2013–2014 YEAR IN REVIEW RISK MANAGEMENT AND MITIGATION

MISSION ANALYTICS GROUP, INC. SEPTEMBER 2014



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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) 2013/14.

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 2013, DDS served approximately 265,000 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 2013/14. 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 2008 through June 2014, 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.

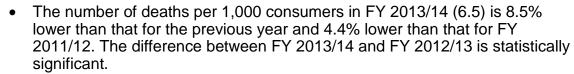
Table 1: Reported Special Incidents for All DDS Consumers

| | FY 11/12 | FY 12/13 | FY 13/14 |
|------------------------------------|----------|----------|----------|
| Total Number of Consumers | 248,129 | 257,194 | 266,842 |
| Total Number of Reported Incidents | 18,610 | 19,823 | 20,279 |
| All Incidents per 1,000 Consumers | 75.0 | 77.1 | 76.0 |
| Deaths per 1,000 Consumers | 6.8 | 7.1 | 6.5 |

FY 2013/14 counts use data received August 2014, with incidents reported through June 30, 2014.

Key Findings:

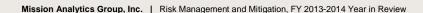
- Approximately 267,000 consumers were served by DDS at some point in FY 2013/14, an increase of nearly 10,000 from FY 2012/13.
- There were 20,279 special incidents reported in FY 2013/14, including 18,542 non-mortality incidents and 1,737 deaths. Additional mortality incidents for this period may be reported in later months.



• At 6.5 deaths per 1,000 consumers, California's overall mortality rate appears to be lower than those of other states.

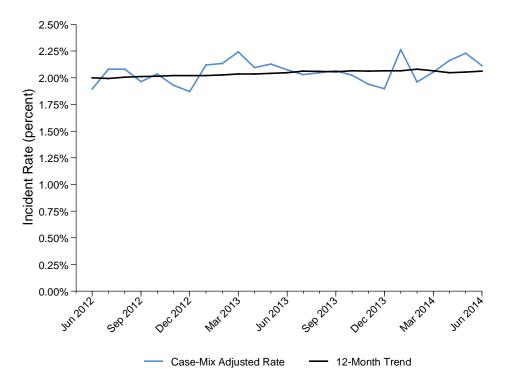
More About These Data

Total Number of Consumers refers to the total number of individuals served by DDS at any point during a fiscal year. For FY 2013/14, the total number counts individuals served between July 2013 and June 2014. 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 11 for more details.



The non-mortality incident rate was higher than the long-term trend in the last quarter of FY 2013/14.

Figure 1: Statewide Non-Mortality Rates, Out-of-Home Consumers Age 3 and Up Case-Mix Adjusted Monthly Rates Since June 2012



Key Findings:

• The monthly non-mortality special incident rate (blue line) was at or below the long-term trend for the first half of FY 2013/14.



- The non-mortality rate spiked in January 2014 due to an unexpectedly high rate of unplanned hospitalizations for respiratory illness, but this increase was not statistically significant for the January–March quarter overall.
- Increases in rates of suspected abuse and suspected neglect increased the non-mortality special incident rate for each of the last three months of FY 2013/14. Mission is conducting additional analyses of these increases.

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.

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

Victim of Crime, 4% Missing Person, 8% Suspected Neglect, Unplanned 5% Medical Hospitalization, 33% Suspected Abuse, 11% Injury, 17% Unplanned Psychiatric Hospitalization, 8% Medication Error,

Figure 2: Breakdown of Non-Mortality Special Incidents by Type, All DDS Consumers, July 2013 – June 2014

Key Findings:



- Unplanned medical hospitalization is the most commonly reported nonmortality incident type, accounting for about 33% of all reported incidents in FY 2013/14. Medication error and injury incidents are the second 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 17% of all special incidents.

More About These Data

Definitions of all special incident types can be found on the *Definitions* page (page 11). The percentages shown above are based on raw counts of special incidents and are not casemix adjusted.

There are no statistically significant changes in incident rates from the previous two fiscal years.

Table 2: Case-Mix Adjusted Breakdown of Special Incidents by Type, FY 2013/14

| | Avg. Monthly Incident Rate FY 2013/14 | Change from FY 2012/13 | Change from FY 2011/12 |
|---------------------------------------|---|------------------------------|------------------------------|
| Unplanned Medical Hospitalization | 0.70% | -3% | -1% |
| Unplanned Psychiatric Hospitalization | 0.16% | -5% | 0% |
| Injury | 0.39% | -1% | -2% |
| Medication Error | 0.36% | -2% | 6% |
| Suspected Abuse | 0.24% | 13% | 14% |
| Suspected Neglect | 0.10% | 24% | 29% |
| Missing Person | 0.15% | 0% | 12% |
| Victim of Crime | 0.09% | -3% | 5% |

Key Findings:



- The rate of suspected neglect increased more than 20% compared to each of the previous years. These differences, while not statistically significant, illustrate a rise in the long-term trend in suspected neglect incidents.
- None of the year-to-year differences in rates shown in Table 2 are statistically significant.

More About These Data

"Avg. Monthly Incident Rate for FY 2013/14" 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.

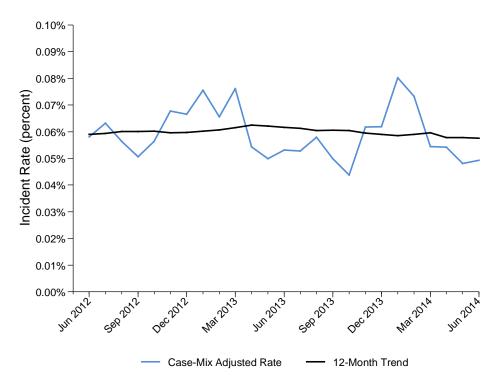


Figure 3: Mortality Incidents, Statewide Case-Mix Adjusted Monthly Rates Since June 2012

Key Findings:

- The statewide mortality rate was below the long-term trend in 8 out of 12 months in FY 2013/14. Consistent with previous years, the mortality rate was well above the trend in January and February 2014.
- The long-term trend in mortality incidents decreased slightly over FY 2013/14.
- This rate is calculated differently from those in Table 1; it includes only consumers age 3 and over and is case-mix adjusted.

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).

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 2013/14 | 0.7% | Children and adults living in the community | 6.5 |
| Connecticut DDS, FY 2011/12 | 0.4% | Children and adults living in the community | 13.1 |
| Louisiana OCCD, FY 2010/11 | 0.2% | Children and adults served on waivers | 9.5 |
| Massachusetts DMR, CY 2011 | 0.5% | Adults | 18.4 |
| Ohio MRDD, CY 2013 | 0.8% | Children and adults | 8.8 |
| South Dakota DDD, CY 2012 | 0.06% | Children and adults served on waivers | 16.9 |

Key Findings:



- At 6.5 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 2011 (October 2012).

http://new.dhh.louisiana.gov/assets/docs/earlysteps/publications/Annual Mortality Report 2010-2011.docx

2010 & 2011 Mortality Report (February 2012),

http://www.mass.gov/eohhs/docs/dmr/reports/mortalityreport2011.pdf

Ohio 2011 MUI/Registry Unit Annual Report,

http://dodd.ohio.gov/healthandsafety/Documents/2013%20MUI%20Registry%20Unit%20Annual%20Report.pdf

South Dakota Division of Developmental Disabilities Trend Analysis: 2012 Critical Incident Reporting (October 2013), http://dhs.sd.gov/dd/Division/documents/CIRAnnualReport2012.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.
- 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 2013/14, Mission introduced improved versions of the risk models that account for additional health-related risk factors.
- 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.

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 the findings from analyses of long-term increases in incident rates and follow-up site visits, Mission developed a medication error diagnostic tool to help residential care providers establish and maintain effective medication administration to reduce the risk of medication errors. Mission worked with Far Northern and Westside Regional centers on piloting the tool.
- DDS Mental Health Services Act (MHSA): Five regional centers received MHSA funds in the following areas: Substance Abuse, Infant/Early Childhood Mental Health, MHSA Forums, Psychotherapy to Reduce Psychiatric Hospitalizations, and Transition Age Youth. Cycle II of the grant ended on June 30, 2014. DDS issued a Request for Applications to the regional centers for Cycle III (July 1, 2014 - June 30, 2017). Applications are currently under review, and funding recommendations will be forthcoming. Many accomplishments have been achieved from January 1, 2014, through June 30, 2014, such as training sessions conducted regarding substance abuse (more than 75 participants), mental health of infants (8 sessions), and motivational interviewing of transitional aged youth (more than 90 participants). A peer mentoring program regarding addiction was being developed, a conference was held geared toward how to help individuals with dual diagnosis, assessment tools were developed, 35 individuals received psychotherapy in order to allay psychiatric hospitalizations, quality indicators were developed, and data were collected for a resource directory.

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 expand monitoring activities to include individuals who have transitioned from other developmental centers.
 - Mission will establish baseline data for the mover cohort. These data will be presented in a background report that will measure 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.
 - Through statistical analysis, Mission will identify subpopulations among the mover cohort who are at greater risk for specific types of

- SIRs. Mission will provide the information to regional centers for risk prevention and mitigation activities at the local level. Mission and DDS will utilize the data to develop targeted statewide risk management activities.
- 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.

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; cardiacrelated, 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.