Health Care Utilization and Costs of Full-Pay and Subsidized Enrollees in the Florida KidCare Program: MediKids

> Prepared for the Florida Healthy Kids Corporation

# Prepared by

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# I. INTRODUCTION

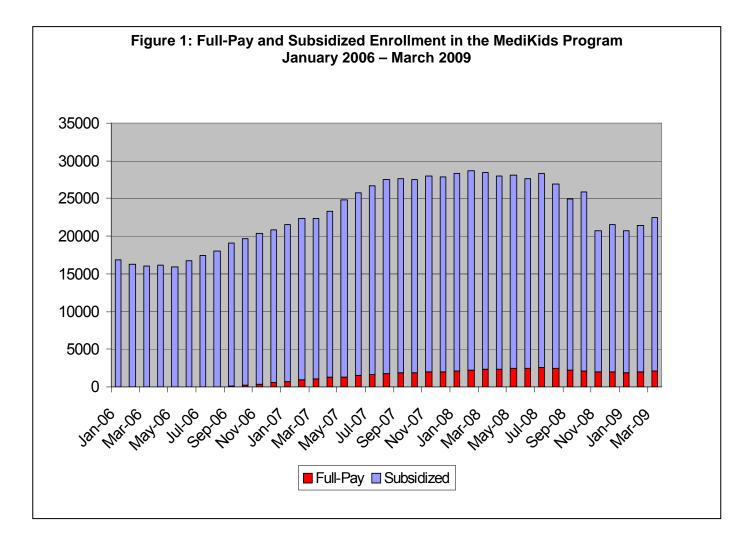
Florida KidCare is the state's health insurance program for uninsured children under age 19. The Title XXI State Children's Health Insurance Program (SCHIP) components of Florida KidCare provide health insurance to low-income uninsured children who are not eligible for Medicaid. The MediKids program serves children ages 1-4 years old, and the Florida Healthy Kids Program serves children ages 5-18 years. Children who meet the program eligibility requirements with family income between 101-200% of the federal poverty level (FPL) are eligible for subsidized premiums. Families whose annual income is less than or equal to 150% of the FPL pay monthly premiums of \$15 per family per month (PFPM). Families whose annual income is 151-200% of the FPL pay \$20 PFPM. Since the program's inception, the Florida Healthy Kids Program has permitted families whose income exceeds the program's subsidy level to buy into the program at the full monthly premium cost for each enrolled child. The MediKids program began offering a similar buy-in option on July 1, 2006. The current premium amount for the Florida Healthy Kids buy-in program is \$128 per child per month for medical and dental coverage, or \$116 per child per month for families who opt out of the dental coverage. The premium amount for the MediKids buy-in program is \$159 per child per month for medical and dental coverage. From July 1, 1998 through July 1, 2008, enrollment of these "full-pay" children was limited to 10% of total program enrollment.

During the 2008 Florida Legislative Session, the 10% enrollment limit was removed effective July 1, 2008. The legislation charged the Florida Healthy Kids Corporation with providing a study to the Legislature and the Governor that (1) compares the utilization and costs of the full-pay enrolled population and the subsidized enrolled population, (2) evaluates the premium impact to the subsidized portion of the program of including the full-pay program, and (3) makes recommendations on how to mitigate possible impacts to the subsidized population. The Florida Healthy Kids Corporation contracted with the Institute for Child Health Policy to conduct this evaluation.

A report was submitted on January 2009 that covered only the Florida Healthy Kids Program because data for the MediKids program were not available at that time. This report appends the January 2009 report to include MediKids enrollees. Claims and encounter data were only available for non-HMO enrollees in the MediKids program, representing just 18% of all MediKids enrollees. Therefore, the results contained in this report should not be generalized to all MediKids enrollees. Should HMO claims and encounter data become available for analysis, the ICHP will further append this report.

# II. ENROLLMENT

MediKids began offering a full-pay premium option for families whose income exceeds 200% of the federal poverty level on July 1, 2006. Figure 1 shows enrollment in the MediKids program for full-pay and subsidized enrollees from January 2006 through March 2009. As with the Florida Healthy Kids Program, full-pay enrollment was limited to 10% of total enrollment until this cap was lifted July 1, 2008. Full-pay enrollment in the MediKids program has never reached 10% of total enrollment. In the first three months of 2009, full-pay enrollment averaged 9.3% of total enrollment.



# III. DATA SOURCES AND MEASURES

# A. Data Sources

The following data sources were used:

- 1. Enrollment files provided by the Florida Healthy Kids Corporation. The enrollment files contain information about the children's age, gender, family income, monthly premium amounts, and enrollment status. These files were used to (1) identify the children's monthly enrollment and subsidy status and (2) obtain information about the children's socio-demographic characteristics.
- 2. The enrollment files were matched to health care claims and encounter data for non-HMO enrollees (approximately 18% of all MediKids enrollees) provided by the Agency for Health Care Administration. The person-level claims and encounter data include inpatient, outpatient, and pharmacy files. These files contain Physician's Current Procedural Terminology (CPT) codes, International Classification of Diseases, 9<sup>th</sup> Revision (ICD 9-CM) codes, and National Drug Codes. The claims and encounter data were used to classify the children's health status and identify their health care utilization.

## B. Samples

**1. Enrollment and Demographic Characteristics.** We analyzed enrollment and demographic data for 45,998 unique children ages 1-4 enrolled in the MediKids Program for at least one month during calendar year 2007. These children collectively represented 298,146 months of coverage.

**2. Health Care Utilization and Costs.** We analyzed health status, health care utilization, and costs for 8,491 unique children who were not enrolled in an HMO and could be matched to claims and encounter data. This represents 18% of all MediKids enrollees and 51,759 months of coverage.

The full-pay premium amount for MediKids enrollees during the study period was \$159 per child per month. The analytic dataset was constructed such that there were 12 records for each child (one for each month of the year), and analyses were conducted at the child-month level.

## C. Measures

**Subsidy Status.** An enrollment month was classified as "subsidized" if the monthly premium amount was \$20 or less. An enrollment month was classified as "full-pay" if the monthly premium amount was greater than \$20.

*Children's Health Status.* The health care claims and encounter data were used to characterize the children's health status using the Clinical Risk Groups (CRGs). The CRGs uses ICD-9-CM diagnosis codes from all health care encounters, except those associated with providers known to frequently report unreliable codes (e.g., non-clinician providers and ancillary testing providers), to assign individuals to a hierarchically defined core health status group (Neff et al. 2001). The CRGs has been tested and validated for identifying children with special health care needs (Bethell 2002; Neff et al. 2001). Children more than 12 months old must be enrolled for at least six months to be classified. This time frame allows for a sufficient claims history for classification.

The CRGs has nine health status categories that were reduced to the following five groups using instructions from the developers: (1) healthy (including non-users of health care services), (2) significant acute conditions (e.g., meningitis and traumatic brain injury), (3) minor chronic conditions (e.g., attention

deficit disorder), (4) moderate chronic conditions (e.g., diabetes and depression), and (5) major chronic conditions (e.g., cystic fibrosis, cancer, and schizophrenia). Children not meeting the minimum enrollment criteria of six months for CRG classification are labeled "unclassified." Unclassified children include new enrollees and children who cycle in and out of the program.

**Demographic Characteristics.** The children's age, gender, and geographic location (urban or rural) were obtained from the enrollment files.

*Utilization.* Within each subsidy category (full-pay and subsidized), utilization was assessed at the childmonth level and averages were calculated for the entire sample. Utilization measures were calculated for the following categories of service:

- outpatient encounters,
- inpatient stays,
- emergency room visits,
- prescription drugs,
- therapy services, and
- ancillary services (laboratory, radiology, and pathology).<sup>1</sup>

Where possible, utilization measures were calculated using the specifications provided in the National Commission on Qualify Assurance (NCQA) HEDIS Technical Specifications manual.

**Costs.** Per member per month (PMPM) averages were calculated for the entire sample using the paid amounts in the claims and encounter data. Because the purpose of these cost calculations is to examine the relative differences between the two subsidy groups, we normalized the PMPM costs to a value of \$1 PMPM for subsidized enrollees.

**Analytic Methods.** Tests of statistical significance were used to determine whether there were significant differences between enrollees in the full-pay and subsidized premium categories. Chi-square tests were used to compare the socio-demographic characteristics and health status of the two groups. Because utilization and cost data are skewed, nonparametric Wilcoxon-Mann-Whitney tests were used to compare these measures. Differences between the two subsidy categories were considered statistically significant for p-values  $\leq .05$ .

# IV. RESULTS

#### A. Socio-demographic Characteristics and Health Status

As noted above, enrollment and socio-demographic data were available for 45,998 unique children enrolled in 2007, whereas health care claims and encounter data were available for only 8,491 of these children. Tables 1-3 summarize the following information about these children:

- Table 1 compares the socio-demographic characteristics of the 8,491 children for whom encounter data were available to the 37,507 children for whom encounter data were not available.
- Table 2 provides the distribution of the socio-demographic characteristics by subsidy category for the full sample of 45,998 children.
- Table 3 provides the distribution of the socio-demographic and health characteristics by subsidy category for the subset of 8,491 children for whom encounter data were available.

Table 1: Comparison of characteristics of children for whom encounter data were available to those for whom encounter data were not available. Children for whom encounter data were available were somewhat more likely to be younger than those for whom encounter data were not available: 43% of those with encounter data were 1 or 2 years of age compared to 41% of those without encounter data  $(\chi^2=106.45; p<.0001)$ . Because the encounter data were not available for those children enrolled in Medicaid HMOs and Medicaid HMOs are more likely to be found in urban areas of the state, the geographic location was substantially different between the two groups of children. Approximately 25% of those with encounter data available resided in rural areas compared to 3% of those without encounter data  $(\chi^2=31,000; p<.0001)$ . We did not detect any statistically significant differences in gender between the two groups.

Table 1: Socio-demographic Characteristics of MediKids Enrollees by Availability of Encounter Data   January 1, 2007 – December 31, 2007								
	Total Enr	ollment	En	Encounter Data Available?				
	Mon		Ye	S	1	lo		
	N	Column %	N	Column %	N	Column %		
Total	298,146	100.00%	51,759	100.00%	246,387	100.00%		
Age								
1 year	41,057	13.77%	7,782	15.04%	33,275	13.51%		
2 years	82,433	27.65%	14,521	28.06%	67,912	27.56%		
3 years	85,644	28.73%	14,476	27.97%	71,168	28.88%		
4 years	89,012	29.86%	14,980	28.94%	74,032	30.05%		
Gender								
Female	149,563	50.16%	25,992	50.22%	123,571	50.15%		
Male	148,583	49.84%	25,767	49.78%	122,816	49.85%		
Geographic Location								
Urban	271,594	91.09%	38,369	74.13%	233,225	94.66%		
Rural	21,052	7.06%	12,899	24.92%	8,153	3.31%		
Unknown	5,500	1.84%	491	0.95%	5,009	2.03%		

Table 2: Socio-demographic characteristics by subsidy category for all enrollees (those with and without encounter data). Full-pay enrollees were more likely to be younger than subsidized enrollees ( $\chi^2$ =403.57; *p*<.0001). Approximately 46% of full-pay enrollees were 1 or 2 years of age (versus 3 or 4 years of age) compared to 41% of subsidized enrollees. Full-pay enrollees also were somewhat more likely to reside in urban areas ( $\chi^2$ =44.25; *p*<.0001). We did not detect any statistically significant differences in gender between the two subsidy categories.

Table 2: Socio-demographic Characteristics by Premium Subsidy Status- All MediKids Enrollees January 1, 2007 to December 31, 2007							
	Total Fre		Pr	emium Sub	sidy Status	5	
	Total En Mon		Subsidized	Premium	Full	-рау	
	Ν	Column %	N	Column %	N	Column %	
Total	298,146	100.00%	279,196	100.00%	18,950	100.00%	
Age							
1 year	41,057	13.77%	37,537	13.44%	3,520	18.58%	
2 years	82,433	27.65%	77,303	27.69%	5,130	27.07%	
3 years	85,644	28.73%	80,570	28.86%	5,074	26.78%	
4 years	89,012	29.86%	83,786	30.01%	5,226	27.58%	
Gender							
Female	149,563	50.16%	140,117	50.19%	9,446	49.85%	
Male	148,583	49.84%	139,079	49.81%	9,504	50.15%	
Geographic Location							
Urban	271,594	91.09%	254,084	91.01%	17,510	92.40%	
Rural	21,052	7.06%	19,931	7.14%	1,121	5.92%	
Unknown	5,500	1.84%	5,181	1.86%	319	1.68%	

# Table 3: Socio-demographic and health characteristics by subsidy category for non-HMO

**enrollees.** Among non-HMO MediKids enrollees, full-pay enrollees were more likely to be younger than subsidized enrollees ( $\chi^2$ =55.75; *p*<.0001). Approximately 46% of full-pay enrollees were 1 or 2 years of age (versus 3 or 4 years of age) compared to 43% of subsidized enrollees. Full-pay enrollees also were somewhat more likely to reside in urban areas ( $\chi^2$ =6.51; *p*<.0001). We did not detect any statistically significant differences in gender between the two subsidy categories.

Overall, 63% of non-HMO enrollees were classified as healthy, 8% had significant acute conditions, 3% had minor chronic conditions, 6% had moderate chronic conditions, less than 1% had major chronic conditions, and 20% had insufficient enrollment during the observation period to be classified. The high percentage of unclassified enrollees likely reflects shortened enrollment lengths within the MediKids program due to transitions into and out of the program because MediKids covers a narrow age range. Full-pay enrollees were less likely to be classified as healthy (53%) compared to enrollees with subsidized premiums (63%). Half of this 10 percentage point difference in healthy enrollees is reflected in a higher percentage of full-pay enrollees who had insufficient enrollment length to be classified (25%) compared to those with subsidized premiums (20%). The remaining difference is due to a greater proportion of full-pay enrollees with significant acute or chronic conditions compared to subsidized enrollees ( $\chi^2$ =243.15; *p*<.0001). For example, 8% of full-pay enrollees had moderate chronic conditions compared to 6% of those with subsidized premiums.

Table 3: Socio-demographic Characteristics and Health Status by Premium Subsidy Status- Non-HMO MediKids Enrollees January 1, 2007 to December 31, 2007							
	Table	Premium Subsidy Status					
	Total Enr Mon		Subsidized	Premium	Full-pay		
	N	Column %	N	Column %	N	Column %	
Total	51,759	100.00%	48,553	100.00%	3,206	100.00%	
Age							
1 year	7,782	15.04%	7,195	14.82%	587	18.31%	
2 years	14,521	28.06%	13,628	28.07%	893	27.85%	
3 years	14,476	27.97%	13,523	27.85%	953	29.73%	
4 years	14,980	28.94 %	14,207	29.26%	773	24.11%	
Gender							
Female	25,992	50.22%	24,365	50.18%	1,627	50.75%	
Male	25,767	49.78%	24,188	49.82%	1,579	49.25%	
Geographic Location							
Urban	38,369	74.13 %	35,948	74.04%	2,421	75.51%	
Rural	12,899	24.92%	12,152	25.03%	747	23.30%	
Unknown	491	0.95%	453	0.93%	38	1.19%	
Health Status Category							
Healthy	32,436	62.67%	30,737	63.31%	1,699	52.99%	
Significant Acute	4,007	7.74%	3,757	7.74%	250	7.80%	
Minor Chronic	1,541	2.98%	1,401	2.89%	140	4.37%	
Moderate Chronic	3,016	5.83%	2,763	5.69%	253	7.89%	
Major Chronic	318	0.61%	254	0.52%	64	2.00%	
Unclassified	10,441	20.17%	9,641	19.86%	800	24.95%	

# **B.** Utilization by Service Category

We analyzed health care utilization and costs for the 8,491 unique children who were not enrolled in an HMO and could be matched to claims and encounter data. This represents 18% of all MediKids enrollees and 51,759 months of coverage

*Outpatient Encounters.* Table 4 provides the utilization per 1,000 member months for outpatient encounters, which was calculated using the following formula:

(total visits/total member months) x 1,000.

Three categories of outpatient encounters were examined:

(1) Total outpatient encounters during the month were identified by using the CPT codes specified in the NCQA HEDIS Technical Specifications manual to identify outpatient encounters. Following the HEDIS approach, mental health and chemical dependency services were excluded.

(2) Office or other outpatient visits are a subcategory of total outpatient encounters and reflect evaluation and management services provided in an outpatient setting. CPT E&M codes 99201-99205 and 99211-99215 were used to identify these encounters.

(3) Outpatient consultations are another subcategory of total outpatient encounters and capture specialty referrals in an outpatient setting. These encounters were identified using CPT E&M codes 99241-99245. Outpatient consultations may be indicative of a greater need for health care services overall and for specialty services in particular.

Overall, full-pay enrollees averaged 1,307 outpatient encounters per 1,000 member months compared to 811 encounters for those with subsidized premiums, and this difference was statistically significant. The ratio of full-pay outpatient encounters to subsidized outpatient encounters was 1.61, indicating a 61% higher utilization rate among full-pay enrollees overall. Utilization also was higher among full-pay enrollees within each health status category, and these differences were statistically significant except for those children with moderate chronic conditions. Outpatient office visit utilization rates were 28% higher for full-pay enrollees overall, and there were statistically significant higher utilization rates within each health status category except for moderate and major chronic conditions. Outpatient consultation utilization rates were 64% higher for full-pay enrollees, but there were no statistically significant differences within health categories except for the minor chronic condition category.

Table 4: Outpatient Encounters by Premium Subsidy Status and Child Health Status   January 1, 2007 – December 31, 2007							
	Outpatient Encounters p	Ratio of					
	Subsidized Premium	Full-pay	Full-pay to	n volue			
	(48,553 member months)	(3,206 member months)	Subsidized	<i>p</i> -value			
Total Outpatient Encounters							
Total*	810.68	1,306.92	1.61	<0.0001			
10141	810.08	1,300.92	1.01	<u> \0.0001</u>			
By Health Status							
Healthy*	603.18	750.44	1.24	<0.0001			
Significant Acute*	1,400.59	2044.00	1.46	0.0168			
Minor Chronic*	1,591.72	1,935.71	1.22	0.0074			
Moderate Chronic	1,736.16	2,027.67	1.17	0.1823			
Major Chronic*	2,657.48	9,859.38	3.71	< 0.0001			
Unclassified*	814.96	1,236.25	1.52	0.0061			
	011.00	1,200.20	1.02	0.0001			
Outpatient Office Visits							
Total*	339.03	435.12	1.28	<0.0001			
By Health Status							
Healthy*	264.63	315.48	1.19	0.0017			
Significant Acute*	644.13	804.00	1.25	0.0020			
Minor Chronic*	479.66	728.57	1.52	0.0008			
Moderate Chronic	644.95	719.37	1.12	0.1201			
Major Chronic	870.08	687.50	0.80	0.1454			
Unclassified*	335.23	412.50	1.23	0.0430			
Outpatient Consultations							
Total*	12.17	19.96	1.64	0.0012			
Du Llaath Status							
By Health Status Healthy	6.72	10.01	1.49	0 1020			
Significant Acute	6.73 27.68	36.00	1.49	0.1020			
Minor Chronic*	41.40	85.71	2.07	0.0309			
Minor Chronic Moderate Chronic	28.59	43.48	1.52	0.2638			
Major Chronic	70.87	46.88	0.66	0.5518			
Unclassified	12.97	15.00	1.16	0.8709			

\*Statistically significant at the  $p\leq .05$  level.

*Inpatient Stays.* Table 5 shows the utilization per 1,000 member months for (1) inpatient discharges and (2) inpatient days. Inpatient discharges were calculated as: (total discharges/ total member months)\*1,000. Inpatient days were calculated as: (total days/total member months)\*1,000. Inpatient discharges with a mental health and chemical dependency principal diagnosis were excluded. Overall, full-pay enrollees averaged six inpatient discharges per 1,000 member months compared to three discharges for those with subsidized premiums, but this difference was not statistically significant. Full-pay enrollees averaged a greater number of days compared to subsidized enrollees, but this difference also was not statistically significant at the 5% level. There were too few children with inpatient stays to break out the results by health status.

Table 5: Inpatient Discharges and Days by Premium Subsidy Status January 1, 2007 – December 31, 2007						
	Discharges and Days per 1,000 Member MonthsRatio ofSubsidized PremiumFull-pay(48,553 member months)(3,206 member months)Subsidizedp-val					
Inpatient Discharges	3.42	5.93	1.73	0.0629		
Inpatient Days	6.92	12.48	1.80	0.0633		

\*Statistically significant at the  $p\leq .05$  level.

*Emergency Room Visits.* Table 6 shows the utilization per 1,000 member months for emergency room visits that did not result in an inpatient admission. ER visits with a mental health and chemical dependency principal diagnosis were excluded. ER visits were 10% higher overall among full-pay enrollees; however, this difference was not statistically significant.

Table 6: ER Visits by Premium Subsidy Status and Child Health Status   January 1, 2007 – December 31, 2007							
	Visits per 1,000	Ratio of Full-pay to					
	(48,553 member months)	(3,206 member months)	Subsidized	<i>p</i> -value			
ER Visits – No Inpatient Admission							
Total	84.32	92.64	1.10	0.5011			
By Health Status							
Healthy	67.28	63.57	0.94	0.8924			
Significant Acute	158.90	124.00	0.78	0.3308			
Minor Chronic	78.512	71.43	0.91	0.8460			
Moderate Chronic	156.71	221.34	1.41	0.2699			
Major Chronic	90.55	31.25	0.35	0.2998			
Unclassified	89.51	112.50	1.26	0.3467			

\*Statistically significant at the  $p\leq .05$  level.

**Prescription Drug Utilization.** Table 7 shows prescription drug utilization measured in two ways: (1) the number of prescriptions per 1,000 member months and (2) the number of prescriptions per member per year. Prescription drug utilization was 30% higher among full-pay enrollees compared to subsidized enrollees, and this difference was statistically significant. In addition, there were statistically significant differences in prescription drug utilization among enrollees classified as healthy and those with minor and moderate chronic conditions.

Table 7: Prescription Drug Utilization by Premium Subsidy Status and Child Health Status   January 1, 2007 – December 31, 2007							
	Prescriptions per 1,000 Member Months		Prescriptions F Per Year (				
	Subsidized Premium (48,553 member months)	Full-pay (3,206 member months)	Subsidized Premium (48,553 member months)	Full-pay (3,206 member months)	Ratio of Full-pay to Subsidized	<i>p</i> -value	
Prescriptions							
Total*	457.09	593.26	5.49	7.12	1.30	<0.0001	
By Health Status							
Healthy*	337.96	420.84	4.06	5.05	1.25	<0.0001	
Significant Acute	814.21	920.00	9.77	11.04	1.13	0.2423	
Minor Chronic*	565.31	850.00	6.78	10.20	1.50	0.0260	
Moderate Chronic*	1,140.07	1,359.68	13.68	16.32	1.19	0.0021	
Major Chronic	1,169.29	1,062.50	14.03	12.75	0.91	0.4685	
Unclassified	467.48	532.50	5.61	6.39	1.14	0.2413	

\*Statistically significant at the  $p\leq .05$  level.

**Therapy and Ancillary Services.** Table 8 shows the utilization rates for therapy services and for radiology, laboratory, and pathology procedures. Therapy services included physical therapy, occupational therapy, speech therapy, and respiratory therapy. Because many therapy procedures are measured in time intervals (e.g., 15 or 30 minutes) that result in multiple units per procedure code, utilization was measured in units of service by summing the number of units for all of the relevant procedure codes. Radiology, laboratory, and pathology were measured by summing the number of procedures. Utilization is presented per 1,000 member months. Full-pay enrollees had statistically significant higher rates of utilization in both categories.

Table 8: Therapeutic and Ancillary Procedures by Premium Subsidy Status   January 1, 2007 – December 31, 2007						
	Services per 1,000 Member MonthsRatio ofSubsidized PremiumFull-pay(48,553 member months)(3,206 member months)Subsidizedp-v					
Therapy Procedures*	150.52	409.23	2.72	<0.0001		
Radiology, Laboratory and Pathology Procedures*	185.78	282.91	1.52	<0.0001		

\*Statistically significant at the  $p\leq .05$  level.

# C. Costs

Per member per month (PMPM) health care costs were examined to provide a comprehensive measure of the relative resource utilization between full-pay and subsidized enrollees. PMPM costs are equal to total costs divided by total member months. The purpose of these cost calculations is to examine the relative differences between the two subsidy groups. For this evaluation, the actual dollar amounts or exact costs are not as critical as the relationships observed between the two groups. Therefore, the calculated costs were normalized to a value of \$1.00 PMPM for the subsidized population. Table 9 shows the normalized PMPM costs. Overall, full-pay enrollees have PMPM costs that are 76% greater on average compared to subsidized enrollees.

Table 9: Normalized Costs by Premium Subsidy Status and Child Health Status   January 1, 2007 – December 31, 2007							
	Normalized F	Ratio of					
	Subsidized Premium (48,553 member months)	Full-pay (3,206 member months)	Full-pay to Subsidized	<i>p</i> -value			
Normalized PMPM Costs							
Total*	1.00	1.76	1.76	<0.0001			
By Health Status							
Healthy*	0.64	0.82	1.28	<0.0001			
Significant Acute*	1.58	2.06	1.30	0.0277			
Minor Chronic*	2.23	2.33	1.02	0.0502			
Moderate Chronic*	2.80	4.48	1.60	<0.0001			
Major Chronic*	8.64	15.76	1.82	<0.0001			
Unclassified*	1.02	1.56	1.53	<0.0039			

\*Statistically significant at the  $p\leq .05$  level.

<sup>+</sup> PMPM costs were normalized to a value of \$1.00 PMPM for the subsidized group. Therefore, the costs reported in Table 9 do not represent actual program costs; rather, they reflect the relative PMPM costs by subsidy status and child health status.

# V. SUMMARY

A greater proportion of children in the full-pay premium category had significant acute and chronic health conditions compared to children with subsidized premiums. Average utilization across all service categories examined was greater among full-pay enrollees with statistically significant differences for the following service categories: outpatient encounters, prescription drugs, therapy services, and ancillary services. The most comprehensive measure of the relative resource utilization of full-pay enrollees compared to subsidized enrollees is the relative per member per month cost between the two subsidy groups, which was 1.76 during the time period we examined. Therefore, full-pay enrollees' resource utilization was 76% higher than subsidized enrollees on average. These findings suggest that adverse selection exists among the pool of full-pay enrollees relative to subsidized enrollees in the non-HMO MediKids population.

It is important to note that the sample of children included in this analysis are non-HMO enrollees accounting for only 18% of all MediKids enrollees, and they are not representative of the overall population. Because Medicaid HMOs are more likely to be found in urban areas of the state, those with encounter data were disproportionately from rural areas. In addition, HMOs use different reimbursement and utilization management mechanisms than Medicaid PCCM and FFS programs, which could affect utilization rates and costs. Therefore, although the findings of this report provide some preliminary insight into the case mix and utilization rates of subsidized and full-pay enrollees in the MediKids program, they should not be relied upon for policy-making purposes. To have a complete picture, it is critical to analyze claims and encounter data for the participating HMOs.

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#### ENDNOTES

<sup>1</sup> Chemical dependency services, mental health services, and durable medical equipment were not included because very few children ages 1-4 used these services.