

An Updated Analysis of Utilization in the Los Angeles Healthy Kids Program

Prepared for:



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BACKGROUND

The Los Angeles Healthy Kids program extended health insurance coverage to children ineligible for Medi-Cal or Healthy Families (California's Medicaid and State Children's Health Insurance Program, respectively). Launched in 2003, the program covers children living in families with incomes up to 300 percent of the federal poverty level regardless of immigration status. With funding from First 5 LA supporting children ages 0 through 5, and philanthropic donations covering children ages 6 through 18, the program provides a benefits package modeled after that of Healthy Families: a comprehensive set of preventive, primary, and specialty care services, including dental and vision care. In return, families pay income-adjusted premiums and copayments, and premiums are waived for the vast majority of enrollees whose families earn income that is less than 133 percent of the federal poverty level.

Enrollment in the program steadily increased during the first two years of implementation, peaking at nearly 45,000 children in June 2005 (approximately 8,000 children ages 0 through 5 and 37,000 children ages 6 through 18; Sommers et al. 2005). That month, funding shortfalls forced the program to institute a cap on the enrollment of children ages 6 through 18. Enrollment of these older children steadily decreased, and even enrollment for children ages 0 through 5 (for whom funding remained secure) eroded. As of June 2008, total enrollment stood at approximately 34,000 (just under 6,000 children ages 0 through 5 and approximately 28,000 children ages 6 through 18; Farias et al. 2009).

To evaluate the program and provide feedback to stakeholders, First 5 LA contracts with the Urban Institute and its partners. As part of the multiyear evaluation launched in

2004, the researchers conducted a study of the service use of children who enrolled in Healthy Kids during the second year of the program (Sommers, Howell, and Hill 2007). They collaborated with the L.A. Care Health Plan (L.A. Care), which provides services to Healthy Kids enrollees, to assess the usefulness of encounter data for evaluating service use in the program, and to investigate the levels of service use across five measures—the percentage of Healthy Kids enrollees who had at least one

- Preventive visit,
- Ambulatory visit,
- Emergency department visit,
- Hospital stay, and
- Prescription filled during their first year in the program.

Because services for preventive care and other ambulatory care are reimbursed by L.A. Care on a capitated basis, data for these services are based on encounter data submitted by providers on a voluntary basis. In contrast, data on hospital stays, emergency department visits, and prescription drug use are based on claims, since these services are reimbursed on a fee-for-service basis. Data for services based on claims are thought to be more complete because the provider has a monetary incentive to submit information on these services to L.A. Care—the provider cannot be paid for rendering a service without submitting a claim. Notwithstanding the differing reimbursement structures, the completeness of data on preventive and ambulatory care received by Healthy Kids has improved substantially over time.

The researchers analyzing data from the first two years of the program found that in the second year, providers serving over 90 percent of the Healthy Kids population were submitting encounter data on ambulatory services (Sommers, Howell, and Hill 2007).

Regarding the amount of care received by Healthy Kids enrollees, the encounter data from the second year of the program suggested lower service use than shown by this evaluation's parent survey. For example, the encounter data showed that 61.7 percent of children ages 1 through 5 had an ambulatory visit in their first 12 months of enrollment, while parent reports in the household survey indicated that 76.4 percent of children in the same age group had a visit in just a six-month period. The researchers speculated that some enrollees may be receiving services that are billed to other programs in which the children have concurrent coverage (such as Emergency Medi-Cal), and thus are not reflected in the L.A. Care data.

Claims data for children in San Mateo County's Healthy Kids program—a similar program that provides coverage to children with family incomes up to 400 percent of the federal poverty level, regardless of immigration status—also indicated higher levels of utilization than encounter data for Los Angeles Healthy Kids. For example, in San Mateo's program, 84.1 percent of children ages 0 through 5 had an ambulatory visit during their first 12 months of enrollment. San Mateo Healthy Kids enrollees, however, are less likely to have concurrent coverage than those in Los Angeles County.

While the comparisons between data sources in this study provided some information on the completeness of the encounter data for Los Angeles Healthy Kids, the researchers concluded that differences in coverage patterns, billing practices, and quality of information systems made it impractical to compare administrative data from different programs. Instead, future studies using the encounter data to track Los Angeles Healthy Kids' service use over time would provide more information on the program's progress in helping children obtain health care.

This report follows up on that first study by presenting new encounter data from the third year of Healthy Kids. We compare these new data to the data from the second year of the program to see how service use has changed over time. Our analysis suggests that service use within Los Angeles Healthy Kids did improve.

METHODS

This report presents new data for Healthy Kids beneficiaries ages 0 through 5 who first enrolled during the third year of the program (or July 1, 2005, through June 30, 2006) and remained continuously enrolled for one year. Because of these restrictions, the number of children analyzed for our study is about half the total number of children in this age group who were enrolled during the time period of our analysis. Also, we present findings for younger children only, as our data reflect the period after the enrollment cap was instituted for children ages 6 through 18 in June 2005. Sample sizes by age group are presented in Exhibit 1.

We analyze use of the same five services previously studied; namely, preventive care, use of all ambulatory care (including preventive care), emergency department visits, hospital stays, and prescriptions filled. Because our analysis encompasses use of these services during each child's first year of enrollment, actual service dates vary by child and extend from July 1, 2005, through June 30, 2007.

Exhibit 1. Cohort Sample Sizes Children Enrolled July 2005 – June 2006	
Age	Number of children
<1 year	178
1 year	442
2–5 years	2,395
Total	3,015
<i>Note:</i> Age defined at time of enrollment. <i>Source:</i> LA Care Health Plan enrollment data.	

As with the first study of utilization in Healthy Kids, analysis of preventive and ambulatory care is based on encounter data submitted by providers to L.A. Care. Data on emergency department visits, hospital stays, and prescriptions come from claims, as these services are reimbursed on a fee-for-service basis.¹ For all five measures, information was extracted nearly one year after the end of the study period, allowing ample time for claims submissions to clear.

When children receive multiple treatments during one visit to a health care provider, these treatments are sometimes coded as separate encounters. To avoid overestimating utilization, we treat these scenarios so that all claims or services reported by a single provider for the same date are counted as one encounter. This unduplication was performed on a provider by provider basis, so that if a child visited an emergency room and an outpatient provider on the same day, we would include each of these visits in measures of use for those services.

¹ Throughout the remainder of this report, the term “encounter data” refers to both the claims data on emergency department visits, hospital use, and prescriptions filled, as well as to the “information only” data on preventive and ambulatory care services.

For comparison, we present these new data alongside the data for children ages 0 through 5 from this evaluation's prior study of Healthy Kids utilization. The two years of data were collected using the same methods and provide a view of how children's service use has changed over time. We also compare service use in the encounter data for Los Angeles Healthy Kids to service use for children ages 1 through 5 in the parent survey fielded as part of this evaluation. Data on new enrollees from the second wave of the survey provide the most appropriate benchmark group, as these children's enrollment dates of March through July 2005 overlap with the enrollment dates for the children represented in the most recent encounter data. The service use indicated in the survey data occurs entirely during the time the children were enrolled in Healthy Kids, but the reference period of 6 months is half that used in the encounter data.²

RESULTS

In this section we present our findings on preventive visits, ambulatory visits, hospital stays, emergency department visits, and prescription drug use. We find that, compared to children who enrolled in the second year of Los Angeles Healthy Kids, children who enrolled in the third year were more likely to have received primary care. Consistent with this increase in primary care use, emergency department visits and hospital stays remained at low levels across both years.

² More information on the survey methods appears in the "Parent Survey" section of chapter 2 in Howell, Dubai, and Palmer 2008.

Preventive visits

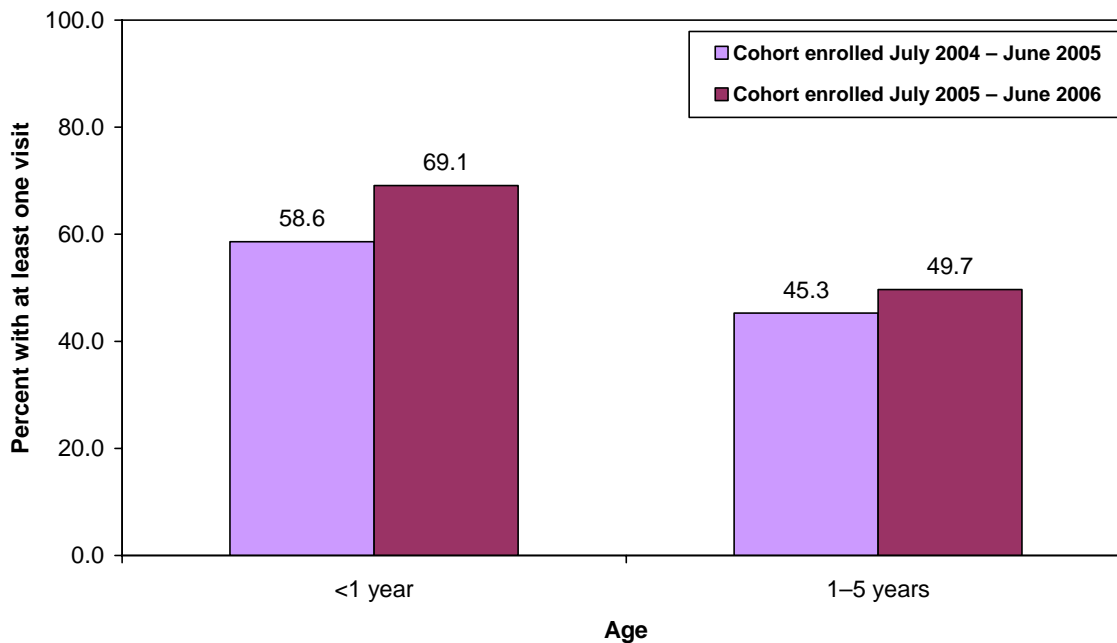
Half of children ages 0 through 5—50.8 percent—received at least one preventive visit, although not all children received the number of recommended visits for their age group. Infants had the highest rate of utilization at 69.1 percent. However, the proportion of children who had preventive care progressively falls for the older age groups (exhibit 2). Just under half of children ages 2 to 5 years received a preventive visit. These older children were also less likely to have multiple visits than infants, with 17.1 percent of children ages 2 to 5 receiving two or more preventive visits, compared to 52.8 percent of children less than one year old. The American Academy of Pediatrics (AAP) recommends progressively fewer preventive visits as children grow older, although many more than reported in the encounter data for Healthy Kids: seven visits for infants, three visits for one-year-olds, two visits for two-year-olds, and one visit per year thereafter (Committee on Practice and Ambulatory Medicine, Bright Futures Steering Committee 2007). Thus, most Los Angeles Healthy Kids enrollees did not receive the number of visits recommended by the AAP. For example, only 26.7 percent of enrollees who were one year old had more than one preventive visit, even though the AAP recommends three visits for this age group.

Exhibit 2. Percent of LA Healthy Kids Enrollees with Preventive Visits by Age Group and Number of Visits				
	Percentage of Enrollees with Visits in First Year Enrolled (July 2005 – June 2006)			
Number of visits	Age <1 year	1 year	2–5 years	Total
0	30.9	40.7	52.1	49.2
1	16.3	32.6	30.8	30.2
2+	52.8	26.7	17.1	20.6
At least 1 visit	69.1	59.3	47.9	50.8
N	178	442	2,395	3,015

Source: LA Care Health Plan encounter and enrollment data.

Over time, the encounter data show that more children are receiving preventive visits. From the second year of the program to the third, the proportion of infants with preventive visits increased over 10 percentage points, from 58.6 to 69.1 percent (exhibit 3).

Exhibit 3. Percent of LA Healthy Kids Enrollees with At Least One Preventive Visit in First Year of Enrollment by Age Group and Year Enrolled



Source: LA Care Health Plan encounter and enrollment data.

Ambulatory visits

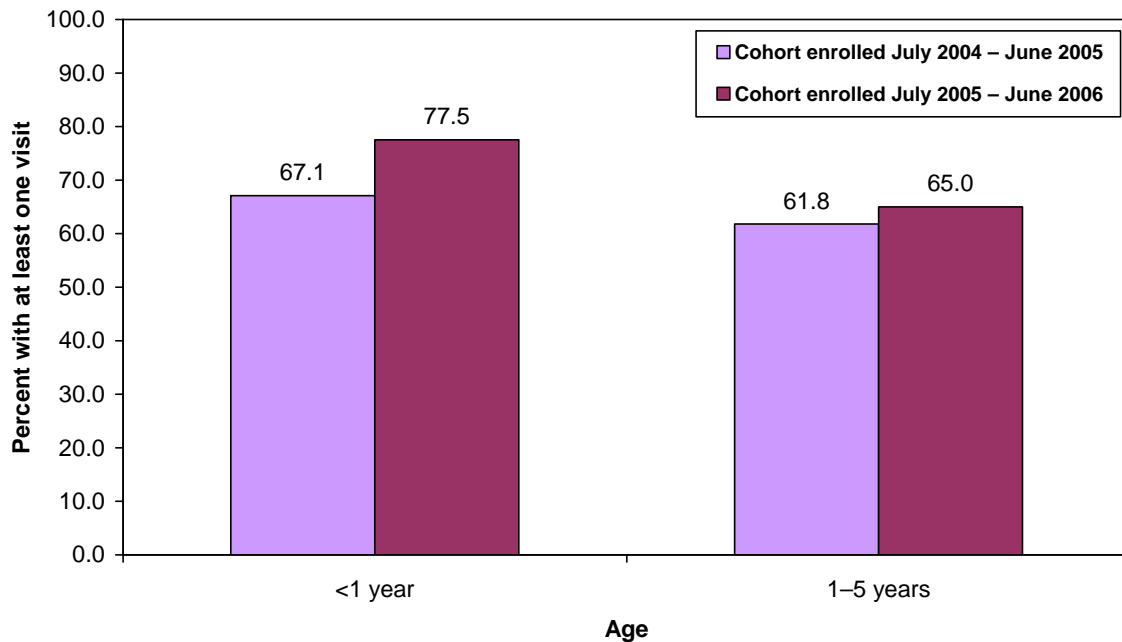
Data on ambulatory visits include both preventive care and acute care visits to a primary care physician or specialist. Because the broader measure of ambulatory care visits is less dependent on the provider’s coding of the content of care than the more specific measure of preventive visits, ambulatory care visits may be a more accurate indicator of utilization in the LA Healthy Kids program. During the third year of Healthy Kids, 65.7 percent of children ages 0 through 5 had at least one ambulatory care visit. As with preventive visits, the youngest children were most likely to have more than one visit. Just over three quarters of children less than one year old had an ambulatory visit paid for by Healthy Kids, as did roughly two thirds of one-year-olds and children ages 2 to 5 years (exhibit 4).

Exhibit 4. Percent of LA Healthy Kids Enrollees with Ambulatory Visits by Age Group and Number of Visits				
	Percentage of Enrollees with Visits in First Year Enrolled (July 2005 – June 2006)			
Number of visits	Age <1 year	1 year	2–5 years	Total
0	22.5	30.5	35.8	34.3
1	8.4	15.4	17.5	16.6
2+	69.1	54.1	46.7	49.1
At least 1 visit	77.5	69.5	64.2	65.7
N	178	442	2,395	3,015

Source: LA Care Health Plan encounter and enrollment data.

Like preventive visits, receipt of ambulatory care visits by LA Healthy Kids also increased over time (exhibit 5). While data for children ages 1 through 5 show only a three percentage point increase, the proportion of infants receiving ambulatory care increased by 10 percentage points—from 67.1 to 77.5 percent.

Exhibit 5. Percent of LA Healthy Kids Enrollees with At Least One Ambulatory Visit in First Year of Enrollment by Age Group and Year Enrolled



Source: LA Care Health Plan encounter and enrollment data.

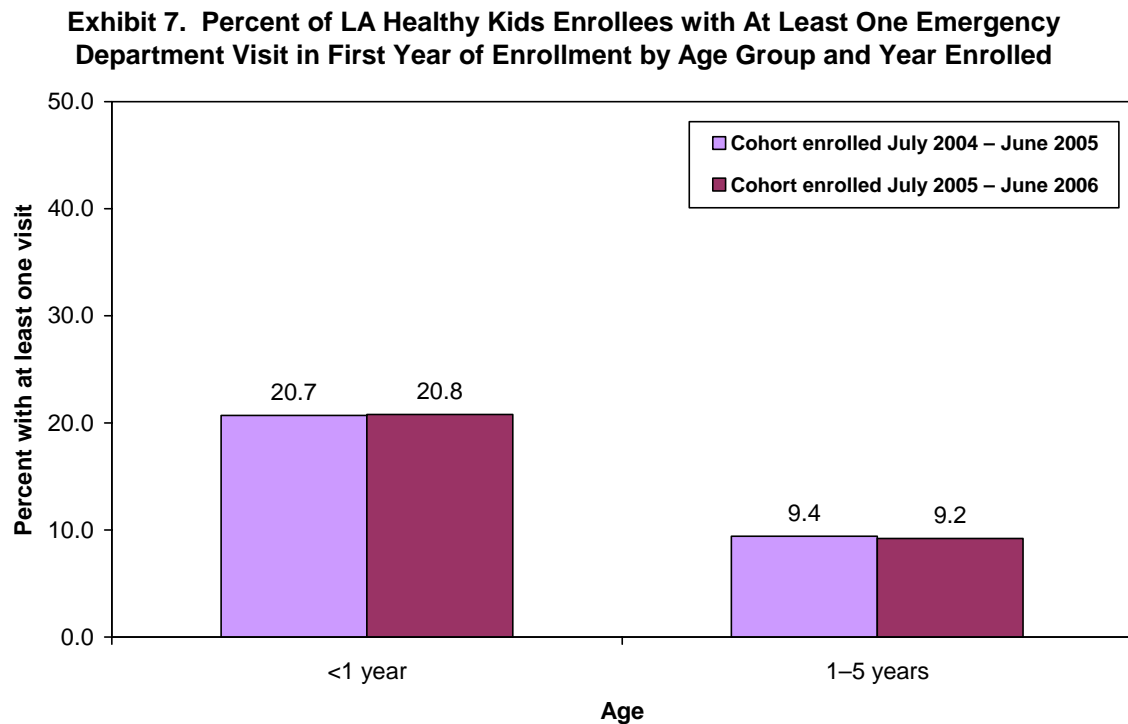
Emergency department visits

We find that 9.9 percent of children ages 0 through 5 had an emergency department visit, although rates for specific age groups varied. One fifth of children less than one year old had at least one visit to the emergency room. However, under 10 percent of children ages 2 to 5 years had such a visit (exhibit 6). Multiple emergency department visits were also much less common among older children. Of enrollees ages 2 to 5, only a tiny share (2.1 percent) had multiple emergency department visits, compared to 11.8 percent of children

less than one year old. Younger children are much more likely to have the kinds of accidents and acute symptoms that require emergency care.

Exhibit 6. Percent of LA Healthy Kids Enrollees with Emergency Department Visits by Age Group and Number of Visits				
	Percentage of Enrollees with Visits in First Year Enrolled (July 2005 – June 2006)			
Number of visits	Age <1 year	1 year	2–5 years	Total
0	79.2	85.3	91.8	90.1
1	9.0	10.6	6.1	6.9
2+	11.8	4.1	2.1	3.0
At least 1 visit	20.8	14.7	8.2	9.9
N	178	442	2,395	3,015

Source: LA Care Health Plan claims and enrollment data.



Source: LA Care Health Plan claims and enrollment data.

The proportion of LA Healthy Kids with emergency department visits remained roughly constant from the second year to the third year (Exhibit 7). For infants, the percentage of enrollees with at least one visit increased only one-tenth of a percentage point (from 20.7 to 20.8 percent). Among children ages 1 through 5, the percentage with emergency department visits decreased by two-tenths of a percentage point (from 9.4 to 9.2 percent).

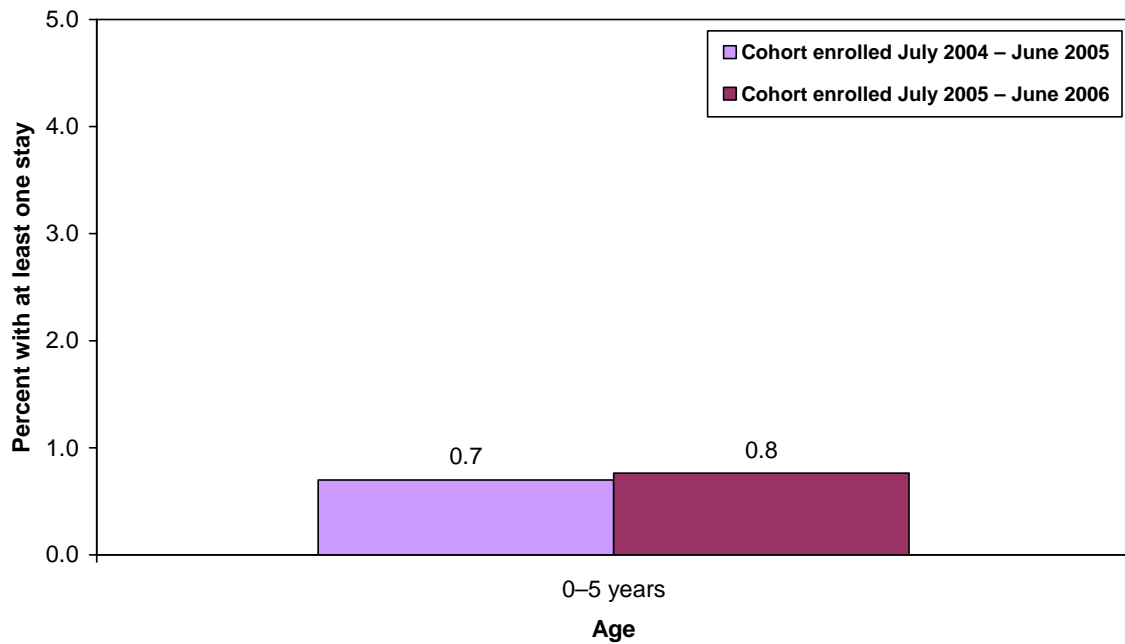
Hospital stays

Although a tiny fraction of children incur hospital stays, these stays contribute a large part of the total costs of any public insurance program. Among children ages 0 through 5, 0.8 percent had at least one hospitalization. Approximately 2 percent of infants and one year olds had a hospital stay, though hospital stays were even more rare for ages 2 to 5 years (exhibit 8). Less than one percent of these children were hospitalized. It was also extremely rare for children to require more than one hospitalization during their first year enrolled.

Exhibit 8. Percent of LA Healthy Kids Enrollees with Hospital Stays by Age Group and Number of Visits				
	Percentage of Enrollees with Visits in First Year Enrolled (July 2005 – June 2006)			
Number of visits	Age <1 year	1 year	2–5 years	Total
0	97.8	98.0	99.6	99.2
1	2.2	1.8	0.4	0.7
2+	0.0	0.2	0.0	0.0
At least 1 visit	2.2	2.0	0.4	0.8
N	178	442	2,395	3,015
<i>Source:</i> LA Care Health Plan claims and enrollment data.				

Over time, LA Healthy Kids' hospitalization remained almost constant, increasing just 0.1 percent from the second year to the third year (exhibit 9). These low rates of hospitalization could be a result of the increased access to primary care that enrollees receive.

Exhibit 9. Percent of LA Healthy Kids Enrollees with At Least One Hospital Stay in First Year of Enrollment by Year Enrolled



Source: LA Care Health Plan claims and enrollment data.

Prescription drugs

Prescriptions filled can be an indicator not only of children's access to drugs to treat their illnesses, but also of their access to the physician visit necessary to get a prescription.

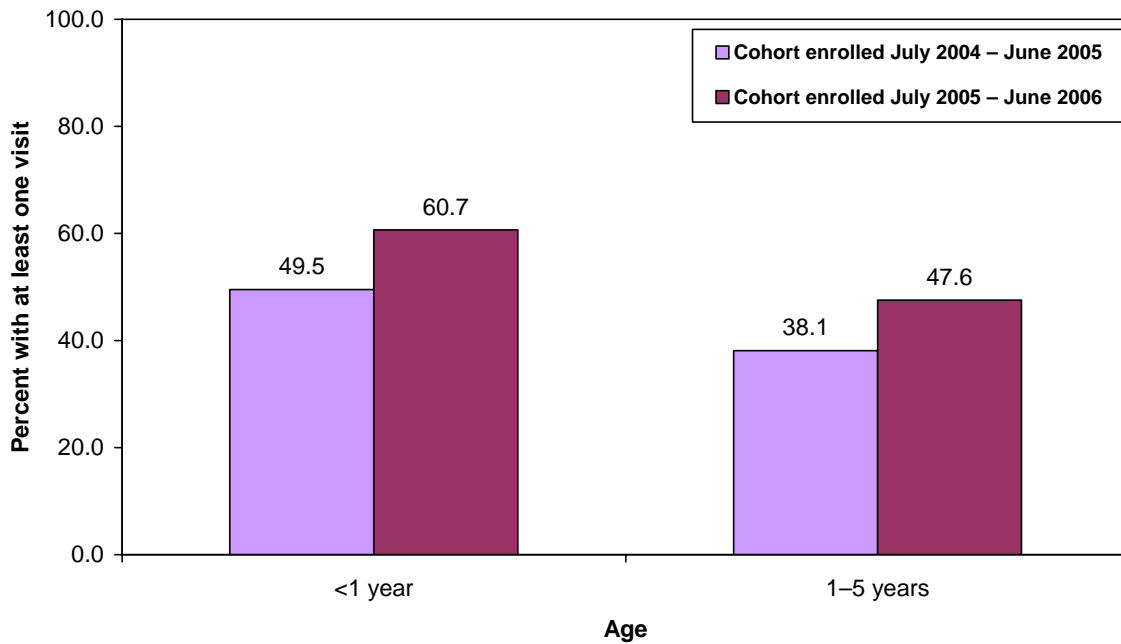
Approximately half of LA Healthy Kids enrolling in the third year of the program received prescription drugs (exhibit 10). Over half of infants and one-year-olds and 46.8 percent of children ages 2 to 5 had a prescription filled. Further, most children receiving prescription drugs had more than one prescription filled (48.9 percent of infants, 37.6 percent of one-year-olds, and 34.8 percent of children ages 2 to 5).

Exhibit 10. Percent of LA Healthy Kids Enrollees with Prescriptions Filled by Age Group and Number of Prescriptions				
	Percentage of Enrollees with Visits in First Year Enrolled (July 2005 – June 2006)			
Number of prescriptions	Age <1 year	1 year	2–5 years	Total
0	39.3	48.6	53.2	51.7
1	11.8	13.8	12.0	12.3
2+	48.9	37.6	34.8	36.1
At least 1 Rx	60.7	51.4	46.8	48.3
N	178	442	2,395	3,015

Source: LA Care Health Plan claims and enrollment data.

The percentage of LA Healthy Kids enrollees with at least one prescription filled increased substantially from the second year of the program to the third (exhibit 11). Among infants who enrolled in the third year of the program, 60.7 percent had a prescription filled—11.2 percentage points higher than the proportion of second-year enrollees. For children ages 1 to 5, 38.1 percent of second-year enrollees had a prescription in their first year on the program, increasing to 47.6 percent of third-year enrollees.

Exhibit 11. Percent of LA Healthy Kids Enrollees with At Least One Prescription Filled in First Year of Enrollment by Age Group and Year Enrolled



Source: LA Care Health Plan claims and enrollment data.

SUMMARY AND IMPLICATIONS

Our findings suggest that, as the Healthy Kids program matures, it is increasing children's access to critical primary care and decreasing their need for acute care.

Children who enrolled in the Healthy Kids program during its third year were more likely to receive preventive care, ambulatory care, and prescription drugs, compared to children who enrolled during the program's second year. The proportion of children with emergency department visits or hospital visits remained low and nearly constant across both years. The low levels of utilization of these services suggest that enrollees may have infrequent needs for urgent care as a result of receiving primary care services through the program. Impact estimates from the parent survey are consistent with this theory, as new enrollees had a statistically significant decline in emergency department use over a one-year period (Howell, Dubay, and Palmer 2008).

Despite these improvements, levels of preventive care use are still low, indicating that not all children are receiving care recommended by the AAP. Almost a third of children less than 1 year old did not receive any preventive care, even though the AAP recommends multiple visits for this age group. For all children, the AAP recommends at least one preventive visit per year, and yet only half of the children studied received preventive care during their first year enrolled in Healthy Kids. This finding shows a key area needing attention by policymakers as the program continues to develop.

At the same time, low rates of service use in the encounter data may partially be the result of underreporting. Comparison between estimates of utilization in the encounter data and the survey data supports this conclusion. Overall, encounter data indicate lower rates of utilization for preventive visits, ambulatory visits, emergency department visits,

and hospital stays compared to results from the parent survey. For example, 63.2 percent of parents surveyed reported that their child ages 1 to 5 had a preventive visit in the six months prior to the survey. In the encounter data, only 49.7 percent of children in this age group had a preventive visit during a full 12 months of enrollment. The difference between reference periods for these two estimates suggests that the encounter data estimate may be especially low. While differences in the encounter data and survey data estimates for the other three measures of utilization were not as striking, they nonetheless suggest that actual rates of service use may be higher than observed in the encounter data.

Several factors may contribute to the underreporting of Healthy Kids service use in the encounter data. One area for inquiry might be improving the integration of multiple programs covering children in LA County. Because of the substantial discrepancies between estimates of service use in the encounter data and survey data, we speculate that some Healthy Kids enrollees may be receiving services that are being billed to other programs in which the children may have concurrent coverage. For example, some preventive care visits may be charged to the Child Health and Disability Prevention program, in particular the “CHDP Gateway.” Similarly, it is possible that some emergency department visits and hospital stays may be billed to Emergency Medi-Cal. In both cases, such services would not be captured by encounter data for the Healthy Kids program. Results of the evaluation’s parent survey showed that nearly 60 percent of new enrollees surveyed in 2006 had coverage in Emergency Medi-Cal just prior to enrolling in Healthy Kids. Given that Emergency Medi-Cal is guaranteed for 12 months, parents

could have used their children's Emergency Medi-Cal card after enrollment in Healthy Kids. In fact, parents of 10 percent of enrollees indicated they had done this.³

Additional factors suggest that preventive and ambulatory visits may be more prevalent than indicated by the LA Healthy Kids encounter data. The encounter data estimate for receipt of preventive visits may be low if providers do not always code the complete content of care in the data they provide to L.A. Care. For example, if a child receives some preventive care during a sick visit, and the provider reports only the care for the sick visit, the visit would be captured by the encounter data estimate of ambulatory care use but not the estimate of preventive care. Comparison of the survey data and encounter data estimates support this explanation, as the discrepancy between these two estimates was smaller for ambulatory visits than for preventive visits.

Additionally, the encounter data on preventive and ambulatory care may not yet be complete. Though analysis for the first report on utilization by LA Healthy Kids showed a high reporting rate, comparisons between our measures and across counties suggest a portion of ambulatory visits could be missing from the encounter data. Data from the San Mateo Healthy Kids program and its evaluation show a much smaller discrepancy between administrative data and survey data estimates of service use, compared to the data from LA's program.⁴ It may be that the administrative data for San Mateo's program are more complete, because ambulatory care is provided on a fee-for-service basis in that program, resulting in a higher reporting rate. Given these concerns regarding data completeness, an increase in reporting of ambulatory care visits in the encounter data for LA Healthy Kids could be at least partly responsible for the apparent increase in

³ Unpublished tabulations of LA Healthy Kids survey data from the second wave fielded in 2006.

⁴ Unpublished tabulations of the San Mateo Healthy Kids parent survey fielded in 2006 and plan data for children who first enrolled in 2005 (the third year of the program) and stayed enrolled for one year.

preventive and ambulatory care use observed over the two years of encounter data in this report.

While some concerns remain regarding the completeness of encounter data for preventive and ambulatory visits, these administrative data continue to provide a valuable source of information on the program's efforts to increase access to care for low-income, primarily immigrant children. It may be beneficial for First 5 LA and L.A. Care to continue monitoring the completeness of the data and to analyze utilization for cohorts of new enrollees using the methods developed for the evaluation. Because the encounter data are produced in the course of the program's normal activities, they could provide an inexpensive means to monitor utilization in LA Healthy Kids after the end of the evaluation contract.

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