



# Medi-Cal Access to Care Quarterly Monitoring Report #7 2013 Quarter 2



## Service Utilization

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Research and Analytic Studies Division  
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## Utilization of Select Services by Medi-Cal FFS Beneficiaries

### Introduction

Studying trends in service utilization provides DHCS with information regarding Medi-Cal beneficiaries' receipt of services, whether those services or service settings were appropriate, and may help identify areas where health care access gaps exist.

Many factors affect health care utilization and the type of health care used by a given population. One of those factors is adequate access to care. Limitations on the scope of benefits provided under a health plan, cost-sharing requirements, and gaps in health plan coverage may all contribute to underutilization of health care services. Other factors that influence health care utilization include the prevalence of chronic disease in the population, provider practice patterns, recommended medical practice guidelines for specific subpopulations (e.g., cancer screenings for women, immunization schedules, and developmental assessments for children), and cultural acceptance of medical practices among the population.

Age is also associated with health care utilization patterns. For example, advanced age increases functional limitations and the prevalence of chronic conditions. The elderly have higher utilization rates for inpatient and long-term care services, many medical procedures, and are prescribed more medications, such as glucose-lowering or antihypertensive drugs. In general, children have lower health care utilization rates than the elderly. However, infants born at low birthweight (<2,500 grams, or 5.5 lbs), and children with chronic health conditions and disabilities have both higher rates of health care utilization and use more costly services than their counterparts.

Children in foster care are particularly vulnerable to physical, emotional, or developmental problems stemming from abuse or neglect, substance abuse by their mothers during pregnancy, or their own substance abuse issues. A majority of these children have at least one physical or emotional health problem, and as many as 25% suffer from three or more chronic health conditions. Consequently, examining health care utilization patterns should be undertaken with specific thought given to the characteristics of a population.

### Highlights

Although many children in the Blind/Disabled aid code category transitioned into managed care during 2011, those that remained in the Medi-Cal FFS delivery system continue to place a disproportionate demand on services of all kinds, most likely due to their complex medical needs.

As beneficiary participation continues to shift away from the FFS delivery system and into managed care, many service categories experienced a noticeable decline in user counts that made the data unsuitable for analysis.

Ongoing declines in statewide birthrates are reflected in lower service utilization of certain service categories such as Hospital Inpatient and Physician/Clinic services.

## Methods

In this report, DHCS examines utilization trends for ten different provider types:

1. Physician/Clinics
2. Non-Emergency Transportation
3. Emergency Transportation
4. Home Health
5. Hospital Inpatient
6. Hospital Outpatient
7. Nursing Facility
8. Pharmacy Services
9. Other
10. Radiology

Service utilization was measured in various ways, depending upon the provider type. The unit of measure for Physician/Clinic, Home Health, Hospital Outpatient, and Radiology services was the number of unique visits or patient encounters. The unit of measure for Pharmacy services was the unit counts of prescriptions. Individual encounters were used as the measure for both Emergency and Non-Emergency Transportation services, while the length of stay as measured in days was the unit of measure for Hospital Inpatient and Nursing Facility service utilization. Service rates were calculated per 1,000 member months for each of these service types and for beneficiaries eligible for Medi-Cal only and participating in FFS. Beneficiaries were classified into broad age groupings (children age 0–20 vs. adults age 21+) and aid categories as a proxy for health and disability status, factors which are known to influence utilization patterns.

DHCS plotted monthly service utilization rates per 1,000 member months for the study period of July 2012–June 2013. DHCS used Shewhart control charts to identify whether health care service utilization rates changed over this time period and compared to low and high utilization thresholds calculated from the baseline period January 1, 2007–December 31, 2009.<sup>1</sup> These thresholds or control limits have been set at three standard deviations from the mean, and define the natural range of variability expected from the plotted measures. Upper and lower threshold levels are represented in each control chart, with UCL representing upper control limits, LCL representing lower control limits, and  $\bar{x}$  representing the mean. Comparing the plotted measures to the mean and upper and lower control limits can lead to inferences regarding whether the data are within an expected or predictable range, or whether there are marked changes in the data over time. Potential marked changes include:

- Eight or more consecutive points all either above or below the mean line indicate a shift in utilization patterns.

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<sup>1</sup> See various health care service utilization baseline analyses on the DHCS website at [www.dhcs.ca.gov/pages/RateReductionInformation.aspx](http://www.dhcs.ca.gov/pages/RateReductionInformation.aspx)

- Six or more consecutive points all going in the same direction (either up or down) indicate a trend.
- Two or more consecutive points plotted outside of these established limits will provide a signal indicating that health care utilization has deviated markedly from the expected range.

Changes in enrollment and provider capacity are important factors influencing health care utilization trends. When evaluating utilization trends, some basic paradigms should be considered. Under the first paradigm, if enrollment increases within a subpopulation and the network of health care providers cannot absorb the increased demand, beneficiaries may experience difficulties accessing health care services.<sup>2</sup> In that case, one would expect to detect a decline in service utilization rates as beneficiaries forego health care services.

Under the second paradigm, if participation increases and the network of providers is able to absorb additional demand, then one would expect service utilization rates to remain constant, increase, or to experience no significant decreases.<sup>3</sup>

Under the third paradigm, if participation decreases within a subpopulation and those that remain in the health care system have a significantly different case mix than the initial population, one would expect marked changes in health care utilization. For example, if the subpopulation that remains in the health care system has significantly greater medical needs than the initial population, one would expect service utilization rates to increase. However, if the subpopulation that remains is healthier, one would expect service utilization rates to decrease. Certain shifts in populations from one health care system to another, such as FFS to managed care, might result in a significant change in the mix of patients. This in turn may result in significant changes in utilization trends.

The sections that follow present health care utilization trends for each of the ten service categories studied. Each section is introduced with a discussion that presents background material related to each unique service category. This background provides the reader with some introductory information regarding the types of services associated with the category, historical use, and types of providers, where applicable, contained within the service category. The reader should note that the background sections present service utilization information that relates to 2010 and includes all FFS utilization, regardless of health care system participation in FFS or managed care. In addition, utilization statistics associated with the background sections include utilization associated with dual eligibles. Following the background information, utilization trends for each service category are presented. The utilization trends display statistics associated with beneficiaries eligible for Medi-Cal only and participating in Medi-Cal's FFS system.

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<sup>2</sup> Assumes populations who enroll exhibit similar health needs as those who were enrolled prior. If the newly enrolled individuals are a much healthier population with low health service utilization, utilization rates may actually decline. This decline may be driven more by the health characteristics than access difficulties.

<sup>3</sup> Assumes populations who enroll exhibit similar health needs as those who were enrolled prior.

## Physician/Clinic Services

### Background

It is important for any health care delivery system to monitor trends in physician service utilization among its patients, because physicians are the first point of contact for most health care needs. Once contact is made in a physician's office, numerous other services may be accessed, such as prescription drugs, lab services, and referrals to specialty care. Receiving regular ambulatory health care visits has been widely recognized as a fundamental measure of successful health care access.

In the Medi-Cal program, beneficiaries may see a physician in solo practice, physicians affiliated with a physician group, or those affiliated with a Federally Qualified Health Clinic (FQHC), Rural Health Clinic (RHC), or some other clinical setting. A large proportion of Medi-Cal beneficiaries with paid claims in the FFS system (>5 million) receive at least one physician or clinic visit throughout the year.

FQHCs are nonprofit, community-based organizations or public entities that offer primary and preventive health care and related social services to the medically underserved and uninsured population, regardless of their ability to pay. FQHCs receive funding under the Public Health Service Act, Section 330, which is determined by the U.S. Department of Health and Human Services.

RHCs are organized outpatient clinics or hospital outpatient departments located in rural shortage areas as designated by the U.S. Department of Health and Human Services. To qualify as an RHC, a clinic must be located in a non-urbanized area or area currently designated by the Health Resources and Services Agency (HRSA) as a federally designated or certified shortage area.

Indian Health Services (IHS) Clinics are those authorized by the U.S. Secretary of Health, Education and Welfare, to contract services to tribal organizations. Services available under the IHS provider type are more extensive than under the FQHC or RHC provider type, and include the following services: physician and physician assistant; nurse practitioner and nurse midwife; visiting nurse; clinical psychology and social work; comprehensive perinatal care; Early Periodic Screening, Diagnosis and Treatment (EPSDT); ambulatory; and optometry.

Other clinics in the Medi-Cal program include: Free Clinics; Community Clinics; Surgical Clinics; Clinics Exempt from Licensure; Rehabilitation Clinics; County Clinics not associated with a hospital; and Alternative Birthing Centers. All of these various clinics are included in this analysis.

In 2010, many users of Physician/Clinic services were either seen in physician group practices (2,413,502, or 46%) or in an FQHC or RHC (2,040,980, or 38.8%). Nearly half of all Physician/Clinic services are provided to children under age 20, and many are eligible for

benefits under the Families aid category. Most users of these services (75%) have on average one to five visits annually.

## Trend Analysis

### Children

Among children age 0 to 20 in the Medi-Cal FFS program, monthly Physician/Clinic services utilization rates ranged from 155.3 to 634.5 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

The Physician/Clinic services utilization rates continued to be higher among children in the Blind/Disabled aid category, most likely due to their inherent complex medical needs. The utilization rates for children in the Other and Undocumented aid categories mostly fell below the expected baseline ranges observed in the baseline period of 2007 to 2009. Children in all of the analyzed aid categories continued to display predominantly lower than average utilization rates during the study period. These lower utilization rates coincide with the decrease in participation in the Medi-Cal FFS delivery system among beneficiaries in this age group over the same time period.

Both children and adult beneficiaries in the Blind/Disabled aid category place a greater demand on Physician/Clinic services than most other beneficiary subgroups.

### Adults

The monthly Physician/Clinic services utilization rates for adults age 21 and older ranged from 171.8 to 1,359.5 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Similar to the Physician/Clinic services utilization trends identified in the previous quarterly access reports, adults in the Blind/Disabled and Other aid categories again exhibited noticeably higher utilization rates than adult beneficiaries in other aid subgroups. The utilization trends among most adults, with exception to those in the Families and Undocumented aid categories, primarily fell within the expected ranges. Adults in all of the analyzed aid categories experienced a noticeable downward trend in Physician/Clinic services utilization during the last two quarters of 2012. Additionally, while experiencing increased utilization in the first quarter of 2013, adults in every aid category continued to exhibit below average utilization during this time period. This lower utilization of Physician/Clinic Services among some adult subpopulations coincides with the decline in the number of beneficiaries participating in the Medi-Cal FFS delivery system during the same timeframe.

Adults enrolled in the Families and Undocumented aid categories had lower than average use of physician/clinic services, a trend that is most likely due to continued declines in the state birth rates.

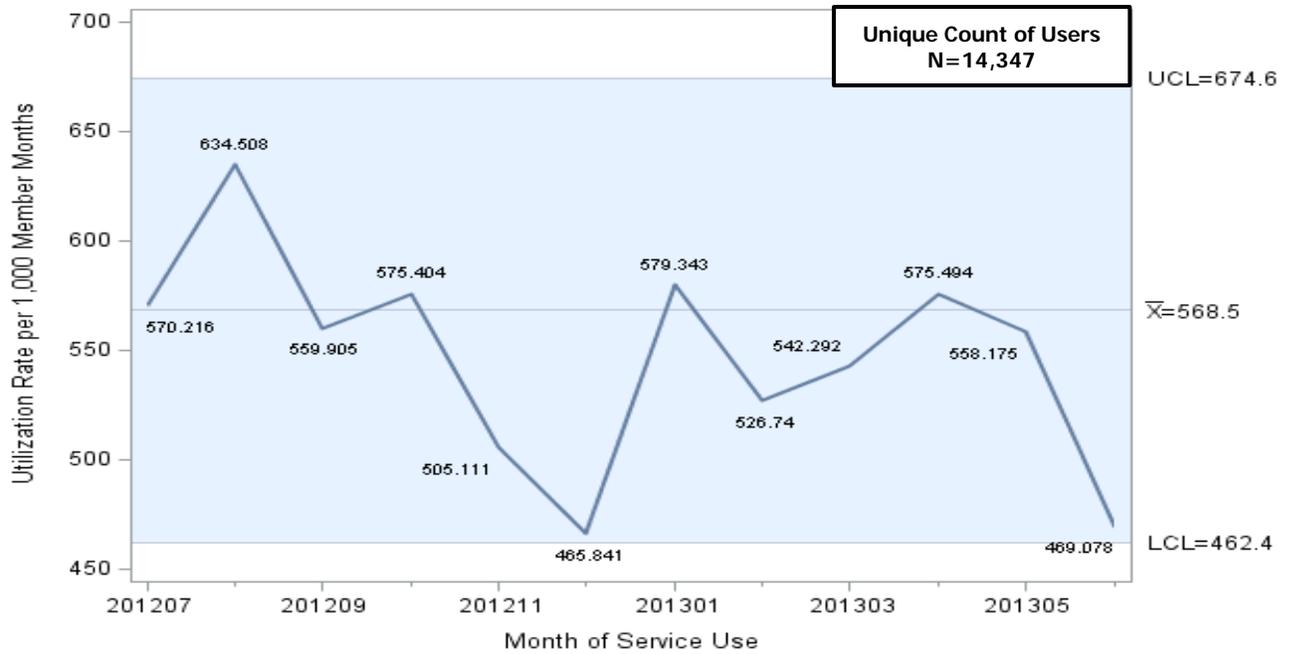
Adults in the Families and Undocumented aid categories continued to exhibit below average and lower than expected use of Physician/Clinic services throughout the study period, which may be explained in part by the continued declines in national and state birthrates. For instance, national birthrates experienced its sharpest decline in over 30 years from 2007 through 2010, while preliminary National Vital Statistics' data indicates a continued decline in the birthrate for 2011 and 2012. Given that many beneficiaries in the Undocumented aid category become

eligible for services because they are pregnant, it can be hypothesized that the demand for Physician/Clinic services, particularly as it pertains to prenatal care and delivery, has decreased due to the decline in birthrates among this subgroup. A definitive explanation for these service use patterns can only be reached by undertaking further analysis.

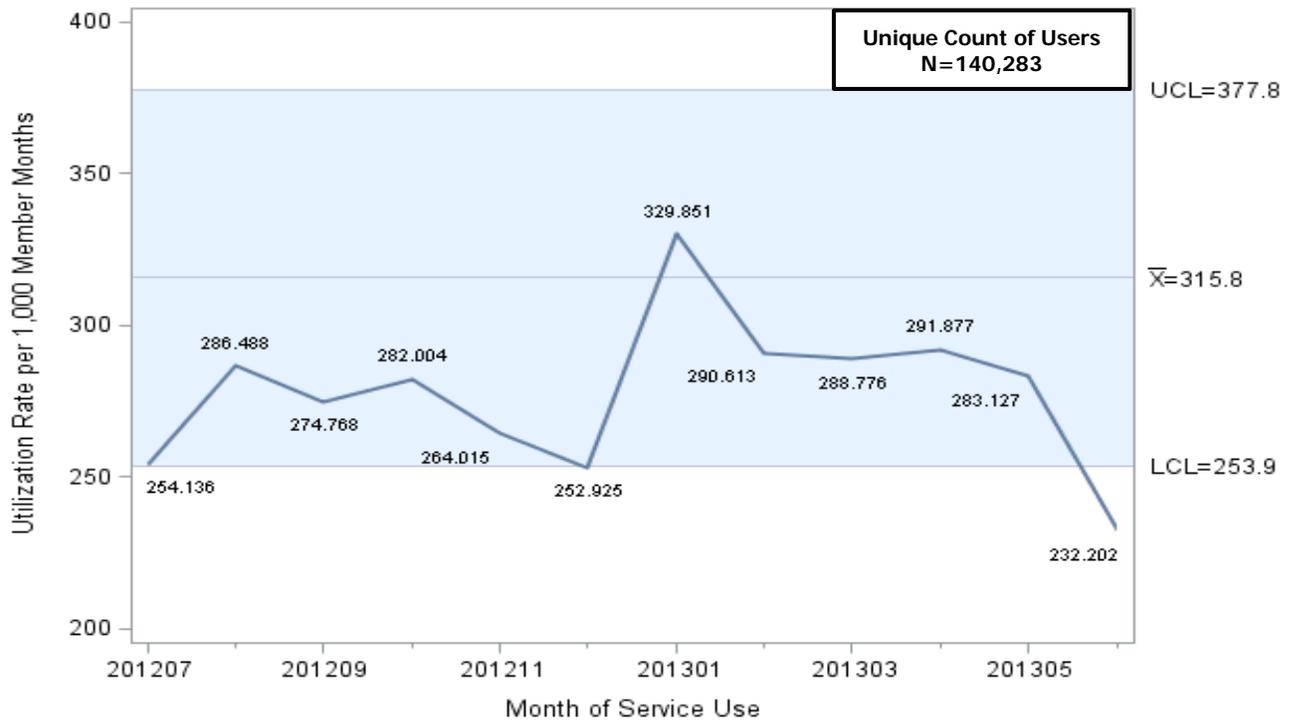
The following figures SU-1 to SU-10 represent the control chart analysis for physician/clinic visits by children and adults from the third quarter of 2012 to the second quarter of 2013.

### Trends of Monthly Physician/Clinic Services Utilization Rates among Children, July 2012–June 2013

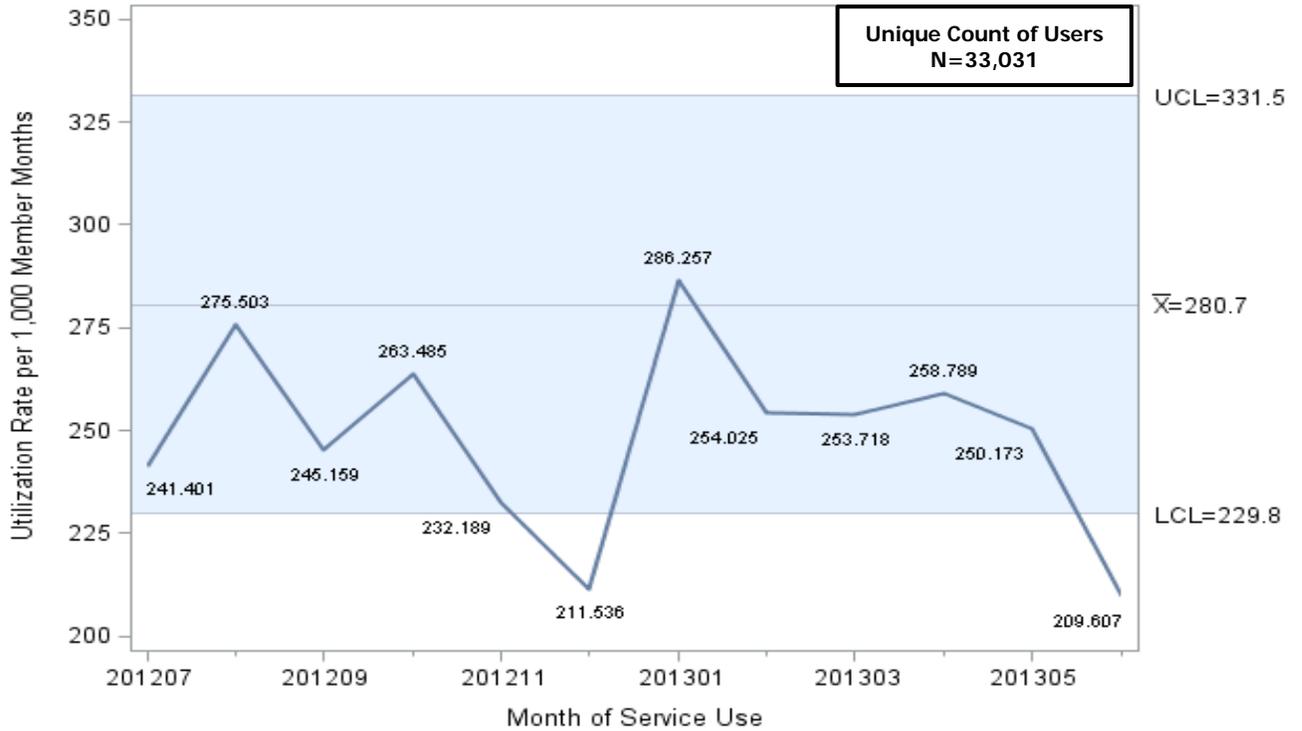
**Figure SU-1. Physician/Clinic Utilization Rates among Children (Age 0-20) in the Blind/Disabled Aid Category, July 2012–June 2013**



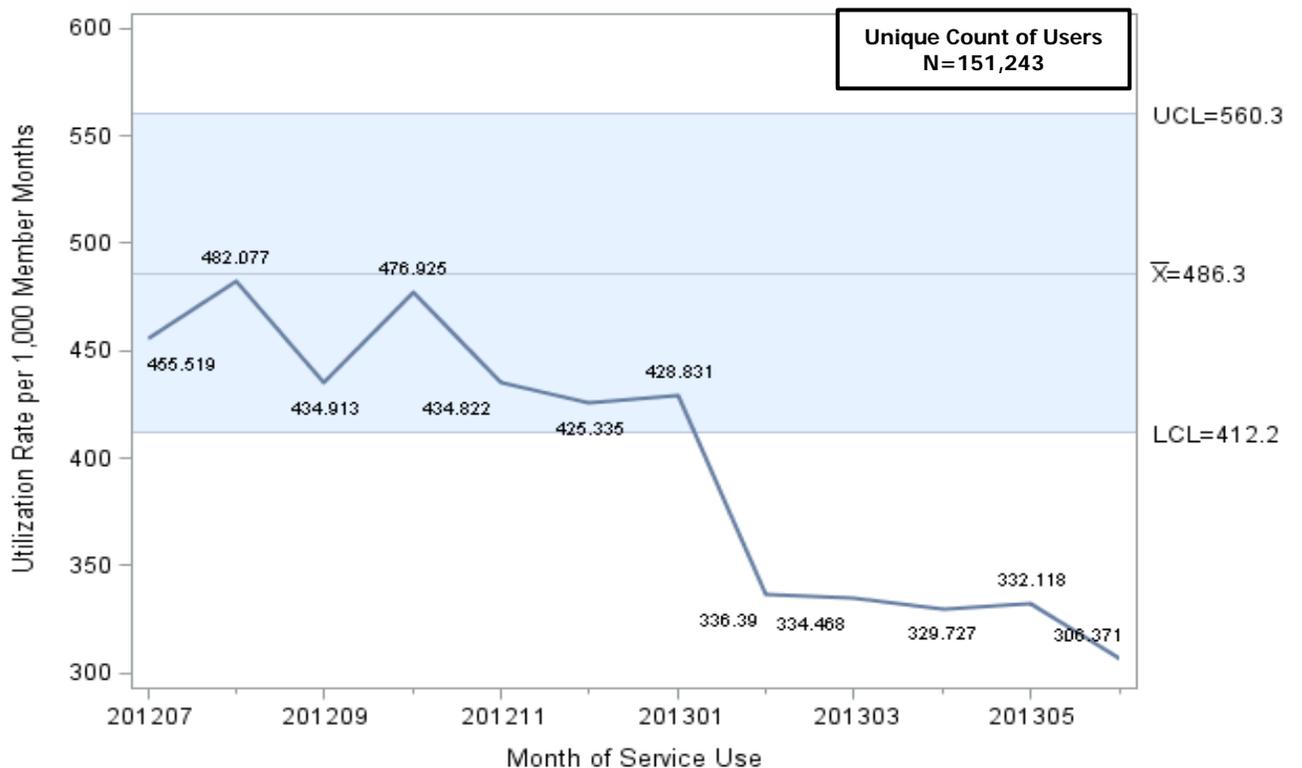
**Figure SU-2. Physician/Clinic Utilization Rates among Children (Age 0-20) in the Families Aid Category, July 2012–June 2013**



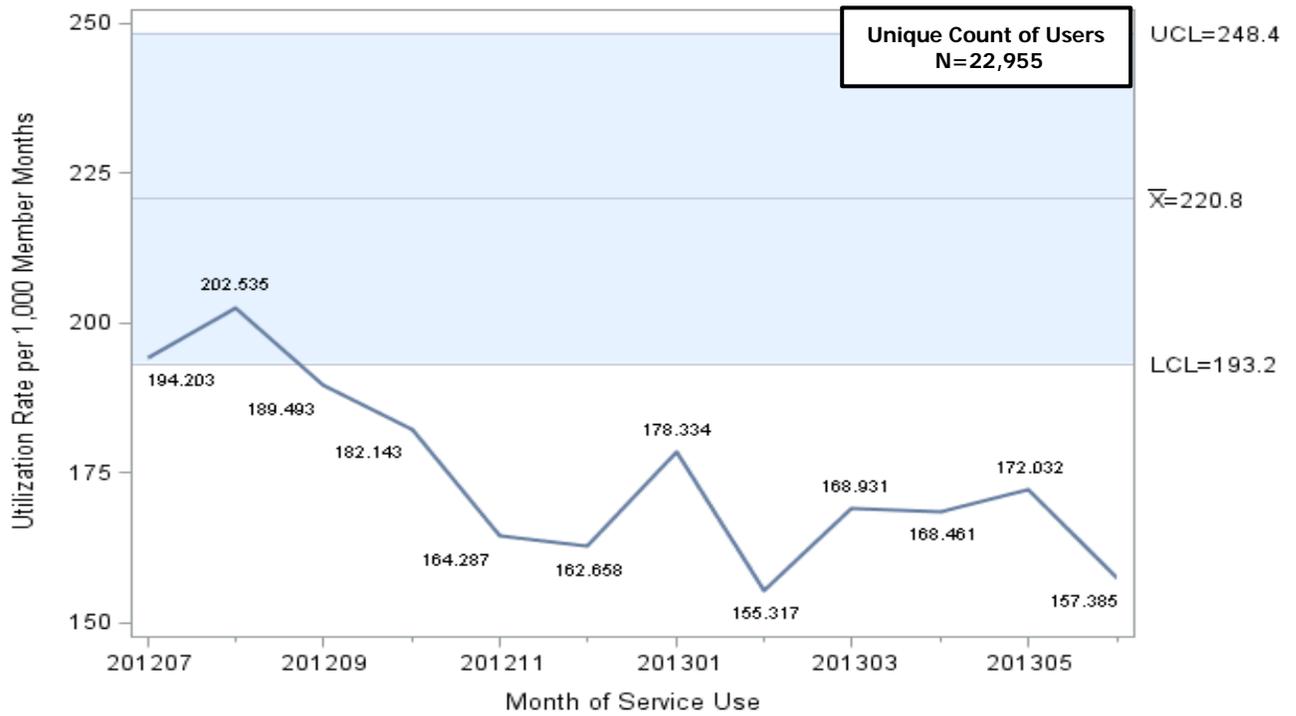
**Figure SU-3. Physician/Clinic Utilization Rates among Children (Age 0-20) in the Foster Care Aid Category, July 2012–June 2013**



**Figure SU-4. Physician/Clinic Utilization Rates among Children (Age 0-20) in the Other Aid Category, July 2012–June 2013**



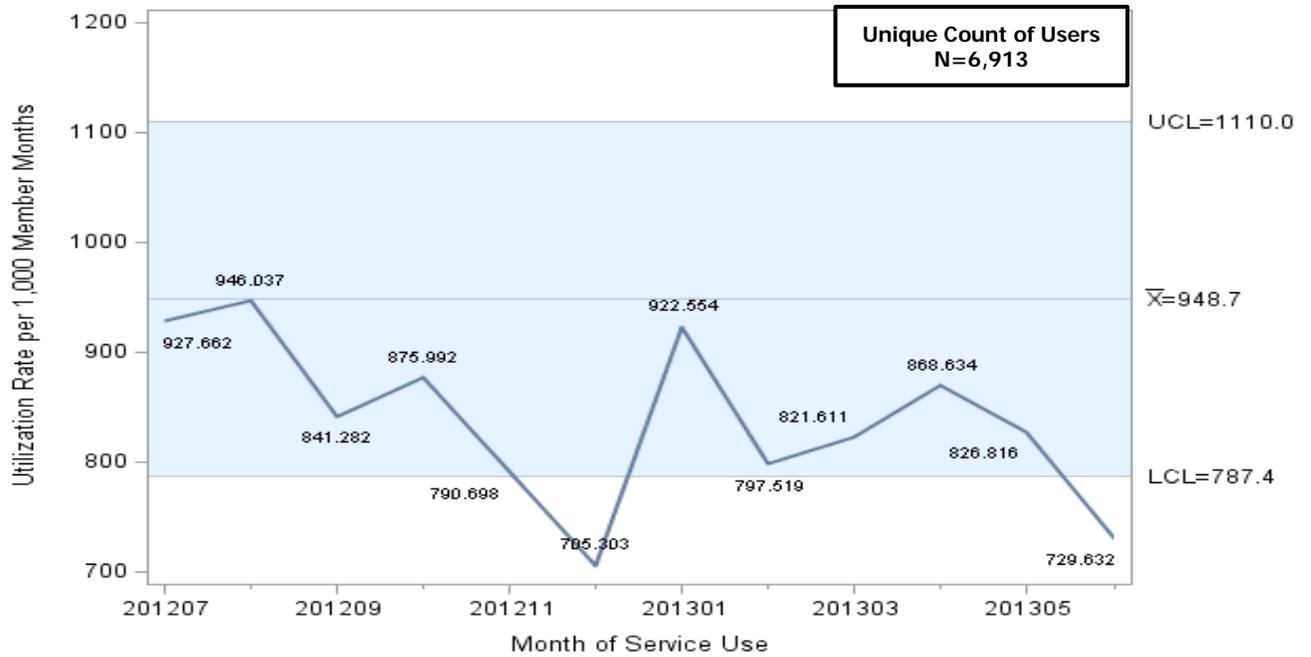
**Figure SU-5. Physician/Clinic Utilization Rates among Children (Age 0-20) in the Undocumented Aid Category, July 2012–June 2013**



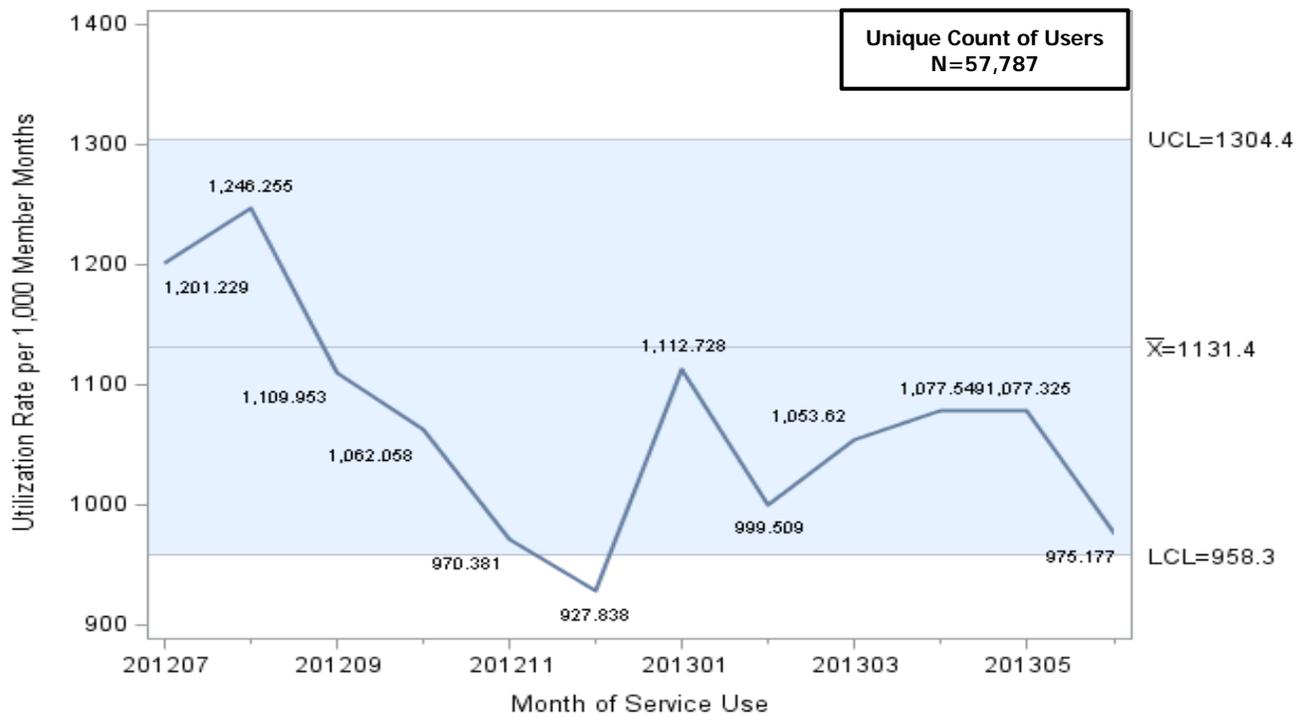
Source: Data for figures SU-1 to SU-5 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

### Trends of Monthly Physician/Clinic Services Utilization Rates among Adults, July 2012–June 2013

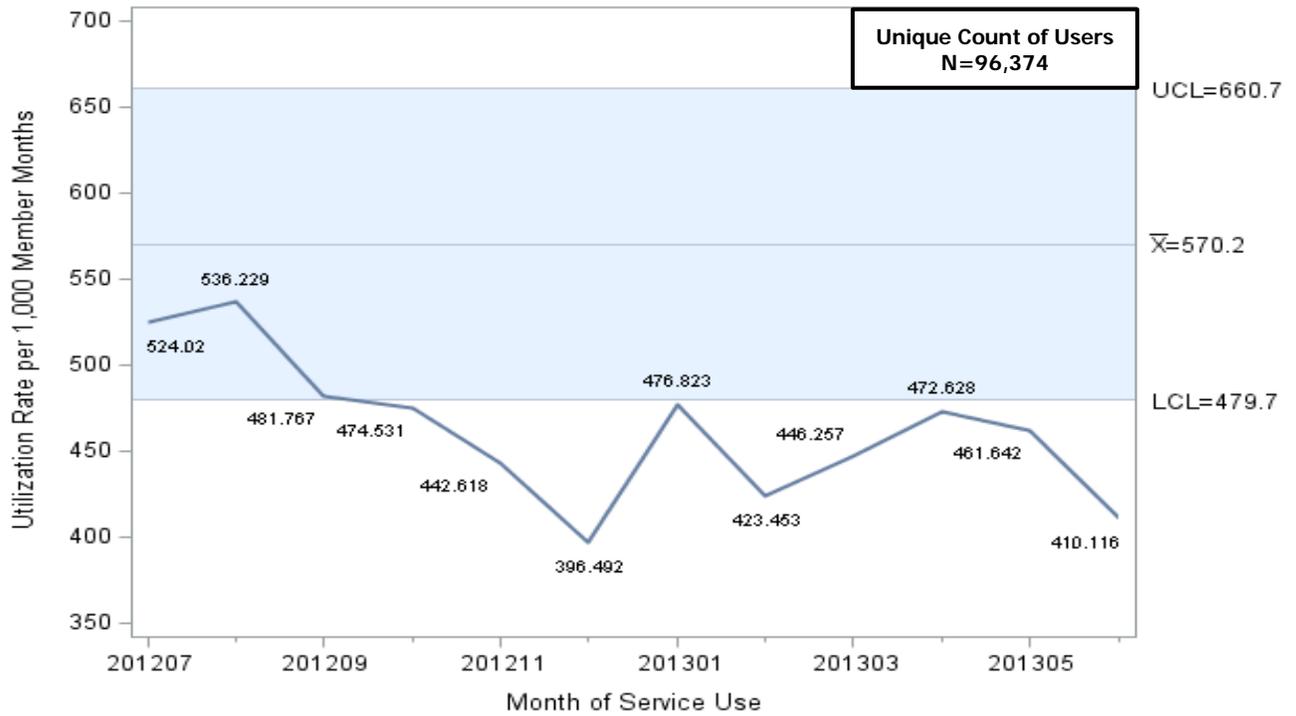
**Figure SU-6. Physician/Clinic Utilization Rates among Adults (Age 21+) in the Aged Aid Category, July 2012–June 2013**



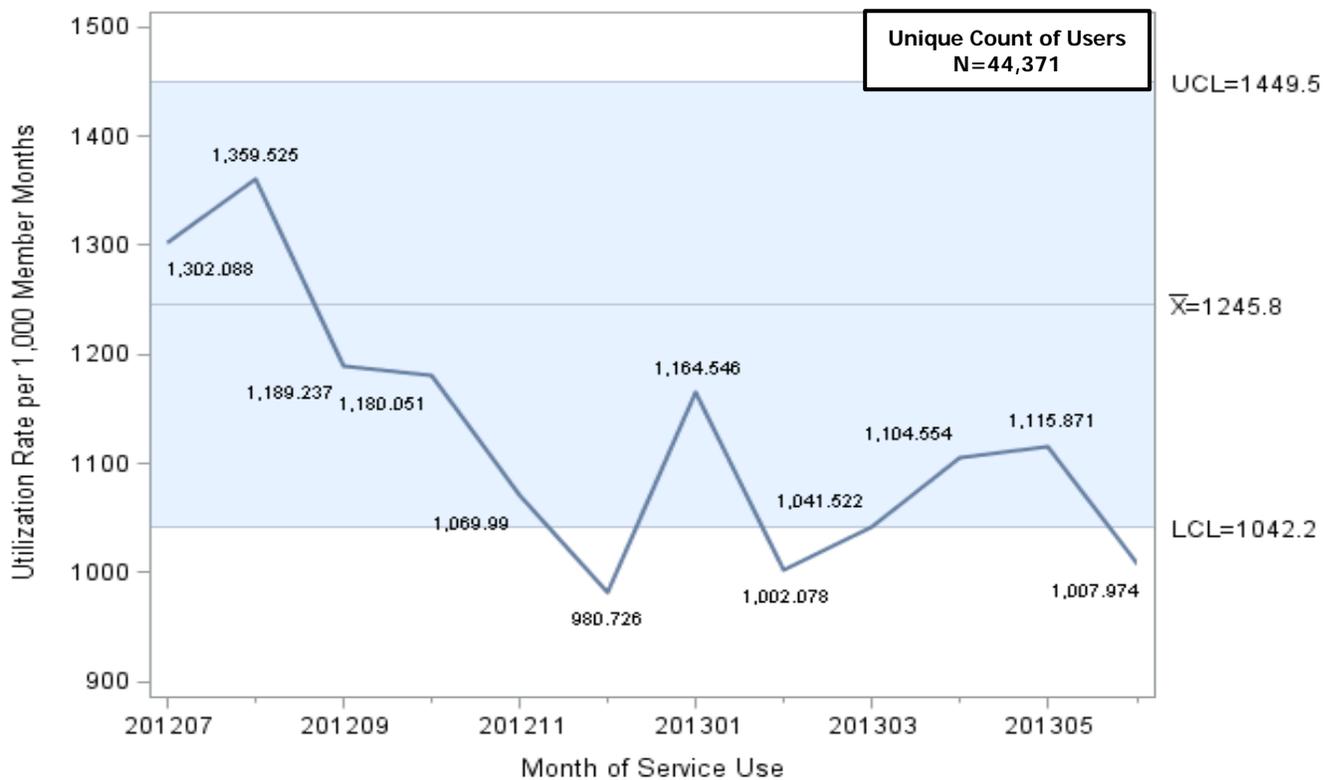
**Figure SU-7. Physician/Clinic Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013**



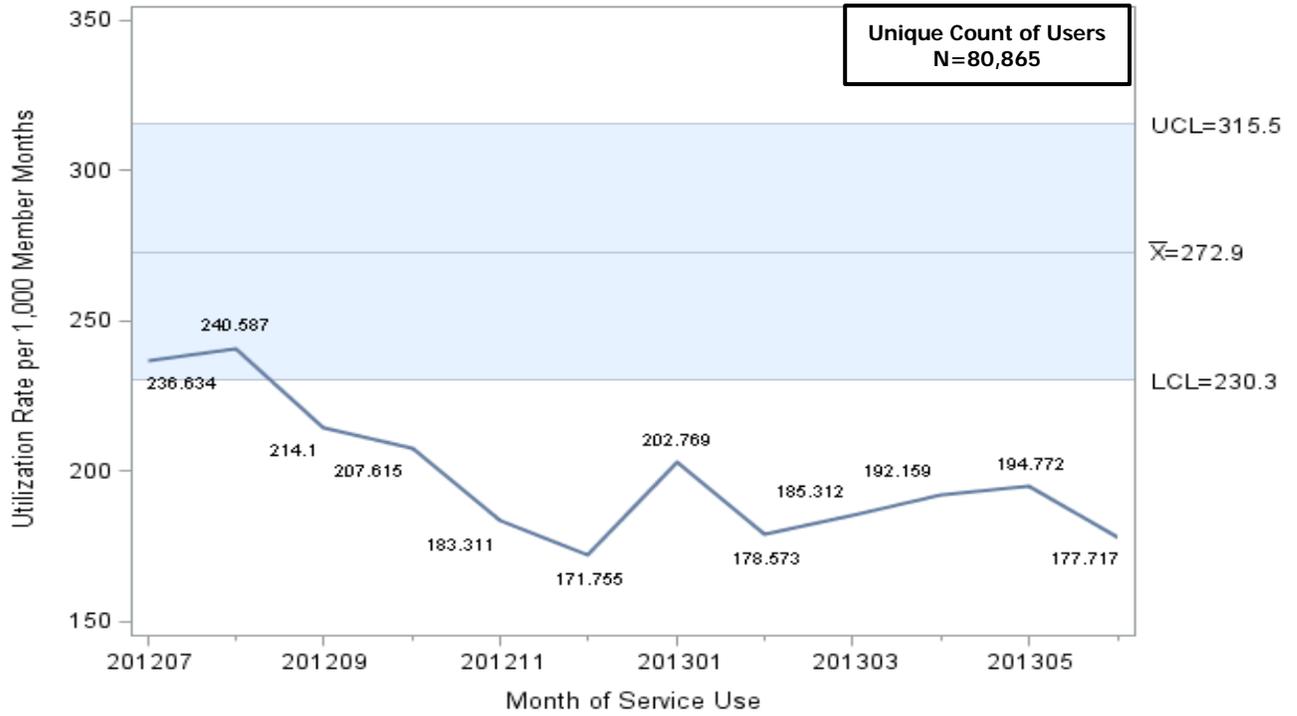
**Figure SU-8. Physician/Clinic Utilization Rates among Adults (Age 21+) in Families Aid Category, July 2012–June 2013**



**Figure SU-9. Physician/Clinic Utilization Rates among Adults (Age 21+) in the Other Aid Category, July 2012–June 2013**



**Figure SU-10. Physician/Clinic Utilization Rates among Adults (Age 21+) in the Undocumented Aid Category, July 2012–June 2013**



Source: Data for figures SU-6 to SU-10 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

## **Non-Emergency Medical Transportation**

### **Background**

Non-emergency transportation is the transportation of the sick, injured, invalid, convalescent, infirmed, or otherwise incapacitated persons when access to medical treatment is needed, but when the condition is not immediately life-threatening. An example of non-emergency transportation would be transport by litter van or wheelchair van to a doctor or clinic. Transportation services are also provided through air ambulance services. For non-emergencies, medical transportation by air is only covered when the medical condition of the patient or practical considerations make ground transportation impractical.

The Medi-Cal program covers medical transportation when a beneficiary cannot obtain medical services using ordinary means of transportation. Non-emergency transportation requires previous authorization and is covered only in limited situations. While most insurance plans apart from Medi-Cal provide their members with emergency medical transportation, non-emergency transportation is only covered by other plans in a limited form. For example, private insurance companies may cover non-emergency transportation when transferring a patient being discharged from the hospital, or when plan members seek specific treatment such as organ transplantation services.

Over 200,000 Medi-Cal beneficiaries access some form of medical transportation service paid through the Medi-Cal FFS claiming system annually. Fewer than 40% of medical transportation service recipients are users of non-emergency medical transportation. Approximately 70% of beneficiaries using non-emergency medical transportation services have between one and five service encounters annually and are predominantly age 65+ (58%). Many beneficiaries who utilize these services are covered under Disabled (45%), Aged (30%), and Long-Term Care (18%) aid categories, and are seen for conditions such as renal failure, brain damage, congestive heart failure, and other serious illnesses. Beneficiaries who utilize non-emergency medical transportation services six or more times annually represent a small segment of users (16%), a majority of whom have been diagnosed with renal failure (55%).

## Trend Analysis

### Children

Children in all of the aid categories are excluded from this analysis because of their relatively small user counts (<500).

### Adults

This analysis only focuses on Non-Emergency Medical Transportation services utilization among Medi-Cal adults 21 and older participating in the FFS program and enrolled in the Blind/Disabled and Other aid categories. Among adults in these two aid categories, monthly Non-Emergency Medical Transportation services utilization rates ranged from 26.1 to 61.4 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

The Non-Emergency Medical Transportation services utilization rates among adults across the analyzed aid categories were similar to the previous quarterly access reports. For instance, adults in the Blind/Disabled aid category exhibited noticeably higher utilization with rates about 1.5 to two times higher than for adults in the Other aid category. Adults in the analyzed aid categories again exhibited Non-Emergency Medical Transportation utilization rates above the expected baseline ranges throughout the study period.

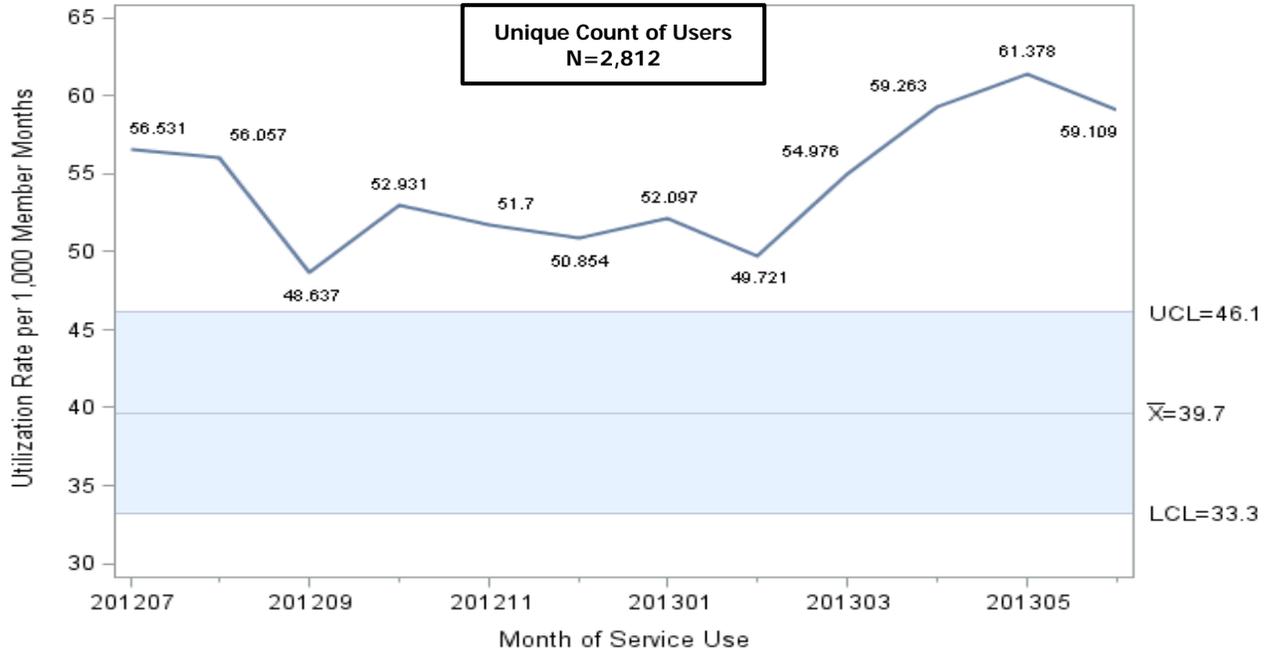
Medi-Cal FFS beneficiaries in the Undocumented aid category are not entitled to Non-Emergency Medical Transportation services and were subsequently excluded from this analysis. Additionally, adults in the Aged and Families aid categories were excluded due to their relatively small user counts (<500).

The following figures SU-11 and SU-12 represent the control chart analysis for adults from the third quarter of 2012 to the second quarter of 2013.

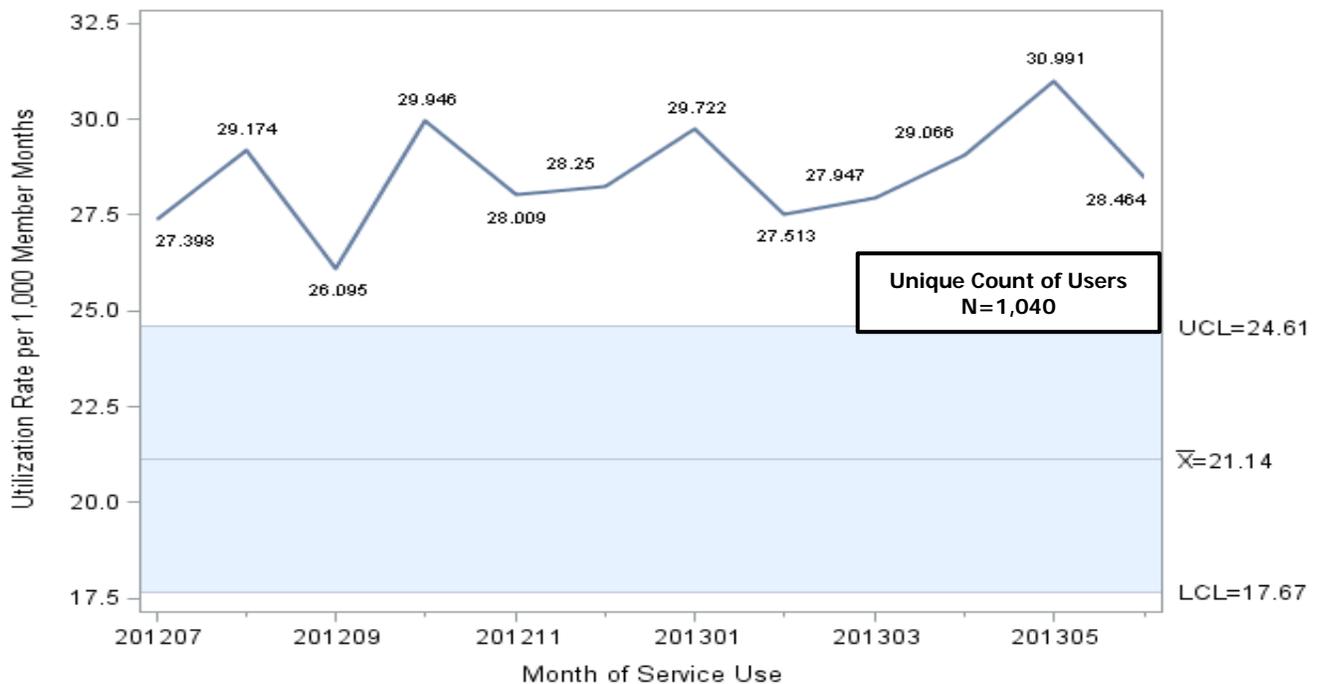
Due to low user counts for most subpopulations, utilization rates of Non-Emergency Medical Transportation services are only reported for adults in the Blind/Disabled and Other aid categories. Service use rates for these two populations were above expected ranges for the entire study period.

### Trends of Monthly Non-Emergency Medical Transportation Services Utilization Rates among Adults, July 2012–June 2013

**Figure SU-11. Non-Emergency Transportation Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013**



**Figure SU-12. Non-Emergency Transportation Utilization Rates among Adults (Age 21+) in the Other Aid Category, July 2012–June 2013**



Source: Data for figures SU-11 and SU-12 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

## **Emergency Medical Transportation**

### **Background**

Emergency transportation is the transportation of the sick, injured, invalid, convalescent, infirm, or otherwise incapacitated persons for medical treatment needed in life-threatening situations. Similar to non-emergency transportation, emergency transportation services are provided through air ambulance services and ground medical transportation providers. Transportation by air is covered for emergencies if the medical condition of the patient contraindicates using other means of transportation, or if either the patient, or the nearest hospital capable of attending to the patient's medical needs, is inaccessible by ground transportation. Approximately 2.5% of all emergency transportation services are provided by air ambulance.

Emergency transportation is covered by Medi-Cal. Although this type of transportation does not require prior authorization, each claim must include a justification for the emergency transportation.

Of the 213,796 Medi-Cal beneficiaries that accessed medical transportation services in 2010, 69% utilized emergency transportation at a cost of \$56,777,111, or 32.3%, of the total medical transportation expenditures. A large proportion of users of emergency medical transportation services utilize services just once annually (69%), while a small proportion (5%) have six or more emergency medical transportation service encounters annually. The predominant user groups of emergency transportation services are adults between age 21–64 (66%), in Disabled aid categories (50%), and being treated for abdominal and chest pain, injuries, epilepsy or convulsions, spondylosis and other back problems, and schizophrenia or other psychotic disorders.

## Trend Analysis

### Children

Among children age 0 to 20 in the Medi-Cal FFS program, monthly Emergency Medical Transportation services utilization rates ranged from 1.5 to 9.2 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Patterns of service use among children in all of the analyzed aid categories mostly followed those identified in the previous quarterly access reports. For instance, Emergency Medical Transportation services utilization was again noticeably higher among children in the Blind/Disabled aid category with rates ranging from 7.0 to 9.2 visits per 1,000 member months. In contrast, utilization rates for children in the Families and Other aid categories ranged from 1.9 to 6.0 visits per 1,000 member months. Children in the Blind/Disabled, Other, and Undocumented aid categories continued to mostly exhibit below average utilization, while those in the Foster Care aid category again primarily displayed above average utilization rates. Additionally, the Emergency Medical Transportation utilization rates for children in the Other aid category fell below the expected baseline ranges during the first two quarters of 2013.

Medi-Cal children used Emergency Medical Transportation services at below average rates, except for those in Families and Foster Care aid codes.

### Adults

The monthly Emergency Medical Transportation services utilization rates for adults age 21 and older ranged from 6.5 to 45.3 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Similar to the prior access quarterly reports, the utilization rates were noticeably higher for adults in the Blind/Disabled aid category, while adults in the Undocumented aid category rarely utilized these services. Adults in the Families aid category exhibited mostly below average Emergency Medical Transportation services utilization patterns that fell within the expected baseline ranges, whereas adults in the Blind/Disabled aid category primarily displayed above average utilization rates that were, at times, above the baseline ranges. The utilization rates for adults in the Undocumented aid category again primarily fell below the expected baseline ranges.

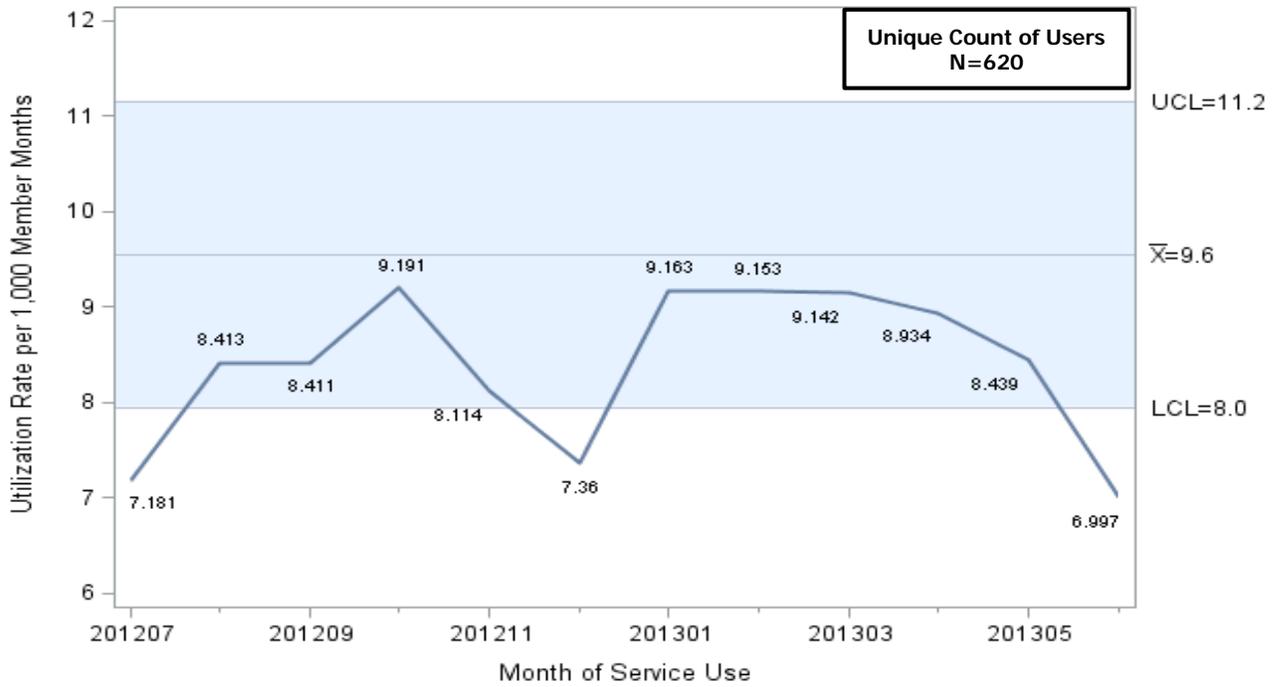
Utilization among adults in Blind/Disabled aid codes was mostly above average and at times above expected ranges.

Adults in the Aged aid category were excluded due to their relatively small user counts (<500).

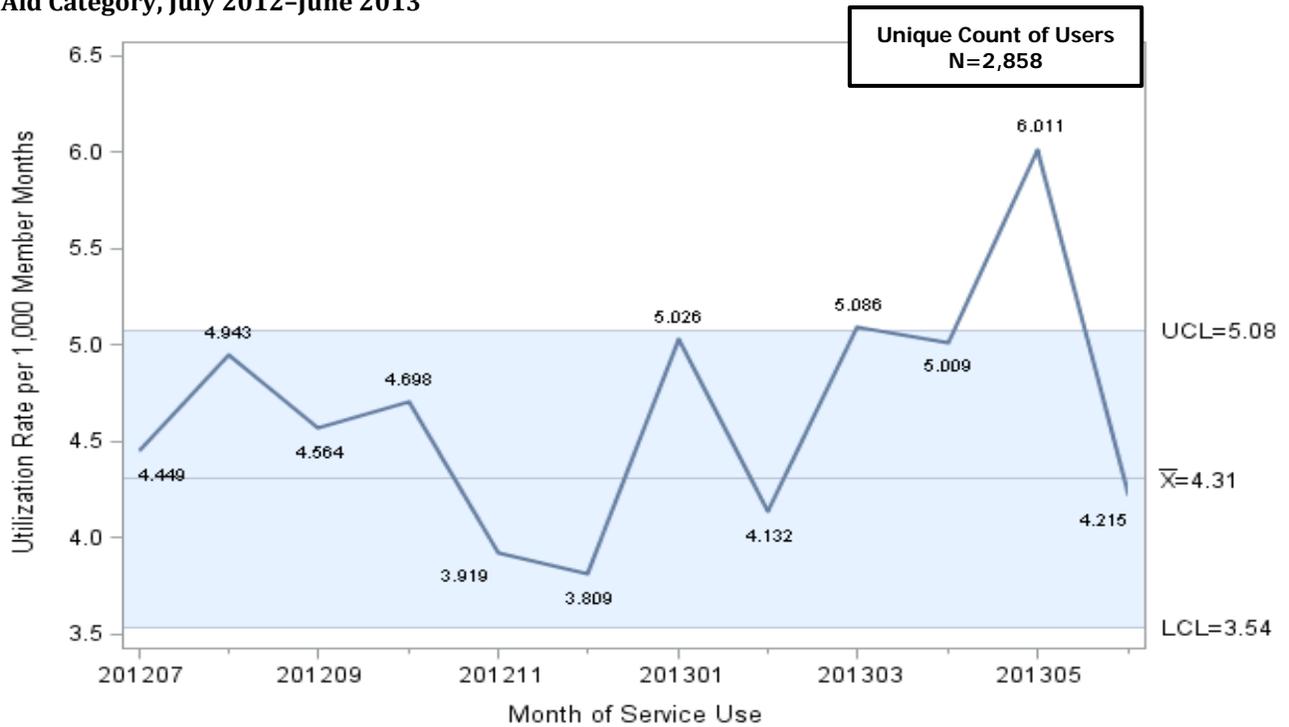
The following figures SU-13 to SU-21 represent the control chart analysis for both children and adults from the third quarter of 2012 to the second quarter of 2013.

### Trends of Monthly Emergency Medical Transportation Services Utilization Rates among Children, July 2012–June 2013

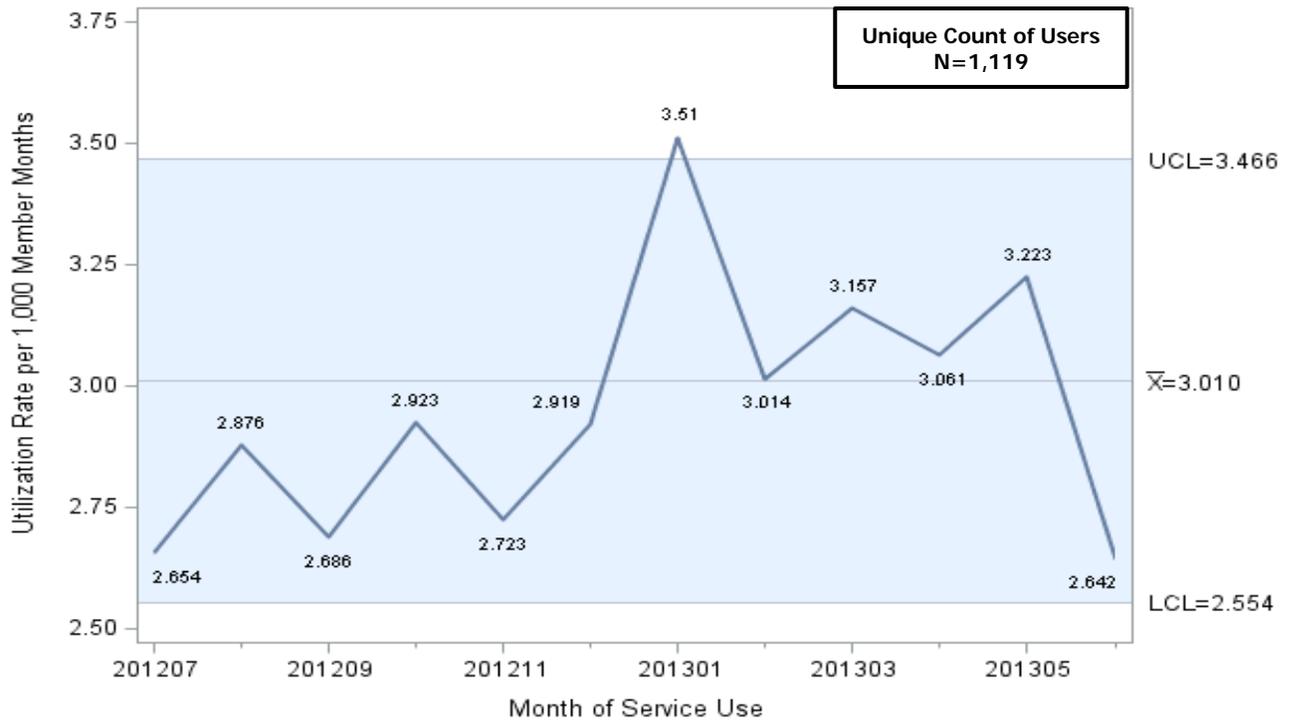
**Figure SU-13. Emergency Transportation Utilization Rates among Children Age (0–20) in the Blind/Disabled Aid Category, July 2012–June 2013**



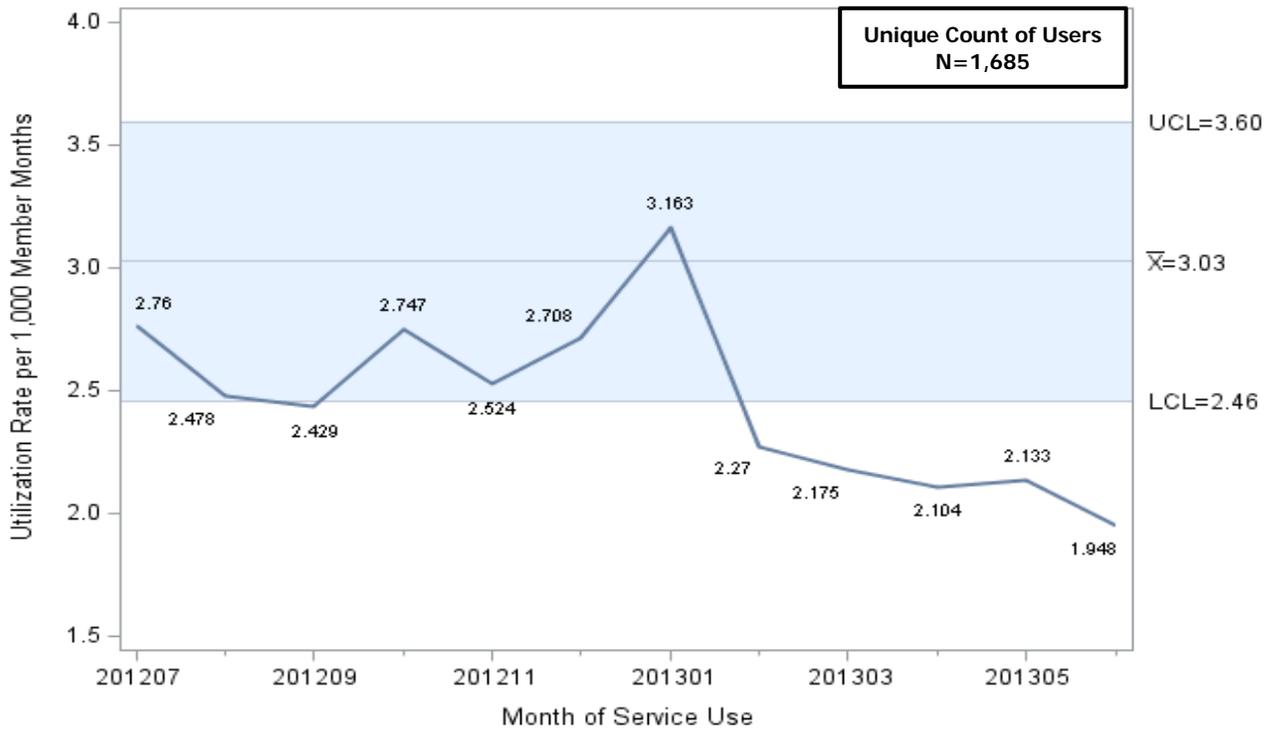
**Figure SU-14. Emergency Transportation Utilization Rates among Children (Age 0–20) in the Families Aid Category, July 2012–June 2013**



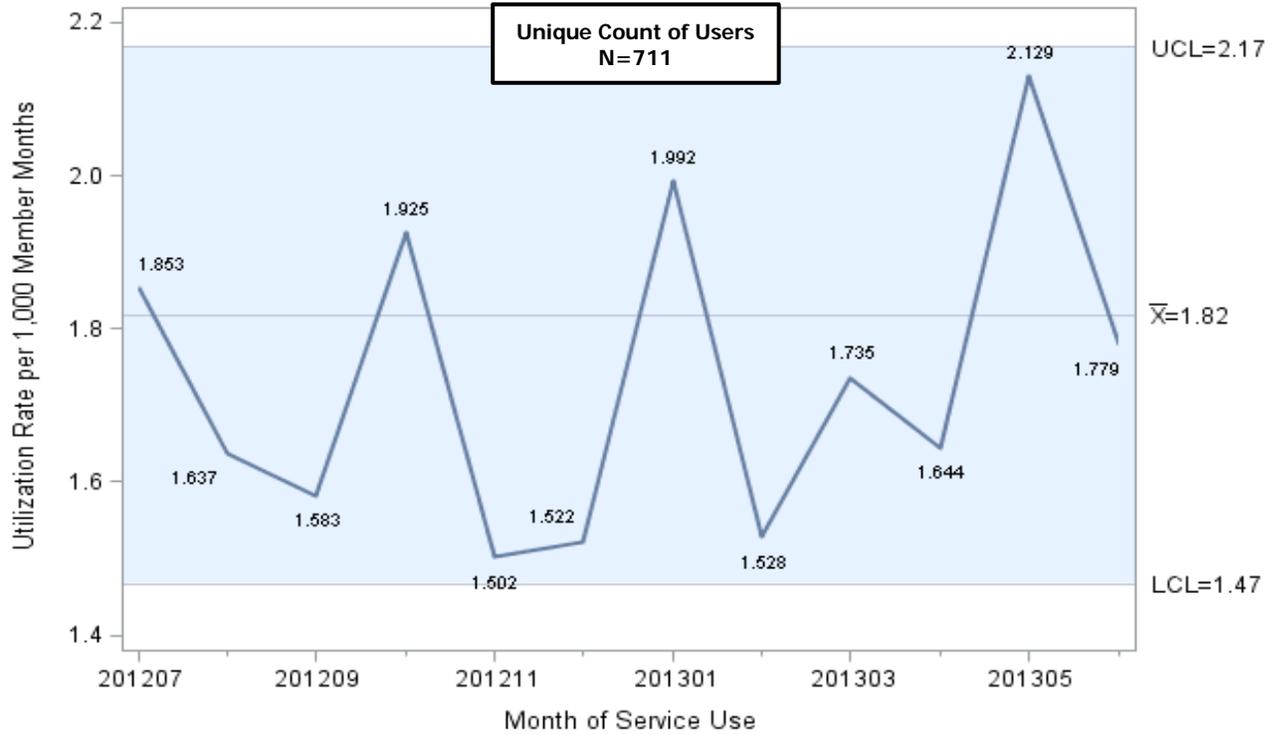
**Figure SU-15. Emergency Transportation Utilization Rates among Children (Age 0-20) in the Foster Care Aid Category, July 2012-June 2013**



**Figure SU-16. Emergency Transportation Utilization Rates among Children (Age 0-20) in the Other Aid Category, July 2012-June 2013**



**Figure SU-17. Emergency Transportation Utilization Rates among Children (Age 0-20) in the Undocumented Aid Category, July 2012–June 2013**



Source: Data for figures SU-13 to SU-17 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

### Trends of Monthly Emergency Transportation Services Utilization Rates among Adults, July 2012–June 2013

Figure SU-18. Emergency Transportation Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013

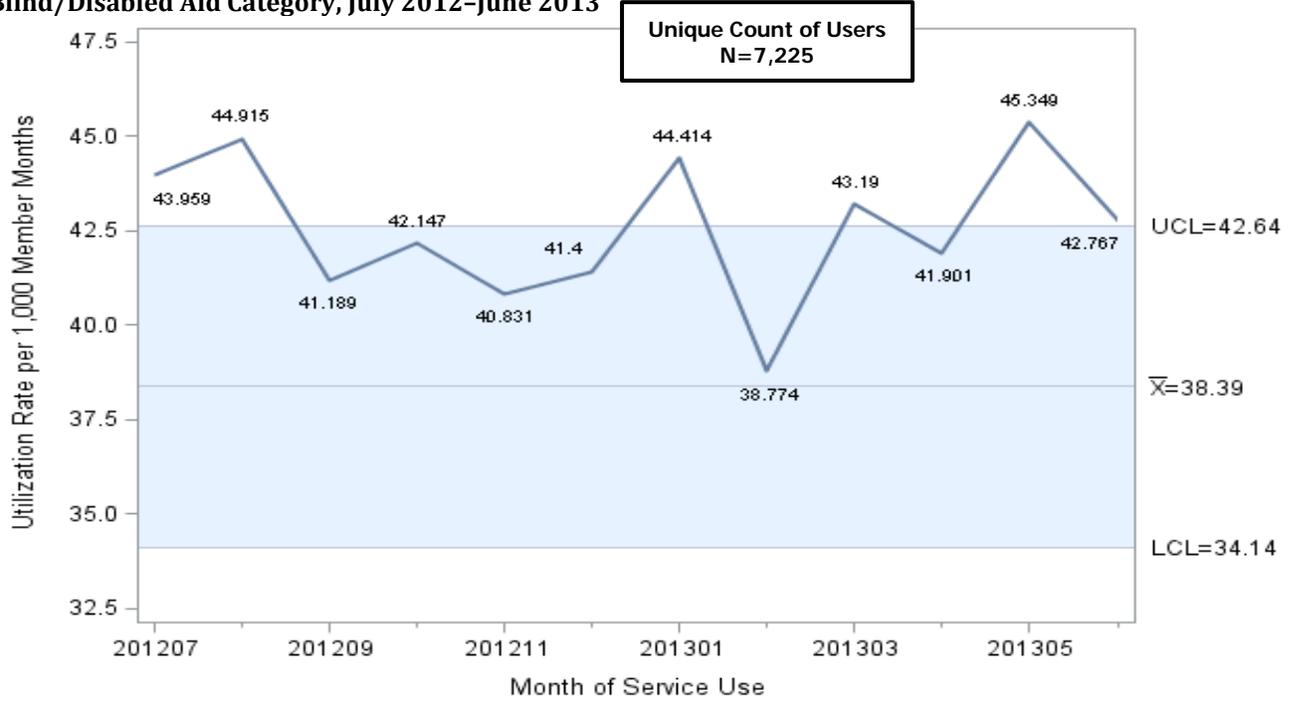
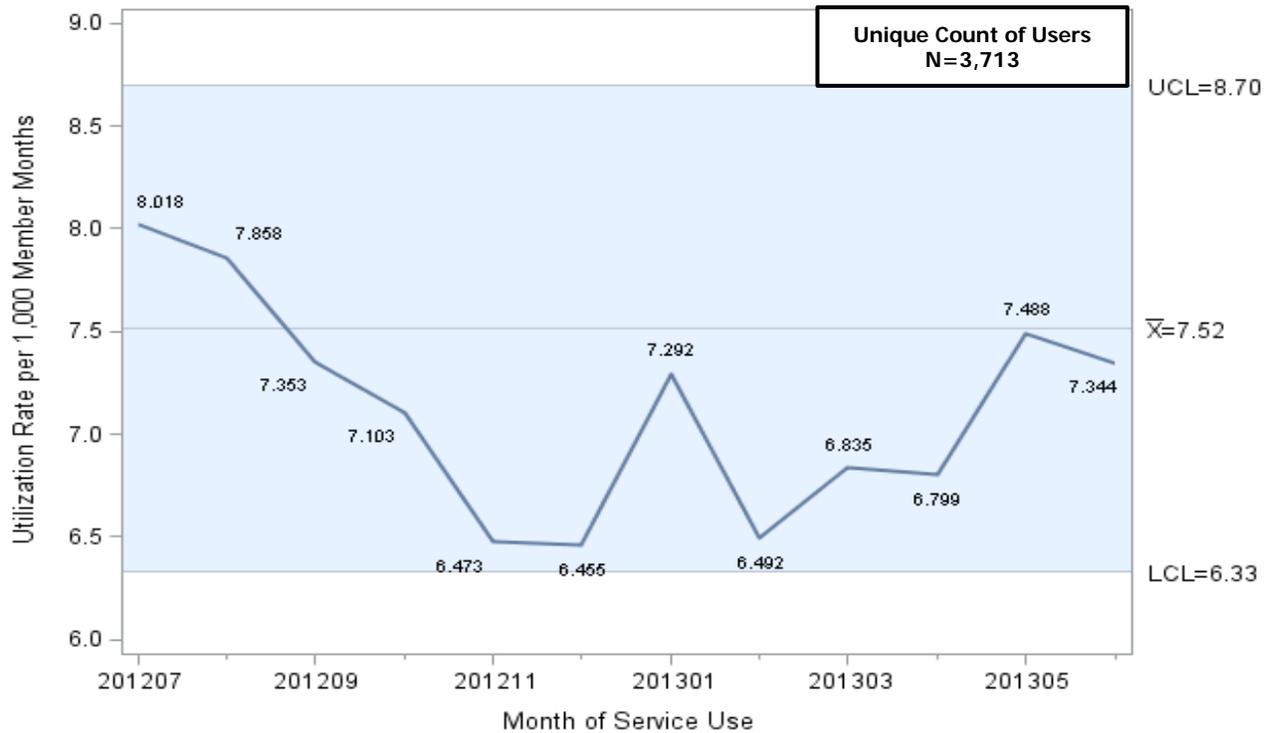
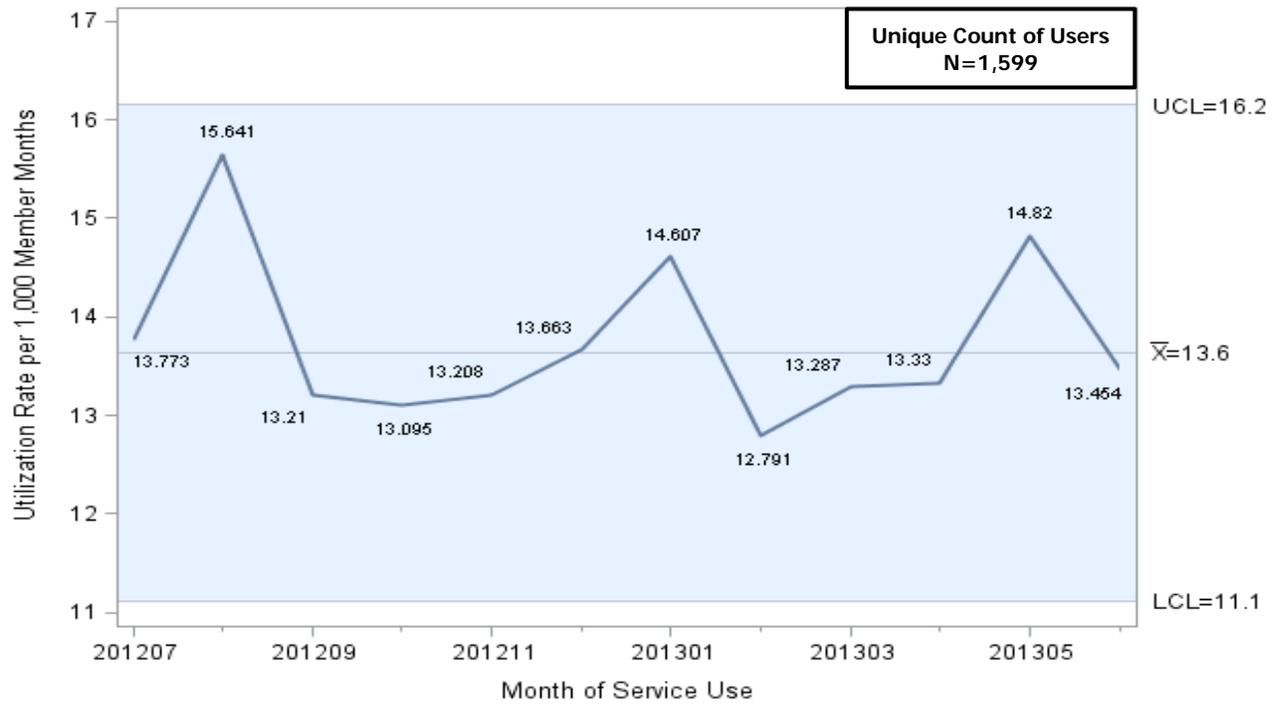


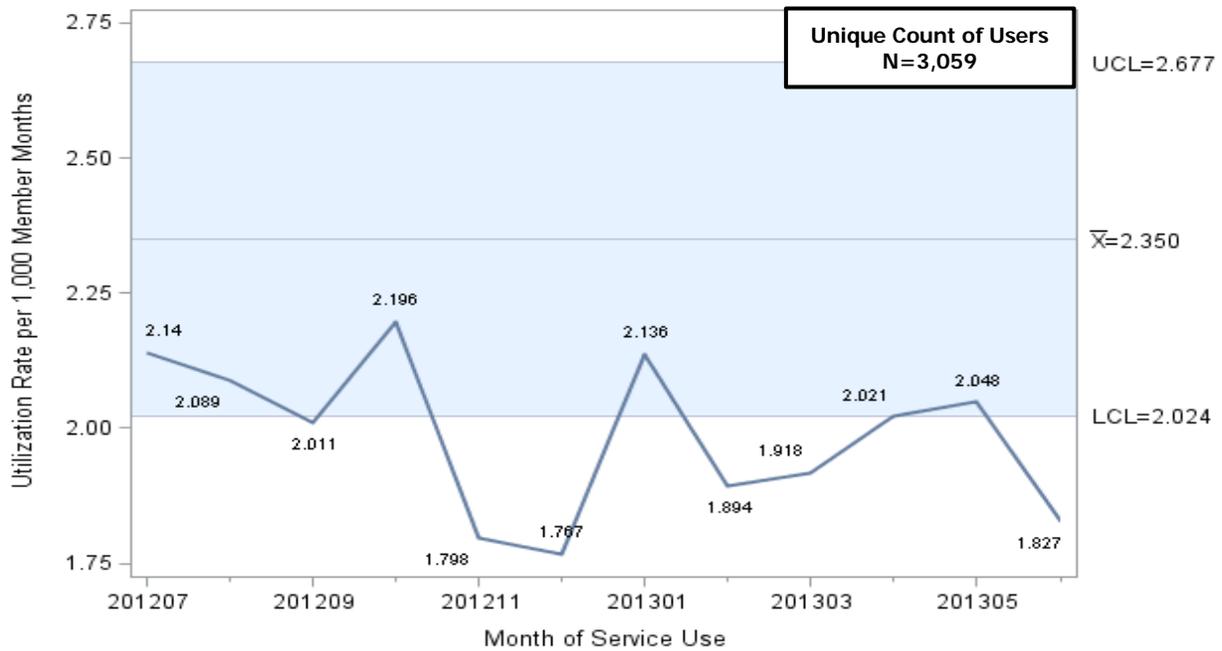
Figure SU-19. Emergency Transportation Utilization Rates among Adults (Age 21+) in the Families Aid Category, July 2012–June 2013



**Figure SU-20. Emergency Transportation Utilization Rates among Adults (Age 21+) in the Other Aid Category, July 2012–June 2013**



**Figure SU-21. Emergency Transportation Rates among Adults (Age 21+) in the Undocumented Aid Category, July 2012–June 2013**



Source: Data for figures SU-18 to SU-21 prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

## Home Health Services

### Background

Home Health services provide outpatient care to Medi-Cal beneficiaries on an intermittent or part-time basis. Services include:

- Part-time or intermittent skilled nursing by licensed nursing personnel
- In-home medical care
- Physical, occupational, or speech therapy
- Home health aide
- Provision of medical supplies, excluding drugs and biological
- Medical social services
- Use of medical appliances

These services must be prescribed by a physician under a written plan renewed every 60 days, and be provided at the recipient's place of residence. Most services require prior authorization, except for services related to case evaluations and early discharge follow-up visits.

Home Health services paid through FFS Medi-Cal comprise any claim paid under provider type "014–Home Health Agency," which covers a variety of services, including services provided by home health agencies, home- and community-based services, residential care and home health under the assisted living waiver, and pediatric palliative care waiver services.

In any given year, there are approximately 26,000 unique users of Home Health agency services paid through FFS Medi-Cal. Most Home Health services users are adults age 21 and older (69%), while the remaining 31% are children. Though children represent a small proportion of home health users, their expenditures are significant, accounting for 73% of total Home Health services costs. Most of these expenditures are attributable to EPSDT private duty nursing that provides care for children with paralysis, nervous system disorders, epilepsy, and other congenital anomalies and hereditary conditions.

Private duty nursing and home- and community-based waiver populations receive long-term Home Health services averaging 9.3 months. Most individuals receiving long-term services have more chronic conditions, are under age 21, and covered under Disabled aid categories. Intermittent Home Health services users received an average of 1.76 months of visits for such things as rehabilitative care, mother-baby checks, and other aftercare treatment.

Nearly 50% of all Home Health services users are in Disabled aid categories, and approximately 25% are in medically needy Families and Undocumented aid categories and most likely receive services for postpartum follow-up care.

## Trend Analysis

### Children

This analysis focuses only on Home Health services utilization rates among Medi-Cal children age 0 to 20 participating in the FFS program and enrolled in the Blind/Disabled aid category. The monthly Home Health services utilization rates for children in this aid category ranged from 135.4 to 157.0 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Children in the Blind/Disabled aid category again exhibited utilization rates above the thresholds established in the baseline period of 2007 to 2009 throughout the study period.

Use of Home Health services among children is now concentrated among children and adults in the Blind/Disabled aid category.

### Adults

Among adults 21 and older, this analysis only focuses on Home Health services utilization among beneficiaries enrolled in the Blind/Disabled aid category. The monthly Home Health services utilization rates for adults in this aid category ranged from 11.8 to 15.1 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

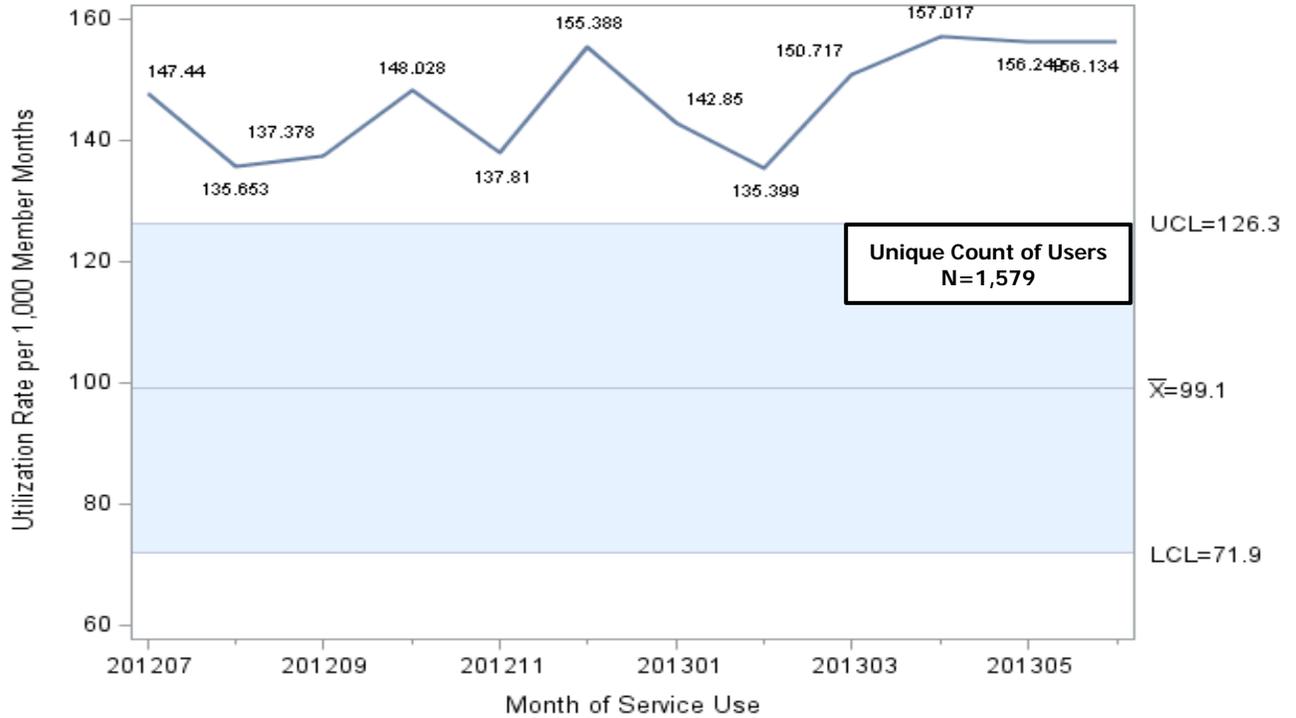
Similar to the prior access quarterly reports, adults in the Blind/Disabled aid group exhibited much lower overall Home Health services utilization rates than children in the same aid category. Adults in this aid category primarily displayed above average utilization that also remained within the expected baseline ranges.

Medi-Cal FFS beneficiaries in the Undocumented aid category are not entitled to Home Health services and were subsequently excluded from this analysis. Additionally, adults in the Aged, Families, and Other aid categories, as well as children in the Families, Foster Care, and Other aid categories were excluded because of their relatively small user counts (<500).

The following figures for SU-22 and SU-23 represent the control chart analysis for both children and adults from the third quarter of 2012 to the second quarter of 2013.

### Trends of Monthly Home Health Services Utilization Rates among Children, July 2012–June 2013

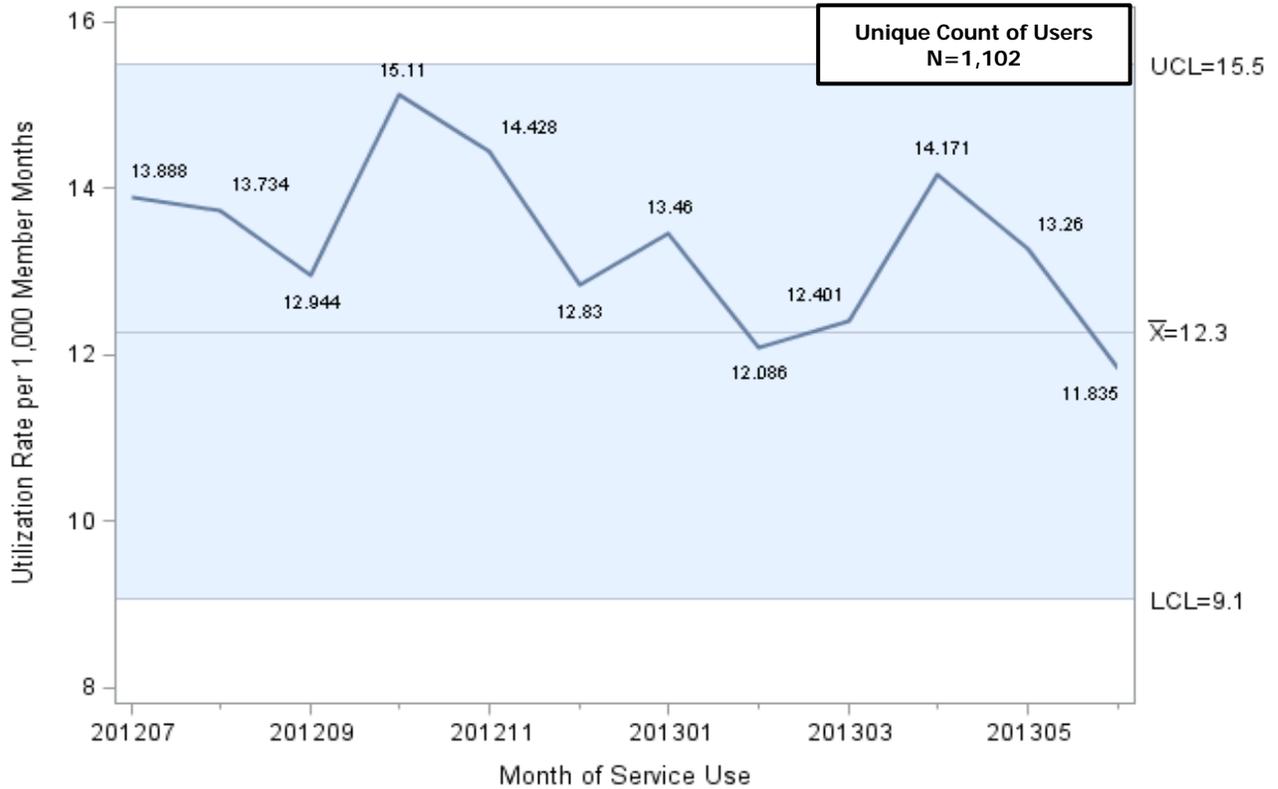
**Figure SU-22. Home Health Services Utilization Rates among Children (Age 0–20) in the Blind/Disabled Aid Category, July 2012–June 2013**



Source: Data for figure SU-22 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

### Trends of Monthly Home Health Services Utilization Rates among Adults, July 2012–June 2013

**Figure SU-23. Home Health Services Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013**



Source: Data for figure SU-23 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

## **Hospital Inpatient Services**

### **Background**

Hospital Inpatient services are those services provided by a physician to patients admitted to the hospital at least overnight or who are transferred to another facility in the same day. Hospital Inpatient services do not include skilled nursing and intermediate care services furnished by a hospital with a swing-bed approval.

The general public is ensured access to emergency medical services, regardless of their ability to pay, under the Emergency Medical Treatment and Active Labor Act (EMTALA). Under this act, individuals who present to hospitals having emergency rooms must be appropriately screened and examined to determine whether or not an emergency medical condition exists, and must receive stabilizing treatment when medically needed. Emergency medical conditions include women in active labor. This provision is equally applicable to Medi-Cal beneficiaries seeking emergency and pregnancy-related services, including beneficiaries who are in restricted scope aid categories with limited benefits.

There are over 700,000 hospital admissions in the Medi-Cal FFS program annually, with nearly one-third of these admissions originating in a hospital emergency room. The most common reason for Hospital Inpatient admissions among the Medi-Cal FFS population is for childbirth and pregnancy-related services.

A large proportion of hospital admissions are to Medi-Cal FFS beneficiaries age 21–64 (52%), and those in the Undocumented and Families aid categories (33%). An additional 33% of hospital inpatient service users are beneficiaries in Disabled and Aged aid categories. Over 90% of beneficiaries admitted to the hospital during the year have only one hospital inpatient stay, while a small proportion (7%) are admitted three or more times.

Beneficiaries who are hospitalized multiple times during the year are predominantly in the Aged and Disabled aid categories (>70%), and are hospitalized for reasons such as septicemia, pneumonia, congestive heart failure, complications of devices or implants, chronic obstructive pulmonary disease, and diabetes with complications.

## Trend Analysis

### Children

The monthly Hospital Inpatient services utilization rates for children age 0-20 in the Medi-Cal FFS program ranged from 13.3 to 141.6 days per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Hospital Inpatient services utilization continued to be higher among children in the Blind/Disabled aid category with rates two to three times higher than for children in the Families, Other, and Undocumented aid categories and about seven to eight times higher than for children in the Foster Care aid category. Children in the Blind/Disabled and Families aid categories exhibited mostly above average Hospital Inpatient services utilization rates that primarily fell within expected baseline ranges. In contrast, children in the Foster Care, Other, and Undocumented aid categories again mostly exhibited below average utilization of Hospital Inpatient services throughout the study period. Of particular note, utilization among children in the Other and Undocumented aid categories declined to levels below the expected ranges during the last two quarters of the study period.

Children in the Blind/Disabled aid category had Hospital Inpatient use rates that were 2-8 times higher than for children in the other aid categories.

### Adults

Among adults 21 and older, monthly Hospital Inpatient services utilization rates ranged from 29.4 to 302.3 days per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

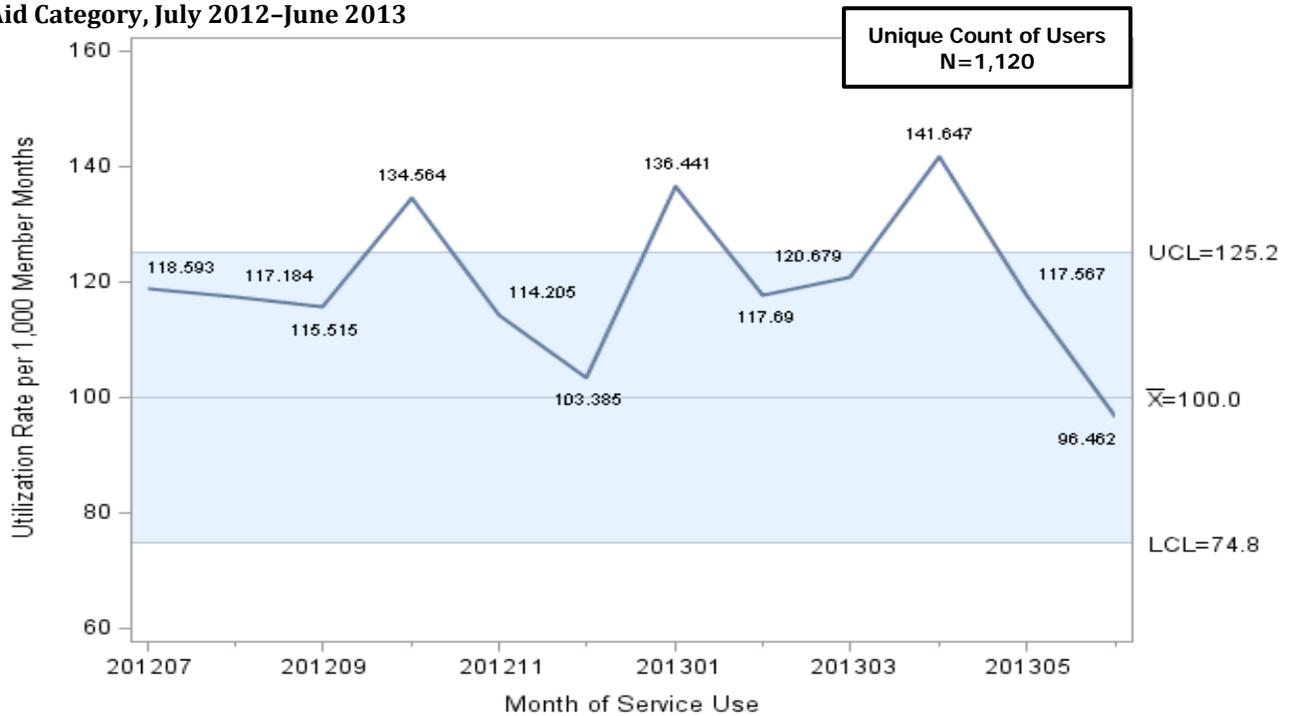
Hospital Inpatient services use was again noticeably higher for adults in the Aged, Blind/Disabled, and Other aid categories. Adults in the Aged and Blind/Disabled aid categories exhibited above average utilization that reached levels above the baseline thresholds. In contrast, adults in the Families, Other, and Undocumented aid categories exhibited below average Hospital Inpatient services utilization rates that often fell below the expected ranges. This continued low Hospital Inpatient services use among these subgroups may be influenced in part by the continued decline in statewide birthrates.

Adults in the Aged and Blind/Disabled aid categories had Hospital Inpatient service use rates that were well above baseline levels, while service use for adults in the Families, Other, and Undocumented aid categories were mostly below average.

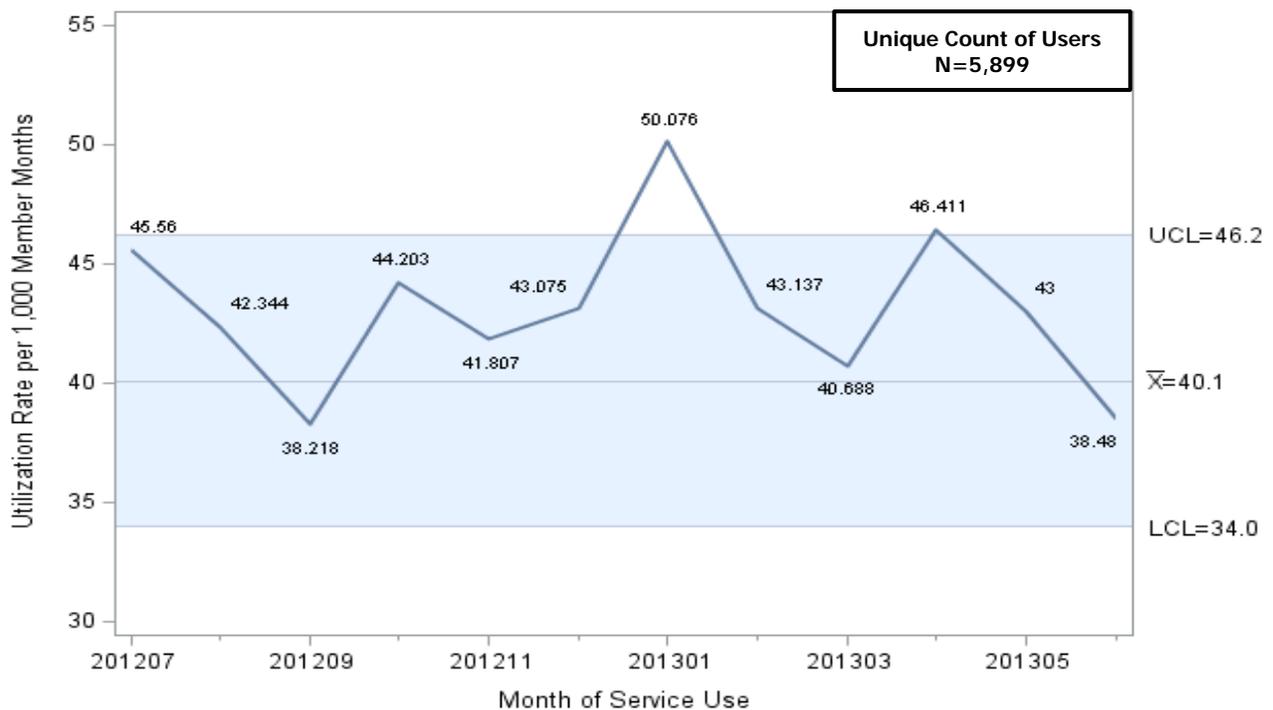
The following figures SU-24 to SU-33 represent the control chart analysis for both children and adults from the third quarter of 2012 to the second quarter of 2013.

### Trends of Monthly Hospital Inpatient Services Utilization Rates among Children, July 2012–June 2013

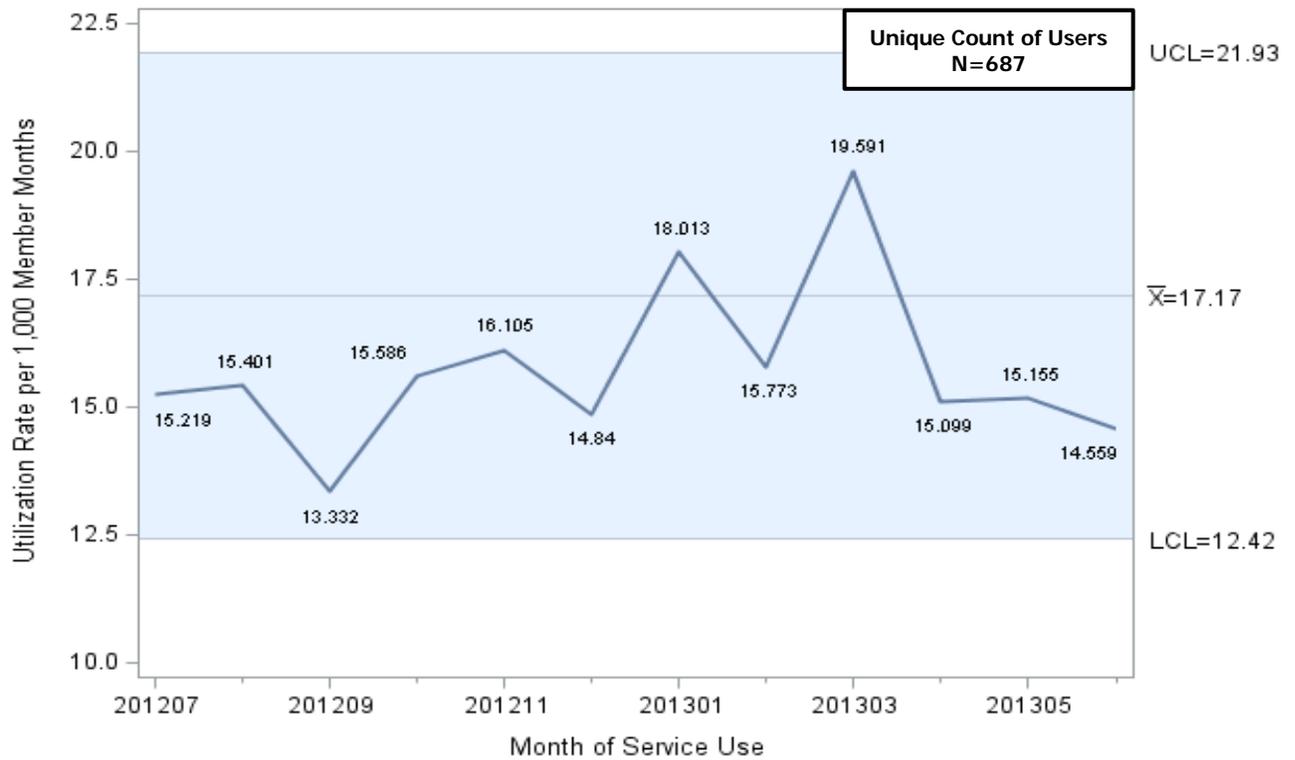
**Figure SU-24. Hospital Inpatient Utilization Rates among Children (Age 0-20) in the Blind/Disabled Aid Category, July 2012–June 2013**



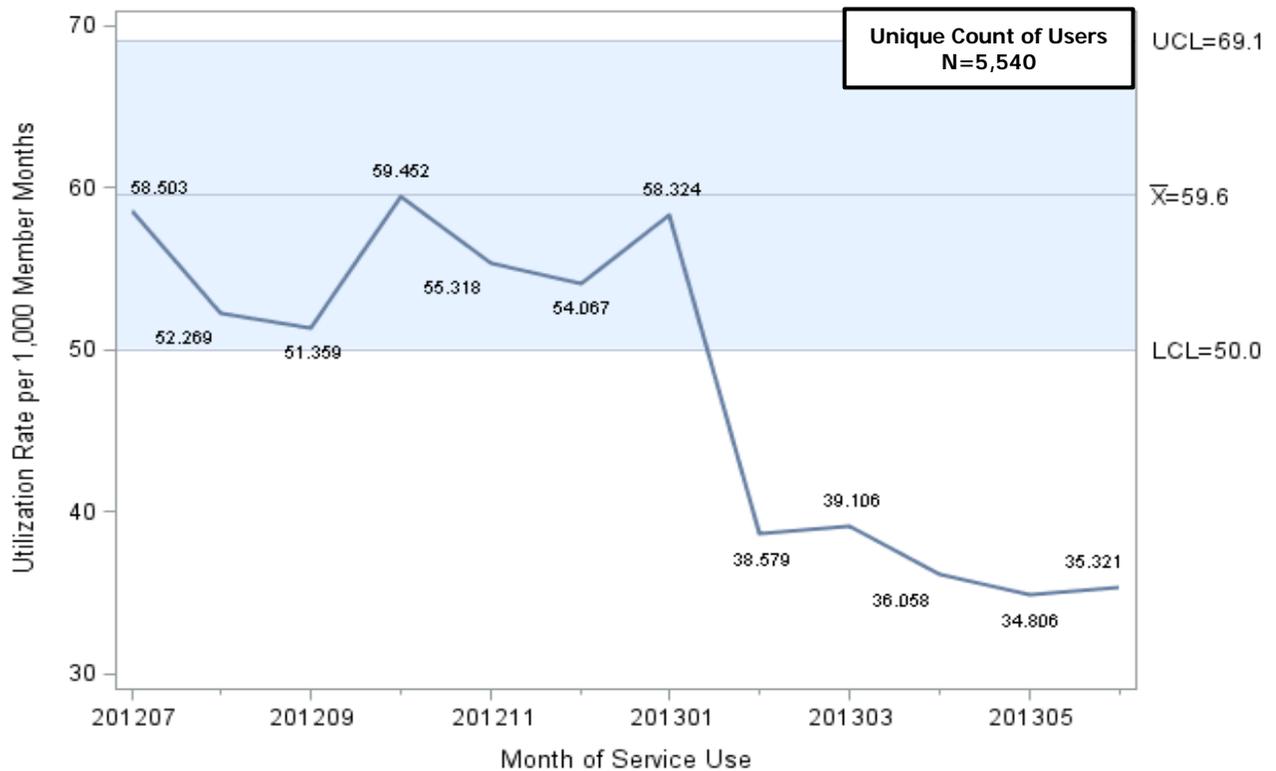
**Figure SU-25. Hospital Inpatient Utilization Rates among Children (Age 0-20) in the Families Aid Category, July 2012–June 2013**



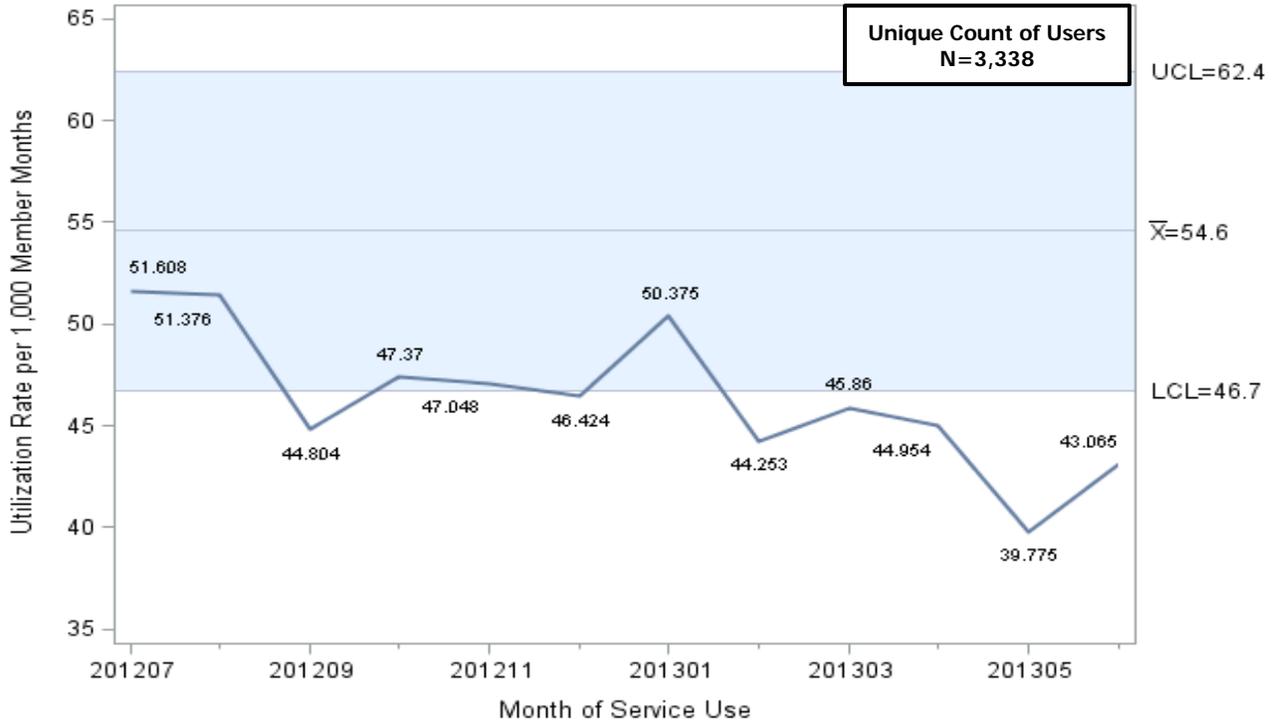
**Figure SU-26. Hospital Inpatient Utilization Rates among Children (Age 0-20) in the Foster Care Aid Category, July 2012-June 2013**



**Figure SU-27. Hospital Inpatient Utilization Rates among Children (Age 0-20) in the Other Aid Category, July 2012-June 2013**



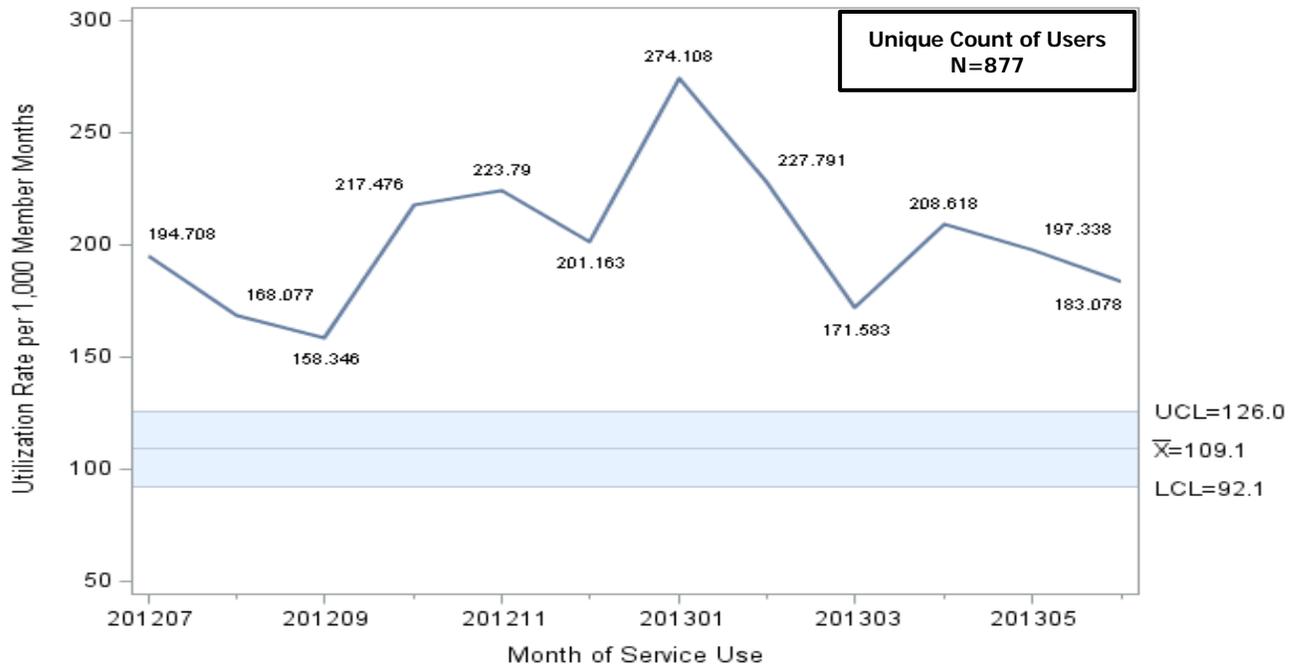
**Figure SU-28. Hospital Inpatient Utilization Rates among Children (Age 0-20) in the Undocumented Aid Category, July 2012–June 2013**



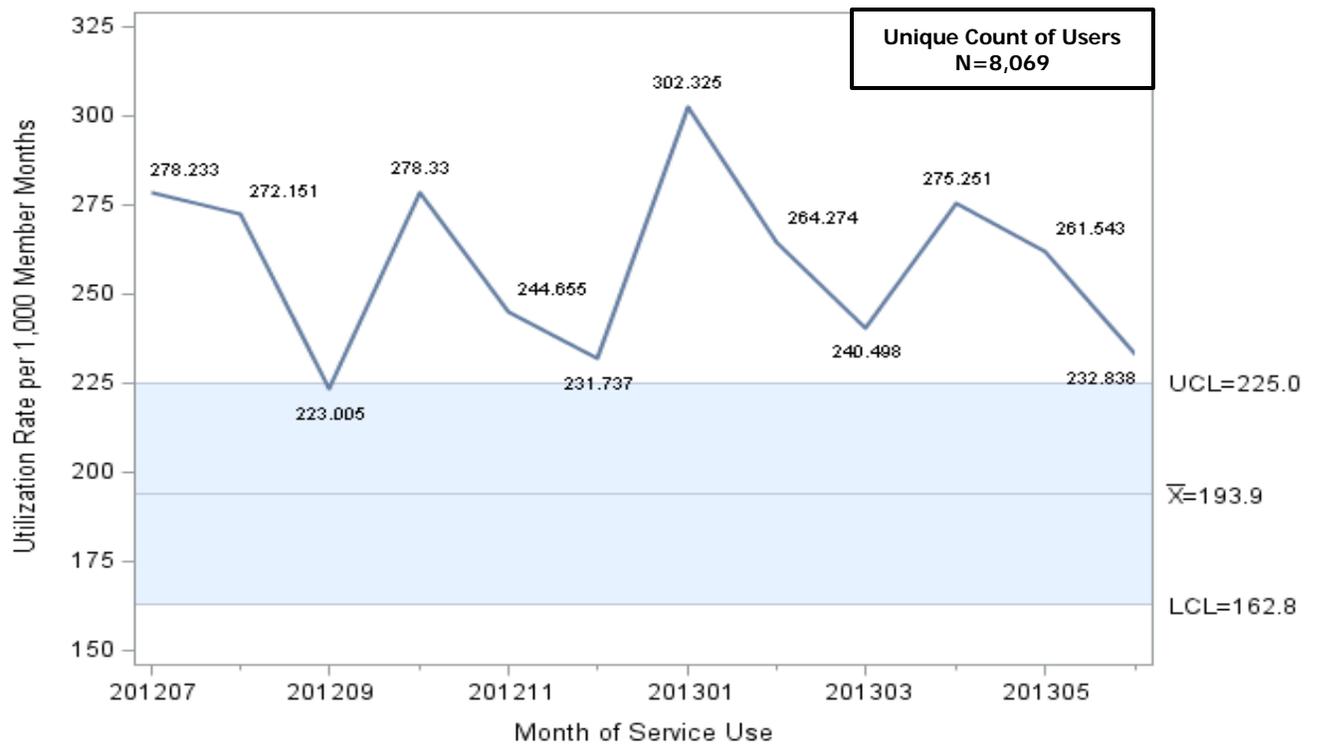
Source: Data for figures SU-24 to SU-28 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

### Trends of Monthly Hospital Inpatient Services Utilization Rates among Adults, July 2012–June 2013

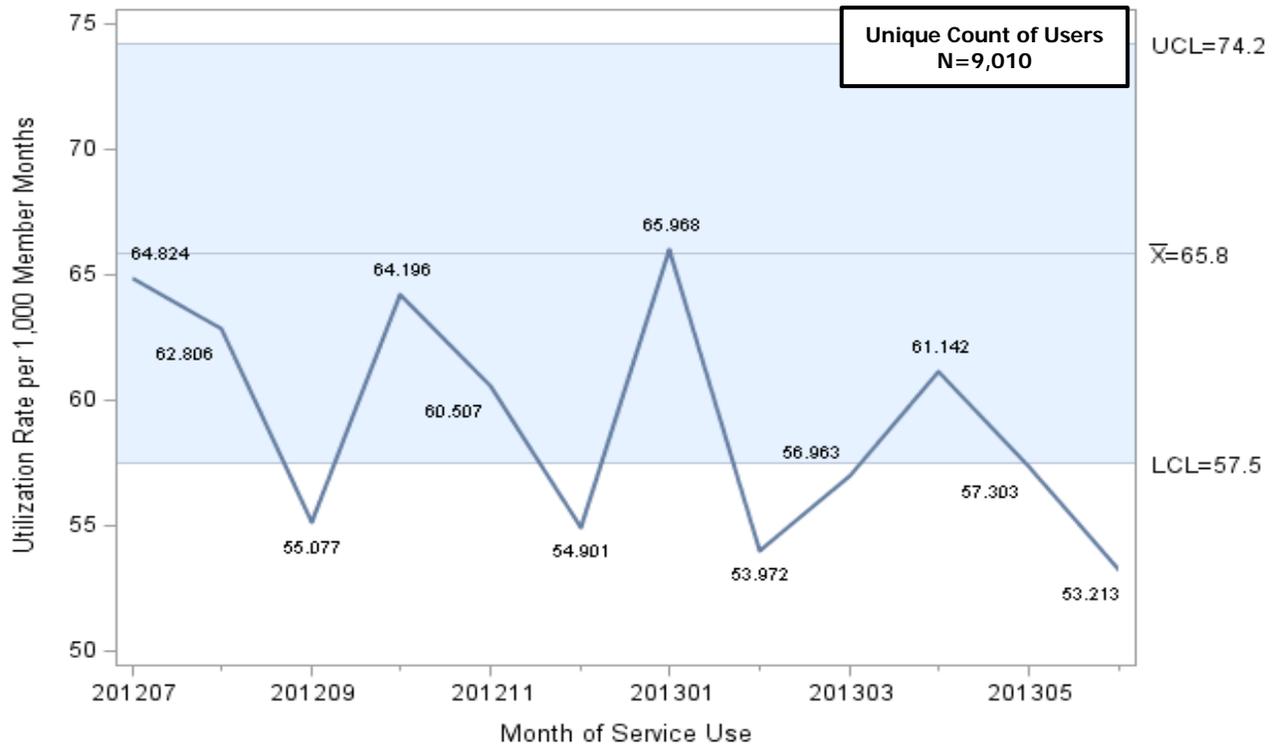
**Figure SU-29. Hospital Inpatient Utilization Rates among Adults (Age 21+) in the Aged Aid Category, July 2012–June 2013**



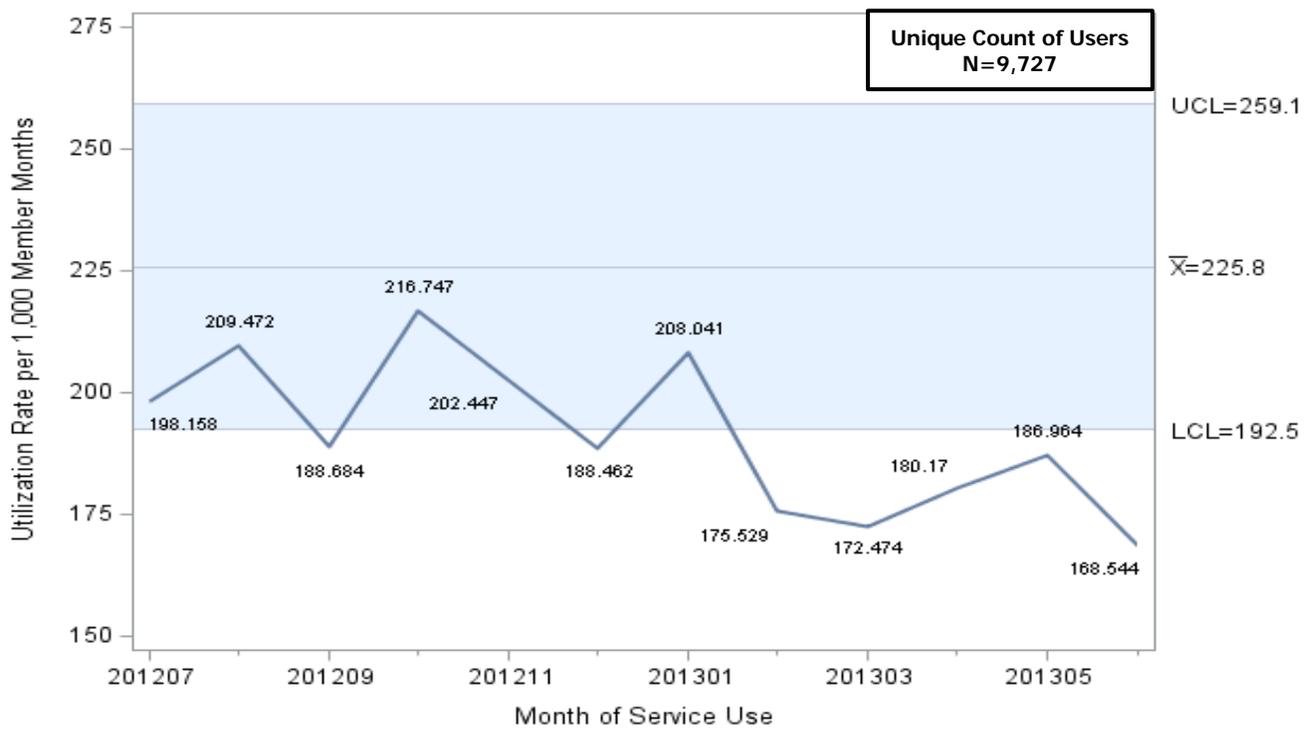
**Figure SU-30. Hospital Inpatient Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013**



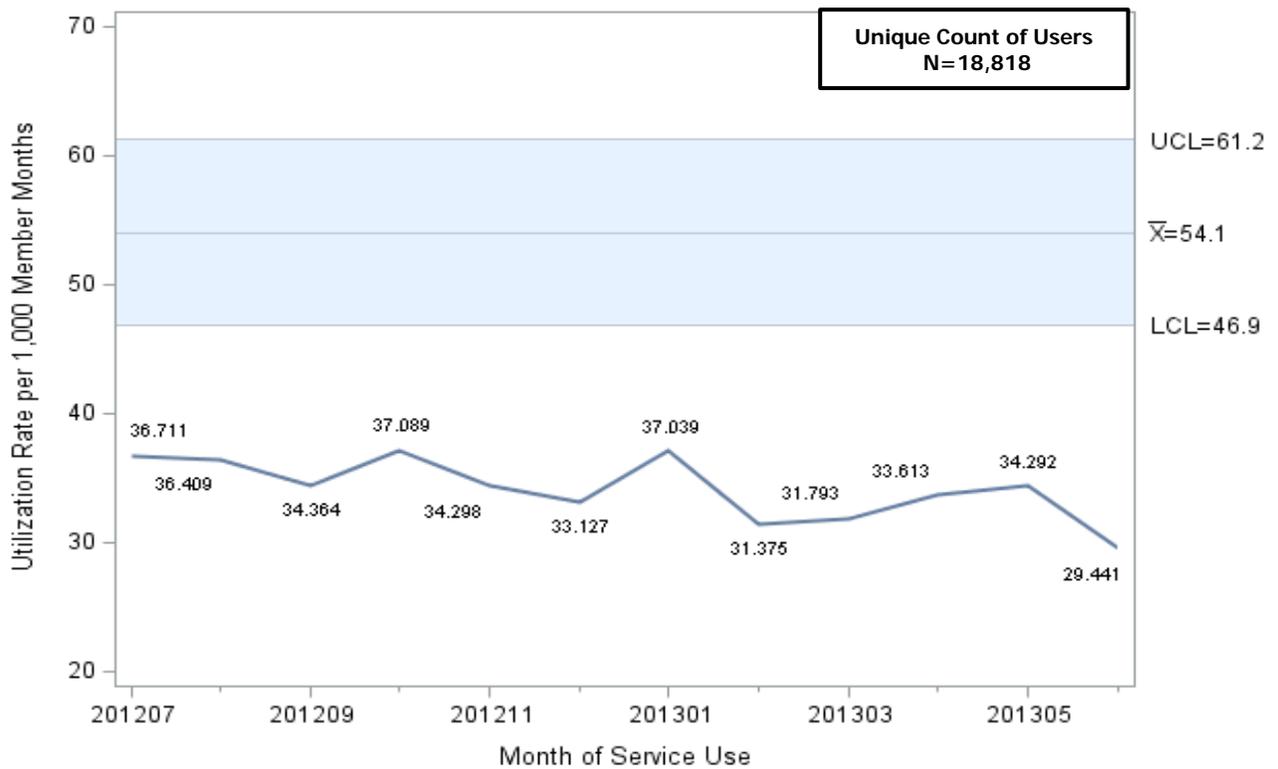
**Figure SU-31. Hospital Inpatient Utilization Rates among Adults (Age 21+) in the Families Aid Category, July 2012–June 2013**



**Figure SU-32. Hospital Inpatient Utilization Rates among Adults (Age 21+) in the Other Aid Category, July 2012–June 2013**



**Figure SU-33. Hospital Inpatient Utilization Rates among Adults (Age 21+) in the Undocumented Aid Category, July 2012–June 2013**



Source: Data for figures SU-29 to SU-33 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

## **Hospital Outpatient Services**

### **Background**

Hospital Outpatient services are diagnostic, preventative, or therapeutic services furnished on an outpatient basis on the premises of a hospital. These services are rendered on the expectation that a patient will not require services beyond a 24-hour period. Hospital Outpatient services may include visits to an emergency room, as well as scheduled procedures that do not require overnight hospitalization.

The general public is ensured access to emergency medical services under EMTALA, regardless of their ability to pay. Under this act, individuals who present to hospitals having emergency rooms must be appropriately screened and examined to determine if an emergency medical condition exists, and must receive stabilizing treatment when medically needed. Emergency medical conditions include women in active labor. This provision is equally applicable to Medi-Cal beneficiaries seeking emergency and pregnancy-related services, including beneficiaries who are in restricted scope aid categories with limited benefits.

There are over 1,600,000 beneficiaries in the Medi-Cal program that utilize Hospital Outpatient services at any given time during the year, only 16% of whom utilize emergency services. A large proportion of beneficiaries who utilize Hospital Outpatient services use these services only once during the year (44%), while more than half are repeat users of these services (56%).

Nearly 40% of non-emergency Hospital Outpatient service users are age 20 and younger, another 40% are age 21–64, and an additional 20% are elderly beneficiaries age 65 and over. Many users of non-emergency hospital services are enrolled in Families and Undocumented (40%) aid categories, or in Aged and Disabled aid categories (34%). Beneficiaries who utilize emergency Hospital Outpatient services are predominantly adults age 21–64 (60%), and in Undocumented aid categories (45%).

## Trend Analysis

### Children

Among children age 0 to 20 in the Medi-Cal FFS program, monthly Hospital Outpatient services utilization rates ranged from 54.8 to 187.3 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Hospital Outpatient services use continued to be higher among children in the Blind/Disabled aid category with rates ranging from two to three times higher than for children in any other aid category. Children in the Blind/Disabled aid category primarily displayed above average utilization, while those in the Families and Undocumented aid categories mostly exhibited below average utilization. Additionally, children in the Other aid group displayed Hospital Outpatient services utilization below the expected ranges throughout the study period. Of particular note, children in the Families and Other aid categories displayed a downward trend in Hospital Outpatient services utilization between January 2013 and June 2013. Children in the Blind/Disabled, Foster Care, and Undocumented aid categories displayed a decrease in Hospital Outpatient utilization in June 2013.

Children in the Blind/Disabled aid category used Hospital Outpatient services at rates two to three times higher than children in other aid categories.

### Adults

The monthly Hospital Outpatient services utilization rates for adults age 21 and older ranged from 44.1 to 318.3 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

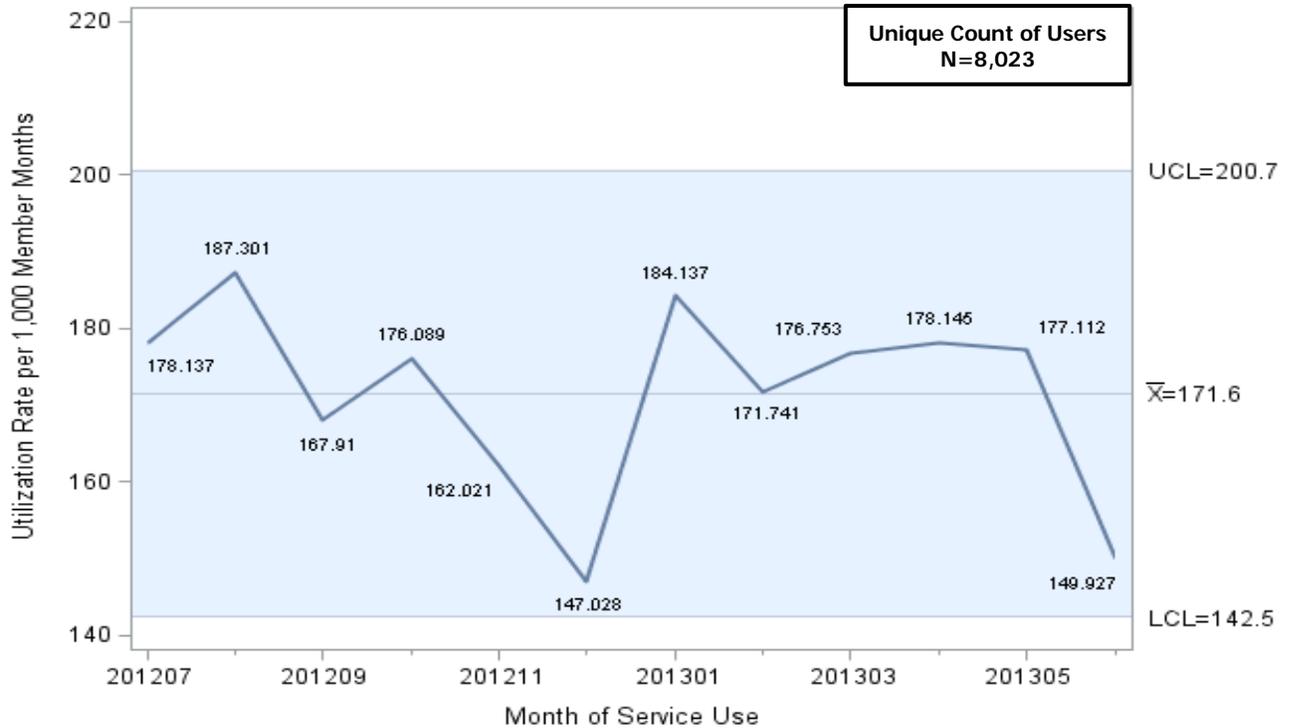
As noted in the prior access quarterly reports, Hospital Outpatient services utilization rates were noticeably higher for adults in the Blind/Disabled and Other aid categories. Adults in the Aged and Blind/Disabled aid categories again primarily exhibited above average utilization that at times reached levels above the expected ranges. In contrast, adults in the Families, Other, and Undocumented aid categories mostly exhibited below average utilization that reached levels below the expected ranges during the last three quarters of the study period. Of particular note, adults in the Blind/Disabled, Families, Other, and Undocumented aid categories exhibited a noticeable downward trend in Hospital Outpatient services utilization between August 2012 and December 2012.

Adults in Blind/Disabled and Other aid categories experienced higher utilization rates for Hospital Outpatient services.

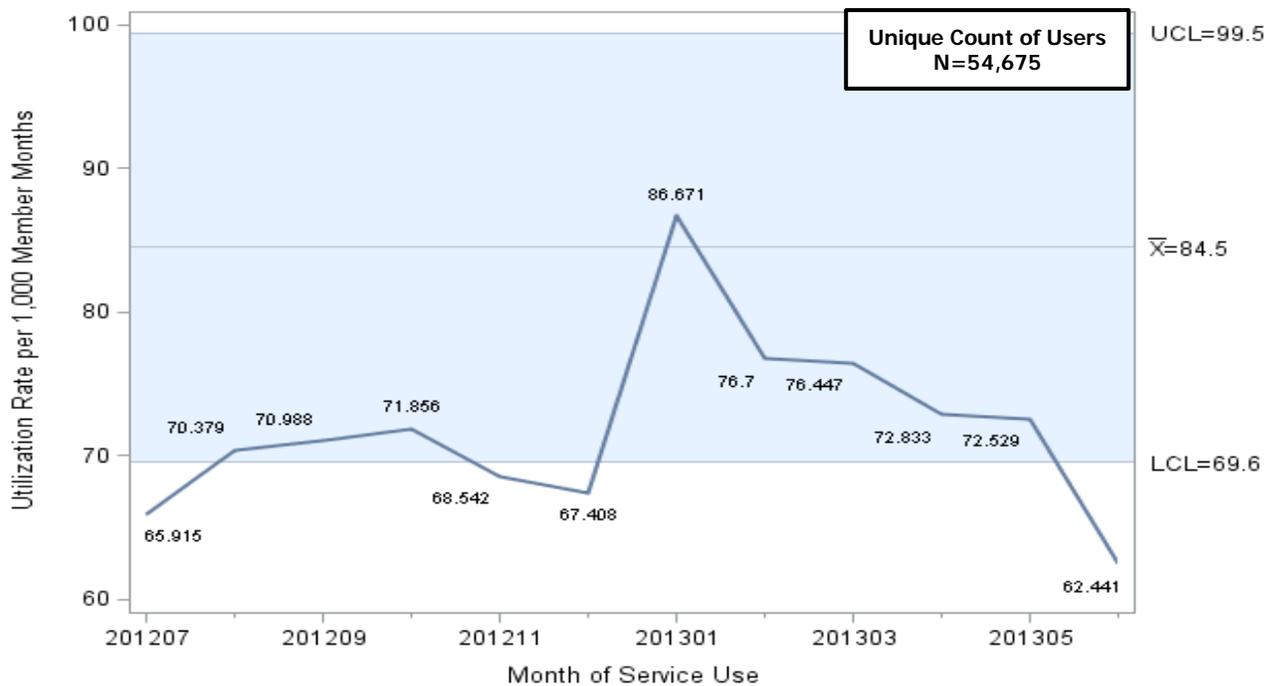
The following figures SU-34 to SU-43 represent the control chart analysis for both children and adults from the third quarter of 2012 to the second quarter of 2013.

### Trends of Monthly Hospital Outpatient Services Utilization Rates among Children, July 2012–June 2013

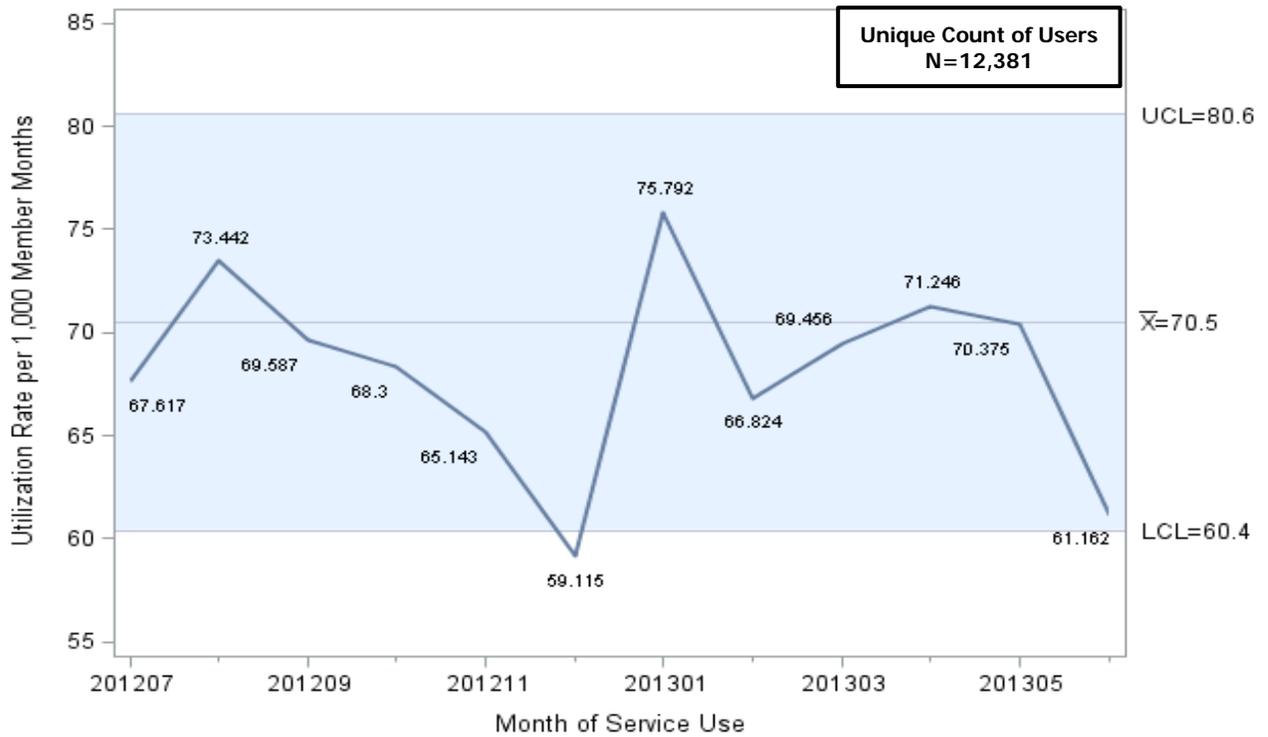
**Figure SU-34. Hospital Outpatient Utilization Rates among Children (Age 0-20) in the Blind/Disabled Aid Category, July 2012–June 2013**



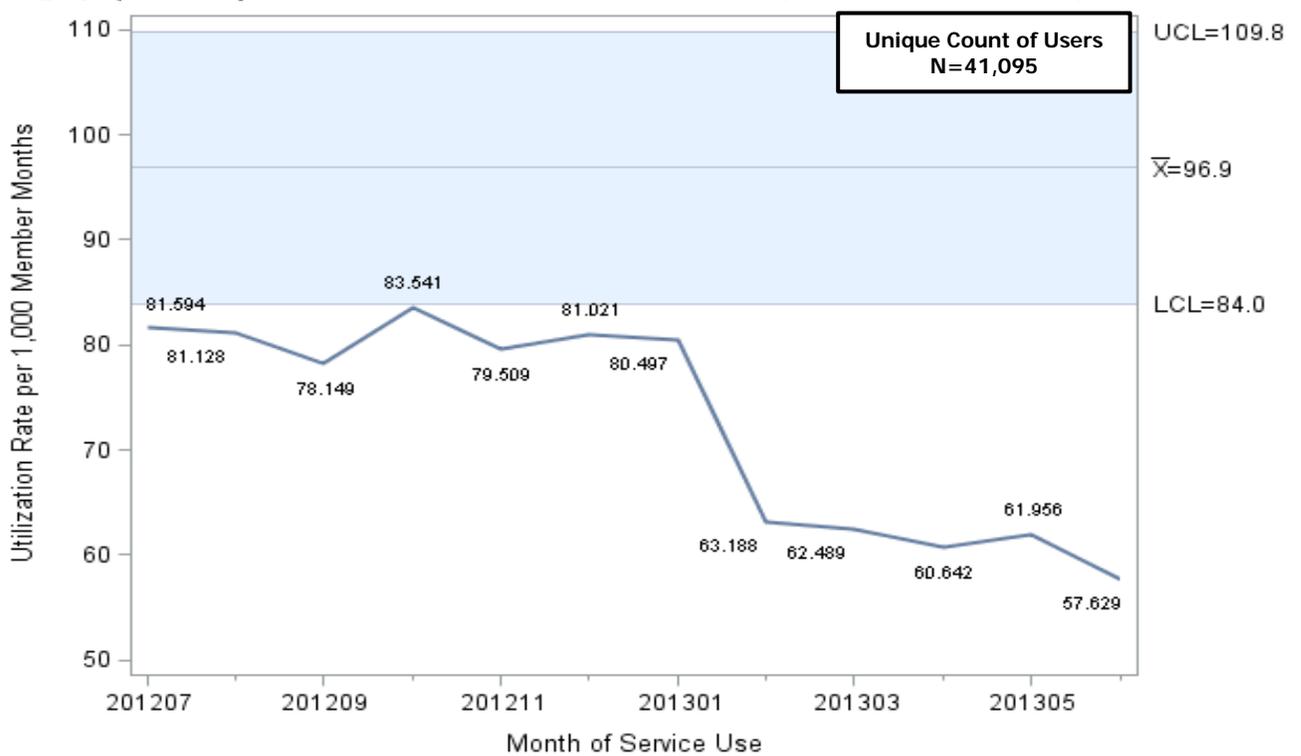
**Figure SU-35. Hospital Outpatient Utilization Rates among Children (Age 0-20) in the Families Aid Category, July 2012–June 2013**



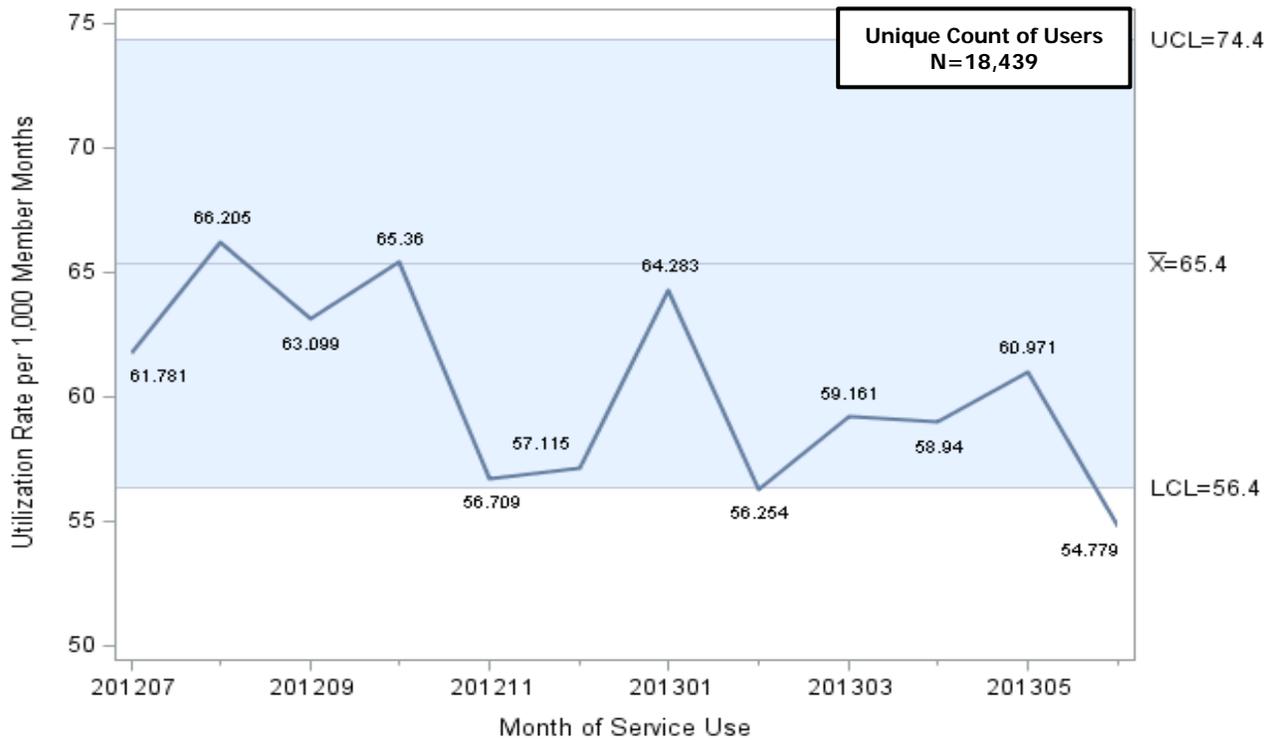
**Figure SU-36. Hospital Outpatient Utilization Rates among Children (Age 0-20) in the Foster Care Aid Category, July 2012–June 2013**



**Figure SU-37. Hospital Outpatient Utilization Rates among Children (Age 0-20) in the Other Aid Category, July 2012–June 2013**



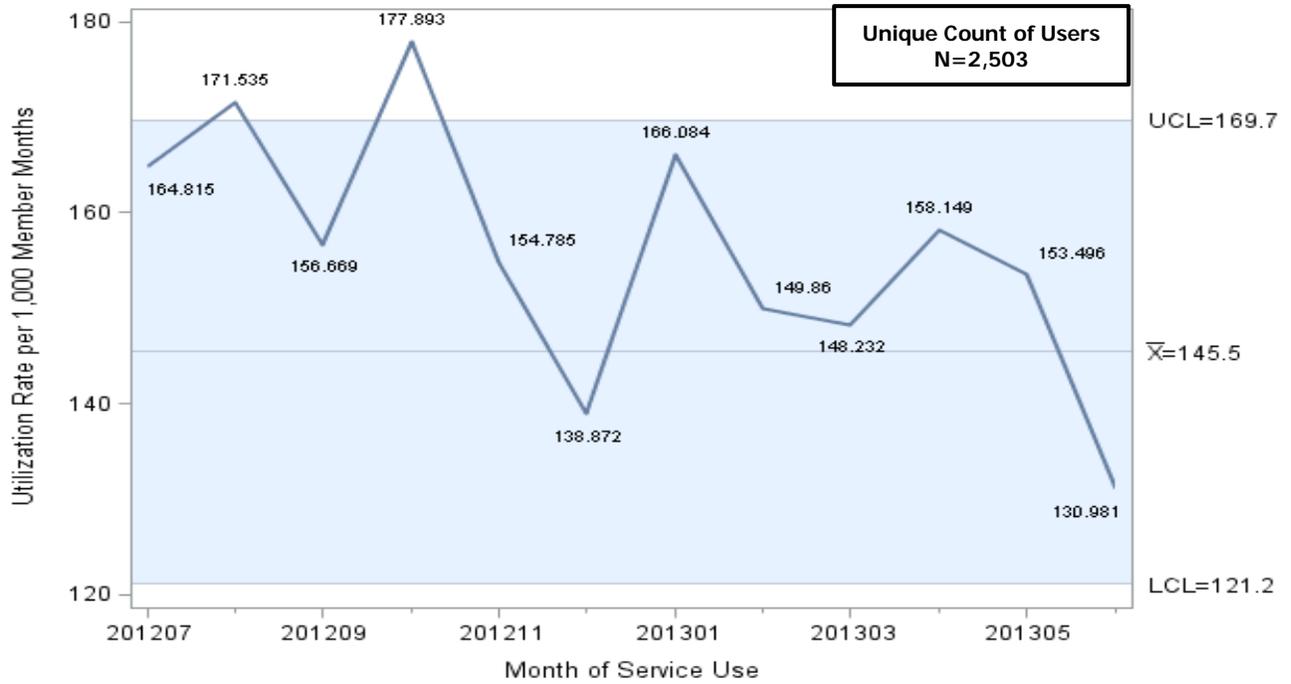
**Figure SU-38. Hospital Outpatient Utilization Rates among Children (Age 0-20) in the Undocumented Aid Category, July 2012–June 2013**



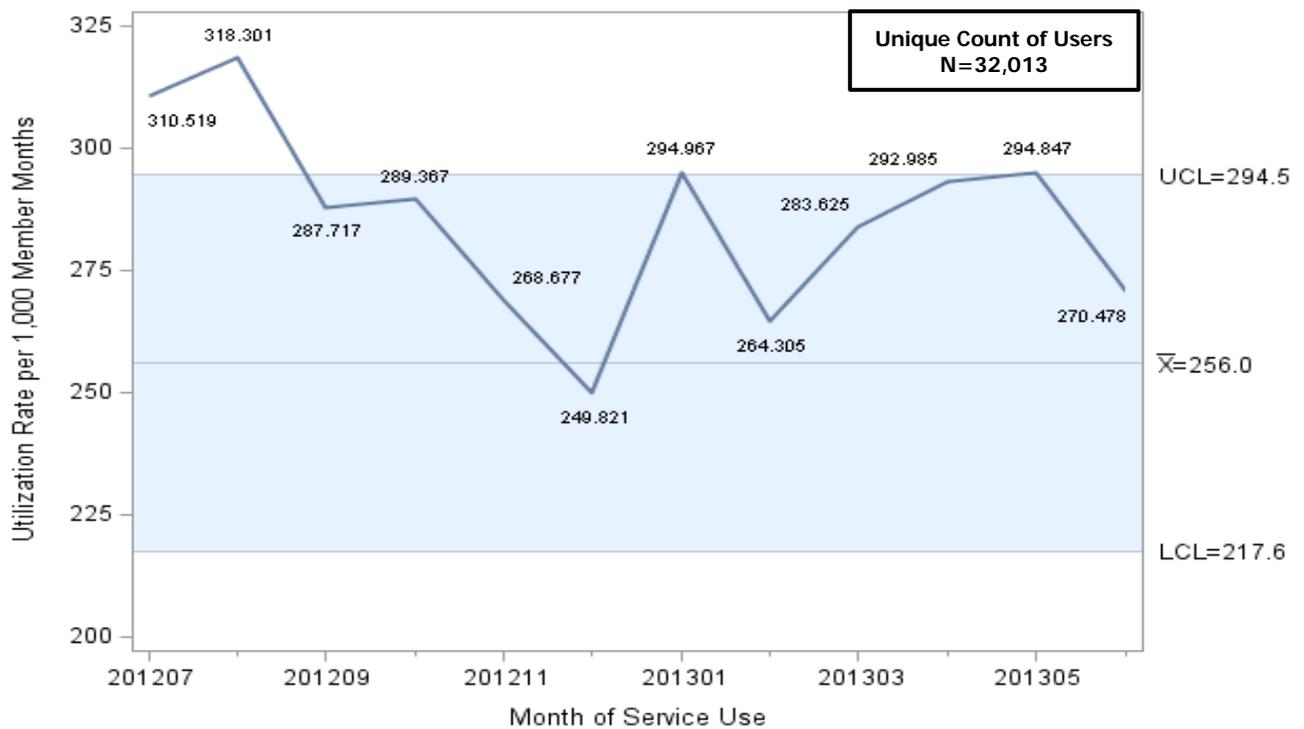
Source: Data for figures SU-34 to SU-38 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

### Trends of Monthly Hospital Outpatient Services Utilization Rates among Adults, July 2012–June 2013

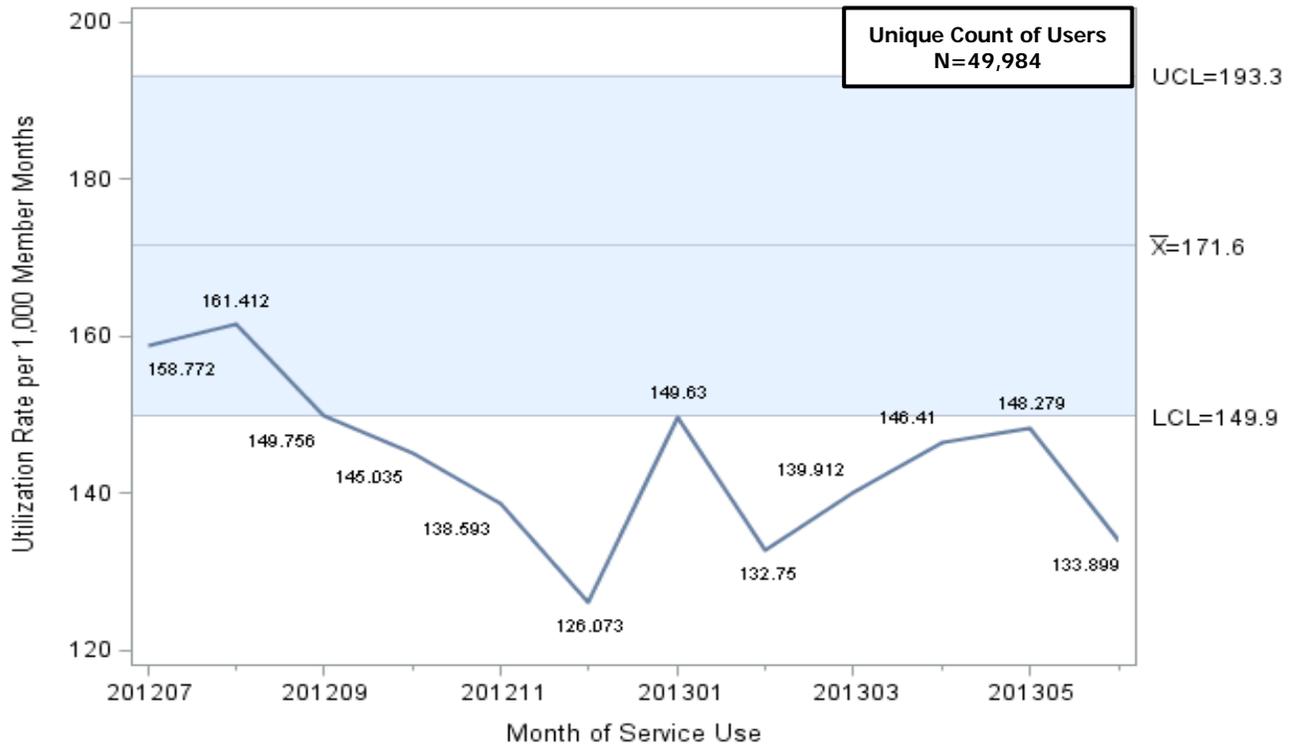
**Figure SU-39. Hospital Outpatient Utilization Rates among Adults (Age 21+) in the Aged Aid Category, July 2012–June 2013**



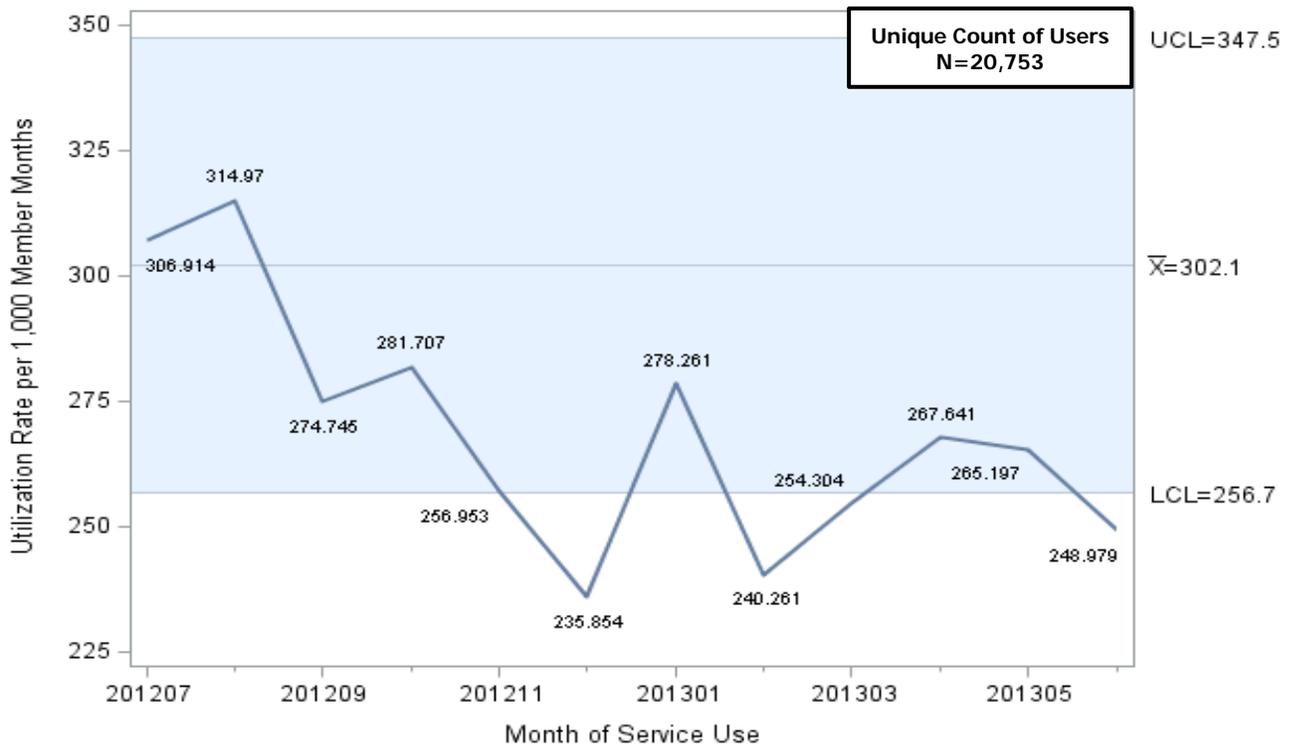
**Figure SU-40. Hospital Outpatient Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013**



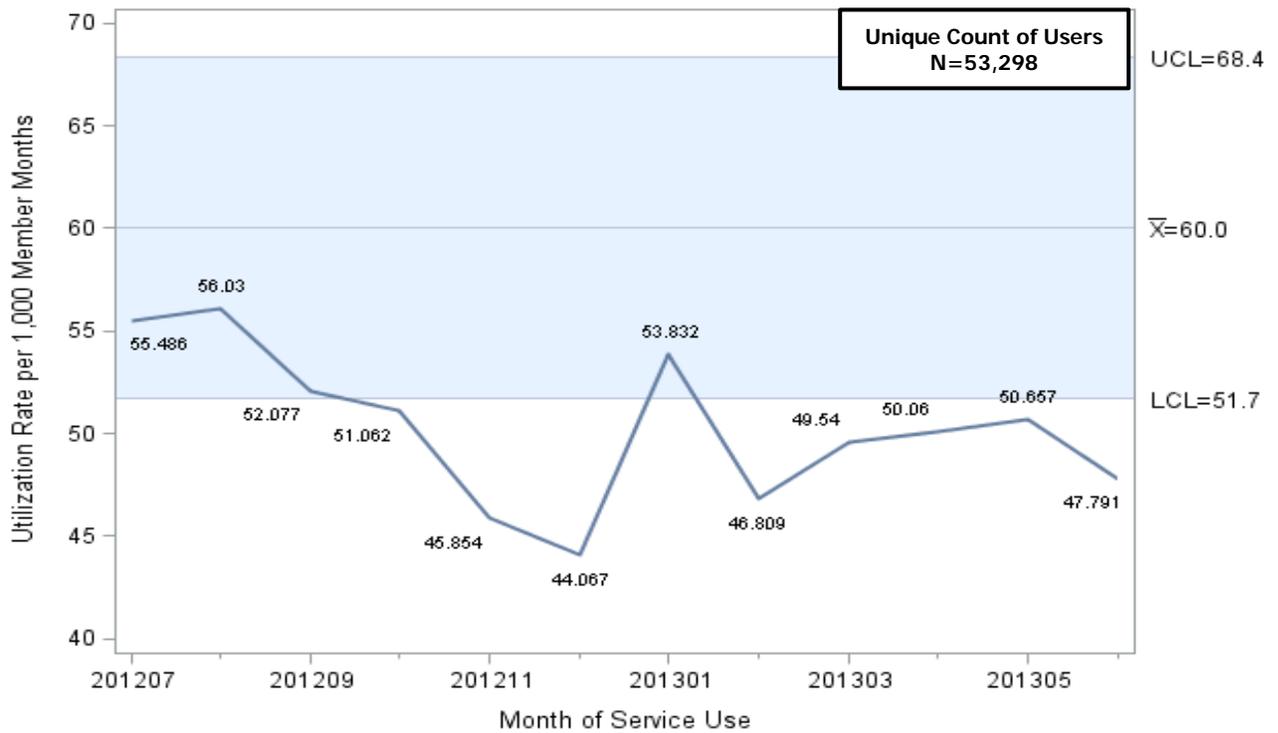
**Figure SU-41. Hospital Outpatient Utilization Rates among Adults (Age 21+) in the Families Aid Category, July 2012–June 2013**



**Figure SU-42. Hospital Outpatient Utilization Rates among Adults (Age 21+) in the Other Aid Category, July 2012–June 2013**



**Figure SU-43. Hospital Outpatient Utilization Rates among Adults (Age 21+) in the Undocumented Aid Category, July 2012–June 2013**



Source: Data for figures SU-39 to SU-43 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

## **Nursing Facility Services**

### **Background**

Nursing Facility services offered under the Medi-Cal program encompass a variety of provider types, including intermediate care facilities for the developmentally disabled (ICF/DD), nursing facility Level A and B care, and certified hospice services.

ICF/DD facilities provide 24-hour personal, habilitation, developmental, and supportive health care to clients who need developmental services and who have a recurring but intermittent need for skilled nursing services. There are three types of ICF/DD facilities that are distinguished by the different levels of developmental and skilled nursing services they provide. ICF/DD facilities primarily provide developmental services for individuals who may have a recurring, intermittent need for skilled nursing. ICF/DD–Habilitative facilities provide developmental services to 15 or fewer clients who do not require the availability of continuous skilled nursing care. ICF/DD–Nursing facilities offer the same services as those found in an ICF/DD–Habilitative facility, but focus their services on medically frail persons requiring a greater level of skilled nursing care.

There are approximately 6,500 unique users of ICF/DD services, representing 4.5% of all nursing facility service recipients. Many of these recipients are adults age 21–64 (82%), and enrolled in Long-Term Care (54.4%) and Disabled (41.6%) aid categories.

Nursing Facility Level A (NF-A) provides intermediate care for non-developmentally disabled clients. These facilities provide inpatient care to ambulatory or non-ambulatory patients who have recurring need for skilled nursing supervision, need supportive care, but who do not require the availability of continuous skilled nursing care. Approximately 3% of all nursing facility recipients use NF-A services annually.

Skilled Nursing Facility Level B (SNF-B) provides skilled nursing and supportive care to patients whose primary need is for continuous care on an extended basis, such as those with physical and/or mental limitations and those requiring subacute care. Recipients of SNF-B services are the predominant user group of Nursing Facility services, representing about 80% of all users in this service category.

A large proportion of Medi-Cal beneficiaries who use NF-A or SNF-B services are covered under Long-Term Care (51.2%), Aged (25.4%), and Disabled (18.6%) aid categories, and are primarily adults age 65 and older (76.1%).

Certified hospice services are designed to meet the unique needs of terminally ill individuals who opt to receive palliative care versus care to treat their illness. The following providers may render hospice services to program beneficiaries: hospitals; skilled nursing facilities; intermediate care facilities; home health agencies; and licensed Medi-Cal health providers who are certified by Medicare to provide hospice services. Hospice services may include: nursing and physician services; medical social and counseling services; home health aide and homemaker

services; bereavement counseling; and any additional item that may otherwise be paid under the Medi-Cal program. There are approximately 15,000 users of hospice care, representing just over 10% of recipients of Nursing Facility services. Most hospice recipients are elderly beneficiaries over age 65 (71.3%) and covered under Long-Term Care (39.3%), Aged (27.5%), and Disabled (20.9%) aid categories.

## Trend Analysis

### Children

Children in all of the aid categories are excluded from this analysis because of their relatively small user counts (<500).

### Adults

This analysis only focuses on Nursing Facility services utilization among Medi-Cal adults age 21 and older participating in the FFS program and enrolled in the Aged, Blind/Disabled and Other aid categories.

Among adults in these aid categories, the monthly Nursing Facility services utilization rates ranged from 675.8 to 2,053.0 days per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

The Nursing Facility services utilization rates were again highest among adults in the Other aid category, which is understandable given that this subgroup contains beneficiaries enrolled in Long-Term Care aid codes. Additionally, adults in the Blind/Disabled aid category exhibited high utilization of Nursing Facility services, most likely due to their inherent complex medical needs. Although displaying high use, adults in the Other aid category continued to exhibit below average Nursing Facility services utilization that predominantly fell below the ranges established during the baseline period. In contrast, adults in the Aged and Blind/Disabled aid categories displayed above average utilization of Nursing Facility services that reached levels well above the expected ranges throughout the study period.

These trends highlight how markedly the case mix of the FFS beneficiary population has changed since the baseline utilization rates were established during 2007-2009. As DHCS transitioned beneficiaries enrolled in the Seniors and Persons with Disabilities (SPDs) aid codes into managed care plans beginning in 2011, the SPDs who remained in Medi-Cal's FFS system were generally those who receive a medical exemption or incurred an LTC stay or resided in an LTC facility. SPD beneficiaries remaining in FFS most likely represent beneficiaries who are medically compromised and suffering from severe chronic health conditions. In turn, they represent a group most likely to become LTC service utilizers. For those beneficiaries completing their transition into managed care plans and needing LTC services, an additional enrollment shift may be made back into Medi-Cal's FFS system where LTC services are then reimbursed.<sup>4</sup> This is due to the current Medi-Cal managed care policy that only places the plan at risk for LTC services for the month of admission plus one

Nursing Facility use is now concentrated among three beneficiary subpopulations: adults in the Blind/Disabled, Aged, and Other aid categories.

These trends highlight how markedly the case mix of the adult FFS beneficiary population has changed since the baseline utilization rates were established.

<sup>4</sup> This policy applies to managed care plans operating in Two-Plan and GMC counties.

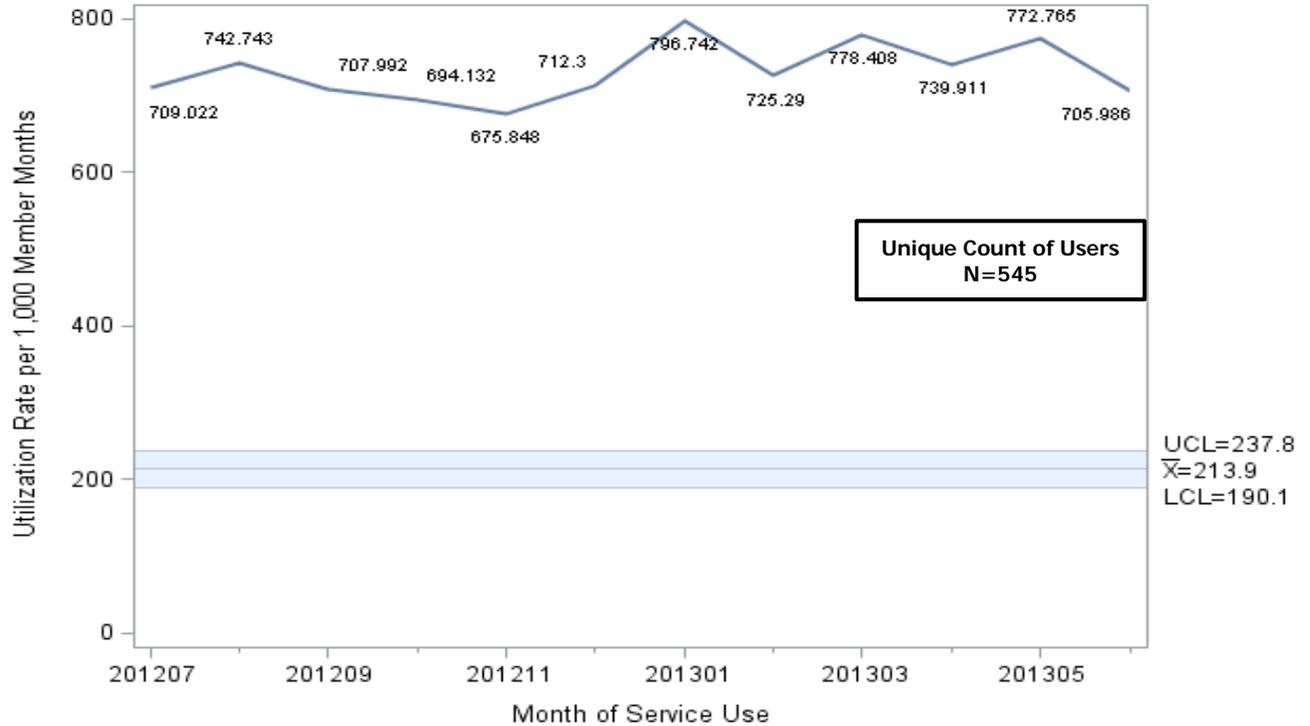
additional month. Consequently, the case mix of adult beneficiaries who remain in the FFS delivery system can be characterized as those exhibiting health care needs that are much greater than the norm.

Medi-Cal FFS beneficiaries in the Undocumented aid category are not eligible for Nursing Facility services and were subsequently excluded from this analysis. Additionally, adults in the Families aid category were excluded due to their relatively small user counts (<100).

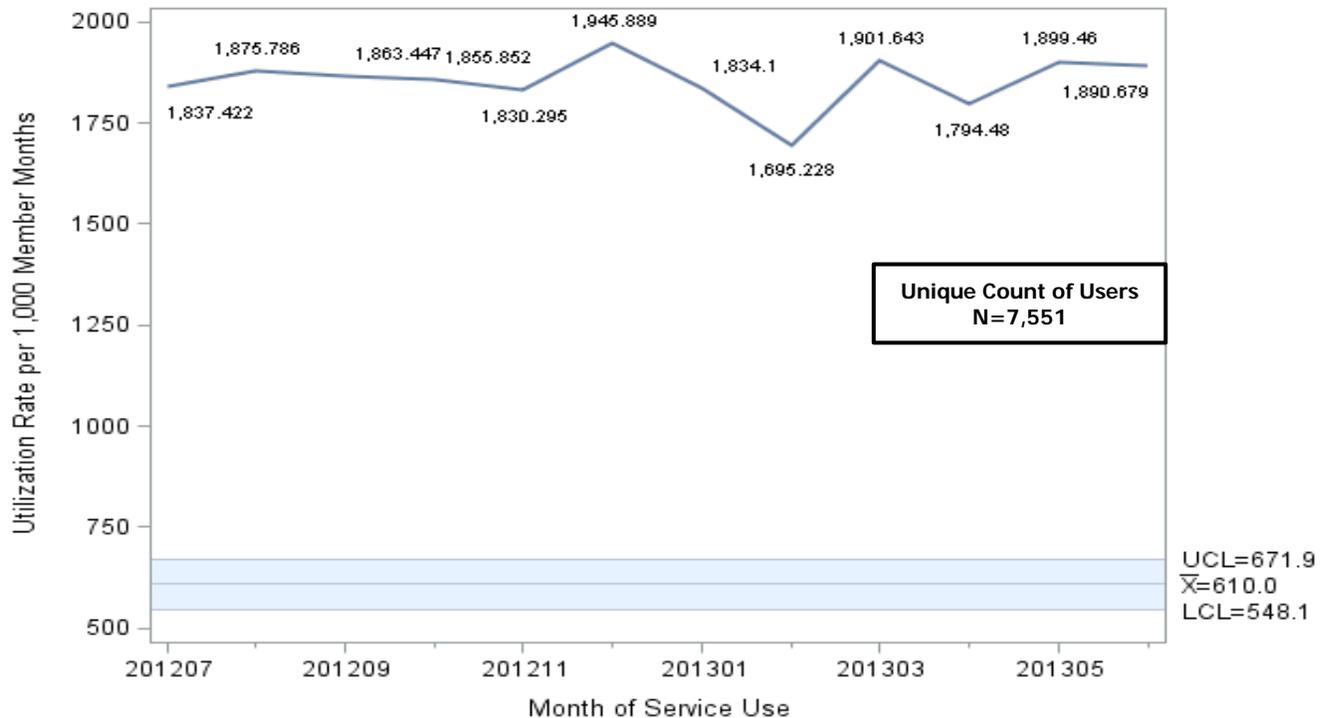
The following figures SU-44 to SU-46 represent the control chart analysis for adults from the third quarter of 2012 to the second quarter of 2013.

### Trends of Monthly Nursing Facility Services Utilization Rates among Adults, July 2012–June 2013

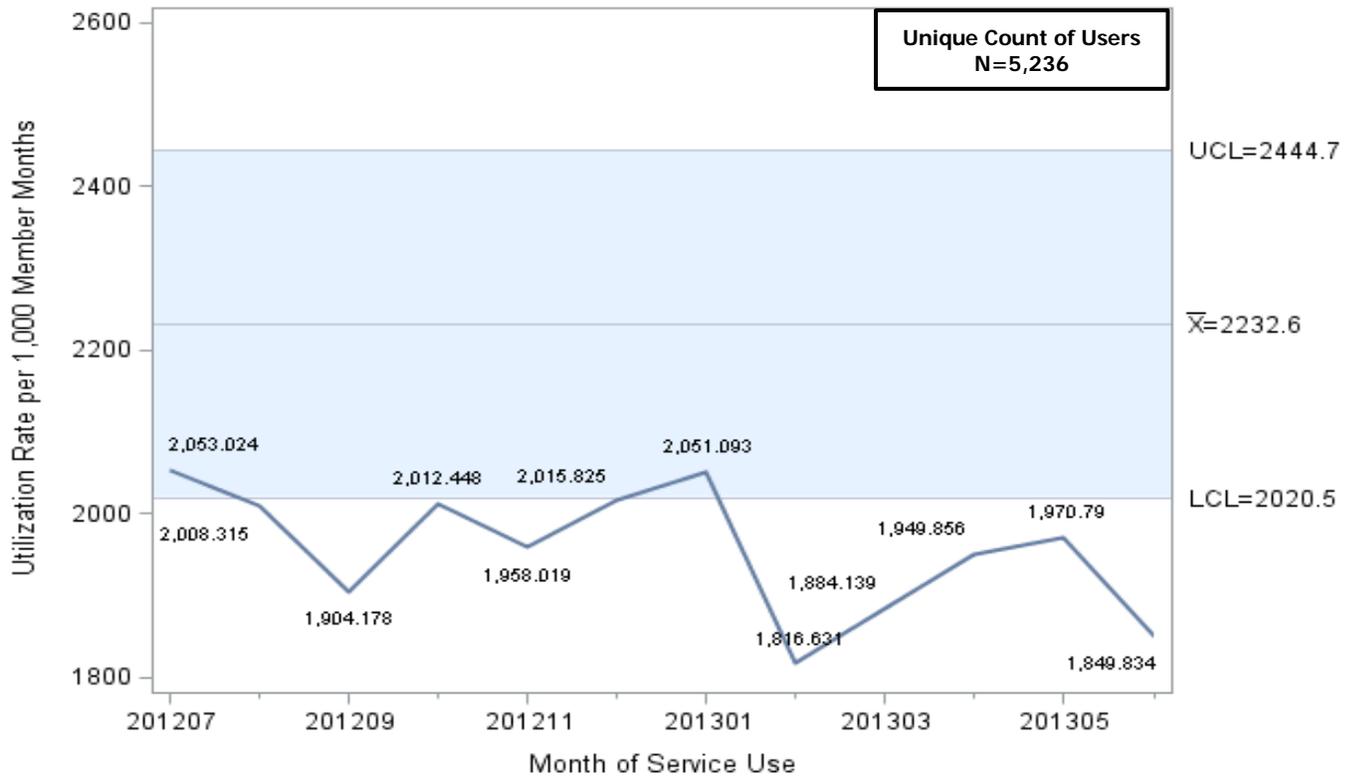
**Figure SU-44. Nursing Facility Utilization Rates among Adults (Age 21+) in the Aged Aid Category, July 2012–June 2013**



**Figure SU-45. Nursing Facility Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013**



**Figure SU-46. Nursing Facility Utilization Rates among Adults (Age 21+) in the Other Aid Category, July 2012–June 2013**



Source: Data for figures SU-44 to SU-46 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

## **Pharmacy Services**

### **Background**

Pharmacy services are the most frequently used Medi-Cal benefit and the fastest growing portion of the Medi-Cal budget. Pharmacy coverage is a significant proportion of the benefits received by the elderly and for beneficiaries with a disability, mental illness, or chronic condition.

Pharmacy providers not only dispense prescription drugs, they also bill for over-the-counter drugs, enteral formula, medical supplies, incontinent supplies, and durable medical equipment. Most outpatient prescription drug claims are billed by pharmacy providers. Physicians and clinics may also bill for drugs administered in their office and prenatal care vitamins that are distributed through Comprehensive Perinatal Services Program providers.

Pharmacy services for beneficiaries eligible for FFS Medi-Cal only are restricted to six prescriptions per month per beneficiary for most drugs. Previous authorization is needed to obtain coverage beyond the six-prescription cap. A copayment of \$1 per prescription is required for most beneficiaries, although beneficiaries cannot be denied coverage if they can't afford the copayment. Federal law prohibits states from imposing cost sharing on children, pregnant women, and institutionalized beneficiaries, and for family planning services, hospice services, emergencies, and Native Americans served by an Indian health care provider.

In 2010, there were over 3 million beneficiaries who received at least one Pharmacy service through the Medi-Cal FFS program. The majority of Pharmacy service users (99%) accessed prescription drugs. Young beneficiaries under age 20 represent 35% of Pharmacy service users, while adults age 21–64 represent 43%, and an additional 22% are Pharmacy service users over age 65. Beneficiaries who utilize Pharmacy services are predominantly found in the Families (27.6%), Disabled (24.5%), Aged (10%), and Undocumented (10%) aid categories. The most frequently dispensed pharmacy products are non-steroidal anti-inflammatory drugs (NSAIDs), penicillin, and analgesics.

## Trend Analysis

### Children

The monthly Pharmacy services utilization rates for children age 0 to 20 in the Medi-Cal FFS program ranged from 64.7 to 1,372.8 prescriptions per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Similar to the previous access quarterly reports, the utilization of Pharmacy services was noticeably higher among children in the Blind/Disabled aid category, with rates about two times higher than children in the Foster Care aid category and five to six times higher than children in the Families and Other aid categories. Children in the Families, Other, and Undocumented aid categories again primarily displayed below average Pharmacy services utilization that at times reached levels below the expected baseline ranges. In contrast, children in the Blind/Disabled aid category exhibited above average utilization that remained within the baseline ranges, while children in the Foster Care aid category continued to exhibit normal use patterns. Additionally, children in the Families, Other, and Undocumented aid categories displayed a downward trend in utilization over the first two quarters of 2013.

Among children in the Blind/Disabled aid category, Pharmacy services use is 2-6 times higher than for children in other aid categories.

### Adults

Among adults 21 and older, monthly Pharmacy services utilization rates ranged from 172.9 to 3,047.4 prescriptions per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

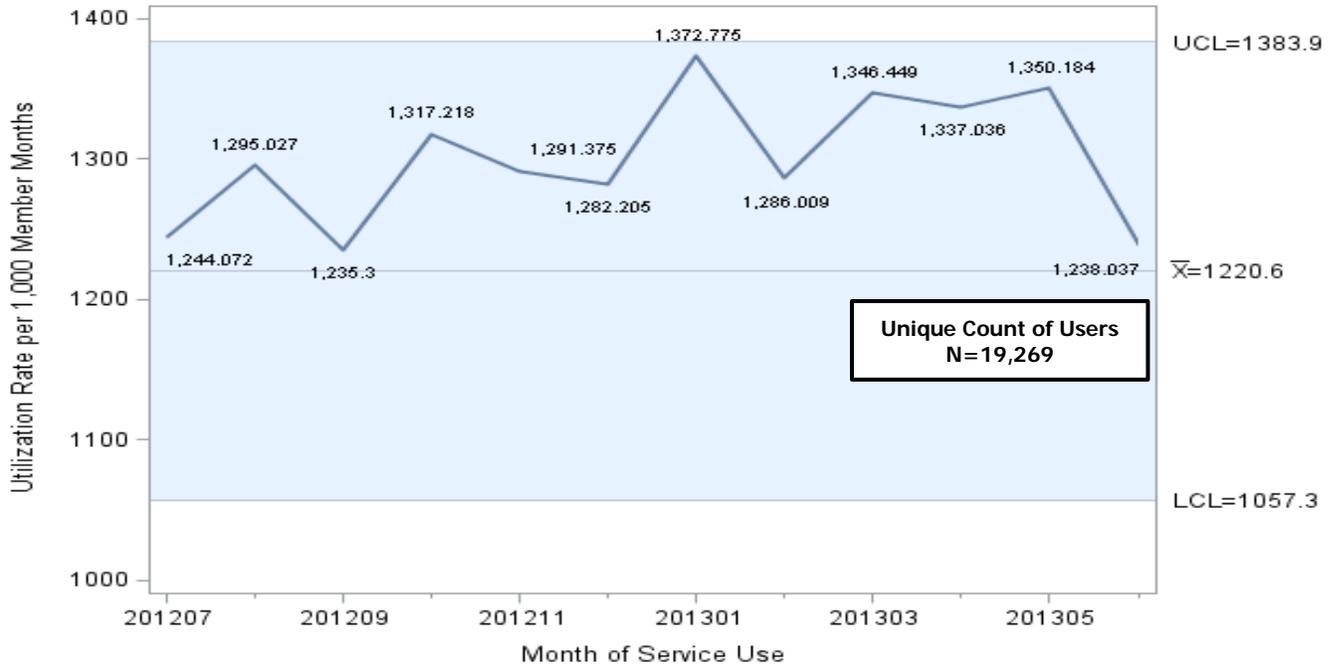
Similar to the trends identified in the prior access quarterly reports, Pharmacy services utilization was again noticeably higher among adults in the Blind/Disabled aid category. Additionally, adults in the Aged and Other aid categories exhibited significant utilization rates of pharmacy services, while adults in the Undocumented aid category utilized these services at much lower rates. Adults in the Aged, Blind/Disabled, Families, and Other aid categories mostly displayed below average Pharmacy services utilization, while adults in the Undocumented aid category mostly displayed above average utilization. The Pharmacy services utilization rates for adults in the Aged, Blind/Disabled, and Families aid categories primarily fell below the expected ranges. In contrast, Pharmacy services utilization rates for adults in the Other and Undocumented aid groups again fell within the expected ranges.

Use of Pharmacy services was highest among adults in the Blind/Disabled aid category.

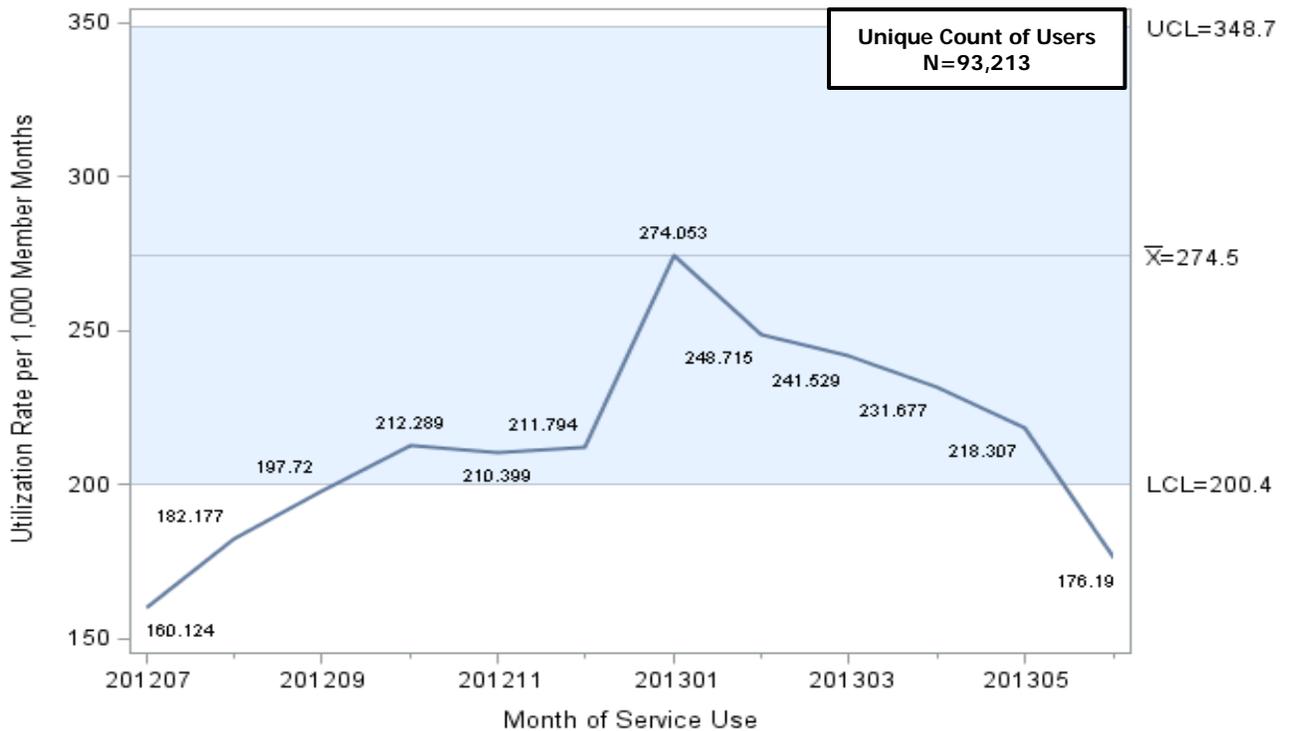
The following figures SU-47 to SU-56 represent the control chart analysis for both children and adults from the third quarter of 2012 to the second quarter of 2013.

### Trends of Monthly Pharmacy Services Utilization Rates among Children, July 2012–June 2013

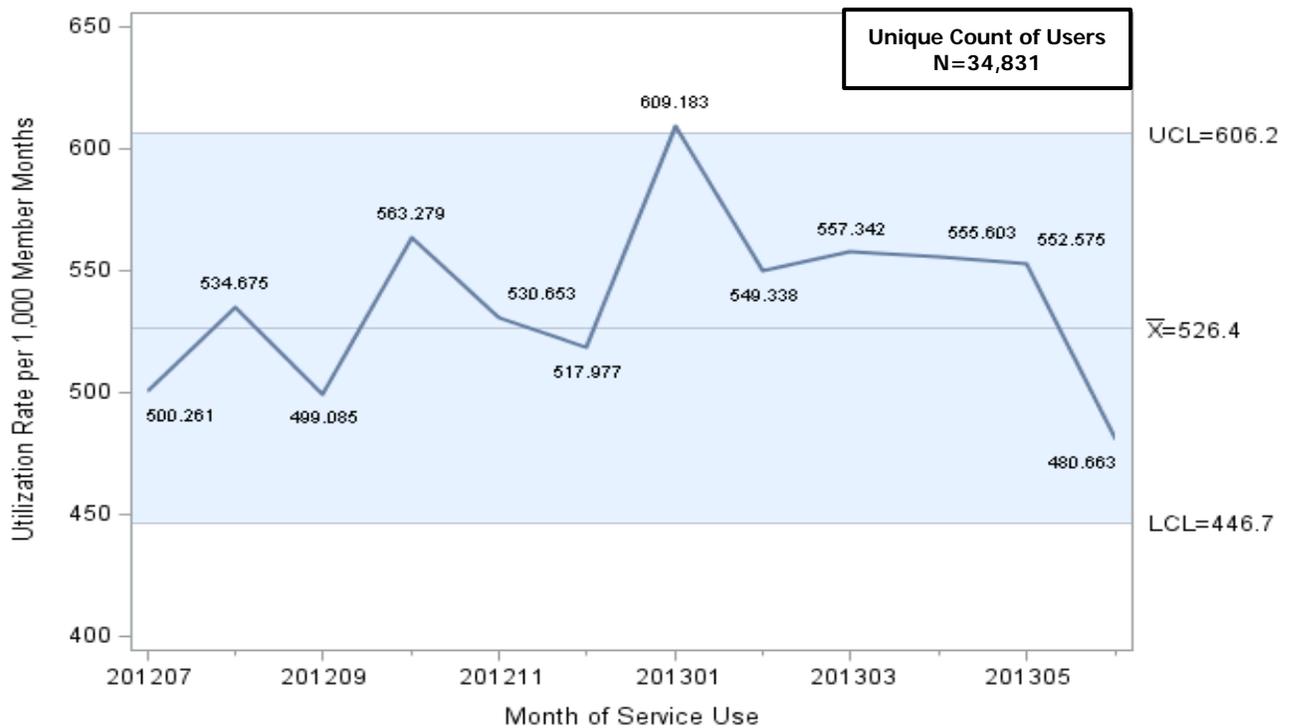
**Figure SU-47. Pharmacy Utilization Rates among Children (Age 0–20) in the Blind/Disabled Aid Category, July 2012–June 2013**



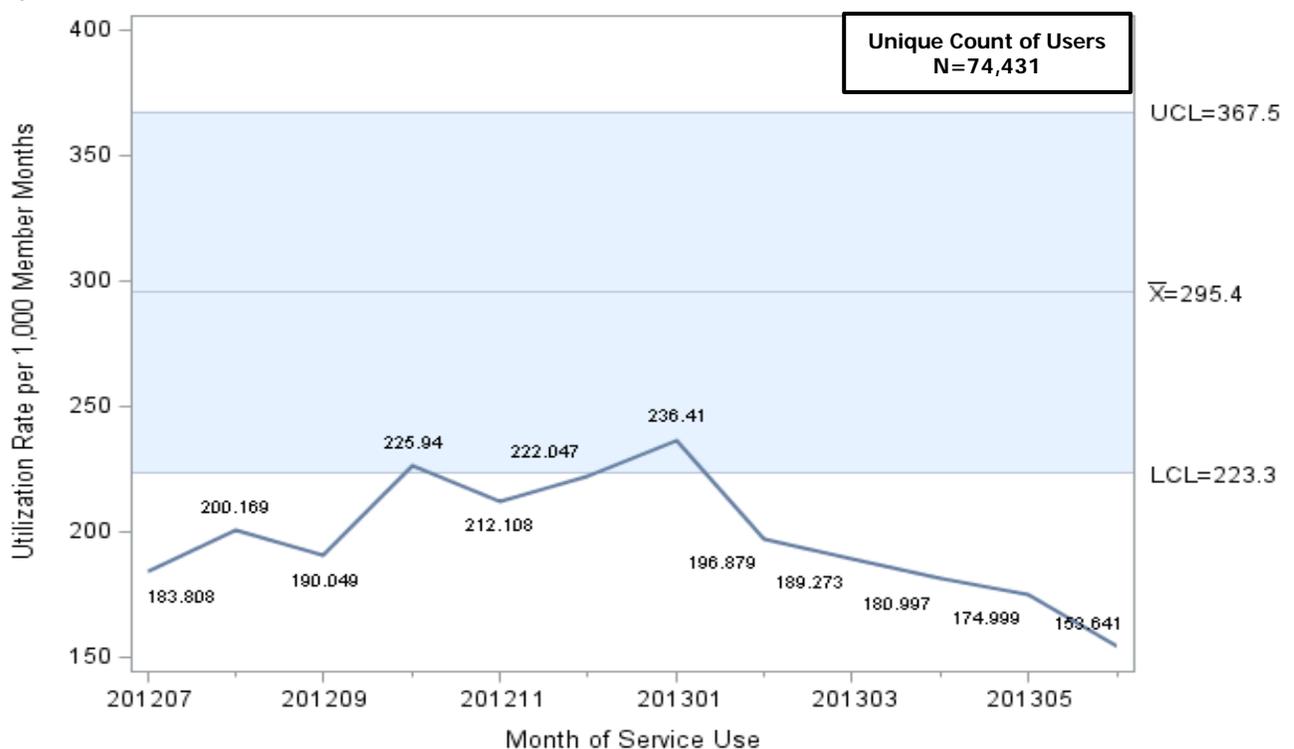
**Figure SU-48. Pharmacy Utilization Rates among Children (Age 0–20) in the Families Aid Category, July 2012–June 2013**



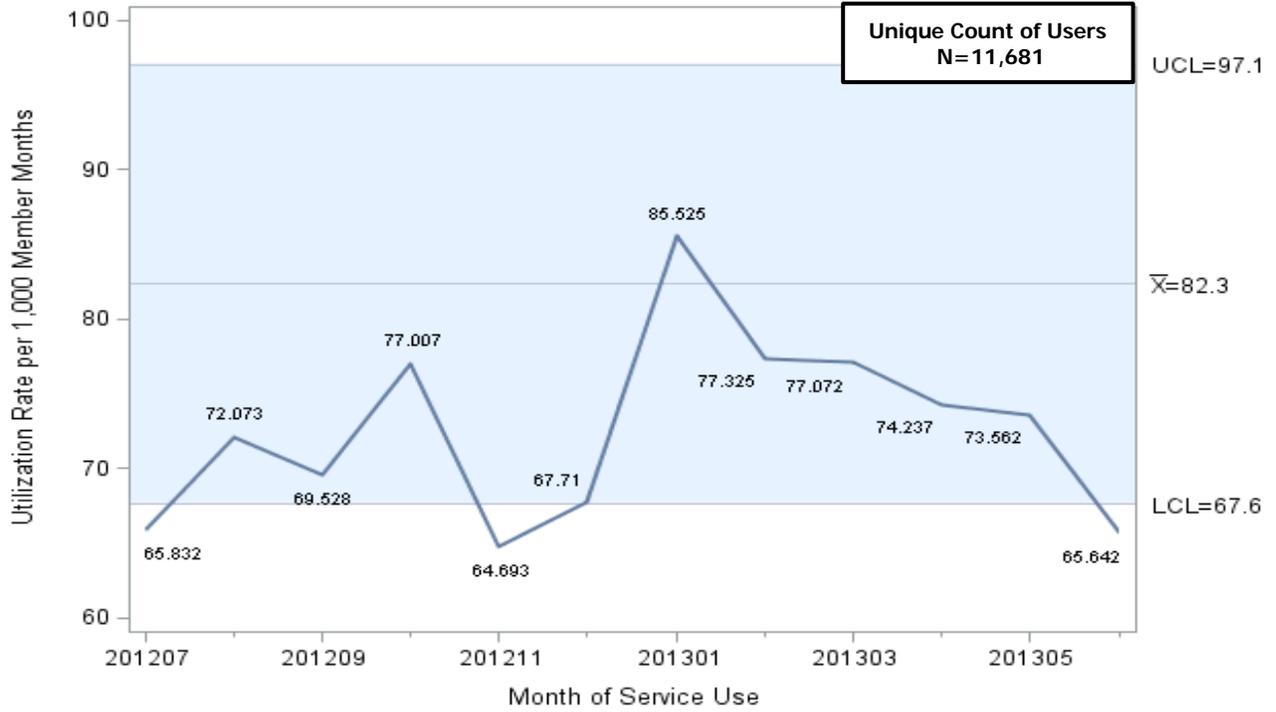
**Figure SU-49. Pharmacy Utilization Rates among Children (Age 0-20) in the Foster Care Aid Category, July 2012-June 2013**



**Figure SU-50. Pharmacy Utilization Rates among Children (Age 0-20) in the Other Aid Category, July 2012-June 2013**



**Figure SU-51. Pharmacy Utilization Rates among Children (Age 0-20) in the Undocumented Aid Category, July 2012-June 2013**



Source: Data for figures SU-47 to SU-51 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012-June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

### Trends of Monthly Pharmacy Services Utilization Rates among Adults, July 2012–June 2013

Figure SU-52. Pharmacy Utilization Rates among Adults (Age 21+) in the Aged Aid Category, July 2012–June 2013

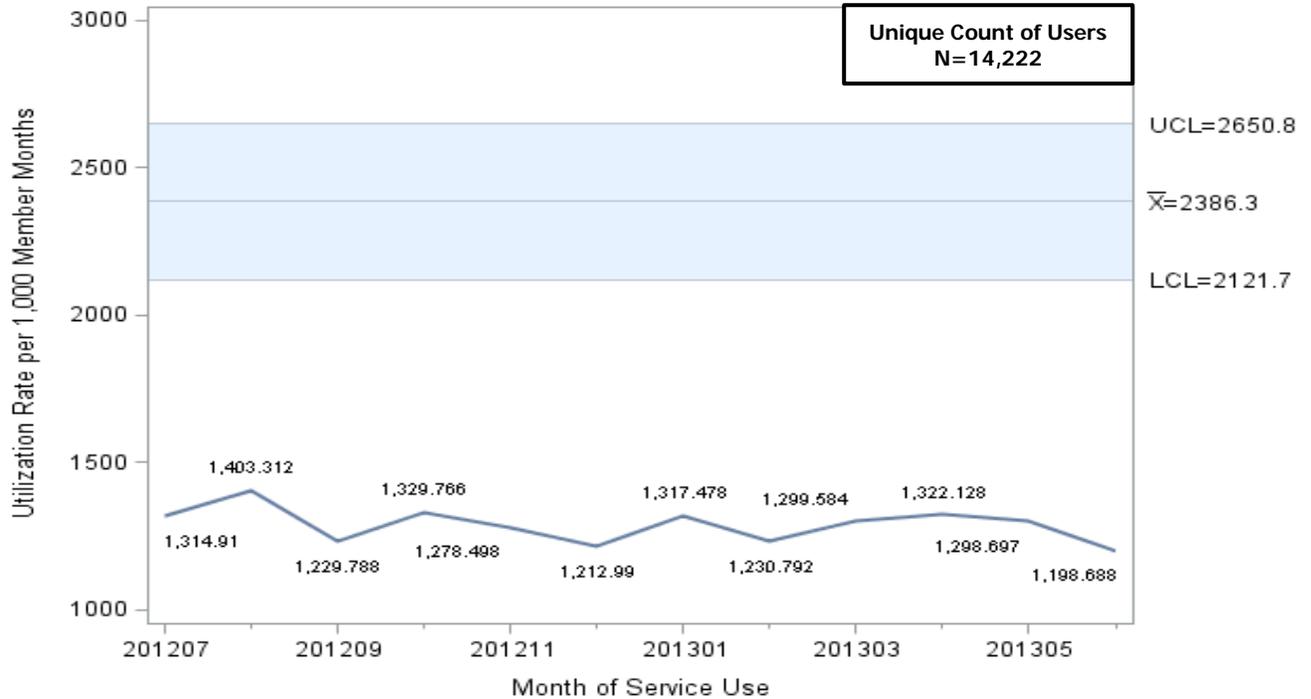
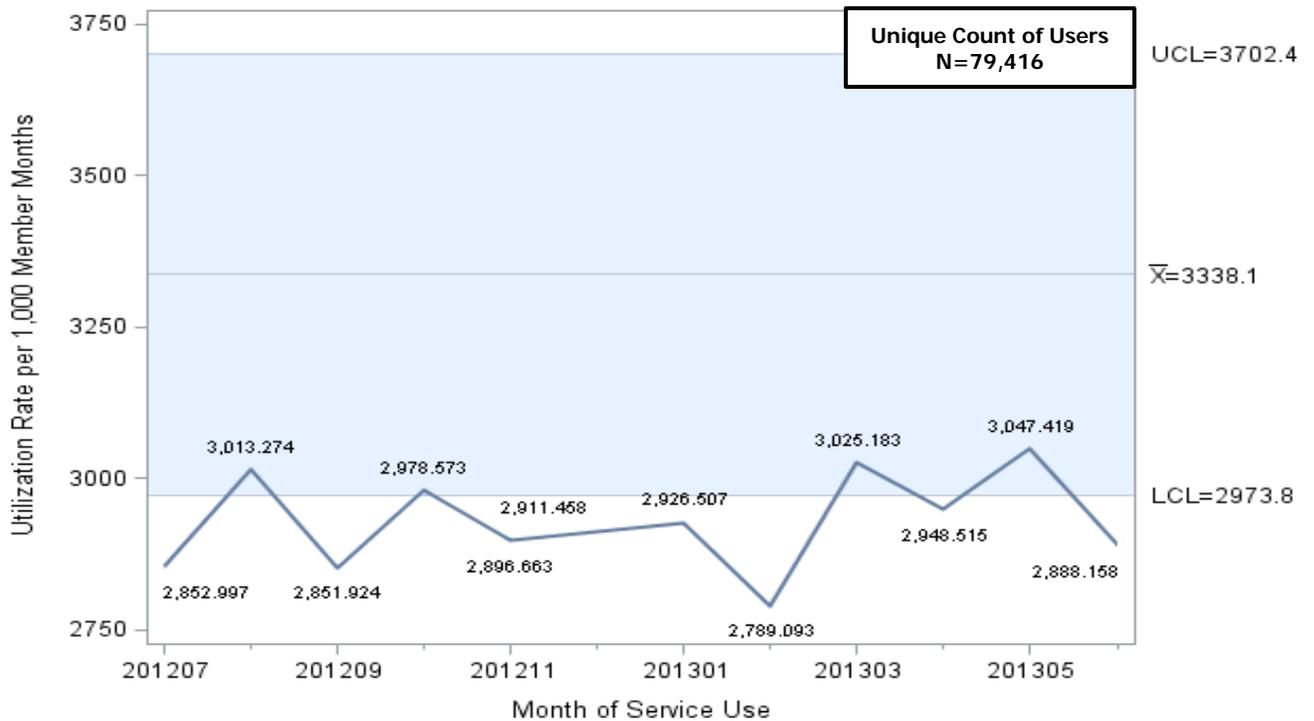
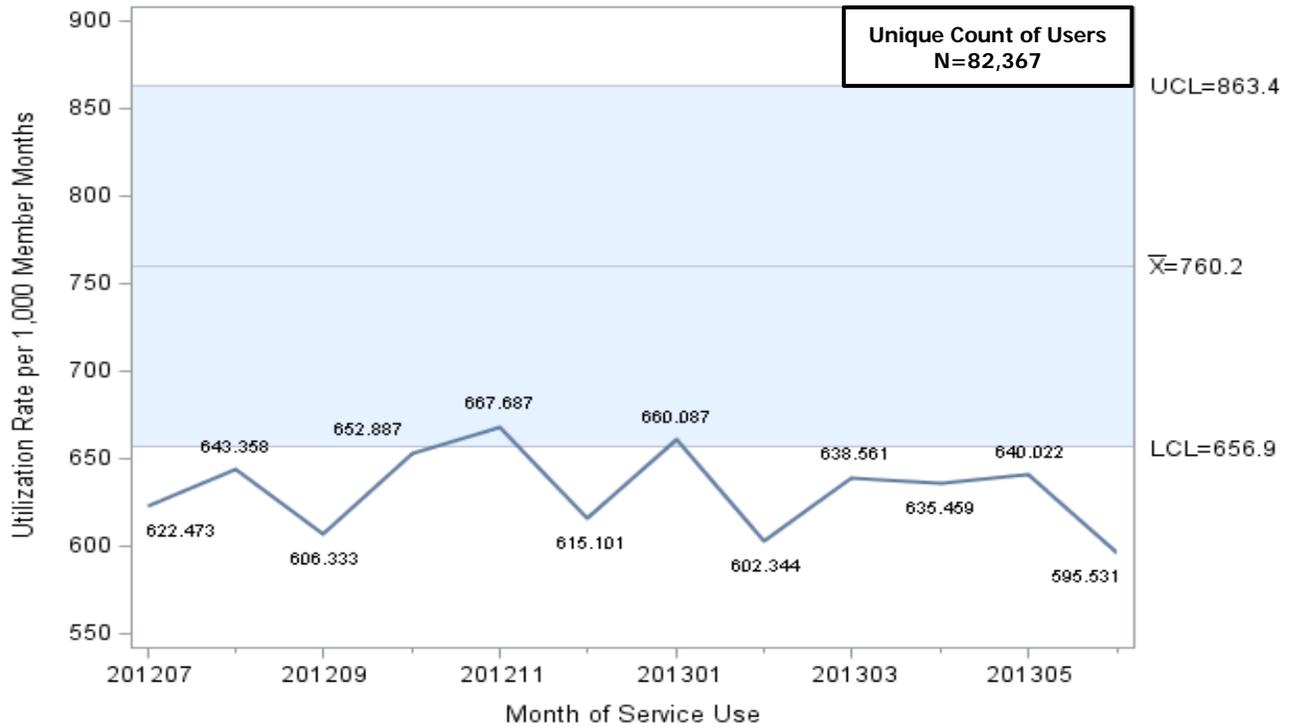


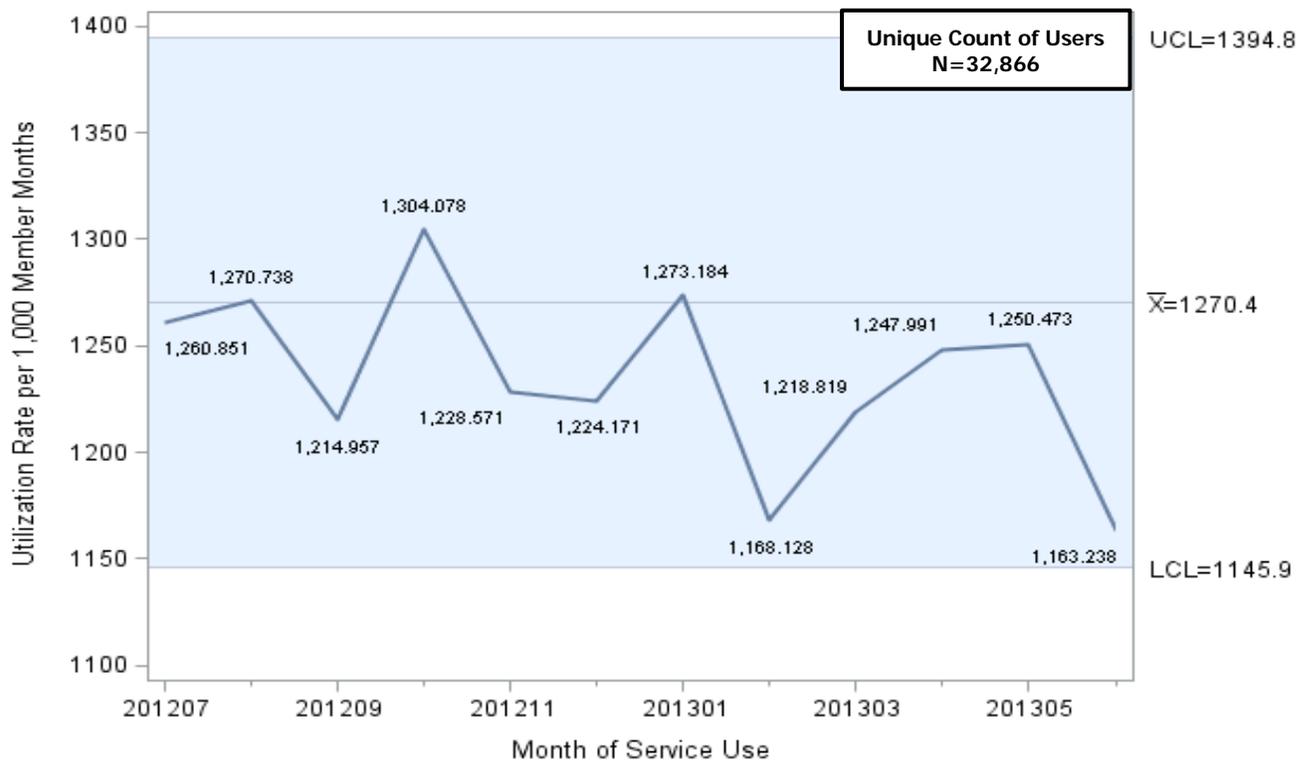
Figure SU-53. Pharmacy Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013



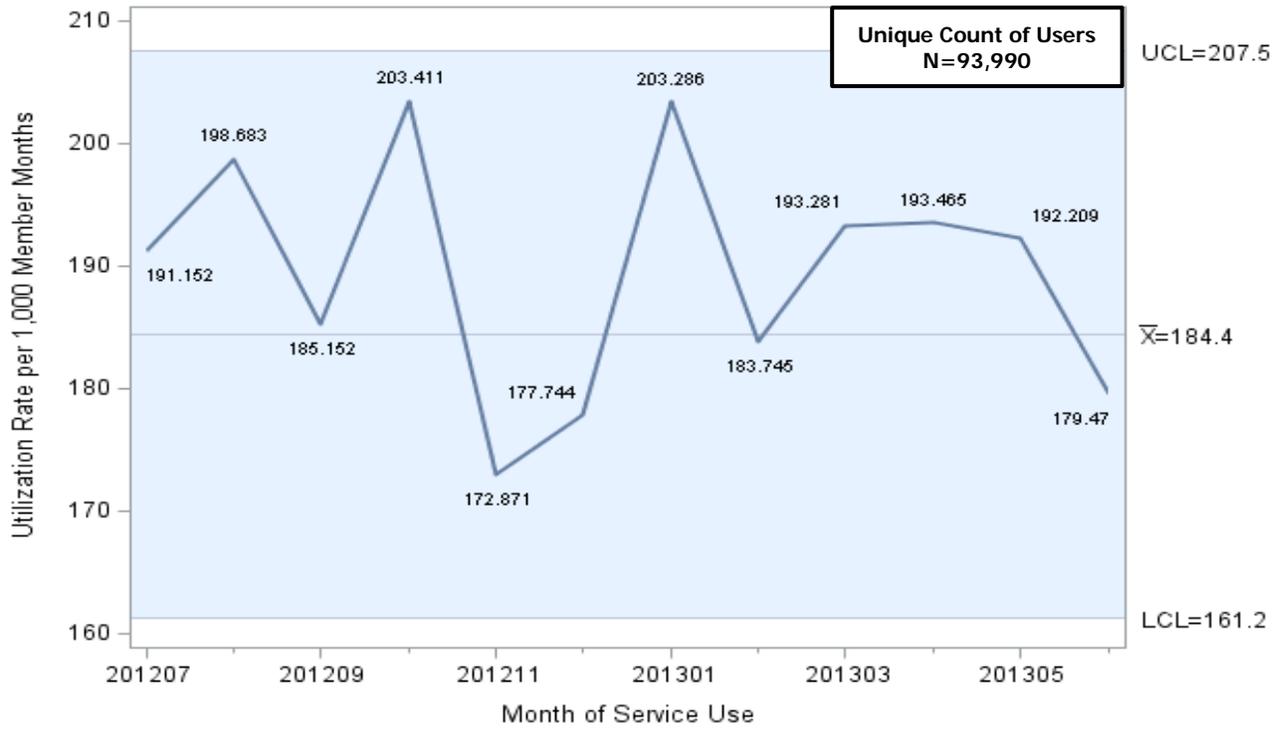
**Figure SU-54. Pharmacy Utilization Rates among Adults (Age 21+) in the Families Aid Category, July 2012–June 2013**



**Figure SU-55. Pharmacy Utilization Rates among Adults (Age 21+) in the Other Aid Category, July 2012–June 2013**



**Figure SU-56. Pharmacy Utilization Rates among Adults (Age 21+) in the Undocumented Aid Category, July 2012–June 2013**



Source: Data for figures SU-52 to SU-56 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

## Other Services

### Background

Service providers covered under the "Other" aid category include the following partial list:

- Community-Based Adult Services Program (formerly called Adult Day Health Care)
- Assistive Device and Sick Room Supply Dealers
- Audiologists and Hearing Aid Dispensers
- Certified Nurse Practitioners, Pediatric Nurse Practitioners
- Physical, Occupational and Speech Therapists
- Orthotists and Prosthetists
- Podiatrists
- Psychologists
- Genetic Disease Testing
- Local Education Agency (LEA)
- Respiratory Care Practitioners
- Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Supplemental Services Providers
- Health Access Program (HAP)

For a full list of provider types, see the [Appendix](#).

It is important to note that beginning in July 2009 several optional benefits were excluded from the Medi-Cal program. These benefits comprise the following list and impact most beneficiaries except those eligible for EPSDT services, beneficiaries in skilled nursing facilities or residing in intermediate care facilities for the developmentally disabled (ICF/DD), and beneficiaries enrolled in the Program of All-Inclusive Care for the Elderly (PACE):

- Acupuncture
- Adult Dental Services
- Audiology Services
- Chiropractic Services
- Incontinence Creams and Washes
- Dispensing Optician Services
- Fabricating Optical Laboratory Services
- Podiatric Services
- Psychology Services
- Speech Therapy

## Trend Analysis

### Children

Among children age 0 to 20 in the Medi-Cal FFS program, monthly utilization rates for Other services ranged from 13.5 to 1,424.0 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Similar to the prior reporting period, the utilization of Other services was again noticeably higher among children in the Blind/Disabled aid category. Children in the Blind/Disabled, Families, and Foster Care aid categories exhibited mostly normal utilization of Other services. In contrast, children in the Undocumented aid category exhibited below average utilization that fell below the expected ranges observed in the baseline period of 2007 to 2009. Of particular note, children in the Blind/Disabled, Families, Foster Care, and Other aid categories displayed a decline in utilization during the last quarter of the study period.

Use of Other services by children in Blind/Disabled, Families, Foster Care, and Other aid categories declined in the last quarter of the study period.

### Adults

The monthly utilization rates for Other services among adults age 21 and older ranged from 36.7 to 314.7 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

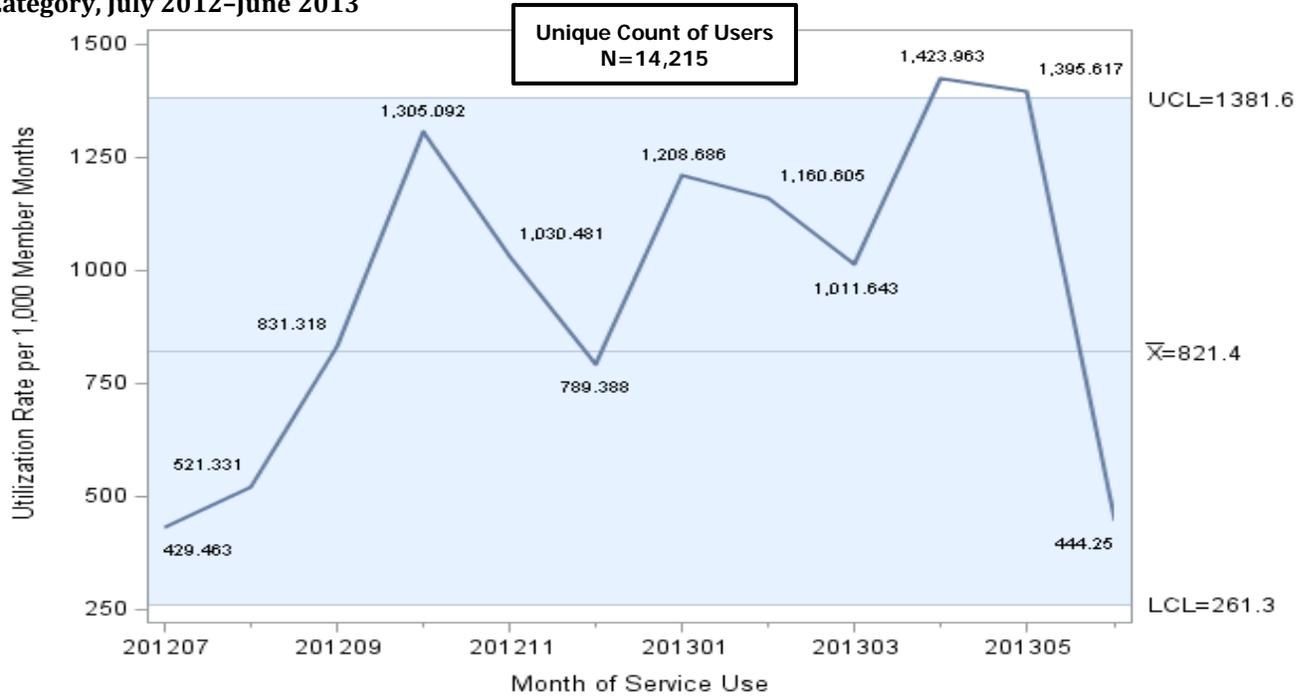
Consistent with the trends identified in the previous access quarterly reports, Other services utilization rates were noticeably higher for adults in the Aged, Blind/Disabled, and Other aid categories and lowest among adults in the Undocumented aid group. Adults in all of the analyzed aid categories exhibited mostly below average use of Other services throughout the study period. Additionally, adults in the Aged and Undocumented aid categories again displayed utilization rates below the expected ranges throughout most of the study period.

Utilization rates of Other services were noticeably higher among adults in the Aged, Blind/Disabled, and Other aid categories.

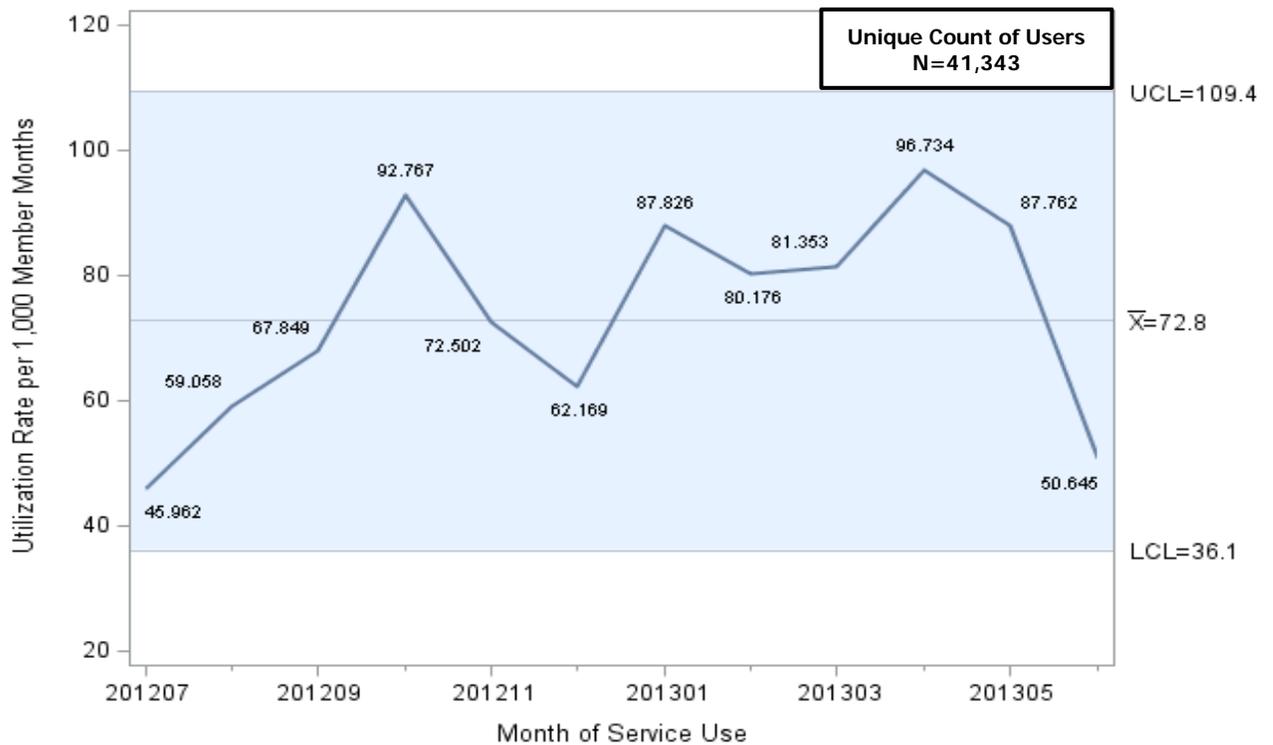
The following figures SU-57 to SU-66 represent the control chart analysis for both children and adults from the third quarter of 2012 to the second quarter of 2013.

### Trends of Monthly Other Services Utilization Rates among Children, July 2012–June 2013

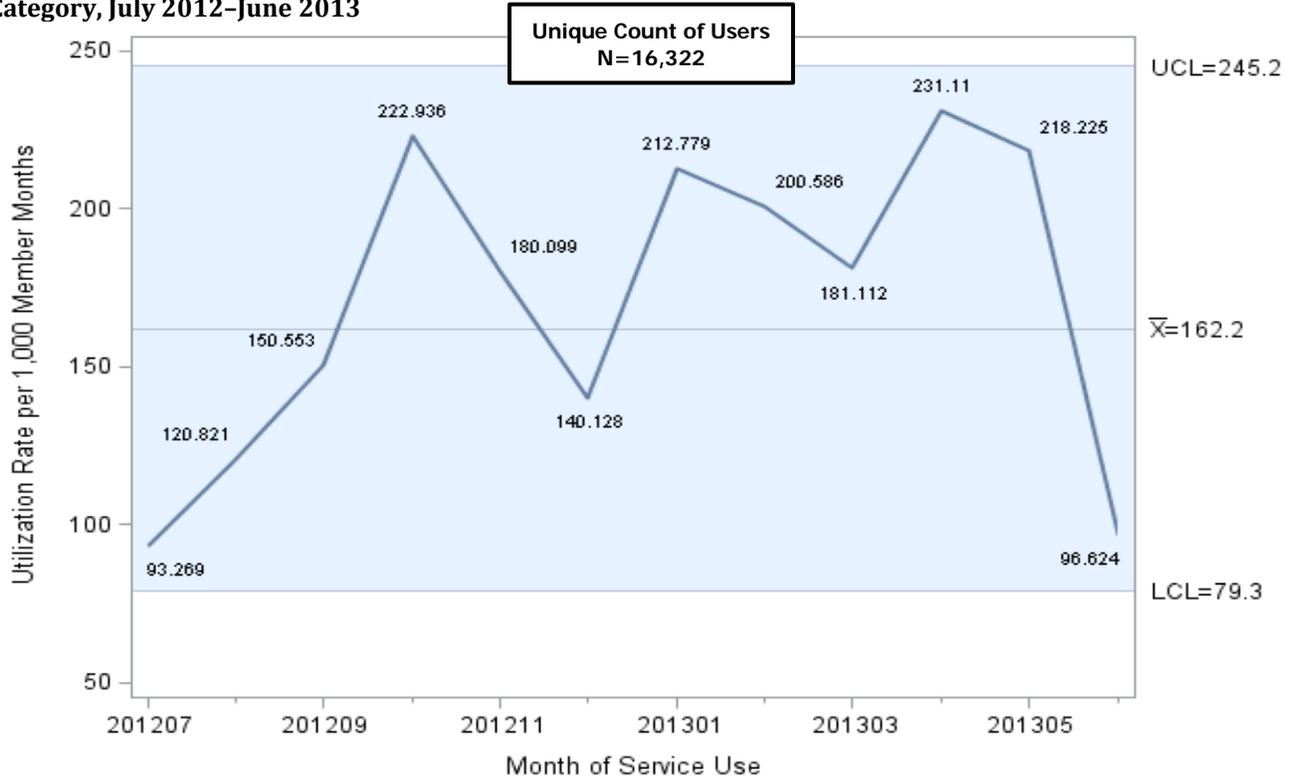
**Figure SU-57. Other Services Utilization Rates among Children (Age 0–20) in the Blind/Disabled Aid Category, July 2012–June 2013**



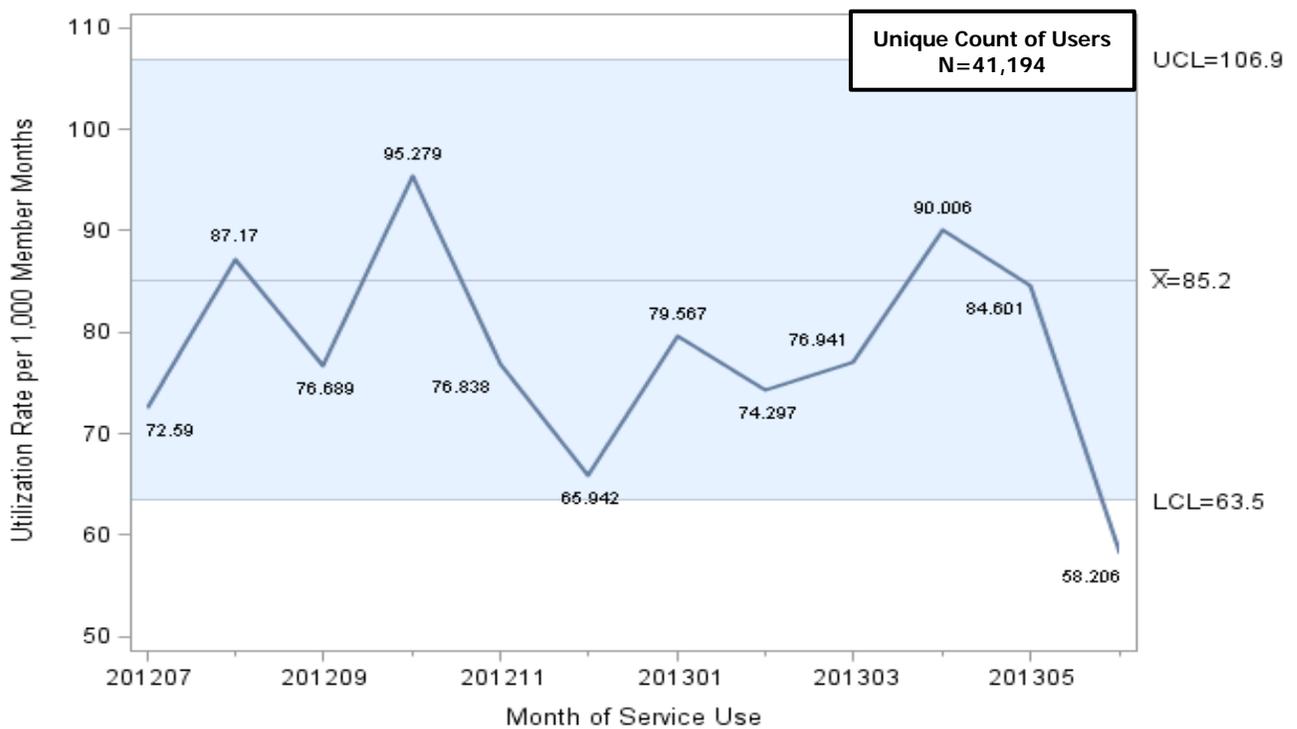
**Figure SU-58. Other Services Utilization Rates among Children (Age 0–20) in the Families Aid Category, July 2012–June 2013**



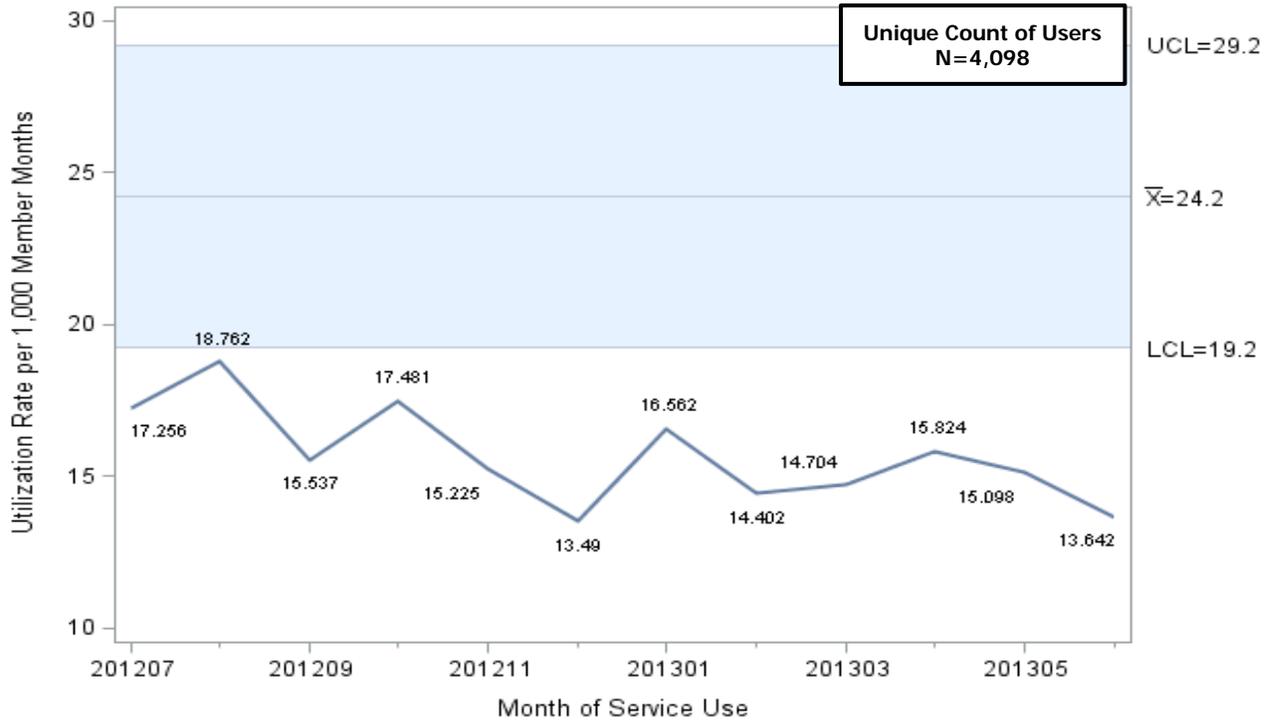
**Figure SU-59. Other Services Utilization Rates among Children (Age 0–20) in the Foster Care Aid Category, July 2012–June 2013**



**Figure SU-60. Other Services Utilization Rates among Children (Age 0–20) in the Other Aid Category, July 2012–June 2013**



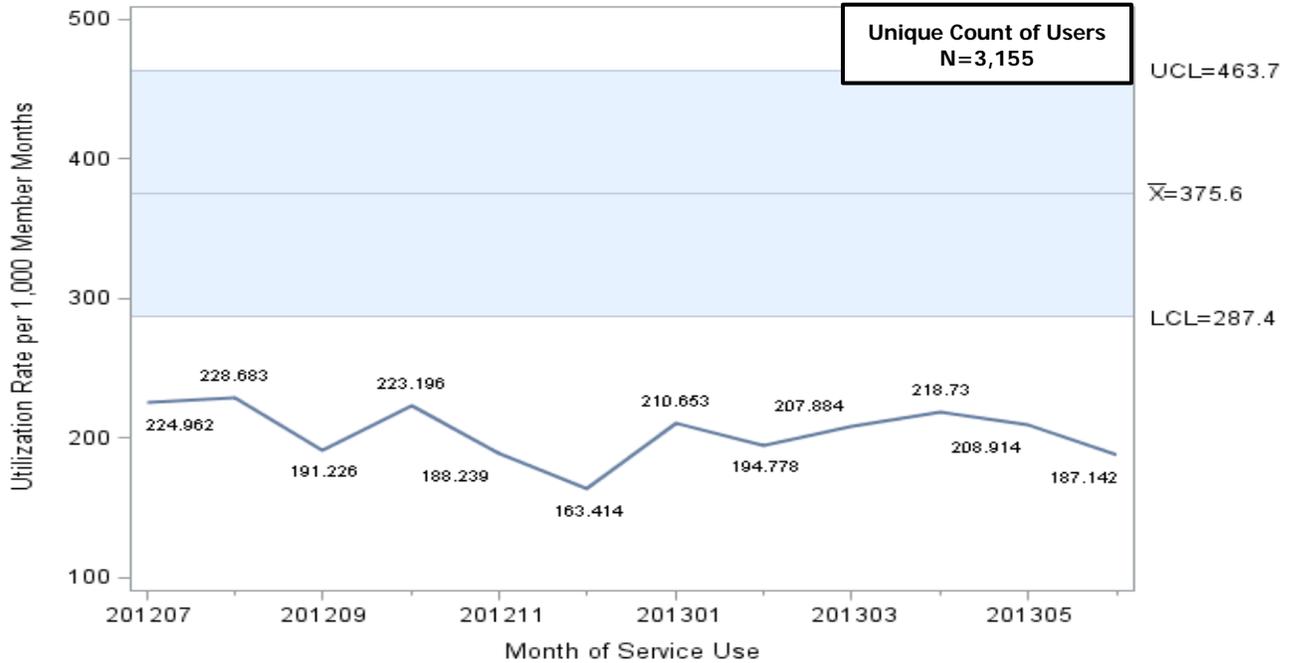
**Figure SU-61. Other Services Utilization Rates among Children (Age 0–20) in the Undocumented Aid Category, July 2012–June 2013**



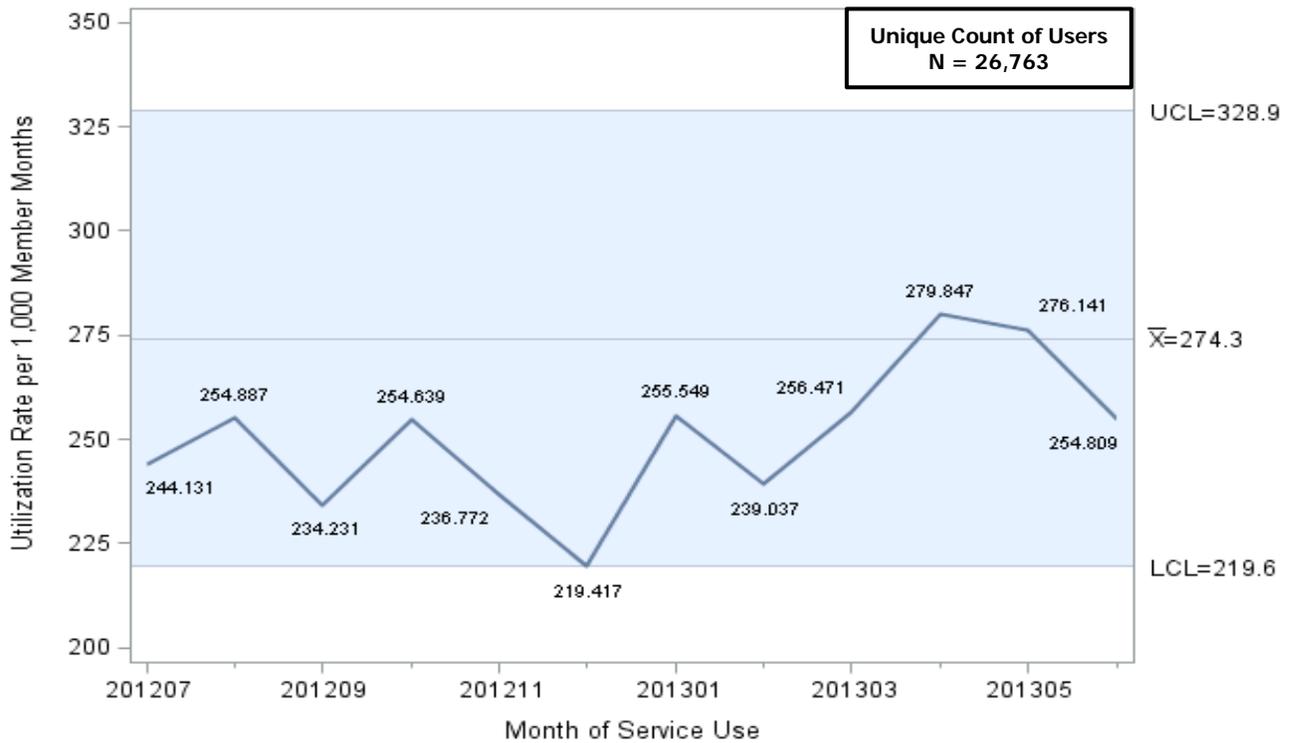
Source: Data for figures SU-57 to SU-61 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

### Trends of Monthly Other Services Utilization Rates among Adults, July 2012–June 2013

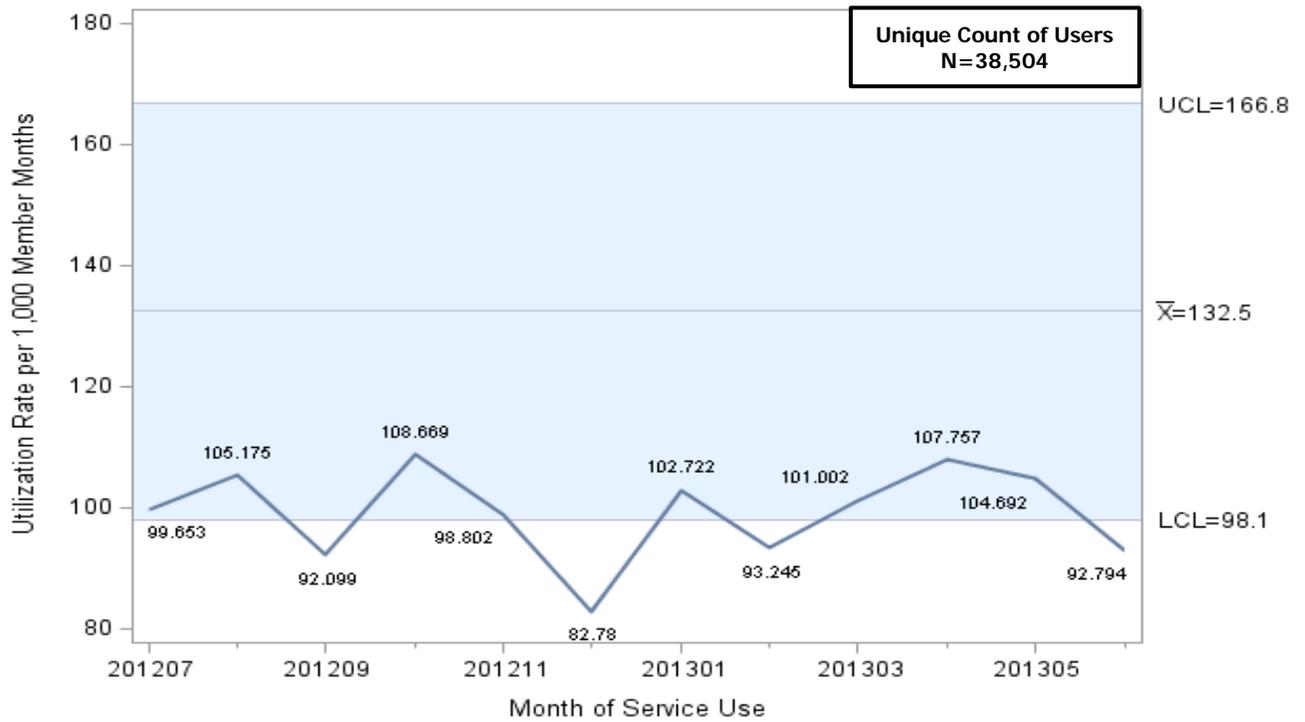
**Figure SU-62. Other Services Utilization Rates among Adults (Age 21+) in the Aged Aid Category, July 2012–June 2013**



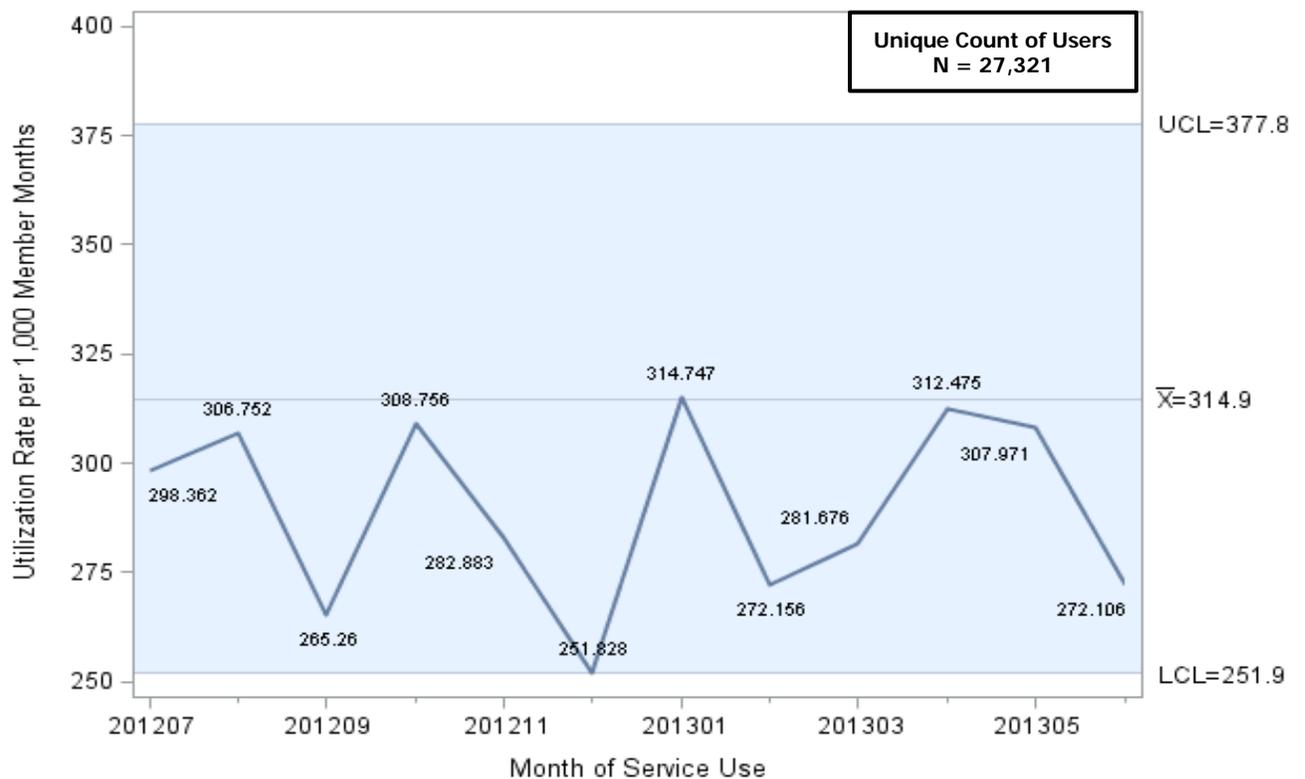
**Figure SU-63. Other Services Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013**



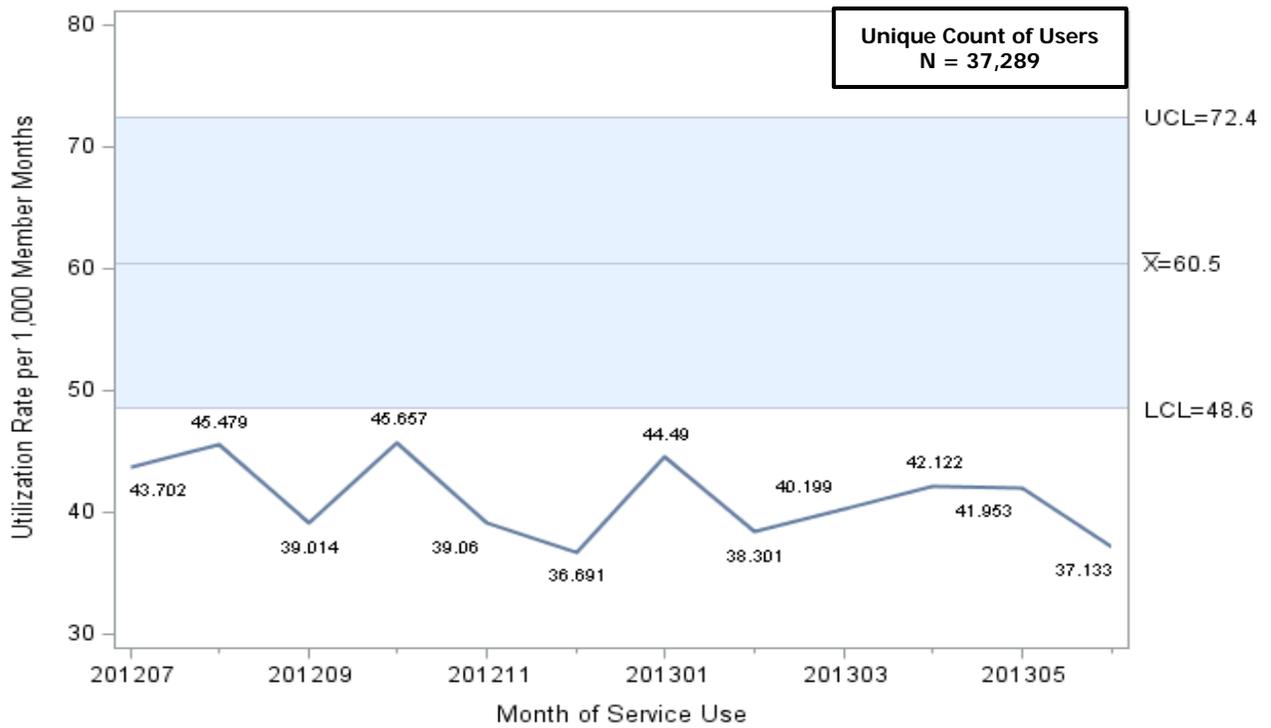
**Figure SU-64. Other Services Utilization Rates among Adults (Age 21+) in the Families Aid Category, July 2012–June 2013**



**Figure SU-65. Other Services Utilization Rates among Adults (Age 21+) in the Other Aid Category, July 2012–June 2013**



**Figure SU-66. Other Services Utilization Rates among Adults (Age 21+) in the Undocumented Aid Category, July 2012–June 2013**



Source: Data for figures SU-62 to SU-66 was prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

## Radiology Services

### Background

Radiology services are used to diagnose, treat, or manage medical conditions. Radiology services covered by Medi-Cal's state plan include:

- Computed Tomography (CT) Scans
- Computed Tomography Angiography (CTA) Scans
- Magnetic Resonance Imaging (MRI)
- Magnetic Resonance Angiography
- Magnetic Resonance Cholangiopancreatography (MRCP)
- Fluoroscopy and Esophagus Studies
- Screening and Diagnostic Mammography
- Mammography with Xeroradiography
- Dual Energy X-Ray Absorptiometry (DXA)
- Angiography Services
- Single Photon Emission Computed Tomography (SPECT)
- Positron Emission Tomography (PET) Scans
- Radiation Oncology Procedures
- Other Nuclear Medicine Services
- Ultrasound Services
- X-Ray and Portable X-Ray Services

Radiology services are administered in several medical settings including Inpatient Hospitals, Outpatient Hospitals, Physician/Clinics, and independent clinical laboratories. The federal Clinical Laboratory Improvement Act (CLIA) mandates that all providers must be certified for the types of Radiology services that they administer.<sup>5,6</sup>

Radiology services must be medically appropriate for health screening, preoperative evaluation, method surveillance, and complication management, and must be ordered by a Family PACT provider, Medi-Cal provider, or their associated practitioners.<sup>6</sup>

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<sup>5</sup> Centers for Medicare and Medicaid Services, Clinical Laboratory Improvement Amendments (<http://www.cms.gov/Regulations-and-Guidance/Legislation/CLIA/downloads/HowObtainCLIACertificate.pdf>).

<sup>6</sup> You can view additional information on radiology services at [www.medi-cal.ca.gov](http://www.medi-cal.ca.gov) under the Publications tab, go to Provider Manuals and select the [Clinics and Hospitals link](#).

## Trend Analysis

### Children

Among children age 0 to 20 in the Medi-Cal FFS program, monthly Radiology services utilization rates ranged from 30.5 to 113.9 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Radiology services utilization was again noticeably higher among children in the Blind/Disabled aid category with rates ranging from two to three times higher than for children in any other aid category. The Radiology services utilization rates exhibited by children in the Foster Care aid category continued to closely follow the average rates observed in the baseline period of 2007 to 2009. Children in the Blind/Disabled, Families, Foster Care, and Undocumented aid categories displayed service utilization rates that primarily fell within the baseline ranges, while rates for those in the Other aid category fell below the expected ranges between February 2013 and June 2013. Of particular note, children in the Blind/Disabled and Families aid categories exhibited a decline in utilization in the last quarter of the study period.

Utilization rates for children in the Blind/Disabled aid category were 2-3 times higher than for children in other aid categories.

### Adults

Radiology services utilization rates for adults age 21 and older ranged from 51.4 to 333.2 visits per 1,000 member months from the third quarter of 2012 to the second quarter of 2013.

Services utilization rates were again highest among adults in the Blind/Disabled and Other aid categories, while adults in the Undocumented aid category exhibited markedly lower utilization. Utilization rates for adults in the Aged and Blind/Disabled aid categories continued to be above average and often reached levels above the expected baseline ranges. Radiology utilization rates for adults in the other analyzed aid categories (Families, Other, and Undocumented) again fell within the expected baseline ranges throughout the study period.

Utilization rates were highest among adults in the Blind/Disabled and Other aid categories.

Charts SU-67 to SU-76 represent the analysis of Radiology services utilization for both children and adults from the third quarter of 2012 to the second quarter of 2013.

### Trends of Monthly Radiology Services Utilization Rates among Children, July 2012–June 2013

Figure SU-67. Radiology Utilization Rates among Children (Age 0-20) in the Blind/Disabled Aid Category, July 2012–June 2013

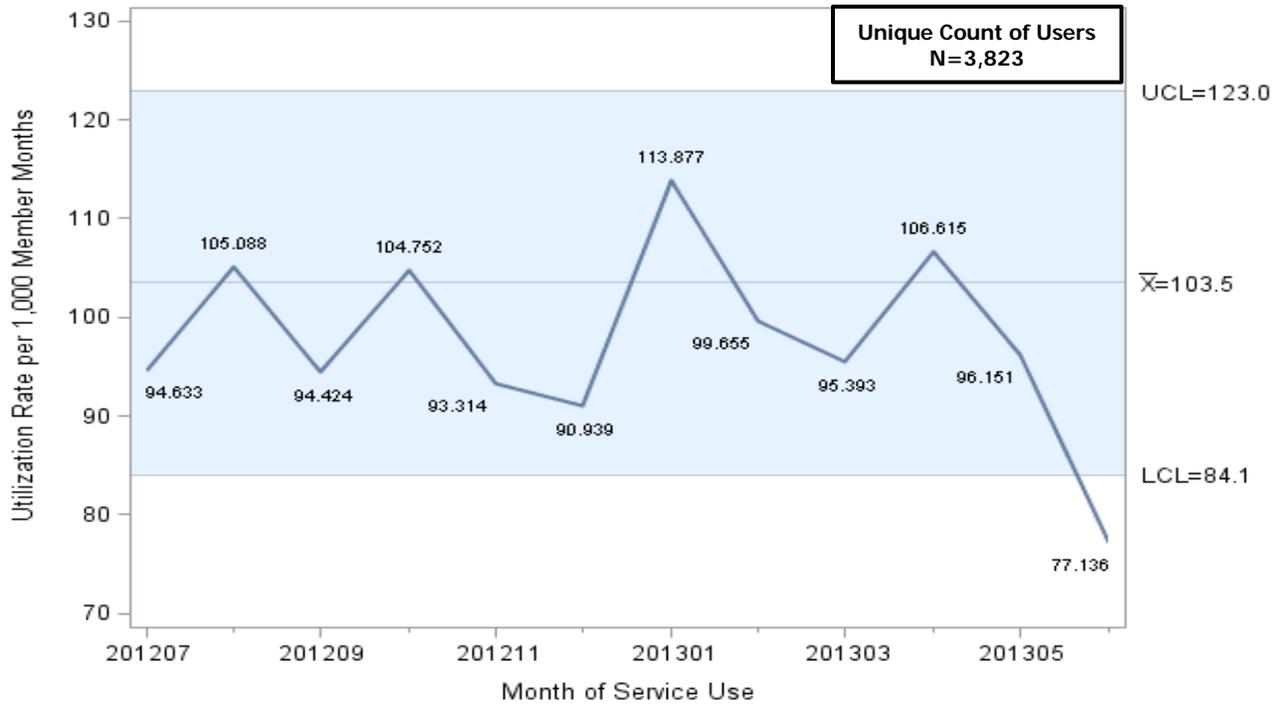
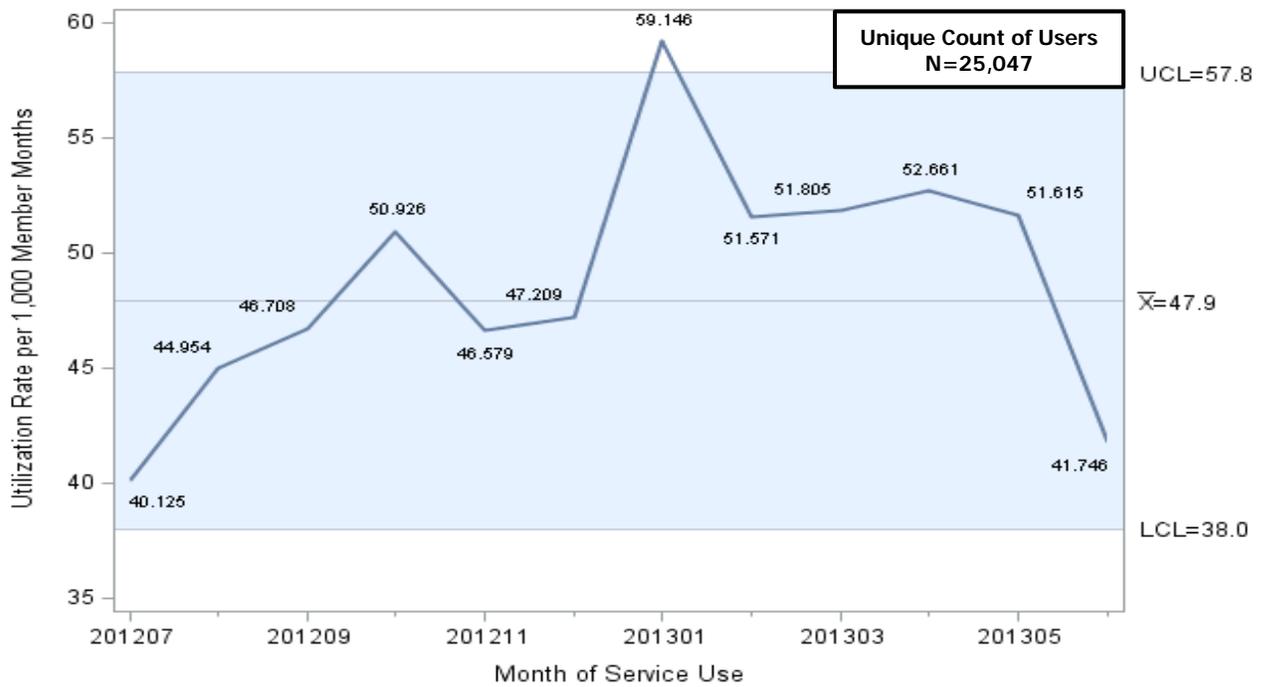
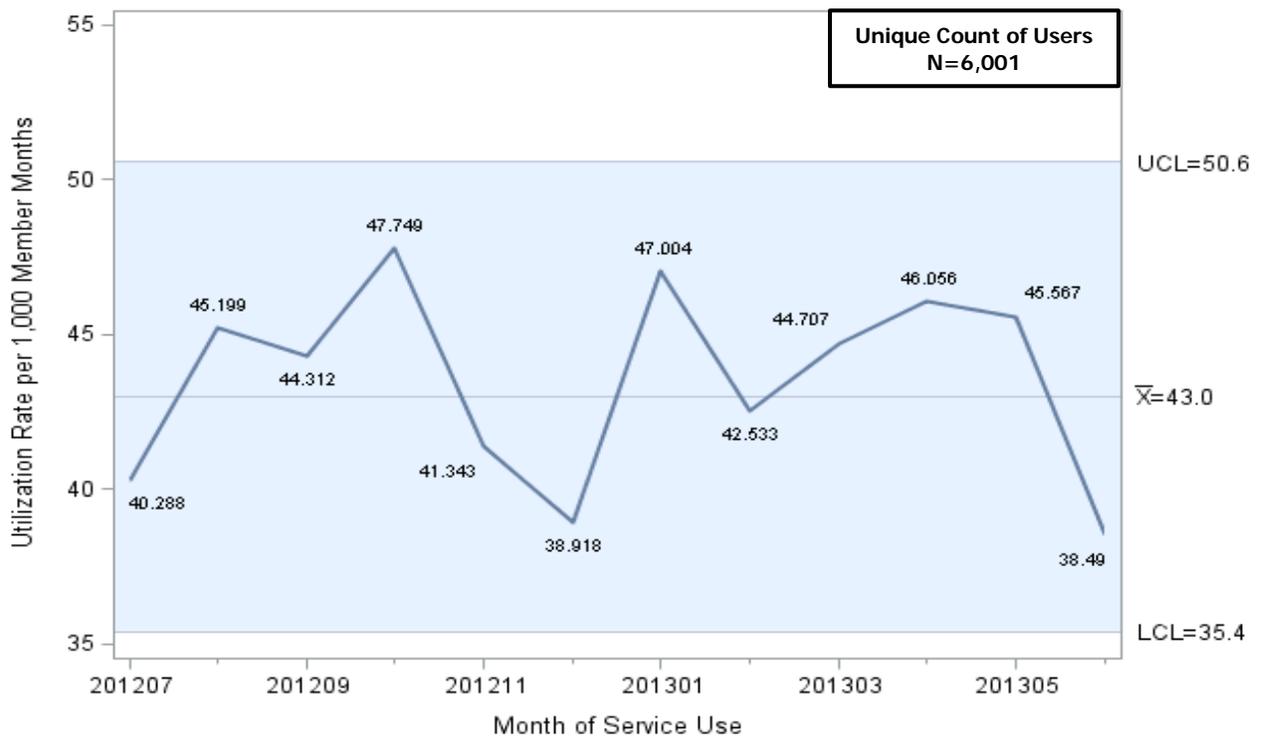


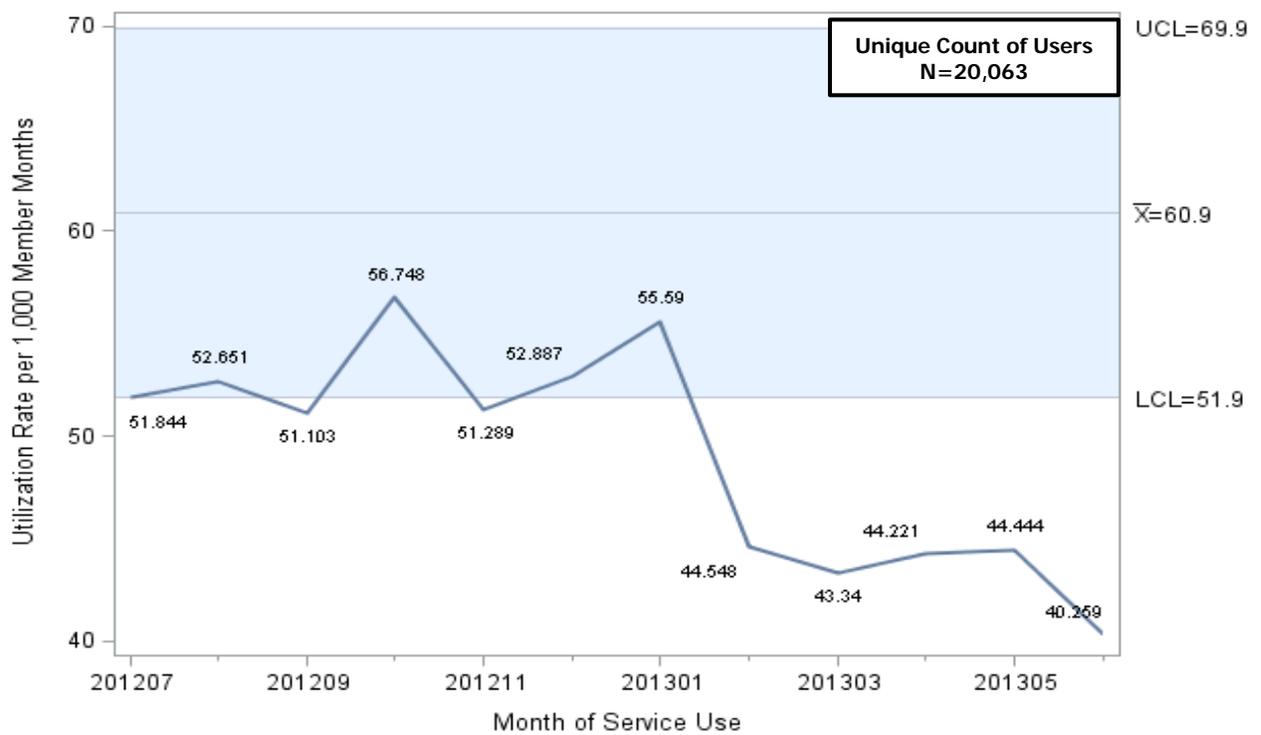
Figure SU-68. Radiology Utilization Rates among Children (Age 0-20) in the Families Aid Category, July 2012–June 2013



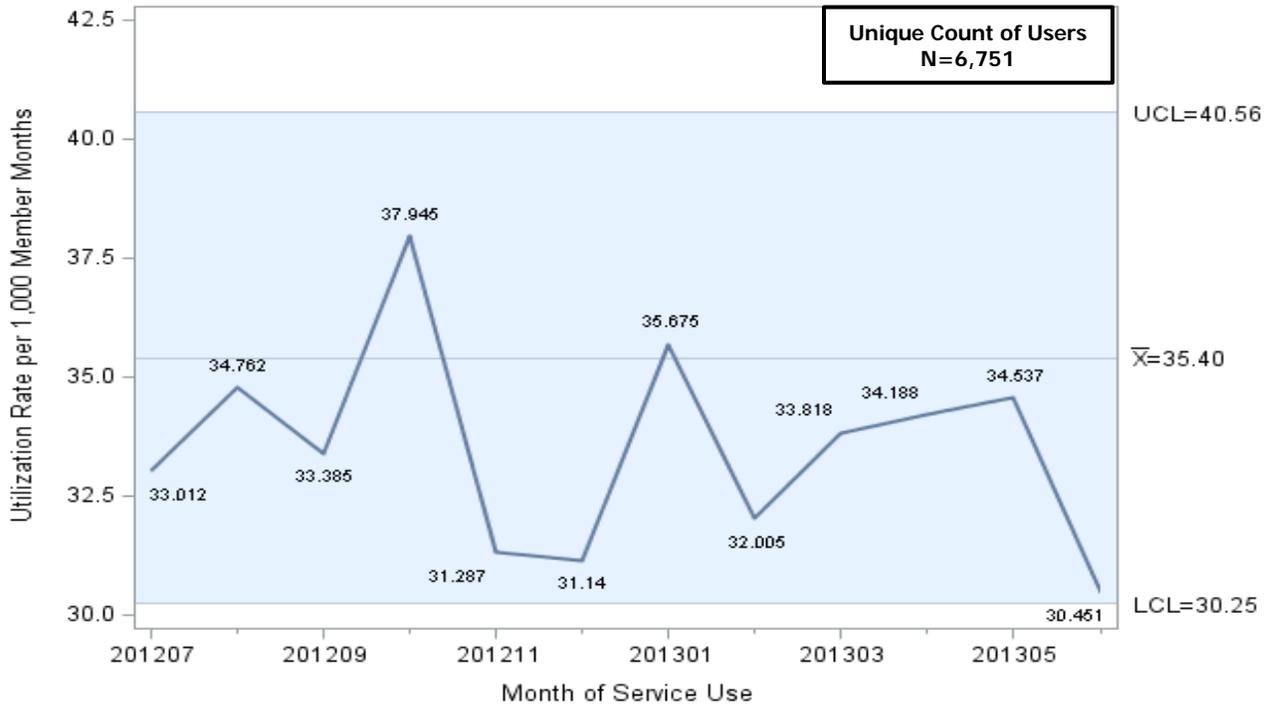
**Figure SU-69. Radiology Utilization Rates among Children (Age 0-20) in the Foster Care Aid Category, July 2012–June 2013**



**Figure SU-70. Radiology Utilization Rates among Children (Age 0-20) in the Other Aid Category, July 2012–June 2013**



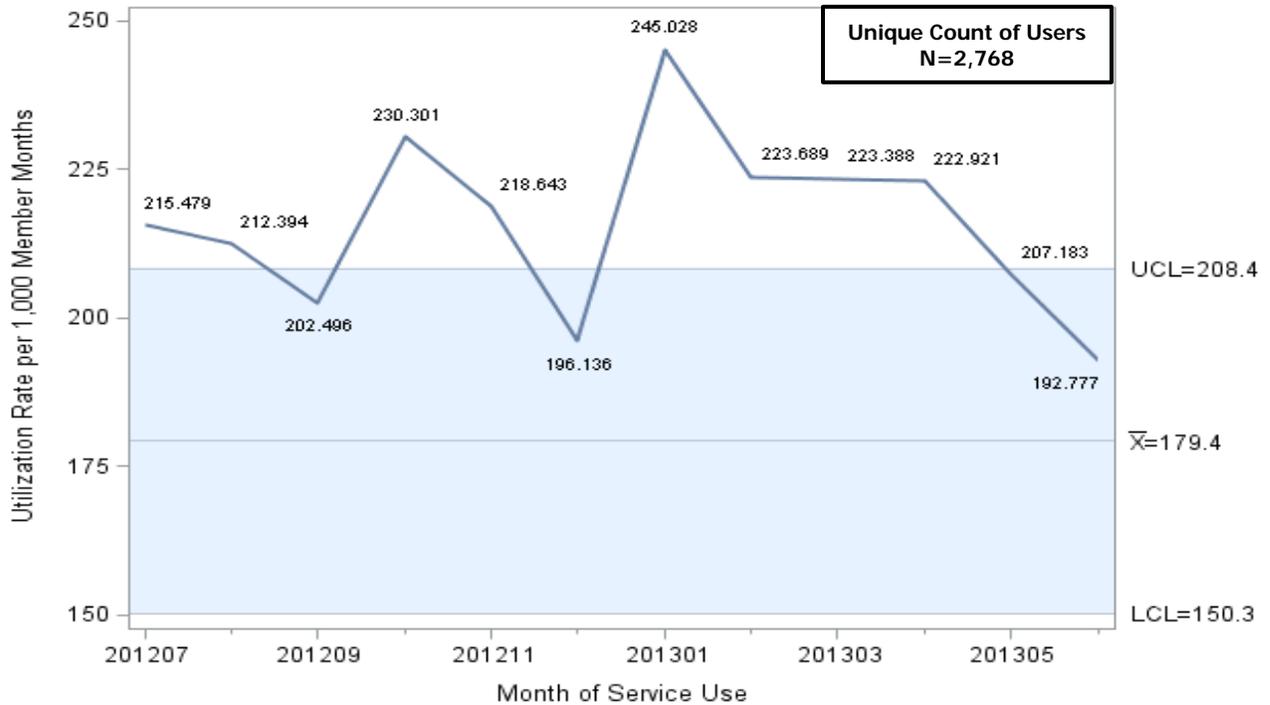
**Figure SU-71. Radiology Utilization Rates among Children (Age 0-20) in the Undocumented Aid Category, July 2012–June 2013**



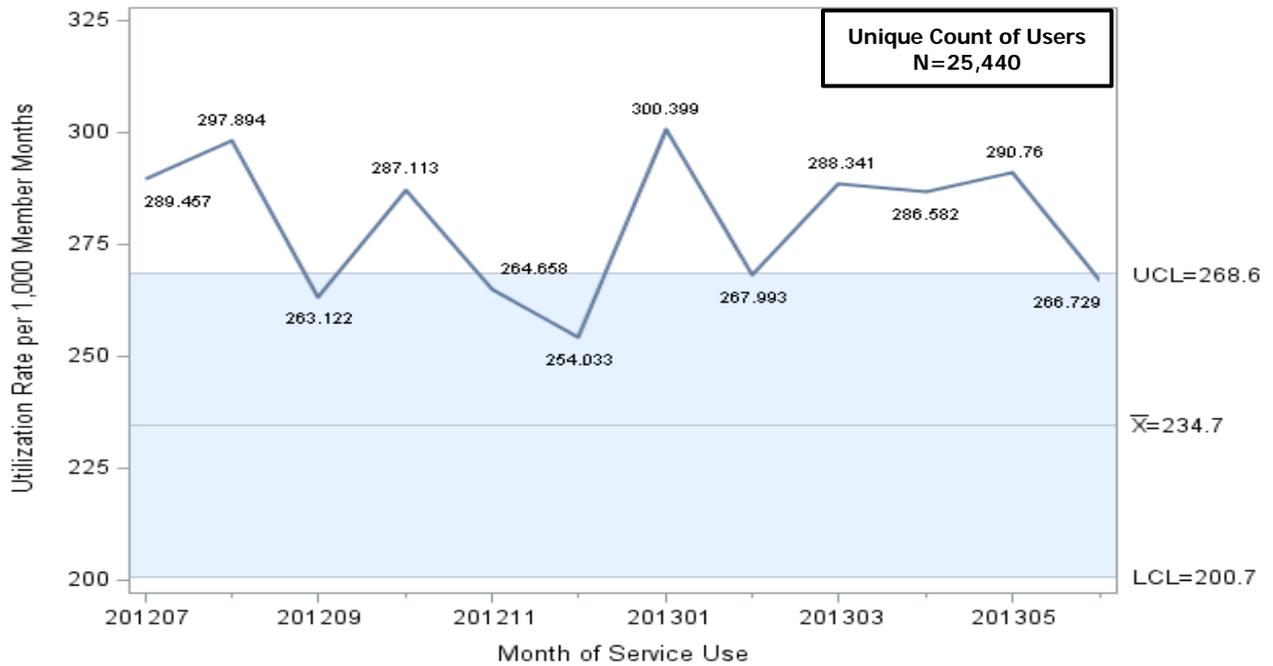
Source: Figures SU-67 to SU-71 were prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag.

### Trends of Monthly Radiology Services Utilization Rates among Adults, July 2012–June 2013

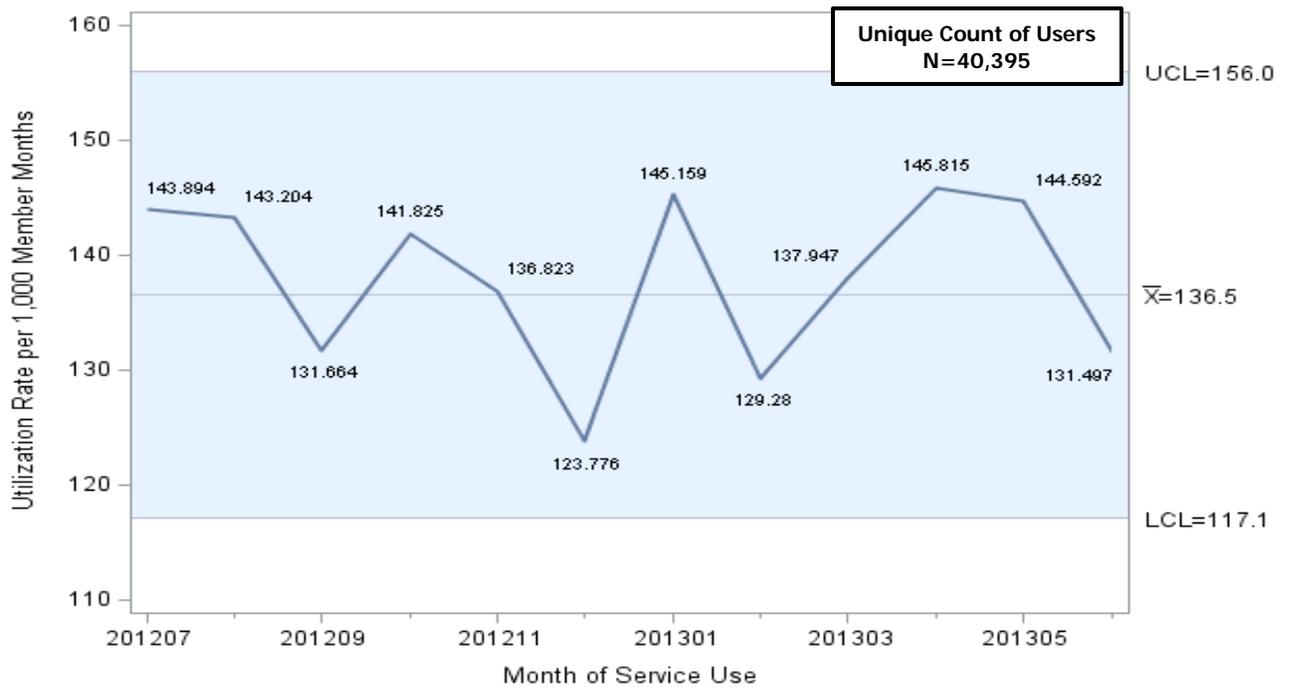
**Figure SU-72. Radiology Utilization Rates among Adults (Age 21+) in the Aged Aid Category, July 2012–June 2013**



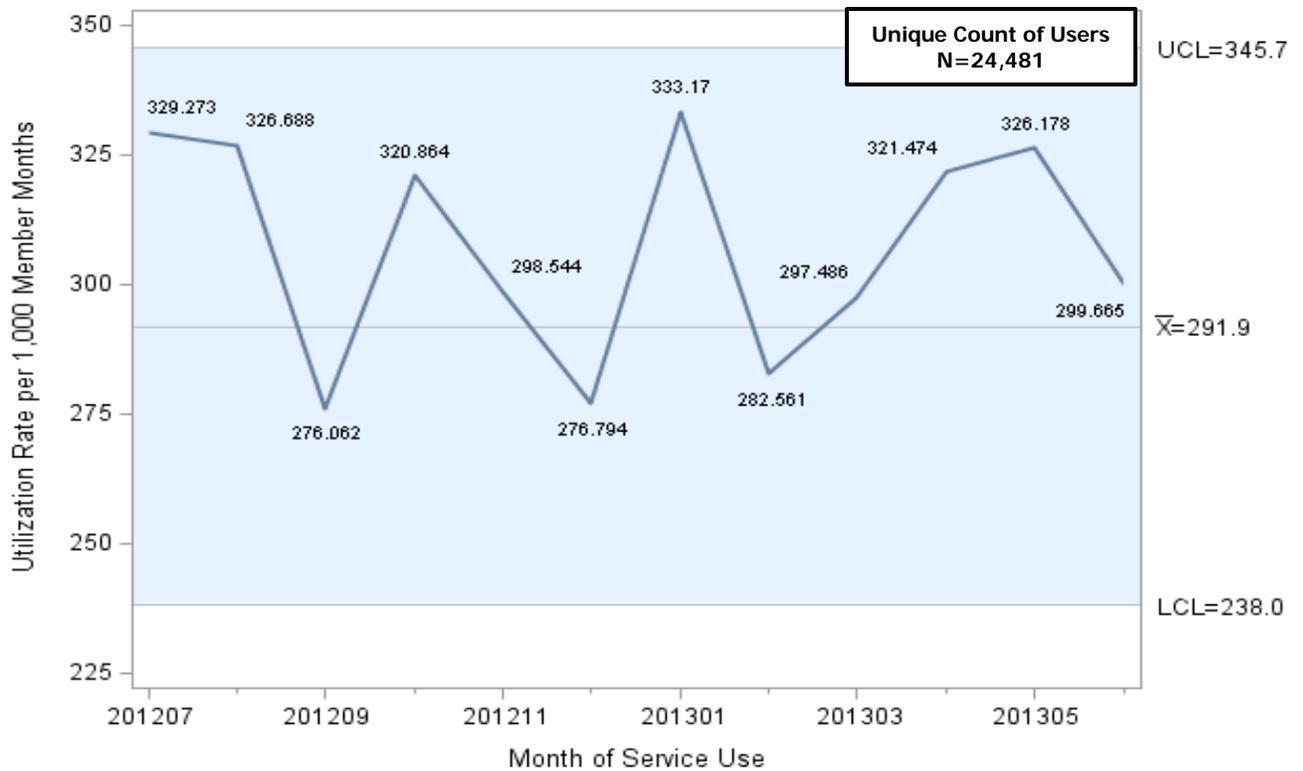
**Figure SU-73. Radiology Utilization Rates among Adults (Age 21+) in the Blind/Disabled Aid Category, July 2012–June 2013**



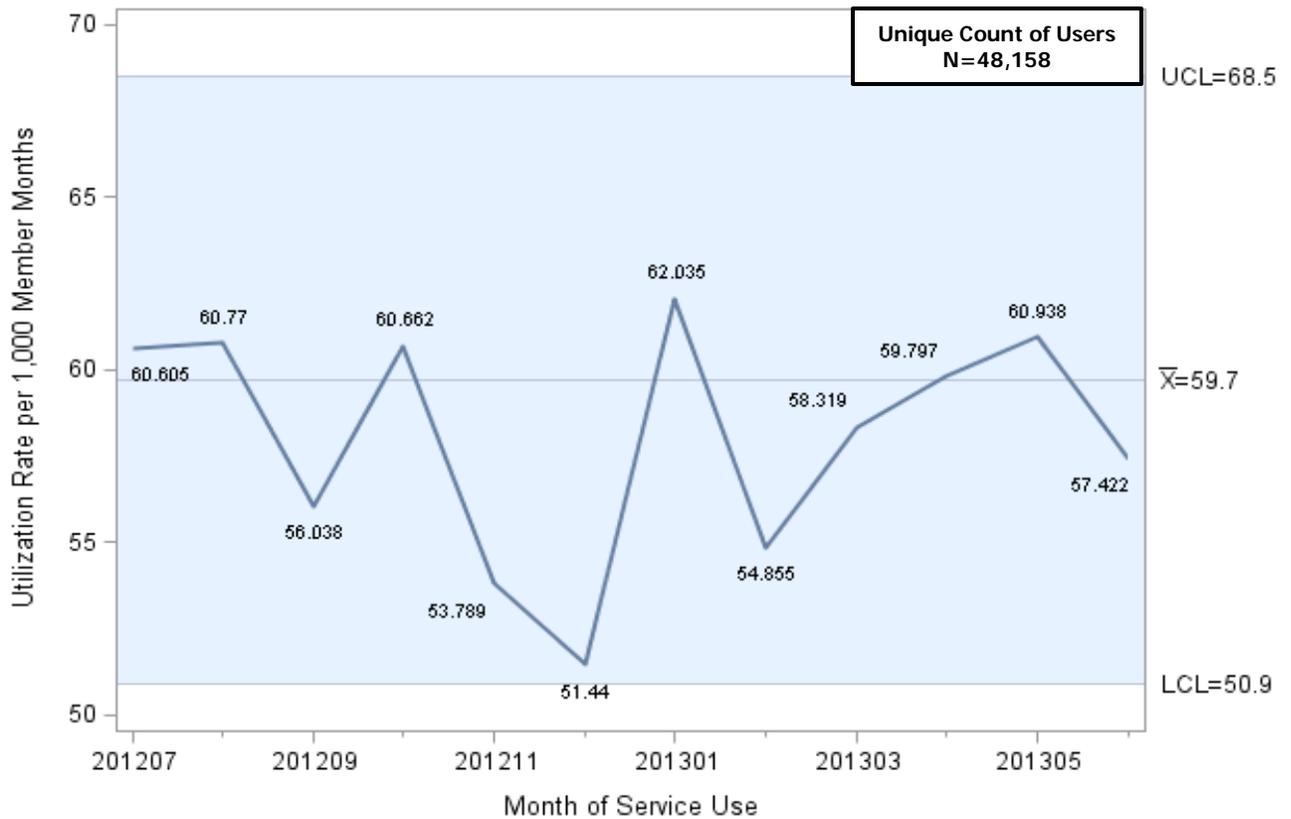
**Figure SU-74. Radiology Utilization Rates among Adults (Age 21+) in the Families Aid Category, July 2012–June 2013**



**Figure SU-75. Radiology Utilization Rates among Adults (Age 21+) in the Other Aid Category, July 2012–June 2013**



**Figure SU-76. Radiology Utilization Rates among Adults (Age 21+) in the Undocumented Aid Category, July 2012–June 2013**



Source: Figures SU-72 to SU-76 were prepared by DHCS Research and Analytic Studies Division, using data from the Fiscal Intermediary's 35-file of paid claims records with dates of service from July 2012–June 2013, and data from the MEDS eligibility system, MMEF File. Quarterly data reflects a 4-month lag

## Summary Tables

Table SU-1 and Table SU-2 present the results of DHCS' analysis of the utilization trends among children and adults by aid and service categories. The tables are color-coded to identify those cases when a particular cell, which presents utilization by aid and service categories, generated a utilization rate that was either lower or higher than the established confidence level.

- Beige—Represents utilization rates found to be within the expected confidence intervals.
- Green—Represents utilization rates found to be outside of the expected confidence level.

In some cases, the utilization rate was found to be greater than expected. As noted above, there are a number of reasons why this might occur, such as changes in population mix.

**Table SU-1. Summary of Service Utilization Trends Among Medi-Cal FFS Children by Aid Category and Service Category**

Service Category \ Aid Category	Physician/Clinic Visits	Emergency Medical Transportation	Home Health Services	Hospital Inpatient Services	Hospital Outpatient Services	Pharmacy Services	Other Services	Radiology Services
<b>Blind/Disabled</b>	Within Expected Range. Mostly Below Average During Last 3 Quarters. Decline in Jun 2013.	Below Average and Mostly Within Expected Range. Slight Downward Trend Jan 2013 – Jun 2013.	Above Expected Range.	Mostly Above Average and Mostly Within Expected Range. Decline in Jun 2013.	Mostly Above Average and Within Expected Range. Decline in Jun 2013.	Above Average and Within Expected Range. Decline in Jun 2013.	Mostly Within Expected Range. Decline in Jun 2013.	Mostly Below Average and Mostly Within Expected Range. Decline in Jun 2013.
<b>Families</b>	Mostly Below Average and Mostly Within Expected Range. Decline in Jun 2013.	Mostly Within Expected Range. Decline in Jun 2013.	N/A	Mostly Above Average and Mostly Within Expected Range.	Mostly Below Average and Mostly Within Expected Range. Downward Trend Jan 2013–Jun 2013.	Mostly Below Average. Downward Trend Jan 2013–Jun 2013.	Within Expected Range. Decline in Jun 2013.	Mostly Within Expected Range. Decline in Jun 2013.
<b>Foster Care</b>	Mostly Below Average and Mostly Within Expected Range. Decline in Jun 2013.	Mostly Above Average and Mostly Within Expected Range. Decline in Jun 2013.	N/A	Mostly Below Average and Within Expected Range.	Mostly Within Expected Range. Downward Trend Aug 2012–Dec 2012. Decline in Jun 2013.	Mostly Within Expected Range. Decline in Jun 2013.	Within Expected Range. Decline in Jun 2013.	Within Expected Range. Decline in Jun 2013.
<b>Other</b>	Below Average with 5 Consecutive Months Below Expected Range Feb 2013–Jun 2013.	Below Average with 5 Consecutive Months Below Expected Range Feb 2013–Jun 2013.	N/A	Below Average with 5 Consecutive Months Below Expected Range Feb 2013–Jun 2013.	Below Expected Range. Downward Trend Jan 2013–Jun 2013.	Below Average and Mostly Below Expected Range. Slight Downward Trend Jan 2013–Jun 2013).	Mostly Below Average and Mostly Within Expected Range. Decline in Jun 2013.	Below Average with 5 Consecutive Months Below Expected Range Feb 2013–Jun 2013.
<b>Undocumented</b>	Below Average and Mostly Below Expected Range.	Mostly Below Average and Within Expected Range.	N/A	Below Average with 5 Consecutive Months Below Expected Range Feb 2013–Jun 2013.	Below Average and Mostly Within Expected Range.	Mostly Below Average and Mostly Within Expected Range. Downward Trend Jan 2013–Jun 2013.	Below Expected Range.	Mostly Below Average and Within Expected Range.

Note: Children were excluded from analyses of non-Emergency Medical Transportation and Nursing Facility services utilization due to low user counts (n<500).

**Table SU-2. Summary of Service Utilization Trends Among Medi-Cal FFS Adults by Aid Category and Service Category**

Service Category Aid Category	Physician/ Clinic Visits	Non- Emergency Transportation	Emergency Medical Transportation	Home Health Services	Hospital Inpatient Services	Hospital Outpatient Services	Nursing Facility Services	Pharmacy Services	Other Services	Radiology Services
<b>Aged</b>	Below Average and Mostly Within Expected Range. Decline in Last Quarter.	N/A	N/A	N/A	Above Expected Range.	Mostly Above Average and Mostly Within Expected Range. Decline in Last Quarter.	Above Expected Range.	Below Expected Range.	Below Expected Range.	Above Average and Mostly Above Expected Range. Decline in Last Quarter.
<b>Blind/ Disabled</b>	Mostly Below Average and Mostly Within Expected Range. Downward Trend Aug 2012–Dec 2012. Decline in Jun 2013.	Above Expected Range.	Above Average with Several Months Above Expected Range.	Mostly Above Average and Within Expected Range.	Mostly Above Expected Range.	Mostly Above Average and Mostly Within Expected Range.	Above Expected Range.	Mostly Below Expected Range.	Mostly Below Average and Within Expected Range.	Above Average and Mostly Above Expected Range.
<b>Families</b>	Mostly Below Expected Range. Downward Trend Aug 2012–Dec 2012).	N/A	Mostly Below Average and Within Expected Range. Downward Trend Jul 2012–Dec 2012.	N/A	Mostly Below Average with Several Months Below Expected Range.	Mostly Below Expected Range. Downward Trend Aug 2012–Dec 2012.	N/A	Mostly Below Expected Range.	Below Average with Several Non-Consecutive Months Below Expected Range.	Within Expected Range.
<b>Other</b>	Mostly Below Average and Mostly Within Expected Range. Downward Trend Aug 2012–Dec 2012.	Above Expected Range.	Within Expected Range.	N/A	Below Average with 5 Consecutive Months Below Expected Range Feb 2013–Jun 2013.	Mostly Below Average and Mostly Within Expected Range. 3 Non-Consecutive Months Below Expected Range.	Mostly Below Expected Range.	Mostly Below Average and Within Expected Range.	Below Average and Within Expected Range.	Mostly Above Average and Within Expected Range.
<b>Undoc- umented</b>	Mostly Below Range. Downward Trend Aug 2012–Dec 2012.	N/A	Below Average with Several Months Below Expected Range.	N/A	Below Expected Range.	Mostly Below Expected Range. Downward Trend Aug 2012–Dec 2012.	N/A	Mostly Above Average and Within the Expected Range.	Below Expected Range.	Within Expected Range.

## Conclusions—Service Utilization of Children Participating in FFS

1. Overall, service utilization patterns for children in most aid code categories primarily followed the patterns identified in the previous access quarterly report. For example, Hospital Outpatient services use was again noticeably higher among children in the Blind/Disabled aid category, with rates ranging from two to three times higher than for children in any other aid category. Other services utilization among children in the majority of the analyzed aid categories were observed to be within the expected ranges. Additionally, service utilization rates for Emergency Transportation were again predominantly below average for children in most aid code categories.
2. After displaying increased utilization in Emergency Medical Transportation, Hospital Inpatient, Hospital Outpatient, Pharmacy services, and Physician/Clinic visits during the first quarter of 2013, Blind/Disabled children exhibited noticeable decreases in utilization of these service categories at the end of the study period. These shifts in utilization may indicate the development of newly established 'normal' service use patterns which manifested after the transition of the SPD beneficiary population into managed care plans. Additionally, despite these shifts in utilization, children in the Blind/Disabled aid category continued to place a disproportionate demand on services of all kinds, which is most likely due to their complex medical needs.
3. Physician/Clinic service use patterns among children in most of the evaluated aid categories again fell below the average rates established during the baseline period. The lower utilization rates among children in the Families, Foster Care, Other, and Undocumented aid categories may be influenced in part by the declines in national and statewide teen birthrates over the same time period.<sup>7</sup>
4. The utilization of all the evaluated services by children in the Other aid category again mostly fell below either the average rates or the expected ranges established during the baseline period. Of particular note, this population's utilization of Emergency Transportation, Hospital Inpatient, Hospital Outpatient, Radiology, and Pharmacy services, and Physician/Clinic visits noticeably declined below the expected ranges during the last two quarters of the study period. The change in utilization is most likely due to the transition of children from the Healthy Families program into Medi-Cal that started in January 2013. The Other aid category includes children as they temporarily enter FFS, but are subsequently enrolled in managed care according to program policy. Utilization rates are expected to stabilize by the end of 2013.
5. As beneficiary participation shifted away from the FFS delivery system and into managed care, many service categories (e.g. Non-Emergency Transportation, Home Health, and

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<sup>7</sup> Data from the National Vital Statistics System, found at <http://www.cdc.gov/nchs/data/databriefs/db60.pdf>

Nursing Facility Services) again experienced a noticeable decline in user counts that made the data unsuitable for analysis.

## Conclusions—Service Utilization of Adults Participating in FFS

1. Adults in the Blind/Disabled aid category continued to place a great demand on Emergency Transportation, Hospital Inpatient, Hospital Outpatient, Nursing Facility, and Radiology services. Additionally, despite experiencing a downward trend in Non-Emergency Transportation services utilization during the first two quarters of the study period, Blind/Disabled adults again utilized these services at rates well above the expected baseline ranges.
2. Physician/Clinic service use patterns among adults in all of the analyzed aid categories again fell below either the average rates or the expected ranges established during the baseline period. Additionally, adults in most of the aid categories displayed downward trends in Physician/Clinic visits over the last two quarters of 2012. For some beneficiary subgroups (Aged, Blind/Disabled, and Undocumented), these shifts in utilization may indicate the development of new 'normal' service use patterns resulting from the decline in Medi-Cal FFS participation over the same time period.
3. Adults in the Families aid code category again displayed below average utilization of Emergency Transportation, Hospital Inpatient services, and Physician/Clinic visits throughout most of the study period. The lower utilization of these services among younger adults (age <65) in the Families aid category may be explained in part by the continued declines in the birthrate.<sup>8</sup>
4. Adults in the Undocumented aid code category, who are only eligible for emergency and pregnancy-related services, also continued to exhibit below average and lower than expected use of Emergency Transportation, Hospital Inpatient services, and Physician/Clinic visits. This lower service use further supports the argument that these utilization patterns may be heavily influenced by the decline in overall births statewide and nationally, which is most noticeable among the immigrant population.<sup>9</sup>
5. The continued decline in Medi-Cal's FFS population, which is a result of the transition of Medi-Cal beneficiaries into managed care plans, has directly reduced the pool of users for particular services. For instance, the number of adults in Aged and Families aid categories that utilize Non-Emergency Transportation and Home Health services have declined to levels (<500) that render their use of these service categories inconsequential to the current analysis. The beneficiary subgroups that continue to use these service categories exhibited utilization patterns at above average rates that often fall above the expected ranges. These

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<sup>8</sup> Data from the National Vital Statistics System at <http://www.cdc.gov/nchs/data/databriefs/db60.pdf>

<sup>9</sup> Livingston, G., & Cohn, D. (2012, November 29) U.S. Birth Rate Falls to a Record Low; Decline Is Greatest Among Immigrants. *Pew Research Center: Social & Demographic Trends*.

shifts in utilization patterns provide further evidence of how markedly the Medi-Cal FFS population case mix has changed since the baseline period of 2007 to 2009.

**Appendix—Detailed List of Other Providers**

Community-Based Adult Services Program (formerly called Adult Day Health Care) (PT 001)

Assistive Device and Sick Room Supply Dealers (PT 002)

Audiology Services—Audiologists (PT 003), Hearing Aid Dispensers (PT 013)

Blood Banks (PT 004)

Certified Nurse Midwife (PT 005)

Chiropractors (PT 006)

Certified Nurse Practitioner (PT 007), Group Certified Family/Pediatric Nurse Practitioners (PT 010)

Christian Science Practitioner (PT 008)

Fabricating Optical Lab (PT 011), Dispensing Opticians (PT 012), Optometrists (PT 020), and Optometric Groups (PT 023)

Nurse Anesthetists (PT 018)

Physical Therapist (PT 025), Occupational Therapist (PT 019), Speech Therapist (PT 037)

Orthotists (PT 021), Prosthetists (PT 029)

Podiatrists (PT 027)

Portable X-Ray (PT 028)

Psychologists (PT 031)

Certified Acupuncturist (PT 032)

Genetic Disease Testing (PT 033)

Medicare Crossover Provider Only (PT 034)

Outpatient Heroin Detoxification Center (PT 051)

Local Education Agency (LEA) (PT 055)

Respiratory Care Practitioner (056) and Respiratory Care Practitioner Group (PT 062)

Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Supplemental Services Provider (PT 057)

Health Access Program (HAP) (PT 058)

## Home and Community-Based Services (HCBS) Waiver Programs (Multiple Provider Types):

HCBS Nursing Facility (Congregate Living Health Facilities with Type A licensure) (PT 059)

HCBS Licensed Building Contractors (PT 063)

HCBS Employment Agency (PT 064)

HCBS Personal Care Agency (PT 066)

HCBS Benefit Provider (Licensed Clinical Social Worker, Licensed Psychologist, or Marriage and Family Therapist) (PT 068)

HCBS Professional Corporation (PT 069)

AIDS Waiver (PT 073)

Multipurpose Senior Services Program Waiver (PT 074)

Assisted Living Waiver-Facility (PT 092)

Assisted Living Waiver-Care Coordinator (PT 093)

HCBS Private Non-Profit (PT 095)

Pediatric Subacute Care/LTC (PT 065)

RVNS Individual Nurse Providers (PT 067)

CCS/GHPP Non-Institutional Providers (PT 080)

CCS/GHPP Institutional Providers (PT 081)

Independent Diagnostic Testing Facility Crossover (PT 084)

Clinical Nurse Specialist Crossover Provider (PT 085)

Out of State Providers (PT 090)