DRAFT – For Discussion Only

Department of Human Services
Addictions and Mental Health Division
Program Analysis and Evaluation Unit

Trends in Services & Service Outcomes Before and After Initiation of the Children's System Change Initiative

DRAFT
for discussion only

SUMMARY

1. Numbers of Children Enrolled and Served, By Quarter

   - *Number of Children Enrolled:* Enrollment of children and youth aged 0 – 17 increased between 1/2005 and 6/2007. Average quarterly enrollment in 2005 was 209,016; average quarterly enrollment in 2006 was 215,623, and average quarterly enrollment in 2007 was 218,459.
   - *Number of Children Served:* 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.

2. Billings for Children's Services as a Fraction of Capitation for Children's Services, By Quarter that Billings were Received

3. Trends in Frequency and Duration of Services, By Service Type and Quarter

   - *Mental Health Outpatient Services*: Person-days of OHP outpatient children's mental health services increased markedly between the beginning of 2005 and the most recent period for which complete data are available.
   - *Psychiatric Day Treatment Services (PDTS)*: Admissions to and discharges from day treatment have changed little, but the duration of day treatment episodes has been dropping since the beginning of 2006.
   - *A&E Psychiatric Residential Treatment Services (PRTS)*: Admissions to A&E PRTS have dropped slightly; average lengths of stay in A&E PRTS have remained unchanged.
   - *Non-A&E Psychiatric Residential Treatment Services (PRTS)*: Admissions to Non-A&E PRTS settings have dropped markedly, such that total bed-days in these settings are now ¼ of what they were in the 4th quarter of 2005. Average lengths of stay in Non-A&E PRTS settings have not shown a consistent trend toward decreasing or increasing. 30-day and 90-day rates of readmission to psychiatric residential care have been increasing.
   - *Stabilization and Transition Services*: Admissions to STS settings peaked in the first quarter of 2006, and then dropped. Average lengths of stay in STS settings have not shown a consistent trend.

- *Psychiatric Subacute Treatment Services*: These services are too infrequent to track trends in admissions or lengths of stay.
- *Secure Child Inpatient (SCIP) and Secure Adolescent Inpatient (SAIP) Services:* Except for a peak in admissions and discharges in the 2nd quarter of 2007, admissions to and discharges from SCIP/SAIP have changed little. There has been a slight trend toward decreasing lengths of stay in these settings since late 2005.
- *Acute Care Hospitalizations for Psychiatric Disorders*: The number of acute care hospitalizations has dropped, both within the population of children and youth served by managed care and the population of children and youth served by FFS providers.
- *Rates of Readmission to the Same or to a Higher Level of Care*: For both the PDTS and PRTS populations, rates of readmission, within 30 days, to the same or to a higher level of care have been dropping since early 2005. Rates of readmission to the same or to a higher level of care within 60 or within 90 days have, however, changed little.

4. Trends in Satisfaction with Service Delivery

- *Satisfaction with coordination* among mental health services has increased over the past three years. 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 have also increased over the past three years. Overall, satisfaction with coordination of mental health services and juvenile justice services, as well as satisfaction with coordination of mental health services and OYA services, changed little between 2004/05 and 2006/07; however, the parents / guardians of children in residential care 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 between 2004/05 and 2006/07.
- Overall, satisfaction with coordination of mental health services and chemical dependency services decreased between 2004/05 and 2006/07; however, the parents / guardians of children in residential care expressed a significant increase in satisfaction with the coordination of mental health and chemical dependency services between 2004/05 and 2006/07.

- *Satisfaction with Family Treatment Participation* increased between 2004/05 and 2006/07.
- *Satisfaction with Treatment Appropriateness* increased between 2004/05 and 2006/07.

5. Trends in Reported Service Outcomes

DATA SOURCES

1. Medicaid Management Information System
2. Client Process Monitoring System
3. Child and Adolescent Service Intensity Instrument Database
4. Youth Services Survey for Families

DRAFT
for discussion only

1. Numbers of Children Enrolled and Served, By Quarter

Figure A: Number of Children / Youth Aged 0 – 17 Enrolled in MHO: 1/2005 – 6/2007

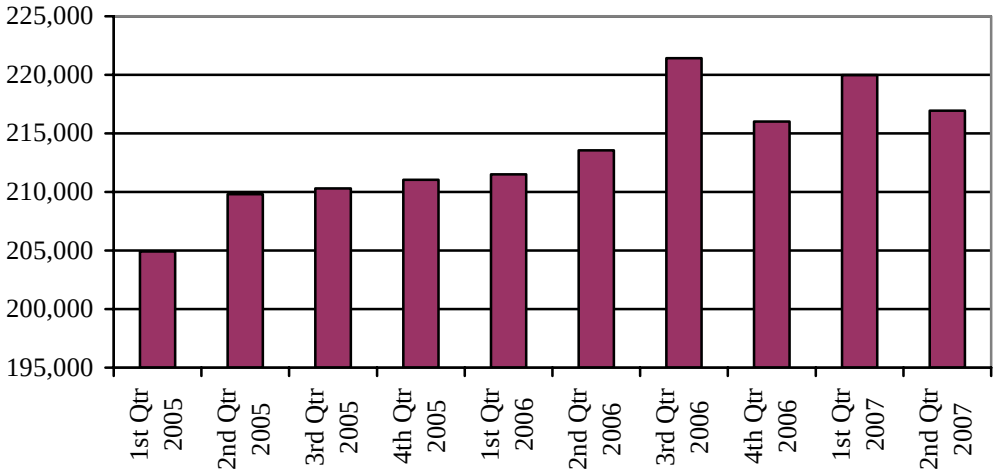
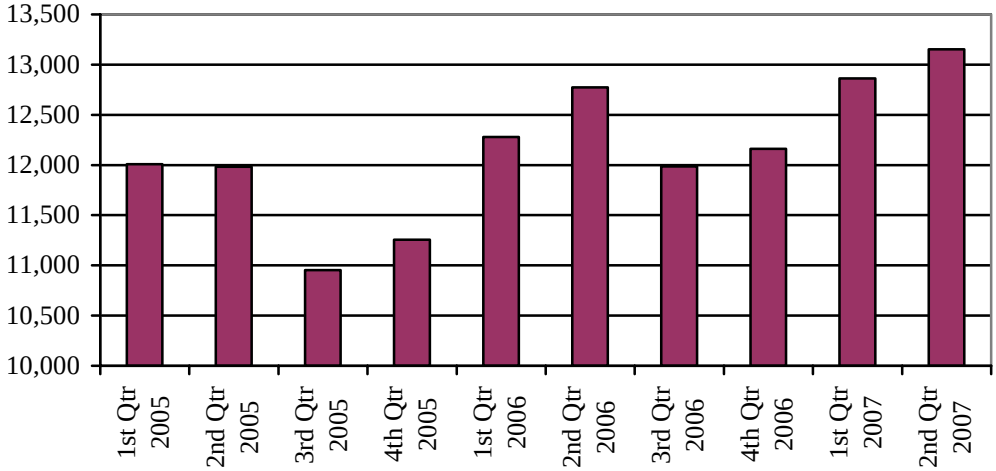


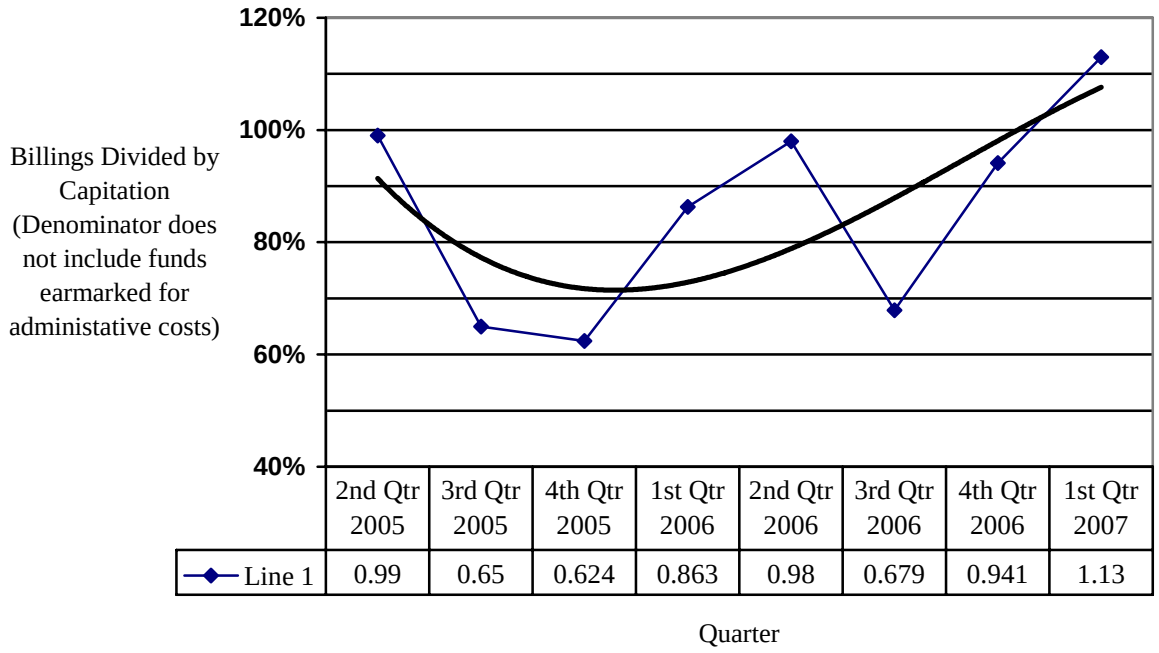
Figure B: Number of Children / Youth Aged 0 – 17 Receiving OHP Services: 1/2005 – 6/2007



DRAFT
for discussion only

2. Billings for Children's Services as a Fraction of Capitation for Children's Services, By Quarter that Billings were received.

Figure C: 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



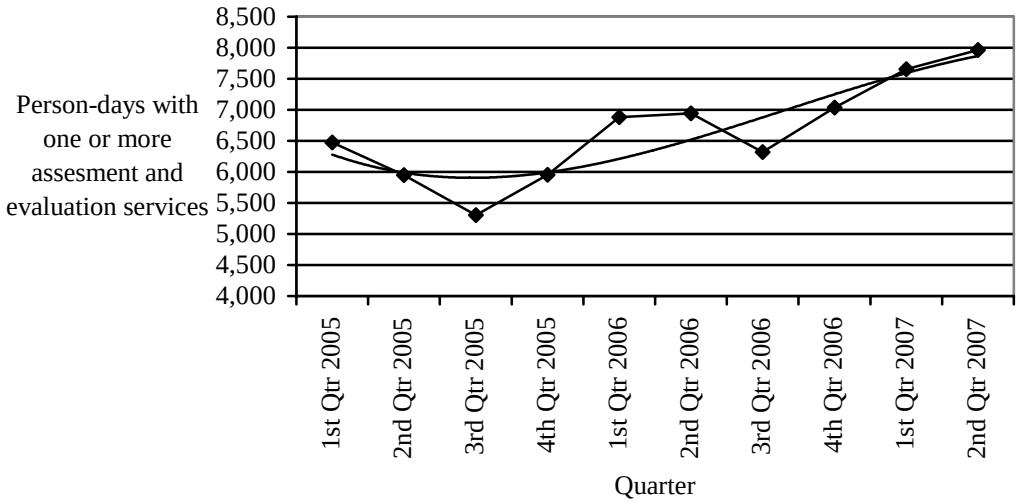
DRAFT
for discussion only

3. Trends in Frequency and Duration of Services, By Service Type and Quarter

Outpatient Services Summary: The number of person-days of outpatient mental health service has increased markedly since the 3rd quarter of 2005. The increase is seen within all service types, including assessment and evaluation services (Figure 1), case management services (Figure 2), group and family therapy services (Figure 3), individual therapy services (Figure 4), respite services (Figure 5), skills training services (Figure 6), and "wraparound" services (Figure 7).

Figure 1: Person-Days with one or more MHO-Provided Outpatient Assessment and Evaluation Services, by quarter: 1/2005 – 6/2007.

Figure 1



DRAFT
for discussion only

Figure 2: Person-Days with One or More MHO-Provided Case Management Services, by Quarter: 1/2005 – 6/2007

Figure 2

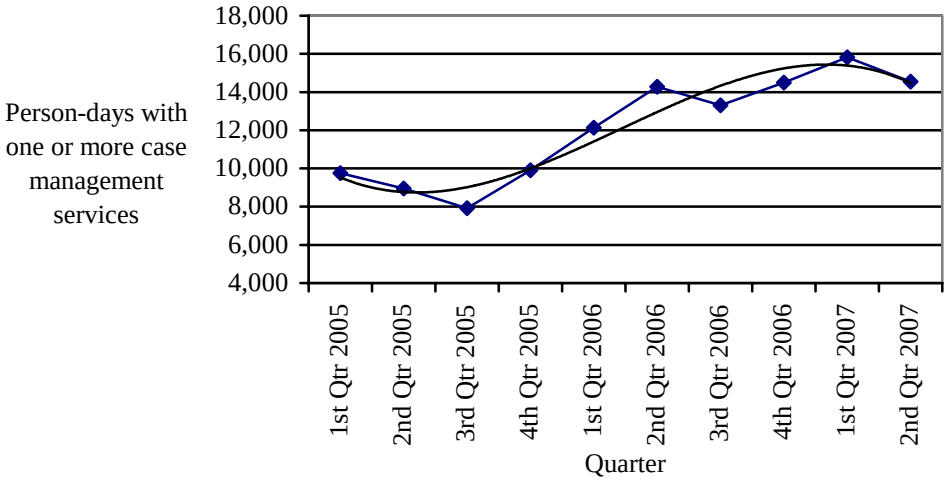
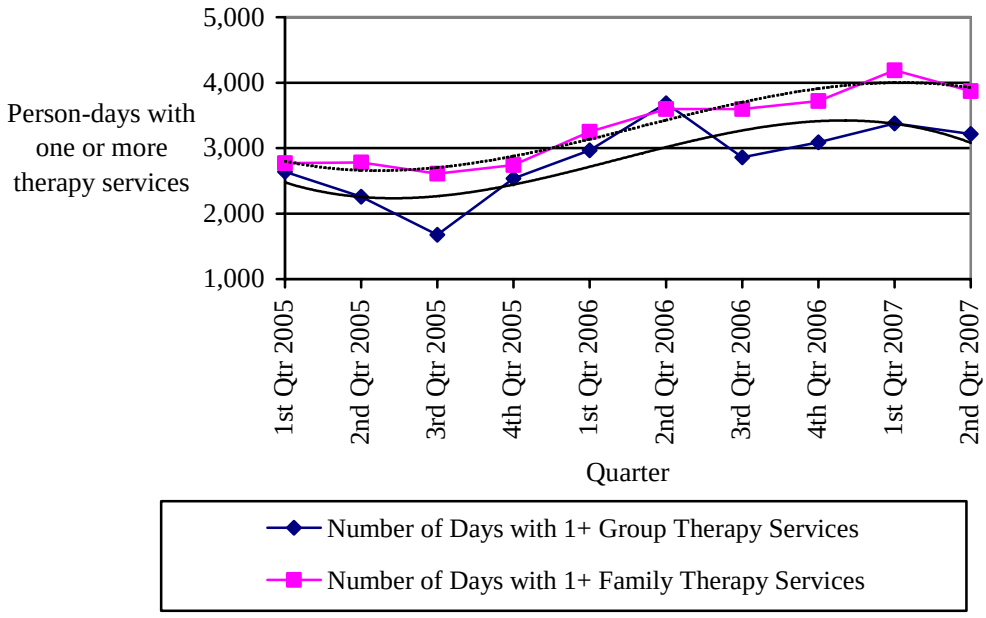


Figure 3: Person-Days with One or More MHO-Provided Group Therapy Services/Family Therapy Services, by quarter: 1/2005 – 6/2007

Figure 3



DRAFT
for discussion only

Figure 4: Person-Days with One or More MHO-Provided Individual Therapy Services, by quarter: 1/2005 – 6/2007

Figure 4

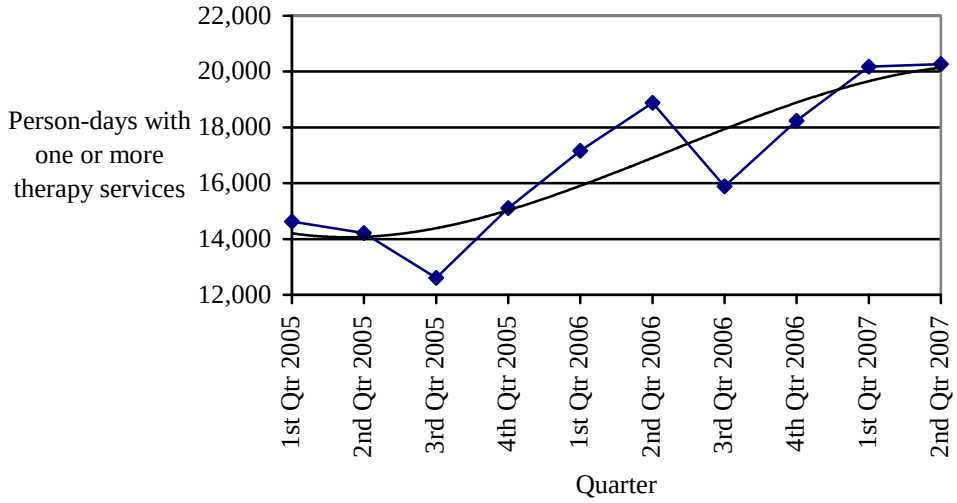
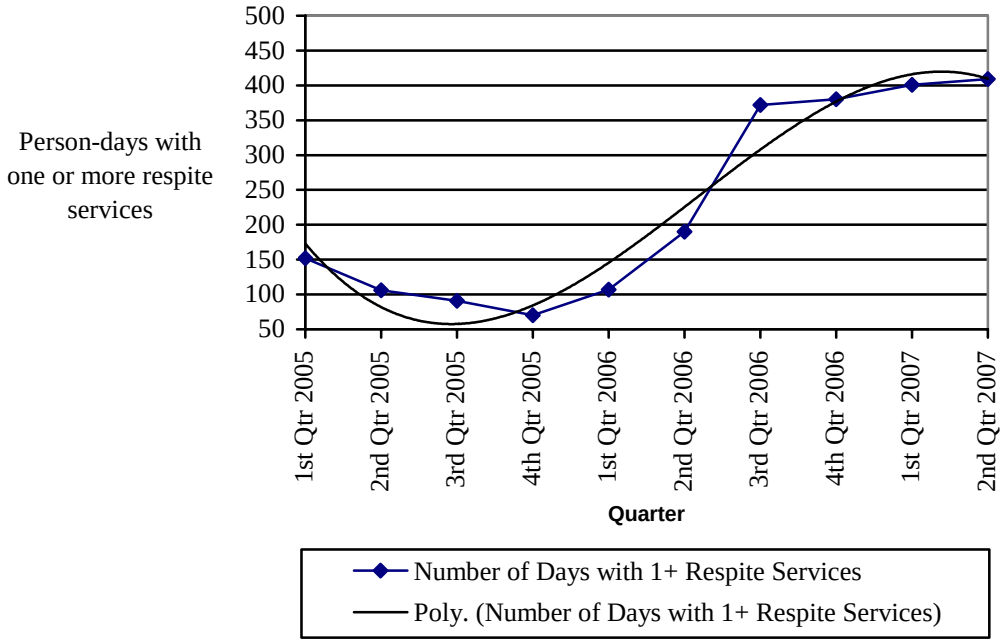


Figure 5: Person-Days with One or More MHO-Provided Respite Services, by quarter: 1/2005 – 6/2007

Figure 5



DRAFT
for discussion only

Figure 6: Person-Days with One or More MHO-Provided Skills Training Services, by quarter: 1/2005 – 6/2007

Figure 6

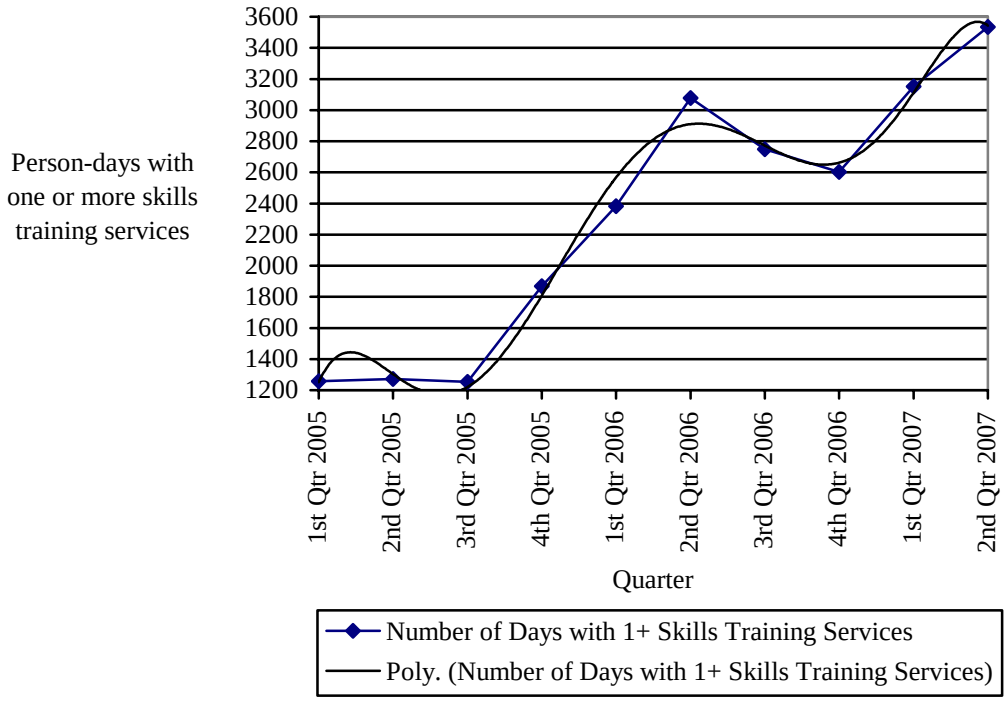
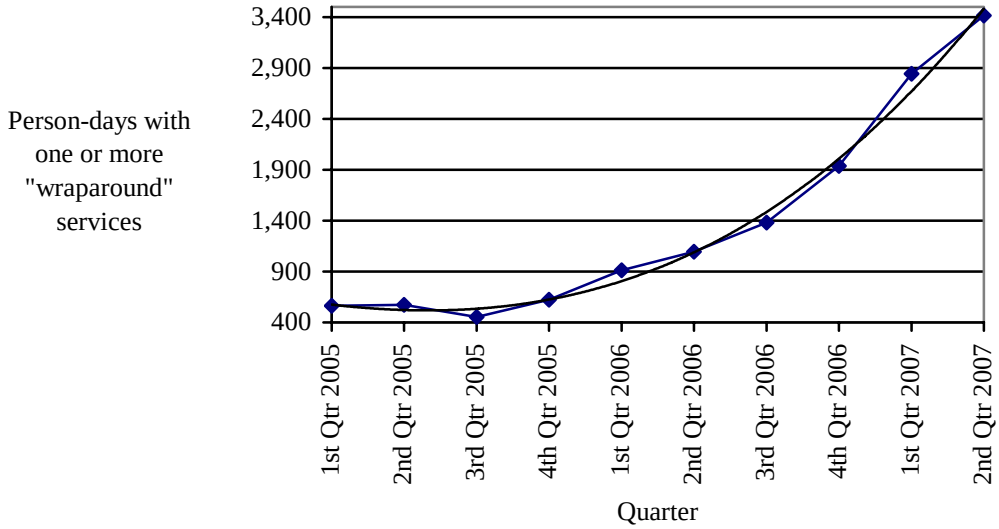


Figure 7: Person-Days with One or More MHO-Provided "Wraparound" Services, by quarter: 1/2005 – 6/2007

Figure 7



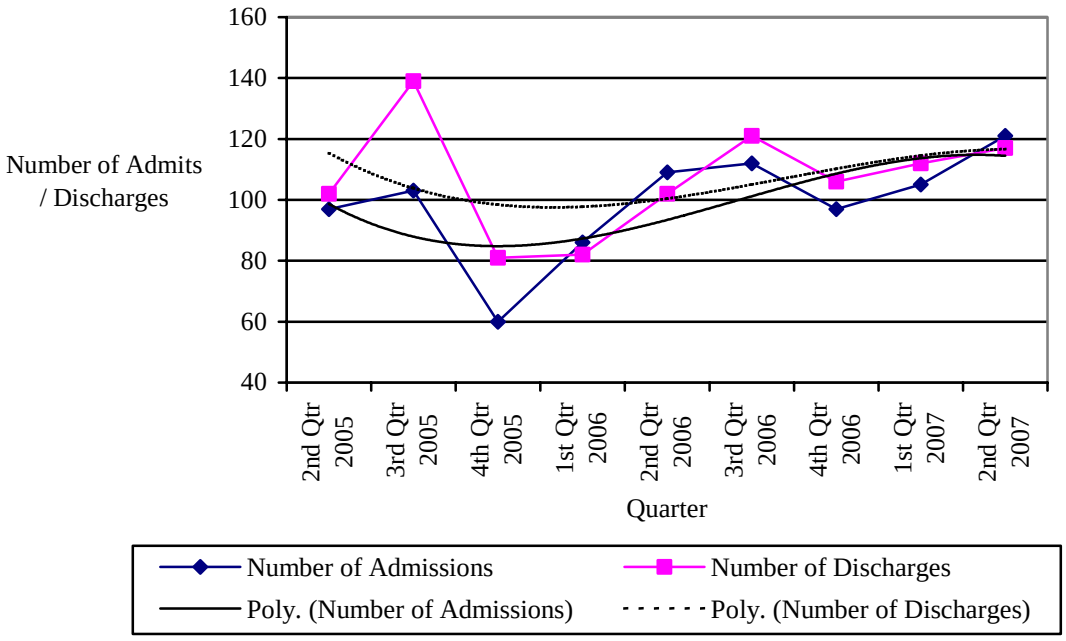
DRAFT
for discussion only

Psychiatric Day Treatment Services (PDTS) Summary:

- Discharges and admissions to PDTS have changed little since mid-2005, reflecting a relatively stable number of children in day treatment (Figure 8).
- Overall, the average duration of PDTS episodes increased until the beginning of 2006, and has been gradually decreasing since that time (Figure 9).

Figure 8: Number of Admissions to and Number of Discharges from PDTS, by quarter: 1/2005 – 6/2007 (Note: an "admission" is PDTS preceded by over 30 days without day treatment).

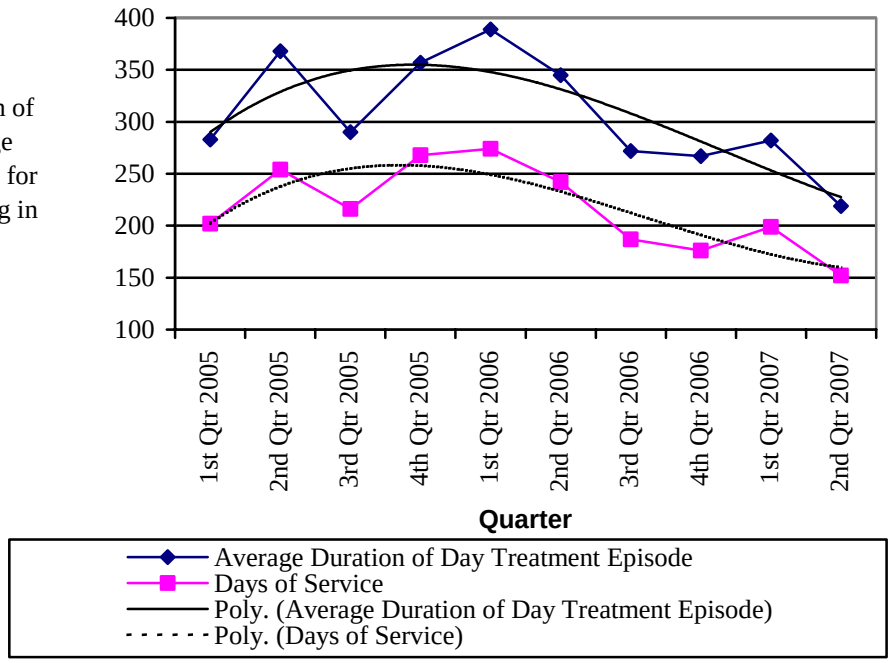
Figure 8



DRAFT
for discussion only

Figure 9: Average Duration of PDTS Episodes and Average Days of Service within PDTS Episodes, by quarter of "Discharge" from PDTS: 1/2005 – 9/2007 (based on billings received between 1/2003 and 12/2007).

Figure 9



Summary, A&E Psychiatric Residential Treatment Services (PRTS):

- Discharges and admissions decreased somewhat, on average, between 1/2005 and 9/2007, reflecting a decrease in the number of children in A&E (Figure 10).
- Lengths of stay have remained virtually constant since 1/2005 (Figure 11).

Summary, Non-A&E Psychiatric Residential Treatment Services (PRTS):

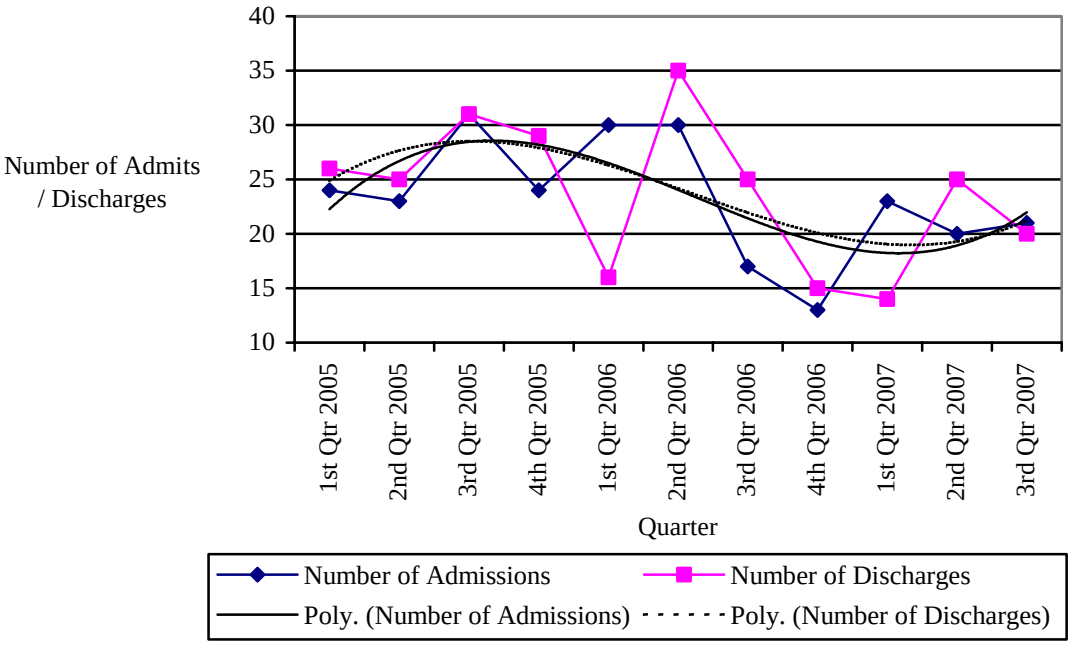
- Discharges exceeded admissions until the beginning of 2007, reflecting a decrease in the number of children in residential care (Figure 12)
- Bed-days have dropped dramatically, from a high of over 10,000 bed-days in the last quarter of 2005 to just over 2,500 bed-days in the second quarter of 2007 (Figure 13).

DRAFT
for discussion only

- Lengths of stay have not yet shown a clear trend of increasing or decreasing. Average lengths of stay may not be clearly decreasing because the subset of children now being admitted to and/or remaining in PRTS are those with higher service needs (Figure 14).
- Rates of readmission to care have increased, perhaps because the children now being admitted to (and subsequently discharged from) PRTS are those with higher service needs (Figures 15 and 16).

Figure 10: Number of Admissions to and Number of Discharges from A&E PRTS, by quarter: 1/2005 – 9/2007

Figure 10



DRAFT
for discussion only

Figure 11: Average Length of Stay in A & E PRTS, by quarter: 1/2005 – 9/2007

Figure 11

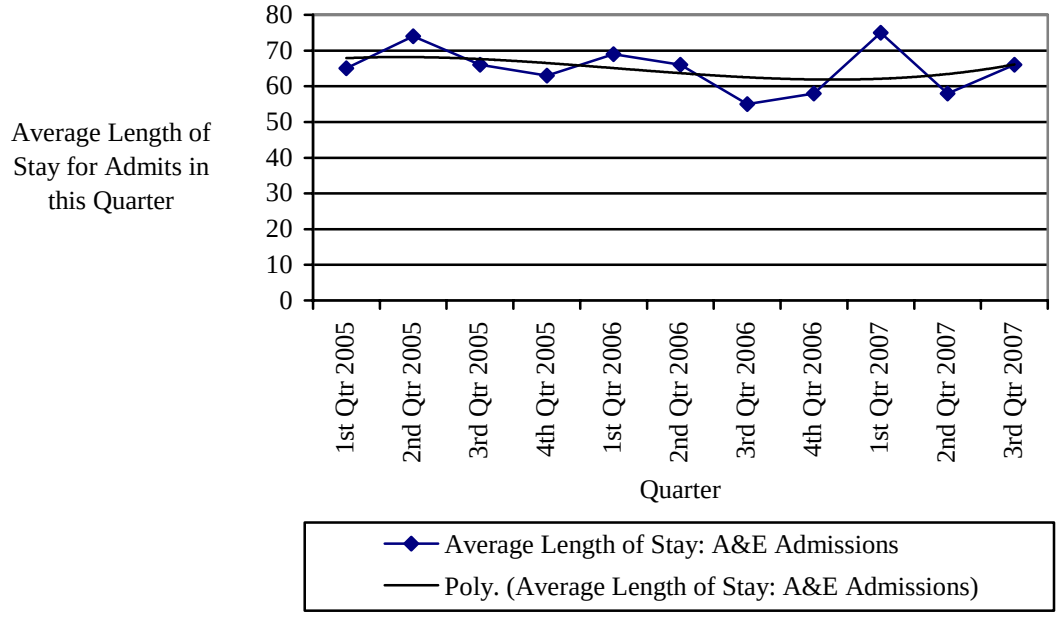
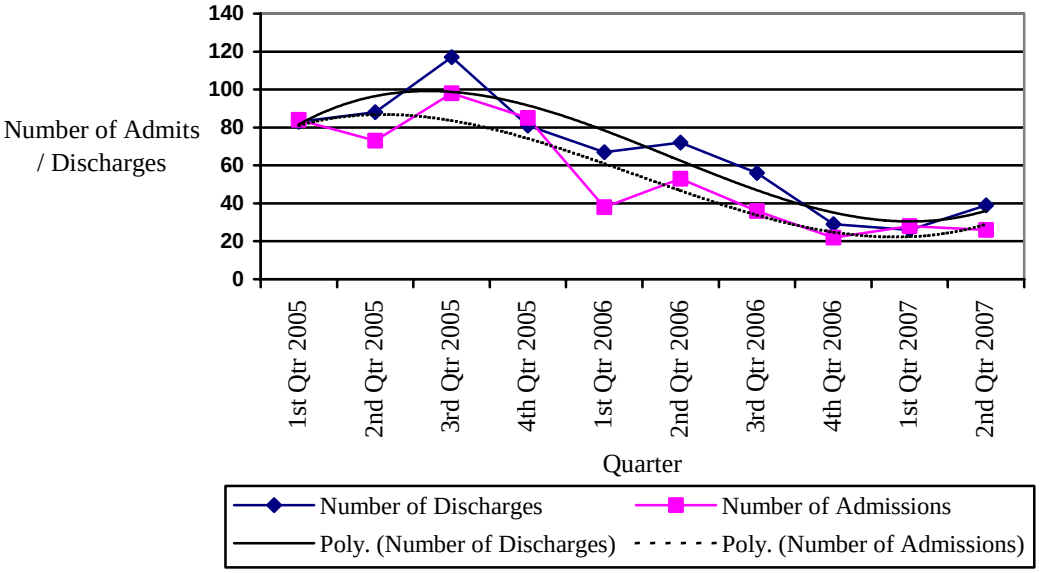


Figure 12: Number of Admissions to and Number of Discharges from Non A&E PRTS, by quarter: 1/2005 – 6/2007 (per billings received by the end of 12/2007).

Figure 12



DRAFT
for discussion only

Figure 13: Total Bed-Days in Non A&E PRTS, by Quarter: 1/2005 – 6/2007

Figure 13

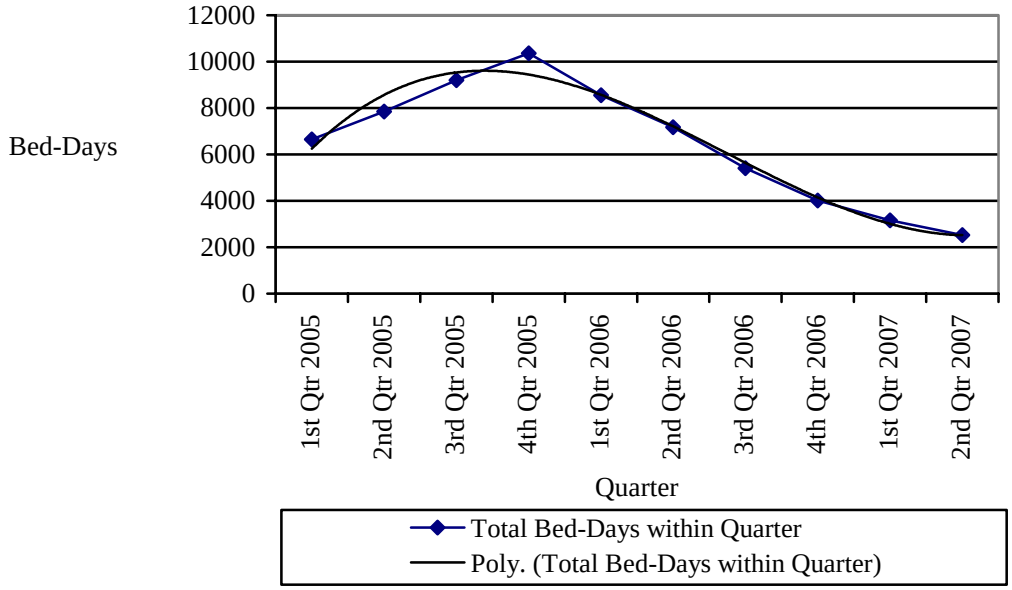
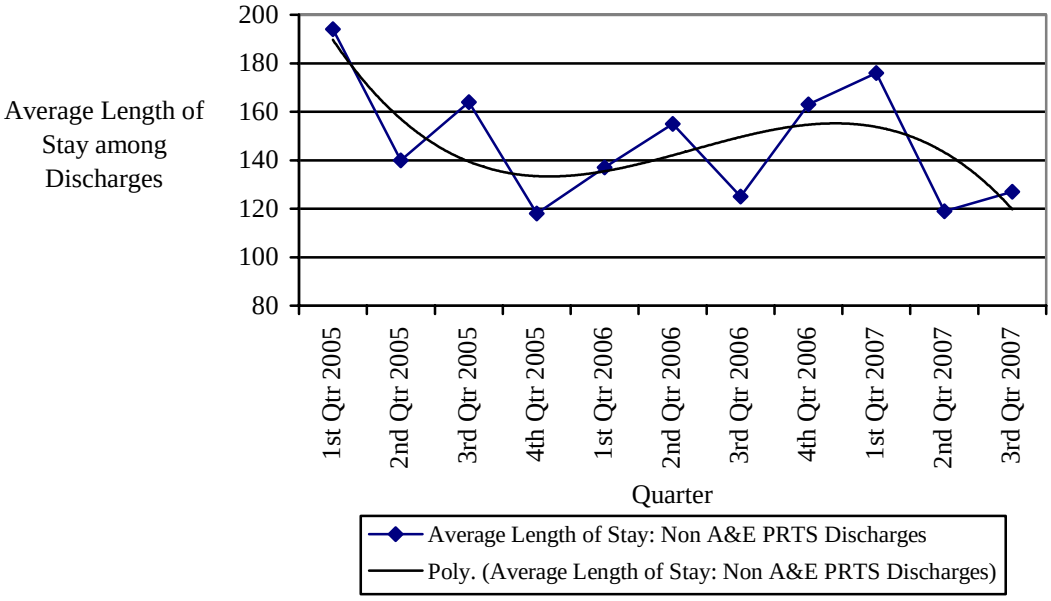


Figure 14: Average Length of Stay for Discharges from Non A&E PRTS, by quarter of Discharge: 1/2005 – 9/2007 (based on billings received between 1/2003 and 12/2007).

Figure 14



DRAFT
for discussion only

Figure 15: Percent Readmitted to PRTS within 30 days, by quarter of discharge: 1/2005 – 6/2007 (for purposes of this analysis, transfers from A&E to Residential were treated as continuous episodes of care, not readmissions).

Figure 15

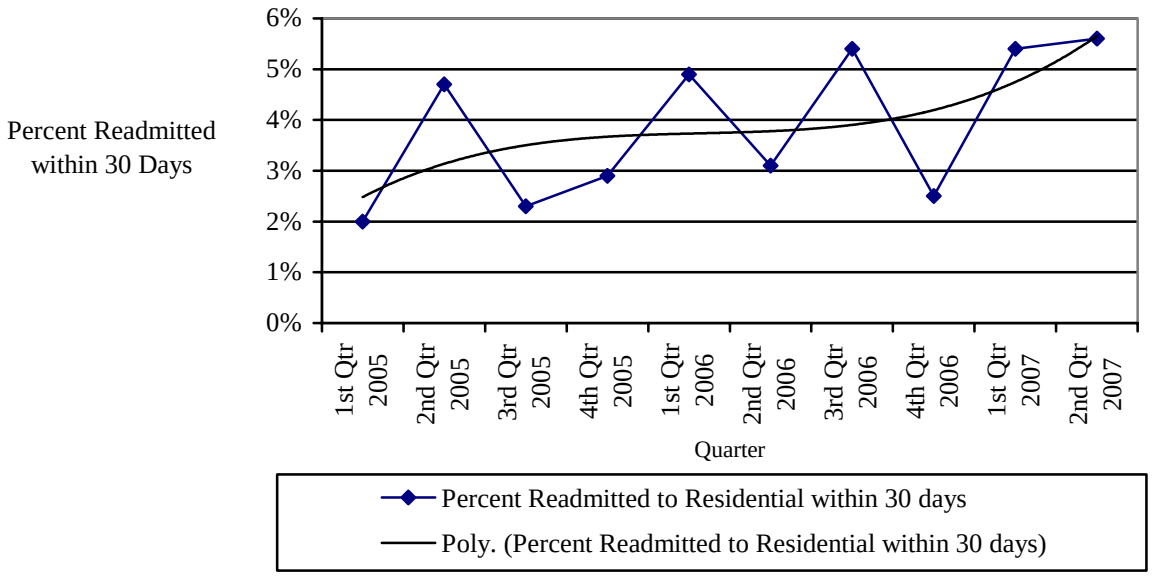
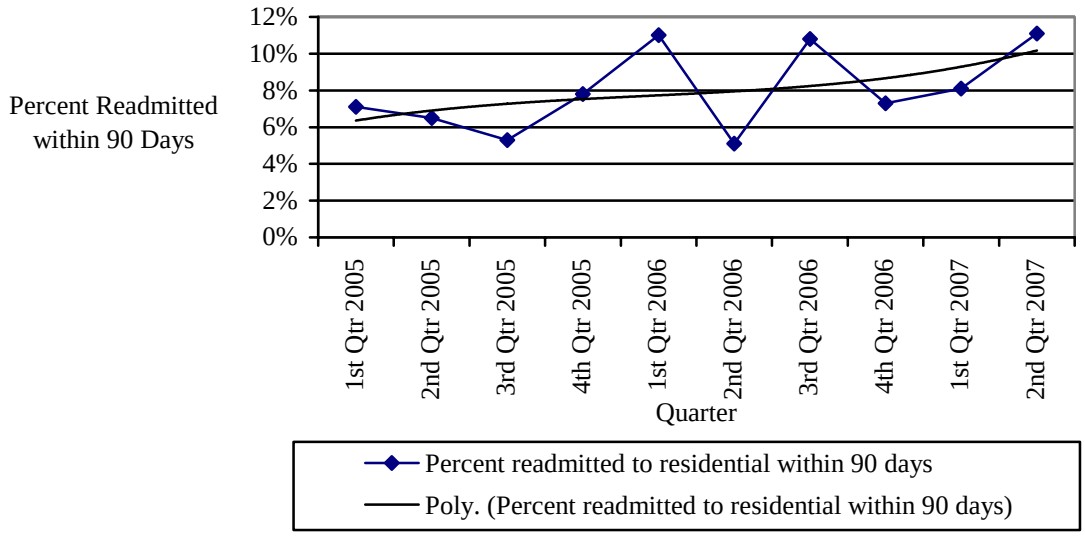


Figure 16: Percent Readmitted to PRTS within 90 days, by quarter of discharge: 1/2005 – 6/2007 (Transfers from A&E to Residential were treated as continuous episodes of care, not readmissions).

Figure 16



DRAFT
for discussion only

Summary, STS Services: Admissions to and discharges from STS peaked in the second quarter of 2006, and have since dropped (Figure 17). Lengths of stay have not shown a consistent trend, but numbers are small, making detection of trends difficult (Figure 18).

Figure 17: Admissions to/Discharges from STS, by quarter of Discharge: 1/2005 – 9/2007 (based on billings received between 1/2003 and 12/2007).

Figure 17

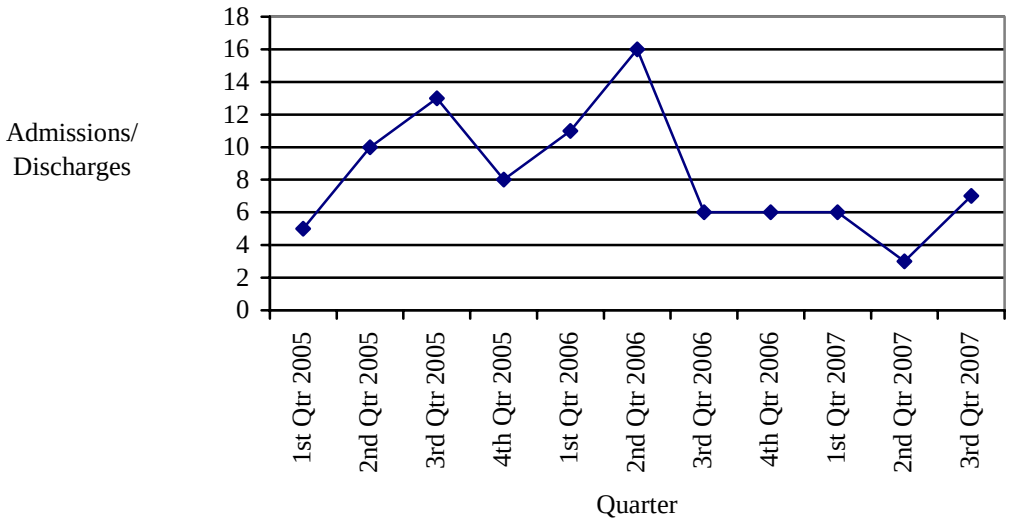
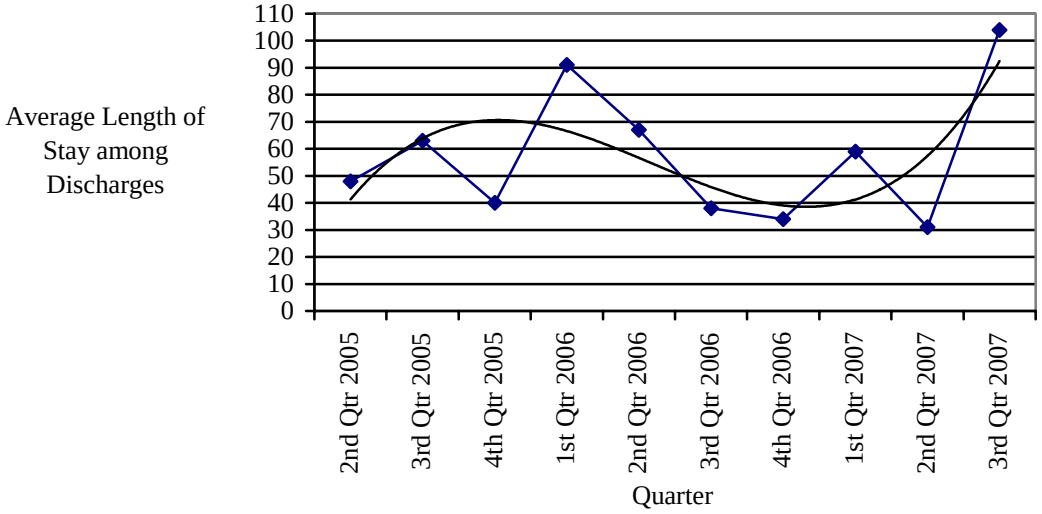


Figure 18: Average Length of Stay for Discharges from STS, by quarter of Discharge: 1/2005 – 9/2007 (based on billings received between 1/2003 and 12/2007)

Data Being Reviewed

Figure 18

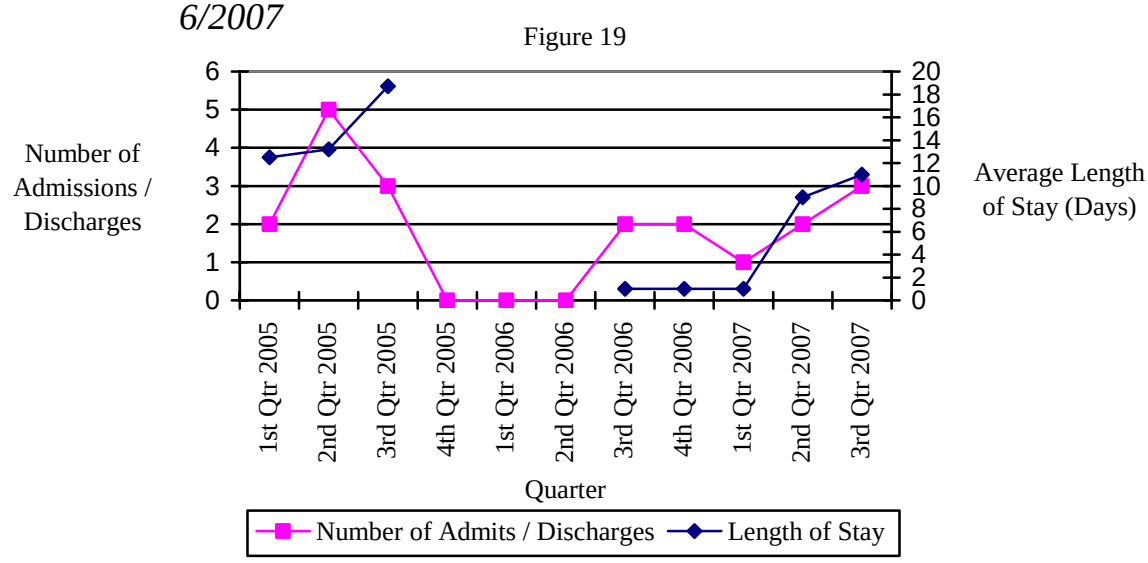


DRAFT
for discussion only

Summary, Subacute Services: Children receive subacute services too infrequently to track trends in admissions or lengths of stay (Figure 19).

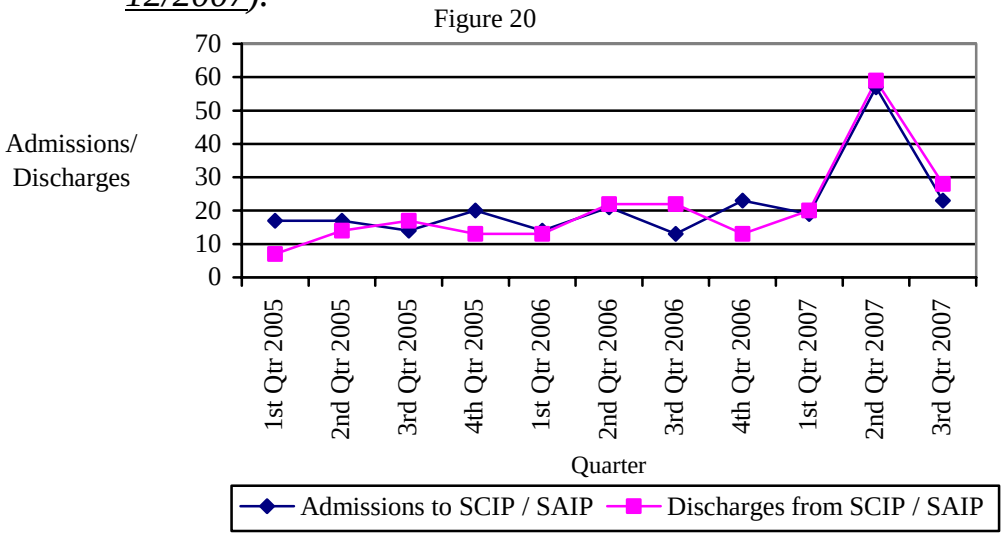
Figure 19: Number of Admits to/Discharges from Sub-Acute Care, and Average Length of Stay in Sub-Acute, by quarter: 1/2005 – 6/2007

Data Being Reviewed



Summary, SCIP/SAIP: Except for a peak in admissions and discharges in the 2nd quarter of 2007, admissions to and discharges from SCIP / SAIP have remained stable over time (Figure 20). While average lengths of stay have been variable, the overall trend is toward shorter lengths of stay in these settings (Figure 21).

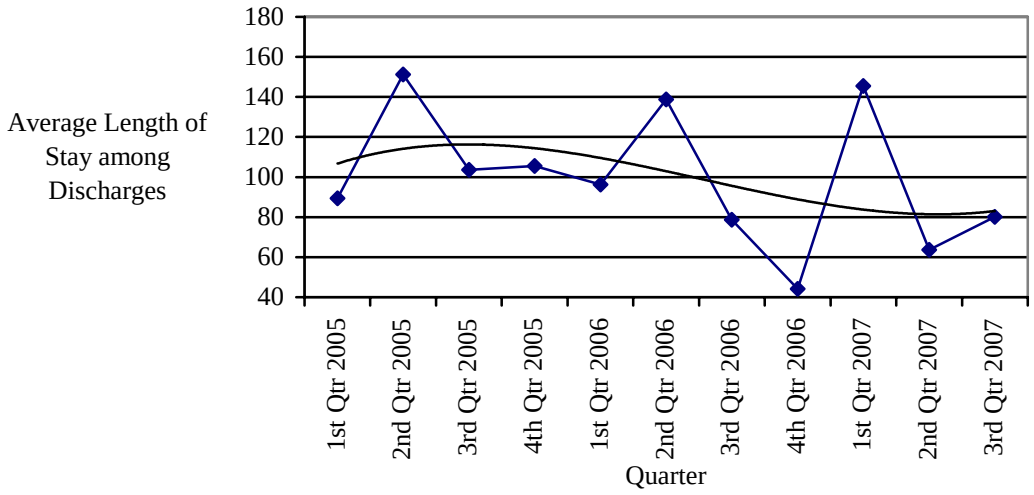
Figure 20: Admissions to/Discharges from SCIP/SAIP, by quarter: 1/2005–9/2007 (based on billings received between 1/2003 and 12/2007).



DRAFT
for discussion only

Figure 21: Average Length of Stay for Discharges from SCIP/SAIP, by quarter of Discharge: 1/2005 – 9/2007 (based on billings received between 1/2003 and 12/2007).

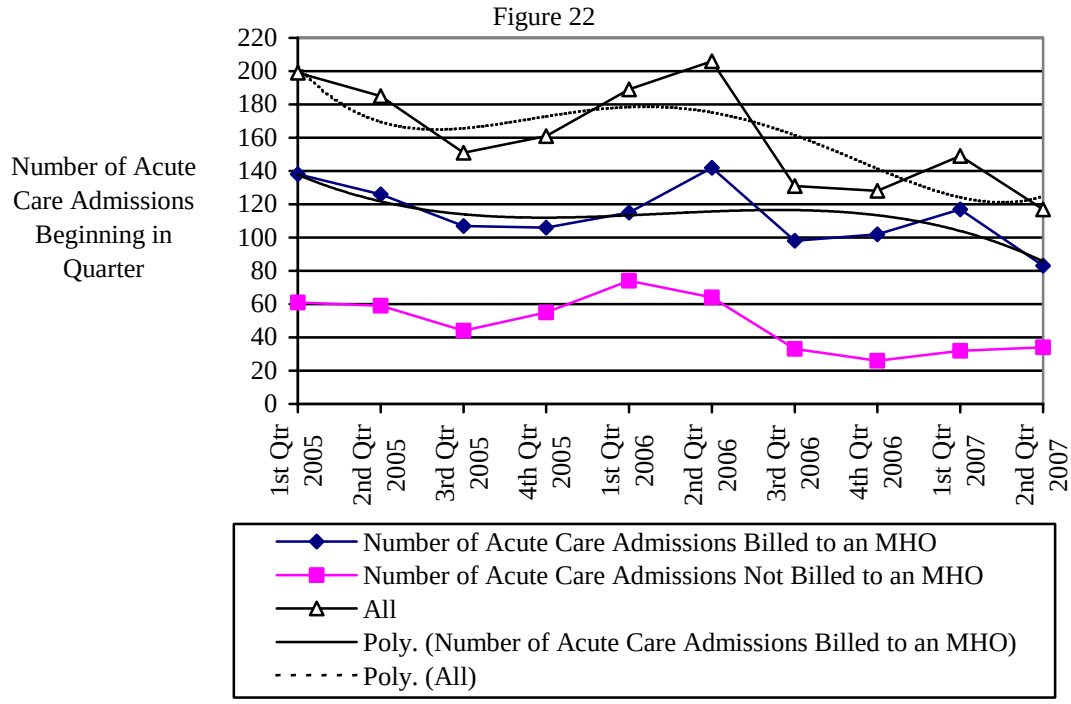
Figure 21



Summary, Acute Care: Total acute care hospitalizations for mental health conditions increased between the 3rd quarter of 2005 and the 2nd quarter of 2006, and then dropped to levels below those of the period preceding the CSCI (Figure 22)

Figure 22: Acute Care Admissions, by quarter: 1/2005 – 6/2007

Figure 22



DRAFT
for discussion only

Trends in Rates of Readmission to the Same or a Higher Level of Care

Figure 23: Percent Discharged from Day Treatment who were Readmitted to Same or Higher Level of Care within 30, 60 or 90 Days of Discharge, by quarter of Discharge: 1/2005 – 6/2007 (Note: Includes acute care hospitalization occurring within episodes of day treatment).

Figure 23

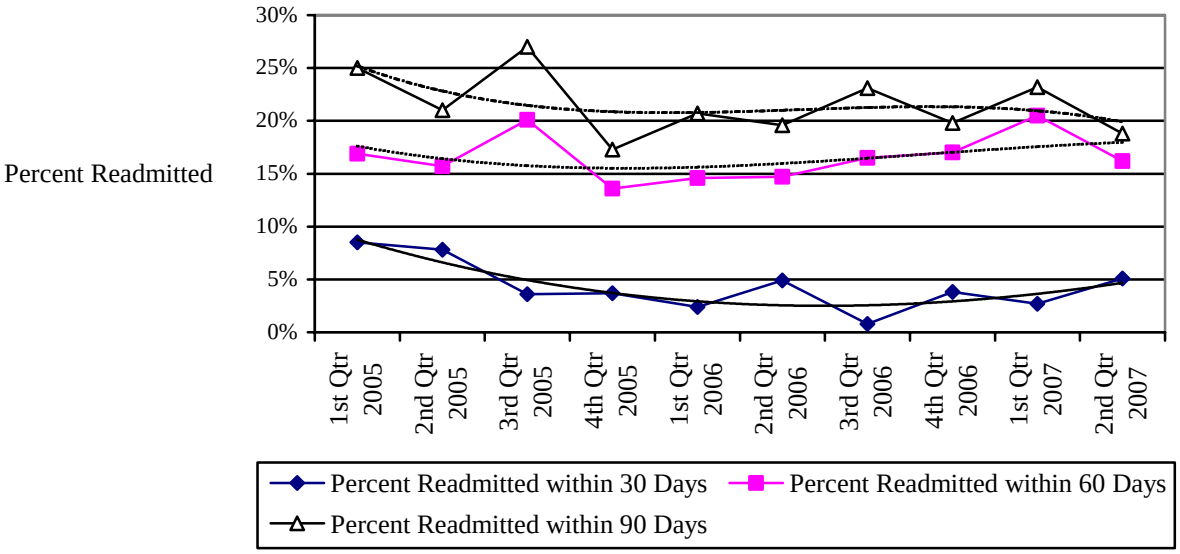
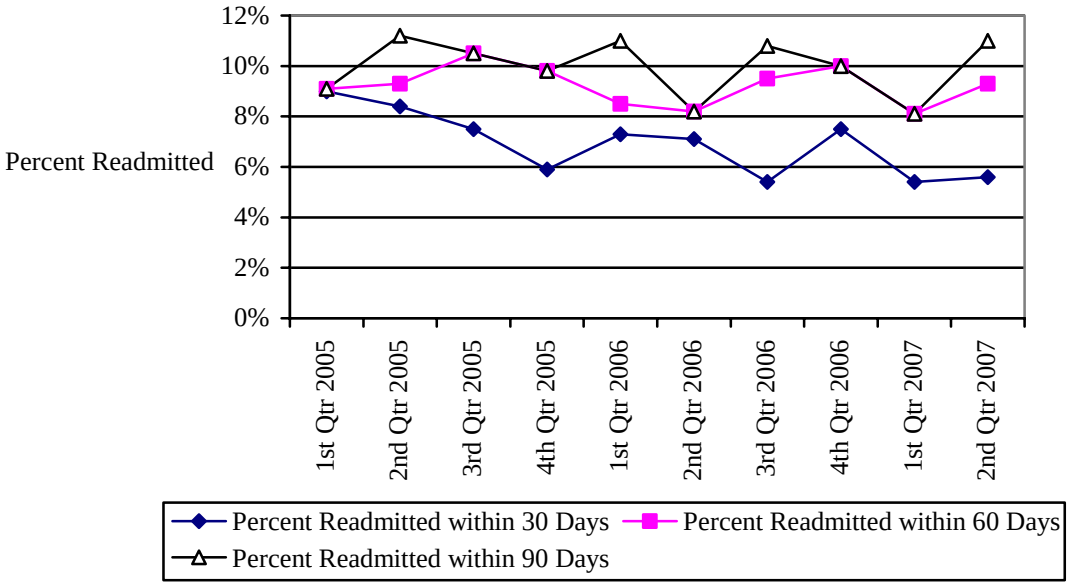


Figure 24: Percent Discharged from PRTS who were Readmitted to Same or Higher Level of Care within 30, 60 or 90 Days of Discharge, by quarter of Discharge (Note: Includes acute care hospitalizations occurring within episodes of PRTS).

Figure 24



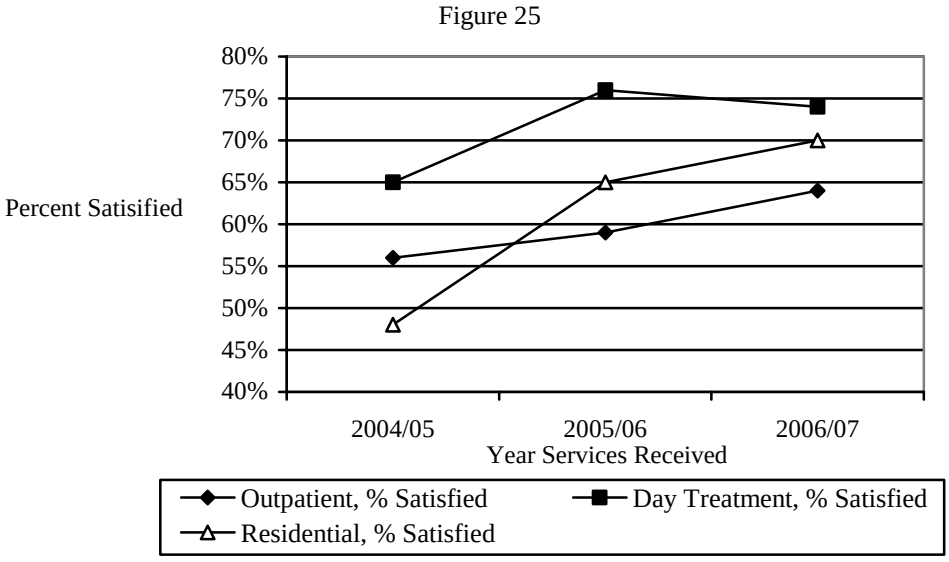
DRAFT
for discussion only

4. Trends in Satisfaction with Service Delivery

Data on Satisfaction with Care Coordination

(a) 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)). Trends in satisfaction with coordination among MH services by service type are in Figure 25.

Figure 25: Satisfaction with Coordination Among Mental Health Services

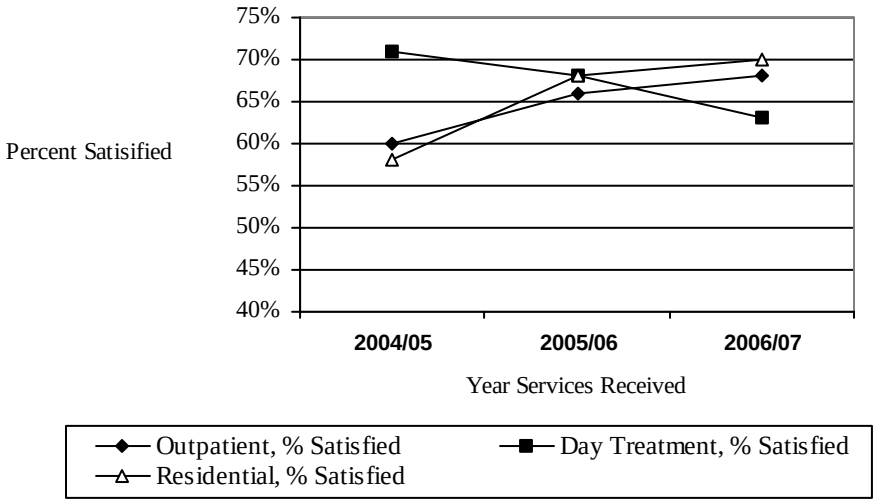


(b) Coordination of mental health services with Child Welfare services: In 2006/07, 58% of respondents said coordination with CW was applicable for their child. Overall, satisfaction with coordination of mental health and child welfare services increased each year over the past three years (from 61% (in 2004/05) to 67% (in 2005/06) to 68% (in 2006/07)). Trends in satisfaction by service type are in Figure 26.

DRAFT
for discussion only

Figure 26: Satisfaction with Coordination of Mental Health Services and Child Welfare Services

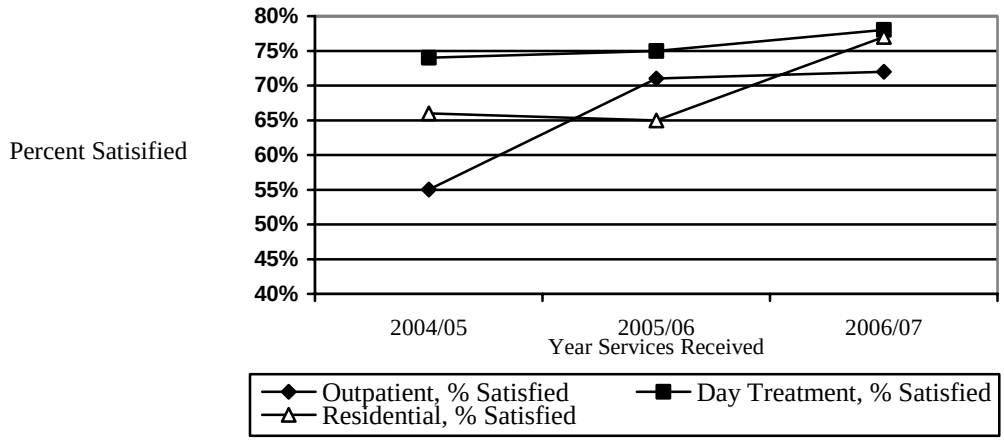
Figure 26



(c) 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)). Trends in satisfaction with coordination of mental health services and education services by service type are in Figure 27.

Figure 27: Satisfaction with Coordination of Mental Health Services and Educational Services

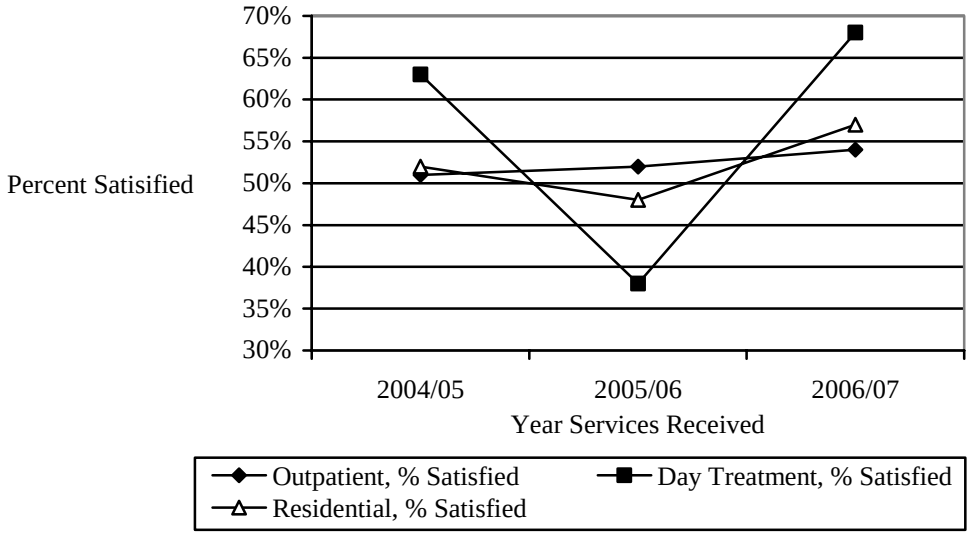
Figure 27



(d) Coordination of mental health services with Developmental Disabilities 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). Trends in satisfaction with coordination of mental health services and DD services by service type are portrayed in Figure 28.

Figure 28: Satisfaction with Coordination of Mental Health Services and Developmental Disability Services

Figure 28

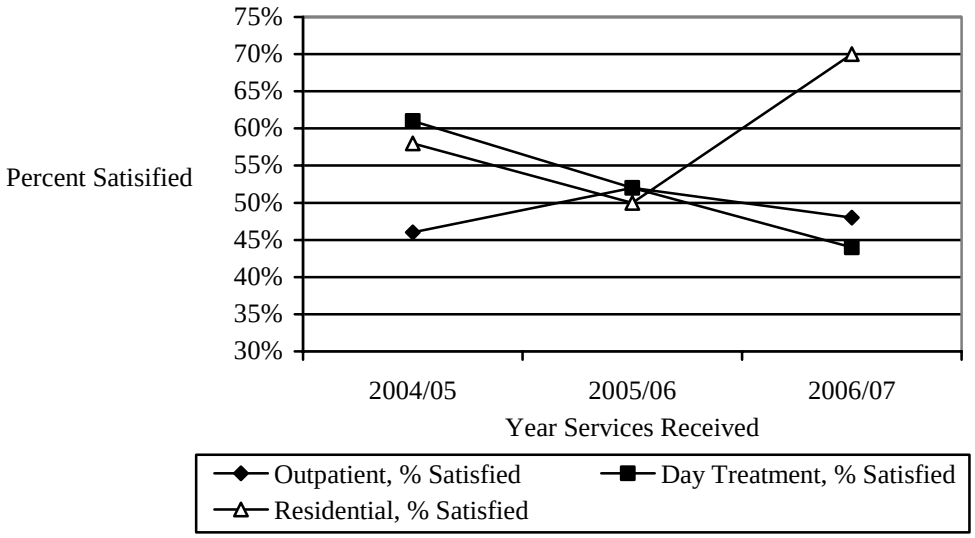


(e) Coordination of mental health services with Juvenile Justice services: In 2006/07, 26% of respondents said coordination with JJ was applicable for their child. Overall, satisfaction with coordination of mental health services and juvenile justice services dropped in 2006, though satisfaction remained higher than it was in 2004 (% satisfied was 48% in 2004, 52% in 2005, and 49% in 2006). Trends in satisfaction with coordination of mental health services and juvenile justice services by service type are portrayed in Figure 29.

DRAFT
for discussion only

Figure 29: Satisfaction with Coordination of Mental Health Services and Juvenile Justice Services

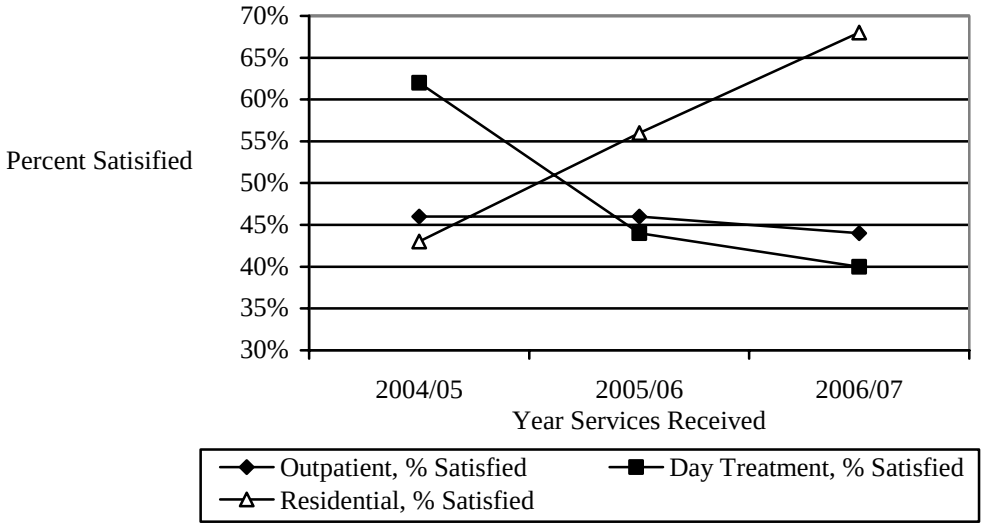
Figure 29



(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). Trends in satisfaction are portrayed in Figure 30.

Figure 30: Satisfaction with Coordination of Mental Health Services and OYA Services.

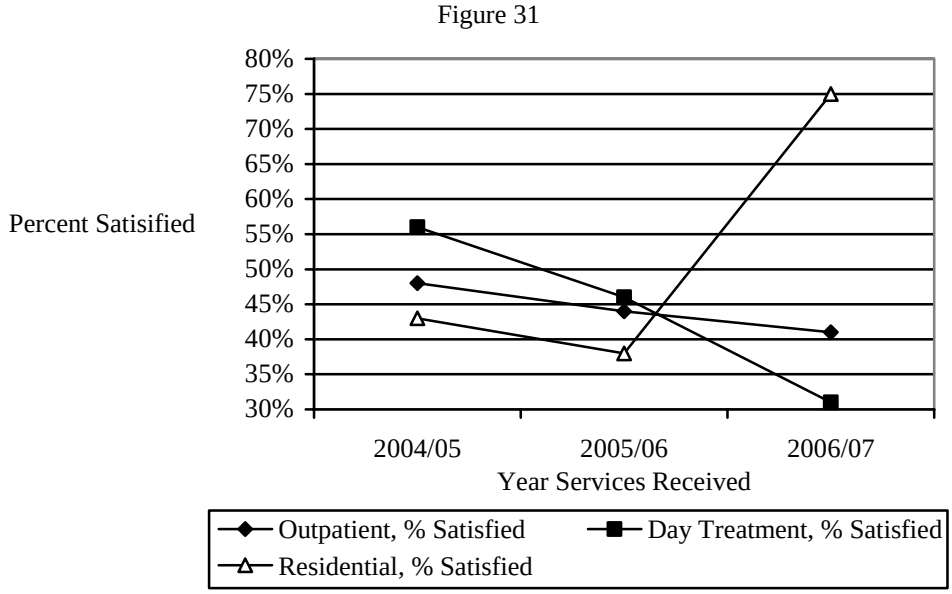
Figure 30



DRAFT
for discussion only

(g) Coordination of mental health services with Addiction Services: In 2006/07, 18% of respondents said coordination with AD services was applicable for their child. 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 31: Satisfaction with Coordination of Mental Health Services and Addiction Services

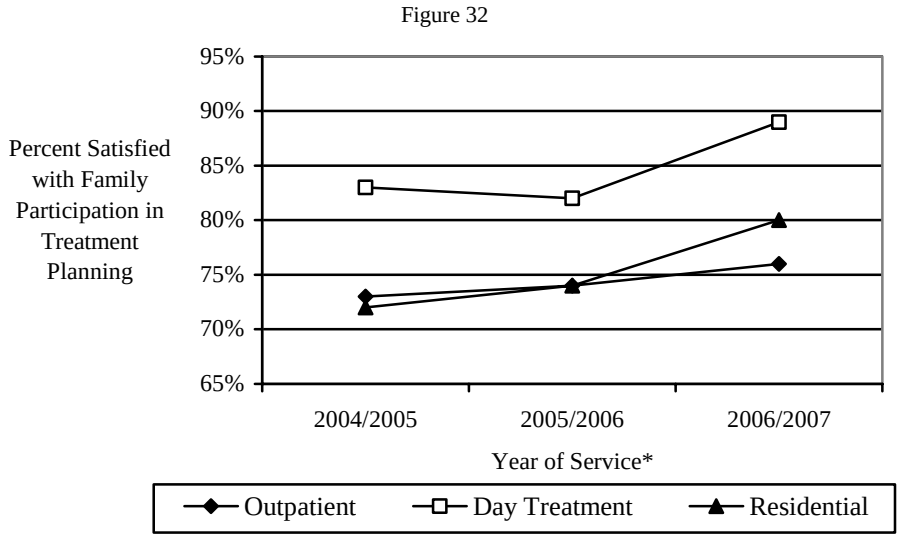


Data on Satisfaction with Family Treatment Participation

Ratings of satisfaction with Family Treatment Participation increased between 2004/2005 and 2006/2007 (Figure 32). 89% of parents/guardians of children selected on the basis of receiving day treatment were satisfied with family treatment participation in 2006/2007, compared with 83% in 2004/2005. Similarly, 80% of parents/guardians of children selected on the basis of receiving residential treatment were satisfied with family treatment participation in 2006/2007, compared with 72% in 2004/2005. Satisfaction with family treatment participation also increased among parents/guardians of children selected on the basis of receiving outpatient treatment, from 73% in 2004/2005 to 76% in 2006/2007.

DRAFT
for discussion only

Figure 32: Ratings of Family Treatment Participation, Per the Youth Services Survey for Families: by year of service.



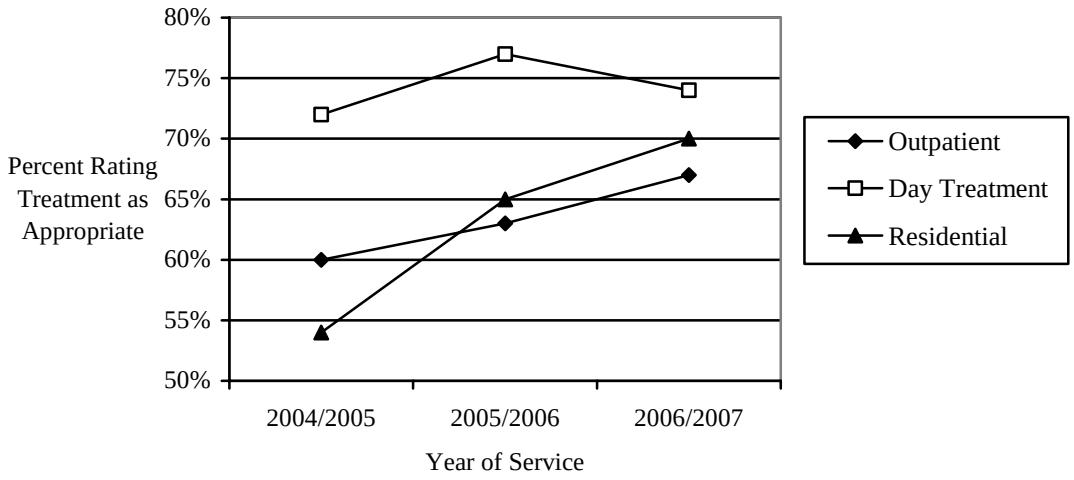
Data on Satisfaction with Treatment Appropriateness

Overall, ratings of satisfaction with Treatment Appropriateness increased between 2004/2005 and 2006/2007 (Figure 33). 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. 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. The most substantial increase in satisfaction with treatment appropriateness is seen within the parents/guardians of children selected on the basis of receiving residential care; while only 54% of these parents/guardians were satisfied in 2004/2005, 70% were satisfied in 2006/2007.

DRAFT
for discussion only

Figure 33: Ratings of Treatment Appropriateness, Per the Youth Services Survey for Families: by year of service

Figure 33



5. Trends in Treatment Outcomes

- **Perceived Outcomes.** Ratings of satisfaction with Treatment Outcome increased between 2004/2005 and 2006/2007 (Figure 34). 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 care and parents/guardians of children selected on the basis of receiving day treatment.

Figure 34: Ratings of Treatment Outcomes, Per the Youth Services Survey for Families: by year of service.

Figure 34