2014–2015 YEAR IN REVIEW

RISK MANAGEMENT AND MITIGATION

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INTRODUCTION AND BACKGROUND

According to Title 17 of the California Code of Regulations, vendors and long-term health care facilities must report certain "special incidents" that occur to consumers with developmental disabilities. This year-end report summarizes California's rates of reported special incidents during the fiscal year (FY) 2014/15.

The California Department of Developmental Services (DDS) relies on a network of 21 regional centers to plan, coordinate, and monitor an array of services for individuals with developmental disabilities. In July 2014, DDS served approximately 271,000 individuals with developmental disabilities in community settings. In 2001, DDS initiated a comprehensive risk prevention, mitigation, and management system as one cornerstone of quality services for consumers.

As part of this system, DDS monitors the occurrence of adverse events, or "special incidents," 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 person if they occur when a consumer is under vendored care. (See the last page for definitions of special incidents and vendored care.) In addition, any occurrence of consumer mortality or victim of crime must be reported whether or not it occurred while the consumer was under vendored care. This year-end report summarizes California's rates of reported special incidents during FY 14/15. The report delineates special incident rates by type, comparing them with incident rates from the previous fiscal year. The rates and graphs presented in this report were constructed using data from the Special Incident Reporting (SIR) System from July 2009 through June 2015, augmented with two additional data sources maintained by DDS:

1. The Client Master File (CMF)
2. The Client Development Evaluation Report (CDER)

Mission Analytics Group (Mission), the risk management contractor for DDS, compiled this report based on statistical analyses that measure a consumer's risk of experiencing a special incident. The report concludes with a discussion of how DDS, Mission, and the regional centers are working to ensure effective risk management practices to prevent the occurrence of special incidents.

The rate of special incidents is higher this fiscal year than the previous two.

Table 1: Reported Special Incidents for All DDS Consumers

	FY 14/15	FY 13/14	FY 12/13
Total Number of Consumers	277,433	266,036	256,652
Total Number of Reported Incidents	21,709	20,347	19,835
All Incidents per 1,000 Consumers	78.2	76.5	77.3
Deaths per 1,000 Consumers	6.7	6.8	7.2

FY 14/15 counts use data received August 2015, with incidents reported through June 30, 2015.

Key Findings:

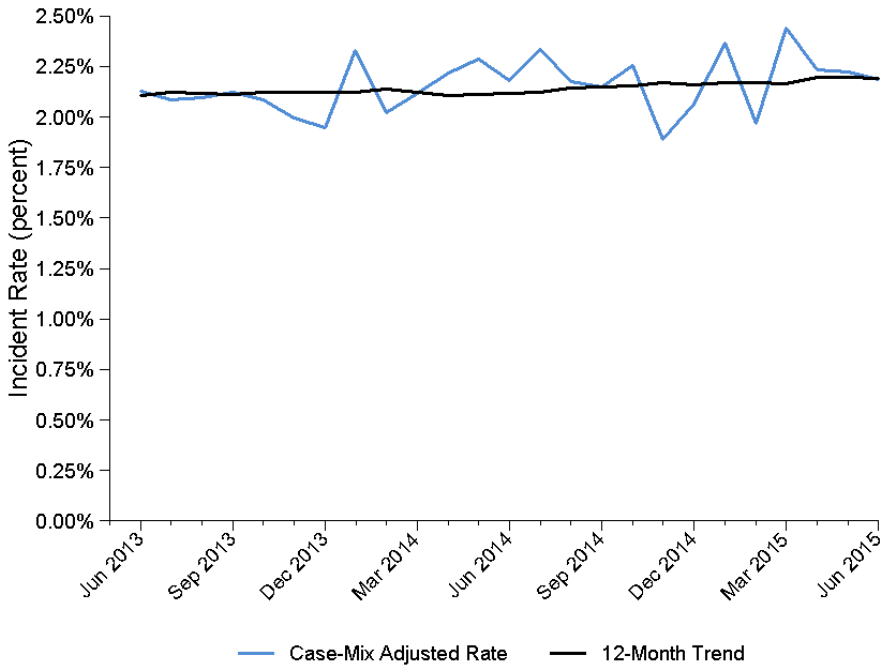
- Approximately 277,000 consumers were served by DDS at some point in FY 14/15, an increase of over 10,000 from FY 13/14.
- There were 21,709 special incidents reported in FY 14/15, including 19,854 non-mortality incidents and 1,855 deaths. Additional mortality incidents for this period may be reported in later months.
- The number of deaths per 1,000 consumers in FY 14/15 (6.7) is 1.4% lower than that for the previous year and 6.7% lower than that for FY 12/13. The difference between FY 14/15 and FY 13/14 is not statistically significant.
- At 6.7 deaths per 1,000 consumers, California's overall mortality rate appears to be lower than those of other states.

More About These Data

Total Number of Consumers refers to the total number of individuals served by DDS at any point during a fiscal year. For FY 14/15, the total number counts individuals served between July 2014 and June 2015. This number includes people diagnosed as having a developmental disability who are served in the community (Status Code 2) and children who receive Early Start services (Status Code 1). The number does not include individuals who are served in a State Developmental Center. See *Definitions* on page 13 for more details.

The monthly non-mortality special incident rate was at or below the long-term trend for most of FY 14/15.

Figure 1: Statewide Non-Mortality Rates, Out-of-Home Consumers Age 3 and Up Case-Mix Adjusted Monthly Rates Since June 2013



Key Findings:

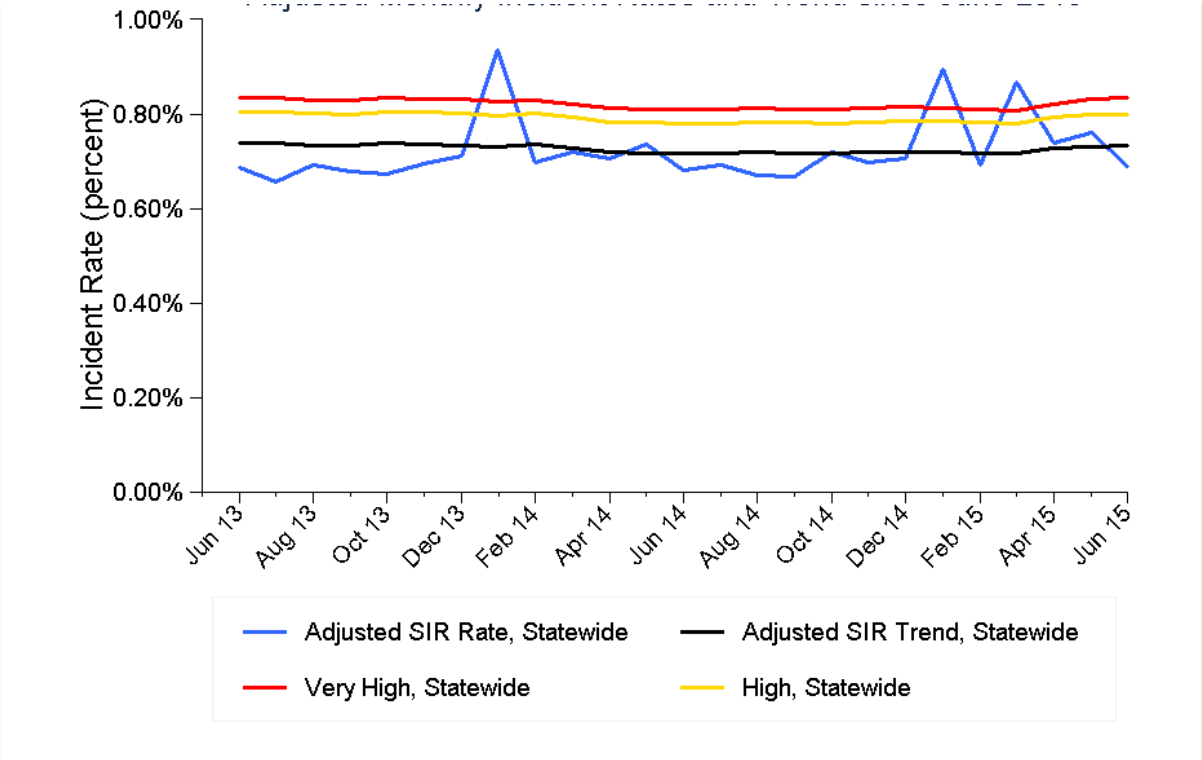
- The monthly non-mortality special incident rate (blue line) was at or below the long-term trend for most of FY 14/15 with the exception of three monthly spikes in October 2014, January 2015, and March 2015.
- The non-mortality rate spikes in October 2014, January 2015, and March 2015 were due to unexpectedly high rates of unplanned medical hospitalizations. The increases in January and March were statistically significant for the January–March quarter overall.

More About These Data

The black line above represents a 12-month moving average. It is calculated by taking the average of the statewide incident rates from the most recent 12-month period. The blue line represents the share of consumers statewide who experience one or more special incidents in a month. The lines shown on this graph account for differences in consumer characteristics, as well as changes in the characteristics of the consumer population over time. This approach, called “case-mix adjustment,” controls for consumer characteristics such as age and medical condition and removes these effects from the calculated trend.

Rate of Unplanned Medical Hospitalization over Time

Figure 2: Unplanned Medical Hospitalization, Case-Mix Adjusted Monthly Rates DDS Out-of-Home Consumers, June 2013 – June 2015



Key Findings:

- The adjusted incident rate for unplanned medical hospitalization spiked in the month of January and March 2015, before falling in later months. These spikes exceeded the "very high" threshold.
- In this period, there were two regional centers that had quarterly spikes in their unplanned medical hospitalization incident rates. They were Central Valley (CVRC) and Tri-Counties (TCRC).

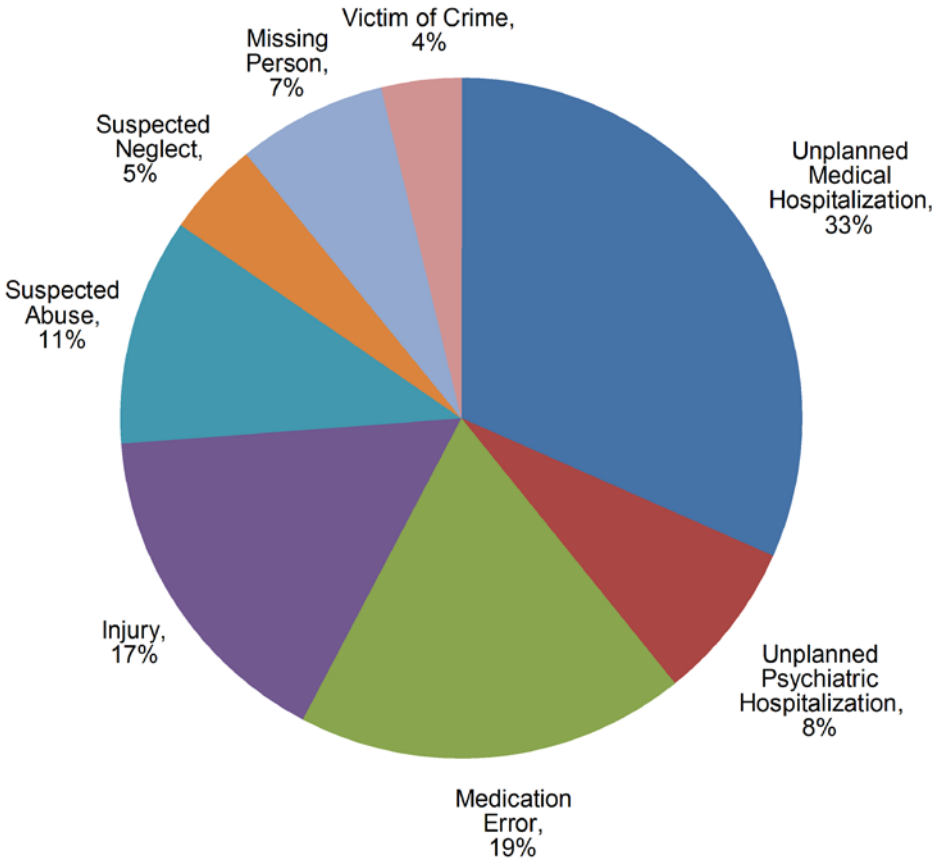
More About These Data

The black line in the graph above is the same line shown in Figure 1, representing the 12-month trend. The blue line represents the percentage of consumers statewide who experience one or more special incidents in a month. Both rates are case-mix adjusted, meaning that the trends account for changes in consumer characteristics over time. See page 3 for more details.

This graph identifies unplanned medical hospitalization incident rates that are unusually high and, therefore, classified as a "spike." A rate that rises above the yellow line in a given month will occur randomly in only one month out of twenty (less than 5% of the time) and is considered "High". A rate that rises above the red line in a given month will occur randomly less than 1% of the time. Rates above the red line, therefore, are very unlikely to be chance events and are classified as "Very High."

Unplanned medical hospitalizations, injury incidents, and medication errors account for over two-thirds of reported non-mortality incidents.

Figure 3: Breakdown of Non-Mortality Special Incidents by Type, All DDS Consumers, July 2014 – June 2015



Key Findings:

- Unplanned medical hospitalization is the most commonly reported non-mortality incident type, accounting for about 33% of all reported incidents in FY 14/15. Medication error and injury incidents are the second and third most commonly reported incident types.
- The least common types of reported incidents are victim of crime, suspected neglect, and missing person, which combined account for approximately 16% of all special incidents.

More About These Data

Definitions of all special incident types can be found on the *Definitions* page (page 13).
The percentages shown above are based on raw counts of special incidents and are not case-mix adjusted.

The drop in the rate of missing incidents was the only statistically significant change from the previous fiscal year.

Table 2: Case-Mix Adjusted Breakdown of Special Incidents by Type, FY 14/15

	Avg. Monthly Incident Rate FY 14/15	Change from FY 13/14	Change from FY 12/13
Unplanned Medical Hospitalization	0.73%	2%	-1%
Unplanned Psychiatric Hospitalization	0.18%	5%	-2%
Injury	0.39%	0%	-1%
Medication Error	0.41%	6%	4%
Suspected Abuse	0.25%	4%	20%
Suspected Neglect	0.11%	-1%	22%
Missing Person	0.16%	2%	3%
Victim of Crime	0.09%	7%	5%

Key Findings:

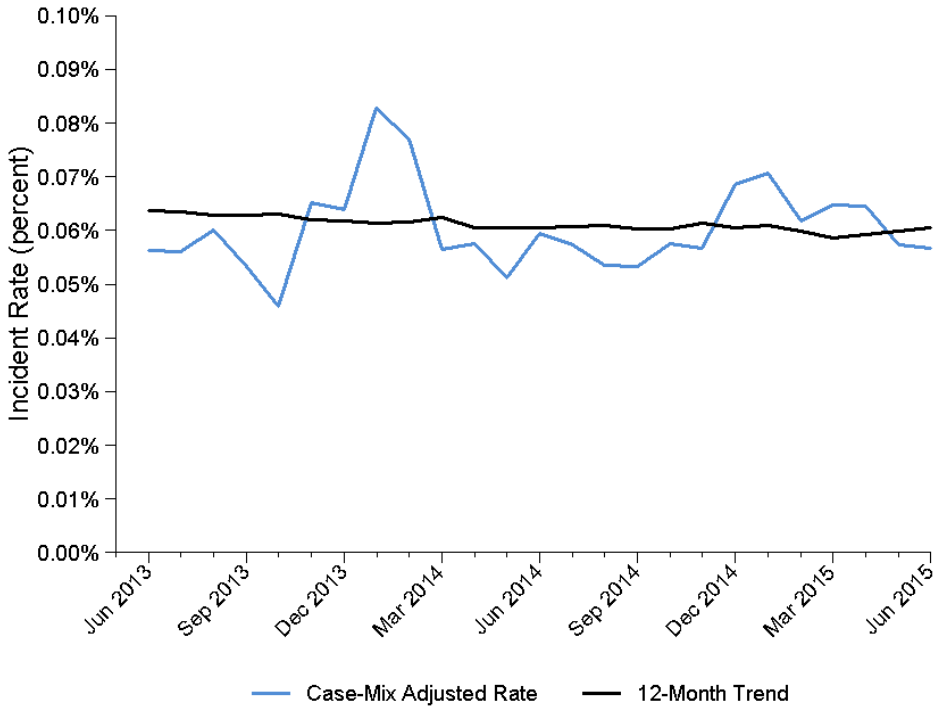
- The rate of suspected neglect decreased by 1% compared to the previous year. However this rate represents a 22% increase relative to FY 12/13. These differences are not statistically significant.
- With the exception of the drop in the rate of missing person incidents relative to FY 13/14, none of the other year-to-year differences in rates shown in Table 2 are statistically significant.

More About These Data

"Avg. Monthly Incident Rate for FY 14/15" refers to the rate of out-of-home consumers statewide who experience one or more incidents in an average month. Rates are case-mix adjusted (refer to page 3 for description). Case-mix adjusted rates include only individuals aged 3 and above.

The mortality rate was higher than the long-term trend in December 2014 and January 2015.

Figure 4: Mortality Incidents, Statewide
Case-Mix Adjusted Monthly Rates Since June 2013



Key Findings:

- The statewide mortality rate was below the long-term trend in 7 out of 12 months in FY 14/15. Consistent with previous years, the mortality rate was well above the trend during the winter season (December 2014-March 2015).
- The long-term trend in mortality incidents decreased slightly over the past two fiscal years.

More About These Data

The trend line (black line) is the monthly mortality rate averaged over the latest 12-month period. The monthly rate is multiplied by 12 to provide an annualized rate, meaning the rate that would be seen for the year if the monthly rate prevailed for 12 months. The trend is calculated by taking the average of the *Case-Mix Adjusted Rate* (blue line) for the previous 12-month period (case-mix adjustment described on page 3). This rate is calculated differently from those in Table 1; it includes only consumers age 3 and over and is case-mix adjusted.

California's mortality rates appear to be lower than published rates from other states.

Table 3: Comparison of Statewide Mortality Rates

State Organization and Year	Share of State Population Served	Population Included	Deaths per 1,000
California DDS, FY 14/15	0.7%	Children and adults living in the community	6.7
Connecticut DDS, FY 11/12	0.4%	Children and adults living in the community	13.1
Louisiana OCCD, FY 11/12	0.3%	Children and adults served on waivers	9.7
Massachusetts DDS, CY 2011	0.5%	Adults	18.4
Ohio DODD, CY 2013	0.8%	Children and adults	8.8
South Dakota DDD, CY 2013	0.3%	Children and adults served on waivers	13.4

Key Findings:

- At 6.7 deaths per 1,000 consumers, California's mortality rate appears to be lower than those of other states we observed.
- Differences in mortality rates may occur as a result of differences in severity and disabilities between California's consumer population and populations served by other states.

More About These Data

See page 2 for the definition of individuals included in the California mortality data.

Other state rates are drawn from online resources, including the *Connecticut Mortality Annual Report FY2012* (March 2013), http://www.ct.gov/dds/lib/dds/health/reports/mortality_report_fy_12.pdf

Louisiana OCDD Waiver Services Annual Mortality Report 2012
http://new.dhh.louisiana.gov/assets/docs/earlysteps/publications/AnnualMortalityReport20112012.pdf

2010 & 2011 Mortality Report (February 2012),
http://www.mass.gov/eohhs/docs/dmr/reports/mortalityreport2011.pdf

Ohio 2013 MUI Abuser Registry Unit Annual Report,
http://dodd.ohio.gov/HealthandSafety/Documents/2013%20MUI%20Registry%20Unit%20Annual%20Report.pdf

South Dakota Division of Developmental Disabilities Critical Incident Reporting Trend Analysis: 2013
http://dhs.sd.gov/dd/Division/documents/CIR_Annual_Report_2013.pdf

The risk management contractor analyzes SIR data to better target remediation activities at the regional center and state level.

Throughout the years, Mission has improved its use of SIR case reviews and statistical analyses as part of monitoring, discovery, and improvement activities associated with spikes or longer-term increases in incident rates. Many additional activities will also support regional centers in avoiding future incidents. We describe these activities below.

Monitoring and Discovery Activities:

- *Discovery and Reporting Back:* Regional centers with quarterly spikes in individual incident types are required to report to 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 regional centers faced obstacles in implementing these follow-up activities. These responses are reviewed by the DDS Quality Management Executive Committee (QMEC) semi-annually, and may be used to develop strategies for mitigating risk to consumers statewide.
- *Long-Term Increases in Incident Rates*: Mission has established a multi-stage process to investigate drivers of long-term increases in incident rates. Mission provides additional analyses and technical assistance to regional centers identified based on results. For such regional centers, the contractor conducts additional analyses to determine the detailed incident types and/or consumer characteristics associated with the increase. Based on these results, the contractor 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.
- *Monitoring Medication Use and Chronic Conditions:* Mission is using Medi-Cal claims data for DDS consumers to identify consumers who are prescribed large numbers of prescription medications for long-term use to support regional center clinical staff in monitoring for possible polypharmacy issues. In addition, the Medi-Cal claims data are used to help identify consumers with chronic medical conditions such as diabetes.
- *Monitoring Suspected Abuse and Neglect Incidents:* This FY, the ARCA Chief Counselors Risk Management Committee (ACCRMC) approved additional outreach to regional centers on cases of consumers who are at increased risk of suspected abuse and/or neglect. Mission provides information on consumers who have been the subject of two suspected abuse or incidents within a year. Mission provides quarterly spreadsheets that identify consumers who were the subject of a suspected abuse or neglect SIR during the most recent quarter, to determine which of those consumers were the subjects of the same type of SIR within the previous 12 months.
- *Additional Analyses on Residential Settings:* At the request of the QMEC, Mission conducted additional analyses to determine whether any types of residential care settings were associated with risks of special incidents that were higher than expected given the care challenges for the resident populations.

- *Improved Version of the Risk Models:* Mission uses risk models to account for the risk of special incidents associated with consumer characteristics such as age and medical condition to permit DDS to distinguish changes in incident rates associated with changes in the caseload from those that may reflect risk management practice. In FY 14/15, Mission introduced improved versions of the risk models that account for additional health-related risk factors. In particular, we added a contextual variable to risk model for unplanned psychiatric hospitalizations to capture county-wide policies affecting this outcome, and added additional measures of special health needs to the unplanned medical hospitalization risk model.
- *Monitoring Individuals Who Have Transitioned from Lanterman Developmental Center into the Community:* Mission conducts analyses and submits a semi-annual Lanterman Risk Management Report to DDS. This report includes all individuals who have transitioned from Lanterman Development Center since January 2009 (mover cohort). The semi-annual report helps monitor changes in residential settings, changes in the Client Development Evaluation Report (CDER), and Special Incident Report (SIR) rates.
- *Expanded Monitoring of Individuals who have Transitioned from Developmental Centers*: Building on the analyses developed for "Lanterman movers," Mission began to expand monitoring activities to include individuals who have transitioned from other developmental centers.
    - Mission established baseline data for the mover cohort. These data were presented in a background report that measured the most common incident types for the mover cohort, groups within movers that are at a higher risk of SIRs by type, and differences, if any, between closure-related movers and other movers.

System Improvement Activities:

- *DDS SafetyNet Website:* Mission maintains the DDS SafetyNet, a website promoting health and safety for individuals with developmental disabilities. In addition to addressing safety issues identified in partnership with the ARCA Chief Counselor Risk Management Committee, SafetyNet materials respond directly to trends in special incident rates to help manage risk among the consumer population.
- *Medication Error Diagnostic Tool:* Based on findings from analysis of long-term increases in incident rates and follow-up site visits, Mission developed a medication error diagnostic tool to help service coordinators and residential care providers establish and maintain effective medication administration and reduce the risk of medication errors. Far Northern and Westside Regional centers piloted the tool. Regional centers have used the tool, in particular, in connection with individuals who have left Lanterman Developmental Center. Medication errors occur at a much higher rate among the mover population than in the population with developmental disabilities as a whole. To address this fact, DDS sponsored two conferences on using the diagnostic tool to limit medication errors in the former population. The audiences for the conferences were staff from regional centers that serve Lanterman movers.

These regional centers subsequently began using the medication error diagnostic tool and sending data collected by the tool to Mission each quarter for analysis.

- *DDS Mental Health Services Act (MHSA):* Cycle III (Fiscal Year 2014/15 - 2016/17) MHSA Projects are now underway. A Mental Health/Forensic Collaborative will assist consumers and regional centers in navigating the criminal justice system and shortening incarceration time by establishing competency to stand trial training and identifying resources within the community. An infant mental health project will promote cultural competence in clinical care settings, while another project will develop a mental health clinic to provide psychiatric assessment, medication management, and individual and group therapy. Two projects will assist transition age youth with referral and connections to appropriate community resources, continuity of care before, during and after hospital admission, identifying new community resources, early detection and assessment of mental health conditions and establishment of a Wellness/Drop-In Center. The final project will provide training on evidence-based practices and how each can be used for prevention and early intervention.

Planned Activities for the Coming Year:

- *Expanded Monitoring of Individuals who have Transitioned from Developmental Centers:* Building on the analyses developed for "Lanterman movers," Mission will continue to expand monitoring activities to include individuals who have transitioned from other developmental centers.
    - In quarter one of FY 15/16, Mission will identify individuals in the mover cohort who have experienced two or more SIRs during a quarter and report to DDS and regional center on these individuals for risk prevention and mitigation purposes.
    - Mission will conduct statewide reviews of all abuse, neglect, and mortality SIRs for the mover cohort, as well as findings from regional center mortality reviews for this population, to ensure appropriate reporting, investigation, and risk prevention and mitigation.
- *Monitoring Individuals Who Have Transitioned from Sonoma Developmental Center into the Community:* Mission will develop a monitoring report similar to the Lanterman Risk Management Report given to DDS. Mission will submit findings in a semi-annual Sonoma Risk Management Report to DDS. This report will include data regarding all individuals who have transitioned from Sonoma Developmental Center. The semi-annual report will help monitor changes in residential settings, changes in the CDER, and SIR rates.
- *A Proposed Public Health Campaign Regarding Pneumococcal and Flu Vaccines,* as well as *Vision, Hearing, and Dental Health Issues among DDS Clients*: Data from the National Core Indicators (NCI) in 2012, suggest that individuals with developmental disabilities in California use preventive healthcare at lower rates than individuals with developmental disabilities in other states participating in the NCI. DDS, through Mission, and in collaborations with the ACCRMC, and the chairs of the regional center Risk Management and Planning Committees (RMAPC) is implementing an

informational campaign to increase the use of pneumococcal and flu vaccines, vision and hearing tests, and preventative dental care. The campaign will develop materials and disseminate them through the www.ddssafety.net website and the regional centers.

Terms and Definitions

Case-Mix Adjustment – A process that accounts for differences in the characteristics of the consumer population over time. Case-mix adjustment allows us to distinguish trends driven by changes in population from trends driven by risk management practices. If, for example, there were an influx of medically fragile consumers into a given region, we would expect rates of unplanned hospitalization incidents to increase, even if the effectiveness of the risk management practices did not change. Case-mix adjustment accounts for changes such as these so that rates (and risk management practices) can be reasonably compared to previous periods. Children under age 3 are excluded from case-mix adjusted results.

Death Rate – The annual number of deaths per 1,000 individuals. For monthly mortality data, an annualized rate is calculated by multiplying the monthly rate by 12.

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 – When a consumer is missing and the vendor or long-term health care facility has filed a missing persons report with a law enforcement agency.

Mortality – Any consumer death, regardless of cause.

Out-of-home Consumer – An individual residing in a community setting such as licensed residential services, Family Home Agency (FHA), Supported Living Services (SLS), or Independent Living Services (ILS), rather than in the home of a parent or guardian.

Raw (rate) – The unadjusted rate (e.g., the total number of incidents divided by the total number of consumers).

Suspected Abuse – 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; 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.

Total Number of Consumers – The total number of individuals served by DDS at any point during the fiscal year. Note that this number is larger than the number of individuals served by DDS at a single point in time. This total includes consumers living in the community, that is, consumers receiving services from a regional center not residing in a Developmental Center or state-operated facility.

Unplanned Medical Hospitalization – Unplanned or unscheduled 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; nutritional deficiencies, including but not limited to anemia and dehydration.

Involuntary Psychiatric Admission – Unplanned or unscheduled hospitalization due to a psychiatric condition.

Vendored Care – A consumer is considered “under vendored care” when he or she is receiving services funded by a regional center.

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, fist, 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 of a structure to commit a felony or theft therein; rape, including rape and attempts to commit rape.