollees with a full year of medical assistance eligibility were 2.03 times more likely to have a claim.

Table 3.
Prevalence* of HealthChoices Eligible Children (0-20 years) With At Least One Behavioral Health Claim by Eligibility Year

Enrollment Year 2002		
Race		
	Caucasian	13.66
	AA	9.11
	Other	8.12
	Total	11.22
Age		
	0 – 5	2.21
	6 – 12	14.09
	13 -17	20.17
	18 – 20	12.76
	Total	11.22
Gender		
	Male	13.69
	Female	8.67
	Total	11.22
JPO		
	Yes	28.92
	No	10.47
	Total	11.22
CYF		
	Yes	26.67
	No	8.63
	Total	11.22
Substitute Care		
	Yes	37.07
	No	9.75
	Total	11.22
Eligibility Status		
	Full Year	13.68
	Partial Year	7.25
	Total	11.22

*Proportion per 100 Enrollees

Therefore, male, Caucasian children, ages 13-17 years, known to juvenile justice, known to CYF, and known to substitute care, with a full year of eligibility, had the highest prevalence of having at least one claim in the system.

In the next section, the report begins to look at racial differences in the prevalence rate of having a claim.

Racial Differences in Prevalence Rates for a Behavioral Health Claim by Demographic, Social Program Participation and Medical Assistance Eligibility during 2002

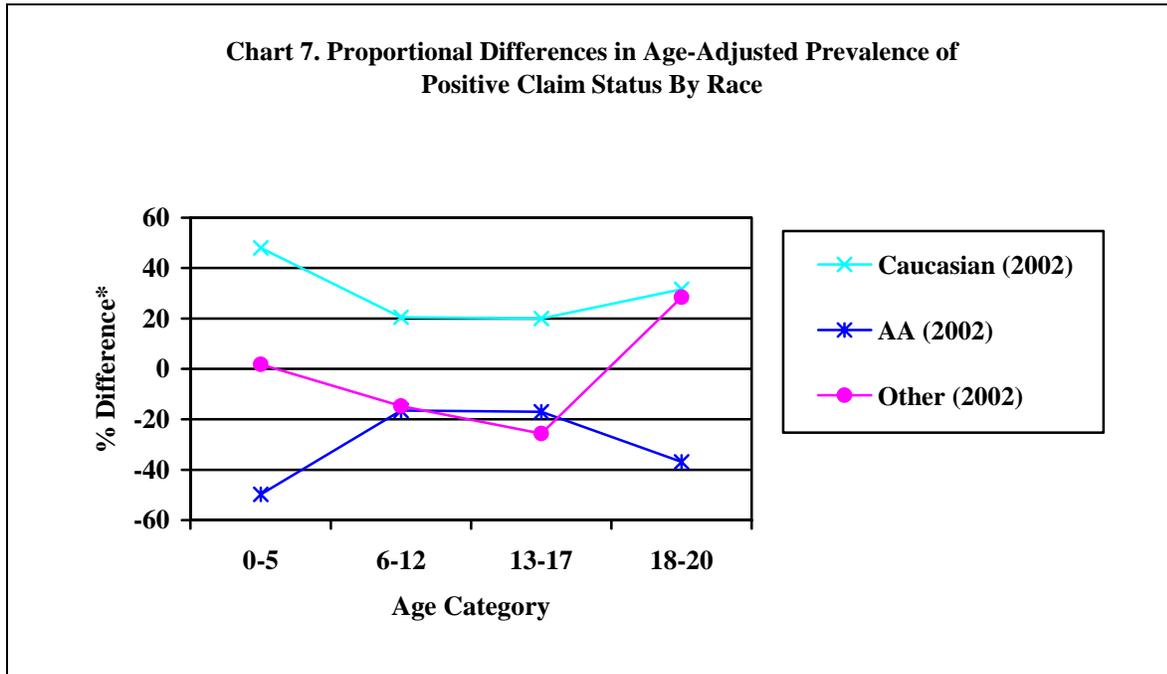
For each racial group, the prevalence rates of a claim was stratified by the levels of the remaining demographic, social services program and medical assistance eligibility variables and are presented in Tables 4 through 9 on the following pages. This process allows us to determine whether the racial differences outlined in the previous section remain true when controlling for these variables.

- The racial differences in prevalence rates between Caucasian and African-American HealthChoices enrollees with at least one claim persisted when stratified by age group but were less predictable for the “Other” minority group and are presented in Table 4.
 - The 0-5 year old age group had the lowest percentage of HealthChoices enrollees with at least one claim for all racial groups, whereas the 13-17 year old age group had the highest prevalence in the Caucasian and African-American population sub-groups. For the “Other” minority group, the highest percentage of enrollees was in the 18-20 year old group.
 - As detailed in Chart 7 on the following page, the percentage difference in prevalence of Caucasian enrollees with at least one claim is higher (e.g. 3.27 vs. 2.21; 16.78 vs. 12.76) than the age-stratified overall population prevalence across all age groups, with the largest positive deviation in the 0-5 and 18-20 year old age group.
 - For African-American enrollees, the percentage difference in prevalence of having at least one claim is lower than the age-stratified overall population prevalence with the largest negative deviation in the 0-5 and 18-20 year old age strata as presented in Figure 2.
 - The greatest percentage difference between Caucasian and African-American enrollees with a claim occurs in the 0-5 and 18-20 year old age group.
 - The percentage difference in prevalence of enrollees in the “Other” minority group with at least one claim is much less predictable than the Caucasian and African-American population subgroups. For the “Other” minority enrollees, the prevalence approximates the prevalence in the total population group. It is lower in the 6-12, and 13-17 age strata and is higher in the 18-20 year old stratum.

Table 4.
Prevalence* of a Behavioral Health Claim by Race and Age

Enrollment Year 2002			
Race	Age Group	Prevalence	% Difference From Population Total
Caucasian	0 – 5	3.27	48.04
	6 – 12	16.97	20.49
	13 – 17	24.19	19.98
	18 – 20	16.78	31.54
	Overall	13.66	
AA	0 – 5	1.11	-49.71
	6 – 12	11.76	-16.55
	13 – 17	16.73	-17.01
	18 – 20	8.05	-36.91
	Overall	9.11	
Other	0 – 5	2.25	1.81
	6 – 12	12.00	-14.82
	13 – 17	14.98	-25.69
	18 – 20	16.38	28.44
	Overall	8.12	
Total	0 – 5	2.21	
	6 – 12	14.09	
	13 – 17	20.17	
	18 – 20	12.76	
	Overall	11.22	

*Proportion per 100 Enrollees



The racial differences in prevalence rates of HealthChoices enrollees with at least one claim persisted when stratified by gender and are presented in Table 5.

- The prevalence rates of male and female Caucasians were 18.92% and 25.61% higher than the prevalence rates in the total male and female populations. The prevalence rates for African-Americans were 16.58% and 21.68% lower than the prevalence rates in the total male and female populations.
- The “Other” minority enrollees exhibited a similar trend as the African-American groups with the male and female groups 27.02% and 32.06% lower than the total male and female populations.

Table 5.
Prevalence* of a Behavioral Health Claim by Race and Gender

Enrollment Year 2002			
Race	Gender	Prevalence	% Difference From Gender-Specific Population Total
Caucasian			
	Male	16.28	18.92
	Female	10.89	25.61
AA			
	Male	11.42	-16.58
	Female	6.79	-21.68
Other			
	Male	9.99	-27.02
	Female	5.89	-32.06
Total			
	Male	13.69	-
	Female	8.67	-

*Proportion per 100 Enrollees

The racial differences in prevalence rates of HealthChoices enrollees with at least one claim varied slightly when stratified by involvement with the juvenile justice system and are presented in Table 6.

- The prevalence rates of Caucasian and “Other” minority enrollees involved in the juvenile justice system were 19.02% and 6.40% higher than the overall total population rates for those involved in the juvenile justice system. The prevalence rate for African-American enrollees was 12.28% lower than the total population prevalence rates of those involved in the juvenile justice system.
- The prevalence rate of Caucasian enrollees not involved in the juvenile justice system was 23.69 higher than the total population prevalence rate for those not involved in the juvenile justice system. The prevalence rates for both African-American and “Other” minority groups were 20.92% and 26.07 lower than the total population prevalence rates for those not involved in the juvenile justice system.

Table 6.
Prevalence* of a Behavioral Health Claim by Race and JPO Status

Enrollment Year 2002			
Race	JPO	Prevalence	% Difference From JPO-Specific Population Total
Caucasian			
	Yes	34.42	19.02
	No	12.95	23.69
AA			
	Yes	25.37	-12.28
	No	8.28	-20.92
Other			
	Yes	30.77	6.40
	No	7.74	-26.07
Total			
	Yes	28.92	-
	No	10.47	-

*Proportion per 100 Enrollees

Factors Associated with Behavioral Health Claims

The racial differences in prevalence rates of HealthChoices enrollees with at least one claim persisted when stratified by involvement with the Office of Children, Youth, and Family Services (CYF) and are presented in Table 7.

- The prevalence rate of Caucasian enrollees involved in the CYF was 26.70% higher than the overall total population rates for those involved in the CYF. The prevalence rates for African-American and “Other” minority enrollees were 13.54% and 17.44% lower than the total population prevalence rates of those involved in CYF.
- Similar patterns emerge for those enrollees not involved in CYF.

Table 7.
Prevalence* of a Behavioral Health Claim by Race and CYF Status

Enrollment Year 2002			
Race	CYF	Prevalence	% Difference From CYF-Specific Population Total
Caucasian			
	Yes	33.79	26.70
	No	11.34	31.40
AA			
	Yes	23.06	-13.54
	No	5.95	-31.05
Other			
	Yes	22.02	-17.44
	No	6.69	-22.48
Total			
	Yes	26.67	-
	No	8.63	-

*Proportion per 100 Enrollees

Factors Associated with Behavioral Health Claims

The racial differences in prevalence rates of HealthChoices enrollees with at least one claim persisted when stratified by placement in substitute care and are presented in Table 8.

- The prevalence rate of Caucasian enrollees involved in substitute care was 21.31% higher than the overall total population rates for those involved in substitute care. The prevalence rates for African-American and “Other” minority enrollees were 9.47% and 21.04% lower than the total population prevalence rates of those involved in substitute care.
- Similar patterns emerge for those enrollees not placed in substitute care.

Table 8.
Prevalence* of a Behavioral Health Claim by Race and Placement in Substitute Care

Enrollment Year 2002			
Race	Substitute Care		% Difference From Substitute-Care Specific Population Total
Caucasian			
	Yes	44.97	21.31
	No	12.49	28.10
AA			
	Yes	33.56	-9.47
	No	7.22	-25.95
Other			
	Yes	29.27	-21.04
	No	7.35	-24.62
Total			
	Yes	37.07	-
	No	9.75	-

*Proportion per 100 Enrollees

Factors Associated with Behavioral Health Claims

The racial differences in prevalence rates of HealthChoices enrollees with at least one behavioral health claim persisted when stratified by medical assistance eligibility enrollment status and are presented in Table 9.

- The prevalence rate of Caucasian enrollees involved with a full year of HealthChoices eligibility was 27.56% higher than the overall total population rates for those with a full year of eligibility. The prevalence rates for African-American and “Other” minority enrollees were 20.69% and 23.76% lower than the total population prevalence rates of those involved with a full year of eligibility.
- Similar patterns emerge for enrollees enrolled in HealthChoices for only a partial year.

Table 9. Prevalence* of a Behavioral Health Claim Stratified by Race and Medical Assistance Eligibility Status

Enrollment Year 2002			
Race	Eligibility Status	Prevalence	% Difference From Population Total
Caucasian			
	Full Year	17.45	27.56
	Partial Year	8.73	20.41
AA			
	Full Year	10.85	-20.69
	Partial Year	5.55	-23.45
Other			
	Full Year	10.43	-23.76
	Partial Year	5.49	-24.28
Total			
	Full Year	13.68	-
	Partial Year	7.25	-

*Proportion per 100 Enrollees

Relationship Among Demographic Characteristics, Social Services Program Participation, Duration of Medical Assistance Eligibility and the Use of Any Behavioral Health Service During 2002

A statistical model was constructed to evaluate the collective relationship between each of the aforementioned demographic, social service program, and medical assistance eligibility variables and the use of a behavioral health service while adjusting for the variation and effect of the remaining model variables.

- A similar pattern of significant relationships between each of the demographic, social service program, and medical assistance eligibility variables was identified.
 - HealthChoices enrollees in age groups 6-12 years, 13-17 years and 18-20 were 6.72, 8.68 and 6.25 times more likely to have a claim for a behavioral health service than the enrollees in the 0-5 year old age group;
 - Male HealthChoices enrollees were 1.72 times more likely to have a claim for a behavioral health service than female enrollees;
 - Caucasian enrollees were 2.28 times more likely to have a claim for behavioral health service than African-American enrollees. Caucasian enrollees were 1.53 times more likely to have a claim than “Other” minority enrollees;
 - HealthChoices enrollees involved in the juvenile justice system were 1.69 times more likely to have a claim for a behavioral health service than enrollees not involved in the juvenile justice system;
 - HealthChoices enrollees involved with the Office of Children, Youth and Family Services were 2.44 times more likely to have a claim for a behavioral health service than enrollees not involved in CYF;
 - HealthChoices enrollees in substitute care were 2.94 times more likely to have a claim for a behavioral health service than those enrollees not in substitute care; and
 - Increased duration of medical assistance eligibility is associated with increased likelihood of a behavioral health claim.

Summary

In conclusion, this report identifies the following results:

- Profiles of enrollees and members receiving service differ.
 - For example, for both eligibility years, HealthChoices enrollees with at least one claim were older and in the 6-12 and 13-17 year old age groups; male; Caucasian; involved in the juvenile justice system, Children, Youth, and Family Services, and substitute care; and had a full year of medical assistance eligibility compared to those who did not have a behavioral health claim;
- Disparities between consumers with a claim and those without exist across demographic and social service program participation;

Factors Associated with Behavioral Health Claims

- Trends are consistent by year;
- Social service program participation is associated with the likelihood of having a claim; and
- Racial differences persist across levels of demographic and social service categories.
 - The greatest difference between Caucasian and African-American enrollees with a claim occurs in the 0-5 and 18-20 year old age group.

As to be expected, however, this analysis perhaps raises more questions than it answers. Perhaps, the most important issue warranting further exploration is developing an understanding of the extent to which children and adolescents, but particularly younger children, may be receiving services outside of the public behavioral health system. A related issue would be the perception of families of the need for services and their knowledge of how to access services. In order to explore this further, AHCI would need access to data from the physical health managed care organizations and/or access to families themselves. Information directly from families would be perhaps the most useful source of data to further this discussion. Both approaches represent a fairly significant departure from the current approaches and work that AHCI does. However, AHCI will be exploring these possibilities in the future as ways to expand this knowledge base.