2008-2009 YEAR IN REVIEW
Risk Management and Mitigation

ACUMEN, LLC
MAY 2010
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 January 2009, DDS served 232,015 individuals with developmental disabilities. In 2001, DDS initiated a comprehensive risk prevention, mitigation, and management system as one cornerstone of quality services for consumers living in the community.

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 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 they were under vendored care.

This year-end report summarizes California’s rates of reported special incidents during FY 2008-2009. It 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 January 2002 through June 2009, augmented with three additional data sources maintained by DDS:

1. The Client Master File (CMF)
2. The Client Development Evaluation Report (CDER)
3. The Early Start Report (ESR).

Acumen, LLC (Acumen) the department’s risk management contractor, 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, Acumen, and the regional centers are working to ensure effective risk management practices to prevent the occurrence of special incidents.
The consumer population increased in FY 08/09, but the number and rate of special incidents declined.

Table 1
Reported Special Incidents for All DDS Consumers

<table>
<thead>
<tr>
<th></th>
<th>FY 07/08</th>
<th>FY 08/09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Consumers</td>
<td>249,547</td>
<td>263,177</td>
</tr>
<tr>
<td>Total Number of Reported Incidents</td>
<td>17,664</td>
<td>17,452</td>
</tr>
<tr>
<td>All Incidents per 1000 Consumers</td>
<td>70.8</td>
<td>66.3</td>
</tr>
<tr>
<td>Deaths per 1000 Consumers</td>
<td>7.1</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Key Findings:

- The total number of consumers served by regional centers in FY 08/09 rose 5.6% compared to the previous year, while the number of reported special incidents fell by 1.2% compared to the previous year.
- At 66.3 incidents per 1000 consumers, the statewide rate of reported special incidents was lower in FY 08/09 than in the previous year.
- The number of deaths per 1000 consumers in FY 08/09 (6.5) was lower than that of the previous year (7.1), although this figure may rise slightly as late reported deaths are added to the data.
- California’s overall mortality rate appears to be lower than rates published by other states, although the populations served may differ. The reported 2008 mortality rate in Connecticut was 13.9 deaths per 1000, while Massachusetts' rate (for adults in 2007) was 17.6 deaths per 1000. See Page 7 for details.

More About These Data

Total Number of Consumers refers to the total number of individuals served by DDS at any point between July 2008 and June 2009. See Definitions on page 9 for more details.
The non-mortality incident rate rose in March 2009, but the increase was lower in magnitude and duration than in the previous year.

Figure 1: Statewide Non-Mortality Rates, All DDS Consumers
Case-Mix Adjusted Monthly Rates since June 2007

Key Findings:

- Trends from previous years reveal that monthly incident rates tend to rise in winter/spring months and fall in summer/autumn months.
- Unlike in previous years, March-May 2009 did not see a sustained increase in incident rates; after March, rates fell to below the long-term average.
- Except in March, incident rates during the most recent fiscal year were near or below the long-term average.

Follow-Up Activities:

- Acumen is conducting additional discovery activities to determine whether the March 2009 spike was associated with the H1N1 flu virus.

More About These Data

The black line above represents a 12-month moving average. It is calculated by taking an average of 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 hospitalization and injury incidents account for almost three quarters of reported non-mortality incidents.

Figure 2: Breakdown of Non-Mortality Special Incidents by Type, DDS Consumers, July 2008 - June 2009

- Unplanned Hospitalization, 38.51%
- Injury, 31.88%
- Suspected Abuse, 11.55%
- Suspected Neglect, 5.17%
- Missing Person, 8.11%
- Victim of Crime, 4.78%

Key Findings:
- Unplanned hospitalizations are the most commonly reported non-mortality incident type, accounting for about 39% of all reported incidents in FY 08/09. Injury incidents follow closely behind at around 32%.
- The least common types of reported incidents are suspected neglect, missing person, and victim of crime, which combined account for less than 20% of all special incidents.

More About These Data
Definitions of all special incident types can be found on the Definitions page (Page 9).

The percentages shown above are based on raw counts of special incidents and are not case-mix adjusted.
Except for victim of crime incidents, reported rates for all special incident types decreased compared to last year.

Table 2: Case-Mix Adjusted Breakdown of Special Incidents by Type, FY 08/09

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Avg. Monthly Incident Rate FY 08/09</th>
<th>Change from FY 07/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unplanned Hospitalization</td>
<td>0.19%</td>
<td>-1%</td>
</tr>
<tr>
<td>Injury</td>
<td>0.16%</td>
<td>-3%</td>
</tr>
<tr>
<td>Suspected Abuse</td>
<td>0.07%</td>
<td>-8%</td>
</tr>
<tr>
<td>Suspected Neglect</td>
<td>0.03%</td>
<td>-9%</td>
</tr>
<tr>
<td>Missing Person</td>
<td>0.04%</td>
<td>-3%</td>
</tr>
<tr>
<td>Victim of Crime</td>
<td>0.03%</td>
<td>+3%</td>
</tr>
</tbody>
</table>

Key Findings:

- Reported rates of unplanned hospitalization fell 1% compared to the previous year, although they continue to account for the greatest share of non-mortality special incidents.
- Reported rates of injury decreased by 3% compared to the previous year, while rates of suspected neglect and missing person fell by 8% and 9%, respectively, relative to the previous year.
- The only incident type to see an increase in rates was victim of crime, which rose by 3%. This increase was driven primarily by an isolated incident of theft at Central Valley Regional Center in November 2008. A thief broke into a provider’s main office and stole over 50 Personal and Incidental (P&I) checkbooks, leading to dozens of special incident reports.

Follow-Up Activities:

- Reporting Back – Although statewide rates generally decreased compared to last year, several regional centers saw increases within certain incident types. As of December 2009, each of these regional centers has reported back to DDS its discovery and remediation activities related to these spikes.
- Technical Assistance – Acumen is following up with those regional centers that experienced quarterly spikes in FY 08/09. Over the next 12 months, Acumen will monitor their rates closely and perform additional data analysis if the spikes remain.

More About These Data

“Monthly Incident Rate for FY 08/09” refers to the rate of consumers statewide who experience one or more incidents in an average month. Rates are case-mix adjusted (refer to Page 3 for description).
Like the non-mortality incident rate, the winter increase in mortality rates was lower in magnitude and duration than the previous year.

**Key Findings:**

- Controlling for consumer characteristics, mortality rates during FY 08-09 rose above the 12-month average in January before dipping to near or below the long-term average for the remainder of the fiscal year.
- Like the non-mortality incident rate, the familiar winter spike in mortality rates was less pronounced in FY 08-09. With the exception of January, rates were generally near or below the 12-month average.
- Over the past fiscal year, the trend line (black) has steadily decreased.

**More About These Data**

The trend line (black line) is the monthly mortality rate averaged over the latest 12 month period. The trend is calculated by taking the average of the *Case-mix Adjusted Rate* (blue line) for the previous twelve-month period. The lines in the graph above also use case-mix adjustment, as described on the bottom of page 3.
California's mortality rates appear to be no higher than rates published from other states we have observed.

Table 3: Comparison of Statewide Mortality Rates
2008 figures, unless otherwise noted

<table>
<thead>
<tr>
<th>State and Organization</th>
<th>Share of State Population Served</th>
<th>Population Included</th>
<th>Mortality Rate (deaths /1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>California DDS</td>
<td>0.7%</td>
<td>Children and adults living in the community</td>
<td>6.3</td>
</tr>
<tr>
<td>Connecticut DDS</td>
<td>0.4%</td>
<td>Children and adults</td>
<td>13.9</td>
</tr>
<tr>
<td>Massachusetts DMR</td>
<td>0.5%</td>
<td>Adults</td>
<td>17.6</td>
</tr>
<tr>
<td>Ohio MRDD</td>
<td>0.7%</td>
<td>Children and adults</td>
<td>9.3</td>
</tr>
</tbody>
</table>

Key Findings:
- At 6.3 deaths per 1000 consumers, California’s mortality rate appears to be lower than those of other states we observed, although populations included in these data differ considerably.
- California’s population may differ from those of other states given differences in the population included and severity of disabilities served.

More About These Data

California mortality data includes individuals with Status Code 2, or people diagnosed as having a developmental disability who are served in the community. This does not include children under the age of three or individuals who are served in a State Developmental Center.


Massachusetts mortality data was collected from the 2007 Mortality Report, and is also available online: http://www.mass.gov/Eeohhs2/docs/dmr/mortalityreport2007.pdf.

Ohio mortality data was collected from the report “Rates of Report by Selected Category per 1000,” found online at https://odmrdd.state.oh.us/health/MUIReport/2008/report08.htm.
With overall incident rates declining compared to last year, few remediation activities are necessary at the state level.

Compared to last year, rates of all incident types decreased except for victim of crime, which saw only a slight increase. As a result, the only remediation activity planned is further discovery analysis related to the March spike in non-mortality incidents (see Pg. 3). However, DDS has a number of monitoring and system improvement initiatives planned for the coming year:

**Update on Monitoring Activities:**
- Regional centers receive graphs each month that allow them to identify significant increases in special incident rates. They also receive reports each quarter summarizing trends in special incident rates.
- Regional centers are reporting back to DDS information about their follow-up activities to any spikes in incident rates. These reports will provide information in greater depth about any unusual increases in incident rates and help guide risk management activities.

**Update on System Improvement Activities:**
- Responding to trends in incident rates, Acumen publishes monthly articles on www.ddssafety.net, as well as a quarterly newsletter. These materials are geared toward consumers, their families, and their support providers.
- Acumen has developed several sets of risk management tools for regional centers, including mortality review guidelines and checklists for case managers. These tools are intended to equip regional center staff with risk management resources based on best practices and current literature.

**Planned Activities for the Coming Year:**
- DDS and Acumen will continue to collect information from regional centers on how they respond to increases in their special incident rates.
- Acumen is in the process of releasing the mortality review guidelines and case management checklists for regional center use. The materials will soon be posted on ProgramInfo, a web-based information sharing system for DDS, Acumen, and the regional centers.
- DDS and Acumen are working to tailor accessible materials on the www.ddssafety.net website to educate consumers about issues important to their health and safety, as well as offer risk prevention resources. DDS and Acumen are also redeveloping the structure and appearance of the SafetyNet website to improve the user experience for all audiences.
- Acumen is conducting data analysis for several regional centers whose special incident data indicate long-term increases over the past few years. Acumen is working with these regional centers to explain these increases and propose appropriate follow-up activities.
**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 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.

**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.

**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.

**Raw (rate)** – The unadjusted rate. (Eg. The total number of deaths 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 between July 2008 and June 2009. Note that this number is larger than the number of individuals served by DDS at any 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 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; or involuntary psychiatric admission.
**Vendored Care** – A consumer is considered “under vendored care” when they are 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 which 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.