Ontario Association of
Residences Treating Youth

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Partners in Care – 2

Residential Care and Treatment

May 2005

OARTY Mission Statement:

The Ontario Association of Residences Treating Youth, through its member agencies, promotes the provision of high quality residential (group and foster) care and treatment for vulnerable children, youth, young adults and their families.

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Executive Summary

OARTY Objectives:

- To develop and coordinate resources to benefit children and youth in need who are physically or sexually abused, emotionally disturbed, developmentally challenged, autistic, medically fragile, young offenders, dually diagnosed, conduct disordered, psychological and psychiatric disorders, and other hard to serve children living in residential care.
- To provide support, encouragement and to facilitate the healthy development of these children and youth.
- To liaise and consult with other children's and youth's service providers to maximize efforts and initiatives.
- To create, maintain and share relevant communications among service providers, internal and external to the Association.

What does OARTY do?

- OARTY is a provincial network of children's residential services. We represent 94 member agencies and over 2700 residential beds for children across Ontario. We are licensed and regulated under the Child and Family Services Act and funded on a per diem basis.
- OARTY provides residential care and treatment for children and youth who are physically and sexually abused, emotionally disturbed, developmentally handicapped, autistic, medically fragile, young offenders, dual diagnosed, conduct disordered, psychiatric and psychological disordered, and other hard to serve children and youth. Our services include residential care, specialized foster care, treatment facilities, education and day treatment.
- OARTY agencies are committed to treatment. We ensure the health, safety and welfare of children and youth in our care

Approach of the Research Committee of OARTY

- To provide information to support Evidence Based Practices in the provision of foster and group residential treatment

- To provide measurement tools and promote practice guidelines relative to the core clinical objectives of OARTY residences for their children:

    - To form attachments and build resilience
    - To change the inner working model and to become self reflective
    - To achieve school bonding and be successful in academic arena

- To implement an outcome measurement system. Agencies using this system can measure changes over time in the following domains:

On Health and Safety:

- child's social adjustment
- child's behaviour problems esp. hyperactivity and attentiveness
- teenagers' psychiatric symptomatology
- school age child's emotional symptomatology
- autistic symptomatology
- level of care required for medically fragile and dually diagnosed children

On ability to cope:

- child's experience of stress
- parent's experience of stress
- adverse family history
- quality of attachment to most caring and consistent adult
- child's developmental functioning

Membership of the OARTY Research Committee

Dr. Larry Sanders, Research Committee Chair; Chairman/CEO, Bayfield Homes

Mr. David Schulz, Executive Director, Mutual Support Systems

Dr. Carol Stewart, Director and Associate Professor, School of Child and Youth Care, Ryerson University

Mr. Kent Perras, Director, Jack Pine Residential Treatment Programs

Robert J. Fulton, M.S.W., Research Consultant, PRO.FILES Social Research and Outcome Evaluation

Data Sources

The data for this report was drawn from 1,229 young people, based on:

- File review and structured survey instruments
- Behaviour observation using norm referenced standardized instruments
- Youth self report using norm referenced standardized instruments

The outcome data was based on behaviour observation scales and youth self reports on all children admitted to three designated agencies, offering the full spectrum of service: residential treatment, staffed group homes, family led group homes and foster homes.

In addition, financial, staffing, salaries and benefits, service volume and program data was collected from member agencies using a structured survey instrument. Since the research database is fully relational, the program data can be linked to the child data in order to study the relationship between the characteristics of the children and the level of care and funding.

FINDING #1 SIGNIFICANT CHANGES COMPARED TO 1991

(1) In 1991-92, only 47% of the children in OARTY placements were crown wards compared to 63% in 2003-04. The percentage of society wards is unchanged. The increase in crown wardship is balanced by the loss of children in care by agreement with the parents.

(2) The children being admitted to OARTY agencies are younger by 1.3 years; in 1991, the average age of admission to OARTY residences was 13.0 years compared to 11.6 years currently.

(3) The percentage of children requiring hospitalization on medical (non-psychiatric grounds) has more than doubled from 3% to 8%.

FINDING #2 PARENTS OF CHILDREN IN CARE HAVE PROFOUND DISABILITIES

(1) 51% of parents have experienced years of deprivation and hardship; within society no more than 13% of families in Ontario would experience comparable levels of hardship. This represents a significant increase in hardship since 1991-92, when only 34% of children had this indicator in their history.

(2) 27% of parents have been incarcerated. The Canadian rate of incarceration is one tenth of 1 percent of the adult population. The accumulated rate of incarceration over the average 11 years before the child was admitted, is 1%. This means that incarceration is 27 times higher for the children in OARTY resources. Equally important, the incarceration of family members has almost doubled since 1991-92 when this indicator was reported in 16% of children placed.

(3) 54% of parents have a substance abuse disorder compared to 15% of the adult population. Parental substance abuse has more than doubled since 1991-92 when this was reported in only 22% of the parents.

(4) 20% of the parents are diagnosed as mentally retarded compared to 2% of the adult population; cognitive impairments in the parents of adult clients are higher.

(5) 24% of the mothers started their parenting in their teens compared to 6% of the general population.

Ninety-seven percent (97%) of the children placed in OARTY are in the care of a Children's Aid Society. OARTY has found that there is a significant increase in the amount of anti-social conduct disorder and disabilities in the parents of children placed. This pattern reflects a larger problem experienced by the entire Child Welfare system. The social and mental health of the parents being served by the CAS has become much worse during the past decade as evidenced by unambiguous facts on the record.

FINDING #3 EARLY SCHOOL PROBLEMS

The children placed in OARTY residences have a significant history of early learning problems (61%) dating back to elementary grades. The proportion of children with significant early learning problems has increased dramatically over the decade when the ratio was 39%. As will be shown later in this report, early school problems in children are highly correlated with parental anti-social behaviour and disability.

FINDING #4 CHILDREN ARE SIGNIFICANTLY MORE IMPAIRED TODAY COMPARED TO 1991-92

The proportion of children who are multiply handicapped (DH plus other behavioural or medical conditions) has more than doubled since 1991-92: from 18% to 45% of all children placed. The increase is found among children diagnosed with autism, fetal alcohol spectrum disorder and dually diagnosed children.

Paradoxically, the proportion of children with no disability has also more than doubled from 8% to 18%. This reflects the increasing function of emergency admissions that the OARTY agencies carry for their CAS partners. This is happening because the number of children coming into CAS care has increased dramatically, outstripping the internal resources of the Children's Aid Society. The dramatic increase in admissions to CAS care may reflect new legislation and standards. However, finding #2 suggests another explanation: that parents under CAS supervision are significantly more dangerous and disturbed than they were ten years ago.

The pattern of parental anti-social conduct and disability may explain the significant increase in children with developmental disability and other co-morbid conditions. Child development is profoundly affected by parental behaviour and disability.

During the past five years OARTY agencies have developed a system of outcome measurement based on standardized and norm referenced instruments in use around the world. The system is based on "multi-gate" screening, assessed on two primary domains:

- health and safety of the child
- the child's ability to cope

Several agencies have been using a combination of these tests since 2001 for all children admitted. OARTY has a database of 235 children with both a time one and time two results separated by an average of 300 days.

FINDING #5 CHILDREN ARE MAKING SIGNIFICANT IMPROVEMENT ON ALL OUTCOME MEASURES

Children (n = 90) whose total score on the CGI-P (a measure of hyperactivity and attention) was worse than 1 in a 1,000 children (t-score = 80.71), improved in nine months to just above the clinical range (t-score = 74.86) or worse than 1 in 100 children. This is a statistically significant improvement highly unlikely to be caused by chance (t-score of difference in means = 4.040, significance = .000).

The children in the care of OARTY agencies (n= 180) had an average score on the CGAS (a measure of social adjustment) at time one (44.57) that is reflective of the following description:

> *Moderate degree of interference in functioning in most social areas or severe impairment in functioning in one area*, such as might result from, for example suicidal preoccupations and ruminations, school refusal and other forms of anxiety, obsessive rituals, major conversion symptoms, frequent anxiety attacks, poor or inappropriate social skills, frequent episodes of aggressive or other antisocial behaviour with some preservation of meaningful social relationships

This score improved to 51.42 reflecting the beginning of a much higher level of functioning, as reflected in this description.

> *Variable functioning with sporadic difficulties or symptoms in several but not all social areas*; disturbances would be apparent to those who encounter the child in a dysfunctional setting or time but not to those who see the child in other settings

This improvement is statistically significant (t-score = 7.607, significance = .000) indicating that there is no chance that this result could be due to random effects or measurement error.

There were 26 children with test results on a measure of psychiatric symptomatology (SA-45), where the teenager scored in the clinical range at time one (t-score = 72.77). A score such as this is reflective a teenager who is seen on in-patient wards of psychiatric hospitals. Within nine months, the average score on the SA-45 dropped to 61.00 at the upper end of the normal range. The t-score of the difference in means for this change is 3.342, with a significance of .003. This means that the probability that a change of this magnitude was due to measurement error or random chance is 3/10 of 1%.

There were 24 children with test results on the FAB-C, a measure of emotional symptomatology for school age children, where the child scored in the borderline clinical range at time one (t-score = 69.13). This result describes a child who is full of worries, has terrible self esteem problems, peer relationship problems and anti-social attitudes and behaviour. Within nine months, the average score dropped to 59.58, clearly in the average range and showing a substantial improvement in the child "self declared" feelings and attitudes. The t-score of the difference in means for this change is 5.444 with a significance of .000. The probability that a change of this magnitude was due to measurement error or random chance is zero.

We measured the degree of stress that the child was experiencing (OSC). On admission, these children self identified an average 7 discrete stressors indicating that they feel overwhelmed by their social context. Within nine months, the list of stressors has been reduced to 5.92. The t-score of the difference in means for this change is 2.964 with a significance of .004. This means that the probability that a change of this magnitude was due to measurement error or random chance is 4/10 of 1%.

Finally, we measured attachment using the PBI, an instrument in wide use around the world.

> "The strong connection between parental bonding and psychopathology found in the present study provides support for Bowlby's attachment theory. Adolescents who reported high care and low control (optimal bonding) reported less psychiatric symptoms and distress. They had a positive feeling of well being and felt supported by family and friends. On the opposite end, the combination of low care and high control (affectionless control) gave rise to psychological symptomatology and a lesser-feeling of well being. These individuals also experience less support from their surroundings" (Canatti, 1997).

The PBI has been used by OARTY agencies for mothers or fathers, based on the child's perception of "who do you feel closest to". The most common target is mothers. A group of 24 teenagers produced a score in reference to their mothers at time one that reflects Canatti's profile of psychopathology, which she described as *affectionless control*. The caring score at time one was 24.6, which reflects the child's perception that his mother was not affectionate.

The over-controlling scale at time one was 22.9, which reflects a perception that his/her mother was domineering and controlling. This combination of low care and high control is predictive of serious adverse consequences for the teenager by the time he or she is a young adult.

At time two, the caring scale has not changed with the teenager continuing to view his/her mother as affectionless (caring scale = 24.6). However, there was significant improvement in the over-controlling scale, which dropped from 22.9 to 15.5. After nine months of treatment, the teenagers perceive their parents' disciplinary practices and family rules as *more reasonable*. This change in the teenagers' attitudes about the need for parental control is a critical step in helping them to form a secure bond with their current caregivers.

The t-score of the difference in means for this change is 4.957 with a significance of .000. This means that the probability that a change of this magnitude was due to measurement error or random chance is zero.

In conclusion, OARTY has demonstrated treatment effectiveness across a broad array of concerns that are very significant for the well being of these children. The improvements are pervasive and statistically significant. The tests themselves are widely used standardized instruments with proven validity and reliability. On every test, the children placed in OARTY are showing marked improvement.

Many of the programs in OARTY serve adults who entered the service as children. The proportion of adults in OARTY beds is 16%.

The vast majority of the adults in care (80%) are located in programs specializing in multiply handicapped individuals; autistic, dually diagnosed, brain damaged, physically disabled and medically fragile. A small number (20%) are distributed across several programs serving psychiatrically ill children and youth with severe behavioural problems.

FINDING #6 COST OF CARE IS SIGNIFICANTLY HIGHER FOR ADULTS

The average per diem for the adult clients is $208.66 in contrast with $187.48 for youth under 18 years. The range of per diems for adults is also more compact compared to youth; the cost of care for adults has a higher minimum and a lower maximum. The standard deviation for the average per diem of adults is $43.51 compared to $55.71. The difference in per diem was measured using Analysis of Variance, producing an F-ratio of 4.5, sig = .035.

FINDING #7 SIGNIFICANTLY HIGH STAFFING RATIOS REQUIRED FOR THE ADULT CLIENTS

The average minimum and maximum wages is almost identical for the adults and children. However, the adults require much higher staffing ratios in the afternoon and evening shifts. Much of this extra staffing is required to run day treatment programs for adults. This is an important factor driving the higher unit cost of wages in programs serving the adult clients.

FINDING #8 ADULT CLIENTS HAVE GREATER SPECIAL NEEDS

The clinical factors which are significantly different between the adult clients and the youth are:

(1) *The Children's Global Assessment Scale* (F-ratio = 16.0, sig = .000). The adults scored on average 35.8 compared to 53.0 for youth. The difference is that adults are much more dangerous or completely unable to function; while the children display problems that make them visibly disturbed to observers, but still retain some capacity to participate in society.

(2) *Earliest age when special needs were recognized* (F-ratio = 6.5, sig = .012), The adults were first identified by the child welfare system as having special needs at age 3.0 years, compared to the youth who were identified at 3.4 years. All adults in OARTY were placed as children and were the least functional individuals as children which is reflected in their earlier age of problem identification.

(3) *Number of co-morbid medical/psychiatric diagnoses* (F-ratio = 12.1, sig = .001) Adults have 4.1 diagnoses compared to 2.3 for youth. A single diagnosis is easier to treat with best practice; the greatest challenge is not "what" the diagnosis is but how many co-exist.

FINDING #9 MOST ADULT CLIENTS IN CARE FOR THEIR SPECIAL NEEDS EXCLUSIVELY

The profile of the adult clients suggests that 2/3^{rds} of the adults are in care for their special needs exclusively. This group represents 10% of all clients in the OARTY network.

In summary, there is a large group of adult clients in the care of OARTY agencies, funded by agencies such as COTA and the Ministry directly. These adults are characterized by very low functioning levels, significant medical and psychiatric conditions. They require more staffing, especially day programs, and are associated with higher per diem costs compared to children.

FINDING #10 DISABILITY: THE DOMINANT CLINICAL PROFILE OF YOUTH IN CARE

Nearly one half (48%) of the youth under 18 years served by OARTY agencies are diagnosed as developmentally handicapped. The vast majority of these DH children are in fact multiply handicapped with other co-morbid conditions, including:

(1) DH plus severe behaviour problems (33%)
(2) Fetal Alcohol Effects (10%)
(3) DH plus medically fragile (7%)
(4) Autism (7%)

FINDING #11 ABUSED CHILDREN SHOW SIGNIFICANT CLINICAL EFFECTS

Abused children have significantly more sexualized behaviour, more social risk factors, more diagnostic co morbidity, more behavioural crises in the residence, more hyperactivity, more frequently diagnosed with an Axis DSM-IV disorder, parents with severe, multiple anti-social conduct and parents who are in great distress or disability themselves.

FINDING #12 24% OF CHILDREN PLACED ARE SPECIAL NEEDS CHILDREN

One quarter of children placed in OARTY agencies (24%) are children who are physically disabled, medically fragile, sensory impaired, autistic, brain damaged and terminally ill. Most of these children (59%) have no history of abuse and significantly fewer indicators of other parental abnormalities.

FINDING #13 15% OF CHILDREN HAVE SPECIAL CARE NEEDS NOT REQUIRING CHILD PROTECTION

If CAS guardianship was not necessary for families to access funding for their special needs children, as many as 15% of the children in OARTY care would be funded outside the Child Welfare system. The Child Welfare system spends approximately $80,845 per day on these special needs children or approximately $29,500,000 per annum.

FINDING #14 VERY DISTURBED AND DANGEROUS PARENTS AFFECT CHILD DEVELOPMENT

Approximately 50% of the children have parents who display multiple indicators of antisocial conduct and disability. These dangerous, disturbed or disabled parents produce children who have severe early learning problems, hyperactivity, sexualized behaviour, younger age of admission and longer stays in care.

FINDING #15 HIGHLY SEXUALIZED CHILDREN ARE VERY DIFFERENT FROM CONDUCT DISORDER

There are a substantial number of children placed in OARTY (19%) whose sexualized behaviour on a standardized norm referenced instrument is 20 times greater than typical children. This type of behaviour is very difficult and risky for families. The clinical profile of these children is very different compared with anti-social conduct disorders. These highly sexualized children are much more closely associated with serious developmental disorders and children who have been sexually abused.

FINDING #16 15% OF CHILDREN ARE PLACED PRIMARILY FOR EMOTIONAL DISTURBANCE

Almost one half of the children (48%) have either a formal Axis 1, DSM-IV diagnosis or psychiatric symptomatology. A sub-set of these children with psychiatric diagnoses or symptomatology do not display a single indicator of parental anti-social conduct, suggesting that these children are in care primarily for their special needs as emotionally disturbed children, rather than children recovering from the consequences of living with dangerous or disturbed parents. The cost to Children's Aid Societies of this special needs group is approximately $29,500,000 per annum.

FINDING #17 CHILDREN WITH NO DISABILITY APPEAR NORMAL ON TESTING

At least 18% of children placed have no disability whatsoever. Results on the standardized measures confirm the absence of disability. The costs of care for these children are significantly lower. However, this finding begs the question: why are they in care?

Children with no disability have:

(a) Anti-social parents (77%): these children have at least one indicator of antisocial parents. In the case of sexual abuse, the child is even more likely to have no disability whatsoever, (chi square = 3.6, sig = .042). This finding has also been reported by Kendall-Tackett, K., Williams, L. & Finkelhor, D. (1993).

(b) Parents with psychiatric disorder or other indicators of severe personal needs (66%) such as intense poverty and hardship or teen moms.

FINDING #18 CHILDREN WITH NO DISABILITY ARE IN CARE FOR PROTECTION REASONS

Several members of OARTY provide emergency placement services to Children's Aid Societies for short term, emergency admissions and assessment.

There are 26 corporate members of OARTY who have a license to operate foster care. Collectively, these agencies offer 1,244 foster care beds or 46% of the total OARTY bed capacity. The average cost of foster care throughout the OARTY network including agencies who did not respond to the PIC 2 survey is $96.34. The occupancy rate in private foster care is 76%. However, the "stated capacity" in foster care is theoretical; no-one really knows if the supply of vacant approved foster homes will actually accept a placement until the day arrives.

FINDING #19 AN 11.7% PROFIT MARGIN IN PRIVATE FOSTER CARE

Financial data was collected on 7 agencies. The difference between their total income from the per diem and special needs agreement (unit cost of $124.90) total expenditures (unit cost of $110.28) yields a profit margin of 11.7%.

FINDING #20 CHILDREN REMAIN LESS THAN 9 MONTHS IN FOSTER CARE

There is a rapid flow through of admissions and discharges within foster care. The average length of stay for children who were discharged in this year was 9.4 months. The clinical profile of the children in private foster care is split between two groups of children:

(1) Children in care for short term emergency admission or assessment who have at least one indicator of parental anti social behaviour (usually abuse) or at least one indicator of parental distress (usually poverty or teen mom). These children are more likely to have no disability or diagnosis.

(2) Children with significant clinical needs are not unlike the children in staff operated group homes. Children in group care are marked by higher average scores on standardized measures of pathology.

There are sixty one (61) OARTY member agencies with at least one licensed group home. Collectively, these agencies operate 205 licensed group homes with 1,465 beds or 54% of the total OARTY bed capacity. The system-wide average per diem for these group homes is $182.01.

FINDING #21 SHELTER UNIT COST

The average shelter costs are $16.53 with little or no variation by age group or clinical profile. We also know that $6.90 of shelter costs is attributable to taxes, utilities, repairs and furniture. This means that the equivalent value of "pure rent" is $9.63 per day or $290 per month per child. For a typical 7 bed group, the equivalent value of "pure rent" would be $2,023 per month.

The equivalent value of "pure rent" for a child per month ($290) is about one half of the increment paid to mothers on ODSP for one additional child.

FINDING #22 A SIGNIFICANT RELATIONSHIP BETWEEN CLINICAL NEEDS AND COSTS

Statistical tests have shown that the cost of care is significantly related to the child's social adjustment as measured by the CGAS. It must be pointed out, however, that the CGAS was completed at the time of the PIC2 survey and not at the point of admission. As noted in section 4.0, OARTY agencies produce significant improvement in this measure and other measures during treatment. When a high cost treatment centre makes significant improvements to the child clinically, he becomes less disturbed than he was at the point of admission. Over time, the strong relationship between needs and cost at intake will become less observable.

FINDING #23 OPERATING A LICENSED GROUP HOME IS MARGINAL AND RISKY

Financial data on 81 licensed group homes was collected. The difference between their total income from the per diem, pay equity and special needs agreements (unit cost of $216.15) and total expenditures (unit cost of $206.59) yields a profit margin of 4.4%.

The group home operators who responded to this survey generally had a higher approved per diem than those agencies who did not respond to the survey which may mean that system profit margins are even lower. Many individual sites among those who responded are operating at a deficit. Clearly, the business of running group homes is marginal and risky. This has an impact on the salaries and benefits paid to direct care staff.

The average minimum hourly wage is $13.21 or $27,474 per annum. The average maximum rate at the top of the scale is $15.45 or $32,143 per annum. The hourly rates drop to a low of $10.00 per hour and a top rate of $23.08 per hour.

FINDING #24 WAGES FOR CHILD AND YOUTH WORKERS AMONG THE LOWEST IN ONTARIO

These rates are the lowest wage rates in the Child Welfare system for direct care child and youth workers by at least three dollars per hour for minimum and maximum averages by sector.

Fourteen percent (14%) of group homes do not pay any benefits to staff beyond those prescribed by Ontario Employment Standards Act (CPP, Workman's Comp and EI). The average cost of benefits as a ratio of total staffing is 14%.

FINDING #25 AGENCIES PROVIDE EXTENSIVE CLINICAL SUPPORT THROUGH THE CORE PER DIEM

Table of Clinical Support provided either by employment or by contract

Clinical Support	**Foster Care**	**Group Care**
Psychiatrist	44%	29%
Psychologist	78%	43%
Social Worker	44%	18%
Speech Therapist	11%	58%
Play Therapist	56%	21%

Twenty nine percent (28.6%) of children were restrained during the study year (2003-04). About half of the children are restrained once or twice per year. Seventeen percent (17%) of all children placed are restrained at the rate of once per month or higher in a few cases. The number of restraints is highly correlated with psychotropic medication, hyperactivity and attention, social adjustment and having a learning disability.

The number of restraints is not related to most clinical variables including diagnosis, number and type of social risk factors, co morbidity, degree of sexual acting out, staffing model, foster or group care, being developmentally delayed or multiply handicapped.

FINDING #26 CLEAR EVIDENCE THAT RESTRAINT PRACTICES COMPLY WITH POLICY FRAMEWORK

Children can only be restrained if they are actively at risk of harming themselves or others. Restraint is not a clinical procedure applied to children who are most "disturbed" but rather it is an emergency measure applied to children who cannot cope with everyday demands of living without resorting to dangerous behaviour.

Current restraints are not related to the long list of variables above, including diagnostic conditions; this means that staff are not restraining children because they are disturbed, handicapped or come from a severe adverse family background. The data also implies that systemic factors do not drive restraint: i.e. being in a high cost resource, a family operated home or a staff operated home, a foster care resource or a group home.

The number of restraints are related to the CGI-P, the CGAS and the degree of social support necessary to navigate demands of daily living. The CGAS contains the element of dangerousness in its definitions; it is a direct measure of the concept in the policy framework. The policy framework requires treatment staff to use restraint exclusively to protect children from behaviour that is self injurious or dangerous to others. The CGAS applies a lower score to children who exhibit unpredictable self injurious and violent behaviour.

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1.0 Response Rate:

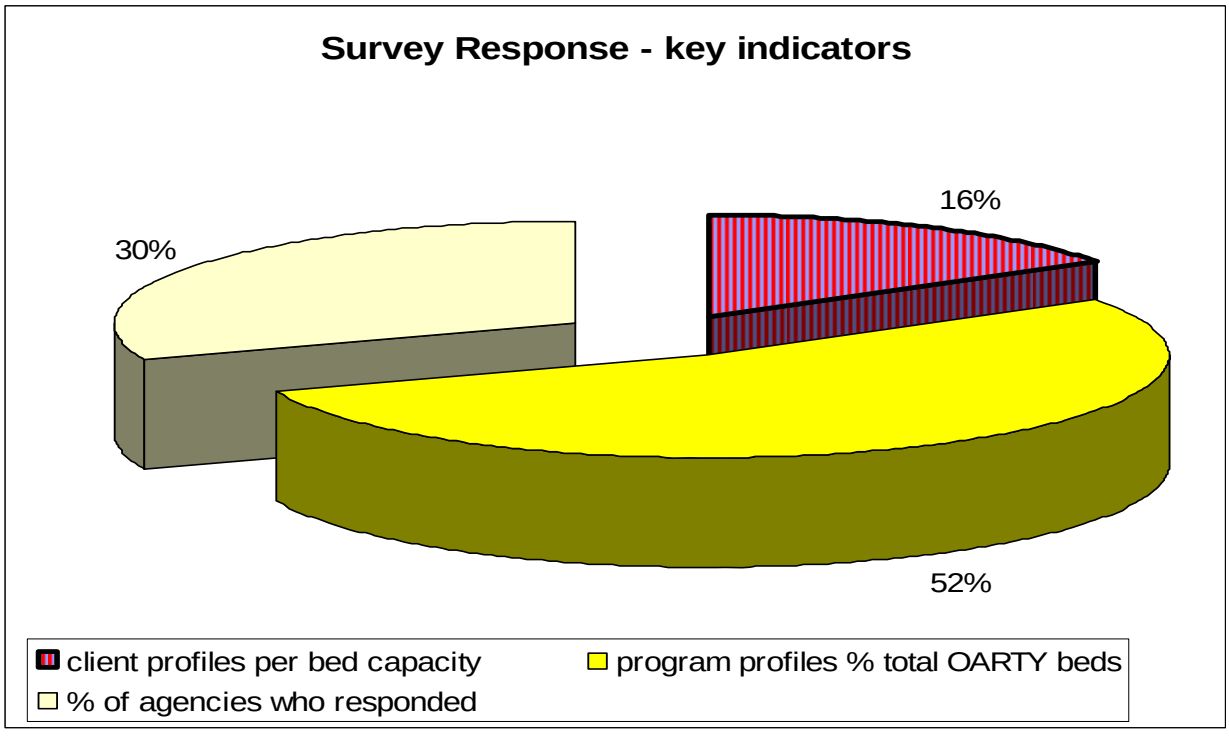
(1) The PIC2 surveys were sent to 94 corporate members of OARTY. 30% of the members responded to the survey.

(2) The 30% who responded to the survey operate 52% (1,413 beds) of the total OARTY count of 2,709 beds.

(3) We have sampled randomly 219 children and adults from the 1,413 beds operated by the agencies surveyed or 16% of the beds from the agencies who responded.

(4) We have good coverage of special areas of interest for the survey, specifically:

(a) 35% - licensed foster care agencies and 47% of all foster care beds
(b) 47% - agencies serving cognitively impaired children
(c) 44% - agencies serving medically fragile clients
(d) 50% - agencies serving terminally ill clients



1.1 Previous Surveys

OARTY conducted two previous random surveys:

(1) Partners in Care 1: 1991

In 1991 OARTY collected similar data to the 2005 survey on 154 children.

(2) Social Risk Factors Survey: 2002

In 2002 OARTY collected data on the social risk factors, using the same instrument as in the PIC2: 2005 survey. Data on 18 serious risk factors were collected on 621 children.

1.2 Outcome Data

OARTY has collected outcome data using standardized norm referenced instruments, specifically:

(1) the Conners' Global Index … behaviour observation
(2) the Children's Global Assessment Scale … file review and behaviour observation
(3) the SA-45 (measures psychiatric symptomatology … teen self report)
(4) the FAB-C (measures feeling, attitudes, behaviour … pre-teen self report)
(5) objective stressors checklist (measures current stressors … child self report)

OARTY has time 1 and time 2 data for 235 children. This data has been collected at nine month intervals since 2001.

1.3 Summary of Data Sources

The data for this report was drawn from 1,229 young people, based on:

File review and structured survey instruments
Behaviour observation using norm referenced standardized instruments
Youth self report using norm referenced standardized instruments

The outcome data was based on behaviour observation scales and youth self reports on all children admitted to three designated agencies, offering the full spectrum of service: staffed group homes, family led group homes and foster homes.

In addition, financial, staffing, salaries and benefits, service volume and program data was collected from member agencies using a structured survey instrument. Since the research database is fully relational, the program data is able to be linked to the child data to study the relationship between the characteristics of the children and the level of care and funding.

2.0 Content and Structure of Report

The Partners in Care survey contains data for the fiscal year 2003-04 covering the following areas of interest:

2.1 Description of the Clients

Data was collected on 219 clients from two sources: file review and behaviour observation by caregivers using standardized measures. The non-identifying clinical profile was linked to the programs in which the client was placed so that the clinical characteristics could be studied in relation to cost and services. The *file review* covered the following areas:

(1) basic demographics: age, gender, legal status, referral source, dates of admission and discharge, history of prior placements

(2) emergency services provided to client since admission with count of events in 2003-04, including: police involvement, medical care, restraints and quiet rooms

(3) school information, including specific educational programs, current academic performance, attendance in IPRC and use of IEP

(4) experience and readiness for the job market

(5) social risk factors or adversity in the background: a checklist of 18 factors

(6) medical and psychiatric diagnostic conditions: including a checklist of 13 major diagnostic groupings and details on specifics, drawn from medical reports on file

(7) minority group status and ethnicity using the Statistics Canada coding

(8) social support and treatment interventions actually provided to the client during the year: including extra school support, cultural programs, in-residence treatment interventions, multi-disciplinary professional services such as Psychological testing and psychotropic medications and special medical support such as suctioning, G-tube feeding, etc.

The areas of interest can be compared to the results with the survey in 1991. In addition, the data on the social risk factors was collected for three years: 1991, 2002 and 2004. Data from four standardized behaviour observation measures was collected in 2004.

(a) Children's Global Assessment Scale (CGAS)

The CGAS was developed by a team of psychiatrists at Columbia University, New York. (Shaffer et al, 1983). The CGAS was developed by revising Axis 5 from the DSM-IV (Global Assessment of Functioning) so that it is suitable for children. It has since been used as a gating instrument in tertiary level services and found to be a reliable and valid indicator of the intensity of service needs. (Guzder et al, 1996; Newman et al, 1987) The CGAS shares the psychometric properties of the DSM-IV axis 5, which has been in existence since 1962 and has been subject to thousands of research studies, including

extensive use by Michael Rutter, who found that this scale was predictive of life span adverse outcomes (Rutter, 1995).

(b) Conners' Global Index (CGI-P)

The CGI is a behaviour observation scale completed by the parent or teacher. The CGI measures impulsivity, inattention and emotional lability. These behaviours predict which children and teenagers will exhibit serious conduct problems in early adulthood and are much better predictors than aggression. (Rutter & Sandberg, 1985).

(c) Mayo Clinic Sexual Behaviours Scale

The Mayo Clinic – sexual behaviours scale was developed by Friedrick, et al (1998) in order study the relationship between childhood sexual abuse and acting out sexual behaviours. The scale is designed to measure normal sexual behaviour at various age groups and three separate clinical populations indicative of special needs.

(d) Level of Care for Social Functioning

Based on instruments in extensive use in Children's Treatment (including the RAD-L by Doug Salmon, Ph.D., C. Psych.), the level of care measures the degree of staff support required for the child to function in areas such as verbalizing his needs, self care, attending activities in the community, etc.

(e) Special Medical Care

This is a checklist of special medical procedures required by the child to survive: including neurological support (CP, seizures, microencephaly, acquired brain injury, etc.), G-tube feeding, care for deaf and blind children and respiratory supports.

(f) Para and Quadriplegia scale

The scale is below:

PHYSICAL FUNCTIONING	SPECIFICATION	SCORE
Positioning the body	Positioning head, sitting, standing, lying down	
Mobility	Rolling head, getting from place to place	
Manipulation	Reaching, pushing, pulling, retrieving	
Oral motor functions	Swallowing, Drinking, Eating	
Communicating Needs	Talking with or without aids	
Total support score for physical functioning = sum of individual scores		

The coding sheet is not reproduced here but scores the child based on a scale from *independent functioning* to *child requires total care*.

2.2 Description of the Programs

The program survey collected details on foster care program and group homes by site. Some agencies responses indicated that they offer as many as ten separate programs. Data was collected on 102 group care programs, with 824 beds, and 9 foster care programs, with 592 beds. The information collected on these 111 discrete programs include:

(1) basic facts: licensing, corporate structure, flow through statistics, budgeted staffing levels for morning, afternoon and evening shifts

(2) restraints: statistics, training model and impact on agencies

(3) admission criteria

(4) financial data: approved per diems, income and expenditures by sub-lines, benefits, benchmark salary scales

(5) multi-disciplinary supports and whether the funding for these supports are internal or anchored in a community service

(6) referral sources

2.3 Structure of the Report

The report is divided into three sections: client profiles, clinical outcomes and program descriptions. The client profiles are organized by the major client groups served by OARTY. These client groups were discovered from the database by means of factor analysis. These groups include:

(1) low functioning children with serious developmental and organic brain disorders;

(2) low functioning adults who have remained in the resource past age 18;

(3) children whose parents are very disturbed and/or anti-social;

(4) youth with significant sexual acting out behaviour; and

(5) psychiatrically ill or emotionally disturbed youth.

There are at least 100 different variables in the database that distinguish the children and adults being served. The factor analytic methods identified the groups above as sharing a significant number of commonalities. The aforementioned groups represent 80% of the children placed. In addition, there are some groups of children who have a single unique profile that are not adequately captured under the groups listed above.

The section on clinical outcomes examines the results of the first nine months of intervention based on standardized instruments.

The program section will discuss:

(1) foster and group care;
(2) the cost of care;
(3) salary and benefits of benchmark positions;
(4) clinical support services; and
(5) restraints: patterns and lessons learned.

3.0 Client Profiles

3.1 Overview

- 68.5% males
- 63% crown wards (plus 16% society wards or others before the court)
- Average age of admission = 11.6 years (standard dev = 4.0)
- Average age when first identified by CAS = 4.1 years (SD = 3.4)
- 36% of youth were restrained since admission
- 7% required hospitalization on psychiatric grounds
- 8% required hospitalization on other medical grounds
- Average Conners' Global Index = 74.5 (SD = 15.0)
- Average CGAS = 50.3 (SD = 23.2)

The average CGI-P of 74.5 describes a population that is more hyperactive, impulsive and emotionally labile than 99% of the Canadian population. These behaviours make it extremely difficult for these children to benefit from learning experiences in school, community and home, from teachers and treatment staff. The profile of the clients of OARTY according to the Children's Global Assessment Scale is in the centre of the following table:

60-51	*Variable functioning with sporadic difficulties or symptoms in several but not all social areas*; disturbances would be apparent to those who encounter the child in a dysfunctional setting or time but not to those who see the child in other settings
50-41	*Moderate degree of interference in functioning in most social areas or severe impairment in functioning in one area*, such as might result from, for example suicidal preoccupations and ruminations, school refusal and other forms of anxiety, obsessive rituals, major conversion symptoms, frequent anxiety attacks, poor or inappropriate social skills, frequent episodes of aggressive or other antisocial behaviour with some preservation of meaningful social relationships
40-31	*Major impairment in functioning in several areas or unable to function in one of these areas*, ie, disturbed at home, at school, with peers, or in society at large, (e.g. persistent aggression without clear instigation; markedly withdrawn and isolated behaviour due to either mood or thought disturbance, suicidal attempts with clear lethal intent; such children are likely to require special schooling and/or hospitalization or withdrawal from school (but this is not a sufficient criterion for inclusion in this category)

FINDING #1 SIGNIFICANT CHANGES COMPARED TO 1991

- In 1991-92, only 47% of the children in OARTY placements were crown wards compared to 63% in 2003-04. The percentage of society wards is unchanged. The increase in crown wardship is balanced by the loss of children in care by agreement with the parents.
- The children being admitted to OARTY agencies are younger by 1.3 years. In 1991, the average age of admission to OARTY residences was 13.0 years compared to 11.6 years currently.
- The percentage of children requiring hospitalization on medical (non-psychiatric grounds) has more than doubled from 3% to 8%.

3.2 The Burden of Suffering among the Clients of OARTY

As discussed below 16% of the clients of OARTY are adults with special developmental needs. The profile of the adults is quite distinct from the majority of the child clients. In the next two tables, the profile of adults and children will be presented in separate columns. Young people (under 18 years) in OARTY carry a significant burden of suffering. The percentage of social risk factors in 2002 and in 1991 are also presented.

SOCIAL RISK FACTORS AND CONDITIONS ADVERSITY	% FOR ADULTS	% FOR CHILDREN	% IN 2002 (N = 621)	% IN 1991 (N =154)
years of hardship and deprivation including poverty	29%	51%	50%	27%
sexual abuse	23%	32%	35%	35%
physical abuse	29%	44%	51%	51%
suicide of a family member	0%	2%	6%	3%
incarceration of a family member	11%	27%	30%	16%
Psychiatric hospitalisation of a family member	11%	14%	19%	17%
family member has cognitive deficits (MR)	23%	20%	23%	
abuse of drugs or alcohol by a family member	17%	54%	53%	22%
rape or sexual assault of family member	11%	9%	18%	
Client has a history of abusing drugs	11%	11%	15%	
Current family violence	11%	15%	18%	16%
Client is brain damaged (epilepsy, acquired brain injury)	23%	6%	16%	16%
Early learning problems from elementary school	43%	61%	71%	39%
The client's mother was in her teens when child born	11%	24%	18%	
Medically fragile	6%	6%	22%	6%
Diagnosis of autism	29%	7%	10%	2%
Diagnosis of DH of mild or lower disability	80%	48%		35%

The average number of social risk factors is 3.3 for adult clients and 4.2 for children with identical standard deviations of 2.3. This will be discussed more fully in the section 4, on adult clients. There is an enormous burden of suffering that profoundly distinguishes the young people placed by the CAS agencies.

The most striking finding was that the parents of the children in care have profound disabilities and behaviour problems. The current situation is much worse than observed during the period 1991-92.

FINDING #2 PARENTS OF CHILDREN IN CARE HAVE PROFOUND DISABILITIES

- 51% of parents have experienced years of deprivation and hardship; within society no more than 13% of families in Ontario would experience comparable levels of hardship. This represents a significant increase in hardship since 1991-92, when only 34% of children had this indicator in their history.
- 27% of parents have been incarcerated. The Canadian rate of incarceration is one tenth of 1 percent of the adult population. The accumulated rate of incarceration over the average 11 years before the child was admitted is 1%. This means that incarceration of close family members is 27 times higher for the children in OARTY resources. Equally important, the incarceration of family members has almost doubled since 1991-92 when this indicator was reported in 16% of children placed.
- 54% of parents have a substance abuse disorder compared to 15% of the adult population. Parental substance abuse has more than doubled since 1991-92 when this was reported in only 22% of the parents of the children placed.
- 20% of the parents are diagnosed as mentally retarded compared to 2% of the adult population; cognitive impairments in the parents of adult clients are higher.
- 24% of the mothers started their parenting in their teens compared to 6% of the general population.

Ninety-seven percent (97%) of the children placed in OARTY are in the care of a Children's Aid Society. OARTY has found that there is a significant increase in the amount of anti-social conduct disorder and disabilities in the parents of children placed. This pattern reflects a larger problem experienced by the entire Child Welfare system. The social and mental health of the parents being served by the CAS has become much worse during the past decade.

FINDING #3 EARLY SCHOOL PROBLEMS

The children placed in OARTY residences have a significant history of early learning problems dating back to elementary grades (61%). The proportion of children with significant early learning problems has increased dramatically over the decade when the ratio was 39%. As will be shown later in this report, early school problems in children are highly correlated with parental anti-social behaviour and disability.

3.3 Diagnostic Conditions

MAJOR DIAGNOSTIC CATEGORIES	% FOR ADULTS	% FOR CHILDREN	% IN 1991-92
Physical disabilities (e.g. quadriplegia)	14%	9%	3%
Axis 1, DSM-IV diagnosis	29%	28%	5%
Undiagnosed psychiatric symptoms	23%	31%	49%
Diagnosed developmentally handicapped	80%	48%	35%
Diagnosed learning disability	37%	35%	3%
Sensory impaired(blind, deaf)	40%	15%	1%
Multiply handicapped (one or more of below)	66%	45%	18%
Autism Spectrum Disorder	29%	7%	2%
Fetal Alcohol Spectrum Disorder	3%	10%	
Developmental delay plus serious behaviour problems	51%	33%	10%
Developmental delay plus serous medical problems	14%	7%	5%
Terminally ill (Palliative care)	0%	2%	1%
No diagnosis or disabling condition	6%	18%	8%

The percentages in this table add up to more than 200% because of the amount of co-morbidity. For example, most of the children with physical disabilities are also in the categories DH plus serious medical problems or terminally ill.

The Axis 1, DSM-IV diagnosis and the undiagnosed psychiatric symptoms are exclusive categories, suggesting that 51% of adults and 59% of the children in care are emotionally disturbed or psychiatrically ill. The percentage of children with a formal diagnosis or undiagnosed symptoms is almost identical today compared to 1991-92 (54%). However, there has been a marked difference in the percentage of children today who have a formal diagnosis (from 5% to 28%).

The adult clients are dominated by individuals with developmental disabilities and multiple handicaps.

FINDING #4 CHILDREN ARE SIGNIFICANTLY MORE IMPAIRED TODAY COMPARED TO 1991-92

The proportion of children who are multiply handicapped (DH plus other behavioural or medical conditions) has more than doubled since 1991-92: from 18% to 45% of all children placed. The increase is found among children diagnosed with autism, fetal alcohol spectrum disorder and dually diagnosed children.

Paradoxically, the proportion of children with no disability has also more than doubled from 8% to 18%. This reflects the increasing function of emergency admissions that the OARTY agencies carry for their CAS partners. This is happening because the number of children coming into CAS care has increased dramatically, outstripping the internal resources of the Children's Aid Society. The dramatic increase in admissions to CAS care may reflect new legislation and standards.

However, finding #2 suggests another explanation: that parents under CAS supervision are significantly more dangerous and disturbed than they were ten years ago.

The pattern of parental anti-social conduct and disability may explain the significant increase in children with developmental disability and other co-morbid conditions. Child development is profoundly affected by parental behaviour and disability.

4.0 Clinical Outcomes

During the past five years OARTY agencies have developed a system of outcome measurement based on standardized and norm referenced instruments in use around the world. The system is based on "multi-gate" screening, assessed on two primary domains:

- health and safety of the child
- the child's ability to cope

Health and Safety is measured by:

Children's Global Assessment Scale (CGAS) ..... child's social impairment
Conners' Global Index ..... child's behaviour problems
SA-45 ..... teenager's psychiatric symptomatology
or FAB-C ..... school-age child's emotional symptomatology
The Childhood Autism Rating Scale (CARS)..... degree of autistic symptomatology
Level of Assistance ..... degree of care required for medically fragile children

The central belief for using these tests is that a child's health and safety is compromised by one of five, fairly distinct and uncorrelated conditions: (1) chronic behaviour problems, (2) an inability to function at home, in school or in the community, (3) the presence of high levels of anxiety, worries, depression and crazy thoughts, (4) autistic symptoms, and (5) the presence of medical & or physical conditions requiring direct intervention for the child to function at the most basic level.

The child's or the family's ability to cope is measured by:

the child objective stressors checklist ..... the child's experience of stress
the QRS-F..... the parent's experience of stress
a sociodemographic checklist..... adverse family history
parental bonding instrument..... quality of attachment
Vineland Adaptive Behaviour Scale (VABS)..... child's developmental functioning

The central belief for using these tests is that the probability that the child will get worse without intervention is determined by a combination of:

1. The child's *current stress levels*
2. The parent's *current stress levels*

3. The *accumulation* of very stressful events and adverse conditions from early life
4. The quality of the child's *attachment* to his or her primary care givers
5. The child's *acquisition of basic skills* in communication, socialisation, daily living and motor development compared his peers

Several agencies have been using a combination of these tests since 2001 for all children admitted. OARTY has a database of 235 children with both a time one and time two results separated by an average of 300 days.

FINDING #5 CHILDREN ARE MAKING SIGNIFICANT IMPROVEMENT ON ALL OUTCOME MEASURES

4.1 Conners' Global Index (GCI-P)

The CGI-P is a behaviour observation scale completed by the parent or direct caregiver. The CGI-P measures impulsivity, attention and emotional lability. These behaviours predict which children will exhibit serious conduct problems in early adulthood and are much better predictors than aggression. (Rutter & Sandberg, 1985) By changing these behaviours, OARTY agencies will reduce the probability that children with behaviour problems will develop more serious anti-social conduct.

The Conners' Global Index is very reliable. Cronbach's Alpha measuring the internal consistency for the Conners' Global Index was 0.89. (Conners' Manual, 1999, page 111). Moreover, the Conners' Global Index was highly correlated with the total score of the Kovacs Children's Depression Inventory (CDI) at .71 (Conners' Manual, page 131) and the total problems scale of the Achenbach r = 0.82 (Achenbach 1991, page 85).

Children (n = 90) whose total score on the CGI-P was worse than 1 in a 1,000 children (t-score = 80.71) improved in nine months to just above the clinical range (t-score = 74.86) or worse than 1 in 100 children. This is a statistically significant improvement highly unlikely to be caused by chance (t-score of difference in means = 4.040, significance = .000).

4.2 Children's Global Assessment Scale (CGAS)

The CGAS is completed by the case manager after assessing the intake and reports from the referring agency. At time two, the case manager measures the child's adjustment using the CGAS by assessing the information about how well he or she is performing the major roles of his/her life in family, school, community and workplace.

The CGAS was developed by revising Axis 5 from the DSM-IV (Global Assessment of Functioning) so that it is suitable for children. The CGAS shares the psychometric properties of the DSM-IV axis 5, which has been in existence since 1962 and has been subject to thousands of research studies, including extensive use by Michael Rutter who found that this scale was predictive of life span adverse outcomes (Rutter, 1995). The inter-rater reliability of the CGAS is 0.84; test-retest correlations are in the high 80's and 90's.

The children in the care of OARTY agencies (n= 180) had average score on the CGAS at time one (44.57) that is reflective of the following description:

> *Moderate degree of interference in functioning in most social areas or severe impairment in functioning in one area*, such as might result from, for example suicidal preoccupations and ruminations, school refusal and other forms of anxiety, obsessive rituals, major conversion symptoms, frequent anxiety attacks, poor or inappropriate social skills, frequent episodes of aggressive or other antisocial behaviour with some preservation of meaningful social relationships

This score improved to 51.42 reflecting the beginning of a much higher level of functioning, as reflected in this description.

> *Variable functioning with sporadic difficulties or symptoms in several but not all social areas*; disturbances would be apparent to those who encounter the child in a dysfunctional setting or time but not to those who see the child in other settings

This improvement is statistically significant (t-score = 7.607, significance = .000) indicating that there is no chance that this result could be due to random effects or measurement error.

4.3 the Symptom Assessment (SA-45)

This is a one page form with 45 questions completed by the teenager. The SA-45 provides a direct measure of emotional disturbance. The SA-45 is a revision of the BSI by Derogatis. The longer version (SCL-90R by Derogatis) is the major epidemiological instrument for adult mental health. The SA-45 produces one number for input into risk assessment and outcome measurement (the global symptom severity scale) and ten other scales that can be used in case planning.

An index of Global Severity and a Positive Symptom total can also be obtained from the SA-45 results. These indices are helpful in assessing overall symptomatology. Appendixes in the technical manual provide inpatient and nonpatient age and gender based norms to compare the respondents' results. The SA-45 is scored relative to a normative database of over 18,000 subjects. The internal consistency of each of its scales has been established with Cronbach's alpha of 0.71 or greater. Test-retest reliability over a two week interval is in the 80's. (SA-45 manual, reliability summary, page 49).

Borduin et al (1995) found that the Global Severity Index of the SA-45 "represents the best single indicator of the respondent's psychiatric functioning" (page 572). The manual for the SA-45 provides extensive data on the reliability and validity of the SA-45.

There were 26 children with test results, where the teenager scored in the clinical range at time one (t-score = 72.77). This score describes a teenager who is seen on in-patient wards of psychiatric hospitals. Within nine months the average score on the SA-45 dropped to 61.00 within the upper end of the normal range. The t-score of the difference in means for this change is 3.342, with a significance of .003. This means that the probability that a change of this magnitude was due to measurement error or random chance is 3/10 of 1%.

4.4 the Feelings. Attitudes and Behaviour Scale (FAB-C)

The FAB-C consists of 48 *yes/no* questions that ask the child to rate whether the statement describes him or her. The FAB-C is appropriate for children ages 6 to 13 years of age.

The FAB-C was developed by Joseph H. Beitchman, M.D. who is a Child Psychiatrist practicing at CAMH. The rationale for developing this self report measure grew out of the author's published concerns about guiding clinical practice and research solely on the basis of the observations of parents and teachers. (Beitchman and Raman, 1979) There have been extensive studies (reviewed in the FAB-C manual, pages 27-28) that have uncovered persistent informant bias with behaviour observation tests, such as the Conners'. Beitchman does not dismiss behaviour observation scales, stating that they make a substantial contribution to child psychiatry and psychology. However, Beitchman points out that adding a self report measure "may lead to improved clinical methods in which the nature of a particular problem can more accurately be specified as resting in the perception or behaviour of the adult, the behaviour or feelings of the child, or both. The use of self report measures also has important treatment implications, since these type of measures provide information that allows treatment to be better directed at the specific problem." (Beitchman, 1996, page 27)

The FAB-C was engineered to cover: conduct problems, self-image, worry, negative peer-relations, antisocial and lie-defensiveness. In addition, the FAB-C has a total problem score.

There were 24 children with test results, where the child scored in the borderline clinical range at time one (t-score = 69.13). This result describes a child who is full of worries, has terrible self esteem problems, peer relationship problems and anti-social attitudes and behaviour. Within nine months, the average score dropped to 59.58, clearly in the average range and showing a substantial improvement in the child "self declared" feelings and attitudes.

The t-score of the difference in means for this change is 5.444 with a significance of .000. The probability that a change of this magnitude was due to measurement error or random chance is zero.

4.5 Objective Stressors Checklist (OSC)

This is an open ended one page questionnaire to help a child identify the stress in his life from his point of view. It clearly draws the child into his plan of care. As the child reveals information about "what he is worried about", the worker will have to engage the child in a discussion about "how we can help".

The number of objective stressors that people self-identify has been shown to be a strong predictor of physical abuse by parents (Chan, 1994), Kasim, 1995; Kruttschnitt, 1994). Stress has long been identified as a factor in the generation of physical illness (Wheaton, 1983) and mental illness, especially depression, substance abuse and antisocial conduct disorders (Dohrenwend, 1992).

Researchers have found that *life events stress* and *neighbourhood violence stress* along with normative beliefs supporting violence *predicted violence* much better than poverty in a two year longitudinal study involving 1,935 multi-ethnic elementary school age children from lower income inner city neighbourhoods (Guerra, 1995).

In a study of the separate effects of different types of stress, Blair Wheaton compared life events, chronic stress, non-events, daily hassles and childhood traumas. *The study concluded that each separate category of stress made an independent contribution to mental health problems*. He found that {1} no single stress concept was sufficient to capture the full predictive power of stress; each category of stress makes a separate and independent contribution to the bad outcome {2} *life events stress* (family moving, parents splitting up, etc) do not make a smaller contribution to bad outcomes; {3} the explained variance attained by adding the other stress concepts was three to five times greater than using life events stress alone and at times it approaches 50%, *meaning that the full continuum of stress explains half of the factors leading to mental illness;* {4} non-events and daily hassles played a generally weak role in predicting mental health outcomes, but their effects were not simply absorbed by the other stressors - they made a separate contribution; and {5}estimation of the true role of stressors clearly demands a model of the effects of cumulative stress exposure over time. Sources of stressors which persist over a longer period of time are more toxic, partly because of the chain of events flowing from a serious stressor. In studies of adult mental health, childhood trauma had the second greatest total impact on adult mental health after current chronic stressors (Wheaton, 1996).

OARTY has pre-post data on 91 children. On admission, these children self identified an average 7 discrete stressors indicating that they feel overwhelmed by their social context. Within nine months, the list of stressors has been reduced to 5.92.

The t-score of the difference in means for this change is 2.964 with a significance of .004. This means that the probability that a change of this magnitude was due to measurement error or random chance is 4/10 of 1%.

4.6 Parental Bonding Instrument (PBI)

The PBI has been used extensively in cross sectional and longitudinal studies across the world. The PBI measures how securely the child is bonded to whatever target person is identified on the test. The target can include father, mother, foster parent, childcare worker or family of origin. The security of attachment is a critical protector of the life span outcome of many social & demographic risk factors and the prognosis for change in children with symptoms of emotional disturbance or behaviour problems (Mallincroft, 1992; Werner, 1989 & 1992, Fonagy, 1993, Rutter, 1982; Rutter, 1995; Costello & Angold, 1995).

The Parental Bonding Instrument (PBI) was developed by Gordon Parker, Hilary Tuping and L.B. Brown (Parker et al, 1979). The original purpose of the PBI was to examine the parental contribution to a parent-child bond and to define and measure the constructs of significance.

The scales were originally developed to measure the parent's ability to bond to their children based on how well they were bonded to their own parents. There are four types of parental bonding:

high care-low overprotection (optimal bonding)
low care-low overprotection (absent or weak bonding)
high care-high overprotection (affectionate constraint)
low care-high overprotection (affectionless control)

The PBI has been used with adolescents as a means for them to rate the quality of bonding with their parents. (Rey, 1989) This study found that the PBI may be "a measure of bad parenting which is perceived by children as affectionless and controlling". The study found significant differences between children with a DSM-IIIR diagnosis of conduct disorder (n=63) and oppositional disorder (n=49) as compared with a sample of normal adolescents (n=62).

Rey reviewed the findings of the PBI in other studies in the USA and Australia involving thousands of adolescents. By 1997, the PBI had become a widely used measure of parenting with adolescents (Murphy, 1997). Murphy used the PBI with a sample of 583 US and 236 UK students. Murphy reviewed research using the PBI in Australia, UK, USA and Spain. Canetti (1997) employed the PBI with 847 Israeli students. In this study the PBI was completed along with the Brief Symptom Inventory (BSI), General Well Being Scale (GWB), the Perceived Social Support Scale (PSS) and the Social Desirability Scale (SDS). The BSI is the predecessor to the SA-45. Reviewing evidence from adult studies Canetti states that the data suggests "a strong link between the dimensions of the PBI and (*adult*) psychiatric conditions" (Canetti, 1997, page 383). Canetti's research focussed on the relationship between dimensions of the PBI and measures of mental health in normally functioning adolescents. The students were selected from a cross section of youth in Israeli society and provides a sound normative sample.

In Canetti's study the internal reliability (using Cronbach's alpha coefficient) was computed. All four scales were found to be reliable with the following alpha values: maternal care = 0.75, maternal control = 0.82, paternal care = 0.80 and paternal control = 0.83. Canatti's conclusion is as follows:

> "The strong connection between parental bonding and psychopathology found in the present study provides support for Bowlby's attachment theory. Adolescents who reported high care and low control (optimal bonding) reported less psychiatric symptoms and distress. They had a positive feeling of well being and felt supported by family and friends. On the opposite end, the combination of low care and high control (affectionless control) gave rise to psychological symptomatology and a lesser-feeling of well being. These individuals also experience less support from their surroundings".

The PBI has been used by OARTY agencies for mothers or fathers, based on the child's perception of "who do you feel closest to". The most common target is mothers. A group of 24 teenagers produced a score, in reference to their mothers, at time one that reflects Canatti's profile of psychopathology, which she described as *affectionless control*. The caring score at time one was 24.6, which reflects the child's perception that his mother was not affectionate.

The over-controlling scale at time one was 22.9, which reflects a perception that his/her mother was domineering and controlling. This combination of low care and high control is predictive of serious adverse consequences for the teenager by the time he or she is a young adult.

At time two, the caring scale had not moved at all – with the teenager continuing to view his/her mother as *affectionless* (caring scale = 24.6). However, there was significant improvement in the over-controlling scale, which dropped from 22.9 to 15.5. After nine months of treatment, the teenagers perceive their parents' disciplinary practices and family rules as *more reasonable*. This change in attitude probably comes about as a result of the experiences of the teenager around appropriate discipline in the group home or foster home. This change in the teenagers' attitudes about the need for parental control is a critical step in helping them to form a secure bond with his current caregivers.

The t-score of the difference in means for this change is 4.957 with a significance of .000. This means that the probability that a change of this magnitude was due to measurement error or random chance is zero.

4.7 Conclusion on Clinical Outcomes by OARTY agencies

In conclusion, OARTY has demonstrated treatment effectiveness across a broad array of concerns that are very significant for the well being of these children. The improvements are pervasive and statistically significant. The tests themselves are widely used standardized instruments with proven validity and reliability.

This selection of instruments for the OARTY system of outcome measurement applies the best practice in scientific standards for measuring outcomes. The tests directly target the core pathology that determines the need for residential treatment in the first place. On every test, the children placed in OARTY are showing marked improvement.

The sections on the following pages describe the characteristics and needs of discrete groups of OARTY clients. These clinical groups were discovered through factor analysis. Factor analysis allows a researcher to simplify a database with 100s of clinical characteristics per client into a small number of common underlying factors that explain most of the variance in the primary variables. In practical terms, this procedure simplifies about 80% of the database. There will always be a substantial number of cases that have a unique profile.

5.0 Adults served by OARTY agencies

Many of the programs in OARTY serve adults who entered the service as children. The proportion of adults in OARTY beds is 16%.

The vast majority of the adults in care (80%) are located in programs specializing in multiply handicapped individuals: autistic, dually diagnosed, brain damaged, physically disabled and medically fragile. A small number (20%) are distributed across several programs serving psychiatrically ill and youth with severe behavioural problems.

FINDING #6 COST OF CARE IS SIGNIFICANTLY HIGHER FOR ADULTS

The average per diem for the adult clients is $208.66 in contrast with $187.48 for youth under 18 years. The range of per diems for adults is also more compact compared to youth; the cost of care for adults have a higher minimum and a lower maximum. The standard deviation for the average per diem of adults is $43.51 compared to $55.71. The difference in per diem was measured using Analysis of Variance, producing an F-ratio of 4.5, sig = .035.

The unit cost of shelter is statistically identical between the two groups, $16.12 (for adults) and $16.08 (for youth).

Most of the other standardized components which make up the approved per diem are higher for adults. The rest of the unit costs line items are below:

PER DIEM UNIT COST LINE ITEMS	AVERAGE FOR ADULTS	AVERAGE FOR YOUTH < 18
Wages	$154.68	$107.37
Personal needs (inc medication)	$17.55	$13.81
Program administration	$5.80	$11.04
Centralized administration	$22.20	$19.73

There are very few adults at any given time in foster care agencies within the OARTY network. In contrast, one quarter (25%) of the child-clients are served in foster care agencies which have a much lower *wages-unit-cost*. Foster parents are paid a boarding rate rather than a wage for their service.

FINDING #7 SIGNIFICANTLY HIGH STAFFING RATIOS REQUIRED FOR THE ADULT CLIENTS

The table below shows that the average minimum and maximum wage is almost identical for the two groups. However, the adults require much higher staffing ratios in the afternoon and evening shifts. Much of this extra staffing is required to run day treatment programs for adults. This is an important factor driving the higher unit cost of wages in programs serving the adult clients.

COMPONENTS OF THE WAGE UNIT COST	AVERAGE FOR ADULTS	AVERAGE FOR YOUTH < 18
Average minimum wage for direct care staff	$13.30	$12.88
Average maximum wage for direct care staff	$15.08	$15.86
ratio of staff to clients on morning shift	.307	.336
ratio of staff to clients on afternoon shift	.427	.390
ratio of staff to clients on evening shift	.463	.383

Please note: the above components apply only to clients in staff operated settings. The children in foster care and family based group care are omitted. Also the financial data cannot be perfectly split for adults and youth. Some programs serve both age groups. However, the pattern is valid since the vast majority of specific group home sites serve either adults only or children only. The program and financial data was collected at the level of individual sites.

FINDING #8 ADULTS CLIENTS HAVE GREATER SPECIAL NEEDS

The clinical factors which are significantly different between the adult clients and the youth are:

(1) *The Children's Global Assessment Scale* (F-ratio = 16.0, sig = .000). The adults scored on average 35.8 compared to 53.0 for youth. The difference is that adults are much more dangerous or completely unable to function; while the children display problems that make them visibly disturbed to observers, but still retain some capacity to participate in society.

(2) *Earliest age when special needs were recognized* (F-ratio = 6.5, sig = .012), The adults were first identified by the child welfare system as having special needs at age 3.0 years, compared to the youth who were identified at 3.4 years. All adults in OARTY were placed as children and were the least functional individuals as children which is reflected in their earlier age of problem identification.

(3) *Number of co-morbid medical/psychiatric diagnoses* (F-ratio = 12.1, sig = .001) Adults have 4.1 diagnoses compared to 2.3 for youth. A single diagnosis is easier to treat with best practice; the greatest challenge is not "what" the diagnosis is but how many co-exist.

FINDING #9 MOST ADULT CLIENTS ARE IN CARE FOR THEIR SPECIAL NEEDS EXCLUSIVELY

The profile of the adult clients suggests that 2/3^{rds} of the adults are in care for their special needs exclusively. This group represents 10% of all clients in the OARTY network. The reasons for arriving at this conclusion are as follows:

(1) The proportion of adults being served who were at one time crown wards or society wards is 35%, meaning that 65% of these adults were served by way of special needs agreements or on contracts with the Ministry directly or through non CAS funding bodies.

(2) One third of the adults have a history that would require CAS intervention: specifically they were physically and/or sexually abused; this same group of adults have other histories that are more commonly found among the Child Welfare population. They are two to three times more likely to show family members in jail, family members who mentally ill or mentally retarded themselves and displaying domestic violence. These adults are also more likely to be brain damaged and have a history of abusing drugs.

(3) The clinical profile in the adults whom we describe as "in care for the special needs exclusively" is marked by an absence of either physical or sexual abuse, fewer signs of anti-social behaviour by the parents, i.e. jail, substance abuse and domestic violence. The "special needs group" also has more individuals diagnosed with single disorders, i.e. autism and learning disability, but whatever the diagnosis, there is far less co morbidity among this group compared to the *child protection* group of adults

In summary, there is a large group of adult clients in the care of OARTY agencies, funded by agencies such as COTA and the Ministry directly. These adults are characterized by very low functioning levels, significant medical and psychiatric conditions. They require more staffing, especially in day programs, and are associated with higher per diem costs compared to children.

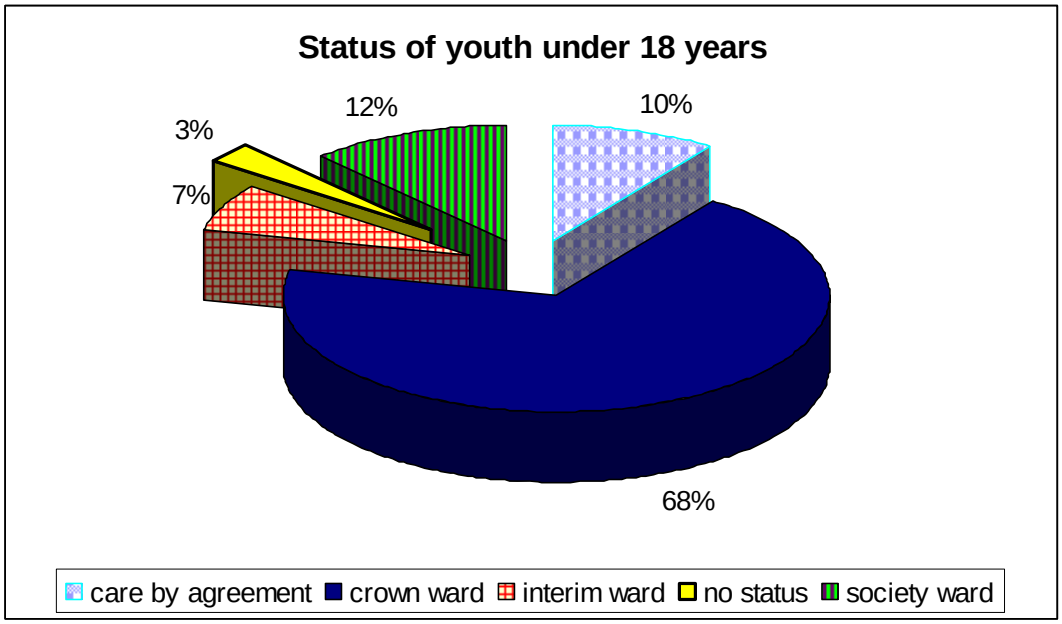
6.0 Children with Special Needs

FINDING #10 DISABILITY: THE DOMINANT CLINICAL PROFILE OF YOUTH IN CARE

Nearly one half (48%) of the youth under 18 years served by OARTY agencies are diagnosed as developmentally handicapped. The vast majority of these DH children are in fact multiply handicapped with other co-morbid conditions, including:

(1) DH plus severe behaviour problems (33%)
(2) Fetal Alcohol Effects (10%)
(3) DH plus medically fragile (7%)
(4) Autism (7%)

The chart below shows that less than 3% of youth have *non-CAS* case status and funding.



The database of youth under 18 years was divided into two groups: those who have been physically or sexually abused (56% of children) and those who have no history of abuse (44% of children).

Several findings emerged:

(1) Sexually abused children have significantly more sexual acting out behaviours (t-score of the difference in means = 4.05, sig = .000).

(2) Sexually or physically abused children have significantly more risk factors (t-score of the difference in means = 8.32, sig = .000).

(3) Sexually abused children have significantly more diagnostic co morbidity (t-score of the difference in means = 2.43, sig = .016).

(4) Sexually abused children have significantly more crisis in the residence (t-score of the difference in means = 2.06, sig = .041).

(5) Physically abused children have a significantly higher score on the CGI-P measuring hyperactivity and impulsivity (t-score of the difference in means = 2.05, sig = .042).

(6) Abused children are twice as likely to have a DSM-IV diagnosis or undiagnosed psychiatric symptoms or a learning disability or a history of drug abuse.

(7) Abused children are three more likely to have a close family member in jail; 37% of abused children have a family member in jail.

(8) Abused children are twice as likely to have a close family member in who has been psychiatric hospital (18% compared to 7%).

(9) Abused children are twice as likely to have current family violence prevalent in their family of origin (19% compared to 10%).

(10) Abused children are twice as likely to have a mother who started her parenting while in her teens (29% compared to 14%)

(11) Abused children are 15 times more likely to have a close family member who has been raped (15% compared to 1%)

Not surprisingly 50% of abused children are on psychotropic medication compared to 36% of children who were not abused. Children *who have not been abused* are much more likely:

(a) to be physically disabled (17% compared to 3%)
(b) to be medically fragile (14% compared to nil)
(c) to be sensory impaired (21% compared to 11%)
(d) to have signs of autism (9% compared to 5%)
(e) to be brain damaged (11% compared to 2%)
(f) to be terminally ill (3% vs nil)
(g) to have no disability whatsoever (24% compared to 14%)

In other respects, the abused and non-abused children are quite similar: equal rates of developmental handicaps (50%), multiple handicaps (45%), Fetal Alcohol Spectrum Disorder (11%) and a mentally retarded parent (20%).

The information in finding #11 demonstrates that children with a history of abuse suffer profoundly adverse consequences both developmentally and psychiatrically.

FINDING #12 24% OF CHILDREN PLACED ARE SPECIAL NEEDS CHILDREN

One quarter of children placed in OARTY agencies (24%) are children who are physically disabled, medically fragile, sensory impaired, autistic, brain damaged and terminally ill. Most of these children (59%) have no history of abuse and significantly fewer indicators of other parental abnormalities. Many of these children are the children described as the group that the Ombudsman said should not have to relinquish custody to meet their special needs.

Despite this sentiment, 66% of these special needs children are crown wards, 11% society wards or before the court and 15% in care by agreement. Only 7% of special needs children are receiving service without guardianship and funding of the CAS.

FINDING #13 15% OF CHILDREN HAVE SPECIAL CARE NEEDS NOT REQUIRING CHILD PROTECTION

If CAS guardianship was not necessary for families to access funding for their special needs children, as many as 15% of the children in OARTY care would be funded outside the Child Welfare system. The Child Welfare system spends approximately $80,845 per day on these special needs children or approximately $29,500,000 per annum.

7.0 Parents with disabilities or antisocial behaviour

The third group of children identified by factor analysis are those with significant adversity whose parents are very disturbed, disabled and anti-social. This group includes children with *at least three* of the following characteristics of parental anti-social behaviour:

- physical abuse
- sexual abuse
- incarceration of family member
- substance abuse of family member
- current domestic violence in family or origin
- current sexually violent family in the family of origin

Moreover, the parents of these children have *at least two* of the following characteristics:

- mother started parenting in her teens
- parent committed suicide
- parent hospitalized for psychiatric reasons
- parent mentally retarded
- years of hardship and deprivation in the family of origin

The children identified by factor analysis are those with significant adversity whose parents are very disturbed, disabled and anti-social. These cases represent 50% of the children placed in OARTY.

FINDING #14 VERY DISTURBED AND DANGEROUS PARENTS AFFECT CHILD DEVELOPMENT

Dangerous, disturbed or disabled parents produce children with:

(1) significantly higher levels of hyperactivity, impulsivity and emotional lability in their children (F- ratio = 5.9, sig = .016);

(2) significantly higher percentages of children with early learning problems, developmental handicaps, autism, brain damage and medically fragile conditions (F- ratio = 5.7, sig = .018);

(3) significantly higher sexual acting out (F- ratio = 13.6, sig = .000);

(4) significantly younger age of admission (F- ratio = 18.1, sig = .000);

(5) significantly longer days in care (F- ratio = 5.3, sig = .023); and

(6) requiring more social support if DH.

These cases are not associated with:

(1) higher per diems or unit costs of service
(2) higher numbers of restraints
(3) lower social adaptability (CGAS)
(4) brain disorders
(5) psychiatric disorders or symptoms in children
(6) earlier age of identification
(7) more crisis responses in the residence
(8) more co morbid conditions or
(9) higher levels of staff to child ratios

8.0 Youth with Significant Sexual Acting-out Behaviour

There is a special group of children placed in OARTY agencies who present serious sexual acting out behaviour. To some extent, this group overlaps with the previous group who have antisocial or disturbed parents. In the language of factor analysis, high scores on the MAYO sexual behaviour scale loads on both latent variables.

Nineteen percent (19%) of children placed in OARTY agencies have scores on the Mayo sexual behaviours scale averaging 29.9 compared to the normative sexual behaviour score of 1.5 (SD = 2.2) for this age group. This group is 20 times more sexualized in its behaviour than normal children in society.

These highly sexualized children have:

(1) significantly lower levels of hyperactivity, impulsivity and emotional lability than other children (F- ratio = 4.1, sig = .043);

(2) significantly higher loading of parents with anti-social behaviour including child abuse, substance abuse, jail and domestic violence (F ratio = 21.2, sig = .000);

(3) significantly higher loading of parents who started parenting in their teens, who are mentally ill, mentally retarded or very poor (F ratio = 10.8, sig = .001);

(7) significantly higher percentages of children with early learning problems, developmental handicaps, autism, brain damage and medically fragile conditions (F-ratio = 4.7, sig = .031);

(8) significantly more social risk factors (F ratio = 23.0, sig = .000);

(9) significantly younger age of admission (F- ratio = 4.5, sig = .035);

(10) a need for more social support if DH;

(11) a history of sexual abuse, but not physical abuse (chi square = 13.7, sig = .000);

(12) a history of parental mental illness (chi square = 3.9, sig = .048);

(13) parents with a substance abuse disorder (chi square = 10.6, sig = .001);

(14) mothers who started parenting in their teens (chi square = 5.2, sig = .024); and

(15) children who have severe early learning problems (chi square = 6.4, sig = .008).

These cases are not associated with:

(1) higher per diems or unit costs of service
(2) higher numbers of restraints
(3) lower social adaptability (CGAS)
(4) psychiatric disorders or symptoms in children
(5) earlier age of identification
(6) more crisis responses in the residence
(7) more co morbid conditions
(8) longer days in care
(9) higher levels of staff to child ratios

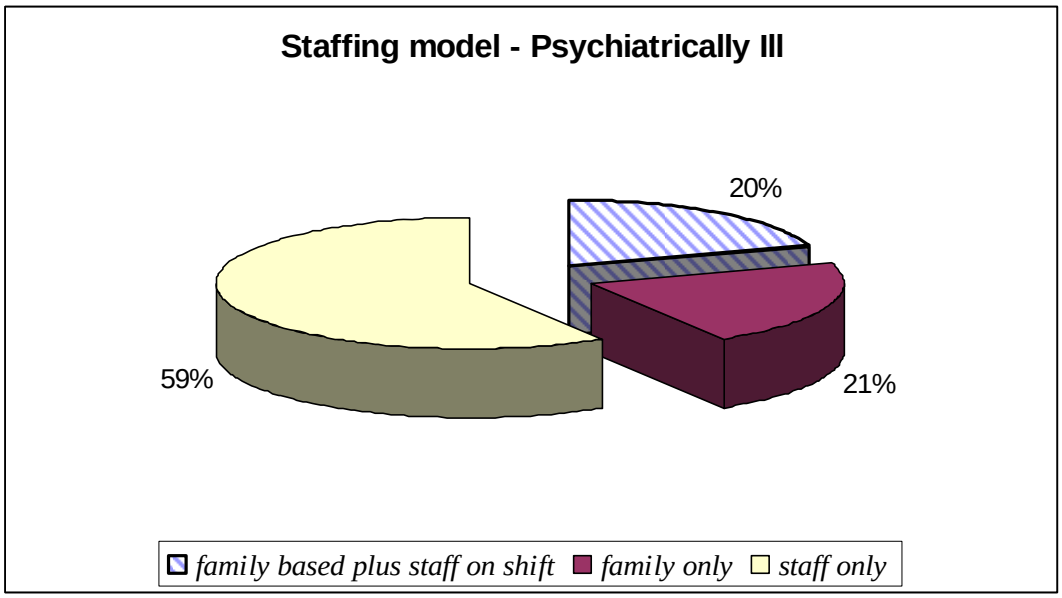
FINDING #15 HIGHLY SEXUALIZED CHILDREN ARE VERY DIFFERENT FROM CONDUCT DISORDER

As noted above, there are a substantial number of children placed in OARTY (19%) whose sexualized behaviour on a standardized norm referenced instrument is 20 times greater than typical children. This type of behaviour is very difficult and risky for families. The clinical profile of these children is different compared with anti-social conduct disorders. These highly sexualized children are much more closely associated with serious developmental disorders and

children who have been sexually abused. Highly sexualized children are no more likely than any other child placed in OARTY to have a psychiatric diagnosis.

9.0 Youth with Psychiatric Disorders or Symptoms

Forty five percent of OARTY clients have either a DSM-IV diagnosis[1] or undiagnosed psychiatric symptoms or both. These clients can be found throughout the OARTY network. Twenty-five percent (25%) are in licensed foster care programs and 75% are in group homes.



Moreover, half (48%) of the children with a psychiatric diagnosis or symptoms are also developmentally delayed. Furthermore, about 75% of the psychiatrically ill children also have anti-social parents with at least one of the following: physical abuse, sexual abuse, parents in jail, parental substance abuse or domestic violence.

The variables, children with a DSM-IV diagnosis and children with undiagnosed psychiatric symptoms, were identified in factor analysis, as a "common factor" explaining much of the variation in other variables in the database. The data shows that most of these children are also in the group, *Parents with disabilities or antisocial behaviour* (section 7.0). This means that about 15% of the children in OARTY care have psychiatric problems as the central organizing theme of their characteristics and few reasons for Child Protection.

[1] . Except for two cases, those children with a DSM-IV diagnosis do not have co-existing diagnosis of Autism or Fetal Alcohol Spectrum Disorder. Staff treated these developmental disorders as *exclusive* of DSM-IV diagnosis.

FINDING #16 15% OF CHILDREN ARE PLACED PRIMARILY FOR EMOTIONAL DISTURBANCE

A sub-set of children with psychiatric diagnoses or symptomatology do not display a single indicator of parental anti-social conduct, indicating that these children are in care primarily for their special needs as emotionally disturbed children, rather than children recovering from the consequences of living with dangerous or disturbed parents. The cost to Children's Aid Societies of this special needs group is approximately $29,500,000 per annum.

The fact that diagnosed and undiagnosed psychiatric illness is prevalent among children in CAS care has been well documented in the literature (Dore, 1999). Martha Dore, in her systematic review of the literature, found that between 30% and 60% of children in the care of CAS "demonstrate some form of psychiatric disorder".

The psychiatrically ill children are more likely:

- To be restrained more often (F-ratio = 6.01, sig = .014). These children are restrained 12.9 times per year or on average once per month
- To be more hyperactive and inattentive (F-ratio = 4.67, sig = .032)
- To have a several different crisis interventions per year (F-ratio = 18.48, sig = .00)
- To have other co-morbid conditions (F-ratio = 13.83, sig = .000)

Such children are not (or do not have):

(1) More or less expensive to care for than non-psychiatrically ill children
(2) Lower or better functioning socially than other children in placement
(3) Their parents are not more or less antisocial
(4) Their parents are not more or less disturbed themselves
(5) More or less social risk factors
(6) More or less sexual behaviour problems

10.0 Conclusion: Describing our Clients

The major client groups identified by a factor analysis of the pattern of social risk factors and diagnoses are:

(1) Adults with special developmental and medical needs = 16% of all clients
All of these people were placed as children

(2) Children = 84% of all clients

The percentages below are all in relation to children only:

[2.1] Children with special developmental and medical needs are 24% of the population surveyed while 15% of all OARTY placements are in care for their special needs exclusively.

[2.2] Children whose parents have at least 3 separate indicators of anti-social conduct, including abusing children, jail, substance abuse, plus 2 separate indicators of personal disability, including being mentally retarded, mentally ill are 50% of the population surveyed.

[2.3] Children with psychiatric diagnoses or undiagnosed symptoms but few protection concerns, i.e. zero parents with anti-social conduct, are 15% of the population surveyed.

[2.4] Children who are at least 20 times more sexualized in their behaviour than the norm as measured a standard scale are 19% of the population surveyed. One half of these children overlap with [2.2] very anti-social and disabled parents and 90% of the parents have at least one indicator of anti-social conduct.

Eliminating the overlap in these numbers, these major clinical groups account for slightly over 80% of the clinical profile of the children served by OARTY.

10.1 Clients with No Disability or Diagnosis

Overall, 16% of OARTY clients, including adults, have no disability or diagnosis (medical or psychiatric). This group was studied in greater detail to understand their needs for residential care.

The group of clients with no disability or diagnosis is much more likely to be in foster care:

	child has a disorder or disability	**child has no disability/diagnosis**	Total
foster	76.1%	23.9%	21.0%
group	86.1%	13.9%	79.0%
Total	84.0%	16.0%	100.0%

As children, these clients are much more likely to be in care by interim order of the court (i.e., recently apprehended).

	child has a disorder or disability	**child has no disability/diagnosis**	Total
care by agreement	93.1%	6.9%	13.2%
crown ward	83.2%	16.8%	62.6%
interim ward	53.8%	46.2%	5.9%
no status	100.0%	0.0%	7.3%
society ward	82.6%	17.4%	10.5%
Total	84.0%	16.0%	100.0%

A t-score of the difference in means was calculated to identify the clinical factors significantly related to having or not having a diagnosis or disability.

Children with no disability or diagnosis are significantly more likely to:

(1) have a lower per diem ($167 vs $195): t-score = -2.6. sig = .012

(2) have a lower staffing cost ($90 vs $117) t-score = -2.5, sig = .013

(3) to be restrained far less often (less than once per year vs 10 times per year) t-score = -4.4, sig = .000

(4) have a lower score on the CGI-P (63 vs 77) t-score = -5.3, sig = .000

(5) have a much higher score on the CGAS (73 vs 46) t-score = 10.5, sig = .000

(6) fewer crises, fewer risk factors and lower level of sexualized behaviour

FINDING #17 CHILDREN WITH NO DISABILITY APPEAR NORMAL ON TESTING

The data above validates the belief by treatment staff that these children have no disability or diagnosis. The costs of care for these children are significantly lower. However, this finding begs the question: why are they in care?

Children with no disability have:

(1) Anti-social parents: 77% of these children have at least one indicator of antisocial parents. In the case of sexual abuse, the child is even more likely to have no disability whatsoever, (chi square = 3.6, sig = .042). This finding has also been reported by Kendall-Tackett, K., Williams, L. & Finkelhor, D. (1993),

(2) Parents with psychiatric disorder or other indicators of severe personal needs (66%) such as intense poverty and hardship or teen moms.

Several members of OARTY provide emergency placement services to Children's Aid Societies for short term, emergency admissions and assessment.

11.0 Foster Care

There are 26 corporate members of OARTY who have a license to operate foster care. Collectively, these agencies offer 1,244 foster care beds or 46% of the total OARTY bed capacity.

Nine of the agencies (35%) offering foster care responded to the survey. The agencies responding provide 581 beds or 47% of all foster care beds under OARTY.

Forty six (46) young people were randomly selected from these homes and their staff completed a clinical profile. The following findings concern the content and costs of service delivery and the profile of the young people served. The number of children randomly selected from foster care agencies represents 8% of the bed capacity. This is a lower level of sampling when compared to group homes where 21% of the clients per bed capacity were sampled. However, the number of children selected from foster care agencies is sufficiently high to make valid statistical inferences about the clinical profile of these children.

11.1 Cost Profile of OARTY Foster Care

Detailed financial analysis of OARTY foster care will be provided from three perspectives:

(1) *system wide data* about the approved per diem: This included information on agencies who did not respond to the survey as well as those who did.

(2) *details within the program survey*: The survey database includes full expenditures for fiscal 2003-04, by the Provincial standard accounting sub-lines (central admin, board rate paid to foster parents, wages (for social work staff and child and youth workers), personal needs, additional shelter costs and program administration). This survey also included information on service statistics, program ingredients (such as type of supports provided, whether or not the per diem included a psychiatrist or psychologist on contract, etc.), details on the new restraint policies, number of serious occurrences, admission criteria and referral sources.

(3) *linking financial and program details to the client profiles*: The clinical profiles of children drawn at random from these agencies are linked to the financial and program data to measure the relationship between dollars, programs and aspects of the client profile, including standardized risk assessment tools (sexual behaviours, hyperactivity and learning problems, social adjustment and social risk factors).

11.11 Approved Per Diem – System Wide

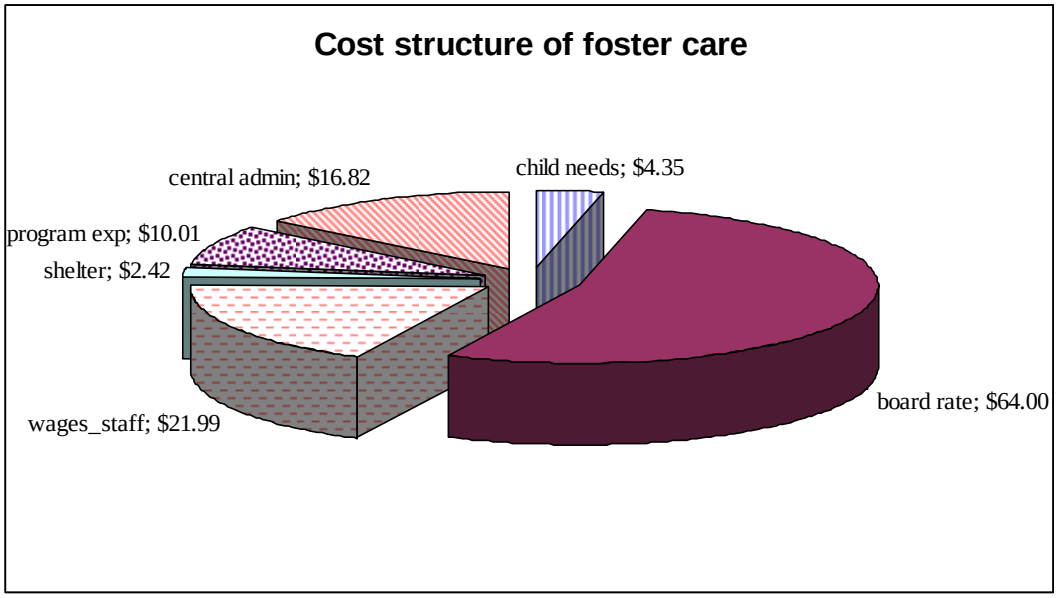
The average cost of foster care throughout the OARTY network including agencies who did not respond to the PIC 2 survey is $96.34. This is the blended average taking into account that some foster care agencies have three different per diems depending on the level of care provided. The limitation of this average is that the true average cost to the Children's Aid Societies depended on how many children were served in the different levels or in the different agencies.

11.12 Program Survey Details

The average approved per diem of the nine foster care agencies responding to the survey is $117.09, with a standard deviation of $33.59. The average per diem produced by the survey is $20.00 higher than the true system wide average; however, the difference is well within one standard deviation. For this reason, we can be reasonably comfortable with the higher level of detail that can only be known by means of the survey. One third of the agencies have different per diems related to the level of care (and ingredients such as extra child and youth worker assigned on shift). Incorporating the additional per diems at different levels, the average rate is $116.35. The occupancy rate in private foster care is 76%. However, the "stated capacity" in foster care is theoretical; no-one really knows if the supply of vacant approved foster homes will actually accept a placement until the day arrives.

FINDING #19 AN 11.7% PROFIT MARGIN IN PRIVATE FOSTER CARE

Financial data was collected on 7 agencies. The difference between their total income from the per diem and special needs agreement (unit cost of $124.90) total expenditures (unit cost of $110.28) yields a profit margin of 11.7%. The components of the expenditures in private foster care are illustrated:



The largest cost component of private foster care is the board rate which is paid to the foster parents, which represents 56% of the total cost. Wages and Benefits for foster care support staff, recruitment and supervisory staff is 19%. Child needs (including medicine, allowance and other incidentals) paid by centralized services is 4%. Central administration is 15% and program expenses amount to 9%.

FINDING #20 CHILDREN REMAIN LESS THAN 9 MONTHS IN FOSTER CARE

There is a rapid flow through of admissions and discharges within foster care. The average length of stay for children who were discharged in this year was 9.4 months.

There were 580 beds in this network and 416 children placed on Apr 1, 2003 (72% occupancy). There were 371 children admitted during fiscal 2003-04 meaning that 787 were served. The rate of inflow (admission per capacity) is 62%. Almost half of all children served were discharged during the year (42% or 334). These flow-through indicators are fairly high because of the number of short term placements in this sector.

Foster Care compared to Group Care on flow-through statistics

FLOW THROUGH INDICATORS	FOSTER CARE	GROUP CARE
discharges per children served	42%	52%
admissions per bed capacity	62%	111%
Average length of stay for children discharged	9.4 months	24.4 months
Occupancy on Apr 1, 2003	72%	93%
Occupancy on March 31, 2004	76%	98%
% of discharges who stay less 9 months	75%	50%

The indicators – discharges per children served and admissions per bed capacity – have different denominators cannot be compared with one another.

11.13 Linked Program and Child Profile

The unit cost for foster care on a child-by-child basis is $121.67. The slightly higher "child-by-child" cost is due to the fact that many children placed in private foster need additional staffing. The clinical profile of the children in private foster care is split between two groups of children:

- Children in care for short term emergency admission or assessment who have at least one indicator of parental anti social behaviour (usually abuse) or at least one indicator of parental distress (usually poverty or teen mom). These children are more likely to have no disability or diagnosis.
- Children with significant clinical needs who are not unlike the children in staff operated group homes. Children in group care are marked by higher average scores on standardized measures of pathology.

The table of clinical indicators for children in foster care versus group care shows that children in foster care are almost identical to children in group care on indicators of parental anti-social behaviour, including abuse, parental distress and risk factors. However, children in group care are more hyperactive, have less social adaptability, more co-morbid conditions and a greater degree of sexualized behaviour.

Both groups of children remain in the resource for the same number of days, children are admitted to foster care approximately two years younger than those admitted to group care (10.3 years versus 12.0 years).

	Foster care					**Group care**				
Clinical indicators	N	Min	Max	Mean	Std. Deviation	N	Min	Max	Mean	Std. Deviation
CGI_global	46	40	95	70.2	14.3	156	41	95	75.8	15.1
CGAS	46	2	95	61.4	21.7	166	1	100	47.2	22.8
anti-social parents	46	-	4	1.8	1.3	173	-	5	1.5	1.4
distressed parents	46	-	3	1.0	0.8	173	-	5	1.2	1.0
Special needs of child	46	-	3	1.0	1.0	173	-	3	1.4	0.9
Comorbid conditions	46	-	8	2.4	2.1	173	-	8	3.2	2.2
risk_factors	46	-	9	3.8	2.3	173	-	11	4.1	2.3
Sexualized behaviour	34	-	32	8.4	10.5	123	-	62	11.9	12.9
AGEADMIT	46	0.0	18.0	10.3	4.4	167	0.3	23.2	12.0	3.8
AGEJAN1	46	2.3	38.6	13.0	6.4	173	1.7	36.4	15.6	4.5
daysincare	34	36	5,620	1,581.7	1,706.0	98	1	5,914	1,559.5	1,314.5

Please note: The CGAS places greater pathology on its scale towards the lower numbers. All other tests place greater pathology on their scales towards the higher numbers.

12.0 Group Care

There are sixty one (61) OARTY member agencies with at least one licensed group home. Collectively, these agencies operate 205 licensed group homes with 1,465 beds or 54% of the total OARTY bed capacity. The system-wide average per diem for these group homes is $182.01.

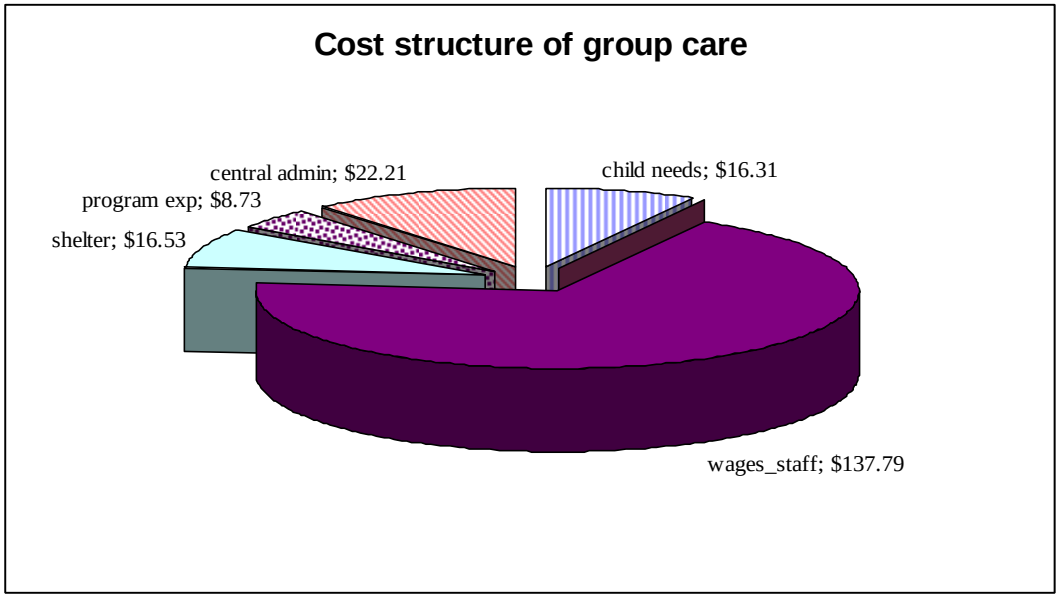
Twenty three (23) OARTY member agencies who operate at least one group home responded to the survey. The members who responded have 821 beds or 56% of all group home beds under OARTY.

A total of 173 individuals were randomly selected from the 821 beds or 21%.

The occupancy rate in licensed group care is 98%.

12.1 Cost Profile of OARTY group care

The components of the cost of group care are:



The largest component of the cost of group care is the wages and benefits category (69%). Child needs, including medicine, allowance and other incidentals paid by centralized services, is 8%. Shelter costs are 8%; central administration is 11% and program expenses amount to 4%.

The average minimum wage for direct care staff is $13.21 (or $27,474) and the average maximum is $15.45 (or $32,143).

FINDING #21 SHELTER UNIT COST

The average shelter costs are $16.53 with little or no variation by age group or clinical profile. We also know that $6.90 of shelter costs are attributable to taxes, utilities, repairs and furniture. This means that the equivalent value of “pure rent” is $9.63 per day or $290 per month per child. For a typical 7 bed group, the equivalent value of “pure rent” would be $2,023 per month.

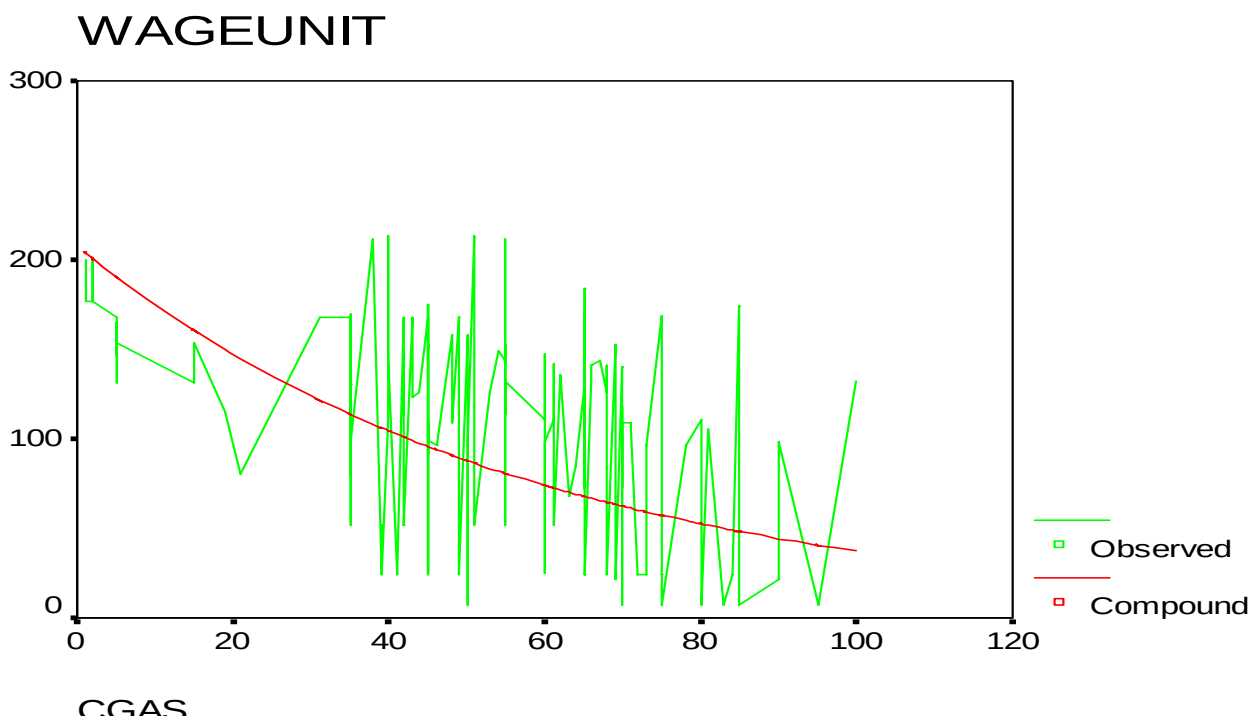
The equivalent value of “pure rent” for a child per month ($290) is about one half of the increment paid to mothers on ODSP for one additional child.

The other element in the cost of caring for a child that is shared by all parents is the category "personal needs". Personal needs for clients (food, medicine, personal hygiene, allowance) is $16.31 or $489 per month per child.

12.12 Linked Program and Child Profile

The unit cost for group care on a child-by-child basis is $187.49.

There is a strong relationship between the CGAS (a measure of social adaptability) and the unit cost of wages and benefits. This number reflects the intensity of staffing. The scatter plot below demonstrates that for each level of the CGAS, there is a wide variety of possible per diems that are associated with the child through his placements. However, the range of values narrows sharply as the CGAS moves into the normal range above 60.



The analysis of variance for this regression is F = 36.69, significance = .000.

FINDING #22 A SIGNIFICANT RELATIONSHIP BETWEEN CLINICAL NEEDS AND COSTS

This chart indicates that staffing unit costs do vary quite a bit regardless of the value of the CGAS. However, there is a clear direction and narrowing of the range of values as children approach normal ends of the continuum. It must be pointed out that the CGAS was completed at the time of the PIC2 survey – not at the point of admission. As noted in section 4.0, OARTY agencies produce significant improvement in this measure and other measures during treatment.

When a high cost treatment centre makes significant improvements to the child clinically, he becomes less disturbed than he was at the point of admission. Over time, the strong relationship between needs and cost at intake will become less observable.

12.2 4.4% Profit Margin in Group Care

Financial data was collected on 81 licensed group homes. The difference between their total income from the per diem, pay equity and special needs agreements (unit cost of $216.15) and total expenditures (unit cost of $206.59) yields a profit margin of 4.4%.

FINDING #23 OPERATING A LICENSED GROUP HOME IS MARGINAL AND RISKY

The group home operators who responded to the survey generally had a higher approved per diem than those agencies who did not respond to the survey which may mean that system profit margins are even lower. Many individual sites among those who responded are operating at a deficit. Clearly, the business of running group homes is marginal and risky. This has an impact on the salaries and benefits paid to direct care staff.

13.0 Staff and Benefits

13.1 Wages: Child and Youth Workers

The survey collected information on salaries and benefits from several perspectives. The budgeted staffing levels in FTE and the fiscal allocation for this level of staffing formed the basis of the per diem. The average salary allocation for each FTE is $29,536 per annum. This is equivalent to $14.20 per hour.

The average minimum hourly wage is $13.21 or $27,474 per annum. The average maximum rate is $15.45 or $32,143 per annum. The absolute minimum is $10.00 per hour and the highest rate is $23.08 per hour.

FINDING #24 WAGES FOR CHILD AND YOUTH WORKERS AMONG THE LOWEST IN ONTARIO

These rates are the lowest wage rates in the Child Welfare system for direct care child and youth workers by at least three dollars per hour for minimum and maximum averages by sector.

13.2 Benefits: Licensed Group Homes

Fourteen percent (14%) of group homes do not pay any benefits to staff beyond those which are prescribed by Ontario Employment Standards Act (CPP, Workman's Comp and EI). The average benefits cost as a ratio of total staffing costs is 14%

The following table displays the percentage of group homes with the benefit:

Benefit	% with benefit	Average % paid by employer
Basic Group Life	86%	76%
Accidental Death & Disability	86%	79%
Supplementary Health	64%	94%
Basic Dental	85%	93%
Endodontal & periodontal	58%	86%
Extended Dental (Orthodontia)	0%	-
Short term disability	24%	74%
Long Term disability	74%	73%

None of these benefits were provided to foster parents.

14.0 Clinical Supports

FINDING #25 AGENCIES PROVIDE EXTENSIVE CLINICAL SUPPORT THROUGH THE CORE PER DIEM

Table of Clinical Support provided either by Employment or by Contract

Clinical Support	**Foster Care**	**Group Care**
Psychiatrist	44%	29%
Psychologist	78%	43%
Social Worker	44%	18%
Speech Therapist	11%	58%
Play Therapist	56%	21%

15.0 A Study of Restraints

Twenty nine percent (28.6%) of children were restrained during the study year (2003-04). About half of the children are restrained once or twice per year. Seventeen percent (17%) of all children placed are restrained at the rate of once per month or higher in a few cases.

The number of restraints is highly correlated with the following variables:

(1) being on psychotropic medication (F=5.39, sig = .024)

(2) Conner's Global Index measuring inattentive/impulsive behaviour (r = .295, sig =.024)

(3) CGAS measuring social adaptability (r = -.315, sig = .016)

(4) Having a learning disability (chi- square 8.7, sig = .000)[2]

The number of restraints is not related to most clinical variables including diagnosis, number and type of social risk factors, co morbidity, degree of sexual acting out, staffing model, foster or group care, developmentally delayed or multiply handicapped.

FINDING #26 CLEAR EVIDENCE THAT RESTRAINT PRACTICES COMPLY WITH POLICY FRAMEWORK

Children can only be restrained if they are actively at risk of harming themselves or others. Restraint is not a clinical procedure applied to children who are most "disturbed" but rather it is an emergency measure applied to children who cannot cope with everyday demands of living without resorting to dangerous behaviour.

The fact that current restraints are not related to the long list of variables above, including diagnostic conditions, means that staff are not restraining children because they are disturbed, handicapped or come from severe adverse family background. The list of no relationship variables indicate that systemic factors do not drive restraint: i.e. being in a high cost resource, a family operated home or a staff operated home, a foster care resource or a group home.

The number of restraints are related to behaviour problems as indicated by the Conners' Global Index, the CGAS and the degree of social support necessary to navigate demands of daily living. The CGAS contains the element of dangerousness in its definitions, so it is a direct measure of the concept in the policy framework. The policy framework requires treatment staff to use restraint exclusively to protect children from behaviour that is self injurious or dangerous to others. The CGAS applies a lower score to children who exhibit unpredictable self injurious and violent behaviour.

[2] This finding is in relation to simple question "ever been restrained?" not in relation to the number of restraints.

16.0 References

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