



Special Incident Trends

Semiannual Report submitted to the California Department of Developmental Services

July – December 2017

Report prepared: August 2018

ABOUT THIS REPORT

As one element of risk management and quality assurance, the California Department of Developmental Services (DDS) and California's network of regional centers monitor the occurrence of adverse events, captured through Special Incident Reports (SIR), to identify trends and develop strategies to prevent and mitigate risks. As required by Title 17, Section 54327 of the California Code of Regulations, vendors and long-term health care facilities report occurrences of suspected abuse, suspected neglect, injury requiring medical attention, unplanned hospitalization, and missing persons, if they occur when an individual is receiving services funded by a regional center (under vendored care). In addition, any occurrence of mortality or an individual being the victim of crime must be reported whether or not it occurred while they were under vendored care. Because of these requirements, mortality incidents are reported for all individuals served by DDS, but most non-mortality incidents are reported among individuals residing in out-of-home care settings. These include licensed care facilities, Family Home Agencies (FHA), Independent Living Services (ILS), and Supported Living Services (SLS).

This report summarizes incident rates for individuals served by DDS between July 2017 and December 2017. Findings on mortality incidents include all individuals actively served by regional centers, except those residing in developmental centers. Findings on non-mortality incidents focus on individuals in out-of-home care.



KEY FINDINGS

- There were 10,824 SIRs in the July-December 2017 period across 317,207 individuals served by DDS.
- The mortality rate decreased by 5% compared to the same period last year.
- Mortality rates declined for most age groups and most residence types.
- The non-mortality incident rate increased about 5% compared to the same period last year.
- The rates of unplanned psychiatric admissions, suspected abuse incidents, and medication errors grew faster than the rate for all non-mortality incidents.

The statistics and graphs presented in this report were constructed using data reported in the SIR system through December 2017. Incident counts may differ from previous reports due to SIRs being added or reclassified as non-reportable. The SIR data are augmented with three additional data sources maintained by DDS: The Client Master File (CMF), the Client Development Evaluation Report (CDER), and the Purchase of Service (POS) data.

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I. SUMMARY OF MORTALITY AND NON-MORTALITY INCIDENTS

Between July and December 2017, more than 317,000 individuals living in the community received services from a regional center. During the period, there were nearly 11,000 special incidents reported for these individuals, including 984 deaths and 9,840 non-mortality incidents. Since non-mortality SIRs are required primarily for incidents that occur under vendored care, 91 percent of non-mortality incident reports involved individuals living in out-of-home care settings. DDS served 63,430 people living in such settings this period.

Table 1: Reported Incidents for Individuals Served by DDS, July – December 2017 and July – December 2016

	July - December 2016 (Last Year)	July – December 2017 (Current Period)
Total Number of Individuals, including Early Start*	303,045	317,207
Reported Mortality and Non-Mortality Incidents, including Early Start	10,166	10,824
Number of Deaths, including Early Start	988	984
Deaths per 1,000 Individuals, including Early Start	3.28	3.12
Number of Individuals, excluding Early Start or Below 36 Months	263,706	274,887
Number of Deaths	939	944
Deaths per 1,000 Individuals	3.56	3.43
Out-of-Home Individuals	63,010	63,430
Number of Non-Mortality Incidents	8,484	8,984
Non-Mortality Incidents per 1,000 Individuals†	134.6	141.6

Data as received through January 2018. Incident counts may differ from previous reports due to SIRs being added or reclassified as non-reportable. *Active and Early Start (<36 months) caseload as reported by DDS for final month of the period. †One person can have multiple non-mortality incidents in a period.

THE MORTALITY RATE DECREASED THIS PERIOD COMPARED TO THE SAME PERIOD LAST YEAR.

Table 1 reports the mortality rate measured as the number of deaths per 1,000 individuals served by DDS. In the July-December 2017 period, this rate was 3.12, 5% lower than in the same period last year, at 3.28. (This difference is not statistically significant.) We compare to July-December 2016, rather than to January-June 2017 because of consistent seasonal differences in mortality rates. Deaths from respiratory illness and other health conditions are more common from January to June than from July to December each year. Note, however, that there are sometimes delays in deaths being reported to DDS, particularly for individuals residing with parents or guardians, so the number of deaths for this period may increase in subsequent reports.

Our more detailed mortality analyses exclude children under three and/or those served in the Early Start program. There are two main reasons for this exclusion. First, children served by Early Start may not qualify for DDS services after age three, since the Early Start Program provides early intervention services for children with developmental delays or conditions that put them at high risk of developmental delays or disabilities. These children are not yet, and may never be, diagnosed with a developmental disability. Second, there are substantial differences in the data collected for Early Start compared to other DDS services, which makes it difficult to conduct combined analyses. There is a

MORTALITY AND NON-MORTALITY INCIDENTS

comparable pattern of rates over time, however, with a 3.9% decline for this period relative to the same period a year ago

THE NUMBER OF NON-MORTALITY INCIDENTS PER 1,000 INDIVIDUALS WAS HIGHER THIS PERIOD THAN IN THE SAME PERIOD LAST YEAR.

Non-mortality special incidents include missing person, suspected abuse, suspected neglect, medication error or serious injury, unplanned medical or psychiatric hospitalization, victim of crime, and death. In this semiannual period, there were approximately 142 non-mortality incidents per 1,000 out-of-home individuals served by DDS, compared to 135 for the same period in 2016. This represents a 5% increase from the same period a year ago.

TABLE 1 DOES NOT ACCOUNT FOR ANY CHANGES IN THE CHARACTERISTICS OF CLIENTS SERVED.

The counts of incidents per 1,000 individuals reported in Table 1 do not account for any changes in the needs of clients served over time. For example, an increase in the number of individuals taking medication could change the likelihood of medication errors. Similarly, if the population served is aging, we would expect hospitalizations or mortality incidents to become more common. Later sections of this report use individual characteristics to measure incident rates accounting for such changes over time.

II. MORTALITY INCIDENT FINDINGS

THE MORTALITY RATE ROSE FOR INDIVIDUALS AGED 42-51 BUT DECLINED IN ALL OTHER AGE GROUPS IN THIS SEMI-ANNUAL PERIOD COMPARED TO THE SAME PERIOD LAST YEAR.

The mortality rate, measured as deaths per 1,000 individuals, increased with the age of the individuals this period. As shown in Table 2, mortality rates were lowest for the 31% of individuals who were children 3-13. For most age groups, the mortality incident rate was lower in the July-December 2017 period than in the same period a year before. The exception is the group of individuals aged 42-51, an age bracket representing 7% of individuals served in the community by DDS, after we exclude the Early Start population (Early Start is excluded for a number of reasons, including that the data available on that group is significantly different than the data available for other age groups, and therefore difficult to compare.). There was a more than 20% increase in the number of deaths per 1,000 individuals in the 42-51 age group in July-December 2017, compared to individuals in this age group a year previously. We did not see the same pattern earlier in 2017: the mortality rate for the same age group was lower in January to June 2017 than in January to June 2016 (5.8 per 1,000 in 2017 compared to 6.1 per 1,000 in 2016). This age bracket will be monitored to determine whether there are special issues arising for this group over time.

Table 2: Mortality Incidents for Individuals Served by DDS Age 3 and Above, by Age Group, July – December 2017 Compared to July – December 2016

Age in Years	Share of Individuals Jul-Dec 2017	Number of Deaths Jul-Dec 2017	Deaths per 1,000 Individuals Jul-Dec 2017	Deaths per 1,000 Individuals Jul-Dec 2016
3 to 13	31%	67	0.78	0.99
14 to 21	20%	47	0.87	1.19
22 to 31	20%	99	1.85	1.92
32 to 41	11%	77	2.62	3.14
42 to 51	7%	120	5.95	4.82
52 to 61	7%	220	11.92	12.19
62 or older	4%	314	26.17	26.21

*We compare to the same period a year ago rather than last period because of seasonal differences in mortality rates.

MORTALITY RATES ARE DOWN IN ALL RESIDENCE TYPES EXCEPT COMMUNITY CARE FACILITIES.

As shown in Table 3, the largest number of deaths (32 percent) occurred among individuals living in the home of a parent or guardian. This residential setting accounts for three quarters of all individuals served by DDS, including most children and young adults. Consistent with the predominance of young people, the mortality rate is lowest for those who live at home. The mortality rate is highest for individuals who live in Skilled Nursing Facilities (SNF), reflecting their significant health issues. Rates for other residential care settings, including Independent/Supported Living Services (ILS/SLS), Community Care Facilities (CCF), and Intermediate Care Facilities (ICF), fall in between these two extremes.

Table 3: Mortality Incidents for Individuals Served by DDS Age 3 and Above, by Residence Type, July – December 2017 Compared to July – December 2016

Residence Type	Share of Individuals Jul-Dec 2017	Number of Deaths Jul-Dec 2017	Deaths per 1,000 Individuals Jul-Dec 2017	Deaths per 1,000 Individuals Jul-Dec 2016
Home of Parent/Guardian/Relative	77%	305	1.45	1.69
Independent/Supported Living Services (ILS/SLS)	10%	118	4.51	4.67
Community Care Facilities (CCF)	9%	218	9.27	7.32
Skilled Nursing/Intermediate Care Facilities (SNF/ICF)	3%	248	30.17	30.49
Other	2%	55	10.49	10.65

In this period, the mortality rate for individuals living in CCFs was 27% higher than the rate in this setting for July-December 2016. As with the age group discussed above, this increase follows a decrease earlier in the year. This may suggest that deaths occurred later in the year than typical. The risk management contractor will monitor these rates.

THE CASE-MIX ADJUSTED MORTALITY RATE DECREASED BY 5% THIS SEMIANNUAL PERIOD COMPARED TO THE SAME PERIOD LAST YEAR.

Case-mix adjustment allows one to monitor risk management by calculating measures that are not influenced by changes in the mix of people served by age, health status, or other risk factors. It accounts for the individual characteristics, including age, residential setting, diagnosis, skills of daily living, behavioral challenges, and history of incidents. Case-mix adjusted trends examine changes in rates keeping the population characteristics the same over time. In doing so, the trend in the adjusted rate is more likely to reflect risk management practices or changes in underlying risks (such as influenza outbreaks). Adjusted rates are calculated for each month and then averaged over the period. The adjusted rate shows what the mortality rate would be if the caseload characteristics were the same over the past several years.

The monthly mortality rate is the average likelihood that an individual will die in a month. As shown in Table 4, the unadjusted average monthly mortality rate is one-sixth of the semiannual rate in Table 1, but it is expressed in

percentages instead of deaths per 1,000. In this report, the adjusted rate shows what the mortality rate would be if the caseload had the same characteristics as in December 2015. In Table 4, there is a small difference between the adjusted and unadjusted rate, indicating that individuals' characteristics explain relatively little of the change between July-December 2016 and July-December 2017. However, these monthly differences add up over the period.

The adjusted mortality rate declined 4.8% from the same period a year ago, compared to the 3.4% decrease in the unadjusted rate.

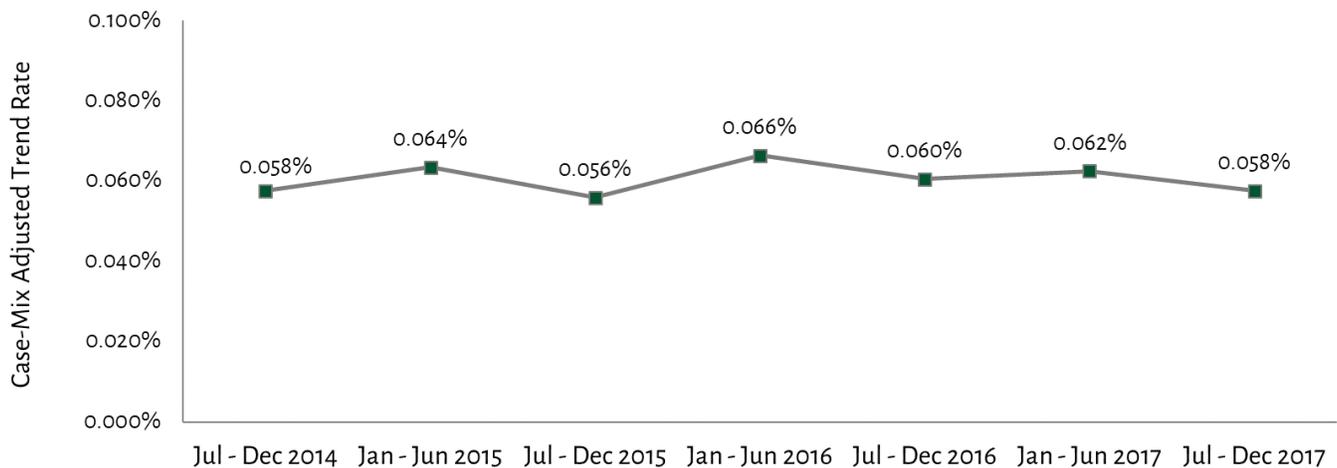
Table 4: Mortality Rates for Individuals, July – December 2017

Mortality	July - December 2016	July - December 2017
Deaths per 1,000 Individuals Age 3 and Above	3.56	3.43
Average Unadjusted Monthly Mortality Rate	0.0601%	0.0580%
Case-Mix Adjusted Mortality Rate	0.0605%	0.0576%
% Change from Same Period Last Year		-4.8%

THE ADJUSTED MORTALITY RATE FOR THIS PERIOD IS SIMILAR TO THE RATE FOR THE SAME PERIOD OVER THE LAST SEVERAL YEARS.

Figure 1 below shows the monthly average mortality rate in each semiannual period from July-December 2014 to the current period, adjusted for case mix. As noted, mortality rates are generally higher in January-June than in July-December. In fact, the high months for mortality are usually December and January, sometimes into February, as was the case in 2016. The July-December 2017 adjusted rate is close the rate of the same period in recent years.

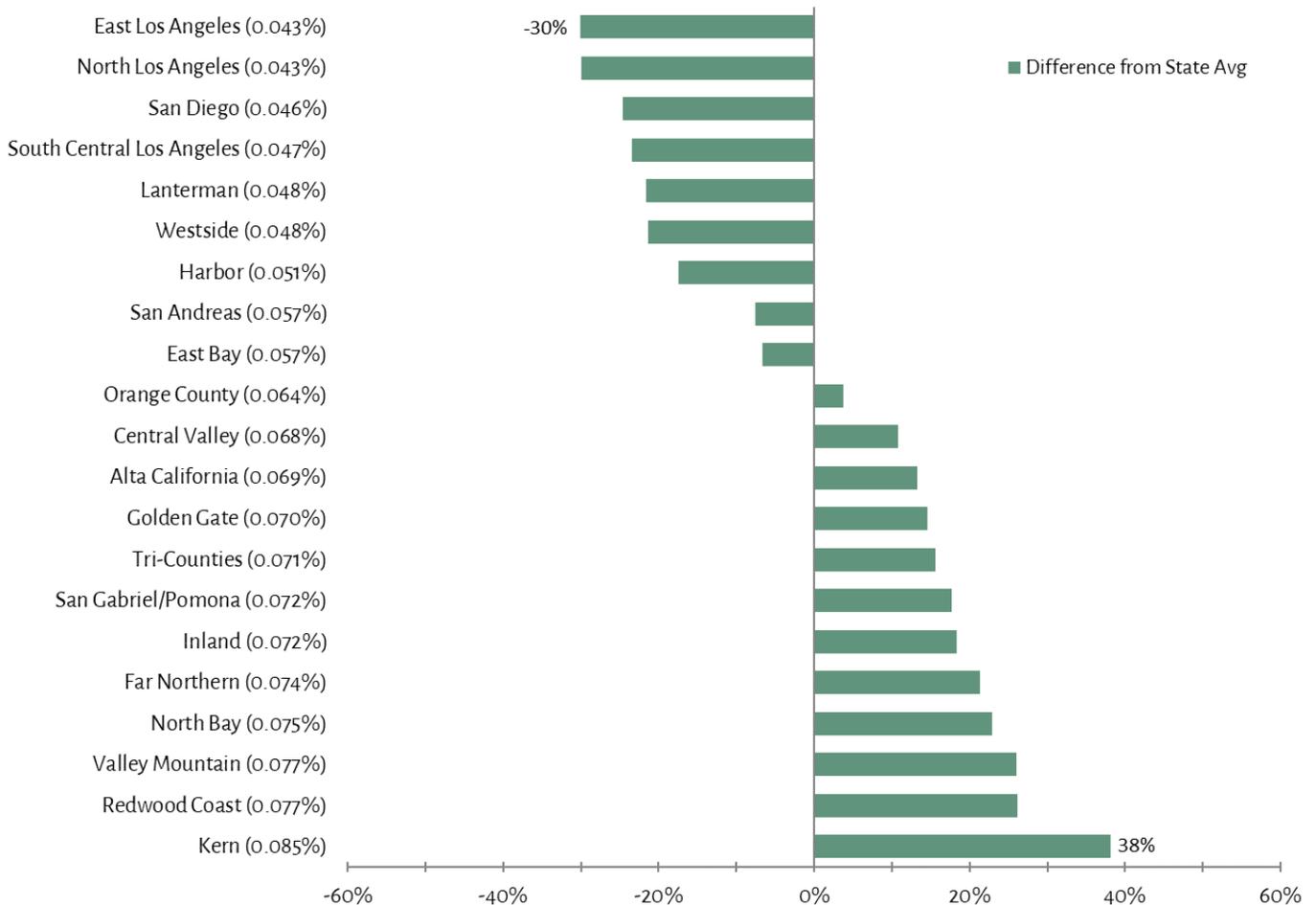
Figure 1: Average Monthly Mortality Incident Rates by Semiannual Period, Case-Mix Adjusted, July-December 2014 – July-December 2017



REGIONAL CENTERS RANGED FROM 30% BELOW TO 38% ABOVE THE STATE AVERAGE, BEFORE ACCOUNTING FOR DIFFERENCES IN THEIR CASELOADS.

The average monthly mortality rates for calendar year 2017 for the 21 regional centers are shown with their names in Figure 2. 12 months are used in this average to smooth some of the short-term variation in rates, especially for smaller regional centers. The bars on the figure represent how much each regional center’s rate is above or below the statewide rate. The average monthly rates range from 30% below the state average to 38% above. Even with 12-month averages, there are still significant variation over time. Kern Regional Center (KRC) had the highest monthly average mortality rate for 2017, up from 10% above the statewide average in 2016. This difference reflects 75 deaths for individuals served by KRC in 2017, compared to 52 in 2016. The mortality rate was higher for KRC in every quarter of 2017 compared to the same quarters the previous year, with the greatest increase occurring in the July-September period.

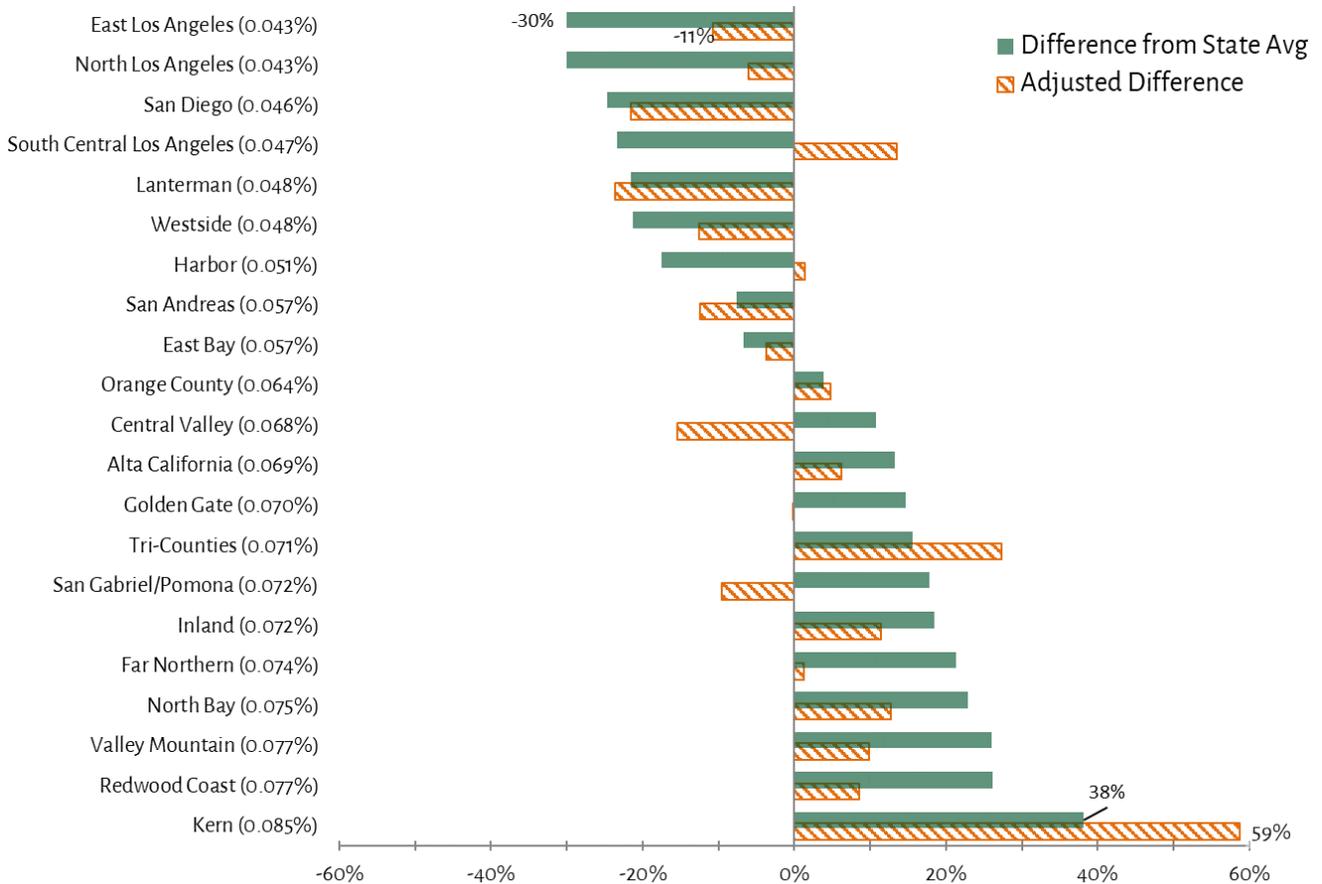
Figure 2: Mortality Rates by Regional Center, Average Monthly Rate Compared to Statewide Average, January 2017 – December 2017



The differences between regional centers may reflect, in part, differences in the characteristics of their clients, such as differences in the average age or presence of chronic illness. To assess the effect of these differences, we calculate adjusted mortality rates. The adjusted rates are estimated for a matching population at every regional center.

Figure 3 matches Figure 2, except the striped bars show the adjusted mortality rate. East Los Angeles Regional Center (ELARC), for example, had the lowest unadjusted rate, 30% below the statewide average. Its adjusted rate is 11% below the statewide average. This indicates that ELARC's average monthly mortality rate is low in part because it serves a lower-risk population. In contrast, San Gabriel/Pomona Regional Center (SGPRC) had an above average rate because it serves a higher-risk population. Accounting for this population difference, SGPRC's adjusted rate is below average.

Figure 3: Mortality Rates by Regional Center, Average Monthly Rate Compared to Statewide Average, Unadjusted and Adjusted, January 2017 – December 2017



Caseload differences do not explain the high rate for KRC, as seen at the bottom of Figure 3. Its caseload is predicted to have lower risk than average: If its caseload had matched the statewide population, KRC's average monthly mortality rate would have been even higher, with an adjusted rate 59% above average. However, some of the difference between the unadjusted and adjusted rate for KRC may reflect data issues that affect the accuracy of the risk modeling. KRC has relatively low reporting of hospitalizations and may have incomplete data on chronic health conditions. Both factors could result in KRC's caseload appearing to be lower risk than if these data were more complete. As a small regional center, KRC's rate is more easily influenced by a small number of additional SIRs.

III. NON-MORTALITY INCIDENT FINDINGS

THE INCREASE IN THE NON-MORTALITY INCIDENT RATE WAS SHARED ACROSS MOST AGE GROUPS, WITH THE LARGEST INCREASE FOR YOUTH AGE 14-21.

The vast majority of individuals in out-of-home settings are adults at least 22 years old. Non-mortality incidents for individuals ages 22 and above accounted for about 93% of the non-mortality SIR count in July – December 2017, similar to previous periods. Other than children age 13 or younger, non-mortality incidents are least common for adults 32-51. Youth and younger adults are at greater risk for psychiatric admissions, suspected abuse and missing person incidents. Older adults are at greater risk of medical hospitalization. Except for children, the number of non-mortality SIRs per 1,000 out-of-home individuals was higher for all age categories this period than in the same period last year. The biggest increase was among individuals age 14-21.

Table 5: Non-Mortality Incidents for Out-of-Home Individuals Age 3 and Above, by Age Group, July – December 2017 Compared to July – December 2016

Age in Years	Share of Out-of-Home Individuals Jul-Dec 2017	Number of Non-Mortality SIRs Jul-Dec 2017*	SIRs per 1,000 Out-of-Home Individuals Jul-Dec 2017	SIRs per 1,000 Out-of-Home Individuals Jul-Dec 2016
3 to 13	2%	84	55.20	59.54
14 to 21	5%	563	193.47	154.99
22 to 31	18%	1,535	134.21	132.72
32 to 41	19%	1,411	117.08	104.37
42 to 51	19%	1,489	127.43	121.43
52 to 61	21%	2,035	151.14	150.96
62 or older	16%	1,799	178.67	168.50

*Excludes 68 SIRs for individuals with missing data for some months of the period.

THE NON-MORTALITY RATE INCREASED ACROSS ALL RESIDENCE TYPES.

Driven in large part by unplanned hospitalizations, individuals in SNF/ICF settings had the highest non-mortality number of incidents relative to the number of people in care this period, with about 224 incidents per 1,000 people. 13% of individuals in residential care resided in SNF/ICF settings, due to significant health care or behavioral needs. Of the 1,750 non-mortality incidents that occurred in SNF/ICF settings, the highest share (60%) were unplanned hospitalizations. Nearly half of the unplanned hospitalizations were due to respiratory illness.

Table 6: Non-Mortality Incidents for Individuals Age 3 and Above, by Residence Type, July – December 2017 Compared to July – December 2016

Residence Type	Share of Out-of-Home Individuals Jul-Dec 2017	Number of Non-Mortality SIRs Jul-Dec 2017*	SIRs per 1,000 Out-of-Home Individuals Jul-Dec 2017	SIRs per 1,000 Out-of-Home Individuals Jul-Dec 2016
Independent/Supported Living Services (ILS/SLS)	41%	2,577	98.52	95.31
Community Care Facilities (CCF)	37%	3,975	169.02	158.84
Skilled Nursing/Intermediate Care Facilities (SNF/ICF)	13%	1,750	212.92	197.87
Other	8%	614	117.11	107.94

*Excludes 68 SIRs for individuals with missing data for some months of the period.

THE CASE-MIX ADJUSTED NON-MORTALITY RATE INCREASED BY 4.2% COMPARED TO THE SAME SEMIANNUAL PERIOD LAST YEAR.

For non-mortality incidents, we calculate the monthly incident rate as the likelihood of an individual having a non-mortality incident in a given month. Characteristics such as age, residential setting, skills of daily living and behavioral challenges help predict the likelihood of a non-mortality incident. In addition, some individuals have multiple incidents; this history also predicts the likelihood of a future incident. Table 7 reports the unadjusted and adjusted monthly non-mortality incident rates, averaged over the six-month period.

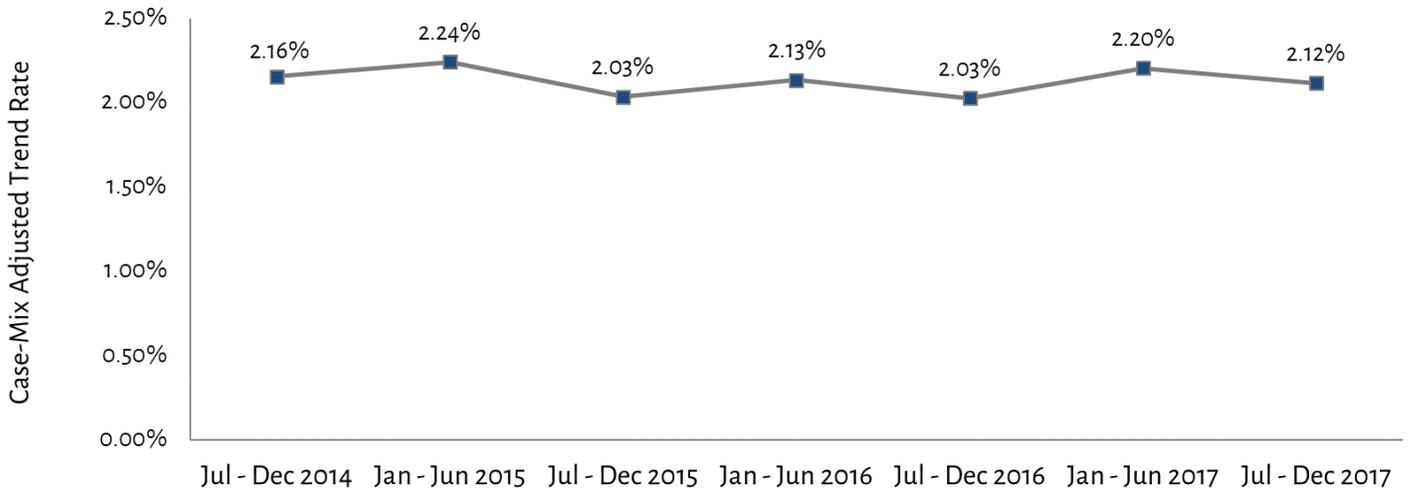
Table 7: Non-Mortality Incident Rates (Monthly Share of Individuals with Incidents), Out-of-Home Individuals, July – December 2017 Compared to July – December 2016

Non-Mortality	July-December 2016	July-December 2017
Non-Mortality Incidents per 1,000 Individuals Age 3 and Above	134.6	141.63
Average Unadjusted Monthly Non-Mortality Rate	2.03%	2.15%
Case-Mix Adjusted Non-Mortality Rate	2.03%	2.12%
% Change from Same Period Last Year		+4.2%

In an average month this period, 2.15% of individuals experienced at least one non-mortality incident. Adjusting for case mix, this incident rate falls slightly to 2.12% of individuals. The adjusted monthly rate for July-December 2017 was 4.2% higher than the same period in 2016. (This change is not statistically significant, meaning it is consistent with typical variation).

Figure 4 shows the monthly average non-mortality rate in each semiannual period from July-December 2014 to the current period, adjusted for case mix. Non-mortality rates are generally lower from July-December than from January to June. Consistent with this pattern, the incident rate was lower this semiannual period than for the previous period. Still, it was higher than the same period in 2015 or 2016. However, the July-December 2017 rate was not unusually high. In July-December 2014, the rate was slightly higher than it was this period.

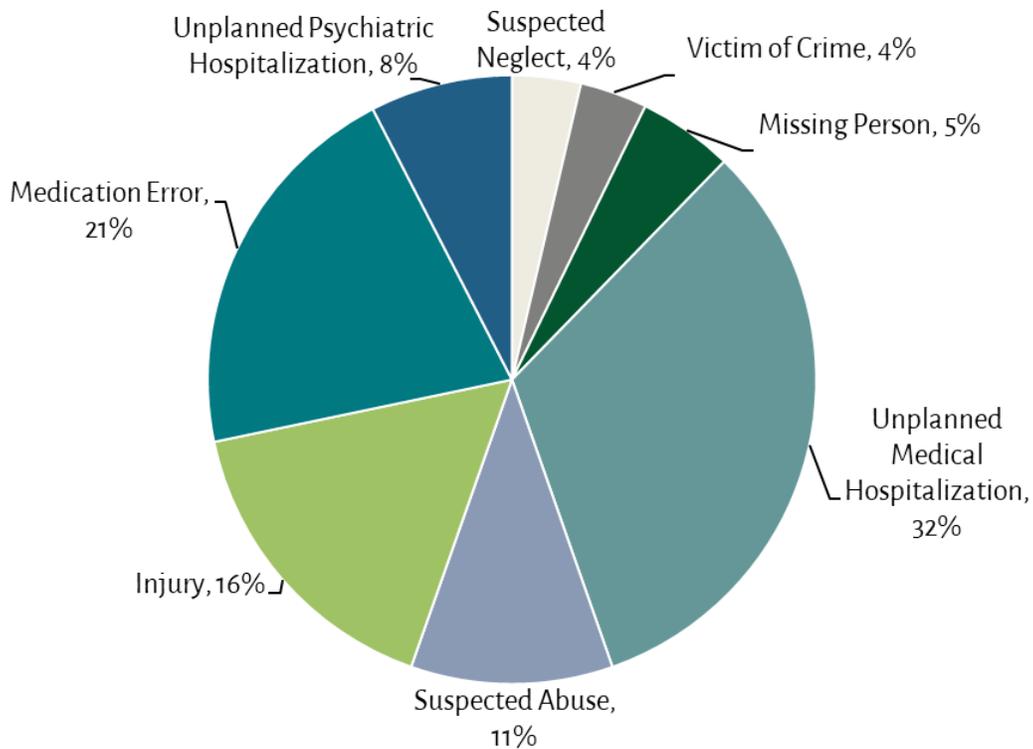
Figure 4: Non-Mortality Incidents, Statewide Case-Mix Adjusted Semiannual Trend, July-December 2014 – July-December 2017



UNPLANNED MEDICAL HOSPITALIZATIONS CONSISTENTLY REPRESENT THE LARGEST SHARE OF NON-MORTALITY INCIDENTS.

Title 17 identifies six major types of non-mortality incidents: unplanned hospitalization, injury, suspected abuse, suspected neglect, missing person and victim of crime. However, the factors that put an individual at risk of an unplanned psychiatric hospitalization differ from the risks for a medical hospitalization. Similarly, risk of medication errors is often quite different from risk of injuries such as fractures or lacerations. Therefore hospitalizations are divided into medical and psychiatric and injuries into medication errors and other injury. Between July and December 2017, there were 8,984 non-mortality incidents for the 63,430 individuals with residential vendors. Figure 5 shows how the non-mortality incidents between July and December 2017 split across incident types.

Figure 5: Breakdown of Non-Mortality Special Incidents for Individuals in Out-of-Home Settings, July – December 2017



Values may not sum to 100% due to rounding.

This period, 32% of non-mortality incidents were unplanned hospitalizations. Medication errors, representing the next highest share of incidents, accounted for 20% of incidents. These rates were similar to the July-December 2016 period.

INCIDENT RATES ROSE FOR MULTIPLE INCIDENT TYPES COMPARED TO THE SAME PERIOD A YEAR AGO.

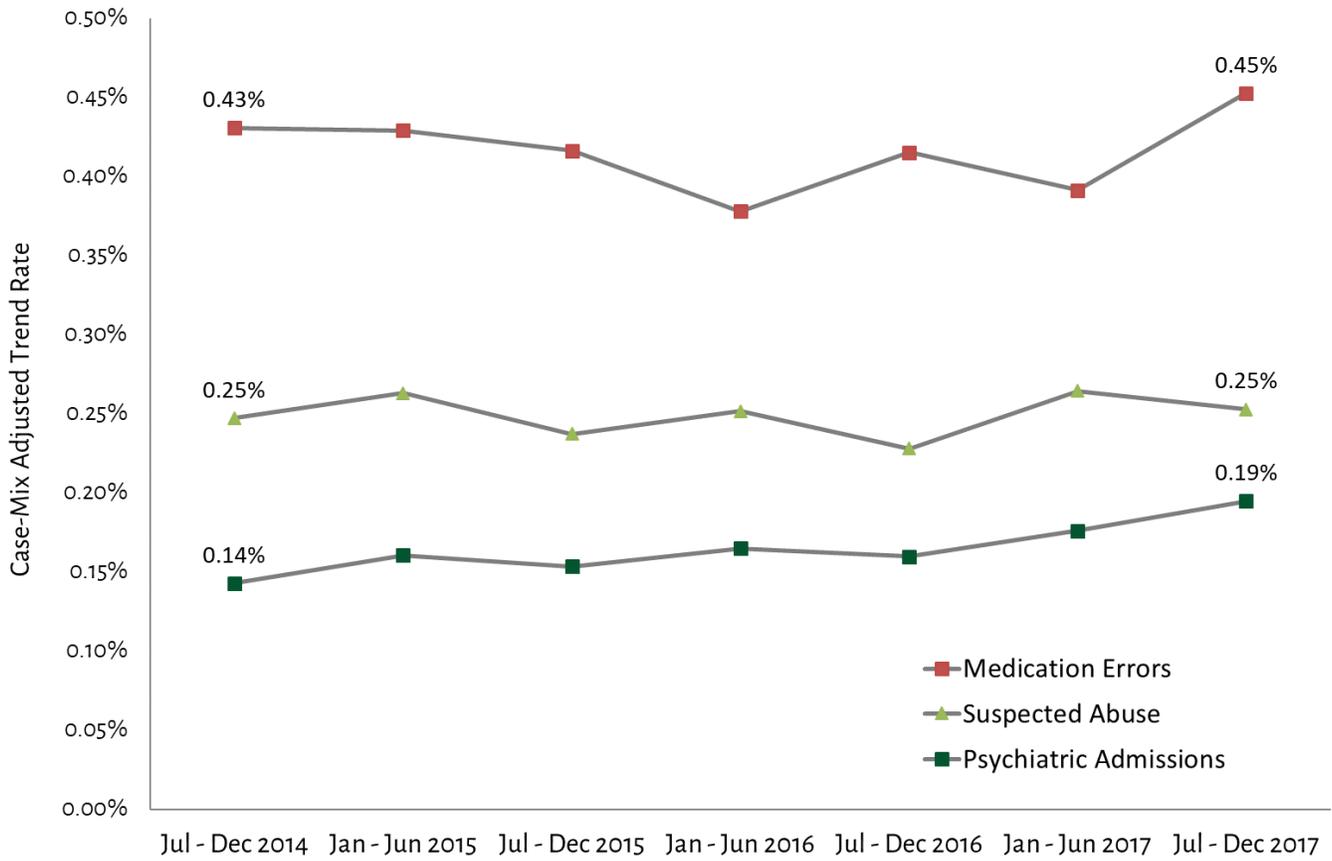
Multiple incident types contributed to the overall increase in the non-mortality incident rate for the July-December 2017 period. The first column of Table 7 shows the average number of individuals with incidents by type during this period. The remainder of Table 7 compares the case-mix adjusted incident rates by type compared to the July-December 2016 period. Unplanned medical hospitalizations accounted for the highest number of individuals with incidents in the average month between July and December 2017. The incident rate increased this period relative to the same period a year ago, but by less than the average increase for all non-mortality incidents. As Table 7 shows, relatively high increases in the adjusted rates for medication errors, suspected abuse incidents and unplanned psychiatric hospitalizations caused an increase in the overall rate.

Table 7: Non-Mortality Incident Rates by Incident Type, Average Monthly Number and Share of Out-of-Home Individuals with Incidents, July – December 2017 Compared to July – December 2016

Incident Type	Avg Monthly # of Individuals with SIRs Jul-Dec 2017*	Adj. Average Monthly Incident Rate Jul-Dec 2017	Adj. Average Monthly Incident Rate Jul-Dec 2016	% Change in Avg Incident Rate from Jul-Dec 2016
Unplanned Medical Hospitalization	467	0.71%	0.68%	+3%
Medication Error	295	0.45%	0.42%	+9%
Injury	246	0.38%	0.38%	+1%
Suspected Abuse	161	0.25%	0.23%	+11%
Unplanned Psychiatric Hospitalization	106	0.19%	0.16%	+22%
Missing Person	70	0.12%	0.13%	-7%
Suspected Neglect	55	0.09%	0.09%	-4%
Victim of Crime	54	0.09%	0.09%	+4%

Looking at the three incident types with the largest increases – psychiatric hospitalizations, suspected abuse incidents, and medication errors – we see different patterns over time. Figure 6 graphs the time trends in average monthly adjusted incident rates for these incident types. The July – December 2017 rate of medication errors is higher than it has been for the past three years, but it had recently been lower, in January-June 2016 and January-June 2017. The rate of suspected abuse incidents has moved up and down over the past three years. The July-December 2017 rate is very close to the rate observed in July-December 2016. In contrast to these two rates, the rate of unplanned psychiatric hospitalizations increased in calendar year 2017 above what had been a lower or stable rate. Between January-June 2015 and July-December 2016, the rate was close to 0.16% per month (1.6 admissions per 1,000 individuals each month). For July-December 2017, the monthly rate was 0.19% (1.9 admissions per 1,000).

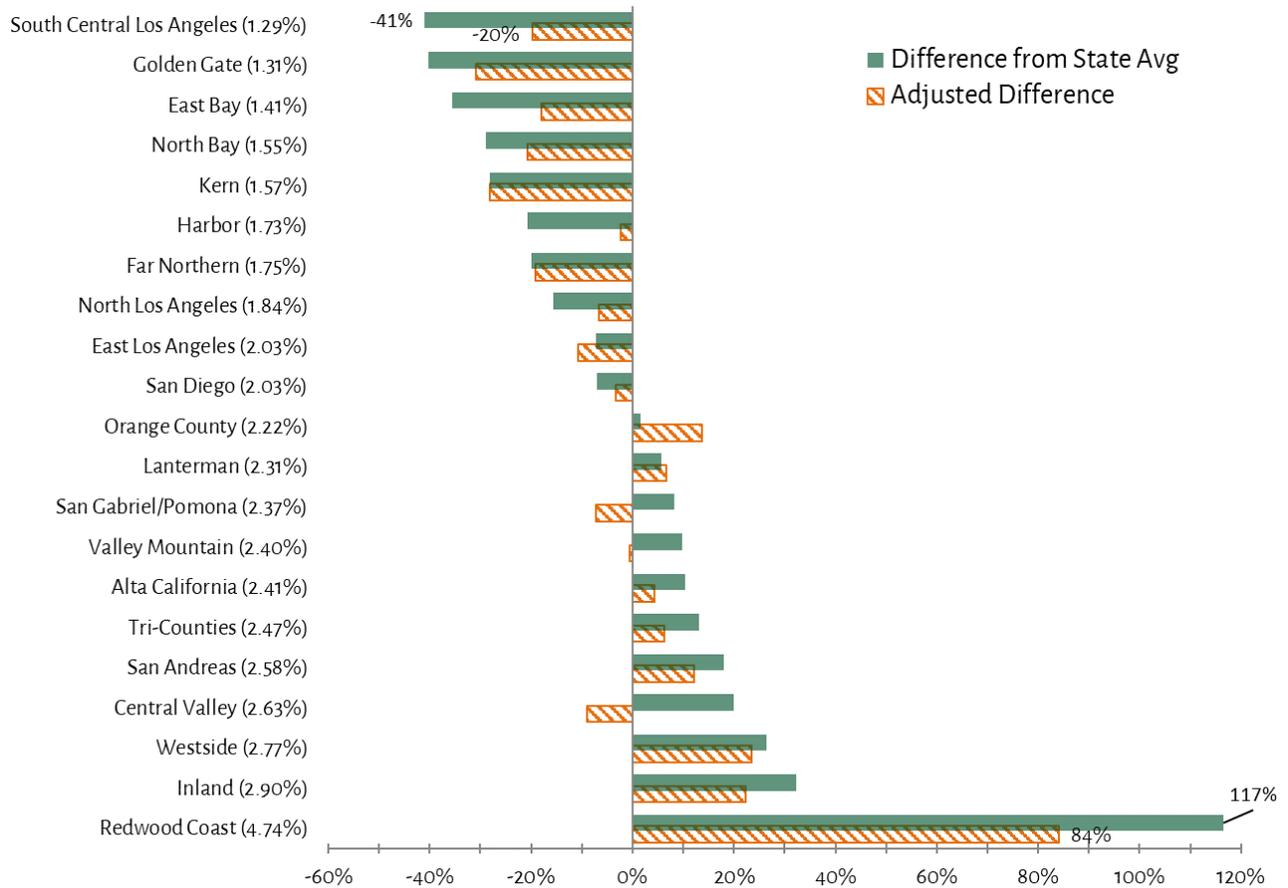
**Figure 6: Average Monthly Case-Mix Adjusted Rates for Selected Incident Types
July 2014 – December 2017**



FOR 20 OUT OF 21 REGIONAL CENTERS, THE AVERAGE ADJUSTED NON-MORTALITY INCIDENT RATE FOR JANUARY TO DECEMBER 2017 WAS WITHIN 31% OF THE STATE AVERAGE.

Like Figure 3, Figure 7 shows the unadjusted (solid bar) and adjusted (striped bar) differences in non-mortality rates across regional centers. In this figure, the unadjusted rate (in parentheses following the regional center name) is the share of individuals with a non-mortality incident in an average month during calendar year 2017. The adjusted rate subtracts the effects of differences in the ages and needs of the populations they serve. For each regional center, the average monthly rate has been adjusted based on the statewide DDS population. The length of the bars represents how much each regional center’s unadjusted or adjusted non-mortality rate is above or below the statewide rate.

Figure 7: Adjusted Non-Mortality Rates by Regional Center, Average Monthly Rate Compared to Statewide Average, January 2017 –December 2017



In general, the case-mix adjustment narrows the range of variation among the regional centers. Excluding Redwood Coast Regional Center (RCRC), regional center rates ranged from 41% below the statewide average to 32% above the average. The adjusted rates for most regional centers are closer to the statewide average, ranging from 24% above average to 31% below average. The adjustment moves two regional centers from above to below average (San Gabriel/Pomona and Central Valley).



Redwood Coast Regional Center (RCRC) had an unadjusted average monthly non-mortality incident rate of 4.74%, more than double the statewide rate. Case-mix accounts for some of this difference, bringing the adjusted rate down from 117% above to 84% above the state average. This gap is a bit higher than the difference in calendar year 2016. Controlling for observable differences in the characteristics of its caseload, RCRC has the highest rate of medication errors, suspected abuse, suspected neglect and victim of crime incidents among the 21 regional centers. It also has one of the highest rates in unplanned hospitalizations.

The difference for RCRC may reflect greater likelihood of reporting. The risk management contractor has recently reviewed the share of residential vendors ever reporting a non-mortality incident. RCRC has a substantially higher than average share of its SLS providers ever reporting an incident, with the biggest reporting differences observed for medication errors. (At the other extreme, Golden Gate Regional Center (GGRC) has a substantially lower than average share of providers reporting incidents.) However, it does not appear that reporting differences fully account for RCRC outlier status on adjusted incident rates. As risk management contractor, Mission has provided additional analyses and offered technical assistance to RCRC.

IV. RISK MANAGEMENT EFFORTS

DDS, through Mission, is coordinating closely with the regional centers to track and monitor the follow-up activities associated with quarterly SIR spikes. For longer-term increases in incident rates, Mission uses SIR case reviews, site visits, and statistical analyses as part of its monitoring, discovery, and improvement activities. A number of additional activities continue to support DDS and regional centers in preventing future incidents. We describe these activities below.

MONITORING AND DISCOVERY ACTIVITIES

Reporting Back: Regional centers with quarterly spikes in individual incident types report back to DDS, through Mission, any discovery and remediation activities related to these spikes, including a description of why any spikes occurred, what follow-up actions were taken, and whether the centers faced obstacles in implementing these follow-up activities. These responses are reviewed by the DDS Quality Management Executive Committee and may be used to develop strategies for how to mitigate risk to individuals statewide.

Long-Term Increases in Incident Rates: Mission has a multi-stage process to investigate long-term increases in incident rates. We provide additional analyses and technical assistance to regional centers identified based on results such as those shown on page 9. For identified regional centers, we conduct additional analyses to determine the detailed incident types and/or individual characteristics associated with the increase. Based on these results, Mission determines whether a more detailed review of the SIRs is necessary to better understand the issue. As appropriate, Mission also works with the regional centers to identify mitigation strategies. Activities this period included:

- Mission provided additional data analyses to multiple regional centers with high and increasing rates of specific incident types based on increases observed in previous periods. In three cases, rates that had been higher returned to state norms. One example involved analyses for Frank D. Lanterman Regional Center (FDLRC) on its rate of suspected abuse. For the period ending in June 2017, FDLRC's rate of suspected abuse was close to the state average. A similar pattern held for the rate of suspected neglect at South Central Los Angeles Regional Center (SCLARC). Mission reported findings from additional data analyses for SCLARC in July and September 2017; its rate of suspected neglect was close to the state average by late 2017. Finally, at the request of North Bay Regional Center (NBRC), Mission investigated the role of atypical reporting for a particular vendor as an explanation for a higher rate of suspected abuse in 2016-17. Subsequent analysis did not support this hypothesis. However, by late 2017-18, the rate of suspected abuse at NBRC declined to approximately the state average.
- Mission also conducted a review of the rate of injury incidents at Central Valley Regional Center (CVRC). In collaboration with CVRC, Mission determined that the high rate of injury incidents was due to 1) a practice of treating contusions (bruises) as cases of internal bleeding, and 2) a practice among vendors to have clients seen by medical staff for minor bruises, classifying the occurrence as "requiring medical treatment beyond first aid" and therefore reportable as SIRs.
- Following an increase in the medication error rate for North Los Angeles County Regional Center (NLARC) through September 2017, Mission did additional analyses. Mission found that the increase was explained by an increase in repeat medication errors among individuals in SLS and by increases in first and repeat medication errors among individuals in ICFs.
- Mission and DDS continue to monitor the high rates of suspected abuse, medication errors, and suspected neglect incidents at RCRC. In December 2017, Mission summarized for DDS findings from multiple technical



assistance reports presented to RCRC leadership earlier in 2017. One area RCRC targeted for improvement was repeated incidents of suspected abuse. The rate of repeated abuse at RCRC declined substantially between January 2016 and December 2017. The rate of first abuse, however, increased over the same period, and, because first abuse affects a much larger share of the population, the increase in first abuse brought about an increase in the overall rate of suspected abuse at RCRC.

V. APPENDIX

SPECIAL INCIDENT DEFINITIONS

Injury – Serious injury/accident, including lacerations requiring sutures or staples; puncture wounds requiring medical treatment beyond first aid; fractures; dislocations; bites that break the skin and require medical treatment beyond first aid; internal bleeding requiring medical treatment beyond first aid; any medication errors; medication reactions that require medical treatment beyond first aid; or burns that require medical treatment beyond first aid.

Medication error – When an individual under vendored care experiences one or more of the following situations: 1) wrong medication, 2) wrong dose, 3) wrong time, or 4) wrong route. According to the Reporting Alignment Project, an individual has a one-hour window to take his or her medications based on the time prescribed by the physician. Any medication administered or self-administered more than one hour before or after the prescribed time is considered a missed dose medication error.

Missing person – These conditions must apply: the vendor has communicated with any law enforcement agency in any way and described the individual as missing to that agency or has filed a formal missing person's report with a law enforcement agency.

Mortality – Any individual death, regardless of cause.

Suspected abuse – All vendors shall report to the regional center the following special incidents if they occurred during the time the individuals was receiving services and supports from any vendor or long-term health care facility: Reasonably suspected abuse/exploitation, including physical, sexual, fiduciary, emotional/mental, or physical and/or chemical restraint.

Suspected neglect – Reasonably suspected neglect, including failure to provide medical care for physical and mental health needs; prevent malnutrition or dehydration; protect from health and safety hazards; or assist in personal hygiene or the provision of food, clothing, or shelter, or exercise the degree of care that a reasonable person would exercise in the position of having the care and custody of an elder or a dependent adult.

Unplanned medical hospitalization – Unplanned hospitalization due to the following conditions: respiratory illness, including but not limited to asthma, tuberculosis, and chronic obstructive pulmonary disease; seizure-related; cardiac-related, including but not limited to congestive heart failure, hypertension, and angina; internal infections, including but not limited to ear, nose and throat, gastrointestinal, kidney, dental, pelvic, or urinary tract; diabetes, including diabetes-related complications; wound/skin care, including but not limited to cellulitis and decubitus; and nutritional deficiencies, including but not limited to anemia and dehydration.

Unplanned psychiatric hospitalization – Unplanned or unscheduled hospitalization due to a psychiatric condition. An involuntary psychiatric hospitalization accomplished pursuant to Section 6500 of the Welfare and Institutions Code is reportable to DDS when all of the following conditions are met: The discharge diagnosis indicates that the individual was admitted to hospital for a psychiatric condition, the individual is not conserved and does not consent to the admission, or the individual is conserved and the individual's parent, legal guardian or conservator does not consent to the admission, and the legal mechanism used to accomplish the admission is section 6500.

Victim of crime – Includes the following: robbery, including theft using a firearm, knife, or cutting instrument or other dangerous weapons or methods that force or threaten a victim; aggravated assault, including a physical attack on a victim using hands, fists, feet, or a firearm, knife, or cutting instrument, or other dangerous weapon; larceny, including the unlawful taking, carrying, leading, or riding away of property, except for motor vehicles, from the possession or constructive possession of another person; burglary, including forcible entry; unlawful non-forcible entry, and



attempted forcible entry to a structure to commit a felony or theft therein; and rape, including rape and attempts to commit rape.