Department of Human Services
Addictions and Mental Health Division

Trends in Services and Service Outcomes
Before and After Implementation of the
Children's System Change Initiative
April 2, 2008

Executive Summary:

In 2003, the Department of Human Services (DHS) received a legislative directive to substantially increase the availability and quality (breadth, depth, and intensity) of individualized, intensive, and culturally competent home- and community-based services so that institutional care is minimized. DHS was directed to take nine significant action steps to meet this goal. The following report reviews selected data elements used to evaluate progress towards this goal. The data reflect system information between 2004 and the second quarter of 2007. The implementation of this legislative directive is called the Children's System Change Initiative (CSCI).

Through a significant stakeholder process, six policy statements were developed that guided the CSCI implementation strategies. It was acknowledged through this process that in order for the children's mental health system to successfully meet the legislative directive, three aspects of the system needed to change: 1) the role of family members at the system level and case level, 2) the location of services, and 3) the type of services provided. System structures were formally put into place in the fall of 2005 that integrated the financing and administration of the children's mental health system into the local or regional Oregon Health Plan Mental Health Organizations (MHO). Key structural aspects of the initiative also included: the involvement of children and families in service delivery and system operation, a uniform level of need determination process, child and family teams, care coordination, coordinated service plans, community care coordination committees, children's system advisory committees, and a system-wide focus on outcomes and data dissemination.

The CSCI brought new attention at the state and local level to children's mental health issues. However, this work was largely done without the infusion of additional state funds. Communities, families and youth, providers, MHOs, and agency system partners invested their available resources to address the challenges and opportunities of the CSCI. Requirements of the CSCI have caused strain in some communities, and consequently there are sentiments throughout the state that without additional resources or further integration of resources, the improvements made to date could be at risk and the identified gaps in the system could widen even further.

Over the years spanning the implementation of the CSCI the desired outcomes have been succinctly expressed as “kids will be at home, in school, out of trouble and with friends”, and that “kids’ money [should] be spent on kids.” The following report attempts to elucidate these outcomes through data that examines the system impact of the CSCI.

This has been done in several different ways. 1) We are asking all families served to tell us what they think. Since 2004, the DHS, Addictions and Mental Health (AMH) Division has administered the Youth Services Survey for Families, a measure developed by the Mental Health Statistical Improvement Project (and used by many states). Expansion of the core questions on the survey has revealed a rich data source about families’ perceptions of mental health treatment services. 2) Additionally, data from paid Medicaid claims have been analyzed to determine the total number served and type of services that have been provided to children at various levels in the treatment service array. We have examined the array of services, the frequency and length of stay with which they are being used, and are continuing to work towards developing appropriate measurement of treatment outcomes. 3) We continue to analyze financial data to ensure that money earmarked for children’s mental health services is being spent on children’s services.

The first results that strongly suggest children are increasingly being served in outpatient settings through intensive community-based services (meaning they are at home, and remaining in a regular school setting). We do know statistically that *significantly* fewer children are being served in out-of-home (residential) settings. Keeping children and youth out of institutions is a desired outcome, but only if they receive equally effective and comprehensive care in the community. This requires that a comprehensive system of care be developed to address the complex needs of those children and youth who were formerly served in residential settings. Thus, it may take more time and data to determine whether the community-based services are serving the needs of this group of children adequately.

The data indicate that funds earmarked for children’s mental health services are in fact being spent on children’s mental health services. Some communities are stretched by the CSCI and are struggling without additional resources to expand their service array so that community-based services become routine care for most children.

We are still working to acquire information on the outcomes of fewer children “in trouble” and more “with friends”. We see promising results from the Youth Services Survey for Families, with reports indicating that after treatment, school attendance increases, fewer children are suspended or expelled from school, and fewer are arrested. A small number of children with complex needs continue to show high rates of readmission in residential and acute care settings, repeated contact with juvenile justice or multiple home placements. We need to understand the needs of these children better to know what further changes are necessary to more effectively serve them.

We have more work to do to answer the following questions: Are fewer children “in trouble” (referred to juvenile justice)? How can we measure positive social outcomes (“with friends”)? Why can’t some children return home and remain in their community? What intervention(s) produce the best outcomes? We are grappling with these issues at both the state and local levels.

AMH is actively working with the MHOs and others to answer these questions through the development of a case level and outcome data collection process. This requirement will be added to the 2009 MHO Agreement.

The CSCI has elevated children’s mental health issues and is beginning to demonstrate some positive results for children and families. Mental health has been brought to the forefront in community discussions. Families, youth, professionals from education, child welfare, juvenile justice, mental health, and others are now planning and discussing together how to meet the mental health needs of children. More children are being served, new services are being developed across the state, families and youth play a key role, system partnerships have been created, and additional gaps and needs have been identified. As unexpected adverse effects are expected to arise with any major change, AMH also recognizes that there is a need to identify possibilities of such effects as it collects and analyzes data.

Introduction

The following data were collected between 2005 and the second quarter of 2007. The CSCI was implemented on October 1st, 2005. One caveat in interpreting the following data is that there is only a short time period of baseline data with which to compare subsequent changes, making subsequent trends related to the CSCI less definitive.

Data on expenditures, total number served, outpatient, day treatment and acute care are from the Medicaid Management Information System (MMIS). Residential Treatment Services data are from the Client Process Monitoring System (CPMS).

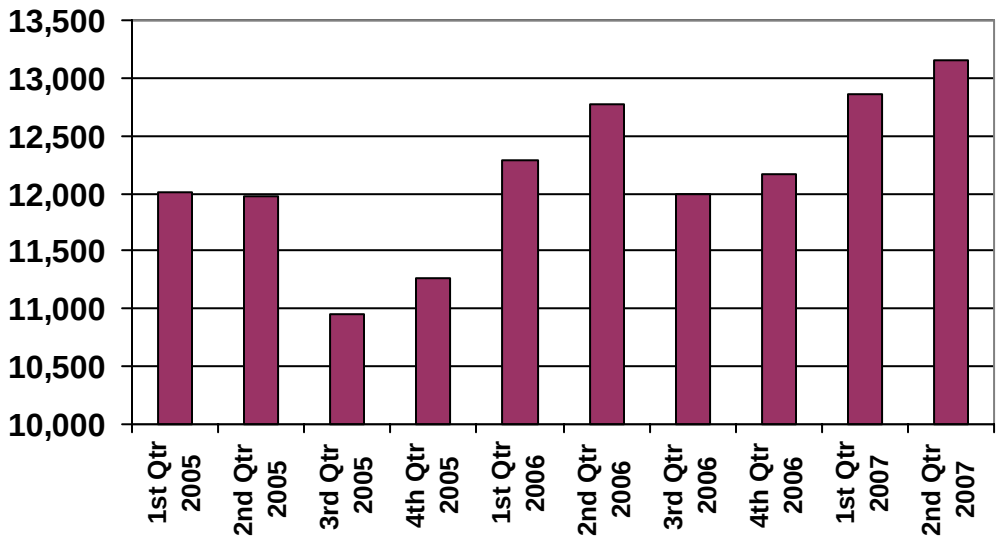
The figures based on parent/guardian report are derived from the Youth Services Survey for Families. 2,751 parents and/or guardians responded in 2007. This represented about 22% of families whose children were receiving services. This was felt to be a representative sample and is a similar response rate to earlier years when the survey was administered. One other caveat is that this data cannot rule out external factors that might be contributing to changes during this time period, such as a better economy.

Increased Numbers of Children Are Being Served

There is a trend towards increasing numbers of children being served since the implementation of the Children's System Change Initiative in Oregon (10/1/2005). The number of children and youth aged 0 – 17 who were served increased between 1/2005 and 6/2007.

The average number served each quarter, in 2005, was 11,550; the average number served each quarter, in 2006, was 12,300, and the average number served each quarter, in the first half of 2007, was 13,009.

Figure 1. Number of Children / Youth Aged 0 – 17 Receiving OHP Services: 1/2005 – 6/2007



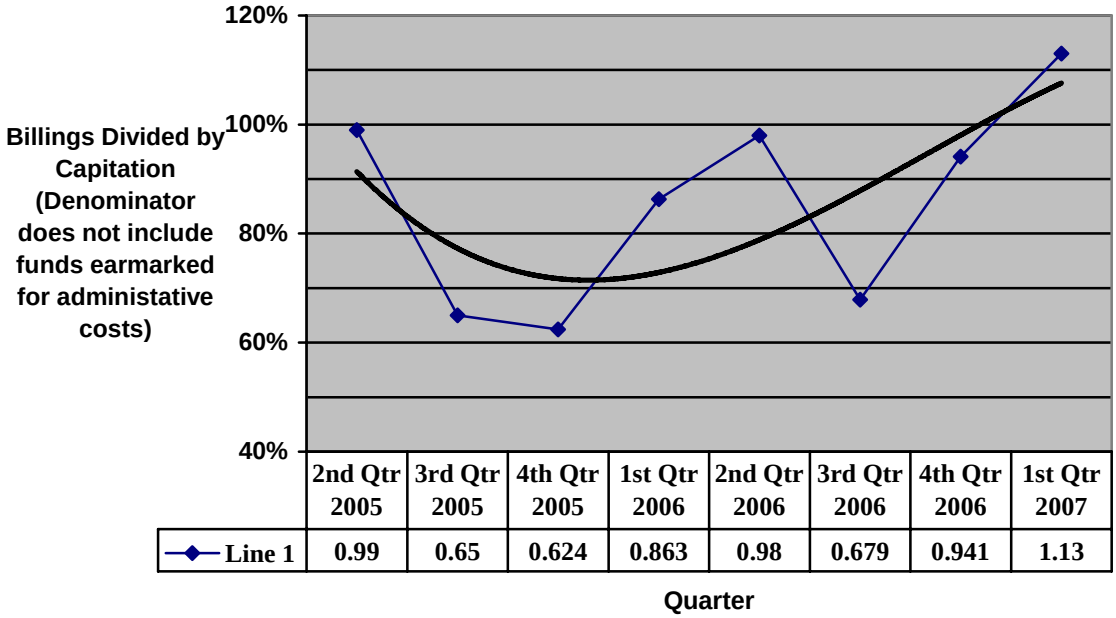
Data Source: MMIS

Money Earmarked for Children's Services Is Being Spent on Children

A key concern historically voiced by children's mental health system advocates was that money identified to be spent on children was (at that time) not consistently being spent on children's mental health services. With implementation of the CSCI, specific language addressing this concern was placed in policy statements and the MHO Agreement. Regular reports have been produced demonstrating the amount of revenue and expenditures for children.

This report shows that money earmarked for children's services is in fact being spent on children's services, on average, in excess of the money designated. Except the 3rd quarter of 2006, the ratio of billings for children's services to capitation for children's services has increased markedly since the end of 2005, *reflecting increasing expenditure of funds earmarked for children on children's services.* In 2005, quarterly billings accounted, on average, for 75% of capitation; in 2006, quarterly billings accounted, on average, for 87% of capitation. In the first quarter of 2007 (the only quarter in 2007 for which data are currently available), billings accounted for 113% of capitation. In the third quarter of 2006, quarterly billings accounted for 68% of capitation. It is unclear what accounts for this decrease.

Figure 3. Billings for Children's MH Services as a Percentage of Capitation for Children's MH Services, By Quarter that Billings were Submitted: 4/2005 - 3/2007



Data Source: MMIS

Initiation of Mental Health Services has a Positive Effect on School Attendance

Per parent/guardian report, initiation of mental health treatment has had a *positive impact on school attendance*. Among 1727 parents/guardians of children who were in school and in treatment in 2005/06, 22 percent said the child's school attendance had increased, while 9 percent said the child's attendance had declined. 36% of responders said the question did not apply.

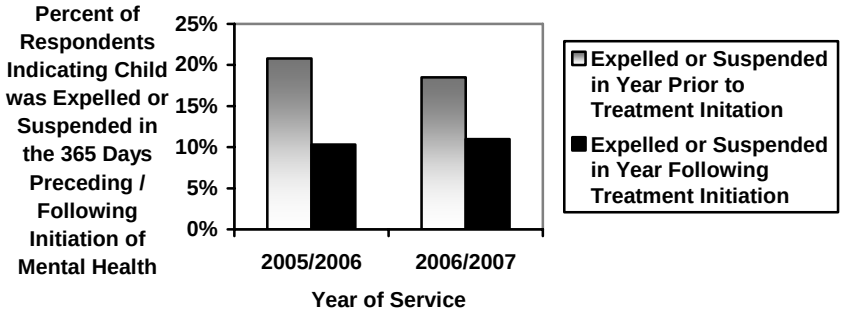
Among 2,343 parents/guardians of children who were in school and in treatment in 2006/07, 22 percent said the child's school attendance had increased, while 6 percent said the child's attendance had declined. More than one-third of responders said the question did not apply.

Initiation of Mental Health Services Has a Positive Effect on Chance of Suspension or Expulsion from School

Per parent/guardian report, initiation of mental health treatment is associated with a *reduction in the chance of suspension or expulsion from school*. Per report, 21% of the children aged 6 and up and treated in 2005/2006 had been expelled or suspended in the 365 days preceding initiation of treatment. In comparison, only an estimated 10% of the same population of children were expelled or suspended in the 365 days following onset of treatment.

Similarly, per report, 18.5% of the children aged 6 and up and treated in 2006/2007 had been expelled or suspended in the 365 days preceding initiation of treatment. Of 2,671 children/youth, 494 had been expelled or suspended in the 365 days preceding initiation of treatment. In comparison, only an estimated 11% of the same population of children was expelled or suspended in the 365 days following onset of treatment. Of 2,672 children/youth 294 had been expelled/suspended in the 365 days preceding initiation of treatment.

Figure 46. Percent of Children Aged 6 and Up who were Expelled or Suspended from School, Year Before Treatment vs. Year Following Treatment: By Year of Service



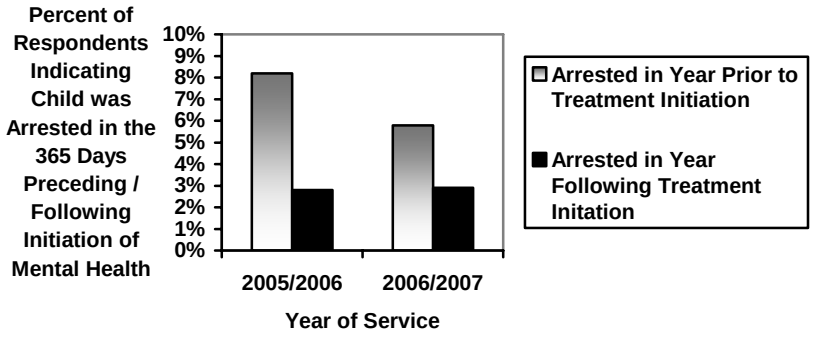
Data source: Youth Services Survey for Families (YSS-F)

Initiation of Mental Health Services has a Positive Effect on Reduction of Arrests

Per parent/guardian report, initiation of mental health treatment is associated with a *reduction in the chance of arrest*. Per report, 8.2% of the children treated in 2005/2006 had been arrested in the 365 days preceding initiation of treatment. In comparison, only an estimated 2.8% of the same population of children was arrested in the 365 days following onset of treatment.

Similarly, per report, 5.8% of the children treated in 2006/2007 had been arrested in the 365 days preceding initiation of treatment. Of 2,664 youth, 155 had been arrested in the 365 days preceding initiation of treatment. In comparison, only an estimated 2.9% of the same population of children was arrested in the 365 days following onset of treatment. Of 2,667 children/youth, 77 were arrested in the 365 days following onset of treatment.

Figure 47. Percent of Children Arrested, Year Before Treatment vs. Year Following Treatment: By Year of Service



Data source: Youth Services Survey for Families (YSS-F)

Expansion of Intensive Community-Based Treatment Services

Another key goal of the CSCI is to increase intensive community based services. The Intensive Community-Based Services (ICTS) Administrative Rules were adopted in 2006. These rules provided a new regulatory structure and provided a basis to open new service codes. A more direct role for families in the design of services at the community and case level occurred. A standardized level of need determination process was established, requiring local mental health entities' involvement at the case level, and ICTS providers were certified to provide an increased array of intensive community-based services.

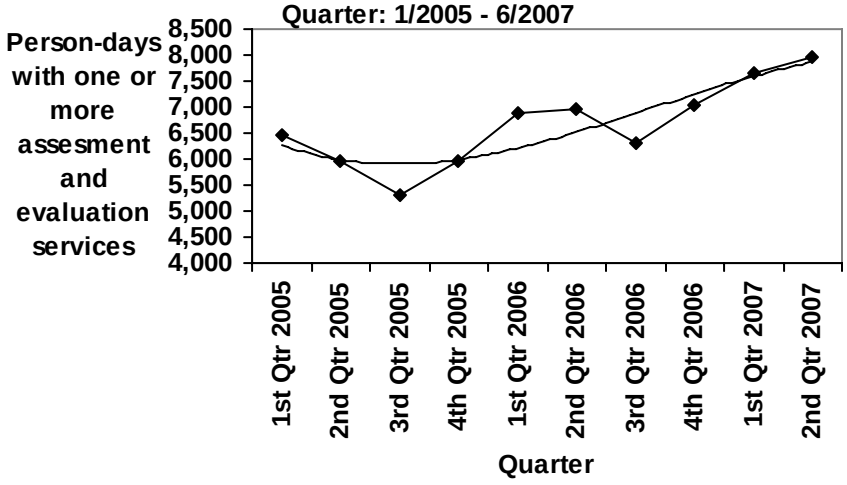
Outpatient Services:

The number of person-days of outpatient mental health service, across all OHP-eligible children aged 0 – 17, has *increased* markedly since the 3rd quarter of 2005. *The increase is seen within all service types*, including assessment and evaluation services (Figure 4), case management services (Figure 5), group and family therapy services, individual therapy services, respite services (Figure 8), skills training services (Figure 9), and "wraparound" services (figure 10).

Wraparound services are defined as informal supports and resources provided to a client and family members in order to promote, maintain or restore successful community living. Services are delivered as the result of a collaborative planning process and are provided in a manner or place different from the traditional manner or place of service delivery. They also include activities to provide information and education to clients, families, and significant others regarding mental disorders and their treatment. Wraparound services may also be provided by peers (mental health consumers or other family members who are consumers) to include a wide range of supports, services, and advocacy that contribute to a client's ability to engage in ongoing treatment. These services may include self-help support groups, drop-in centers, outreach services, education and advocacy.

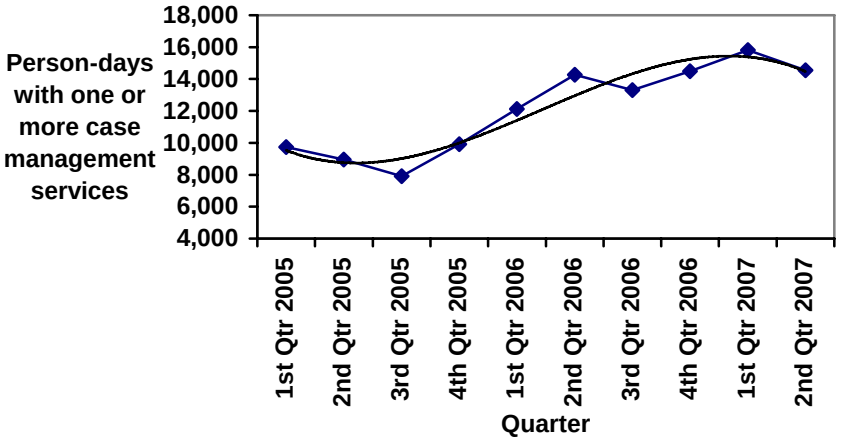
These data show that more children are being assessed and brought into treatment, and that more treatment options are available in more places around the state.

Figure 4. Person-Days with One or More MHO-Provided Outpatient Assessment and Evaluation Services, By Quarter: 1/2005 - 6/2007



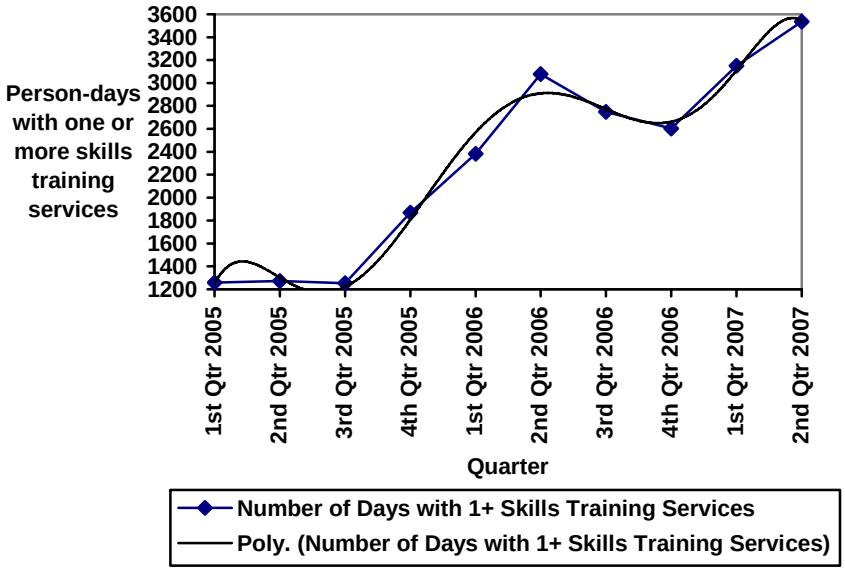
Data source: MMIS

Figure 5. Person-Days with One or More MHO-Provided Case Management Services, By Quarter: 1/2005 - 6/2007



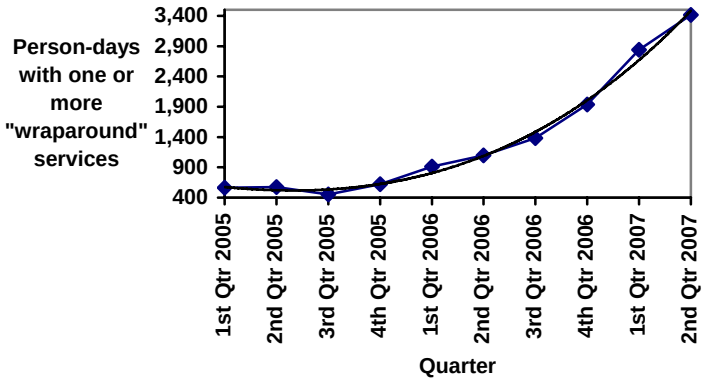
Data source: MMIS

Figure 9. Person-Days with One or More MHO-Provided Skills Training Services, By Quarter: 1/2005 - 6/2007



Note: "Poly." refers to polynomial distribution describing a curve that best fits the data
Data source: MMIS

Figure 10. Person-Days with One or More MHO-Provided "Wraparound" Services, By Quarter: 1/2005 - 6/2007



Note: "Poly." refers to polynomial distribution describing a curve that best fits the data
Data source: MMIS

Families are Satisfied with Coordination of Care with Child Welfare and Education

Coordination of mental health care with that of other child-serving systems is measured by the Youth Services Survey for Families. In 2007, 2751 parents and/or guardians (about 22 %) responded to this survey. Of these 2751 family members, 2578 had children who received outpatient treatment services, 103 had children who received day treatment services and 70 had children who received residential treatment services. As the following data are discussed, it is important to realize that the largest majority of survey respondents were parents/guardians of children and youth who received outpatient services. Additionally, coordination of care is more likely to occur at higher levels of care (e.g. residential treatment).

Coordination of care is a cornerstone of the CSCI and has its core in the child and family team. Requirements for care coordination and an individualized service coordination plan for each child served in the intensive community-based treatment system reinforce this value. Child and family teams may be the first context in which family members and youth will explicitly begin to drive their care. Coordination of care between child serving agencies makes sense clinically and is supported empirically by national data. Rather than each system creating a separate (and at times, divergent) plan, the opportunity exists for shared decision-making between parents, youth, and the systems that serve them. Conflicting priorities can be resolved. In the end, the process certainly takes less time and is more conducive to better treatment outcomes and maximizes resources, which is crucial in a system already stretched for funding.

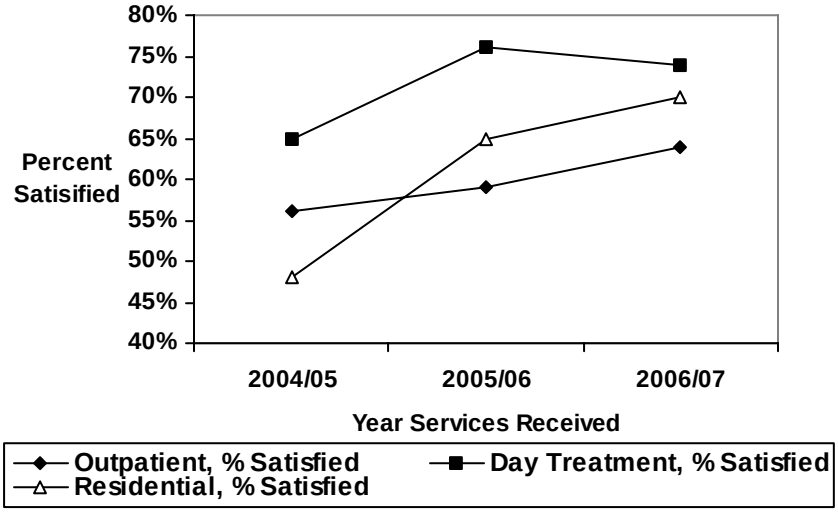
Family satisfaction with coordination of mental health care has increased, both within the mental health system and between mental health and a majority of child serving systems. Satisfaction with coordination of mental health services and child welfare services, with coordination of mental health services and education services, and with coordination of mental health services and DD services has increased over the past three years.

Data from the satisfaction of families with coordination of mental health care with the juvenile justice system and addictions treatment systems needs to improve. Efforts to improve and expand adolescent co-occurring disorder (mental health and substance abuse) treatment capabilities in Oregon are underway. It is possible that an effort to work more closely with the juvenile justice system and to resolve systemic barriers will improve coordination.

Coordination among mental health services:

In 2006/07, 76% of respondents said coordination among MH services was applicable for their child. Overall, satisfaction with coordination among mental health services has *increased* each year over the past three years (from 55% (in 2004/05) to 61% (in 2005/06) to 64% (in 2006/07)). The data suggest that the most change has occurred in residential treatment.

Figure 35. Satisfaction with Coordination Among Mental Health Services

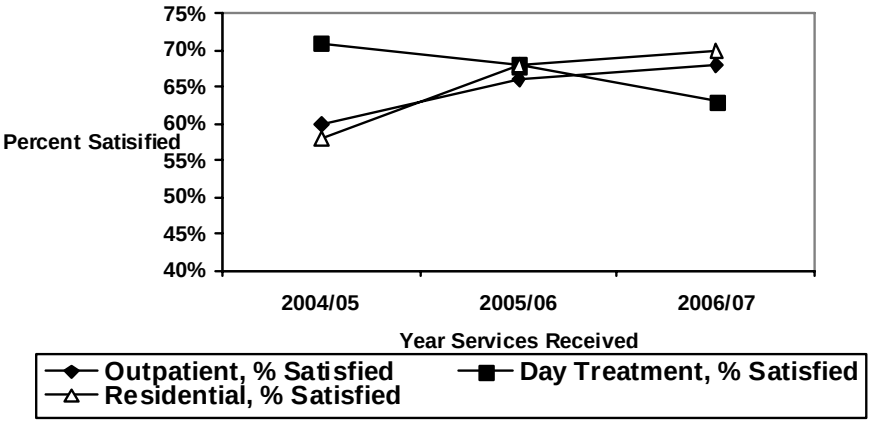


Data source: Youth Services Survey for Families (YSS-F)

Coordination of mental health services with Child Welfare services:

In 2006/07, 58% of respondents said coordination with CW was applicable for their child. Overall, satisfaction with coordination of mental health and child welfare services *increased* each year over the past three years (from 61% (in 2004/05) to 67% (in 2005/06) to 68% (in 2006/07)). However, this is not a large change, and speaks to the need for more analysis. It is not clear how to interpret the decrease in the day treatment group, again because the numbers are small, but this important issue warrants further attention for all three groups.

Figure 36. Satisfaction with Coordination of Mental Health Services and Child Welfare Services

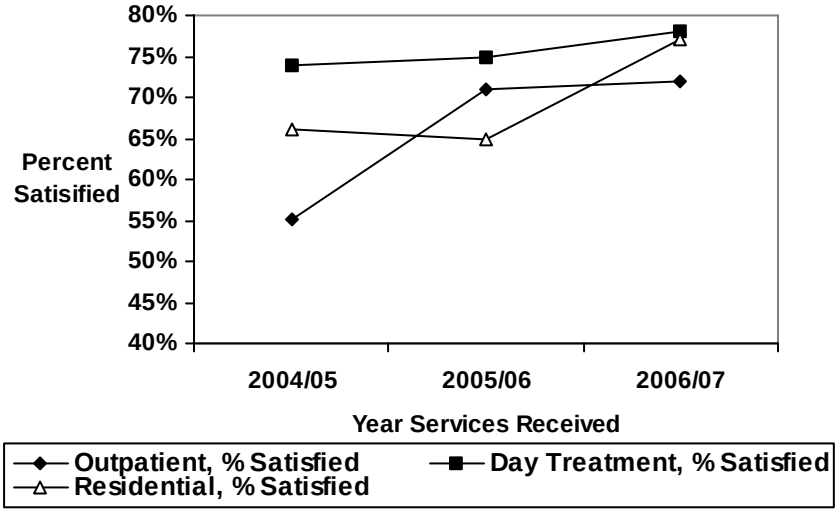


Data source: Youth Services Survey for Families (YSS-F)

Coordination of mental health services with education services:

In 2006/07, 81% of respondents said coordination with Education was applicable for their child. Overall, satisfaction with coordination of mental health services and education services has *increased* each year over the past three years (from 56% (in 2004/05) to 71% (in 2005/06) to 73% (in 2006/07)). These overall findings are encouraging. The differences narrowed and day treatment was already doing a good job. It is interesting that the outpatient group started out the lowest and has had the most change, suggesting that child and family teams have helped to improve coordination with education in the outpatient environment.

Figure 37. Satisfaction with Coordination of Mental Health Services and Educational Services

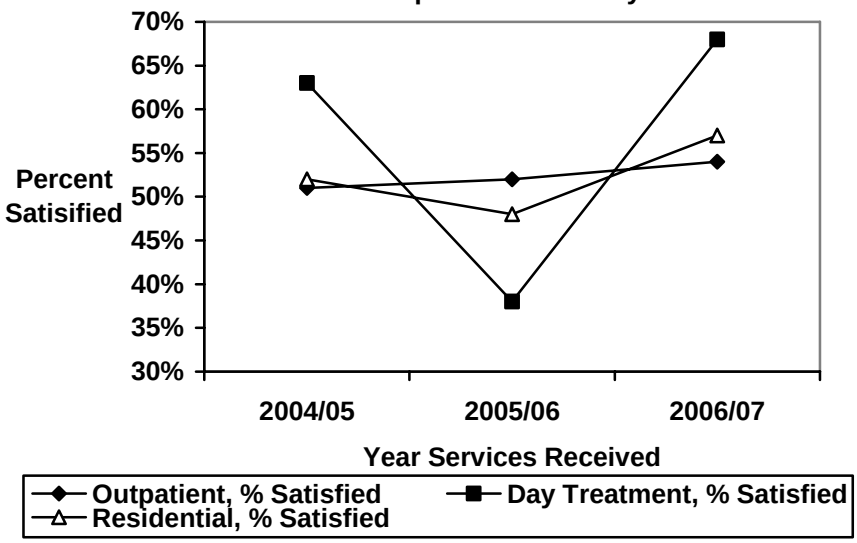


Data source: Youth Services Survey for Families (YSS-F)

Coordination of mental health services with Developmental Disabilities (DD) services:

In 2006/07, 33% of respondents said coordination with DD was applicable for their child. Overall, satisfaction with coordination of mental health services and DD services is at a 3-year high (% satisfied was 52% in 2004/05, 51% in 2005/06, and 55% in 2006/07). This is difficult to interpret and needs additional data points.

Figure 38. Satisfaction with Coordination of Mental Health Services and Developmental Disability Services

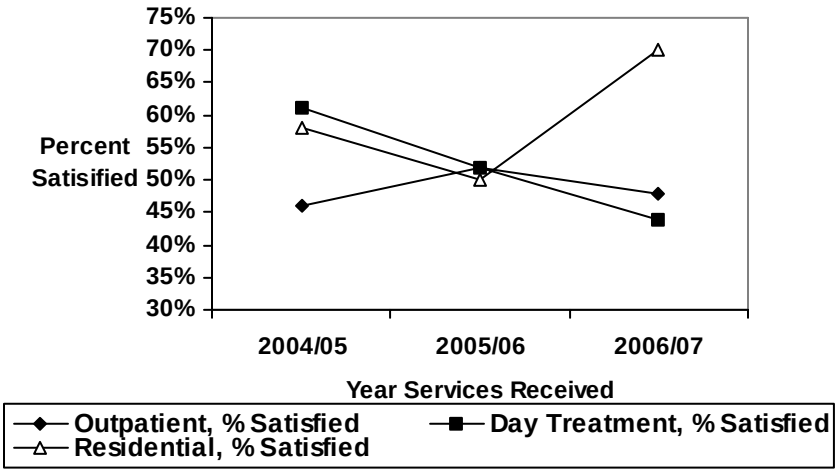


Data source: Youth Services Survey for Families (YSS-F)

Coordination of mental health services with the Juvenile Justice system (including OYA):

In the pooled data, satisfaction with coordination of mental health services and juvenile justice services dropped in 2006, though satisfaction remained higher than it was in 2004 (% satisfied was 48% in 2004, 52% in 2005, and 49% in 2006). The parents / guardians of children in *residential treatment expressed a significant increase* in satisfaction with both the coordination of mental health and juvenile justice services and the coordination of mental health and OYA services. Satisfaction with coordination of mental health services with juvenile justice services and the coordination of mental health and OYA services worsened for the day treatment group. For the outpatient group, parent/guardian satisfaction with coordination of mental health services and juvenile justice services changed little.

Figure 39. Satisfaction with Coordination of Mental Health Services and Juvenile Justice Services



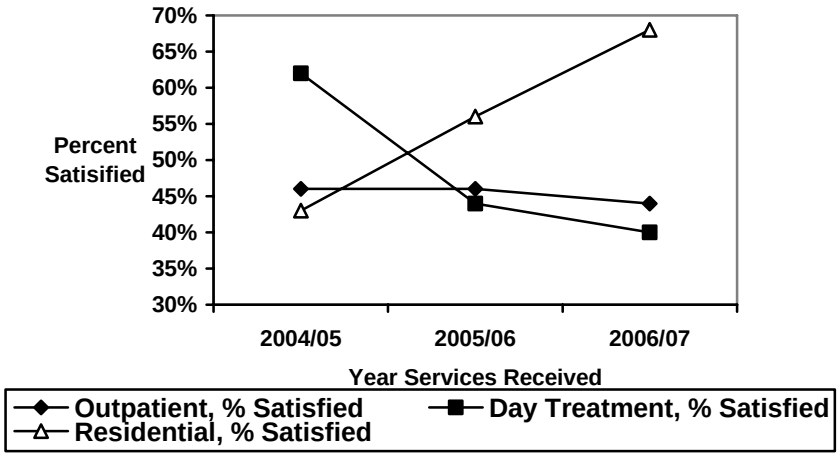
Data source: Youth Services Survey for Families (YSS-F)

Coordination of mental health services with OYA services:

In 2006/07, 23% of respondents said coordination of mental health services with OYA services was applicable for their child. Overall, satisfaction with coordination of mental health services and OYA services *dropped slightly* in 2006/07 (to 45%) from the 2004/05 levels (46% both years).

These data show that there is a definite drop in satisfaction with coordination of mental health services with OYA services by parents / guardians of children receiving day treatment services. It is not clear what accounts for this trend. While satisfaction with coordination of mental health services with OYA services *increased* among parents / guardians of children receiving residential treatment, there was just a slight drop in satisfaction with coordination of mental health services with OYA services by parents / guardians of children receiving outpatient treatment services. It is not clear what accounts for these trends.

Figure 40. Satisfaction with Coordination of Mental Health Services and OYA Services



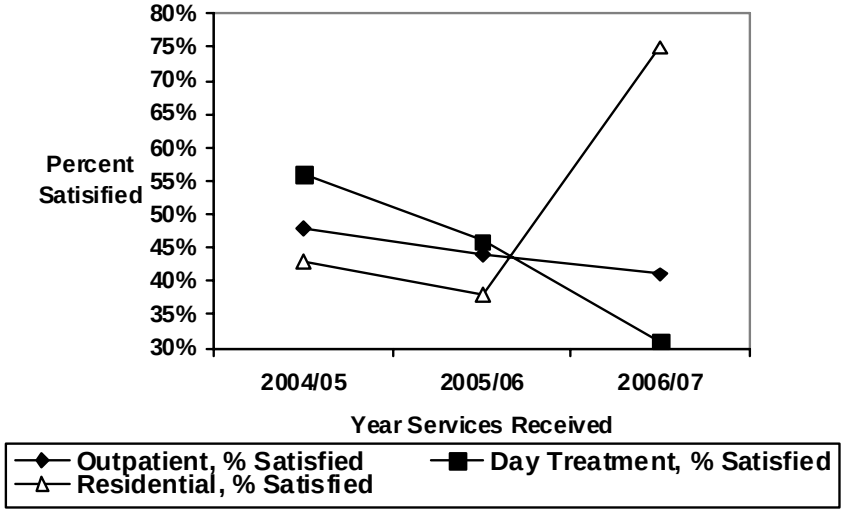
Data source: Youth Services Survey for Families (YSS-F)

Coordination of mental health services with Addiction Services:

Overall, satisfaction with coordination of mental health services and addiction treatment services *decreased* between 2004/05 and 2006/07; however, the parents / guardians of children in *residential treatment expressed a significant increase* in satisfaction with the coordination of mental health and chemical dependency services. In day treatment and outpatient treatment settings, satisfaction with the coordination of mental health and chemical dependency services declined, particularly dramatically in day treatment settings where it decreased by nearly half. It is not clear what is contributing to this downward trend and it warrants more investigation.

Overall, satisfaction with coordination of mental health services and addiction services has decreased each year over the past three years (from 49% (in 2004/05) to 44% (in 2005/06) to 42% (in 2006/07)).

Figure 41. Satisfaction with Coordination of Mental Health Services and Addiction Services



Data source: Youth Services Survey for Families (YSS-F)

Increased Satisfaction with Family Participation in Treatment Planning In All Service Settings

There is evidence that the role of families is changing in treatment settings. This has been one of the key goals of the CSCI. Satisfaction with family participation in treatment planning *increased* between 2004/05 and 2006/07. The proportion of parents / guardians of children in residential treatment who were satisfied increased by 8%, the proportion of parents / guardians of children in day treatment who were satisfied increased by 6%, and the proportion of parents / guardians of children in outpatient treatment who were satisfied increased by 3%. Because these data points represent small percentages of small groups, it would be important to continue to analyze this trend line and acquire more data.

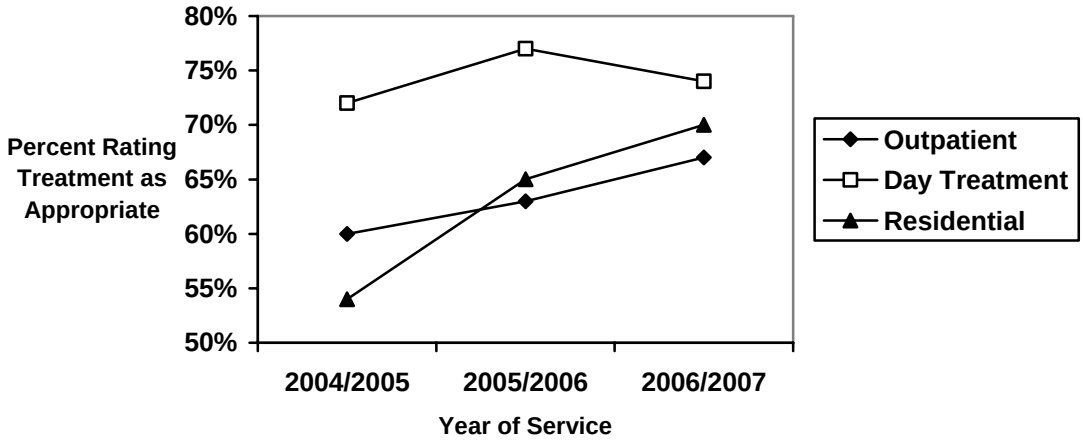
Increased Satisfaction with Treatment Appropriateness

As family members/youth have become more involved with their own treatment, their perception of the appropriateness of that treatment has improved. This reflects an increasing amount of family-driven and youth guided services and supports. Family members' satisfaction with treatment appropriateness *increased* between 2004/05 and 2006/07. The proportion of parents / guardians of children in residential treatment who were satisfied increased by 16%, the proportion of parents / guardians of children in day treatment who were satisfied increased by 2%, and the proportion of parents / guardians of children in outpatient treatment who were satisfied increased by 7%.

Ratings have *consistently increased* among the parents/guardians of children selected on the basis of receiving residential treatment and among parents/guardians of children selected on the basis of receiving outpatient treatment. The most substantial increase in satisfaction with treatment appropriateness is seen within the parents/guardians of children selected on the basis of *receiving residential treatment*; while only 54% of these parents/guardians were satisfied in 2004/2005, 70% were satisfied in 2006/2007. Providers of residential treatment have made an enormous effort to reach out and be inclusive of family members in all aspects of care, and it is well demonstrated here.

Ratings increased and then dropped among parents/guardians of children selected on the basis of receiving day treatment; nonetheless, parents/guardians of children selected on the basis of receiving *day treatment continue to express higher satisfaction with treatment appropriateness than the other groups.*

Figure 43. Ratings of Treatment Appropriateness, Per the Youth Services Survey for Families: By Year of Service



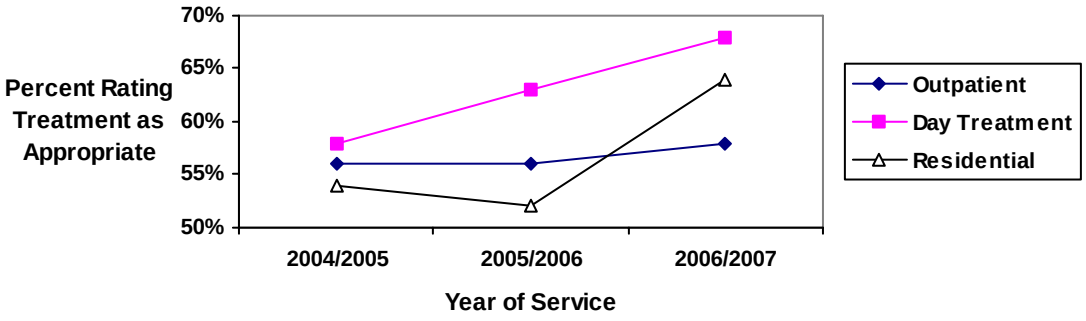
Data source: Youth Services Survey for Families (YSS-F)

Satisfaction in Perceived Outcome of Treatment Increases

Perceived Outcomes:

Ratings of satisfaction with Treatment Outcome increased between 2004/2005 and 2006/2007. Satisfaction with treatment outcome *increased* 10% between 2004/2005 and 2006/2007 among both parents/guardians of children selected on the basis of receiving residential treatment and parents/guardians of children selected on the basis of receiving day treatment. Ratings of satisfaction with Treatment Outcome among parents / guardians of children selected on the basis of receiving outpatient treatment changed very little, and further study should be done to reveal an explanation for this trend.

Figure 44. Ratings of Treatment Outcomes, Per the Youth Services Survey for Families: By Year of Service



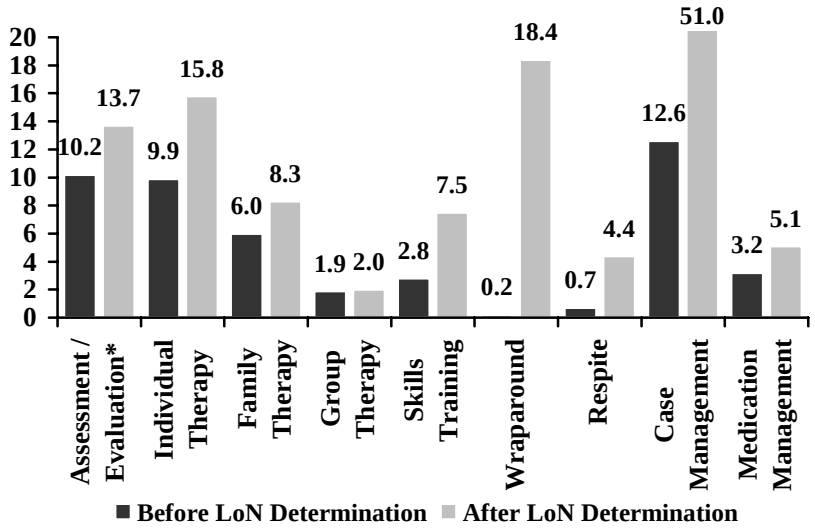
Data source: Youth Services Survey for Families (YSS-F)

Statewide Level of Need Determination Process Leads to More Services

Delivery of <u>Outpatient Services</u> to Children Assessed with the Child and Adolescent Service Intensity Instrument (CASII):

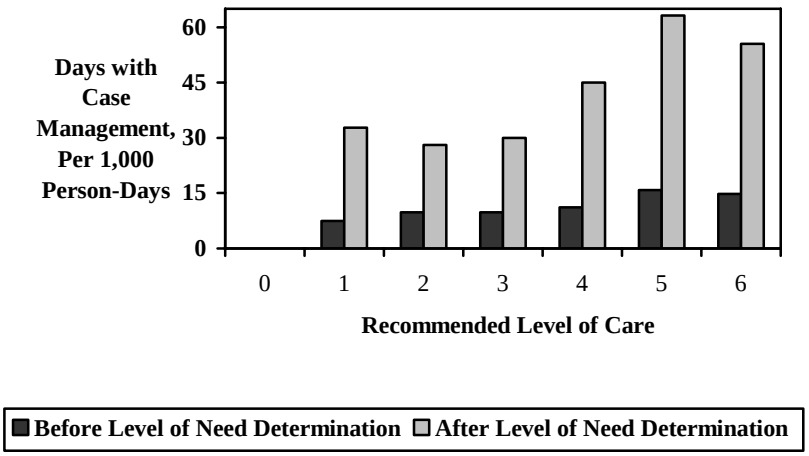
Regardless of the child's Level of Need, as reflected in the composite score on the CASII, children typically received *more treatment services* after the Level of Need determination than they did before the Level of Need determination (Figures 27 and 30), across all CASII-recommended levels of care. The array of services provided matches the service array identified through the CASII.

Figure 27. Days with Service in Service Category, Per 1,000 Person-Days of Eligibility for Service: Before Vs. After Level of Need Determination



Data Source: Level of Need Determination Data

Figure 30. Rate of Case Management Services (Days with Service per 1,000 Person Days) Before and After Level of Need Determination: By Recommended Level of Care



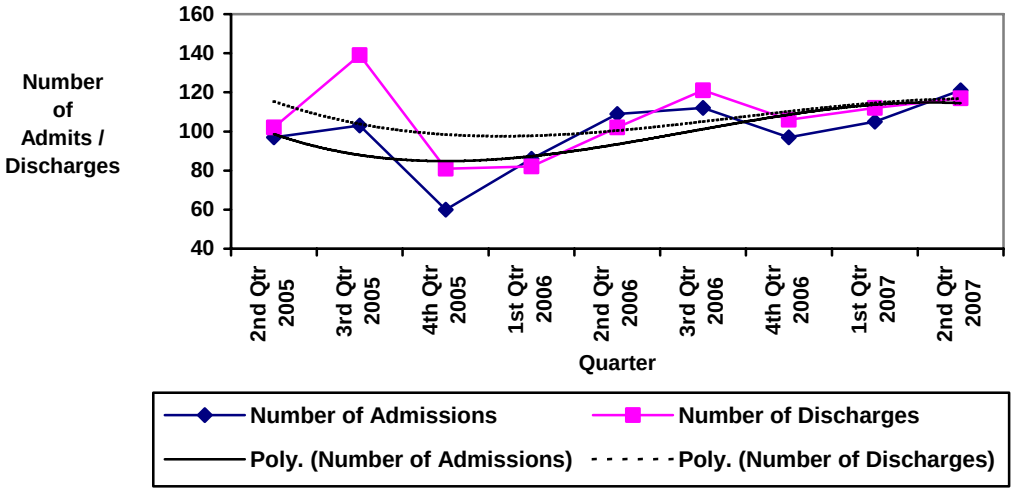
Data Source: Level of Need Determination Data

Intensive Treatment Services Utilization

Psychiatric day treatment services remain a key component in local systems

Discharges and admissions to psychiatric day treatment *have changed little since mid-2005*, reflecting a relatively stable number of children in day treatment (Figure 11). These services provide the opportunity to blend intensive mental health treatment services and specialized education services. These treatment environments are conducive to maintaining children with high mental health treatment needs in their home communities.

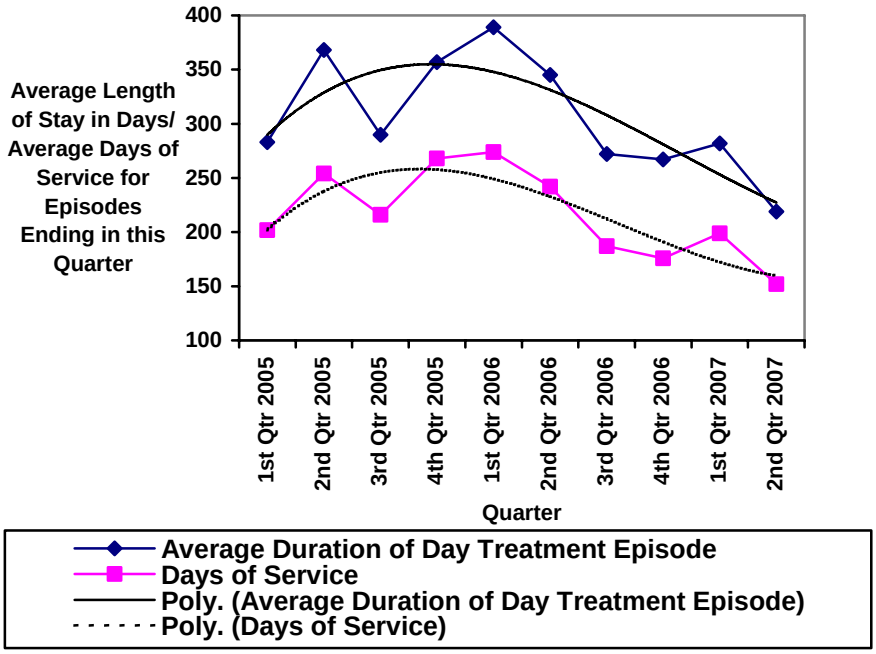
Figure 11. Number of Admissions to and Number of Discharges from Day Treatment, By Quarter: 1/2005 - 9/2007



Note: "Poly." refers to polynomial distribution describing a curve that best fits the data
Data source: MMIS

The average duration of day treatment episodes increased until the beginning of 2006, and has been gradually *decreasing* since that time (Figure 12).

Figure 12. Average Duration of Day Treatment Episodes and Average Days of Service within Day Treatment Episodes, By Quarter of "Discharge" from Day Treatment: 1/2005 - 9/2007



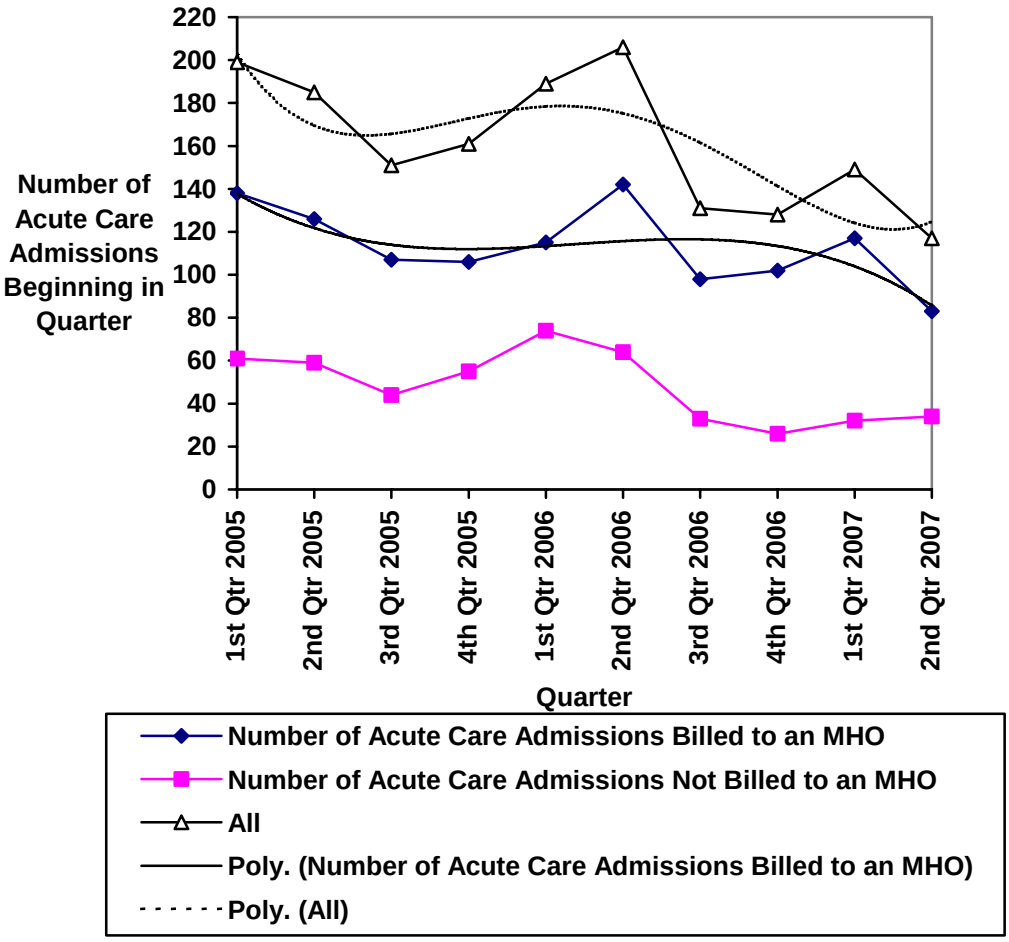
Note: "Poly." refers to polynomial distribution describing a curve that best fits the data
Data source: MMIS

Intensive Facility-Based Care Has Decreased

A significant focus of the CSCI has been a reduction in institutional, out-of-home treatment along with an increase in intensive community-based treatment options. Community planning efforts, alignment of incentives, and local demand for services have all contributed to a reduction in psychiatric residential treatment bed days.

With the advent of the CSCI it was appreciated that those youth who were not going to residential treatment might instead go to acute care hospitals. However, *acute care admissions have not increased* during this time, and admissions to the highest levels of care, Secure Children's Inpatient Program (SCIP) and Secure Adolescent Inpatient Program (SAIP), have also not significantly increased to account for this shift.

Figure 26. Acute Care Admissions, By Quarter: 1/2005 - 6/2007



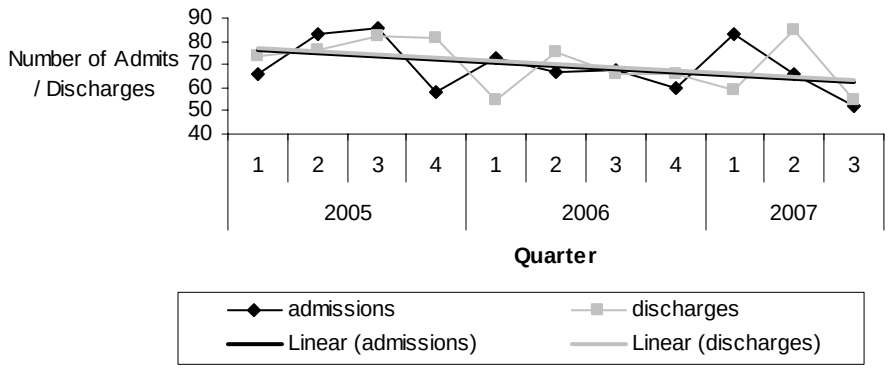
Note: "Poly." refers to polynomial distribution describing a curve that best fits the data
Data source: MMIS

That there are fewer children in out-of-home care appears to be a positive indicator of the movement of the children's mental health system into a community-based system that is no longer primarily dependent on psychiatric residential services for intensive treatment. Providers of psychiatric residential treatment services have diversified and greatly expanded their treatment options to meet this need, many of them now providing intensive community-based treatment.

A&E Psychiatric Residential Services:

Assessment and Evaluation (A & E) provides a safe environment for children to stabilize and receive high quality assessments and evaluation that contributes to the planning of intensive community-based services. Figures 13 through 19 below reflect data collected through the Client Process Monitoring System (CPMS) within AMH. Discharges and admissions *decreased somewhat*, on average, between 1/2005 and 9/2007 (Figure 13). This could be due to the increasing number of children receiving a coordinated service array determination process, increased number of children receiving intensive community-based services, increased service coordination system wide, or increasing numbers of children being served on an outpatient basis.

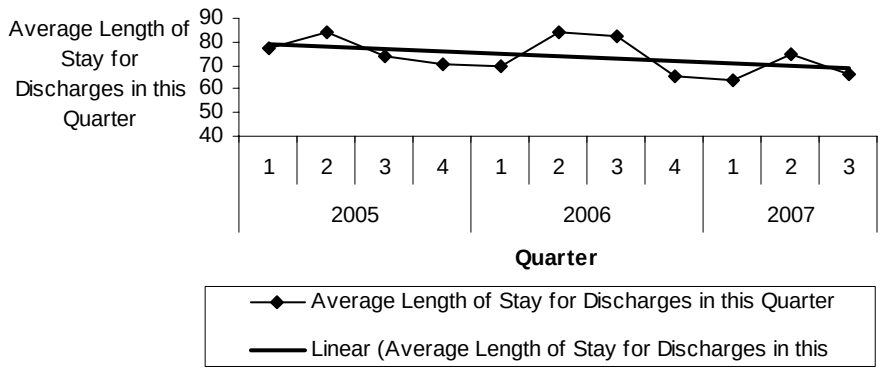
Figure 13. Number of Admissions to and Number of Discharges from A&E Residential, By Quarter: 1/2005 - 9/2007



Note: "Linear" refers to linear distribution describing a line that best fits the data
Data source: CPMS

Lengths of stay decreased modestly since 1/2005. It appears that the model of treatment requiring approximately 75 days to assess and stabilize the child's life and to develop a community-based coordinated service plan for that child is currently working across settings.

Figure 14. Average Length of Stay in A&E Residential, By Quarter: 1/2005 - 9/2007

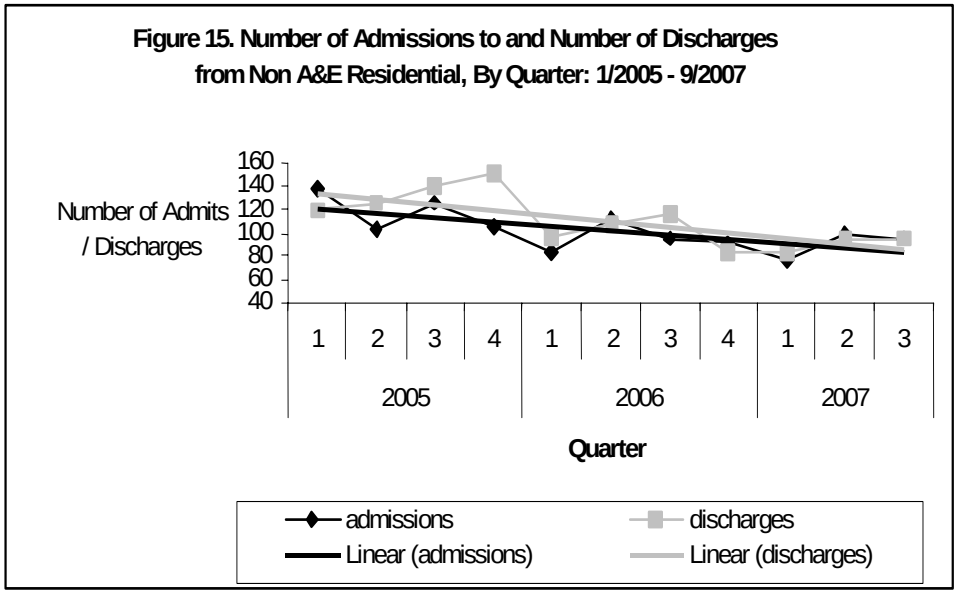


Note: "Linear" refers to linear distribution describing a line that best fits the data
Data source: CPMS

Non-A&E Psychiatric Residential Treatment Services:

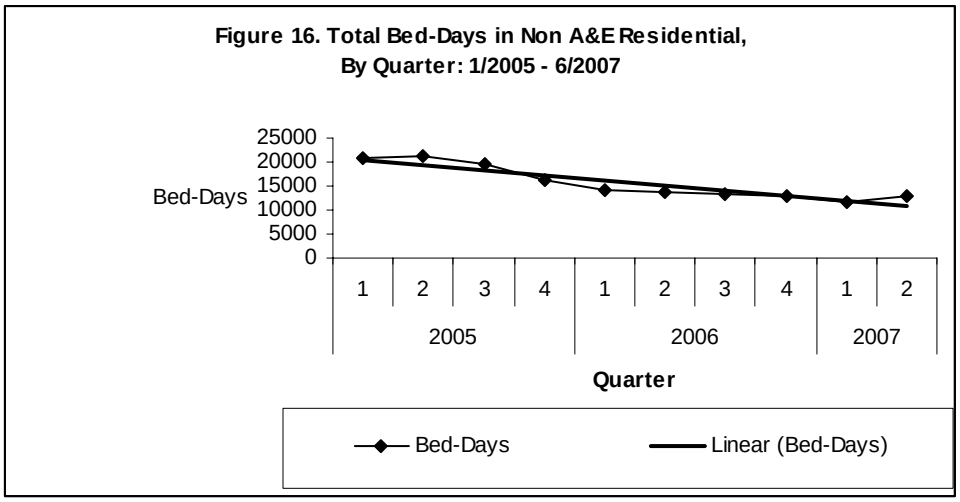
The impact of the CSCI is seen in psychiatric residential treatment services (non A & E): child and family teams, service coordination plans, care coordination and community coordinating committees, along with an increased focus on community partnerships and all these factors helped to maintain children in their home communities. With discharges exceeding admissions, *the total number of children receiving psychiatric residential treatment is declining*.

Discharges exceeded admissions until the middle of 2006, reflecting a *decrease* in the number of children in residential treatment. It is recognized that the fiscal and administrative restructuring of the CSCI has contributed to this change. However, the expectation that this change would be an incentive to expand types and availability of services in the community, as well as other services and supports, seems to have been borne out in this trend, and is supported by other data.



Note: "Linear" refers to linear distribution describing a line that best fits the data
Data source: CPMS

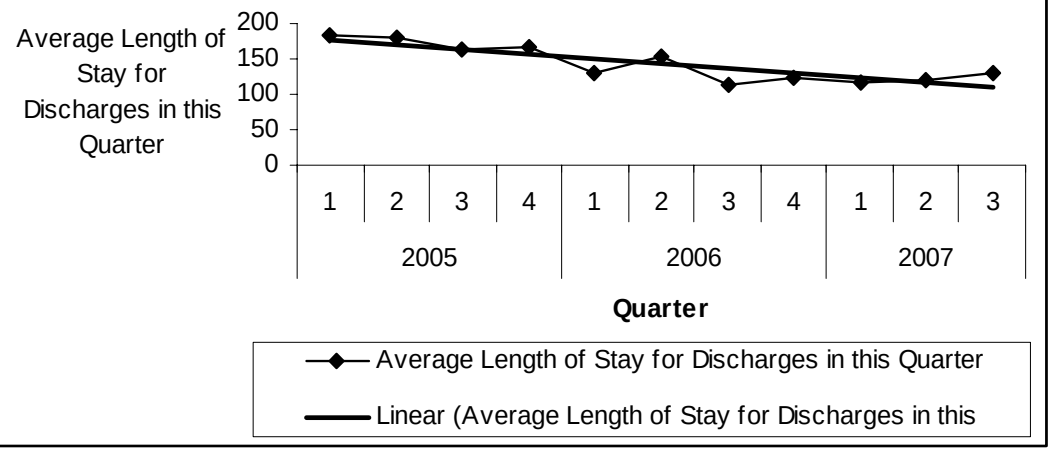
Bed-days have dropped dramatically, from a high of over 20,000 bed-days in the last quarter of 2005 to just over 10,000 bed-days in the second quarter of 2007. This could be reflective of a number of aspects of the changes associated with the CSCI such as improved level of need determination at outset of treatment, care coordination, increased breadth and availability of community based services, and MHO accountability.



Note: "Linear" refers to linear distribution describing a line that best fits the data
Data source: CPMS

Lengths of stay have shown a clear decrease. Average lengths of stay may be clearly decreasing because the subset of children now being admitted to residential treatment are those with service needs that can be met in the community. This may be occurring more rapidly than prior to the CSCI with system changes that support community based treatment. It could also reflect a population of children who have less serious disorders who can succeed in the community and are not returning to residential treatment, or could reflect lengths of stay that are too short to address a particular child's needs.

Figure 17. Average Length of Stay in Non A&E Residential, By Quarter: 1/2005 - 9/2007

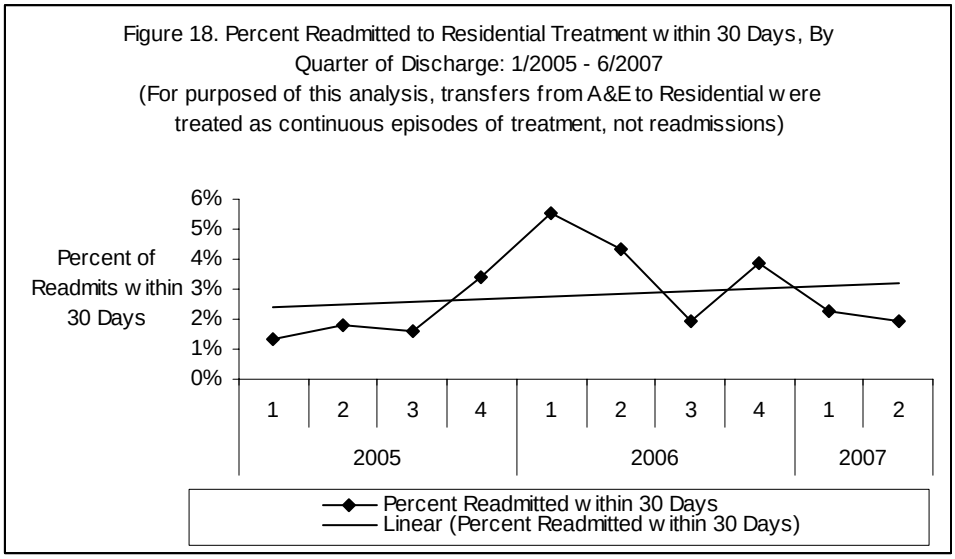


Note: "Linear" refers to linear distribution describing a line that best fits the data
Data source: CPMS

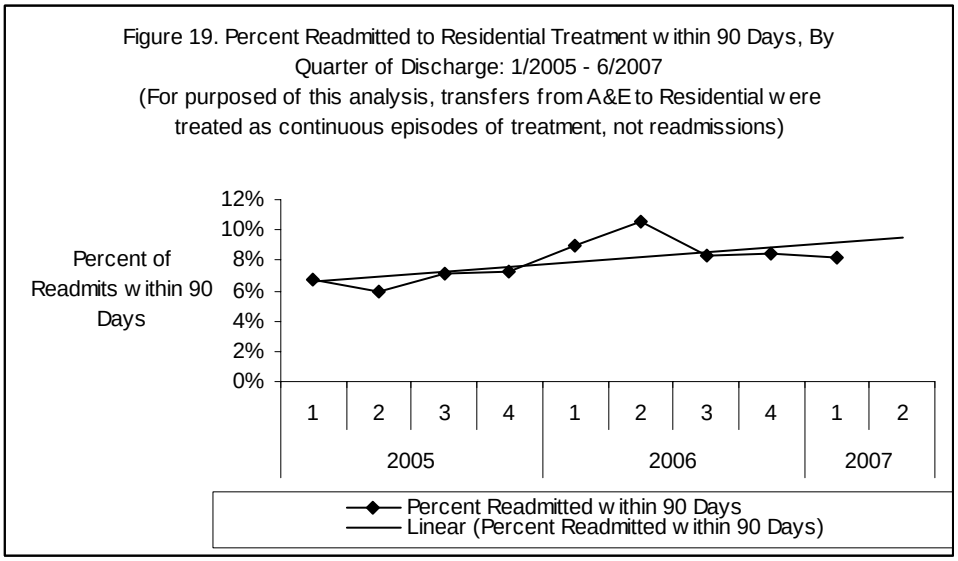
Rates of readmission to PRTS have increased

This group reflects a very small number of children. One explanation is that the children now being admitted to and subsequently discharged from residential treatment are a subset with higher service needs (Figures 18 and 19) that are likely to be at risk for readmission and now are a larger proportion of those in residential treatment. Other possible explanations are that lengths of stay are too short (for this particular group), or that children are being admitted too late to residential treatment and are sicker when they begin treatment and therefore are less likely to recover with one treatment episode.

Prior to CSCI there was a larger cohort of children who were readmitted to PRTS and often moved from program to program. Children with complex multi-system needs are still challenged to find the right mix of services and supports to meet their needs. Continued focus on meeting the complex multi-system needs of these children is critical. Efforts to create a system of care in Oregon reflect an awareness of the importance of serving these children more effectively, and continuing examination of these and other data will be necessary to ensure that all children's needs are being met.



Note: "Linear" refers to linear distribution describing a line that best fits the data
Data source: CPMS



Note: "Linear" refers to linear distribution describing a line that best fits the data
Data source: CPMS

Summary:

There are many challenges and opportunities ahead for the children's mental health system and those it serves. The biggest challenge will be to create a working system of care in Oregon, which will entail true integration of all child-serving systems' services for the benefit of any individual child and family. In the summer of 2007, many interested Oregonian citizens and stakeholders met to make recommendations for the Statewide Children's Wraparound Initiative, a committee convened by the Governor through an executive order. The recommendations of this group include specific operational and fiscal strategies to allow child serving systems to integrate their efforts. The Wraparound Initiative demonstrates the widespread belief that the time has come for Oregon to create a functioning system of care.

Care that is individualized, family driven and youth guided, culturally competent, and delivered in the most normative environment possible remains our goal. Continued system monitoring will be essential, to measure progress. Workforce development will need to continue at increased levels to meet growing demands and provide creative energies that solve some of our unanswered questions. The challenge of increasing and integrating funding for children's services, while current efforts are sustained and bolstered remains. The opportunity for further integration with system partners, understanding of system barriers and ways to resolve them, expansion of youth guided services, development of family navigators, focus on underserved populations of children, prevention and early intervention of mental health disorders, transition age youth services, and co-occurring disorders treatment remain as system challenges.

It seems clear that the children's mental health system is poised and ready to meet the challenges ahead and to take those next steps to insure the health and well-being of our future generations.

Next Steps:

Continued and expanded data collection and analysis by AMH and partners, including:

1. Continue monitoring all these trends over time to further assess their stability.

2. Explore and develop strategies to improve the family-reported satisfaction with coordination of services with specific treatment settings, such as family/parent satisfaction with coordination of services between mental health and DD, juvenile justice/OYA and addictions services.

3. Explore the causes of the differences in satisfaction with family participation in treatment planning and service appropriateness between day treatment and outpatient or residential settings. Use this information to develop a strategy to increase family participation in all levels of service.

4. Residential treatment readmissions will be analyzed in more detail, including, for example, obtaining demographic information (such as age, gender, ethnicity and county of residence) about the population of children and youth who are readmitted, what mental health services they are receiving over time, and implement ways to measure how effectively their needs are being met in the community in periods between residential admissions.

5. Develop mechanisms to capture data from other systems such as child welfare, juvenile justice/OYA, and education to assess whether there are trends in those systems that might indicate whether services are being shifted or unmet needs are manifesting in other systems.

Glossary of Terms

Acute Care Services:
Services delivered to children experiencing acute psychiatric conditions (inpatient services).

Addiction and Mental Health Division (AMH):
A Division of DHS responsible for the administration of addiction and mental health services for the State of Oregon.

Admissions:
Admission numbers reflect the unique admission of a child/children into a specific service (outpatient, PRTS, etc.). The rate of admissions is one measure of demand for service and/or ability to access services.

Admission to day treatment:
Refers to day treatment admission preceded by over 30 or more days without day treatment.

A & E Psychiatric Residential Treatment Services:
Services provided in an AMH certified Assessment & Evaluation (A&E) psychiatric residential treatment program. These services are typically shorter lengths of stay.

Capitation:
A payment model which is based on prospective payment for services, irrespective of the actual amount of services provided, generally calculated on a per OHP Member per month basis.

Child and Adolescent Service Intensity Instrument (CASII):
A screening instrument developed by the American Academy of Child and Adolescent Psychiatry to determine the level of care a child needs based on their functioning and family involvement. Used as part of a level of need determination protocol.

Children's System Change Initiative:
An initiative in response to a 2003 legislative directive to substantially increase the availability and quality (breadth, depth, and intensity) of individualized, intensive, and culturally competent home and community based services so that children are

served in the most natural environment possible and so that the use of institutional care is minimized.

Client Process Monitoring System (CPMS):
A database containing records for episodes of care in community mental health programs and intensive treatment programs. Data are submitted on various standardized forms and entered into a mainframe system by AMH Data Support Unit, at the beginning and end of a service episode and monthly during an episode of service.

Enrolled (Enrollee):
An individual that is eligible for the Oregon Health Plan (OHP) and enrolled in an MHO.

Fee-For-Service (FFS):
Individuals who are eligible for the OHP, but are not enrolled with an MHO. This is also known as fee-for-service (FFS) or an "open card".

Medicaid Management Information System (MMIS):
A database providing information on children who are Medicaid-eligible, including those enrolled in the Oregon Health Plan (OHP). The information contained in MMIS includes eligibility, capitation payments, fee-for-service claims, and encounter data for persons receiving services via prepaid capitation programs. Data is submitted electronically and by fee-for-service billing. Managed MHOs and service providers have 180 days to submit Medicaid data from the time of service.

Mental Health Organization (MHO):
A Prepaid Health Plan under contract with DHS to provide Covered Services under the OHP Medicaid Demonstration Project and State Children's Health Insurance Program (SCHIP). MHOs can be FCHPs, CMHPs, private MHOs or combinations thereof.

Non-A & E Psychiatric Residential Treatment Services:
Refers to psychiatric residential treatment services exclusive of A & E services provided in an A & E setting and billed as A& E services. Does not include sub-acute services.

Oregon Health Plan (OHP):
Oregon's health care reform effort consisting of a Medicaid Demonstration Project, State Children's Health Insurance Program, an individual insurance program for

persons excluded from health insurance coverage due to pre-existing health conditions, and a group insurance program for small businesses. One objective of this reform effort includes universal coverage for Oregonians. In the context of this report, OHP refers to all individuals on FFS.

Outpatient Services:
The array of outpatient services includes: mental health assessments; co-occurring disorder assessments; individual and group therapy; medication management; parent training; case management and care coordination; crisis intervention; consultation to schools and other agencies; flexible services; specialized support service to families; and skills training. Outpatient services do NOT include day treatment.

Person-Days:
The total number of people served per day. Example: if one person received services for two days, this equals 2 person days; if two people received services for one day each, this also equals 2 person days.

Polynomial distribution (Poly.):
This term refers to a trend line displaying a curve that best fits the data.

Psychiatric Day Treatment Services (PDTS):
PDTS are comprehensive, interdisciplinary, non-residential community-based programs consisting of psychiatric treatment, family treatment and therapeutic activities integrated with an accredited education program.

Psychiatric Residential Treatment Services (PRTS):
PRTS are away from home, residential facility-based psychiatric treatment services that occur in a nationally accredited and state certified facility and include assessment and evaluation, regular residential and sub-acute care.

Secure Adolescent Inpatient Program (SAIP):
Beginning in March 2005, this program provides highly specialized intensive mental health services to children between the ages of 14-17, including crisis admits from the Oregon Youth Authority (OYA) and youth served under the Psychiatric Security Review Board (PSRB). SAIP is a secure 24-hour medically monitored service in the community operated by Trillium Family Services.

Secure Children's Inpatient Program (SCIP):

Beginning in January 2002, this program provides highly specialized intensive mental health services to children under the age of 13. SCIP is a secure 24-hour medically monitored service in the community operated by Trillium Family Services.

Service Category:
Service category is a descriptive grouping of service codes (BA, ECC, and CPT) that are similar procedurally.

Sub-Acute Care:
Psychiatric treatment under the clinical direction of a psychiatrist as an alternative to hospitalization for children who are not in the most acute phase of a mental condition, but who require a level of care higher than generally provided in a residential psychiatric treatment setting.