EVALUATION OF CAPITAL REGION HOME VISITATION NETWORK: OUTCOME EVALUATION REPORT

December 1, 2001 – January 31, 2004

Prepared for:

Early Childhood Development Initiative (ECDI) Evaluation Committee

Submitted by:

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FOREWORD

In the fall of 2002, the Canadian Research Institute for Law and the Family (CRILF) funded by the Capital Region Home Visitation and the Early Childhood Development Initiative began the evaluation of the Capital Region Home Visitation Network, which included a range of programs at 11 different sites. This current evaluation of the Home Visitation Network builds on a three-year pilot project funded by the National Crime Prevention Centre (NCPC) that began in 1999 and was completed March 2002. The first phase of the project involved the evaluation of early intervention programs focussed on the Healthy Families model in three sites across Canada including:

- a Healthy Families program sponsored by Success By 6® Edmonton, Alberta in three agencies: Bent Arrow Traditional Healing Society; Norwood Child and Family Resource Centre; and Terra Association.

- Best Start, sponsored by C.H.A.N.C.E.S. Family Resource Centre, Charlottetown, Prince Edward Island;

- Kwanlin Dun Healthy Families Program, sponsored by the Kwanlin Dun First Nation, Whitehorse, Yukon; and

The results of the three year evaluation are contained in the report entitled *Evaluation of Healthy Families Program in Selected Sites Across Canada* (Elnitsky et al., 2003).

Overall, the findings regarding the effectiveness of the Healthy Families programs presented in the Elnitsky report lead to the conclusion that the programs were successful at achieving some, but not necessarily all of their stated objectives. The detail and quality of the data from Child Welfare services especially provided significant support for the effectiveness of the Edmonton and PEI Best Start programs.

Further, the report states that our experiences in evaluating these programs left us with the impression that the programs had provided the skills and support necessary for their clients to cope with the crises of everyday life and had, as well, helped the clients achieve goals that we were not able to clearly document. In part this was due to the heterogeneous nature of the clients and their unique needs. However, it may also be due in part to the fact that the complexity of what these programs do is not easily evaluated. Interestingly, as we expanded the evaluation design, we were able to further document outcomes achieved by the programs. At the conclusion of the Elnitsky report we made the following recommendations:

- Research measures should be developed to help the program staff identify and track individual goals.

- More focus should be placed on identifying and tracking longer-term behaviour outcomes.

- New instruments, more sensitive to the developmental pathways of families with older children (3 years and older), need to be chosen/developed.

- New procedures are needed to track families' contacts and involvement with their communities and their involvement with community resources and activities. This would augment information about social support that is already being gathered.

- More refined instruments should be developed to help parents tell their stories about how the programs helped them. More focus should be placed on their ability to cope with the stress created by the circumstances of their everyday lives and the relationship they have with their developing child.

Over time the programs that were subject to the first three-year evaluation have also grown and developed.

- The Healthy Families program in Edmonton has now evolved into the Home Visitation Initiative and, with Early Childhood Development funding, is being offered at 11 sites in Capital Health Region serving approximately 500 families at risk.

- Best Start, funded by the PEI Department of Health and Social Services and NCPC, has now been expanded province-wide and is serving on average an additional 90 families.

- Sustainability has always been an issue for the Kwanlin Dun Healthy Families program and thus, it does not currently exist as a unique program. A home visitor, however, has been added to a public health program.

In the current evaluation we have been able to build on our past experiences and implement many of the above research recommendations. As a result, this report demonstrates more clearly than previous reports the positive effects that the Home Visitation Network programs have with families at risk.

While this evaluation has produced a number of interim and progress reports, the most relevant to the current report is *Building A Future: A Process Analysis of the Implementation of the Home Visitation/Early Childhood Initiative* (Hornick, et al., July 2004). This report focuses on the historical development and implementation of the overall initiative and provides the context for the current outcome report.

EXECUTIVE SUMMARY

Purpose of the Report

The purpose of this report is to present selected findings regarding program activities and outputs, and a more detailed analysis of the impact of the Home Visitation program at a system level based on outcomes measures. The findings in this report are drawn from the comprehensive evaluation of the Capital Region Home Visitation Network. More specifically, this report has two major objectives as follows:

1. To present an analysis of descriptive information about the clients in all the sites in the Capital Region Home Visitation Network including the following:

    - program activities: contacts, goal summaries, and community referrals; and

    - program outputs: client profiles, client intake, demographic characteristics, and risk assessments.

2. To present an analysis of program outcomes based on:

    - outcomes data collected from a core set of outcomes measurement tools, aggregated and summarized regionally;

    - a survey of clients' experiences and views of the Home Visitation program;

    - involvement with Child Welfare services; and

    - utilization of health care services.

Research Approach

This report provides a limited analysis of program activities and outputs (i.e., components of a process analysis) and an outcomes analysis. The findings reported here are based on data from a variety of sources and methods. These are briefly described below.

- A core set of standardized instruments chosen by the evaluators in consultation with the programs to measure outcomes over time;

- A parent survey to collect qualitative information about client experiences with, and views of, program services; and

- Secondary analysis of Child Welfare data obtained from Alberta Children's Services' Child Welfare Information System database (CWIS).

The outcomes analysis was based on a multi-observation tracking study design which was used to determine the effectiveness of the program. Testing of families begins with intake into the program and continues for the duration of the study or until families withdraw or complete the program. Findings regarding the following five standardized measures are presented and discussed in this report:

- Family Assessment Device (FAD);
- Child Development Inventory (CDI);
- Maternal Social Support Index (MSSI);
- Carey Infant Temperament Questionnaire; and
- Denver Developmental Screening Test-II (DDS-II).

The evaluation strategy and design are discussed in Chapter 2.0.

Conclusions

The conclusions based on the findings of the report are briefly discussed below.

Program Activities and Outputs

Contacts

As expected, the home visitors reported that they spend the majority of their time conducting home visits and meeting with clients. However, a significant number of contacts and time are allocated to other types of activities that also support the client. The results underline the diverse nature of the programs in terms of how program services reach the client.

Community Referrals

These programs are making very good use of other community resources and more importantly are making the resources accessible to their families. The average number of referrals per family was high, at an average of almost five per family and the rate of "success" was almost 40%. Obviously, the programs have been very successful at identifying and building a network of community resources and have helped their families access these community supports.

Program Outputs

From December 1, 2001 to January 31, 2004 the programs have provided home visitation services to over 1,000 at-risk families. While attrition rates were approximately 50%, these are what would be expected given the findings of previous evaluations (e.g., Elnitsky et al., 2003). The two Aboriginal programs had approximately the same attrition and retention rates as the other urban programs.

In terms of risk levels, most of the families served (almost 60%) were young, single parents. While a considerable number of families (approximately 27%) fell below the 25 point threshold on the Risk Assessment Checklist, most of these families were from one program (i.e., Early Head Start).

Baseline Needs of the Families

In terms of the standardized measures at the baseline test, these families were high needs. Only approximately 3% scored in the average range on all five standardized instruments and almost half of the families scored "needs improvement" on two or more of the instruments. The Carey Infant Temperament Scale also indicated that as a group these are relatively difficult or challenged infants with parents who tend to misjudge the behaviour of the infants and have unrealistic expectations.

Conclusion: Standardized Outcome Measures

The analysis of outcome data on the standardized measures which focussed primarily on the parent but also the infant is very positive and encouraging. Conclusions are summarized below.

- Family functioning, measured by the FAD, was significantly increased for most of those families who were not functioning well when they entered the program. Further, the level of functioning tended to increase over time, with those who were involved with the program the longest improving the most.

- Knowledge, measured by the CDI, of the emotional, cognitive, physical, and social development of children increased significantly in the first year for those clients who were limited in their knowledge when they began the program. This improvement, however, dropped off as their children grew older and the instruments became less relevant.

- For those parents who felt a lack of support at intake, as measured by the MSSI, the overall amount of support felt in the home, and support outside of the home, substantially increased in the first year and then leveled off, but was maintained for the next two to three years indicating that the home visitation workers had been successful in helping parents develop and maintain healthy interpersonal relationships. Only community contacts showed comparable improvement. Given the lack of positive change in the other community-based resources to support at-risk families the importance of the relationship of the families to the home visitation workers should be recognized.

- Infants involved with Home Visitation programs were identified by the Carey as having a tendency to be more difficult than the normal population. To make this more challenging, their parents often had unrealistic perceptions about their child's behaviour. The improvement of the parent's perception within one year of entering the program was considerable, indicating the important role the home

visitors play in modeling good parenting perception and skills and, thus, helping the parents to deal positively with a difficult and challenging child.

Overall, the standardized instrument data analyzed to date and presented in this report lead to the conclusion that the Home Visitation program has been very successful in terms of achieving short-term outcomes with these at-risk families.

Conclusion: Parent Interview and Visitor-family Relationship Inventory Outcomes

Overall, the home visitation clients who participated in the survey indicated positive experiences with the program's services and with their home visitor. Respondents felt the program offered a valuable service to families. A number of clients even indicated that they have passed on information about child development and parenting that they had learned from the program to other people. Responses to the interview questions highlight the diverse roles played by the home visitor. For some clients, the relationship they share with their home visitor is the only involvement they have with the Home Visitation program because, for various reasons, they do not participate in any of the program's activities. All 60 of the respondents indicated that they felt the Home Visitation program provided valuable and needed services. The major areas identified by respondents where the program was of most help included: information about child development, information about parenting, accessing community services, and support from the home visitor in terms of providing emotional support, assistance with coping with stress, parenting concerns, and other issues. The parent interview data strongly support the conclusion that in the mind of the respondents these programs are extremely useful and effective in giving them the skills and support they need to be good, functional parents. Clients were clear in describing the value of the Home Visitation program and their relationship with the home visitor in improving their child's life, as well as their own personal lives.

Conclusion: Child Welfare Outcomes

The findings regarding the scope and nature of Child Welfare involvement suggest a clear and unique pattern for home visitation clients compared to the other groups. Overall, the findings suggest that the home visitation clients are well observed by the home visitors who are well trained, vigilant, and relate well to the Child Welfare liaison worker assigned to the programs. Suspicions of abuse are very likely to be reported, screened and investigated, but less likely to need further action – most likely due to the clients' involvement with the program.

Further, if protection services are required, the home visitation client group is more likely to remain with the family and less likely than the general population to need the more expensive services of foster care. If such placements are needed, it is also clear that the home visitation clients require the services for significantly fewer days, thus again limiting the level of expense and intrusiveness.

A preliminary analysis of days in care costs for just two placement categories, foster care and agency foster care, indicate that during the evaluation period the home

visitation program generated a cost saving of over $620,000. A comprehensive cost benefit analysis would likely demonstrate even more significant cost savings.

Overall, these Home Visitation programs seem to work well with Child Welfare services and definitely provide a less intrusive alternative to higher levels of involvement with Child Welfare services, all of which is consistent with the recently implemented Alberta Response Model (ARM).

Conclusion: Health Care

The findings regarding health profiles at birth and health care utilization within the first three years of the child's life strongly support the need for, and effectiveness of, the Home Visitation program. First, in terms of need, the home visitation mothers are clearly at risk compared to the general population of mothers. They are younger, more likely to be single parents, and far more likely to smoke, drink alcohol, and use street drugs during the pregnancy – compared to the general population. Their infants also are more likely to be at risk since they are more likely to be premature and have low birth weights.

In terms of health care utilization, as would be expected given the higher levels of risk for newborns in the Home Visitation programs, these families use health care services more than the general population in the infants' first year. However, by the third year of the child this pattern reverses and these families become more efficient users of health care services. This appears to be due to their involvement with the Home Visitation programs. As indicated by the parent survey data, the mothers themselves recognized that the programs, and particularly their home visitor, have provided them both with the knowledge to make good judgements about prevention and appropriate responses to health issues and as well, have provided them with a resource to consult with if they are in doubt – i.e., the home visitor backed up by public health nurses.

Overall Conclusions

To date the published evaluation research on Home Visitation programs has been unable to clearly document their effectiveness. The fact that these programs serve clients with a broad range of needs and the actual activities of the programs often varies according to the individual needs of clients makes the programs very difficult to evaluate. This situation had lead some researchers, like Gomby et al. (1999) to conclude that we should maintain modest and realistic expectations for home visitation services. Others point to the difficulty of changing lives of children and parents who live in conditions of disadvantage (Behrman, 1999).

Even the most recent randomized trial – evaluation of the Hawaii Healthy Start Program – has not shown the programs to be effective in preventing child abuse. It should be noted however, that very little abuse was ever reported (less than 4% of the families). In the words of the researchers:

> "…we found little evidence in program records that home visitors were alert to mothers with the highest levels of abusive behaviour…It is likely that the home visitors lacked sufficient expertise and supervision to address family risks for abuse, motivate families to change, and link families with professional services." (Duggan et al., 2004, pp. 614 & 615).

This report paints a different picture of the effectiveness of Home Visitation programs than the previous literature has – i.e., that these programs are effective in achieving their objectives programs than the previous literature has – i.e., that these programs are effective in achieving their objectives and at the same time are generating cost savings for the Child Welfare system. It is possible that some prior evaluations have not been sensitive to the subtle and varied achievements of the home visitors with their families. Indeed, it was only after a number of years that we were able to develop a research design and strategy for analysis that demonstrated how and when clients changed.

Another explanation must also be considered. Through the years of our research with the Edmonton programs, we have observed considerable development – from a para-professional support model to a more professional model using knowledge and research for best practice. These programs, it appears, are very different than the Hawaii Healthy Start Program recently evaluated by Duggan et al. (2004). In fact, they provide an ideal model of collaborative community capacity building. More specifically, we feel the following contributed to the successful implementation and effectiveness of the programs with their clients:[1]

- the programs were well organized under a collaboration based on interdisciplinary and interagency partnerships;
- the programs built on past success with host agencies that had a proven track record;
- the programs were well integrated within the public health system and were supported by the public health nurses (and system) through referrals, assessments, and ongoing consultations to the program workers;
- the programs were well integrated within an infrastructure of care for children and families which included Child Welfare (under the ARM initiative) and referrals to other resources were common;
- the programs were committed to and provided extensive training to the front-line staff – training is ongoing;
- the programs have highly qualified supervisors and rigorous standards for supervision;

[1] For a detailed analysis of program implementation and design, please see: Hornick et al., 2003; Wagner et al., 2003; and Hornick et al., 2004.

- the programs were committed to the development and use of computerized client information systems (HOMES and/or MIS), which tracked clients on core outcomes and provided an efficient mechanism both for accountability reporting, as well as for producing information for knowledge-based best practice; and

- the programs have worked closely with both research consultants and the funders to develop, pilot, and implement a standard mechanism for quality assurance and accountability reporting – i.e., the monitoring and evaluation forms (referred to as the "M & E" reports). This mechanism provides an ongoing, easy to use mechanism for the programs to report to funders.[2]

Overall, we feel confident in concluding that these Home Visitation programs are effective in achieving their objectives. Further, we feel that these Home Visitation programs are effectively moving towards achieving the Regional Early Childhood Development/Home Visitation goals:

- Families are safe, healthy and able to promote children's development.

- Parents are more knowledgeable about parenting.

- Children demonstrate improved developmental functioning.

- Parents know how to access professional community resources when required or for additional supports.

Recommendations

There are several recommendations which follow from the findings and conclusions of this evaluation. They are listed below.

<u>Program Management</u>

1. The program should continue to develop and maintain the collaborative, interdisciplinary model that has been implemented, particularly in regards to the following:

    - development of the common standards and outcomes;
    - shared core and on-going training;
    - common or compatible client information systems;
    - standardized contract monitoring mechanisms, that is, monitoring and evaluation (M & E) reports; and
    - the Home Visitor Coordinator position, which is essential for attainment of the items listed above.

2. The program should continue to work with the Region to streamline the ongoing contract monitoring through the monitoring and evaluation (M & E) report form.

[2] Hornick et al., July 2004, *Building a Future*, see page 32.

3. The program should continue to develop strategies for ensuring the quality and correctness of the data entered on the client information system.

4. The program should continue to use a number of standardized quantitative outcomes measures which reflect the broad range of client issues they deal with. Qualitative measures such as the parent interview should also continue to be used and further developed. However, it should be recognized that data from such qualitative measures are severely limited in their use for testing the effectiveness of the program. These measures are subjective in nature and experience shows us that it is also difficult to obtain information from a large number of clients and thus, the findings are not representative of the clients as a group. The information may, however, be useful for program development.

Service Delivery

1. The high rates of attrition (approximately 50%) and the low number of families in the program with children over 3 years of age suggest that most Home Visitation programs are better suited to provide services to families with children from birth to 3 years of age, than for families with children up to 6 years of age. This suggests that the Home Visitation programs could focus primarily on families with children from 0 to 3 years of age and then develop a link with other existing programs that are more relevant for families with children 3 to 6 years of age.

2. The findings regarding community contacts and use of community resources (i.e., the social scale of the MSSI and the parent interviews) suggest that the Home Visitation programs are doing a good job of referring clients to other community agencies, but are more limited in helping families with informal linkages within their communities and neighbourhoods. Perhaps what is needed is more capacity building within the families' own communities with informal and personal supports. The Norwood picnic might be a good example of this.

Research and Evaluation

1. High attrition rates have been a significant issue for the programs yet little is known about why families drop out and what their needs are. Research should be conducted to find out more about these families, possibly through detailed exit interviews.

2. Research should be conducted regarding what additional community supports (in addition to referrals to formal agencies) these families could benefit from.

3. The links with and use of other agency resources should be further researched. The current referral tracking instrument is a good start, but more detailed information would be useful.

4. Research on the further development of age-appropriate measures of development should continue, especially for birth to 3 years of age children.

5. Further comprehensive evaluation (beyond the M & E reports) is not needed with these Home Visitation programs at this time. If the program model were significantly changed, then more in-depth evaluation would again be needed.

6. The findings regarding Child Welfare involvement and health care utilization suggest that a detailed cost/benefit analysis should be conducted.

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- Bent Arrow Traditional Healing Society – Ms Shauna Seneca, Executive Director;
- Boyle Street Community Services Co-operative – Ms Hope Hunter, Executive Director;
- Early Head Start Program – Mr. Martin Garber-Conrad, Executive Director, Edmonton City Centre Church Corporation;
- Leduc County Family and Community Support Services – Ms Betty Ann Piché, Director;
- Mill Woods Family Resource Centre – Ms Laurie Plouffe, Executive Director;
- Multicultural Health Brokers Co-operative – Ms Yvonne Chiu and Dr. Lucenia Ortiz, Co-executive Directors;
- Norwood Child and Family Resource Centre – Ms Bev Parks, Executive Director, and Ms Kim O'Leary, Acting Executive Director;
- St. Albert Parents' Place Association – Ms Sandy Biener, Executive Director;
- Strathcona County Family and Community Services – Ms Jackie Winter, Manager; and
- Terra Association – Ms Karen Mottershead, Executive Director.

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1.0 INTRODUCTION

1.1 Background to the Capital Region Home Visitation Network

The Capital Region Home Visitation Network is a network of Home Visitation programs that serve families across the region. The Capital Region Home Visitation Network includes a range of programs delivered at 11 separate sites. Currently, the initiative includes programs at the following agencies: Ben Calf Robe Society; Bent Arrow Traditional Healing Society; Boyle Street Community Services Co-operative; Early Head Start (at Alex Taylor School); Leduc County Family and Community Support Services; Mill Woods Family Resource Centre; Multicultural Health Brokers Co-operative; Norwood Child and Family Resource Centre; St. Albert Parents' Place Association; Strathcona County Family and Community Services; and Terra Association.

The most common element shared by these programs is that they send trained home visitors into the residences of families with infants and young children with the intent of improving the lives of the children by changing the attitudes, knowledge and behaviour of the parents. More specifically, most Home Visitation programs seek positive family change by providing social support and practical assistance, as well as education and modeling about parenting and child development. Beyond this common element, programs can differ in their specific objectives, level and intensity of service offered, staffing, and types of clients they serve.

1.1.1 Early Childhood Development (ECD) Initiative and the Home Visitation Initiative

In January 2002, the Canadian Research Institute for Law and the Family (CRILF) was contracted by Edmonton and Area Child and Family Services Region 6 (formerly called Ma'mōwe Capital Region Child and Family Services Authority) to evaluate the Home Visitation program. This initiative marked a considerable expansion of the Healthy Families programs at Bent Arrow Traditional Healing Society, Norwood Child and Family Resource Centre, and Terra Association. It also established Home Visitation programs in: St. Albert Parents' Place Association; Strathcona County Family and Community Services; and Leduc County Family and Community Support Services. As well, it expanded: the Early Head Start program; the Mill Woods Family Resource Centre Parents as Teachers program in Edmonton; Ben Calf Robe Society; and, Multicultural Health Brokers Co-operative.

Over the past several years, the recognition that early childhood is a crucial time for the optimal development of children has also led to the implementation of an Early Childhood Development (ECD) Initiative in Alberta. In April 2002, Region 6 received additional funding under the ECD Initiative. A portion of the ECD Initiative funding was allocated to Home Visitation programs. This funding was used to both initiate new Home Visitation programs (Boyle Street Community Services Co-operative), as well as to enhance existing programs. The Capital Region Home Visitation programs, then, currently receive funding from both the Home Visitation Initiative and the ECD Initiative.

It should be noted that the ECD Initiative provides funding for other programs that do not feature home visitation. These programs are the focus of a separate CRILF report entitled, *Early Childhood Development (ECD) Initiative: Description of ECD Programs, Evaluability Assessment and Proposal for Evaluation* (Hornick et al., 2003).

1.1.2 Home Visitation/ECD Goals and Outcomes

The ECD Planning Committee first chose to use the ECD funds in two key investment areas identified in the *Early Childhood Development Implementation Plan: 2002/2003* as follows:

- enhanced parenting supports and parenting skills programs; and
- enhanced quality programming in child care settings and pre-school programs.

In addition, it was recognized that the Capital Region ECD Initiative should expand upon current programs and services that have proven their effectiveness and/or addressed gaps in services. Further, this initiative had been planned within the context of a revised model for child welfare services, the Alberta Response Model (ARM) and it was agreed that the outcome of the ECD Initiative should be consistent with the goals and outcomes of ARM. Overall, ARM identified four approaches to service delivery:

- differential response;
- concurrent permanency planning;
- community partnership; and
- parental accountability.

Early in the process of implementation of the ECD Initiative, the Planning Committee recognized and endorsed the concept of the Provincial Evaluation Framework to ensure program outcomes were consistent with the outcomes identified by the Ministry and included the Alberta Response Model goals. The framework for the Capital Region Evaluation included the development of seven additional common program outcomes and outcome measures, as well as unique outcomes for specific programs. These seven outcomes were summarized by the following four overriding Regional Early Childhood Development/Home Visitation goals which set the overriding context of this evaluation:

- Families are safe, healthy and able to promote children's development.
- Parents are more knowledgeable about parenting.
- Children demonstrate improved developmental functioning.
- Parents know how to access professional community resources when required or for additional supports.

1.2 Overall Purpose of the Evaluation

Given the history and conditions set out above, the overall purpose and research objectives of the evaluation framework are as follows:

1. To conduct an outcome analysis study of the Capital Region Home Visitation network:

    - monitor program development; and
    - measure program effectiveness.

2. To determine whether the program in all sites is meeting families' needs, enhancing strengths, and promoting healthy child development through a monitoring evaluation framework.

3. To provide feedback to the programs regarding 'lessons learned' that will impact best practices for Home Visitation programming.

1.3 Purpose of this Report

The purpose of this report is to present selected findings regarding program activities and outputs, and a more detailed analysis of the impact of the Home Visitation program at a system level based on outcomes measures. The findings in this report are drawn from the comprehensive evaluation of the Capital Region Home Visitation Network. More specifically, this report has two major objectives as follows:

1. To present an analysis of descriptive information about the clients in all the sites in the Capital Region Home Visitation Network including the following:

    - program activities: contacts, community referrals; and
    - program outputs: client profiles, client intake, demographic characteristics, and risk assessments.

2. To present an analysis of program outcomes based on:

    - outcomes data collected from a core set of outcomes measurement tools, aggregated and summarized regionally;
    - a survey of clients' experiences and views of the Home Visitation program;
    - involvement with Child Welfare services; and
    - utilization of health care services.

1.4 Definitions of Program Terms

Client: The definition of client for Home Visitation programs is the family.

First-time Parents: First-time parents are those who will be parenting for the first time. First-time parents may be prenatal, may have given birth to their first child, or may have other children not in their care (i.e., they have not parented these children).

Home Visitation Program and Home Visitation Site: The evaluation covers Home Visitation programs in the Capital Region receiving Early Childhood Development Initiative funding. The Capital Region Home Visitation programs are a network of new and existing Home Visitation programs that serve families across the region. The evaluation covers 11 home visitation sites or agencies in Region 6. The sites including the home visitation component under evaluation are as follows: Ben Calf Robe Society Papoose and Parents; Bent Arrow Traditional Healing Society (THS) Healthy Families; Boyle Street Community Services Co-operative Home Visitation Program; Early Head Start; Leduc County Family and Community Support Services (FCSS) Family Connections; Mill Woods Family Resource Centre (FRC) Parents as Teachers; Multicultural Health Brokers Co-operative Home Visitation (HV) Program; Norwood Child and Family Resource Centre (CFRC) Healthy Families; St. Albert Parents' Place Association (PPA) Parents as Teachers; Strathcona County Family and Community Services Home Visitation (FCSHV) Program; and Terra Association Healthy Families.

Home Visitors: Home visitors, or family support workers, are responsible for the direct delivery of the Home Visitation program including home visits.

1.5 Limitations of the Report

Readers of this report should be aware of a number of limitations. An understanding of these limitations will help to put the findings of the report into context. These limitations are discussed briefly below.

1.5.1 Definition of Success and Standardized Instruments

Other studies of programs at various locations across Canada (Elnitsky et al., 2003; Hornick et al., 2004) and the United States (Anderson et al., 2003) have found that client families who received Healthy Families and other kinds of early childhood development programs are a very heterogeneous group. Even though these client families are assessed as "families at risk," the specific strengths and weaknesses of the individual families are unique and only a few characteristics are commonly shared, i.e., most clients are young, single, have low levels of education, and have children with difficult temperaments. This makes these families both difficult to serve and difficult to evaluate. Further, because of the unique needs of these families, the specific program goals and activities differ significantly from family to family.

Thus, the standardized measures were first administered to clients early in the program (most within the first three months) to provide a detailed picture of the clients' needs. This picture indicated that few clients shared the same pattern of needs. Thus,

since all instruments were standardized and "normed" on large samples from the general population, it was possible to determine cut off scores or predetermined boundaries for each instrument which distinguished between those clients who "needed to improve" on any specific scale from those who were in the normal range and had no need to improve. This provided the basis for the strategy for analyzing the outcome data for the standardized instruments further discussed in Chapter 2.0.

1.5.2 Small Number of Cases at Follow-up

This report presents analysis of findings from the outcomes measures implemented over different points in time. In some cases, however, group sizes after baseline are fairly small and thus interpretation of the findings should be made with caution (e.g., only limited follow-up data are available for Early Head Start clients). There is some variation as to when the different agencies started using the instruments. For instance, three of the agencies who participated in the earlier Healthy Families evaluation (since 1999) represent the largest groups with Time 2 (and later) scores.

1.5.3 Lack of Long-term Outcome Data

An important limitation in much of the research in the field of early childhood development is the lack of long-term outcome data (Anderson et al., 2003). While the current analysis includes up to four time periods on some of the outcomes measures, the data had to be aggregated across the 11 sites in order to reach sufficient sample sizes for meaningful interpretation. This assumes that the programs are comparable when in fact some, like Early Head Start, appear to be quite different.

1.5.4 Multiple Databases

The majority of data reported were collected from the ECD Management Information System (MIS). Not all agencies, however, utilize the MIS to store all their agency records. In some cases data were obtained from the HOMES database managed by the Canadian Outcomes Institute, and from agency-maintained electronic datafiles (e.g., Excel spreadsheets). All outcomes score data were obtained from the MIS.

1.5.5 Limitations Associated with Implementing the Parent Interview and Worker-family Relationship Inventory

There are a number of limitations that should be noted about the survey conducted with parents involved in the Home Visitation program. First, it was necessary that clients freely volunteered to participate and, therefore, the views expressed are not necessarily representative of all home visitation clients. Second, some agencies had more clients willing to participate than other agencies, and thus, the initial contact lists provided by agencies did not necessarily reflect the size of the program. As well, this meant that participation would not be proportional to size of agency; in fact, some of the larger agencies had fewer participants than smaller-sized agencies.

Given their limited English-language skills, it was necessary that someone was available to translate the interview questions for participants from the Multicultural Health Brokers Co-operative. For this group, a different methodology was required and the decision was made to utilize face-to-face interviews rather than telephone interviews. Both methods are widely used in social surveys. While a detailed discussion cannot be made here, it should be noted that as with all methodologies, there are inherent limitations and advantages associated with each of the approaches.

1.5.6 Child Welfare Outcomes Analysis

Data related to Child Welfare involvement were provided by Alberta Children's Services from their Child Welfare Information System (CWIS). Analysis was carried out on three data groups: the clients of the Home Visitation program; the non-clients (i.e., those that qualified for the Home Visitation program, but did not become involved; and, the general Edmonton population. While on the surface, this appears to be a rigorous strategy, there are some limitations. First, not all programs were able to identify the non-clients, thus, it is not a true comparison group. Second, the non-client group cannot be considered a non-treatment group. Third, some of the programs such as Early Head Start have high rates of involvement with Child Welfare by definition because Child Welfare is a major referral agent and many cases involve prior apprehensions (see Early Head Start Program Year End Report, August 2000). Fourth, some of the programs serve primarily aboriginal clients and as we know from a previous study (Elnitsky et. al, 2003) this group of clients has a complex involvement with Child Welfare authority. We would assume that all of the above limitations would tend to suppress the actual positive impact of the program services on Child Welfare involvement.

1.5.7 Quality Control of Data

The quality of data (i.e., absence of errors and omissions) continues to be a problem. CRILF staff have continued to conduct audits as data sets are developed for analysis. Further plans are being implemented to assist in training programs to maintain quality internally.

1.6 Organization of the Report

This report has been organized as follows. Chapter 2.0 outlines the evaluation strategy and design, and discusses the strategy, design, and methods utilized for the outcome analysis. Chapter 3.0 presents information on program activities, including contacts and connections to community resources. Chapter 4.0 describes program output and includes data on client intakes, demographic characteristics about the clients who are involved with the Home Visitation program, risk assessments, and baseline data on the outcome measures. Chapter 5.0 discusses outcomes findings drawing on the data on scores from the standardized instruments. Chapter 6.0 presents findings from interviews conducted with parents utilizing home visitation services. Chapter 7.0 discusses outcome results related to involvement with Child Welfare services. Chapter 8.0 summarizes relevant findings and discusses findings within the context of regional goals and outcomes.

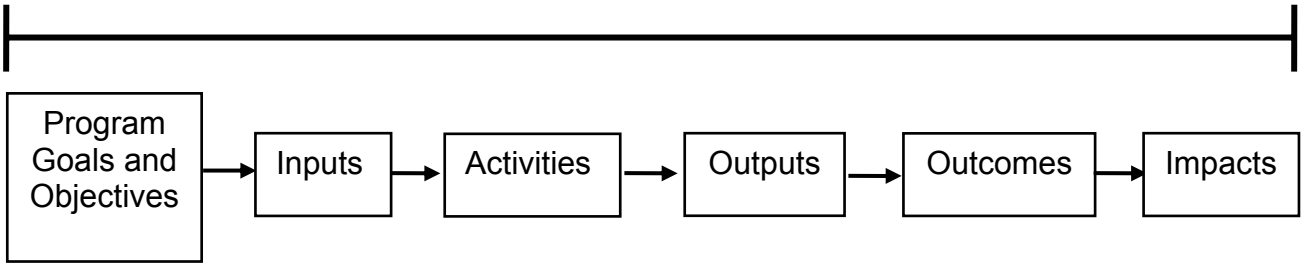
2.0 EVALUATION STRATEGY AND DESIGN

This section of the report contains a detailed discussion of the strategy, design, and specific methods utilized for the outcome analyses of the Home Visitation programs.

2.1 Framework for Outcome Analysis

Figure 2.1 shows a general model of outcome analysis. While outcome analysis begins with outcomes, a brief description of program activities and outputs will also be included in order to account for other types of data also being reported. These data include: contacts, and community referrals (i.e., activities); and client intake, demographics, and risk assessments (i.e., outputs). A more detail description of what is involved in the evaluation project's outcome analysis is then presented.

FIGURE 2.1
A Model of Outcome Analysis



Activities

Program activities are specific ways or actions taken on by program staff in order to achieve the program's goals.

Outputs

Outputs directly result from program activities. Usually, outputs are a volume measure that, for example, indicates the amount of staff workload related to certain activities.

Outcomes

Outcomes state the results of the program in the short, intermediate, and long term. Outcomes measures tell us whether the programs are having their intended effects by achieving specific program objectives identified during the design phase of the program. In programs involving the provision of services to clients, the outcomes should focus directly on the changes expected of the clients. For example, outcomes may relate to behaviour, knowledge, attitude, values, or other attributes that are affected by the program. In addition, for some programs (e.g., crime prevention through social

development), it may also be necessary to identify shorter-term outcomes since the full benefits of the program may not be realized for many years. While intended outcomes (i.e., those dictated by the stated objectives of the program) are the core of outcome evaluation, researchers should also be sensitive to unintended effects – both positive and negative.

Impacts

Impacts are longer-term outcomes. These may also reflect changes that go beyond the individual clients who receive services from a particular program.

2.1.1 Outcome Analysis: Research Design

A multi-observation tracking study design was used to determine the effectiveness of the program. Testing of families begins with intake into the program and continues at one year intervals for the duration of the study or until families withdraw or complete the program.

Written informed consent is obtained from all participants of this study. The consent forms and protocols for obtaining consent ensure that all clients are fully informed regarding the purpose of the evaluation, the nature of their involvement, the confidentiality of the data, and the fact that they may withdraw consent at any point in time and that refusing to consent to the evaluation in no way jeopardizes the home visitation services being offered to them. The specific consent forms have been developed to be consistent with the *Freedom of Information and Protection of Privacy (FOIP) Act* as well as the *Health Information Act (HIA)*.

2.1.2 Outcome Analysis: Methods of Data Collection

The complex research design outlined above requires the collection of data from a variety of sources and methods.

Standardized Instruments

As part of the longer-term outcome evaluation, a group of standardized measures were selected to track change in client attitudes and behaviour over time. These instruments have been "normed" or "standardized" on a large sample of individuals from the general population, providing an indication of how parents or children compare to others. The population average, derived from this standardization process, is used as a basis for comparison on these measures.

The choice of the specific standardized measures described below was based on a multi-facet process. The initial choice of measures was based on a literature review which examined the previous evaluations of Healthy Families (home visitation – early intervention) programs – more specifically, identifying what instruments seemed successful in measuring the program outcomes. In addition, we identified that previous literature indicated an absence of measures of the child's temperament. Thus, the Carey Temperament Scale was added. After an initial list of measures was identified,

meetings were held with program representatives and program front line workers to ensure, from their point of view, that the measures were clinically useful within the context of the services that they provided.

Once a core set of measures were identified they were included in the programs computerized client information system, the Management Information System (MIS), and front line staff were trained in the administration and clinical interpretation of the measures. Over time we also adapted some instruments by identifying what subscales were the most sensitive for the Home Visitation clients, and dropped others. In addition, as children in the program grew older, some new instruments had to be added. An extremely important part of the process was that the program workers and evaluators worked together in developing the lists of standardized measures to ensure that they were useful both for clinical decision making and for measuring outcomes over time. As well, the evaluators and program staff worked closely to ensure that staff were comfortably trained in the administration, scoring and interpretation of the measures they were using on a regular basis as part of their ongoing contacts with their client families.

For the purpose of the process analysis, the first time these measures are administered provides a detailed picture of the needs of the clients. For the purpose of the outcome evaluation, examining change in scores across time (i.e., from the first administration at T1 to the second at T2, from the second administration at T2 to the third administration at T3, and so on) provides an indication of program success. These instruments are listed in Table 2.1. All of these instruments are contained in the client file Management Information System (MIS) and are being administered by home visitation workers at all sites.

Parent Survey: Parent Interview, and Visitor-family Relationship Inventory

A small-scale survey of clients using home visitation services for at least 12 months was conducted in order to obtain descriptive information on experiences with the services as well as views about the program and home visitor.

Child Welfare Services Involvement

In order to provide information on longer term behavioural outcomes, data related to involvement in Child Welfare services were obtained from Alberta Children's Services' Child Welfare Information System (CWIS).[3] Analysis of Child Welfare data will assist in efforts to determine if the Home Visitation program impacts utilization of this kind of public service. The following groups were included in the analysis:

- Home Visitation Clients: Individuals who have participated in the Home Visitation program or utilized services. The time period was from the date of birth of the infant to the date of file closure or November 30, 2003, whichever is earlier.

[3] This report adopts Alberta Children's Services' use of the term Child Welfare to mean Child Protection Services, as well as the name of organizations that provide child protection services.

TABLE 2.1
Core Standardized Instruments Used to Measure Outcomes in the Home Visitation Program

INSTRUMENT	DESCRIPTION	ADMINISTRATION	TIME
Family Assessment Device (FAD)[1]	- 12-item questionnaire designed to assess general family functioning.	- self-administered or read to the mother by the home visitation worker - used only when a partner lives with the mother	5 minutes
Child Development Inventory (CDI)[1]	- 39 true or false items to assess knowledge of child development (0 - 3 years). Measures: • emotional • cognitive • physical • social development	- self-administered or read to the mother by the home visitation worker	10 minutes
Maternal Social Support Index (MSSI)[1]	- 18-item questionnaire which provides information on the following three subscales: • day-to-day help around the home • social support network (outside the home) • community contact and social support	- self-administered or read to the mother by the home visitation worker	10 minutes
Center for Epidemiological Studies Depression Scale (CES-D)[2]	- 20-item questionnaire that focuses on the core symptoms of depression.	- self-administered or read to the mother by the home visitation worker	10 minutes
The Home Observation for Measurement of Environment Scale (HOME)[2]	- 45-item checklist (+ or -) designed to assess: • I emotional and verbal responsivity • II acceptance of child behaviour • III organization of environment • IV provision of play material • V parental involvement with child • VI opportunities for variety - Note: subscales III and IV have been modified to reflect cultural sensitivity.	- checklist is filled in by an observer, the home visitation worker - used only if the workers want to use it as a checklist	10 minutes
Carey Infant Temperament Questionnaire (Carey) (revised)[3]	- 54-item questionnaire for assessing temperamental characteristics of infants four to eight months.	- self-administered or read to the mother by the home visitation worker	20 minutes
Denver Developmental Screening Test (DDST II or Denver II)[4]	- a clinical screening tool designed to assist in early detection of developmental delays. It is composed of 105 items for children 2 weeks - 6.4 years old. The areas covered include: • personal – social • fine motor adaptation • language • gross motor coordination	- involves the home visitation worker asking the parent questions and having the child perform certain tasks	20 minutes

[1] These instruments are administered every 12 months.
[2] These two instruments are contained in the MIS, but administration for the purpose of the evaluation is optional. If the worker chooses, they may administer these to help in clinical decision making.
[3] The Carey is administered at five months and the Parents Perspective scale is repeated at 12 months.
[4] The Denver is first administered at three months then every six months.

- Non-clients: Individuals who were screened into the Home Visitation program or service, but chose not to become involved between December 1, 2001 and November 30, 2003.

- General Edmonton Population: A statistical comparison group for the City of Edmonton composed of all children born between December 1, 2001 and November 30, 2003 who were involved in the Child Welfare system during the same time period, excluding the above client and non-client groups.

Health Care Utilization

Health Care Utilization outcome data were obtained from Capital Health. The data included health profiles at birth, utilization of emergency department services, and hospital visits for children from birth to 3 years of age, involved in the Home Visitation program. The following groups are compared in the analysis of Health Care Services Utilization:

- Home Visitation Clients: Individuals who have participated in the Home Visitation program or utilized services. The time period was from the date of birth of the infant to the date of file closure or November 30, 2003, whichever is earlier (n=507).

- General Population: A statistical comparison group for the City of Edmonton composed of all children born between December 1, 2001 and November 30, 2003 who used emergency department services or had a hospital visit during the same time period, excluding Home Visitation clients (n=32,953).

2.1.3 Strategy for Analysis of Standardized Measures

Based on past experience with evaluations of home visitation services at other sites across Canada (Elnitsky et al., 2003; Hornick et al., 2004), it was very difficult to demonstrate the effectiveness of these early intervention programs for at least three reasons: (1) the nature of the clients themselves; (2) the difficulty in accurately identifying what services were received; and (3) the difficulty in identifying and tracking relevant outcomes and benefits.

As indicated above, the previous evaluation indicated that client families who received the Healthy Families programs were a very heterogeneous group. Even though these client families are assessed as “families at risk,” the specific strengths and weaknesses of the individual families are unique and only a few characteristics are commonly shared, i.e., most clients were young, single, had low levels of education and have children with difficult temperaments. This makes these families both difficult to serve and difficult to evaluate. Further, because of the unique needs of these families, the specific program goals and activities differ significantly from family to family.

As indicated above, the standardized measures were first administered to clients early in the program (most within the first three months) to provide a detailed picture of the clients’ needs. This picture indicated that few clients shared the same pattern of

needs. Thus, since all instruments were standardized and "normed" on large samples from the general population, it was possible to determine cut off scores or predetermine boundaries for each instrument which distinguished between those clients who "needed to improve" on any specific scale from those who were in the normal range and had no need to improve.

Given that the sample of home visitation clients is relatively large, we were able to dichotomize the sample for each instrument by those clients who need to improve and compare them with those who did not need to improve and identify what change occurs over time. This approach will be employed for analyzing the standardized outcome instruments in Chapter 5.0.

2.1.4 Framework for Conducting the Parent Interview and Visitor-family Relationship Inventory

In order to provide a more qualitative perspective on the impact of the program, interviews were conducted with a sample of clients utilizing home visitation services for at least one year. The interview schedule utilized was originally developed as part of the evaluation of selected Healthy Families programs in Canada (see Elnitsky et al., 2003) and only minor changes were made to the current questionnaire. The focus of the interview was on how the program has affected the lives of clients, their children, and other family members in specific areas, and on how the program could have been more helpful.

Home visitors contacted clients who had been in the program 12 months or more, and who had consented to the overall evaluation project. Clients who voluntarily consented to participate were then contacted by evaluation project team researchers by telephone.

Implementation of the Parent Interview and the Visitor-family Relationship Inventory

A total of 60 clients completed interviews. Two survey instruments were utilized: a Parent Interview questionnaire that was based on one used in 2001 for a survey of Healthy Families program clients (Elnitsky et al., 2003), and the Visitor-family Relationship Inventory. The schedules are shown in Appendices A and B. The Parent Interview focuses on how the program has affected the client's life as well as its impact on their child and other family members. Clients' opinions about the program as well as how the program could be improved were also obtained. The Visitor-family Relationship Inventory contains 26 statements describing different views the client may hold about the family visitor. Respondents were asked to rate on a Likert scale their level of agreement with each statement in the Inventory.

Each agency was asked to provide a list of names of clients who agreed to participate in the survey. Eligibility for participation in the survey was based on the following criteria:

- enrolled 12 months or more in the program as of March 1, 2004;
- prenatal mothers not enrolled in the program for one year were excluded; and
- had consented to the overall project evaluation.

Project researchers then contacted clients by telephone in March and April 2004 in order to conduct the survey. On average, the interviews took about 20 to 30 minutes.

Administration of the survey for clients from Multicultural Health Brokers Co-operative (MCHB) was different from that used for the other agencies. Because the Parent Interview questionnaire could not be translated, the MCHB family visitors conducted the surveys in person with MCHB clients in case any questions required translation. The respondents did not receive the Visitor-family Relationship Inventory because this questionnaire asks about the client's experience with their family visitor. Since it was possible that the client's actual family visitor was also the one conducting the survey, and given the sensitive nature of many of the questions, it was felt that it would not be appropriate to include this questionnaire.

All individuals freely volunteered to participate in the survey. They were informed that their participation (or refusal) did not in any way affect their eligibility to receive home visitation services, and that their participation was confidential.

As shown in Table 2.2, response rates based on the list of client names provided to CRILF by the agency are high, ranging from about 66.7% for St. Albert Parents' Place Association to 100% for a number of agencies. Based on the 58 (non-MCHB) clients who had agreed to be contacted about the survey, 87.9% (n=51) completed an interview. Based on the total 246 eligible home visitation clients (including MCHB), the 60 survey participants represent just under one-quarter (24.6%) of the group. The interviews were completed with 59 females and one male client.

TABLE 2.2
Parent Interview Participation Rates by Program Site

Capital Region Home Visitation Sites	Participants	Total Eligible Clients (in Program 12 Months or More)[1]	Response Rate Based on Total Eligible Clients	Total Clients Who Consented to be Contacted[2]	Response Rate Based on Total Clients Who Consented to be Contacted
	n	n	%	n	%
Ben Calf Robe Society	n/a	11	n/a	n/a	n/a
Bent Arrow Traditional Healing Society	10	35	28.6	14	71.4
Boyle Street Co-op	n/a	10	n/a	n/a	n/a
Early Head Start (Alex Taylor School)	9	32	28.1	9	100.0
Leduc County Family and Community Support Services	3	14	21.4	3	100.0
Centre	3	21	14.3	3	100.0
Multicultural Health Brokers Co-op Home Visitation Program[3]	9	24	37.5	n/a	n/a
Norwood Child and Family Resource Centre	9	40	22.5	9	100.0
Association	2	6	33.3	3	66.7
Strathcona County Family and Community Services Home Visitation Program	2	17	11.8	2	100.0
Terra Association	13	36	36.1	15	86.7
Subtotal (Excluding Multicultural Health Brokers Co-op)	**51**	**222**	**23.0**	**58**	87.9
Site Totals (Including Multicultural Health Brokers Co-op)	**60**	**246**	**24.4**	**n/a**	**n/a**

Source of data: Parent Interview 2004

[1] Data were obtained from MIS. Time in program as of March 1, 2004.

[2] Client contact list was provided by the home visitation agency. Excludes individuals on the list who could not have participated (e.g., current telephone number was not available, moved away, illness, etc.).

[3] Multicultural Health Brokers Co-operative conducted the interviews face-to-face with clients.

3.0 PROGRAM ACTIVITIES

This chapter describes program activities related to direct and indirect contact between program staff and clients.[4] This chapter also presents a summary of program activities focused on developing client connections to various types of community resources. It should be noted that findings from these data are limited for a number of reasons. In particular, data were not available for many of the programs in some cases, and data were collected from different databases and did not allow for more detailed or comparative analyses.[5]

3.1 Contacts

Home visitors spend a considerable amount of time on a variety of activities which provide assistance to clients outside of the home visit itself. Tables 3.1, 3.2 and 3.3 below show the types of client-related activities reported by program staff. Contacts in Table 3.1 include direct face-to-face communication. Contacts shown in Table 3.2 are non face-to-face communication which may or may not be direct, for example, a telephone meeting with the client as compared to meeting with other professionals in a client case consultation. Table 3.3 summarizes these two tables.

In Table 3.1, face-to-face contacts are categorized as: home visits; communication within a group meeting or group activity; communication within the Centre; communication occurring within the community; communication in relation to providing transportation for the client; and prenatal visits. As shown in the table, the majority of communications related to face-to-face contact is directed to the home visits themselves (73.3% of total contacts and 76.3% of total hours). The home visits lasted approximately 1.25 hours per visit. Communication with clients during group meetings or group activities represents the next largest category of time allocation in which 11.3% of total face-to-face contacts and 11.9% of total face-to-face hours involved client contact within this context.

In Table 3.2, non face-to-face contact is grouped into three categories: telephone meetings with the client; leaving telephone messages for the client; and indirect contact which involves issues related to the client, but without the client's presence. As shown in Table 3.2, the majority of non face-to-face contacts involve client telephone meetings (61.8% of total contacts); however, this represents a relatively small proportion of the home visitor's time (18.0% of total hours). Interestingly, the majority of non face-to-face contact time (82.0%), as reported by the home visitors, is spent in indirect contact involving a variety of activities such as case consultation, case conference, advocacy, updating case notes, etc.

[4] Data on worker contact with non-clients were not available.

[5] Data on client goal summaries were not available from the MIS. Goal summaries from HOMES were available for four agencies; however, the small number of cases (for Terra Association) and aggregated reporting format (for Mill Woods FRC, Leduc County FCSS Family Connections, and Strathcona County FCSHV Program) prohibited meaningful analysis. For these reasons, data on client goals have not been included in this report.

TABLE 3.1

Contacts between Home Visitors and Clients by Program Site: Direct Face-to-face Contacts

Capital Region Home Visitation Sites	Type of Contact													
	Home Visits (Visit Contact Occurred)		Face-to-face in Group/Activity[1]		Face-to-face in Centre[2]		Face-to-face in Community[3]		Face-to-face Transportation-related		Face-to-face Prenatal Visit		Total Contacts	
	n	hours	n	hours	n	hours	n	hours	n	hours	n	hours	**n**	**hours**
Ben Calf Robe Society	394	481.7	1	60.0	82	90.5	172	107.2	129	198.5	n/a	n/a	**778**	**937.9**
Bent Arrow THS	2,423	3,552.9	26	51.0	334	157.0	242	265.1	79	102.4	n/a	n/a	**3,104**	**4,128.4**
Boyle Street Co-op	67	70.8	1	2.0	60	16.0	13	13.0	26	21.5	2	n/a	**169**	**123.3**
Early Head Start	1,085	1,018.0	1,586	2,114.3	189	303.9	105	117.8	26	4.0	n/a	n/a	**2,991**	**3,558.0**
Leduc County FCSS Family Connections	367	581.0	44	65.3	5	3.8	48	63.1	2	4.3	11	26.0	**477**	**743.3**
Mill Woods FRC	844	1,267.6	57	8.8	14	11.0	75	59.7	8	13.5	4	7.5	**1,002**	**1,368.0**
Multicultural Health Brokers Co-op HV Program	802	117.9	98	17.7	15	7.0	107	17.7	20	0.0	n/a	n/a	**1,042**	**160.3**
Norwood CFRC	2,704	2,969.3	143	137.0	336	167.0	128	100.8	9	12.5	n/a	n/a	**3,320**	**3,386.6**
St. Albert PPA	476	637.7	0	0.0	31	26.7	44	19.7	0	0.0	n/a	n/a	**551**	**684.0**
Strathcona County FCSHV Program	925	1,509.1	0	0.0	40	59.0	94	200.4	71	158.5	n/a	n/a	**1,130**	**1,927.0**
Terra Association	2,774	3,805.4	22	34.0	127	64.5	64	57.9	2	0.7	n/a	n/a	**2,989**	**3,962.5**
Site Totals	**12,861**	**16,011.2**	**1,978**	**2,489.9**	**1,233**	**906.4**	**1,092**	**1,022.2**	**372**	**515.9**	**17**	**33.5**	**17,553**	**20,979.1**
Percentage	**73.3**	**76.3**	**11.3**	**11.9**	**7.0**	**4.3**	**6.2**	**4.9**	**2.1**	**2.5**	**0.1**	**0.2**	**100.0**	**100.0**

Source of data: MIS and HOMES. From December 1, 2001 to January 31, 2004.

In HOMES reports, contact number is taken from "number of notes" and hours are taken from "contact duration."

[1] Face-to-face in Group/Activity contacts include workshops.

[2] Face-to-face in Centre contacts include office visits, admissions, family meetings, and assessments.

[3] Face-to-face in Community contacts include hospital visits, and visits in locations that were not specified.

TABLE 3.2
Contacts between Home Visitors and Clients by Program Site:
Non Face-to-face Contacts

Capital Region Home Visitation Sites	Type of Contact							
	Telephone Calls		Telephone Messages[1]		Indirect Contact[2]		Total Contacts	
	n	hours	n	hours	n	hours	n	hours
Ben Calf Robe Society	458	38.2	102	n/a	65	25.6	625	63.7
Bent Arrow THS	3,274	33.8	1,389	n/a	535	75.0	5,198	108.8
Boyle Street Co-op	76	8.7	2	n/a	89	38.4	167	47.1
Early Head Start	1,178	136.9	529	n/a	587	63.8	2,294	200.7
Leduc County FCSS Family Connections	645	63.6	122	n/a	377	78.3	1,144	141.9
Mill Woods FRC	304	82.1	1	n/a	179	114.4	484	196.5
Multicultural Health Brokers Co-op HV Program	1,211	66.0	32	n/a	30	0.5	1,273	66.5
Norwood CFRC	1,914	18.4	824	n/a	349	2306.0	3,087	2324.4
St. Albert PPA	205	48.7	64	n/a	11	45.0	280	93.7
Strathcona County FCSHV Program	441	98.0	3	n/a	39	36.1	483	134.1
Terra Association	4,336	45.9	2,046	n/a	1,305	139.3	7,687	185.2
Site Totals	**14,042**	**640.1**	**5,114**	**n/a**	**3,566**	**2922.3**	**22,722**	**3562.4**
Percentage	**61.8**	**18.0**	**22.5**	**n/a**	**15.7**	**82.0**	**100.0**	**100.0**

Source of data: MIS and HOMES. From December 1, 2001 to January 31, 2004.
In HOMES reports, contact number is taken from "number of notes" and hours are taken from "contact duration."

Table 3.3 presents a summary comparison of face-to-face and non face-to-face contacts. Provision of service in the form of face-to-face communication with clients represents 43.6% and non face-to-face communication represents 56.4% of the total reported 40,275 contacts. Face-to-face contacts, however, involve 85.5% of workers' time as compared to only 14.5% for non face-to-face contacts (based on a total of 24,541.5 hours reported).

TABLE 3.3
Summary of Face-to-face and Non Face-to-face Contacts by Program Site

Capital Region Home Visitation Sites	Face-to-face Contacts				Non Face-to-face Contacts				Total Contacts			
	n	%	hours	%	n	%	hours	%	n	%	hours	%
Ben Calf Robe Society	778	55.5	937.9	93.6	625	44.5	63.7	6.4	**1,403**	**100.0**	**1,001.6**	**100.0**
Bent Arrow THS	3,104	37.4	4,128.4	97.4	5,198	62.6	108.8	2.6	**8,302**	**100.0**	**4,237.2**	**100.0**
Boyle Street Co-op	169	50.3	123.3	72.4	167	49.7	47.1	27.6	**336**	**100.0**	**170.3**	**100.0**
Early Head Start	2,991	56.6	3,558.0	94.7	2,294	43.4	200.7	5.3	**5,285**	**100.0**	**3,758.6**	**100.0**
Leduc County FCSS Family Connections	477	29.4	743.3	84.0	1,144	70.6	141.9	16.0	**1,621**	**100.0**	**885.2**	**100.0**
Mill Woods FRC	1,002	67.4	1,368.0	87.4	484	32.6	196.5	12.6	**1,486**	**100.0**	**1,564.5**	**100.0**
Multicultural Health Brokers Co-op HV Program	1,042	45.0	160.3	70.7	1,273	55.0	66.5	29.3	**2,315**	**100.0**	**226.7**	**100.0**
Norwood CFRC	3,320	51.8	3,386.6	59.3	3,087	48.2	2,324.4	40.7	**6,407**	**100.0**	**5,711.0**	**100.0**
St. Albert PPA	551	66.3	684.0	88.0	280	33.7	93.7	12.0	**831**	**100.0**	**777.7**	**100.0**
Strathcona County FCSHV Program	1,130	70.1	1,927.0	93.5	483	29.9	134.1	6.5	**1,613**	**100.0**	**2,061.1**	**100.0**
Terra Association	2,989	28.0	3,962.5	95.5	7,687	72.0	185.2	4.5	**10,676**	**100.0**	**4,147.6**	**100.0**
Site Totals	**17,553**	**43.6**	**20,979.1**	**85.5**	**22,722**	**56.4**	**3,562.4**	**14.5**	**40,275**	**100.0**	**24,541.5**	**100.0**

Source of data: MIS and HOMES. From December 1, 2001 to January 31, 2004.
In HOMES reports, contact number is taken from "number of notes" and hours are taken from "contact duration."

3.2 Community Referrals

Information on community referrals is provided by the Community Contact and Resource Tracking System which collects data on the degree to which families become connected to services and organizations in their community. A community contact and referral category list was developed from the referral lists of all the Home Visitation programs. A total of eight categories were identified: physical and mental health; basic needs; child care/support; family/parent support; education, schools, and literacy; recreation/family activities; general support activities; and spiritual/cultural programs.

Table 3.4 shows the distribution of referrals made to community activities and programs, and the number of successful referrals (as defined by the program when following-up with clients). A total of 4,990 referrals (on an average of 4.8 per client served) were made between December 1, 2001 and January 31, 2004.[6] Based on the programs' definition of success, 37.5% of the total 4,990 referrals made were determined to be successful. The top three types of referrals most often made include family/parent support, basic needs, and recreation/family activities. These are described below.

[6] An additional 447 referrals made by Strathcona County FCSHV Program from January 1, 2002 to January 31, 2004 are not included in this total because information on the types of referrals made was not available.

TABLE 3.4
Referrals Made to Community Activities/Programs by Program Site

Capital Region Home Visitation Sites	Type of Activity/Program																					
	Family/Parent Support[1]		Basic Needs[2]		Recreation/ Family Activities[3]		Physical and Mental Health[4]		Education, Schools, Literacy[5]		Child Care/ Support[6]		General Support Agencies[7]		Spiritual/ Cultural		Not Assigned		Total		Successful Referrals[8]	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	% of Total
Ben Calf Robe Society	21	26.3	52	65.0	2	2.5	0	0.0	2	2.5	0	0.0	0	0.0	0	0.0	3	3.8	**80**	**100.0**	50	62.5
Bent Arrow THS	226	12.7	350	19.6	560	31.4	257	14.4	196	11.0	60	3.4	0	0.0	50	2.8	83	4.7	**1,782**	**100.0**	693	38.9
Boyle Street Co-op[9]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	**n/a**	n/a	n/a
Early Head Start	28	8.5	64	19.5	25	7.6	66	20.1	12	3.7	53	16.2	31	9.5	0	0.0	49	14.9	**328**	**100**	135	41.2
Leduc County FCSS Family Connections	58	32.2	46	25.6	1	0.6	31	17.2	12	6.7	9	5.0	13	7.2	0	0.0	10	5.6	**180**	**100.0**	63	35.0
Mill Woods FRC[9]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	**n/a**	n/a	n/a
Multicultural Health Brokers Co-op HV Program	2	2.0	9	9.0	0	0.0	17	17.0	1	1.0	1	1.0	43	43.0	0	0.0	27	27.0	**100**	**100.0**	48	48.0
Norwood CFRC	544	47.3	247	21.5	114	9.9	78	6.8	115	10.0	49	4.3	1	0.1	3	0.3	0	0.0	**1,151**	**100.0**	387	33.6
St. Albert PPA	25	17.6	48	33.8	0	0.0	43	30.3	8	5.6	6	4.2	10	7.0	0	0.0	2	1.4	**142**	**100.0**	99	69.7
Strathcona County FCSHV Program[9]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**[9]	**n/a**	n/a	n/a
Terra Association	530	43.2	236	19.2	141	11.5	139	11.3	81	6.6	35	2.9	47	3.8	16	1.3	2	0.2	**1,227**	**100.0**	395	32.2
Site Totals	**1,434**	**28.7**	**1,052**	**21.1**	**843**	**16.9**	**631**	**12.6**	**427**	**8.6**	**213**	**4.3**	**145**	**2.9**	**69**	**1.4**	**176**	**3.5**	**4,990**	**100.0**	**1,870**	**37.5**

Source of data: MIS and HOMES. From December 1, 2001 to January 31, 2004.

[1] Family/Parent Support examples include Nobody's Perfect, Baby and You, and Big Brothers & Big Sisters.

[2] Basic Needs includes services related to: food; clothing; shelter; employment; transportation; and legal assistance. For example, Interfaith Food Bank, Housing Authority, Supports for Independence, and Legal Aid.

[3] Recreation/Family Activities examples include Parks and Recreation, and Community Centre.

[4] Physical and Mental Health includes Public/Community Health, medical clinics/services, counselling, crisis services. For example, Public Health Nurses, Women's Health Centre, AADAC, Distress Centre.

[5] Education, Schools, Literacy Programs examples include Adult Basic Education, Literacy and Parenting Skills Program, and Public Library.

[6] Child Care/Support includes Daycare, Preschool, Child Services examples include Daycare, and Children's Cottage.

[7] General Support Agencies examples include Immigrant Women's Association, Urban Project Society, Norwood Family Centre, and Bent Arrow Traditional Healing Society.

[8] Success referrals are determined by the programs.

[9] Data on referrals not available. Mill Woods FRC's referral information is written within the case notes. Strathcona County FCSHV Program had a total of 447 referrals from January 01, 2002 to January 31, however, information on types of referrals is not available. This program began follow-up and tracking of referrals in December 2003.

Of the types of referrals made, family/parent support represented the greatest proportion. Of the 4,990 total referrals, 28.7% were to family/parent support services. This grouping includes programs such as Nobody's Perfect, Baby and You, and Big Brothers and Big Sisters.

Referrals for services such as food banks and housing assistance that meet basic needs represented the next most-often made referral type. Of the 4,990 total referrals, 21.1% were to agencies such as Interfaith Food Bank, Housing Authority, Supports for Independence, and Legal Aid.

The third type of referral most often made was for recreation/family activities. Of the 4,990 total referrals, 16.9% were to agencies such as Park and Recreation, and Community Centres. The programs rated 37.5% of the referrals as successful.

4.0 PROGRAM OUTPUT: PROFILES OF CLIENTS SERVED

This chapter presents information describing home visitation clients. The first section describes client intake and the various ways a family may enrol in the Home Visitation program. The average length of stay is compared between families continuing in the program and families who have withdrawn. Also described is information about client profiles, including various demographic characteristics, risk assessments, and baseline scores on the standardized instruments administered as part of the outcome evaluation.

4.1 Client Intake

At most sites, the Home Visitation program is open to or gives priority to first-time parents who are prenatal or where the target child is up to three months of age, with some discretion for infants just past three months. First-time parents include parents with their first child or parents who are parenting for the first time because their other children are in care. Ben Calf Robe Society, Bent Arrow Traditional Healing Society (THS), Boyle Street Community Services Co-operative, Leduc County Family and Community Support Services (FCSS) Family Connections, Norwood Child and Family Resource Centre (CFRC), St. Albert Parents' Place Association (PPA), and Terra Association all serve only first-time parents with children under 3 months of age. Mill Woods Family Resource Centre (FRC), and Strathcona County Family and Community Services Home Visitation (FCSHV) Program give priority to these families; however, the agencies will also provide services to other families based on need. Early Head Start has reserved two spaces for each of their eight workers' caseloads in order to give priority to first-time parents with children under three months of age. Multicultural Health Brokers Co-operative Home Visitation (HV) Program gives priority to families that are parenting for the first time in Canada, with children under three years of age.

The referral process differs somewhat across program sites. For most sites, the initial screening (i.e., the Record Screen/Home Visitation Referral Form) is, for the most part, conducted by community health nurses; however, the program also accepts self-referrals, as well as referrals from other community agencies. The screen is usually completed by community health nurses (Healthy Beginnings) at postnatal visits, 10 to 14 days after birth. The Record Screen/Home Visitation Referral Form is not completed on the first visit as there are too many other issues that must be addressed at the time. A family receiving a positive screen is referred to the Home Visitation Regional Coordinator.

The Home Visitation Regional Coordinator is the primary contact for referrals and forwards cases to the appropriate Home Visitation program based on location, as well as other criteria. The Coordinator also follows up with each referral in order to ensure that the program has contacted the family or referred the family to another program if necessary.

In more rural areas such as Leduc County, St. Albert, and Strathcona County referrals generally go directly to the Family Assessment Worker or team leader/supervisor connected to the program rather than through the initial process involving the Home Visitation Regional Coordinator. The same Record Screen/Home Visitation Referral Form is used.

Some of the sites, for example Early Head Start, have waiting lists or existing client files from which they may identify qualifying families. These cases are treated as transfers rather than new referrals and are not handled at all by the Home Visitation Regional Coordinator.

Program sites may vary in how they conduct intake assessments with new clients. Most sites are using either the KEMP Family Stress Checklist or Healthy Babies-Healthy Children Assessment Tool, or a combination of the two, in order to carry out intake assessments with new families. St. Albert PPA conducts intake assessments with new clients. Mill Woods FRC and Early Head Start have only recently begun to implement intake assessments. Multicultural Health Brokers Co-op HV Program completes an intake form that has been customized for their clients.

Table 4.1 shows the number of referrals received by each program, and the number of families assessed (by pre and postnatal). From December 1, 2001 to January 31, 2004, a total of 1,367 referrals were received by the programs. Of 563 families that were assessed during this period, 26.5% were prenatal and 73.5% were postnatal.

TABLE 4.1
Number of Referrals and Assessments by Program Site

Capital Region Home Visitation Sites	Total Referrals Received[1]	Families Assessed[2]		
		Prenatal	Postnatal	Total Families Assessed
	n	n	n	n
Ben Calf Robe Society	41	12	28	40
Bent Arrow THS	239	35	123	158
Boyle Street Co-op	27	7	18	25
Early Head Start	340	0	32	32
Leduc County FCSS Family Connections	69	23	24	47
Mill Woods FRC[3]	52	1	6	7
Multicultural Health Brokers Co-op HV Program[4]	91	n/a	3	3
Norwood CFRC	181	14	91	105
St. Albert PPA[4]	28	n/a	n/a	n/a
Strathcona County FCSHV Program	100	6	51	57
Terra Association	199	51	38	89
Site Totals	**1,367**	**149**	**414**	**563**

Source of data: MIS and HOMES. From December 1, 2001 to January 31, 2004.

[1] Includes referrals from other agencies, organizations, individuals (including self-referrals), etc.

[2] Families who were assessed and received services. Distribution of assessments by agency does not take into account transfers.

[3] Mill Woods FRC has only recently begun to conduct assessments.

[4] Multicultural Health Brokers Co-op HV Program and St. Albert PPA do not conduct assessments.

Table 4.2 shows the different sources of referrals made to each of the program sites. For the majority of sites, public health organizations (mainly public health nurses) represent the largest percentage of referring organizations to the Home Visitation program. Additional analysis of the data indicates that referrals from public health services have also been increasing over time. For example, in 2003, almost half of the referrals (48.4%) for all programs were made by public health. In terms of increase by specific programs, Early Head Start appears to have increased the most since it was up to approximately 37% from public health in 2003.

TABLE 4.2
Source of Referrals to the Program by Program Site

Capital Region Home Visitation Sites	Public Health[1]		Hospital[2]		Child Welfare[3]		Other Agencies[4]		Self Referrals[5]		Missing		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Ben Calf Robe Society	20	48.8	1	2.4	0	0.0	17	41.5	0	0.0	3	7.3	**41**	**100.0**
Bent Arrow THS	142	59.4	19	7.9	3	1.3	50	20.9	25	10.5	0	0.0	**239**	**100.0**
Boyle Street Co-op	18	66.7	1	3.7	0	0.0	3	11.1	1	3.7	4	14.8	**27**	**100.0**
Early Head Start	45	13.2	1	0.3	4	1.2	16	4.7	9	2.6	265	77.9	**340**	**100.0**
Leduc County FCSS Family Connections	54	78.3	0	0.0	2	2.9	9	13.0	4	5.8	0	0.0	**69**	**100.0**
Mill Woods FRC	26	50.0	2	3.8	2	3.8	6	11.5	1	1.9	15	28.8	**52**	**100.0**
Multicultural Health Brokers Co-op HV Program[6]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	91	100.0	**91**	**100.0**
Norwood CFRC	132	72.9	8	4.4	2	1.1	22	12.2	13	7.2	4	2.2	**181**	**100.0**
St. Albert PPA	14	50.0	0	0.0	0	0.0	2	7.1	5	17.9	7	25.0	**28**	**100.0**
Strathcona County FCSHV Program	44	44.0	0	0.0	0	0.0	48	48.0	8	8.0	0	0.0	**100**	**100.0**
Terra Association	98	49.2	12	6.0	4	2.0	56	28.1	29	14.6	0	0.0	**199**	**100.0**
Site Totals	**593**	**43.4**	**44**	**3.2**	**17**	**1.2**	**229**	**16.8**	**95**	**6.9**	**389**	**28.5**	**1,367**	**100.0**

Source of data: MIS and HOMES. From December 1, 2001 to January 31, 2004.

[1] Public Health includes mainly public health nurses but also public health centres, Health for Two, doctor's office, perinatal programs, and birth control centre.

[2] Hospital includes social workers at the hospital.

[3] Child Welfare includes family enhancement programs.

[4] Includes all other agencies such as other home visitation agencies.

[5] Self Referrals include referrals from family and friends.

[6] Agency has not been tracking this kind of information. Almost 100% of referrals went straight to the home visitation program.

Table 4.3 shows the number of clients continuing in the program (as of January 31, 2004) by average length of time in the program. The 526 families who continue receiving home visitation services have been in the program about 15 months (464 average days). Overall, approximately 1,046 clients received home visitation services during the time of the study.

Table 4.4 shows that 520 clients withdrew or were withdrawn from the Home Visitation program between December 1, 2001 and January 31, 2004 resulting in an overall attrition rate of 49.7%. On average, these 520 families were in the program for just over eight months (260 days). Terra Association was the only program that had drop-out clients who on average were enrolled for over one year (418 days).

TABLE 4.3
Number of Families Currently in the Program[1] and Length of Stay by Program Site

Capital Region Home Visitation Sites	Families in the Program	Average Number of Days in the Program[2]
	n	
Ben Calf Robe Society	20	257
Bent Arrow THS	86	508
Boyle Street Co-op	14	229
Early Head Start	78	438
Leduc County FCSS Family Connections	25	398
Mill Woods FRC	34	415
Multicultural Health Brokers Co-op HV Program	76	401
Norwood CFRC	64	602
St. Albert PPA	22	336
Strathcona County FCSHV Program	38	325
Terra Association	69	656
Site Totals	**526**	**464**

Source of data: MIS, December 1, 2001 to January 31, 2004.

[1] Based on date of entry to January 31, 2004.

[2] From date of entry to January 31, 2004.

TABLE 4.4
Number of Families Withdrawn from the Program[1]
and Length of Stay by Program Site

Capital Region Home Visitation Sites	Families Withdrawn from the Program	Average Number of Days in the Program[2]
	n	
Ben Calf Robe Society	23	290
Bent Arrow THS	177	161
Boyle Street Co-op	16	114
Early Head Start	55	269
Leduc County FCSS Family Connections	3	274
Mill Woods FRC	37	303
Multicultural Health Brokers Co-op HV Program	17	302
Norwood CFRC	94	315
St. Albert PPA	13	193
Strathcona County FCSHV Program	11	311
Terra Association	74	418
Site Totals	**520**	**260**

Source of data: MIS, December 1, 2001 to January 31, 2004.

[1] Based on a file closed date occurring between December 01, 2001 and January 31, 2004.

[2] From date of entry to file closed date.

Reasons why families withdrew or were withdrawn from the Home Visitation program are shown in Table 4.5. The top three most common reasons are as follows: program staff were unable to contact the family (19.5%) and after a period of time the family was dropped from the program; the family did not want program services or was not interested (13.9%); and the family moved away (13.5%).

Attrition and retention rates are quite similar for all programs, including the two Aboriginal programs, Ben Calf Robe Society and Bent Arrow. It appears from Table 4.3 and 4.4 that Bent Arrow has a higher attrition rate than other programs, however, Table 4.5 indicates that 39 (22.0%) of those who withdrew were actually referred to and transferred to another program and an additional 15 (8.5%) moved away. If those referred to another agency are not included in the attrition rate for this program, their attrition rate is approximately 50%, the same as most other agencies. Further, those client families who did not withdraw, stayed with Bent Arrow a long time, an average of 508 days. Agencies in the more rural areas had the lowest attrition rates, ranging from a low of 10.7% for Leduc to 37.2% for St. Albert and 22.5% for Strathcona.

4.2 Demographic Characteristics

Age of Mother

As Table 4.6 indicates, the average age of the mothers entering the programs and receiving home visits ranged from about 18 years for Terra Association to almost 30 years for Multicultural Health Brokers Co-op HV Program and Strathcona County FCSSHV Program. It should be noted, however, that for Early Head Start and Multicultural Health Brokers Co-op HV Program the percentage of individuals for whom age data were unavailable was quite high (missing values were 45.1% and 32.2% respectively). With the exception of these two agencies, over half of the mothers were 27 years old or younger across the sites.

Marital Status

Of the mothers involved with the Capital Region Home Visitation Network programs, 57.7% were single parents and 42.3% (455 of 1,076) were two-parent families. The number of two-parent families and number of files opened between December 1, 2001 and January 31, 2004 are shown for each program in Table 4.7.

TABLE 4.5
Reasons for Withdrawal from the Program[1] by Program Site

Capital Region Home Visitation Sites[1]	Child apprehension	Does not meet criteria	Family doesn't want program (not interested)	Family member(s) not supportive of program	Feels family has enough support	Miscarriage/abortion	Moved	Not Closed	Not connected to the program	Outside boundaries	Referred to other services	Referred/transferred to other HF program	Unable to contact	Unknown reason/Reason not given	Other (please describe)	Total
Ben Calf Robe Society	1		2		3		6						7	4		**23**
Bent Arow THS	2	17	21	2	5	4	15		7	3	2	39	34		26	**177**
Boyle Street Co-op			4		2		1		1		1		6		1	**16**
Early Head Start	1	2	14		3		7			6	12				10	**55**
Leduc County FCSS Family Connections															3	**3**
Mill Woods FRC	2		5		2		5		1		8		3	5	6	**37**
Multicultural Health Brokers Co-op HV Program		1		3	6		6						1			**17**
Norwood CFRC			11		8	1	11	6	2	1	1	1	32	17	3	**94**
St. Albert PPA			4		1		5						3			**13**
Strathcona County FCSHV	1		1		4		4						1			**11**
Site Totals	**7**	**20**	**62**	**5**	**34**	**5**	**60**	**6**	**11**	**10**	**24**	**40**	**87**	**26**	**49**	**446**
Percentages	**1.6**	**4.5**	**13.9**	**1.1**	**7.6**	**1.1**	**13.5**	**1.3**	**2.5**	**2.2**	**5.4**	**9.0**	**19.5**	**5.8**	**11.0**	**100.0**

Source of data: MIS, December 1, 2001 to January 31, 2004.

[1] Data are not available for Terra Association.

TABLE 4.6
Age of Mother of Baby at Program Entry by Program Site

Capital Region Home Visitation Sites	Under 18 years		18 to 22 years		23 to 27 years		28 to 32 years		Over 32 years		Missing		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Ben Calf Robe Society (Mean Age = 22.1 yrs.)	6	14.0	19	44.2	3	7.0	4	9.3	3	7.0	8	18.6	**43**	**100.0**
Bent Arrow THS (Mean Age = 22.3 yrs.)	12	10.6	50	44.2	26	23.0	8	7.1	8	7.1	9	8.0	**113**	**100.0**
Boyle Street Co-op (Mean Age = 25.5 yrs.)	0	0.0	9	28.1	11	34.4	7	21.9	5	15.6	0	0.0	**32**	**100.0**
Early Head Start (Mean Age = 26.8 yrs.)	0	0.0	21	17.2	18	14.8	11	9.0	17	13.9	55	45.1	**122**	**100.0**
Leduc County FCSS Family Connections (Mean Age = 21.7 yrs.)	1	2.2	20	44.4	16	35.6	3	6.7	4	8.9	1	2.2	**45**	**100.0**
Mill Woods FRC (Mean Age = 25.6 yrs.)	0	0.0	13	18.6	23	32.9	16	22.9	17	24.3	1	1.4	**70**	**100.0**
Multicultural Health Brokers Co-op HV Program (Mean Age = 29.6 yrs.)	0	0.0	6	6.7	14	15.6	17	18.9	24	26.7	29	32.2	**90**	**100.0**
Norwood CFRC (Mean Age = 24.0 yrs.)	2	2.1	47	50.0	23	24.5	17	18.1	5	5.3	0	0.0	**94**	**100.0**
St. Albert PPA (Mean Age = 25.0 yrs.)	1	2.9	9	25.7	11	31.4	3	8.6	4	11.4	7	20.0	**35**	**100.0**
Strathcona County FCSHV Program (Mean Age = 29.7 yrs.)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	**n/a**
Terra Association (Mean Age = 18.3 yrs.)	21	27.3	49	63.6	0	0.0	0	0.0	0	0.0	7	9.1	**77**	**100.0**

Source of data: MIS and HOMES. From December 1, 2001 to January 31, 2004.

TABLE 4.7
Single and Two-parent Families[1] by Program Site

Capital Region Home Visitation Sites	Single Parent Families		Two-parent Families		Total Files Ever Opened	
	n	%	n	%	n	%
Ben Calf Robe Society	35	79.5	9	20.5	**44**	**100.0**
Bent Arrow THS	188	72.0	73	28.0	**261**	**100.0**
Boyle Street Co-op	22	62.9	13	37.1	**35**	**100.0**
Early Head Start	57	41.6	80	58.4	**137**	**100.0**
Leduc County FCSS Family Connections	38	84.4	7	15.6	**45**	**100.0**
Mill Woods FRC	26	37.1	44	62.9	**70**	**100.0**
Multicultural Health Brokers Co-op HV Program	18	19.8	73	80.2	**91**	**100.0**
Norwood CFRC	83	52.9	74	47.1	**157**	**100.0**
St. Albert PPA	28	80.0	7	20.0	**35**	**100.0**
Strathcona County FCSHV Program	25	43.1	33	56.9	**58**	**100.0**
Terra Association	101	70.6	42	29.4	**143**	**100.0**
Site Totals	**621**	**57.7**	**455**	**42.3**	**1,076**	**100.0**

Source of data: MIS and HOMES. From December 1, 2001 to January 31, 2004.
[1] Based on families whose cases have been opened and have received services.

Age of Baby at Assessment

Table 4.8 shows the average age of baby at assessment. Data were available for seven of the 11 agencies. While Norwood CFRC and Terra Association provided services to families with younger babies who were on average less than 1.5 months, Early Head Start tended to serve families with older babies who were on average 20 months.

TABLE 4.8
Age of Baby at Assessment by Program Site

Capital Region Home Visitation Sites	Average Age of Baby Months[1]
Ben Calf Robe Society	5.2
Bent Arrow THS	n/a
Boyle Street Co-op	2.3
Early Head Start	20.0
Leduc County FCSS Family Connections	n/a
Mill Woods FRC	n/a
Multicultural Health Brokers Co-op HV Program	n/a
Norwood CFRC	1.3
St. Albert PPA	7.6
Strathcona County FCSHV Program	12.8
Terra Association	1.5

Source of data: MIS and HOMES. From December 1, 2001 to January 31, 2004.
[1] Based on youngest age of child.

4.3 Risk Assessments

Risk assessment scores indicate the level of need or risk of families entering the program and are based on the Family Stress Checklist (FSC)[7] that is completed at assessment. The FSC was developed by Healthy Families America as a clinical tool to aid in the assessment of new families. The FSC tells us how many stressful pressures or events are present within the family, and thus can provide information in decisions about whether a family should be referred to a Home Visitation program.

Implementation of the FSC involves face-to-face interviews, which take an average of two hours, with the parent(s) either prenatally or after the birth of the baby. The FSC has 10 assessment areas, which are each scored on a scale of 0 – 10 in increments of five. A total score of 25 or higher is considered a positive assessment and qualifies the family for the program. The FSC is primarily a clinical assessment tool as opposed to a research scale; therefore, it is not standardized and this makes it difficult to compare scores across programs.

As shown in Table 4.9, 26.7% of program participants fell below the 25 point threshold. Early Head Start had the greatest proportion of clients scoring below the threshold with 63.5% achieving a score between 0 and 20.

TABLE 4.9
Risk Assessment Score[1] by Program Site

Capital Region Home Visitation Sites Utilizing Family Assessment Checklist[2]	Score									
	0 to 20		25 to 40		45 to 60		Over 60		Total	
	n	%	n	%	n	%	n	%	n	%
Ben Calf Robe Society	9	19.6	17	37.0	18	39.1	2	4.3	**46**	**100.0**
Bent Arrow THS	4	9.1	24	54.5	14	31.8	2	4.5	**44**	**100.0**
Early Head Start	101	63.5	42	26.4	13	8.2	3	1.9	**159**	**100.0**
Mill Woods FRC	0	0.0	4	36.4	7	63.6	0	0.0	**11**	**100.0**
Norwood CFRC	9	9.0	38	38.0	37	37.0	16	16.0	**100**	**100.0**
Terra Association	0	0.0	35	35.0	59	59.0	6	6.0	**100**	**100.0**
Site Totals	**123**	**26.7**	**160**	**34.8**	**148**	**32.2**	**29**	**6.3**	**460**	**100.0**

Source of data: MIS, December 1, 2001 to January 31, 2004

[1] Based on Mother's score on the Family Assessment Checklist. Family Assessment Checklist is scored in units of five. Includes all individuals who were screened regardless of outcome of the screen (positive or negative) and regardless of whether they received services.

[2] Data were available for six agencies (n=460).

4.4 Baseline Scores on Outcome Standardized Instruments

As indicated previously, a set of standardized instruments has been administered by program staff to all clients who consented to participating in the evaluation and who were received program services from December 1, 2001 to January 31, 2004. These

[7] This instrument is also called Family Assessment Checklist in the evaluation project.

instruments were chosen primarily because they reflect on the short-term outcomes of the Home Visitation programs. In addition, it is anticipated that these instruments will be useful to the home visitors since they identify the needs of individual families. To facilitate the usefulness of these instruments to the programs, all home visitors have been trained in the administration and interpretation of the instruments. In addition, all instruments are contained in the Management Information System (MIS). The MIS provides automatic feedback summaries to the workers.

All the standardized instruments have been "normed" on a large sample of the general population and thus provide a direct comparison with the population average. The first time these measures are administered they provide a detailed baseline picture of the current needs of the clients (T1). Thus, in the analysis to follow, the clients who need to improve on specific instruments and the clients who are functioning normally and are not expected to improve are identified. Tracking the improvement over time with those cases where improvement is necessary is the measure of successful outcomes presented in the next chapter.

The instruments included in these analyses are as follows (see Table 2.1 for descriptions):

- Family Assessment Device (FAD);
- Child Development Inventory (CDI);
- Maternal Social Support Index (MSSI);
- Carey Infant Temperament Questionnaire; and
- Denver Development Screening Test-II (DDS-II).

4.4.1 Family Assessment Device (FAD)

The Family Assessment Device (FAD) provides an overview of the level of functioning within the family. The general functioning scale of the FAD has 12 statements on it and the parent(s) is asked to indicate the extent to which they agree or disagree with each statement as it relates to their own family. Low scores suggest that the family is functioning quite well while high scores (above 2.0) suggest that there may be problems in family functioning. Since this instrument measures functioning in dyadic relationships, it was administered only in cases where the mother was living with a partner.

As Table 4.10 shows, of the 325 clients analysed, over one-third (34.2% or n=111) were identified by the FAD outcome instrument as having family functioning challenges at a level requiring improvement. Families in this group had an average score of 2.5. Alternatively, for about two-thirds (65.8% or n=214) of the 325 clients, improvement of family functioning was not needed. The average FAD score for this group was 1.7.

TABLE 4.10
Mean Scores at T1 on the Family Assessment Device (FAD)
for Cases with Improvement Expected and Improvement Not Expected[1]

Capital Region Home Visitation Sites Utilizing FAD[2]	FAD Score Mean
Improvement Expected (n=111; 34.2%)	2.5
Improvement Not Expected (n=214; 65.8%)	1.7

Source of data: MIS, December 1, 2001 to January 31, 2004.
[1] Scores on the FAD range from 1 to 4 with higher scores indicating lower levels of family functioning. Cases with scores greater than 2 are assigned to the "Improvement Expected" group and cases with scores less than or equal to 2 are assigned to the "Improvement Not Expected" group.
[2] Data were available for eight agencies (n=325).

4.4.2 Child Development Inventory (CDI)

The Child Development Inventory (CDI) is intended to provide an indication of the parent's overall child development knowledge in each of the following areas:

- emotional development (refers to how much parents know about the causes and consequences of their child's emotional reactions);
- cognitive development (refers to how much parents know about their child's developing thought processes);
- physical development (refers to how much parents know about what young children are capable of in terms of eating habits, nutrition, and sleep patterns etc.); and
- social development (in the context of this measure, refers to how much parents know about how best to respond to their child's behaviour).

The CDI has 39 items scored on a scale of 0 to 100, and basically samples parents' knowledge about child development in each area. A high percentage score, where only a few items are missed, indicates that the parent knows a lot about this aspect of child development. A low percentage correct (e.g., missing half the items) can indicate that the parent is missing quite a bit of information about children and their development in that area.

As Table 4.11 indicates, over half (n=256 or 57.9%) of the 442 clients demonstrated a high level of knowledge of child development. Those with a score less than 85 were identified as needing to improve. Improvement was expected for 42.1% (n=186) of clients. This group achieved an average score of 78.3 on the CDI.

TABLE 4.11
Mean Scores at T1 on the Child Development Inventory (CDI)
for Cases with Improvement Expected and Improvement Not Expected[1]

Capital Region Home Visitation Sites Utilizing CDI[2]	Total Scale Mean	Emotional Development Subscale Mean	Cognitive Development Subscale Mean	Physical Development Subscale Mean	Social Development Subscale Mean
Improvement Expected (n=186; 42.1%)	78.3	78.3	83.3	81.6	69.1
Improvement Not Expected (n=256; 57.9%)	92.5	93.9	95.4	93.2	86.9

Source of data: MIS, December 1, 2001 to January 31, 2004.
[1] Scores on the CDI are based on the percentage of correct answers and range from 0 to 100. Cases with scores less than 85 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 85 are assigned to the "Improvement Not Expected" group.
[2] Data were available for 10 agencies (n=442).

4.4.3 Maternal Social Support Index (MSSI)

The Maternal Social Support Index (MSSI) is intended to provide an overall picture of the amount of social support parents (usually mothers) feel they have or are able to get when they need it. The scale has 18 items and covers social support in seven areas including help with daily tasks, quality of contact with family/relatives, support from partner, and community involvement. The total scale is further broken down into three subscales: support around the home; support outside the home; and community contact.

Table 4.12 shows the breakdown of clients (n=404) who would be expected to improve (n=212) and those not expected to improve (n=192) based on whether the average total scale score was less than 22. The mean average on the total scale for the group expected to improve was 16.5 as compared to 25.7 for the group not expected to improve. In addition, the subscale scores are presented for these two groups based on the total scale breakdown.

TABLE 4.12
Mean Score at T1 on the Maternal Social Support Index (MSSI)
for Cases with Improvement Expected and Improvement Not Expected[1]

Capital Region Home Visitation Sites Utilizing MSSI[2]	Total Scale Mean	Support Around Home Subscale Mean	Support Outside Home Subscale Mean	Community Contact Subscale Mean
Improvement Expected (n=212; 52.5%)	16.5	3.6	11.1	1.7
Improvement Not Expected (n=192; 47.5%)	25.7	6.0	16.3	3.5

Source of data: MIS and Access MIS. From December 1, 2001 to January 31, 2004.
[1] Scores on the MSSI total scale range from 0 to 39 with lower scores indicating lower levels of social support. Cases with scores less than 22 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 22 are assigned to the "Improvement Not Expected" group. Scores on the "Support Around Home" subscale range from 0 to 10. Scores on the "Support Outside Home" subscale range from 0 to 21. Scores on the "Community Contact" subscale range from 0 to 8.
[2] Data were available for four agencies (n=404).

4.4.4 Carey Infant Temperament Questionnaire

The nature and quality of parent-child interactions is a core factor in young children's developmental outcomes. How these interactions proceed over time is a joint function of what the parents and what the child brings to them. For the parent's part, their knowledge, social support, and parenting skill set makes up what they bring to these important ongoing interactions. For the infant and child's part, their contribution comes in the form of their temperament. Infant/child temperament consists of a number of behavioural tendencies that together can pay an influential role in how they are viewed and responded to by their caregivers and later by their peers.

The Carey Infant Temperament Scale provides a detailed indication of an infant's temperament or behavioural style. Temperament is what the infant/child brings to the social interactions. It is made up of a number of basic behavioural tendencies or ways of responding to situations in the world. The Carey assesses temperament across the following nine dimensions:

- activity (the amount of physical motion during daily routine);
- rhythmicity (regularity of bodily functioning in sleep, hunger, bowel movement, etc.);
- approach (responses to new persons, places, events);
- adaptability (the ease/difficulty with which the infant can change to socially acceptable behaviour);
- intensity (the amount of energy in a response whether negative or positive);
- mood (general amount of pleasant or unpleasant feelings);
- persistence (attention span – how long the infant stays with a task or activity);
- distractibility (the effect of external stimuli such as sounds, persons, etc., on ongoing behaviour); and
- threshold (general sensitivity or insensitivity to stimuli like sound, odor, taste, light, etc.).

Based on earlier work with this measure in this and other early intervention programs, it was decided to administer only those five scales that reflect "difficult" aspects of temperament. It was reasoned that assisting parents in gaining the confidence and competence to manage any of the difficult aspects of their child's temperament is a core focus of these sorts of programs.

Useful information can be gathered from the application of the Carey Temperament scales in early intervention settings. First, the five scales of the Carey

that predict the extent to which infants are of "difficult" temperament provides an additional indicator of the degree of challenge or risk faced by the new families in the program. This is because children that are temperamentally difficult place a higher demand upon parent's parenting skills and resources than do children who are temperamentally "easier." In addition, the Carey measure makes it possible to compare parent's impressions of their infants with behaviourally anchored ratings of each child's actual temperament. Parents whose parenting skills and knowledge of their infant are less than optimal may seriously under or over estimate their child's actual level on the temperament dimension in question.

Table 4.13 presents the average scores of infants on each of the five "difficult" temperament dimensions measured by the Carey. These average scores are compared to existing population norms that provide a general picture of the nature of the infants within the families (i.e., what the infants bring to interactions). Infants receiving Home Visitation program services scored significantly higher than the population averages for their age group on all five dimensions.

TABLE 4.13
Mean Child Behaviour Rating on Five Dimensions of the Carey Scale

Capital Region Home Visitation Sites Utilizing Carey[1] (n=344)	Mean[2]	Standard Deviation	Population Mean[3]	Mean Difference
Rhythmicity	3.6	2.3	2.4	1.2***
Approachability	3.3	2.1	2.3	1.0***
Adaptability	3.1	2.1	2.0	1.1***
Intensity	4.0	1.7	3.4	0.6***
Mood	3.4	1.9	2.8	0.6***

*** $\rho < .001$.
Source of data: MIS, December 1, 2001 to January 31, 2004.
[1] Data were available for eight agencies (n=344).
[2] Mean includes the first data point for each case. Children who score greater than one standard deviation above the mean on a behaviour dimension are considered difficult on that dimension.
[3] The population mean is the average of scores for children of that age (i.e., four months). A comparison of the program averages for each dimension indicates whether or not the infants in the programs are similar to the general population.

Table 4.14 shows the number of temperament scales on which the infants were scored as clearly being on the difficult end of the scale (at least one standard deviation above the normative sample's mean). Infants scoring above this cutoff on three or more scales can be described as temperamentally difficult while infants scoring above this cutoff on two scales can be described as challenging in terms of the additional load they will place upon parental skills and sources. For the 344 infants tested, 32.8% (or 113) fall in the difficult temperament category, and 29.4% fall in the challenging category. The results are clearly above the approximately 10% estimate of infants in the general population that are temperamentally difficult, indicating that this is another risk factor to be considered when planning interventions with at-risk infants and their families.

TABLE 4.14
Number of Children Who Scored as "Difficult" by the Five Scales

Capital Region Home Visitation Sites Utilizing Carey[1]	Number of Scales													
	0		1		2		3		4		5		Total	
	n	%	n	%	n	%	n	%	n	%	n	%	**n**	**%**
Site Totals	44	12.8	86	25.0	101	29.4	61	17.7	38	11.0	14	4.1	**344**	**100.0**

Source of data: MIS, December 1, 2001 to January 31, 2004.
[1] Data were available for eight agencies (n=344).

It is also possible to look more closely at the role that home visitors may have played in assisting families with temperamentally difficult infants in developing the skills and resources they need to optimally manage their child's development. Specifically, we can examine the degree to which each parent's view of his or her infant's temperament matches the behaviourally anchored rating of his or her infant's temperament. A positive match occurs when the parent's rating of the infant's temperament matches the behaviour rating exactly. In addition, given that only those temperament dimensions reflecting difficult aspects of temperament are being examined here, it also makes sense to include situations where the parent views the infant as being slightly less difficult than the behavioural rating suggests in the positive match category. This is because it is likely that such parents hold this particular view because they possess the skills and resources necessary to effectively manage that aspect of their child's temperament (and the related behaviour) and as such, are not overwhelmed by, or ignoring, the challenging behaviours.

On the other hand, parental ratings of infants as more difficult than the behaviour rating suggests and parental ratings of infants as very low on difficult temperament dimensions when they are in fact high reflect negative mismatches. Both of these cases reflect a potentially problematic lack of understanding of the child's temperament on the part of the parent that would or should lead the home visitor to focus their intervention on the parent's parenting knowledge, parenting skills and parenting resources. Anecdotal feedback from home visitors suggests that this is, in fact, what occurs, but it is also possible to see if this is reflected in changes in this match/mismatch designation from the first to the second Carey assessment point.

Table 4.15 shows the numbers and percentages of parent-infant pairs with positive matches or negative mismatches at the first Carey testing time. As can be seen, the level of mismatch ranged from 17.6% to 38.0% depending upon the temperament dimension in question.

TABLE 4.15
Match Between Carey Behaviour Ratings and Parental Impression Rating at T1[1]

Dimension	Match		Mismatch	
	n	%	n	%
Rhythmicity T1 (n=265)	200	75.5	65	24.5
Approachability T1 (n=289)	238	82.4	51	17.6
Adaptability T1 (n=281)	196	69.8	85	30.2
Intensity T1 (n=287)	178	62.0	109	38.0
Mood T1 (n=290)	234	80.7	56	19.3

Source of data: MIS, December 1, 2001 to January 31, 2004.
Note: Data were available for eight agencies (n=344).
[1] Includes the first data point for each case for behaviour ratings and the first data point for parental impression ratings. Behaviour ratings and parental impression ratings are considered to match if both are the same (e.g., both ratings are low). Parental impression ratings that are slightly lower than behaviour ratings are considered "positive mismatches" and these are also considered a match. Parental impression ratings that are greatly lower than behaviour ratings are considered a "negative mismatch." Parental impression ratings that are higher than behaviour ratings are also considered "negative mismatches."

4.4.5 Denver Developmental Screening Test-II (DDS-II)

The Denver Developmental Screening Test-II (DDS-II) is a clinical screening tool designed to assist in the early detection of developmental delays. It identifies children whose development appears to be delayed in comparison to the development of other children. The DDS-II covers four basic developmental areas including gross motor (sitting, crawling, walking, etc.), language, fine motor-adaptive (clapping, reaching, grasping, hand-eye coordination, etc.), and personal-social (ability to relate to others).

In developmental terms, items are scored as advanced, normal, caution, or delay. An item is scored advanced if the child has passed an item that most children do not pass until an older age. An item is scored normal if it is developmentally expected that the child can pass the item or if the child has failed or refused items that are developmentally more complex than the current level of development (i.e., the child is not expected to pass them until an older age). An item is scored caution if a majority of the standard sample passed the item at a younger age than the child being tested. This indicates that there is a possibility that the child may show a small lag in development, although it is not of sufficient size to warrant a delay designation. Finally, an item is scored as delayed if almost all the standard sample passed the item at a younger age than the child being tested. The overall designations, based on the scores on individual items, include normal (no delays and a maximum of one caution), suspect (two or more cautions and/or one or more delays), and untestable (one or more refusals of items that the child is developmentally expected to pass).

From December 1, 2001 to January, 31, 2004, 796 files were opened. As shown in Table 4.16, Denver developmental assessments were administered to a total of 337

children in three Home Visitation programs. Of these children, 68 (20.2%) had at least one "suspect" developmental assessment.

TABLE 4.16
Denver Developmental Screening Test-II (DDS-II) Scores

Capital Region Home Visitation Sites Utilizing Denver[1]	Score[2]					
	Normal		Suspect		Untestable	
	n	% of 337	n	% of 337	n	% of 337
Total (n=337)	312	92.6	68	20.2	9	2.7

Source of data: ACCESS MIS, from December 1, 2001 to January 31, 2004.

[1] Data were available for three agencies (n=337).

[2] Normal means there were no delays on individual items and a maximum of one caution. Suspect means there were two or more cautions and/or one or more delays. Untestable means there was one or more refusals of items a child is developmentally expected to pass.

Previous research indicated that the Denver is an excellent assessment tool for identifying developmental delays and indeed was useful for early identification of possible difficulties (Elnitsky et al., 2003). However, it was not useful as an outcome measure over time and thus is not analyzed in the next chapter on outcomes.

4.5 Overview of Baseline Scores on Standardized Outcome Instruments

In summary, Table 4.17 shows that relatively few (3.1%) home visitation clients did not fall into a "needs improvement" category on at least one of the standardized instruments previously discussed (i.e., "did not need to improve" results were achieved on all five instruments). Just over half (50.6%) of the clients obtained a T1 score that put them into the need to improve group on just one instrument. Almost one-third (29.8%) of the cases fell into the needs improvement category on at least two instruments, and 16.5% needed to improve on three or more instruments.

TABLE 4.17
Number of Instruments on Which Cases Needed to Improve at T1

Total Cases	Number of Instruments											
	0		1		2		3		4		5	
	n	%	n	%	n	%	n	%	n	%	n	%
480	15	3.1	243	50.6	143	29.8	59	12.3	15	3.1	5	1.1

Source of data: MIS, from December 1, 2001 to January 31, 2004.

5.0 OUTCOME RESULTS: STANDARDIZED INSTRUMENTS

This chapter presents an analysis of quantitative data on scores from the standardized instruments administered to the home visitation clients who had an active file during the period of December 1, 2001 to January 31, 2004. Some of these clients completed instruments up to four times.

A three-year pilot study of the Best Start program in Charlottetown and programs in other locations across Canada (Elnitsky et al., 2003; Hornick et al, 2004;) found that comparing changes over time in program-wide average scores on individual measures was not sensitive to documenting change in the clients for a number of reasons including:

- the broad focus of the Healthy Families Home Visitation program that is tailored to the varying needs of individual families;
- the complex and varied context in which families live;
- the varied degree and nature of risk experienced by individual families that is affected by situational factors and/or significant individual problems;
- infants in different families may be equally at-risk and yet share very few specific risk factors;
- strengths and supports that offset or compensate for the impacts of some risk factors will also vary broadly from family to family as well as over time;
- different pathways for change and growth in different areas for individual families; and
- the relatively large proportion of families that scored within the average range at the first administration of the instruments (i.e., the larger this proportion, the less dramatic the potential improvement across time).

Thus, in order to develop a strategy that was sensitive to these clients, the standardized measures were first administered to clients early in the program (staggered within the first three months) to provide a detailed picture of the clients' needs. This picture indicated that few clients shared the same pattern of needs which was consistent with previous research. Thus, since all instruments were standardized and "normed" on large samples from the general population, it was possible to determine cut off scores or predetermined boundaries for each instrument which distinguished between those clients who "needed to improve" on any specific scale from those who were in the normal range and had no need to improve.

Given that the current sample of home visitation clients is relatively large, we were able to dichotomize the sample for each instrument by those clients who need to

improve and compare them with those who do not need to improve and identify any change that occurs over time. This approach was used for analyzing the standardized outcome instruments discussed below.

A caution must be noted with regards to the validity of a system-wide outcomes analysis such as that being reported here. As was shown in Table 4.9 (Risk Assessment Score by Program Site), the Early Head Start program is unlike the other home visitation agencies. The majority (63.5%) of this program's clients scored below the 25 point threshold on the Family Stress Checklist. This does not mean that these children and families are not at risk – it means their risk profile is different than the other Home Visitation programs. This result suggests that ideally, Early Head Start should be excluded from any system-wide analysis of Home Visitation program outcomes. In the current analysis of post-Time 1 scores, there were only two cases for Early Head Start in the data on Family Assessment Device, and no cases in any of the other measures. Supplementary analysis was conducted and it was found that these two cases did not significantly impact the findings and thus, Early Head Start was not excluded from the results reported for the data on the Family Assessment Device.

5.1 Family Assessment Device (FAD)

For those families where the mother was living with a partner, the FAD provides an overview of the level of functioning within the family. Scores range from 1 to 4. Low scores suggest that the family is functioning quite well whereas high scores (above 2) suggest that there may be problems in family functioning. As Table 5.1 indicates, 30.5% (n=39) of the 128 clients with more than 1 data point seemed to be experiencing problems with family functioning and thus fell into the "improvement expected" group at the first testing. In contrast, 69.5% (n=89) of the clients were on average below the threshold score of 2 (i.e., scores were 1.6, 1.6 and 1.7 for clients with 2, 3, and 4 data points, respectively), indicating a higher level of family functioning.

Table 5.1 shows that those clients who were expected to improve over time generally did improve as indicated by negative changes in the mean. More specifically, the group in the program the longest time with 4 data points (n=7) showed more consistent improvement after T2 (i.e., -0.2 at T3 and -0.1 at T4), with an overall decrease in the mean score to 2.2 indicating an improvement albeit not enough of one to indicate achievement of a normal level of family functioning.

TABLE 5.1
Mean Scores at T1 on the Family Assessment Device (FAD) and Mean Change Scores across Testings for Cases Including Two Parents with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T22	Mean Change from T2 to T32	Mean Change from T3 to T42	Mean of Last Post-test
Improvement Expected Group	4 (n=7)	2.5	0.0	-0.2	-0.1	2.2
	3 (n=14)	2.4	-0.2	0.1	-	2.4
	2 (n=18)	2.5	-0.3	-	-	2.3
Improvement Not Expected Group	4 (n=25)	1.7	0.3	0.1	-0.2	1.8
	3 (n=22)	1.6	0.2	0.0	-	1.8
	2 (n=42)	1.6	0.1	-	-	1.7

Source of data: MIS, December 1, 2001 to January 31, 2004.
Note: Data were available for eight agencies. Data include Early Head Start (two cases in the Improvement Not Expected group).
[1] Scores on the FAD range from 1 to 4 with higher scores indicating lower levels of family functioning. Cases with scores greater than 2 are assigned to the "Improvement Expected" group and cases with scores less than or equal to 2 are assigned to the "Improvement Not Expected" group. The FAD was only administered if the mother was living with a partner.
[2] Negative mean change scores indicate improvement in family functioning.

The improvement expected group with 3 data points (n=14) did initially improve at T2 (mean change of -0.2), but obtained a slightly lower score at T3 (mean change of 0.1) and thus, exhibited no real overall gain in family functioning.[8] The group with 2 data points also shows an improvement from T1 to T2 (mean change of -0.3). Whether these groups will improve over time as the first group did from T3 to T4 will be interesting; however, we have to be cautious interpreting these results due to the small number of respondents.

Table 5.1 further indicates that the group where improvement was not expected tended to stay the same over time as would be predicted. There were, however, slight overall increases in mean scores at T4 as compared to T1. On average, the FAD scores rose slightly at T2 and T3 for all three of the groups; notably, the group in the program the longest time (n=25) with 4 data points did show an improvement at T4 (mean change of -0.2 between T3 and T4). The group with 3 data points (n=22) also improved in that its mean change score decreased from 0.2 (T1 to T2) to 0.0 (T2 to T3). These results suggest that longer periods of time in the program are associated with positive change in family functioning.

5.2 Child Development Inventory (CDI)

The CDI is intended to provide an indication of the parent's overall knowledge of child development in each of the following areas: emotional, cognitive, physical, and social. The percentage score (i.e., percent correct) serves as a general indication of

[8] A review of the raw data indicated that the pattern of findings was significantly affected by two cases in which the change scores from T2 to T3 were positive and considerably greater than was the case for the other 12 clients. This largely accounts for why no improvement was apparent for the group from T2 to T3.

how knowledgeable a parent is within each area of child development. The higher the percentage score, the more knowledge the parent has in a particular area. Scores below 85% indicate that the parent may be missing information in a particular area of child development and needs to improve. Scores of 85% and above indicate that, for the most part, the parent is knowledgeable in a specific area of development and improvement would not necessarily be expected.

Table 5.2 contains the overall scores on the Child Development Inventory (CDI) for clients who were expected to improve (i.e., those with scores below 85%) and clients who were not expected to improve (i.e., score of 85% and above). As the data indicate, the overall pattern for the improvement expected group is substantial improvement in the first year, ranging from 4.9 to 8.4, followed by modest changes in the second and third years. The improvement expected groups with 3 or 4 data points still remained higher after T3 or T4 than they were at T1 as indicated by the larger mean scores at the last post-test. Interestingly, the improvement not expected group with the longest time in program (n=24) stayed high in the first year, but also dropped off in the third year.

TABLE 5.2

Mean Scores at T1 on the Child Development Inventory (CDI) and Mean Change Scores across Testings for Cases with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T2	Mean Change from T2 to T3	Mean Change from T3 to T4	Mean of Last Post-test
Improvement Expected Group	4 (n=13)	79.3	6.3	1.2	-5.7	81.0
	3 (n=12)	80.3	4.9	2.1	-	87.4
	2 (n=28)	78.1	8.4	-	-	86.5
Improvement Not Expected Group	4 (n=24)	91.8	0.5	0.7	-5.3	87.8
	3 (n=16)	91.5	0.0	0.2	-	91.7
	2 (n=45)	92.3	-1.2	-	-	91.1

Source of data: MIS, December 1, 2001 to January 31, 2004.

Note: Data were available for 10 agencies. There were no cases for Early Head Start.

[1] Scores on the CDI are based on the percentage of correct answers and range from 0 to 100. Cases with scores less than 85 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 85 are assigned to the "Improvement Not Expected" group.

An analysis of the individual items in the CDI suggests why the scores dropped off in the third year. The focus of most of the items is on the first two years of a child's development. Thus, as the child grows older the items become less relevant to the parent and they probably tend to be less attentive when responding to the items.

Tables 5.3 through 5.6 present the findings of the CDI by each subscale: emotional, cognitive, physical, and social development. Interestingly, for the most part, the same pattern of initial improvement and then drop off from the third to the fourth year occurs for the improvement expected group (n=13). Notably, on the social

development subscale shown in Table 5.6, the improvement expected group had a substantial increase in the average score from T1 to T2.[9]

TABLE 5.3

Mean Scores at T1 on the Emotional Development Subscale of the CDI and Mean Change Scores across Testings for Cases with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T2	Mean Change from T2 to T3	Mean Change from T3 to T4	Mean of Last Post-test
Improvement Expected Group	4 (n=13)	80.8	5.4	5.4	-7.7	83.9
	3 (n=12)	81.7	2.5	3.3	-	87.5
	2 (n=28)	78.9	5.0	-	-	83.9
Improvement Not Expected Group	4 (n=24)	94.2	0.4	0.8	-5.4	90.0
	3 (n=16)	93.8	1.3	1.9	-	96.9
	2 (n=45)	93.3	-0.2	-	-	93.1

Source of data: MIS, December 1, 2001 to January 31, 2004.

Note: Data were available for 10 agencies. There were no cases for Early Head Start.

[1] Scores on the CDI are based on the percentage of correct answers and range from 0 to 100. Cases with scores less than 85 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 85 are assigned to the "Improvement Not Expected" group.

TABLE 5.4

Mean Scores at T1 on the Cognitive Development Subscale of the CDI and Mean Change Scores across Testings for Cases with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T2	Mean Change from T2 to T3	Mean Change from T3 to T4	Mean of Last Post-test
Improvement Expected Group	4 (n=13)	82.3	4.6	-2.3	-5.4	79.2
	3 (n=12)	86.7	-3.3	6.7	-	90.0
	2 (n=28)	85.7	7.5	-	-	93.2
Improvement Not Expected Group	4 (n=24)	94.6	-0.4	-0.8	-5.8	87.5
	3 (n=16)	93.8	1.9	-3.8	-	91.2
	2 (n=45)	96.2	-2.7	-	-	93.6

Source of data: MIS, December 1, 2001 to January 31, 2004.

Note: Data were available for 10 agencies. There were no cases for Early Head Start.

[1] Scores on the CDI are based on the percentage of correct answers and range from 0 to 100. Cases with scores less than 85 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 85 are assigned to the "Improvement Not Expected" group.

[9] A review of the raw data indicated that this increase was significantly affected by two cases in which the change scores from T1 to T2 were positive and considerably greater than was the case for the other clients.

TABLE 5.5

Mean Scores at T1 on the Physical Development Subscale of the CDI and Mean Change Scores across Testings for Cases with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T2	Mean Change from T2 to T3	Mean Change from T3 to T4	Mean of Last Post-test
Improvement Expected Group	4 (n=13)	80.0	4.6	3.8	-5.4	83.1
	3 (n=12)	81.7	8.3	-1.7	-	88.3
	2 (n=28)	80.7	8.6	-	-	89.3
Improvement Not Expected Group	4 (n=24)	92.5	-1.7	2.5	-6.7	86.7
	3 (n=16)	93.8	-3.1	3.8	-	94.4
	2 (n=45)	91.6	1.6	-	-	93.1

Source of data: MIS, December 1, 2001 to January 31, 2004.

Note: Data were available for 10 agencies. There were no cases for Early Head Start.

[1] Scores on the CDI are based on the percentage of correct answers and range from 0 to 100. Cases with scores less than 85 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 85 are assigned to the "Improvement Not Expected" group.

TABLE 5.6

Mean Scores at T1 on the Social Development Subscale of the CDI and Mean Change Scores across Testings for Cases with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T2	Mean Change from T2 to T3	Mean Change from T3 to T4	Mean of Last Post-test
Improvement Expected Group	4 (n=13)	73.5	11.1	-2.6	-4.3	77.8
	3 (n=12)	70.4	13.0	0.0	-	83.3
	2 (n=28)	65.9	13.1	-	-	79.0
Improvement Not Expected Group	4 (n=24)	85.7	4.2	0.5	-3.2	87.0
	3 (n=16)	84.0	0.0	-1.4	-	82.6
	2 (n=45)	87.7	-3.7	-	-	84.0

Source of data: MIS, December 1, 2001 to January 31, 2004.

Note: Data were available for 10 agencies. There were no cases for Early Head Start.

[1] Scores on the CDI are based on the percentage of correct answers and range from 0 to 100. Cases with scores less than 85 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 85 are assigned to the "Improvement Not Expected" group.

5.3 The Maternal Social Support Index (MSSI)

The Maternal Social Support Index (MSSI) is intended to provide an overall picture of the amount of social support parents (usually mothers) feel they have or are able to get when they need it. The scale has 18 items and covers social support in a number of areas, including help with daily tasks, quality of contact with family/relatives, support from partner, and community involvement. The total scale is further broken down into three subscales: support around the home; support outside the home; and community contact.

Cases with scores less than 22 on the total MSSI are considered “low” scores indicating that the parent feels they have low social support as opposed to average or high support. Thus, cases with scores lower than 22 on the total scale were assigned to the improvement expected group and those with scores 22 or higher were assigned to the improvement not expected group.

As indicated by Table 5.7, the three improvement expected groups all improved in the first year (T1 to T2 improvements ranged from 1.7 to 3.3) and then leveled off and were maintained for years two and three. The mean scores for these groups at the last post-test were all approximately two points above the pre-test scores.

TABLE 5.7

Mean Scores at T1 on the Maternal Social Support Index (MSSI) and Mean Change Scores across Testings for Cases with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T2	Mean Change from T2 to T3	Mean Change from T3 to T4	Mean of Last Post-test
Improvement Expected Group	4 (n=21)	15.1	3.3	-1.7	1.0	19.4
	3 (n=21)	17.5	2.5	-0.6	-	19.4
	2 (n=46)	16.4	1.7	-	-	18.1
Improvement Not Expected Group	4 (n=14)	24.6	-1.8	-0.1	-0.5	22.3
	3 (n=17)	26.9	-5.6	-0.4	-	20.9
	2 (n=48)	25.9	-2.8	-	-	23.1

Source of data: MIS, and Access MIS. From December 1, 2001 to January 31, 2004.

Note: Data were available for four agencies. There were no cases for Early Head Start.

[1] Scores on the MSSI total scale range from 0 to 39 with lower scores indicating lower levels of social support. Cases with scores less than 22 on the total scale are assigned to the “Improvement Expected" group and cases with scores greater than or equal 22 are assigned to the "Improvement Not Expected" group.

In contrast, the improvement not expected groups obtained high social support scores at pre-test ranging from a low of 24.6 to a high of 26.9; however, the scores for all three groups decreased over time – mainly in the first year. In particular, the group with 3 data points (n=17) had an average change score of -5.6 at the end of the first year. This group’s average MSSI score fell below 22 at post-test whereas the other two improvement not expected groups remained above the score of 22. The improvement expected groups remained below the score of 22, even though they showed improvement over time.

Tables 5.8, 5.9 and 5.10 show results obtained for the subscales: support around home, support outside home, and community contact. The pattern of change for support around home and support outside home subscales is the similar to that of the total scores. The improvement expected groups all experienced some increase in the first year followed by a leveling off, but maintained improvement and achieved higher post-test scores as compared to their pre-test mean score at T1. This pattern was not as apparent for the community contact subscale, however. The group with 3 data points had a lower post-test mean score as compared to their score at T1.

The improvement not expected groups generally followed the same pattern as the total score trends. Overall, average scores decreased over time and post-test scores as compared to their mean score at T1 were lower with the exception of the group with 4 data points for the community contact subscale (n=14). As shown in Table 5.10, this group had a higher mean score of 3.7 as compared to their average score of 3.1 at T1.

TABLE 5.8
Mean Scores at T1 on the "Support Around Home" Subscale of the MSSI and Mean Change Scores across Testings for Cases with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T2	Mean Change from T2 to T3	Mean Change from T3 to T4	Mean of Last Post-test
Improvement Expected Group	4 (n=21)	3.4	0.0	-0.4	0.6	3.6
	3 (n=21)	3.5	0.4	0.3	-	4.2
	2 (n=46)	3.2	0.7	-	-	3.9
Improvement Not Expected Group	4 (n=14)	5.6	-0.8	0.2	-0.2	4.8
	3 (n=17)	6.1	-1.9	0.4	-	4.5
	2 (n=48)	6.2	-0.9	-	-	5.2

Source of data: MIS, and Access MIS. From December 1, 2001 to January 31, 2004.
Note: Data were available for four agencies. There were no cases for Early Head Start.
[1] Scores on the MSSI "Support Around Home" subscale range from 0 to 10 with lower scores indicating lower levels of social support. Cases with scores less than 22 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 22 are assigned the "Improvement Not Expected" group.

TABLE 5.9
Mean Scores at T1 on the "Support Outside Home" Subscale of the MSSI and Mean Change Scores across Testings for Cases with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T2	Mean Change from T2 to T3	Mean Change from T3 to T4	Mean of Last Post-test
Improvement Expected Group	4 (n=21)	9.6	2.4	-0.5	1.0	12.5
	3 (n=21)	11.3	2.0	-0.4	-	12.9
	2 (n=46)	11.6	0.5	-	-	12.1
Improvement Not Expected Group	4 (n=14)	15.9	-1.4	0.0	-0.7	13.8
	3 (n=17)	15.7	-1.9	-0.7	-	13.1
	2 (n=48)	16.3	-1.2	-	-	15.0

Source of data: MIS, and Access MIS. From December 1, 2001 to January 31, 2004.
Note: Data were available for four agencies. There were no cases for Early Head Start.
[1] Scores on the MSSI "Support Outside Home" subscale range from 0 to 21 with lower scores indicating lower levels of social support. Cases with scores less than 22 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 22 are assigned the "Improvement Not Expected" group.

TABLE 5.10
Mean Scores at T1 on the "Community Contact" Subscale of the MSSI and Mean Change Scores across Testings for Cases with Two, Three, or Four Data Points[1]

	Number of Data Points	Mean Score at T1	Mean Change from T1 to T2	Mean Change from T2 to T3	Mean Change from T3 to T4	Mean of Last Post-test
Improvement Expected Group	4 (n=21)	2.1	1.0	-0.8	1.0	3.3
	3 (n=21)	2.7	0.0	-0.4	-	2.3
	2 (n=46)	1.6	0.6	-	-	2.1
Improvement Not Expected Group	4 (n=14)	3.1	0.4	-0.4	0.6	3.7
	3 (n=17)	5.2	-1.8	-0.1	-	3.4
	2 (n=48)	3.5	-0.6	-	-	2.8

Source of data: MIS, and Access MIS. From December 1, 2001 to January 31, 2004.
Note: Data were available for four agencies. There were no cases for Early Head Start.
[1] Scores on the MSSI "Community Contact" subscale range from 0 to 8 with lower scores indicating lower levels of social support. Cases with scores less than 22 on the total scale are assigned to the "Improvement Expected" group and cases with scores greater than or equal to 22 are assigned the "Improvement Not Expected" group.

5.4 Carey Infant Temperament Questionnaire

The nature and quality of parent-child interactions is a core factor in young children's developmental outcomes. How these interactions proceed over time is a joint function of what the parents and what the child brings to them. For the parent's part, their knowledge, social support, and parenting skill set makes up what they bring to these important ongoing interactions. For the infant and child's part, their contribution comes in the form of their temperament. Infant/child temperament consists of a number of behavioural tendencies that together can play an influential role in how they are viewed and responded to by their caregivers and later by their peers.

The Carey Infant Temperament Scale provides a detailed indication of an infant's temperament or behavioural style. Temperament is what the infant/child brings to the social interactions. It is made up of a number of basic behavioural tendencies or ways of responding to situations in the world. The Carey assesses temperament across nine dimensions; however, as indicated in Chapter 4.0, only the five scales that measure the difficult aspects of temperament were used in this analysis. These scales are:

- rhythmicity (regularity of bodily functioning in sleep, hunger, bowel movement, etc.);
- approachability (responses to new persons, places, events);
- adaptability (the ease/difficulty with which the infant can change to socially acceptable behaviour);

- intensity (the amount of energy in a response whether negative or positive); and
- mood (general amount of pleasant or unpleasant feelings).

In addition to directly measuring the infant's temperament, the Carey collects information on the parent's perception of the infant's temperament. This allows us to examine the degree to which each parent's view of his or her infant's temperament matches the behaviourally anchored rating of his or her infant's temperament. A positive match occurs when the parent's rating of the infant's temperament matches the behaviour rating exactly. In addition, given that only those temperament dimensions reflecting difficult aspects of temperament are being examined here, it also makes sense to include situations where the parent views the infant as being slightly less difficult than the behavioural rating suggests in the positive match category. This is because it is likely that such parents hold this particular view because they possess the skills and resources necessary to effectively manage that aspect of their child's temperament (and the related behaviour) and as such, are not overwhelmed by, or ignoring, the challenging behaviours.

On the other hand, parental ratings of infants as more difficult than the behaviour rating suggests and parental ratings of infants as very low on difficult temperament dimensions when they are in fact high reflect negative mismatches. Both of these cases reflect a potentially problematic lack of understanding of the child's temperament on the part of the parent that would or should lead the home visitor to focus their intervention on the parent's parenting knowledge, parenting skills and parenting resources. Anecdotal feedback from home visitors suggests that this is, in fact, what occurs. However, it is also possible to see if this is reflected in changes in this match/mismatch designation from the first to the second Carey assessment point six to seven months after the first administration of the instrument on the infant's behaviour at approximately five months of age.[10]

Table 5.11 presents the T2 matches and mismatches of those parent-infant comparisons that had a negative mismatch at T1 to see if there was evidence that their participation in the program had produced a positive change in this area. There were enough parent-child pairs to allow for a closer look at this question. As shown in Table 5.11, improvement was achieved on all five dimensions. The percentage of improvement was highest for the approachability subscale (76.9%), and lowest for the intensity subscale (19.0%). These results are an indication that the programs are effectively targeting the important core issues of parenting knowledge, parenting skills and parenting resources especially among those parents who clearly need them the most to support them in raising difficult infants.

[10] Elnitsky et al., 2003 found that there was very little change in the infant behaviour component of the Carey results from four months to eight months. The parent's perception, however, did change considerably. Thus, in this study the infant behaviour component is administered only once at five months, but the parent's perception is measured twice.

TABLE 5.11
Change in Match between Carey Behaviour Ratings and Parental Impression Ratings from T1 to T2 for Cases with Negative Mismatches at T1[1]

Dimension	Number of Negative Mismatches at T1	Status of T1 Negative Mismatch at T2		
		Match	Mismatch	% Improvement
Rhythmicity (n=65)	31	10	21	32.3
Approachability (n=51)	13	10	3	76.9
Adaptability (n=85)	35	9	26	25.7
Intensity (n=109)	42	8	34	19.0
Mood (n=56)	16	7	9	43.8

Source of data: MIS, December 1, 2001 to January 31, 2004

Note: Data were available for eight agencies. There were no cases for Early Head Start.

[1] Includes the first data point for each case for behaviour ratings and the first data point for parental impression ratings. Behaviour ratings and parental impression ratings are considered to match if both are the same (e.g., both ratings are low). Parental impression ratings that are slightly lower than behaviour ratings are considered "positive mismatches" and these are also considered a match. Parental impression ratings that are greatly lower than behaviour ratings are considered a "negative mismatch." Parental impression ratings that are higher than behaviour ratings are also considered "negative mismatches."

6.0 OUTCOME RESULTS: PARENT INTERVIEW AND VISITOR-FAMILY RELATIONSHIP INVENTORY

Interviews were conducted with clients who have been in the Home Visitation program 12 months or more in order to collect qualitative information on families' experiences and views of the home visitation services. A total of 60 clients participated in the parent interview, representing about one-quarter (24.6%) of the total number of clients, across all 11 sites, receiving services for at least 12 months. Clients from the Multicultural Health Brokers Co-op Home Visitation Program were not given the Visitor-family Relationship Inventory because the interviews were conducted face-to-face with a home visitor. Thus, 51 respondents completed the Inventory.

It should be noted that because individuals voluntarily participated in the survey the results do not necessarily represent all home visitation clients. Responses to the parent interview are presented first. The last section of this chapter deals with results from the Visitor-family Relationship Inventory. The results of the parent interview are presented according to five main areas: how the program has helped clients; what life would be like without the Home Visitation program; what the best part of the program is; suggested improvements to the program; and whether clients would recommend the program to others and, if so, how they would describe the program to others.

6.1 How the Home Visitation Program has Helped Clients

Individuals were asked about the degree to which the program has helped them in a number of different areas, and to share any experiences related to each of these areas. Clients were also asked about whether the program has helped them with challenges that may make parenting more difficult.

Table 6.1 below shows how the 60 respondents rated the degree of assistance they felt the program provided in a number of different areas. Overall, respondents were very positive in rating how the program has helped them. Well over half indicated the program helped "very much" with child-related areas. This ranged from 61.7% who thought that the program has helped them very much with respect to being patient with their child's behaviour, and with the health of their child, to 85.0% who felt that the program helped very much in terms of their ability to develop a better relationship with their child.

TABLE 6.1
Clients' Views of How the Program Has Helped Them (n=60)

Area	Very Much		Some		A Little		Not At All		N/A to Me	
	n	%	n	%	n	%	n	%	n	%
Understanding of child development	47	78.3	11	18.3	0	0.0	1	1.7	1	1.7
Understanding of parenting	46	76.7	10	16.7	3	5.0	1	1.7	0	0.0
Confidence in taking care of my child	45	75.0	9	15.0	2	3.3	1	1.7	3	5.0
Patience with my child's behaviour	37	61.7	16	26.7	2	3.3	1	1.7	4	6.7
Relationship with my child	51	85.0	4	6.7	3	5.0	1	1.7	1	1.7
The health of my child	37	61.7	15	25.0	3	5.0	2	3.3	3	5.0
The number of people I can rely on for help	40	66.7	12	20.0	5	8.3	2	3.3	1	1.7
The number of places I know about that I can go to for help	36	60.0	19	31.7	1	1.7	2	3.3	2	3.3
The number of places in my community that I can take my child to do things	36	60.0	19	31.7	1	1.7	2	3.3	2	3.3
Ability to cope with stress	27	45.0	20	33.3	9	15.0	2	3.3	2	3.3
Ability to solve problems	26	43.3	19	31.7	11	18.3	1	1.7	3	5.0
Relationship with my partner/spouse	16	26.7	13	21.7	7	11.7	2	3.3	22	36.7
Relationship with other people	21	35.0	18	30.0	11	18.3	7	11.7	3	5.0

Source of data: Parent Interview 2004.

Respondents were slightly less positive, however, when it came to other issues. Less than half of the clients felt the program provided very much help with their ability to cope with stress (45.0%) or with problem solving (43.3%). An even smaller proportion of clients rated the program as helping “very much” when it came to their personal relationships with other people (35.0%) or with their partner/spouse (26.7%). If the ratings are combined to include “some” then over three-quarters of the respondents felt that the program provided help with their ability to cope with stress and solve problems. Over half of respondents indicated that the program helped with their relationships with a partner or with other people.

For each of the areas, respondents were also asked to provide any specific examples that showed how the program helped them. The examples given by the respondents were summarized and grouped into different areas as shown in Table 6.2.

TABLE 6.2
Client Experiences Demonstrating How the Program Has Helped

Area	Comments	
	n	%
Experiences Focused on Child Development, Parenting	44	32.6
Experiences Focused on the Support Provided by the Family Support Visitor (Home Visitor)	29	21.5
Experiences Focused on Establishing Community Connections	25	18.5
Experiences Focused on Meeting Basic Needs (e.g., food, clothing, shelter)	19	14.1
Experiences Focused on Personal Development	10	7.4
Experiences Focused on Personal Relationships	8	5.9
Total	**135**	**100.0**

Source of data: Parent Interview 2004.
Note: Clients may have shared more than one experience and, thus, percentages were calculated based on the total number of comments.

Almost one-third (32.6%) of all comments made were in relation to child development and to parenting. Respondents described how their relationship with their child had improved and how they were engaged in more different kinds of activities with their child. As well, they felt they had a better understanding of child development such as what kinds of behaviours they could expect from their child. Clients also talked about having a better understanding of parenting and adopting more effective parenting skills, particularly with regards to child discipline. Comments related to the child's health included descriptions about being more knowledgeable about food and nutrition, and more aware of the importance of the mental health of their child. A number of respondents also talked about how their views about toys have changed and that they now understood how toys played an important role in child development and education.

The second most common theme in the comments related to the family support visitor (or home visitor). Clients stressed the importance of feeling they could trust and rely on their home visitor to support them when needed. In fact, many of the clients described their relationship with their home visitor as a friendship. Some other particularly important roles of the home visitor, as identified by clients, included: accompaniments (e.g., to medical appointments and interviews with school officials); advocacy; and assistance with language translation and explaining cultural differences.

The ability to access services in the community was also important for clients. Clients identified that they had more access to services related to medical and health, and activities for children. In some instances, the home visitor provided referrals to an agency for the client. One important aspect of being involved in community activities was that clients had an opportunity to meet other parents who shared similar parenting challenges and experiences. Respondents were able to share stories as well as obtain parenting advice.

Related to community services were comments about how the Home Visitation program assisted clients with meeting basic needs such as food, clothing and low-income housing. In some instances, the home visitor assisted by actually obtaining necessities for the child such as a car seat or clothing; at other times, the home visitor provided the client with names of various agencies and services.

Respondents were less likely to provide descriptions about personal development and personal relationships; however, a number of respondents talked about the support they received from their home visitor after they decided to leave an abusive relationship. Other respondents felt that their relationship with a partner/spouse was strengthened because they had acquired more effective communication skills through the Home Visitation program. For a number of families new to Canada, the home visitor was an important source of information about gender equality and cultural practices.

In asking how the program has helped clients, the interview also included questions about whether the program assisted individuals in meeting certain challenges that may make parenting more difficult. Respondents were asked to rate the degree to which the program was helpful to the client in responding to these challenges. The

results are shown in Table 6.3. Challenges in which the clients felt the program was of great help to them were in the following areas: dealing with baby's difficult temperament or nature (45.0%); building a social or support network (40.0%); dealing with other stressful life events (40.0%); not feeling good about yourself (35.0%); and lack of transportation (35.0%). Consistent with findings from the previous question also relating to helpfulness of the program, responses here indicate the significant impact of the Home Visitation program in playing a supportive role, and in providing effective parenting strategies. As well, respondents indicated that the program assists them with more practical needs such as transportation.

TABLE 6.3
How the Program has Helped Clients Deal with Challenges (n=60)

Challenges	A Great Deal		Somewhat		Not At All		N/A to Me		Missing	
	n	%	n	%	n	%	n	%	n	%
Lack of transportation	21	35.0	10	16.7	6	10.0	23	38.3	0	0.0
Not feeling a part of your community	11	18.3	17	28.3	6	10.0	26	43.3	0	0.0
Your social/support network (e.g., lack of family and friends you can rely on)	24	40.0	19	31.7	5	8.3	12	20.0	0	0.0
Not feeling good about yourself	21	35.0	20	33.3	3	5.0	15	25.0	1	1.7
Baby's difficult temperament or nature	27	45.0	16	26.7	1	1.7	16	26.7	0	0.0
Family relationships (other than with your child)	20	33.3	14	23.3	8	13.3	18	30.0	0	0.0
Trouble controlling your anger	11	18.3	18	30.0	2	3.3	29	48.3	0	0.0
Mental health issues (e.g., depression)	18	30.0	14	23.3	4	6.7	24	40.0	0	0.0
Medical/physical issues	17	28.3	14	23.3	6	10.0	22	36.7	1	1.7
Racial/cultural issues	3	5.0	6	10.0	5	8.3	45	75.0	1	1.7
Discrimination	2	3.3	7	11.7	7	11.7	42	70.0	2	3.3
Not having enough education	11	18.3	15	25.0	6	10.0	27	45.0	1	1.7
Unemployment	6	10.0	14	23.3	7	11.7	32	53.3	1	1.7
Inadequate housing	11	18.3	9	15.0	7	11.7	32	53.3	1	1.7
Not having enough money for basic needs	14	23.3	19	31.7	6	10.0	20	33.3	1	1.7
Involvement with the criminal justice/legal system	6	10.0	6	10.0	5	8.3	42	70.0	1	1.7
Family violence	13	21.7	4	6.7	4	6.7	38	63.3	1	1.7
Alcohol or drug use	3	5.0	3	5.0	4	6.7	49	81.7	1	1.7
Gambling	2	3.3	1	1.7	3	5.0	53	88.3	1	1.7
Child welfare involvement with children	5	8.3	7	11.7	5	8.3	42	70.0	1	1.7
Other stressful life events (e.g., death of a loved one)	24	40.0	13	21.7	5	8.3	16	26.7	2	3.3

Source of data: Parent Interview 2004.

6.1.1 How the Home Visitation Program has Impacted the Child

In the parent interview, clients were asked if they felt that their family's involvement in the Home Visitation program has had an impact on their child in any way. Most of the individuals (81.7% of 60) responded "yes" to this question as compared to only 11.7% who disagreed and felt the program had no impact on their child. One respondent said they did not know, and missing values occurred for three individuals. All of the respondents who indicated "yes" also described in more detail how their child benefited from the program. Interestingly, for the seven respondents who stated there was no impact, all indicated in other parts of the interview that the Home Visitation program had improved their lives (e.g., access to more resources, and better relationship with their partner), which actually would also benefit their child's life. As well, for the three respondents with missing values, responses they made in other

parts of the interview indicated that the program had improved their lives (and their child's) (e.g., learning about parenting and having the support of the home visitor). The remaining respondent who had indicated "don't know" had also indicated having problems with the current program and was planning to transfer to another home visitation site.

6.2 What Life Would be Like Without the Home Visitation Program

Clients were asked what they thought their lives would have been like if they had not connected to the Home Visitation program. All but one respondent felt they would have been worse off without the program. Respondent comments were grouped and are shown in Table 6.4. Four major themes were identified and are described below.

In over one-quarter of the comments made, clients felt that they would not have been as informed about child development and about parenting. Generally, individuals felt they would have made poorer decisions about how to raise their child or how to handle medical or other concerns. For example, one respondent stated that she would have taken her baby to the hospital more often because she would not have known if her baby's behaviour was normal. A number of respondents felt that they would not have been able to discipline their children as effectively, and some stated that they would have resorted to spanking or yelling at their child.

The second theme that emerged was that respondents felt their own life situations would not have improved to the same degree without the program. For example, clients felt they would not be as self-confident and informed, would not have been able to meet education goals, and would not be able to budget their finances. Individuals also attributed the program as having an important influence on their relationships with a partner/spouse, child, and other people, because for example, the respondent would not have benefited from the communication skills or anger management they acquired by being involved in the Home Visitation program. A number of respondents believed they would have either continued to stay in an abusive relationship or would have returned to one. As one client stated,

> I would be beaten, and still in the abusive relationship. If not for (the home visitor) I would still be in my relationship. I'd be dead or something. The baby would have been taken from me.

The third theme referred to weaker links to community resources and services. Respondents stated that they would not have known about as many different community supports, and that they might not have taken the initiative to access community services without the assistance they received from the program.

The fourth theme to emerge from responses underlined the important supportive role of the program in a variety of ways. Clients indicated that without the program, they would not have a source of support they can trust and rely on for any number of purposes (from providing a listening ear to helping with emergency situations). In particular, the home visitor's bond with the client and family was, in many cases, more

important to the client than any other relationship. A number of clients said that they received no support from their own families (e.g., their parents or siblings) and therefore, were more dependent on their home visitors for encouragement and support. Respondents said that without the Home Visitation program, their lives would be more stressful, more isolated, and they would feel helpless and overwhelmed as to how to deal with various problems. A number of respondents indicated they would have resorted to violent behaviour such as throwing and breaking things in their home, and yelling at their children. As one individual remarked,

> My life would have been a heck of a lot more stressful. (There would be) more violence, and I would be punching walls, breaking things like I used to do. Now, I don't hit and have more control.

Another comment reflects how some of the respondents felt that the program completely changed their lives.

> My kids would have been apprehended and I would have been lost in alchohol and drugs. They guided me and helped me succeed.

The following response made by another individual highlights the important roles that home visitors play in supporting clients, "My home visitor is like my lifeline. She is an anti-depressant, a shoulder to cry on, (she) gives me the best advice. My life would be chaos otherwise." This kind of description about home visitors was commonly expressed by other clients in the interviews.

TABLE 6.4
Clients' Views on Life Without the Home Visitation Program

Area	Comments	
	n	%
Would not know as much about child development or parenting	21	25.9
Would not have experienced positive change in myself or in relationships (better life skills e.g., education, budgetting; leaving abusive relationships, relationship with	19	23.5
Would not know about or access community resources and services	17	21.0
Would not have had an important source of emotional/mental health support; reliable, trustworthy	17	21.0
Life would be more stressful, more isolated, alone, helpless	6	7.4
Respondent indicated having problems with program	1	1.2
Total	**81**	**100.0**

Source of data: Parent Interview 2004.
Note: Clients may have shared more than one experience and, thus, percentages were calculated based on the total number of comments.

6.3 The Best Part of the Home Visitation Program

Respondents were asked to identify what was the best part of being involved in the Home Visitation program. As shown in Table 6.5, three major themes emerged from the responses. The most-often made comment described the relationship between the home visitor and the client. Respondents stated that the support they received from the home visitor, and from the Home Visitation program enabled them to

seek help whenever they felt they needed it, no matter how important or trivial the concern. The second theme related to the ability to obtain information about community resources and activities for the child. In many cases, involvement in community activities also provided opportunities to meet other parents, thus expanding the respondent's support network. The third theme involved access to information about child development and parenting. Respondents felt they particularly benefited from learning about new or different parenting skills.

TABLE 6.5
Clients' Views on the Best Part of the Home Visitation Program

Area	Comments	
	n	%
Relationship with Home Visitor, Home Visitation Program	40	47.1
Knowledge of and Access to Community and Services	20	23.5
Knowledge about Child Development and Parenting	19	22.4
Other Comments	5	5.9
Respondent indicated having problems with program	1	1.2
Total	**85**	**100.0**

Source of data: Parent Interview 2004

Note: Clients may have shared more than one experience and, thus, percentages were calculated based on the total number of comments.

6.4 Suggested Improvements to the Home Visitation Program

Respondents were asked to suggest ways in which the Home Visitation program could be more helpful. Over half of the respondents (36 of 60) felt the program was fine and could not think of any ways to improve it. Table 6.6 shows clients' suggested improvements.

TABLE 6.6
Clients' Views on How to Improve the Home Visitation Program

Area	Comments	
	n	%
More or Changes to the Program's Activities	9	26.5
Changes to the Home Visit	9	26.5
More or Changes to Other Program Elements	6	17.6
Access to More Information and Resources	5	14.7
Transportation	4	11.8
Program Administration	1	2.9
Total	**34**	**100.0**

Source of data: Parent Interview 2004.

Note: Clients may have shared more than one experience and, thus, percentages were calculated based on the total number of comments.

The majority of suggestions related to program activities and the home visit itself. With regard to the first theme, respondents felt that program activities for children were important. Given this, they felt that more activities should be offered, and with shorter breaks between activities. As well, clients suggested more flexibility in scheduling and

more organization in administering the activity (e.g., that activities start on time). Respondents also felt that it would be helpful if there was opportunity for families to have more involvement in the program activities themselves as well as socializing with other parents.

The second theme that emerged related to the home visit itself. Clients suggested that more home visits be offered and that the home visitor would be able to bring more books and toys. Two respondents stated that if they had children's books in their own language, they would be able to read with their child.

The third theme related to the home visitation in a more general way. Respondents felt it would be helpful if the program linked to other organizations (e.g., national youth organizations), provided other kinds of services (e.g., a drop-in centre) and social activities, and offered more assistance to clients with respect to goal setting.

Other suggestions on how the program could be improved included access to more information and transportation. Clients felt that it would be helpful if programs offered more presentations and materials (e.g., books, videos) on different topics that would be of interest to families using home visitation services (e.g., information about domestic violence, and topics related to the client's community). Suggestions on transportation related to providing more assistance to clients so that they can attend program activities and meet appointments (such as a doctor's appointment for the child).

6.5 Recommending the Home Visitation Program to Others

When asked if they would recommend the Home Visitation program to other people, the vast majority of respondents (95.0%) said they would, only two said they would not, and one was unsure. Ten of the respondents said that they have already recommended the program to other people, such as family members and friends. A few of the respondents said that they have even talked about the program with strangers when they see these other parents struggle with their children.

Table 6.7 presents themes that emerged in responses to how clients describe the program to others. The top two major themes describe how the Home Visitation program provides information about child development and parenting, and about the benefits of assistance from the home visitor. A few respondents indicated that the program teaches people how to look for some potential developmental concerns in young children. With regards to assistance from the home visitor, clients said that the relationship with the home visitor provides emotional support and friendship. The third theme deals with knowledge about resources in the community and assistance with accessing them. Additionally, clients stated that this connection provides an opportunity to meet other parents. Another theme that emerged was that the Home Visitation program was simply a good source of information. Respondents felt that the home visitor could assist with almost any problem or question, even those not related to child development or parenting.

TABLE 6.7
How Clients Would Recommend the Program to Others

Area	Comments	
	n	%
Provides Information About Child Development and Parenting	27	26.0
Benefits of Relationship with Home Visitor	27	26.0
Resources	18	17.3
General Comments[1]	13	12.5
Good Source of Information	12	11.5
Benefits of Program Activities and Getting Involved	7	6.7
Total	**104**	**100.0**

Source of data: Parent Interview 2004.
Note: Clients may have shared more than one experience and, thus, percentages were calculated based on the total number of comments.
[1] General Comments includes overall positive descriptions about the program (e.g., it will better your life, and it is good for young moms).

6.6 Results of the Visitor-family Relationship Inventory

A total of 51 respondents were given the Visitor-family Relationship Inventory, and completed responses were received for all 26 questions in the Inventory. As shown in Table 6.8, responses were positive overall. The top five items in which greater proportions of respondents indicated they strongly agreed with the statement describing their home visitor included the following:

- 60.8% strongly agreed that the home visitor "explains the information she/he gives me";
- 59.9% strongly agreed that the home visitor "praises me when I reach a goal";
- 56.9% strongly agreed that the home visitor "motivates me to protect my baby's/child's health";
- 52.9% strongly agreed that the home visitor "helps me understand"; and
- 52.9% strongly agreed that the home visitor "encourages me to make my own decisions."

Of the 26 items, the smallest proportion of clients rating agreed/strongly agreed was found in responses to the statement, "My home visitor tells me about her/himself." Compared to 25.5% who strongly agreed, 54.9% indicated they agreed with the statement. This result is appropriate given that the home visitor should limit the degree to which they share their own personal and private concerns with their client in order to maintain a professional relationship.

TABLE 6.8
Client Ratings on the Visitor-family Relationship Inventory (n=51)

My home or family visitor…	Agree Strongly		Agree		Neither Agree/Disagree		Disagree		Disagree Strongly	
	n	%	n	%	n	%	n	%	n	%
Helps me understand	27	52.9	22	43.1	1	2.0	0	0.0	1	2.0
Helps me keep a positive outlook	25	49.0	23	45.1	1	2.0	1	2.0	1	2.0
Brings out the best in me	18	35.3	28	54.9	2	3.9	0	0.0	3	5.9
Helps me learn to solve my problems	26	51.0	19	37.3	2	3.9	3	5.9	1	2.0
Encourages me to make my own decisions	27	52.9	21	41.2	1	2.0	1	2.0	1	2.0
Helps my family get along better	15	29.4	23	45.1	8	15.7	4	7.8	1	2.0
Does not ask me to do anything I cannot do	24	47.1	21	41.2	4	7.8	1	2.0	1	2.0
Understands my situation	26	51.0	23	45.1	1	2.0	0	0.0	1	2.0
Helps me develop my role within the family	20	39.2	26	51.0	4	7.8	0	0.0	1	2.0
My work with my home visitor helps my own development and the development of my baby/child.	26	51.0	22	43.1	2	3.9	0	0.0	1	2.0
Understands if I tell her/him what I want to do	23	45.1	25	49.0	1	2.0	0	0.0	2	3.9
Helps me develop as a member of my family	21	41.2	27	52.9	1	2.0	1	2.0	1	2.0
Respects my independence	26	51.0	22	43.1	1	2.0	1	2.0	1	2.0
Accepts my ways	20	39.2	27	52.9	1	2.0	2	3.9	1	2.0
Motivates me to protect my baby's/child's health	29	56.9	21	41.2	0	0.0	0	0.0	1	2.0
Cares about what happens to me	25	49.0	23	45.1	2	3.9	0	0.0	1	2.0
Is sensitive to how I feel	24	47.1	22	43.1	3	5.9	1	2.0	1	2.0
Explains the information she/he gives me (such as information sheets)	31	60.8	19	37.3	0	0.0	0	0.0	1	2.0
Understands me	22	43.1	25	49.0	2	3.9	1	2.0	1	2.0
Praises me when I reach a goal	27	52.9	21	41.2	1	2.0	1	2.0	1	2.0
Shares with me	26	51.0	24	47.1	0	0.0	0	0.0	1	2.0
Encourages me to succeed in daily life	26	51.0	23	45.1	1	2.0	0	0.0	1	2.0
Respects my family's ways of doing things	23	45.1	23	45.1	2	3.9	2	3.9	1	2.0
Work we do together builds my strengths.	19	37.3	30	58.8	1	2.0	0	0.0	1	2.0
I trust my home visitor to look after my best interests.	25	49.0	25	49.0	0	0.0	0	0.0	1	2.0
My home visitor tells me about her/himself.	13	25.5	28	54.9	4	7.8	2	3.9	4	7.8

Source of data: Visitor-family Relationship Inventory 2004

7.0 OUTCOME RESULTS: CHILD WELFARE SERVICES INVOLVEMENT AND UTILIZATION OF HEALTH CARE SERVICES

This chapter presents the analysis of data related to home visitation client involvement with Child Welfare and utilization of health care resources. The analysis includes Child Welfare data obtained from Alberta Children's Services Child Welfare Information System (CWIS)[11] and data obtained from Capital Health on health profiles at birth, emergency department visits, and hospital visits. The time period used for both Child Welfare involvement and for utilization of health care services is based on concurrent involvement with the Home Visitation program. The findings from these data are relevant to outcomes that involve reducing the occurrence of child abuse and neglect, and the outcomes involving appropriate contact with health providers.

7.1 Involvement with Child Welfare Services

7.1.1 An Overview

Every Canadian provincial/territorial jurisdiction has a child protection service agency, which has the legal responsibility under the [Child Welfare Act] for investigating reports that a child may be in need of protection and taking appropriate steps to protect children from ill-treatment. Services for the child and parents may be provided in their home, or the child may be removed from the home on a temporary or permanent wardship basis. The agency may provide services either on a voluntary basis or involuntary basis, using the legal system to require families to receive services. In Alberta, this agency is called Alberta Children's Services Child Welfare.

Child protection service usually begins with a report that a child may be in need of protection as is shown in Figure 7.1. Reports are often made by professionals who have contact with the family, such as a family physician or emergency physician, but reports may also be made by a neighbour or a parent.

> The high rates of non-substantiated cases have led a number of jurisdictions in the United States and more recently in Canada to adopt a "Differential Response System" for potential child welfare cases. This approach involves the provision of early assessment and support services to lower-risk children and families who voluntarily co-operate. For cases where the risk to children is higher, or where the family will not address their needs voluntarily, a child protection services investigation is conducted to determine whether a child may be in need of mandatory services.

[11] This report adopts Alberta Children's Services' use of the term Child Welfare to mean Child Protection Services as well as the name of organizations that provide child protection services.

Alberta is the first Canadian jurisdiction to formally adopt the Differential Response System – referred to in that province as the Alberta Response Model (ARM). The objectives of this model are as follows:

1. Stronger community-based partnerships and linkages that work together to improve outcomes for children, youth and families.

2. Increased utilization rate of effective community-based supports for children, youth and families in "at-risk" circumstances.

3. Increased permanent placement in families for children who have Permanent Guardianship Status.

4. Decrease in the number of children and youth requiring child protection services and increase in child, youth and family well-being.

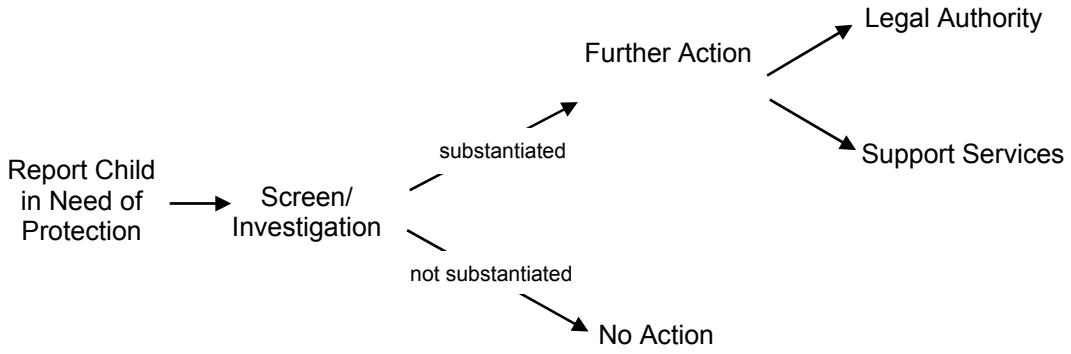
5. Systematic changes to child protection and community-based delivery systems.

In Alberta, unless there is an apparent urgency or high risk, the investigation is usually preceded by a screening procedure that does not necessarily involve direct contact with the child, and only "positive screen" cases are investigated. After the investigation is completed, a decision is made regarding whether the report was substantiated and the child is in need of protection, or not substantiated and the child is not in need of protection. There is also a "third option" in Alberta, which is "substantiated" but with "no need for protection services" (e.g., the child is no longer in need of protection services because the perpetrator no longer has access to the child) (Vogl & Bala, 2004, p. 38).

If the finding of the investigation is that the child is in need of protection, then further action might involve either legal action by the agency and/or the provision of support placement services. Legal action could involve a range of responses from voluntary support agreements to emergency apprehension orders. Support services could involve such services as home supports or parenting education, whereas placement services involve taking the child out of the home and placing him or her in another setting ranging from extended family to foster care.

FIGURE 7.1

Decision Process for Child Welfare Services



7.1.2 Child Welfare Involvement

The following groups are compared in the analysis of Child Welfare services:

- Home Visitation Clients: Individuals who have participated in the Home Visitation program or utilized services. The time period was from the date of birth of the infant to the date of file closure or November 30, 2003, whichever is earlier.

- Non-clients: Individuals who were screened into the Home Visitation program or service, but chose not to become involved between December 1, 2001 and November 30, 2003.

  - These families may have received services and support elsewhere, such as from other organizations or from their own support network (e.g., other family members and friends).

  - There was limited availability of data for the sample of non-clients. Not all Home Visitation programs were represented, and some were under-represented given the size of the program (for example, Early Head Start had only eight non-clients). The resulting limited comparability between the non-client group and the client group limits the validity of the comparisons in the analysis of Child Welfare data.

- General Population: A statistical comparison group for the City of Edmonton composed of all children born between December 1, 2001 and November 30, 2003 who were involved in the Child Welfare system during the same time period excluding the above two groups.

Table 7.1 presents data on Child Welfare involvement for clients, non-clients, and the general Edmonton population. Results from analysis of the Child Welfare data indicate that in the general population Child Welfare involvement has declined over the last few years. Based on the 24-month period, from December 1, 2001 to November 30, 2003, 2.7% of the general population was found to have been involved in the Child Welfare system. An earlier analysis based on the 29 month period from July 1, 1999 to November 30, 2001 found that 4.0% of the population had Child Welfare involvement (Elnitsky et al., 2003). It is likely that this decrease is a reflection of province-wide initiatives under the Alberta Response Model.

TABLE 7.1
Cases with Child Welfare Involvement[1] for Home Visitation Clients,[2] Non-clients,[3] and Those in the General Edmonton Population[4] between December 1, 2001 and November 30, 2003

	Clients	Non-clients	General Population
Number of children	680	250	19,113
Number of children with involvement	213	51	524
Percentage of cases with involvement	31.3	20.4	2.7
Screens	409	81	1,604
Number of screens requiring further investigation[5]	335	63	1,307
Percentage of cases with further investigation	81.9	77.8	81.5
Investigations	291	49	982
Number of investigations requiring further action[5]	143	31	558
Percentage of cases with further action	49.1	63.3	56.8

Souce of data: Alberta Children's Services Child Welfare Information System (CWIS), December 1, 2001 to November 30, 2003.
Total birth rates for the general population were derived based on data from Capital Health.
[1] Involvement is defined as having one or more Child Welfare record.
[2] Home Visitation Clients are the number of clients submitted to Child Welfare who had at least one Child Welfare screen (where the unit of analysis is the target child).
[3] Non-clients are those who screened positive for participation in the program, but declined program service. Data were not available for Mill Woods Family Resource Centre, and Multicultural Health Brokers Co-operative Home Visitation Program, Early Head Start program had eight clients.
[4] General Population includes all children born in Edmonton between December 1, 2001 and November 30, 2003 (for a 24 month period who were involved in the Child Welfare system during the same time period, excluding clients and non-clients.
[5] Excludes results where there was no need for further protection services, and protection needs not substantiated.

The proportion of home visitation clients who had Child Welfare involvement is considerably larger than is the case for non-clients (31.3% as compared to 20.4%). As would be expected, the percentage of individuals with involvement was higher in the client and non-client groups than in the general population (2.7%).

Screens and Investigations

Table 7.1 also shows information about the percentage of screens requiring further investigation, and investigations requiring further action for clients, non-clients, and the general population. The findings indicate that the client group is more likely to have screens requiring further investigation as compared to the non-client group where 81.9% of screens for client cases need further investigation as compared to 77.8% of screens for non-client cases. When it comes to investigations, however, it appears that the non-client group is far more likely to have investigations requiring further action (63.3% and 56.8% for the general population as compared to 49.1% of investigations for the client group). This is consistent with the fact that clients in the program are

observed more closely than non-clients and thus, are more likely to be screened, but less likely to require more intrusive intervention.

As indicated in Table 7.2, the percentage of investigations that result in no need for protection services is 28.9% for clients, 22.4% for non-clients and 22.0% for the general population. Similarly, the percentage of investigations that result in concerns not substantiated is 22.0% for clients as compared to 14.3% for non-clients and 21.2% for the general population. These results indicate a pattern in which cases for home visitation clients are monitored closely, but are less likely to require further action than is the case for non-clients and the general population.

TABLE 7.2
Outcomes of Child Welfare Investigations for Clients,[1] Non-clients,[2] and the General Edmonton Population[3]

Investigation Type	Clients		Non-clients		General Population	
	n	%	n	%	n	%
Investigations not requiring further action						
No need for protection services	84	28.9	11	22.4	216	22.0
Concerns not substantiated	64	22.0	7	14.3	208	21.2
Investigations requiring further action						
Abandonment	7	2.4	0	0.0	24	2.4
Condition of child prevents adequate care by guardian	3	1.0	0	0.0	4	0.4
Convenyance / repatriation	0	0.0	0	0.0	1	0.1
Emotional injury by guardian	2	0.7	0	0.0	21	2.1
Guardian subjects child to cruel/unusual punishment	0	0.0	0	0.0	0	0.0
Guardian unable/unwilling to protect from cruel punishment	0	0.0	0	0.0	2	0.2
Guardian unable/unwilling to protect from emotional injury	4	1.4	2	4.1	26	2.6
Guardian unable/unwilling to protect from physical injury	9	3.1	1	2.0	23	2.3
Guardian unable/unwilling to protect from sexual abuse	1	0.3	0	0.0	4	0.4
Guardian unable/unwilling to provide medical treatment	1	0.3	0	0.0	4	0.4
Guardian unable/unwilling to provide necessities of life	98	33.7	26	53.1	380	38.7
Guardian deceased	0	0.0	0	0.0	0	0.0
Other jurisdiction request-home report	2	0.7	0	0.0	6	0.6
Physical injury by guardian	4	1.4	0	0.0	11	1.1
Risk of physical injury by guardian	12	4.1	2	4.1	37	3.8
Risk of sexual abuse by guardian	0	0.0	0	0.0	5	0.5
Sexual abuse by guardian	0	0.0	0	0.0	1	0.1
Missing code	0	0.0	0	0.0	9	0.9
Total investigations	**291**	**100.0**	**49**	**100.0**	**982**	**100.0**
Total investigations not requiring further action	148	50.9	18	36.7	424	43.6
Total investigations requiring further action	143	49.1	31	63.3	549	56.4
Total investigations	**291**	**100.0**	**49**	**100.0**	**973**	**100.0**
Average Number of Investigations per Child	**1.4**		**1.0**		**0.8**	

Source of data: Alberta Children's Services Child Welfare Information System (CWIS), December 1, 2001 to November 30, 2003.

[1] Home Visitation Clients are the number of clients submitted to Child Welfare who had at least one Child Welfare screen (where the unit of analysis is the target child).

[2] Non-clients are those who screened positive for participation in the program, but declined program service. Data were not available for Mill Woods Family Resource Centre, and Multicultural Health Brokers Co-operative Home Visitation Program.

[3] General Population includes all children born in Edmonton between December 1, 2001 to November 30, 2003 who were involved in the Child Welfare system during the same time period, excluding clients and non-clients born after December 1, 2001.

7.1.3 Legal Actions

Table 7.3 shows the types of legal action taken for the three groups. In terms of apprehension orders, both the client (7.7%) and non-client groups (7.1%) have smaller proportions of cases with apprehension orders as compared to the general population (12.1%). Differences, however, were much smaller when comparing proportions of legal actions that were emergency apprehension orders. Emergency apprehension orders occurred for 7.7% of clients, 6.0% of non-clients, and 7.7% of the general population.

TABLE 7.3
Type of Legal Actions for Clients,[1] Non-clients,[2] and the General Edmonton Population[3] for Cases with Child Welfare Involvement

Legal Action	Clients		Non-clients		General Population	
	n	%	n	%	n	%
Apprehension order	32	7.7	6	7.1	196	12.1
Custody agreement with guardian	28	6.7	6	7.1	90	5.5
Emergency apprehension	32	7.7	5	6.0	125	7.7
Interim access order	1	0.2	0	0.0	4	0.2
Interim custody order	81	19.4	8	9.5	439	27.0
Open under assessment	55	13.2	19	22.6	191	11.8
Permanent guardianship agreement	0	0.0	0	0.0	12	0.7
Permanent guardianship order	2	0.5	2	2.4	21	1.3
Post adoption support	0	0.0	0	0.0	1	0.1
Supervision order	31	7.4	4	4.8	86	5.3
Support agreement with guardian	104	24.9	25	29.8	254	15.7
Temporary guardianship order	51	12.2	9	10.7	204	12.6
Total Legal Actions	**417**	**100.0**	**84**	**100.0**	**1,623**	**100.0**
Average Number of Legal Actions per Child	**2.0**		**1.6**		**1.3**	

Source of data: Alberta Children's Services Child Welfare Information System (CWIS), December 1, 2001 to November 30, 2003.

[1] Home Visitation Clients are the number of clients submitted to Child Welfare who had at least one Child Welfare screen (where the unit of analysis is the target child).

[2] Non-clients are those who screened positive for participation in the program, but declined program service. Data were not available for Mill Woods Family Resource Centre, and Multicultural Health Brokers Co-operative Home Visitation Program.

[3] General Population includes all children born in Edmonton between December 1, 2001 to November 30, 2003 who were involved in the Child Welfare system during the same time period, excluding clients and non-clients born after December 1, 2001.

For interim custody orders, and temporary guardianship orders, the proportions of clients and the general population were considerably greater than for the non-client group. As compared to 9.5% of non-client cases that had an interim custody order, 19.4% of client cases and 27.0% of cases from the general population had this type of order. For temporary guardianship order, 10.7% of non-client cases as compared to 12.2% of client cases and 12.6% of cases from the general population had this type of order.

For support agreement with guardian, greater proportions of the client (24.9%) and non-client (29.8%) groups had this type of agreement as compared to the general population (15.7%). Results were more comparable for the three groups in terms of custody agreement with guardian (6.7% for clients, 7.1% for non-clients, and 5.5% for general population).

7.1.4 Placements

Table 7.4 shows the types of placements made for the clients, non-clients and individuals from the general population group. In terms of foster care, findings indicate that greater proportions of cases in the general population have agency foster care (29.1%) and foster care (12.9%) as compared to the client (25.0% and 7.8% respectively) and non-client groups (18.4% and 8.2% respectively). In contrast, the percentages of general population cases directed to parental care, and placement in extended family are generally lower than for the other groups. Placement in parental care occurred for 39.3% of the general population cases as compared to 49.6% for clients 57.1% for non-clients. Placement in extended family occurred for 6.4% of the general population cases as compared to 6.3% for clients and 12.2% for non-clients. Placement in foster care was lower for the clients (7.8%) and non-clients (8.2%) as compared to the general population (12.9%).

TABLE 7.4
Type of Placements for Clients,[1] Non-clients,[2] and the General Edmonton Population[3] for Cases with Child Welfare Involvement

Placement Types	Clients		Non-clients		General Population	
	n	%	n	%	n	%
Parental care	127	49.6	28	57.1	356	39.3
Agency foster care	64	25.0	9	18.4	264	29.1
Extended family	16	6.3	6	12.2	58	6.4
Auxillary medical	0	0.0	0	0.0	4	0.4
Foster care	20	7.8	4	8.2	117	12.9
Group care[4]	10	3.9	1	2.0	20	2.2
Placement into mental health care	0	0.0	0	0.0	0	0.0
Independent living	0	0.0	0	0.0	0	0.0
Interim placement (other than above)	9	3.5	0	0.0	46	5.1
Out of province residential treatment	0	0.0	0	0.0	0	0.0
Secure treatment	0	0.0	0	0.0	0	0.0
Significant other	1	0.4	0	0.0	8	0.9
Support independent living	4	1.6	0	0.0	3	0.3
Kinship care - Director has custody	1	0.4	0	0.0	2	0.2
Residential treatment	3	1.2	0	0.0	8	0.9
Remedial care	0	0.0	0	0.0	7	0.8
Receiving group care	0	0.0	0	0.0	2	0.2
View to adopt	1	0.4	1	2.0	11	1.2
Total Placements	**256**	**100.0**	**49**	**100.0**	**906**	**100.0**
Average Number of Placements per Child	**1.2**		**1.0**		**0.7**	

Source of data: Alberta Children's Services Child Welfare Information System (CWIS), December 1, 2001 to November 30, 2003.

[1] Home Visitation Clients are the number of clients submitted to Child Welfare who had at least one Child Welfare screen (Where the unit of analysis is the target child).

[2] Non-clients are those who screened positive for participation in the program, but declined program service. Data were not available for Mill Woods Family Resource Centre, and Multicultural Health Brokers Co-operative Home Visitation Program.

[3] General Population includes all children born in Edmonton between December 1, 2001 to November 30, 2003 who were involved in the Child Welfare system during the same period, excluding clients and non-clients born after December 1, 2001.

[4] This category includes young mothers in care.

Table 7.5 shows the average number of days in placement for the client, non-client and general population groups. When foster care is used, time in care is less for the client group than for the non-clients (138.3 days compared to 152.3 days), and

considerably lower than the general population (213.9 days). In contrast, when extended family was used placements were longer for clients than non-clients (107.2 days compared to 86.0 days); however both groups had less time in care than the general population (131.9 days).

TABLE 7.5
Average Number of Placement Days by Placement Type for Clients,[1] Non-clients,[2] and the General Edmonton Population[3]

Placement Types	Clients		Non-clients		General Population	
	n	days	n	days	n	days
Parental care	127	114.7	28	112.2	356	136.2
Agency foster care	64	102.9	9	171.9	264	215.3
Extended family	16	107.2	6	86.0	58	131.9
Auxillary medical	0	0.0	0	0.0	4	2.3
Foster care	20	138.3	4	152.3	117	213.9
Group care[4]	10	64.2	1	1.0	20	17.8
Placement into mental health care	0	0.0	0	0.0	0	0.0
Independent living	0	0.0	0	0.0	0	0.0
Interim placement (other than above)	9	4.4	0	0.0	46	18.9
Out of province residential treatment	0	0.0	0	0.0	0	0.0
Secure treatment	0	0.0	0	0.0	0	0.0
Significant other	1	7.0	0	0.0	8	126.6
Support independent living	4	36.0	0	0.0	3	37.7
Kinship care - Director has custody	1	66.0	0	0.0	2	25.0
Residential treatment	3	86.0	0	0.0	8	29.3
Remedial care	0	0.0	0	0.0	7	10.7
Receiving group care	0	0.0	0	0.0	2	1.0
View to adopt	1	18.0	1	205.0	11	167.4
Total	**256**	**744.7**	**49**	**728.4**	**906**	**1,134.0**

Source of data: Alberta Children's Services Child Welfare Information System (CWIS), December 1, 2001 to November 30, 2003.

[1] Home Visitation Clients are the number of clients submitted to Child Welfare who had at least one Child Welfare screen (where the unit of analysis is the target child).

[2] Non-clients are those who screened positive for participation in the program, but declined program service. Data were not available for Mill Woods Family Resource Centre, and Multicultural Health Brokers Co-opertaive Home Visitation Program.

[3] General Population includes all children born in Edmonton between December 1, 2001 to November 30, 2003 who were involved in the Child Welfare system during the same time period, excluding clients and non-clients born after December 1, 2001.

[4] This category includes young mothers in care.

While a detailed cost benefit analysis of placement patterns is not possible within the context of the current study, a preliminary analysis of the cost implications of placement patterns suggest that the home visitation programs have a significant effect on the costs of child protection services. First, as the data in Table 7.4 indicate, home visitation clients who had Child Welfare placement tended to have less expensive placements such as parental care. Then as the data in Table 7.5 indicate, when home visitation children are placed, it is for significantly fewer days. For example, if we compare the cost of foster care at $57 per day, the home visitation client placements averaged 138.3 compared to 213.9 days for the general population. This results in a cost savings of $4,423 per case or $88,464 for the 20 home visitation clients. Likewise, for agency foster care the home visitation client averaged 102.9 days compared to 215.3 days for the general population. At $74 per day, this results in a cost saving of

$8,318 per case or $532,326 for the 64 home visitation clients over the period covered by the evaluation.[12]

7.2 Health Care Utilization

The analysis of Health Care utilization below includes data regarding health profiles at birth, utilization of emergency department services, and hospital visits. Data related to use of emergency department services and hospital care exclude birth events and report only on children from birth to 3 years of age. It was not possible to obtain health data for the non-Home Visitation client group who qualified for the program but did not become involved. The following groups are compared in the analysis of health care services utilization:

- Home Visitation Clients: Individuals who have participated in the Home Visitation program or utilized services. The time period was from the date of birth of the infant to the date of file closure or November 30, 2003, whichever is earlier.

- General Population: A statistical comparison group for the City of Edmonton composed of all children born between January 1, 2001 and December 31, 2003 who used emergency department services or had a hospital visit during the same time period, excluding home visitation clients.

Caution should be taken in interpreting the findings in this section about health care utilization patterns between home visitation clients and the general population. The rates shown are based on the total number of children across all the 11 home visitation sites. Aggregating the data may mask any agency and/or individual differences which may be considerable in some cases. The number of children across sites varied considerably. Boyle Street Co-op (n=13) and St. Albert Parents' Place Association (n=16) had the smallest samples in comparison to Norwood Child and Family Resource Centre (n=98) and Terra Association (n=84), which had the largest groups. Each site had at least one child who required health care services at some point between birth and 3 years of age (this was the case for both emergency department visits and hospitalizations.) As well, it is possible that when comparing age groups one or more sites did not have any children in the particular group who required emergency or hospital care.

7.2.1 Health Profiles at Birth

Table 7.6 contains a health profile of the mother and infant at the time of the birth of the infant for home visitation families and the general population. As expected, the home visitation mothers and infants are higher risk in all categories than the general population mothers and infants. The home visitation mothers are younger, an average of 23.8 years old, compared to 28.8 years old for the general population. Interestingly, even though they were significantly younger, the home visitation mothers had almost

[12] Cost of placements as of September 2004 were obtained from Cynthia Henituik, Alberta Children Services, by telephone conversation January 5, 2005.

the same average number of previous pregnancies as the population comparison group (2.1 compared to 2.4). These pregnancies of course, did not necessarily result in live births.

TABLE 7.6
Selected Health and Demographic Characteristics of Mothers and Infants for the Home Visitation Group and General Edmonton Population

Characteristics of Mother and Infant	All Home Visitation Sites[1]		General Population[2]	
	n = 637	Missing Values	n = 11,588	Missing Values
Mother				
Age (mean)	23.8 yrs.	39	28.8 yrs.	2
Age (median)	22.0 yrs.	39	29.0 yrs.	2
Number of previous pregnancies (mean)	2.1	38	2.4	0
Number of previous pregnancies (median)	2.0	38	2.0	0
Smoked during pregnancy	30.4%	38	12.7%	0
Drank alcohol during pregnancy	4.8%	38	1.4%	0
Used street drugs during pregnancy	8.2%	38	2.4%	0
Breastfeeding baby	80.3%	38	84.4%	0
Enrolled in Health for 2 Program	14.5%	38	5.2%	0
Single Parent	42.0%	49	11.7%	215
Infant				
Gestation less than or equal to 37 weeks	21.4%	38	18.5%	1
Low birth weight (less than or equal to 2500 grams)	10.0%	39	7.0%	0

Source of data: Capital Health, December 1, 2001 to November 30, 2003 for home visitation group, and 2003 for other population.
Notes: Data exclude infants who have died. Percentages reported are based on totals excluding missing values.
[1] Home Visitation group includes individuals who participated in the Home Visitation program or utilized services. The time period includes date of birth of the infant to the date of file closure or November 30, 2003, is earlier. Note, data are presented by Home Visitation site in Table C-1, Appendix C.
[2] General Population includes all children born in Edmonton in 2003.

Risk behaviours during pregnancy were much more prevalent among the home visitation mothers than the general population. Note, for example, that for the home visitation mothers 30.4% smoked, 4.8% drank alcohol, and 8.2% used street drugs during pregnancy, compared to the general population where 12.7% smoked, only 1.4% drank alcohol, and 2.4% used street drugs during pregnancy.

Further, as would be expected, more of the home visitation mothers (14.5%) were enrolled in the Health for Two program than the general population (5.2%) and many more were single parents (42.0% compared to 11.7% for the general population).

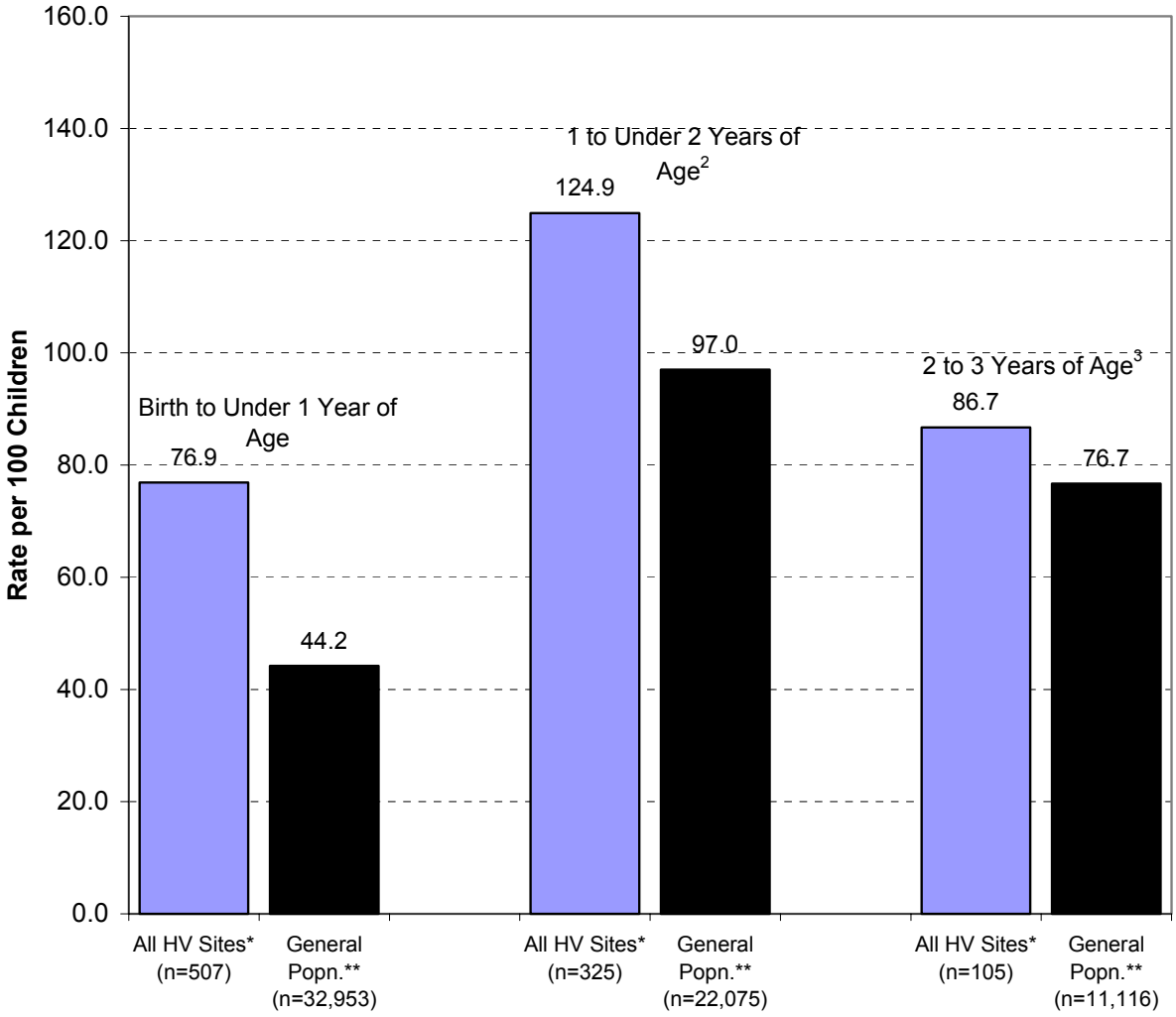
In terms of the infants, the home visitation infants also exhibited higher levels of risk than the general population infants. Note, for example, that 21.4% were premature born with less than 37 weeks gestation period compared to 18.5% for the general population. Further, 10.0% of the home visitation infants were less than 2500 grams at birth compared to 7.0% for the general population.

7.2.2 Emergency Department Visits

Figure 7.2 shows the rate of emergency department visits for home visitation clients as compared to the general population for children up to age 3. The average rate of emergency department visits for home visitation clients was slightly higher than

FIGURE 7.2

Rates of Emergency Department Visits for Home Visitation Clients and the General Edmonton Population by Age Group for Children Up to 3 Years of Age, 2001 to 2003[1]



Source of data: Capital Health, January 1, 2001 to December 31, 2003

[1] Data on the number of visits related to the leading causes of emergency department visits and hospitalizations are provided in Tables C-2 and C-3 in Appendix C. Only data for children up to 3 years of age are included.

[2] 1 to Under 2 Yrs. of Age: Boyle Street Co-op clients had no emergency department visits.

[3] 2 to 3 Yrs. of Age: Boyle Street Co-op and St. Albert Parents' Place Association had no emergency department visits.

* For All Home Visitation (HV) Sites the rate shown is calculated based on total home visitation program sites. Note that it is possible that a site may have data for only one or a few emergency department visits. Also, a site may not have any data for a particular age group.

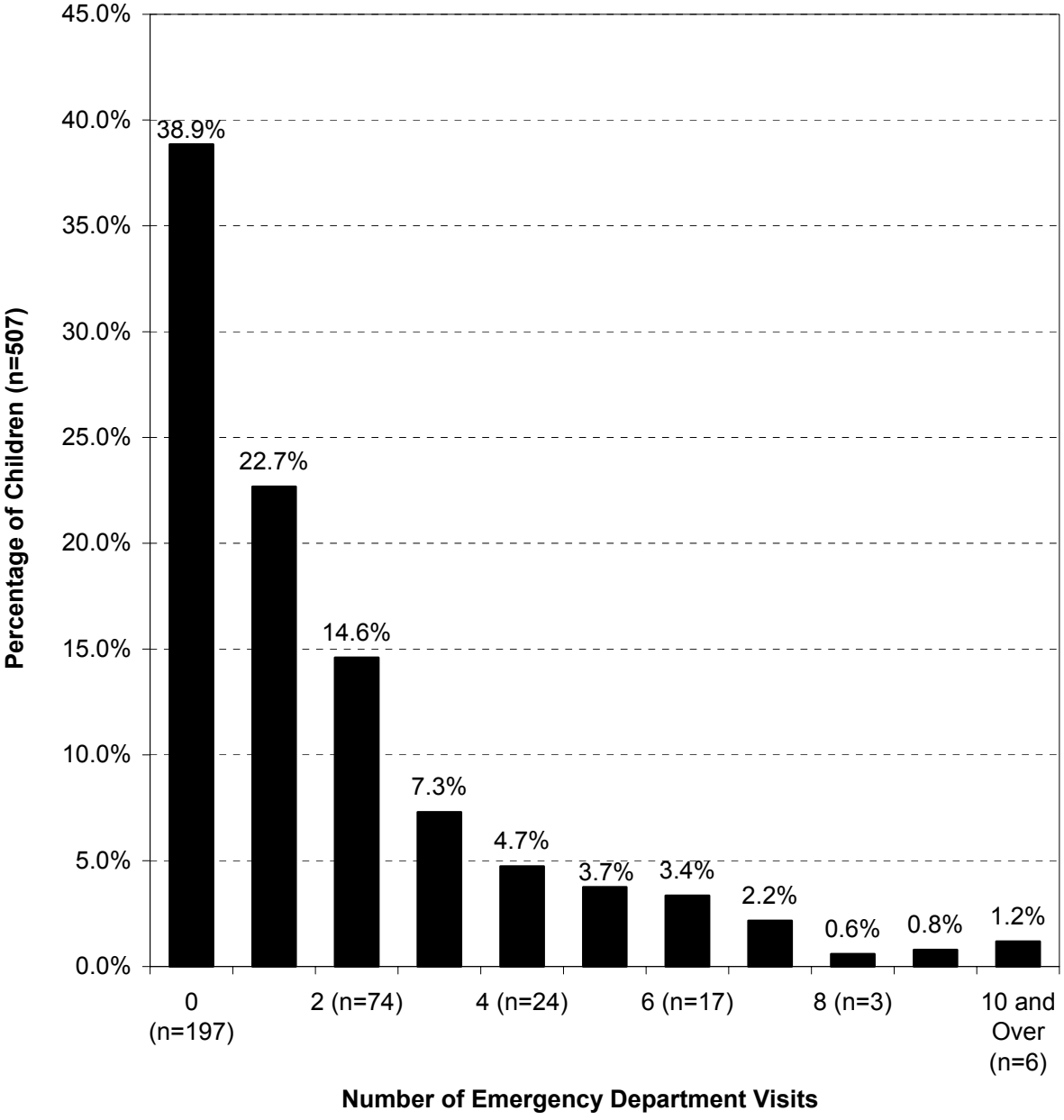
** General Population includes all children born in Edmonton betweeen January 1, 2001 and December 31, 2003, excluding home visitation program clients.

for the general population for all age groups, but the difference between the two groups decreased significantly over time. While rates for both groups declined after age 2, the home visitation clients had a proportionately greater decrease in rate of emergency department visits (from 124.9 to 86.7) as compared to the general population (from 97.0 to 76.7). Findings from the survey of home visitation clients (presented in Chapter 6.0) are consistent with this pattern. A large number of survey respondents noted that they were more knowledgeable about their child's health care and felt they were more effective in responding to their child's health problems.

On the basis of emergency department visits made in 2003 for children from birth to 3 years of age, the primary reason for visiting the emergency department was attributed to respiratory disease for both groups (just over 30% for both the home visitation group and the general population; see Appendix C).

Further analysis of the utilization of emergency department services was carried out for the home visitation client group. Comparable data were not available for the general population. Figure 7.3 shows the percentage distribution of home visitation clients (from 0 to 3 years) by number of emergency department visits for 2001 to 2003. Of the 507 clients, 38.9% (197) did not require emergency department services in this time period. Of the 310 children who received services, almost three-quarters (226 of the 310 children) had less than 3 emergency department visits within the time period of the study.

FIGURE 7.3
Percentage Distribution of Home Visitation Clients Aged 0 to 3 Years by Number of Emergency Department Visits, 2001 to 2003



Source of data: Capital Health, December 1, 2001 to November 30, 2003.

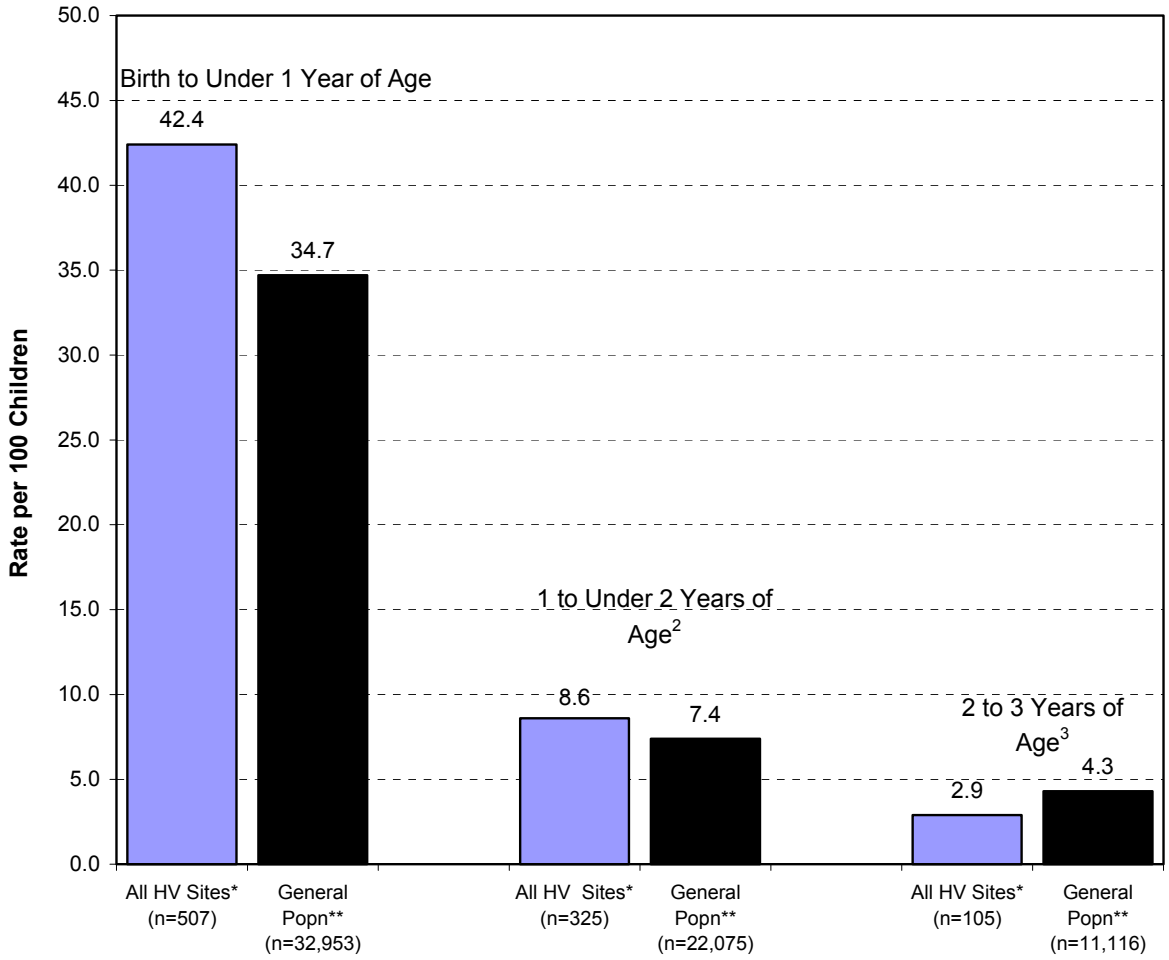
7.2.3 Hospitalization

Figure 7.4 shows the rate of hospitalizations for home visitation clients as compared to the general population for children up to age 3. As was the case with emergency department visits, the average rate of hospitalization for the home visitation group was generally higher than for the general population for the one and two year old children; however the differences between the groups were much smaller compared to emergency department visits. Notably, by age 2 to 3 years, home visitation clients actually had a lower rate (2.9 per 100) than the general population (4.3 per 100). As stated earlier, it was not possible to examine why the rate is lower for the home visitation group. As mentioned, the findings from the survey of home visitation clients (presented in Chapter 6.0) indicated that respondents felt they were more knowledgeable about their child's health care and said that they were more effective in responding to health problems. Thus, it is possible that this additional information has provided the parent with the ability to provide the necessary care for their child or to seek appropriate assistance.

On the basis of hospitalizations in 2003 for children from birth to 3 years of age, the most common reason for hospital stays was attributed to perinatal conditions for both groups of children (57.9% for the home visitation group and 64.0% for the general population; see Appendix C). Perinatal conditions refer to conditions originating in the period between the end of the 20th week of fetal life and the end of the first month after birth.

Further analysis of the utilization of hospital services was carried out for the home visitation client group. Comparable data were not available for the general population. Figure 7.5 shows the percentage distribution of home visitation clients (from 0 to 3 years) by number of hospital discharges (excluding birth event) for 2001 to 2003. Of the 507 clients, 67.1% (340 children) did not require any hospital care. Of the 167 children who were hospitalized, almost three-quarters (124 of the 167 children) had only one hospital visit within the time period analysed.

FIGURE 7.4
Rates of Hospitalizations for Home Visitation Clients and the General Edmonton Population by Age Group Children Up to 3 Years of Age (Excluding Birth Event), 2001 to 2003[1]



Source of data: Capital Health, January 1, 2001 to December 31, 2003

[1] Data on the number of visits related to the leading causes of emergency department visits and hospitalizations are provided in Tables C-4 and C-5 in Appendix C. Only data for children up to 3 years of age are included.

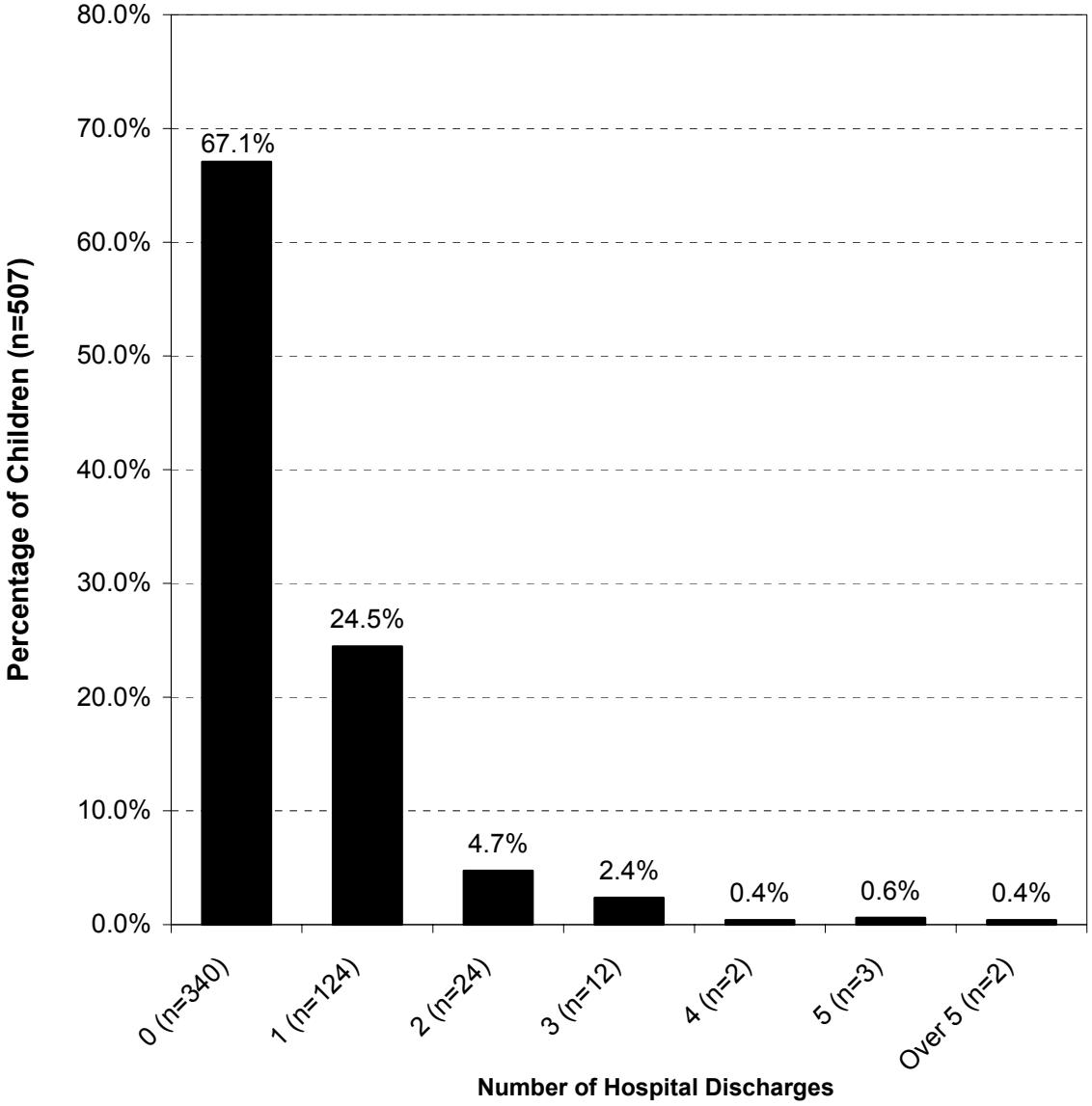
[2] 1 to Under 2 Yrs. of Age: Ben Calf Robe Society and Terra Association clients had no hospitalizations.

[3] 2 to 3 Yrs. of Age: Includes Early Head Start, and Norwood CFRC.

* For All Home Visitation (HV) Sites the rate shown is calculated based on total home visitation program sites. Note that it is possible that a site may have data for only one or a few hospital visits. Also, a site may not have any data for a particular age group.

** General Population includes all children born in Edmonton betweeen January 1, 2001 and December 31, 2003, excluding home visitation program clients.

FIGURE 7.5
Percentage Distribution of Home Visitation Clients Aged 0 to 3 Years by Number of Hospital Discharges (Excluding Birth Event), 2001 to 2003



Source of data: Capital Health, December 1, 2001 to November 30, 2003.

8.0 SUMMARY AND CONCLUSIONS

The purpose of this report is to present selected findings regarding program activities and outputs, and a more detailed analysis of the impact of the Home Visitation program at a system level based on outcomes measures. The findings in this report are drawn from the comprehensive evaluation of the Capital Region Home Visitation Network. More specifically, this report has two major objectives as follows:

1. To present an analysis of descriptive information about the clients in all the sites in the Capital Region Home Visitation Network including the following:

    - program activities: contacts, community referrals; and
    - program outputs: client profiles, client intake, demographic characteristics, and risk assessments.

2. To present an analysis of program outcomes based on:

    - outcomes data collected from a core set of outcomes measurement tools, aggregated and summarized regionally;
    - a survey of clients' experiences and views of the Home Visitation program;
    - involvement with Child Welfare services; and
    - utilization of health care services.

8.1 Findings: Program Activities and Outputs

Data on selected program activities, outputs and outcomes measures were presented in this report. Within an evaluation framework, program goals are achieved by completion of program activities as carried out by staff. As a direct result of activities, program outputs are developed in order to measure staff workload directed toward carrying out the activities. Outcomes measures provide information to assist in determining whether the programs are having their intended effects by achieving specific program objectives, identified during the design phase of the program.

8.1.1 Program Activities

A summary of findings regarding program activities related to client contact and other types of contact that serve to support the client is presented below. It should be noted that findings from these data are limited because data were not available for all the programs in some cases, and data were collected from different databases which did not allow for more detailed or comparative analyses.

Contacts

The summary of findings from the analysis of face-to-face and non face-to-face contacts (Tables 3.1, 3.2, and 3.3) is as follows:

- home visits represent 73.3% of total direct face-to-face contact, and 76.3% of total face-to-face hours;
- the average time of a home visit was 1.25 hours;
- communication with clients at group meetings or group activities represent the second largest category of time allocation (11.3% of total direct face-to-face contacts and 11.9% of total face-to-face hours);
- telephone meetings with the client make up 61.8% of contacts but only 18.0% of total client non face-to-face contact hours;
- indirect contact (e.g., case consultation, administration, etc.) which makes up only 15.7% of total contacts represents 82.0% of total client non face-to-face contact hours;
- in comparing face-to-face contact and non face-to-face contact, it was found that the provision of service in the form of face-to-face communication with clients represents 43.6% and non face-to-face communication represents 56.4% of the total reported 40,275 contacts; and
- face-to-face contacts involve 85.5% of workers' time as compared to only 14.5% for non face-to-face contacts (based on a total of 24,541.5 hours reported).

Community Referrals

Results from the Community Contact and Resource Tracking System (Table 3.4) identified the following:

- the greatest proportion of referrals made was attributed to family/parent support services (28.7% of total referrals made). The second greatest proportion of referrals was 21.1% for services directed toward basic needs. Referrals to recreation/family activities represented the third type of referral most often made (16.9%);
- based on the programs' definition of success, 37.5% of the total 4,990 referrals made were determined as being successful; and
- in just over two years an average of 4.8 referrals were made per client.

8.1.2 Program Outputs

A summary of the findings regarding program outputs from December 1, 2001 to January 31, 2004 (Tables 4.1 – 4.5) is organized by a series of questions and answers below.

- How many families are being served by the Home Visitation programs?

During the term of the evaluation, a total of 1,367 referrals were received by the programs, and 563 families were assessed (26.5% prenatal and 73.5% postnatal). Overall, approximately 1,046 families were involved with the program; 526 currently receiving services and 520 that withdrew, resulting in a 49.7% attrition rate.

Attrition rates were quite consistent across programs, with the exception of the rural agencies, which were lower. It is noteworthy that the two Aboriginal programs had approximately the same attrition and retention rates as other urban programs.

As discussed in Chapter 4.0, there are a number of different ways that programs take in clients. Public health organizations (e.g., public health nurses) represent the major referral source to Home Visitation programs for the majority of program sites. Across all sites during the study period, about 43.4% of referrals came from public health nurses (e.g., public health centres, Health for Two, doctor's office, perinatal programs, and birth control centres). There is also evidence that the rate of referrals from public health nurses is increasing over time. By 2003, they were making almost half of all referrals.

For the 526 families continuing in the Home Visitation program (as of January 31, 2004), the average time in the program is about 15 months (464 days). Between December 1, 2001 and January 31, 2004, 520 families withdrew from the program. These families were in the program, on average, about eight months (260 days). Families withdrew for a number of different reasons, the three most common being: program staff were unable to contact the family (19.5%) and after a period of time the family was dropped from the program; the family did not want program services or was not interested (13.9%); and, the family moved away (13.5%).

- What is the demographic profile of the families served by Home Visitation programs?

Age of Mother (Table 4.6)

Ages of mothers ranged from a median of 18.3 at Terra Association to 29.7 at Strathcona County FCSHV Program. Over half of the mothers were 27 years old or younger.

Marital Status (Table 4.7)

Of the mothers involved with the Capital Region Home Visitation Network programs, 57.7% were single parents and 42.3% were two-parent families.

Age of Baby (Table 4.8)

The average age of baby at assessment varied from a low of 1.3 months at Norwood to 20 months at Early Head Start.

Baseline Needs of the Family (Tables 4.10 – 4.17)

- What was the risk level of clients served?

Based on a score of 25 as the measure for a positive assessment, 26.7% of program participants fell below the 25 point threshold. Most of these were Early Head Start clients.

- What were the needs of the families as measured by the standardized instruments?

Overall, only 3.1% of the families scored in the average range on all five standardized instruments. About half (50.6%) scored in the "needs improvement" range on just one instrument and 45.2% scored in the "needs improvement" range on two to four of the standardized instruments, and 1.1% scored in the "needs improvement" range on all five of the instruments.

Family Assessment Device (FAD)

For families where the mother was living with a partner, the FAD scores indicated that over one-third (34.2%) were identified at T1 as having problems with family functioning and needing to improve.

Child Development Inventory (CDI)

Approximately 42.1% of families were identified as needing to improve their knowledge of child development.

Maternal Social Support Index (MSSI)

Total scores on the MSSI indicate that just over half (52.5%) of the families needed to improve their social support.

Carey Infant Temperament Questionnaire

One third (32.8%) of the infants were identified as having difficult temperament; and an additional 29.4% were identified as being challenging. The results clearly

indicate that these infants as a group are significantly more difficult than the general population where we would expect approximately 10% of infants to be difficult.

The mismatches between the infant's actual behaviour and the parents' impression were also high for the families tested, ranging from 17.6% to 38.0% depending on the temperament dimension.

Denver Developmental Screening Test-II (DDS-II)

Of the children who received Denver developmental assessments, 20.2% had at least one "suspect" developmental assessment. Even though the Denver has been found not to be useful as an outcome measure, it continues to be very useful for the early identification of possible developmental delays.

8.2 Findings: Standardized Outcome Measures (Tables 5.1 – 5.11)

The outcome analysis documents whether the program is effective in achieving specific program objectives identified during the design phase of the program. The specific regional Home Visitation program outcomes relating to parent, child, and community are addressed (to varying degrees) by the various outcomes measures that have been adopted by the Home Visitation programs, as well as by the survey of home visitation clients, and analysis of Child Welfare data.

Some of the programs have achieved outcomes scores for up to four time periods; however, as indicated earlier in this report, collection of outcomes data has not yet allowed for a detailed long term analysis

Family Assessment Device (FAD)

For those families where the mother was living with a partner, the FAD provides an overview of the level of functioning within the family. At T1, 30.5% (n=128) of the home visitation clients with more than one data point seemed to be experiencing problems with family functioning and thus fell into the improvement expected group. In contrast, 69.5% (n=89) of the clients were on average well below the 2.0 threshold, indicating a high level of family functioning.

Findings indicate that those clients who were expected to improve over time generally did improve family functioning. More specifically, those in the program the longest (i.e., 4 data points, n=7) showed more consistent improvement after T2 with an overall decrease in the mean of the last post-test score to 2.2 indicating improvement, but still insufficient to reach a normal level of family functioning.

Further, the findings also indicate that the group where improvement was not expected tended to stay the much the same over time as would be predicted. There were, however, slight overall increases in mean scores at T4 as compared to T1; however, over time the scores appeared to improve (from T2 to T3 to T4).

Child Development Inventory (CDI)

The CDI is intended to provide an indication of the parent's overall knowledge of child development in each of the following areas: emotional, cognitive, physical, and social.

Analysis of the CDI findings indicate the overall pattern for the improvement expected group is substantial improvement in overall knowledge of child development in the first year (with mean changes in scores from T1 to T2 of 4.9 to 8.4) followed by modest changes in the second and third years. The improvement expected groups with three or four data points still remained higher after T3 or T4 than they were at T1. Interestingly the improvement not expected group with the longest time in program (n=24) stayed high in the first year, but also dropped off in the third year.

The findings of the CDI were analyzed by each subscale: emotional, cognitive, physical, and social development. Interestingly, for the most part, the same pattern of initial improvement and then drop off in the third year occurs for the improvement expected group. Notably, on the social development subscale, the improvement expected group had higher increases in the average score from T1 to T2, then on other subscales.

Maternal Social Support Index (MSSI)

The Maternal Social Support Index (MSSI) is intended to provide an overall picture of the amount of social support parents (usually mothers) feel they have or are able to get when they need it. The total scale is further broken down into three subscales: support around the home; support outside the home; and community contact.

The findings regarding the MSSI indicate that the three improvement expected groups all improved substantially in the first year (ranging from 1.7 to 3.3) and then leveled off and were maintained for years two and three. The mean scores for these groups at the last post-test were all approximately 2 points above the pre-test scores.

In contrast, the improvement not expected groups obtained high social support scores at pre-test ranging from a low of 24.6 to a high of 26.9; however, the scores for all three groups decreased over time – mainly in the first year. In particular, the group with 3 data points (n=17) had an average change score of -5.6 at the end of the first year. This group's average MSSI score fell below 22 at post-test whereas the other two improvement not expected groups remained above the score of 22. The improvement expected groups remained below the score of 22, even though they showed improvement over time.

The findings for the subscales, support around home, and support outside home, indicate that the pattern of change is similar to that of the total scores. The improvement expected groups all experienced some increase in the first year followed by a leveling off but maintained improvement and achieved higher post-test scores as

compared to their pre-test mean score at T1. This pattern was not as apparent for the community contact subscale. The group with 3 data points had a lower post-test mean score as compared to their score at T1. However, the subscale consists of only two items and does not seem to be particularly relevant to this high risk group.

Carey Infant Temperament Questionnaire

The Carey Infant Temperament Scale provides a detailed indication of an infant's temperament or behavioural style.

In addition to directly measuring the infant's temperament, the Carey collects information on the parent's perception of the infant's temperament. This allows us to examine the degree to which each parent's view of his or her infant's temperament matches the behaviourally anchored rating of his or her infant's temperament. A positive match occurs when the parent's rating of the infant's temperament matches the behaviour rating exactly. In addition, situations where the parent views the infant as being slightly less difficult than the behavioural rating suggests are also included in the positive match category.

On the other hand, parental ratings of infants as more difficult than the behaviour rating suggests and parental ratings of infants as very low on difficult temperament dimensions when they are in fact high reflect negative mismatches.

An analysis of matches and mismatches of the parent-infant comparisons that had a negative mismatch at T1 was conducted to see if there was evidence that their participation in the program had produced a positive change**.** Improvement was achieved on all five dimensions. The percentage of improvement was highest for the approachability subscale (76.9%), and lowest for the intensity subscale (19.0%). These results are an indication that the programs are effectively targeting the important core issues of parenting knowledge, parenting skills and parenting resources especially among those parents who clearly need them the most to support them in raising difficult infants.

8.3 Findings: Parent Interview and Visitor-family Relationship Inventory (Tables 6.1 – 6.8)

All but one of the 60 clients interviewed described very positive experiences with the Home Visitation program and with their home visitor. Findings from the survey are summarized below.

How the Home Visitation Program has Helped Clients

Overall, respondents were very positive in rating how the program has helped them in a number of different areas. Well over half indicated the program helped "very much" with child-related areas. This ranged from 61.7% who thought that the program has helped them very much with respect to being patient with their child's behaviour,

and with the health of their child, to 85.0% who felt that the program helped very much in terms of their ability to develop a better relationship with their child.

Respondents were asked to rate the degree to which the program was helpful with respect to dealing with certain challenges. The 60 clients felt the program was of great help to them were in the following areas: dealing with the baby's difficult temperament or nature (45.0%); building a social or support network (40.0%); dealing with other stressful life events (40.0%); not feeling good about yourself (35.0%); and lack of transportation (35.0%). Consistent with the earlier findings about the helpfulness of the program, responses here indicate the significant impact of the Home Visitation program in playing a supportive role as well as providing parents with effective parenting strategies.

What Life Would be Like Without the Home Visitation Program

All but one respondent felt they would have been worse off without the program. Four major themes were identified: feeling they would not have been as informed about child development and about parenting; believing that their own life situations would not have improved to the same degree without the program; feeling they would have had weaker links to community resources and services; and believing they would not have such a strong source of support (i.e., their home visitor) who is trustworthy and reliable.

The Best Part of the Home Visitation Program

Three major themes emerged from the responses. The first related to the relationship between the home visitor and the client. Respondents stated that the support they received from the home visitor and the Home Visitation program enabled them to seek help whenever they felt they needed it, no matter how important or trivial the concern seemed. The second theme related to the ability to obtain information about community resources and activities for the child. In many cases, involvement in community activities also provided opportunities to meet other parents thus expanding the respondent's support network. The third theme involved access to information about child development and parenting. Respondents felt they particularly benefited from learning about new or different parenting skills.

Suggested Improvements to the Home Visitation Program

The majority of suggestions related to program activities and the home visit itself. The following is a summary of the suggestions that were made:

- offer more activities for children;
- have shorter breaks between activities;
- create more flexibility in scheduling and more organization in administering the activities (e.g., that activities start on time);

- provide opportunities for families to have more involvement in the program activities themselves as well as be able to socialize with other parents;

- offer more home visits, and provide the home visitor with more books and toys for the family. Two respondents expressed that if they had children's books in their own language, they would be able to read with their child;

- develop the program to link to other organizations (e.g., national youth organizations), provide other kinds of services (e.g., a drop-in centre) and social activities;

- offer more assistance to clients with respect to goal setting;

- increase access to more information. Clients felt that it would be helpful if programs offered more presentations and materials (e.g., books, videos) on different topics that would be of interest to families using home visitation services (e.g., information about domestic violence and topics related to the client's community); and

- provide more access to transportation. Suggestions on transportation related to providing more assistance to clients so that they can attend program activities and meet appointments (such as a doctor's appointment for the child).

Recommending the Home Visitation Program to Others

When asked if they would recommend the Home Visitation program to other people, 57 of the 60 respondents (95.0%) said they would. Ten of the respondents said that they have already recommended the program to other people, such as family members and friends. A summary of how clients describe the program to others follows:

- The Home Visitation program provides information about child development and parenting, and about the benefits of assistance from the home visitor.

- The program teaches people how to look for some potential developmental concerns in young children.

- The relationship with the home visitor provides emotional support and friendship.

- The program provides knowledge about resources in the community and assistance with accessing them. Additionally, clients stated that this connection provides an opportunity to meet other parents.

- The Home Visitation program was simply a good source of information what can assist with almost any problem or question, even those not related to child development or parenting.

Results of the Visitor-family Relationship Inventory

A total of 51 respondents were given the Visitor-family Relationship Inventory. Responses were positive overall. The top five items in which greater proportions of respondents indicated they strongly agreed with the statement describing their home visitor included the following:

- 60.8% strongly agreed that the home visitor "explains the information she/he gives me";
- 56.9% strongly agreed that the home visitor "motivates me to protect my baby's/child's health";
- 52.9% strongly agreed that the home visitor "helps me understand";
- 52.9% strongly agreed that the home visitor "encourages me to make my own decisions"; and
- 59.9% strongly agreed that the home visitor "praises me when I reach a goal."

8.4 Findings: Child Welfare Services Involvement (Tables 7.1 – 7.5)

Results from analysis of the Child Welfare data indicate that in the general Edmonton population Child Welfare involvement has declined over the last few years. Based on the 24-month period from December 1, 2001 to November 30, 2003, 2.7% of the general Edmonton population was found to have been involved in the Child Welfare system. An earlier analysis based on the 29-month period from July 1, 1999 to November 30, 2001 found that 4.0% of the population had Child Welfare involvement (Elnitsky et al., 2003). It is likely that this decrease is a reflection of province-wide initiatives under the Alberta Response Model (ARM).

The proportion of home visitation clients who had some Child Welfare involvement was considerably higher than was the case for non-clients (31.3% as compared to 20.4%). As would be expected, the percentage of individuals with involvement was much higher in the client and non-client groups (both at-risk groups) than in the general population.

The home visitation client group was substantially less likely to have investigations requiring further action (49.1%) than the non-client group and the general population (63.3% and 56.8%).

In terms of investigation outcomes in cases requiring further action, the home visitation clients were far more likely to have no need for protection service than the other two comparison groups (i.e., 28.9% compared to 22.4% for non-clients and 22.0% for the general population).

The number of apprehension orders were very small for all groups, and only slightly higher for the general population (12.1%) than for the client and non-client groups (7.7% and 7.1% respectively). Support agreements, however, were far more likely to be used with the client group and non-client group (24.9% and 29.8%) than with the general population (15.7%).

In terms of placement, the findings indicate that agency foster care and foster care were used more with the general population than with the client and non-client groups. In contrast, placement in parental care was used far more with the client and non-client groups than with the general population (49.6% and 57.1% compared to 39.3%). Further, where foster care placements were made, the home visitation client group required far fewer days in care. For foster care the average number of days in care was 138.3 for the client group compared to 152.3 days for non-clients and 213.9 days for the general population. Similarly, the client group spent an average of 102.9 days in agency day care compared to 171.9 days for non-clients and 215.3 days for the general population.

The differences in the placement patterns between the home visitation client and the general population (i.e., fewer expensive placements for fewer days) results in significant cost savings for the Child Welfare system. For example, fewer days in foster care for the home visitation clients compared to the general population resulted in a cost saving of over $88,000 for the 20 home visitation clients during the evaluation period. For those home visitation clients who used agency foster care (n=64), they used far fewer days which resulted in a saving of over $530,000 during the time of the evaluation.

8.5 Findings: Health Care

Results from the analysis of Capital Health data clearly indicate a higher risk profile for the home visitation mothers and infants at the time of birth when compared to the general population. Home visitation mothers were younger (average age 23.8 compared to 28.8 for the general population), yet they had almost as many previous pregnancies (2.1 compared to 2.4). The home visitation mothers smoked (30.4%), drank alcohol (4.8%), and used street drugs (8.2%) more during pregnancy than did mothers in the general population (12.7%, 1.4%, and 2.4% respectively). Further, significantly more of the home visitation mothers were single parents (42.0% compared to 11.7% of the general population). A good proportion of home visitation mothers were enrolled in Health for Two programs (14.5%).

The home visitation infants were more likely to be born premature (less than 37 weeks) than the general population (21.4% compared to 18.5% respectively). Further, 10.0% of the home visitation infants were born less than 2500 grams compared to 7.0% of the general population.

As would be expected given the health profile of the infants at birth, both emergency department visits and hospitalizations were higher for the home visitation children, particularly in the first year, than the infants for the general population (76.9

per 100 compared to 44.2 per 100 for emergency visits and 42.4 per 100 compared to 34.7 per 100 for hospitalization). By the time the children were two to three years old, the pattern of health care utilization changed considerably. In terms of visits to emergency, the home visitation clients decrease significantly more than the general population to a point where they were only slightly higher (86.7 per 100 emergency visits compared to 76.7 per 100 for the general population). In terms of rates of hospitalizations, the pattern of utilization actually reversed with the home visitation clients having a lower rate (2.9 per 100 compared to 4.3 per 100) than the general population by the time the children were two to three years old.

Overall the pattern indicates that the home visitation parents who have high risk infants at birth became more effective in preventing and responding to the health problems of their children. Interestingly, in the survey of home visitation clients, many mentioned they felt more knowledgeable about the health care of their children because of their contact with the programs.

8.6 Conclusions

The conclusions based on the findings summarized above are briefly discussed below.

8.6.1 Program Activities and Outputs

Contacts

As expected, the home visitors reported that they spend the majority of their time conducting home visits and meeting with clients. However, a significant number of contacts and time are allocated to other types of activities that also support the client. The results underline the diverse nature of the programs in terms of how program services reach the client.

Community Referrals

These programs are making very good use of other community resources and more importantly are making the resources accessible to their families. The average number of referrals per family was high, at an average of almost five per family and the rate of “success” was almost 40%. Obviously, the programs have been very successful at identifying and building a network of community resources and have helped their families access these community supports.

Program Outputs

From December 1, 2001 to January 31, 2004 the programs have provided home visitation services to over 1,000 at-risk families. While attrition rates were approximately 50%, these are what would be expected given the findings of previous evaluations (e.g., Elnitsky et al., 2003). The two Aboriginal programs had approximately the same attrition and retention rates as the other urban programs.

In terms of risk levels, most of the families served (almost 60%) were young, single parents. While a considerable number of families (approximately 27%) fell below the 25 point threshold on the Risk Assessment Checklist, most of these families were from one program (i.e., Early Head Start).

Baseline Needs of the Families

In terms of the standardized measures at the baseline test, these families were high needs. Only approximately 3% scored in the average range on all five standardized instruments and almost half of the families scored "needs improvement" on two or more of the instruments. The Carey Infant Temperament Scale also indicated that as a group these are relatively difficult or challenged infants with parents who tended to misjudge the behaviour of the infants and have unrealistic expectations.

Conclusion: Standardized Outcome Measures

The analysis of outcome data on the standardized measures which focussed primarily on the parent but also the infant is very positive and encouraging. Conclusions are summarized below.

- Family functioning, measured by the FAD, was significantly increased for most of those families who were not functioning well when they entered the program. Further, the level of functioning tended to increase over time, with those who were involved with the program the longest improving the most.

- Knowledge, measured by the CDI, of the emotional, cognitive, physical, and social development of children increased significantly in the first year for those clients who were limited in their knowledge when they began the program. This improvement, however, dropped off as their children grew older and the instruments became less relevant.

- For those parents who felt a lack of support at intake, as measured by the MSSI, the overall amount of support felt in the home, and support outside of the home, substantially increased in the first year and then leveled off, but was maintained for the next two to three years indicating that the home visitation workers had been successful in helping parents develop and maintain healthy interpersonal relationships. Only community contacts did show comparable improvement. Given the lack of positive change in the other community-based resources to support at-risk families the importance of the relationship of the families to the home visitation workers should be recognized.

- Infants involved with Home Visitation programs were identified by the Carey as having a tendency to be more difficult than the normal population. To make this more challenging, their parents often had unrealistic perceptions about their child's behaviour. The improvement of the parent's perception within one year of entering the program was considerable, indicating the important role the home visitors play in modeling good parenting perception and skills and, thus, helping the parents to deal positively with a difficult and challenging child.

Overall, the standardized instrument data analyzed to date and presented in this report lead to the conclusion the Home Visitation program has been very successful in terms of achieving short-term outcomes with these at-risk families.

Conclusion: Parent Interview and Visitor-family Relationship Inventory Outcomes

Overall, the home visitation clients who participated in the survey indicated positive experiences with the program's services and with their home visitor. Respondents felt the program offered a valuable service to families. A number of clients even indicated that they have passed on information about child development and parenting that they had learned from the program to other people. Responses to the interview questions highlight the diverse roles played by the home visitor. For some clients, the relationship they share with their home visitor is the only involvement they have with the Home Visitation program because, for various reasons, they do not participate in any of the program's activities. All 60 of the respondents indicated that they felt the Home Visitation program provided valuable and needed services. The major areas identified by respondents where the program was of most help included information about child development, information about parenting, accessing community services, and support from the home visitor in terms of providing emotional support, assistance with coping with stress, parenting concerns, and other issues. The parent interview data strongly support the conclusion that in the mind of the respondents these programs are extremely useful and effective in giving them the skills and support they need to be good, functional parents. Clients were clear in describing the value of the Home Visitation program and their relationship with the home visitor in improving their child's life, as well as their own personal lives.

Conclusion: Child Welfare Outcomes

The findings regarding the scope and nature of Child Welfare involvement suggest a clear and unique pattern for home visitation clients compared to the other groups. Overall, the findings suggest that the home visitation clients are well observed by the home visitors who are well trained, vigilant, and relate well to the Child Welfare liaison worker assigned to the programs. Suspicions of abuse are very likely to be reported, screened and investigated, but less likely to need further action – most likely due to the clients' involvement with the program.

Further, if protection services are required, the home visitation client group is more likely to remain with the family and less likely than the general population to need the more expensive services of foster care. If such placements are needed, it is also

clear that the home visitation clients require the services for significantly fewer days, thus again limiting the level of expense and intrusiveness. A preliminary analysis of days in care costs for just two placement categories, foster care and agency foster care, indicate that during the evaluation period the home visitation program generated a cost saving of over $620,000. A comprehensive cost benefit analysis would likely demonstrate even more significant cost savings.

Overall, these Home Visitation programs seem to work well with Child Welfare services and definitely provide a less intrusive alternative to higher levels of involvement with Child Welfare services, all of which is consistent with the recently implemented Alberta Response Model (ARM).

Conclusion: Health Care

The findings regarding health profiles at birth and health care utilization within the first three years of the child's life strangely support the need for, and effectiveness of, the Home Visitation program. First, in terms of need, the home visitation mothers are clearly at risk compared to the general population of mothers. They are younger, more likely to be single parents, and far more likely to smoke, drink alcohol, and use street drugs during the pregnancy – compared to the general population. Their infants also are more likely to be at risk since they are more likely to be premature and have low birth weights.

In terms of health care utilization, as would be expected given the higher levels of risk for newborns in the Home Visitation programs, these families use health care services more than the general population in the infants' first year. However, by the third year of the child this pattern reverses and these families become more efficient users of health care services. This appears to be due to their involvement with the Home Visitation programs. As indicated by the parent survey data, the mothers themselves recognized that the programs, and particularly their home visitor, have provided them both with the knowledge to make good judgements about prevention and appropriate responses to health issues and as well, have provided them with a resource to consult with if they are in doubt – i.e., the home visitor backed up by public health nurses.

8.7 Overall Conclusions

To date the published evaluation research on Home Visitation programs has been unable to clearly document their effectiveness. The fact that these programs serve clients with a broad range of needs and the actual activities of the programs often varies according to the individual needs of clients makes the programs very difficult to evaluate. This situation had lead some researchers, like Gomby et al. (1999) to conclude that we should maintain modest and realistic expectations for home visitation services. Others point to the difficulty of changing lives of children and parents who live in conditions of disadvantage (Behrman, 1999).

Even the most recent randomized trial – evaluation of the Hawaii Healthy Start Program – has not shown the programs to be effective in preventing child abuse. It should be noted however, that very little abuse was ever reported (less than 4% of the families). In the words of the researchers:

> "…we found little evidence in program records that home visitors were alert to mothers with the highest levels of abusive behaviour…It is likely that the home visitors lacked sufficient expertise and supervision to address family risks for abuse, motivate families to change, and link families with professional services." (Duggan et al., 2004, pp. 614 & 615).

This report paints a different picture of the effectiveness of Home Visitation programs than the previous literature has – i.e., that these programs are effective in achieving their objectives and at the same time are generating cost savings for the Child Welfare system. It is possible that some prior evaluations have not been sensitive to the subtle and varied achievements of the home visitors with their families. Indeed, it was only after a number of years that we were able to develop a research design and strategy for analysis that demonstrated how and when clients changed.

Another explanation must also be considered. Through the years of our research with the Edmonton programs, we have observed considerable development – from a para-professional support model to a more professional model using knowledge and research for best practice. These programs, it appears, are very different than the Hawaii Healthy Start Program recently evaluated by Duggan et al. (2004). In fact, they provide an ideal model of collaborative community capacity building. More specifically, we feel the following contributed to the successful implementation and effectiveness of the programs with their clients:[13]

- the programs were well organized under a collaboration based on interdisciplinary and interagency partnerships;
- the programs built on past success with host agencies that had a proven track record;
- the programs were well integrated within the public health system and were supported by the public health nurses (and system) through referrals, assessments, and ongoing consultations to the program workers;
- the programs were well integrated within an infrastructure of care for children and families which included Child Welfare (under the ARM initiative) and referrals to other resources were common;
- the programs were committed to and provided extensive training to the front-line staff – training is ongoing;

[13] For a detailed analysis of program implementation and design, please see: Hornick et al., 2003; Wagner et al., 2003; and Hornick et al., 2004.

- the programs have highly qualified supervisors and rigorous standards for supervision;

- the programs were committed to the development and use of computerized client information systems (HOMES and/or MIS), which tracked clients on core outcomes and provided an efficient mechanism both for accountability reporting, as well as for producing information for knowledge-based best practice; and

- the programs have worked closely with both research consultants and the funders to develop, pilot, and implement a standard mechanism for quality assurance and accountability reporting – i.e., the monitoring and evaluation forms (referred to as the "M & E" reports). This mechanism provides an ongoing, easy to use mechanism for the programs to report to funders.[14]

Overall, we feel confident in concluding that these Home Visitation programs are effective in achieving their objectives. Further, we feel that these Home Visitation programs are effectively moving towards achieving the Regional Early Childhood Development/Home Visitation goals:

- Families are safe, healthy and able to promote children's development.

- Parents are more knowledgeable about parenting.

- Children demonstrate improved developmental functioning.

- Parents know how to access professional community resources when required or for additional supports.

8.8 Recommendations

There are several recommendations which follow from the findings and conclusions of this evaluation. They are listed below.

Program Management

1. The program should continue to develop and maintain the collaborative, interdisciplinary model that has been implemented, particularly in regards to the following:

    - development of the common standards and outcomes;
    - shared core and on-going training;
    - common or compatible client information systems;
    - standardized contract monitoring mechanisms, that is, monitoring and evaluation (M & E) reports; and

[14] Hornick et al., July 2004, *Building a Future*, see page 32.

- the Home Visitor Coordinator position, which is essential for attainment of the items listed above.

2. The program should continue to work with the Region to streamline the ongoing contract monitoring through the monitoring and evaluation (M & E) report form.

3. The program should continue to develop strategies for ensuring the quality and correctness of the data entered on the client information system.

4. The program should continue to use a number of standardized quantitative outcomes measures which reflect the broad range of client issues they deal with. Qualitative measures such as the parent interview should also continue to be used and further developed. However, it should be recognized that data from such qualitative measures are severely limited in their use for testing the effectiveness of the program. These measures are subjective in nature and experience shows us that it is also difficult to obtain information from a large number of clients and thus, the findings are not representative of the clients as a group. The information may, however, be useful for program development.

Service Delivery

1. The high rates of attrition (approximately 50%) and the low number of families in the program with children over 3 years of age suggest that most Home Visitation programs are better suited to provide services to families with children from birth to 3 years of age, than for families with children up to 6 years of age. This suggests that the Home Visitation programs could focus primarily on families with children from 0 to 3 years of age and then develop a link with other existing programs that are more relevant for families with children 3 to 6 years of age.

2. The findings regarding community contacts and use of community resources (i.e., the social scale of the MSSI and the parent interviews) suggest that the Home Visitation programs are doing a good job of referring clients to other community agencies, but are more limited in helping families with informal linkages within their communities and neighbourhoods. Perhaps what is needed is more capacity building within the families' own communities with informal and personal supports. The Norwood picnic might be a good example of this.

Research and Evaluation

1. High attrition rates have been a significant issue for the programs yet little is known about why families drop out and what their needs are. Research should be conducted to find out more about these families, possibly through detailed exit interviews.

2. Research should be conducted regarding what additional community supports (in addition to referrals to formal agencies) these families could benefit from.

3. The links with and use of other agency resources should be further researched. The current referral tracking instrument is a good start, but more detailed information would be useful.

4. Research on the further development of age-appropriate measures of development should continue, especially for birth to 3 years of age children.

5. Further comprehensive evaluation (beyond the M & E reports) is not needed with these Home Visitation programs at this time. If the program model were significantly changed, then more in-depth evaluation would again be needed.

6. The findings regarding Child Welfare involvement and health care utilization suggest that a detailed cost/benefit analysis should be conducted.

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APPENDIX A

PARENT INTERVIEW

EDMONTON AND AREA CHILD AND FAMILY SERVICES REGION 6
HV/ECD EVALUATION OF HOME VISITATION PROGRAMS

HOME VISITATION PROGRAM PARENT SURVEY AND VISITOR-FAMILY RELATIONSHIP INVENTORY

INTERVIEW SCRIPT

Interviewer Complete the Following

Participant Name/File ID/agency: _____

Participant Telephone Number: _____

(Required in order to collect demographic information from database.)

Interv. Date:
Start/End time:
Interviewier:

Introduction

Hello, my name is _____. I'm with the Canadian Research Institute for Law and the Family. We're responsible for the evaluation of the home visitation programs in the Edmonton area. Your family visitor gave us your telephone number because you agreed to participate in this survey. Thank you for agreeing to speak to me. It's really important to get your views about the program in order for the evaluation to be complete. The interview should take about 20 to 30 minutes. Is now a good time? If not, when would be better for you?

CONTINUE WITH INTERVIEW OR SET UP AN APPOINTMENT AND TERMINATE CALL.

INTERVIEW TIME:

Date: _____

Alternate telephone number? _____

Time: _____

About the Interview and Consent to Quote Respondent

I will ask you some questions about your experience with the home visitation program and I will be writing down your answers. No one from the home visitation program, including your family visitor, will ever see or hear your answers. When we write the report, we will add together responses from everyone who is participating in this survey. We never identify just one single family or individual. Sometimes the best way to describe something is to use an example where we quote what someone has said. We would only write the comment or part of it and never identify who actually made that comment. **Do you agree to allow us to quote something you have said in the interview without referring to your identity? yes ☐ no ☐**

We will not distribute the list of names of participants. Your participation is completely voluntary. If you choose not to complete this interview, it will not affect your participation in the program. The things you tell me are very important so please be as accurate as possible. Occasionally, some of the questions I ask may not apply to you. If that happens, just tell me and I will move on. Our interview should take about 20 to 30 minutes. Do you have any questions before we start?

If Respondent Wants More Information about the Evaluation Project and Survey

Dr. Joseph P. Hornick, Executive Director of the Canadian Research Institute for Law and the Family, and Home Visitation/Early Childhood Development Evaluation Project Director: (403) 216-0340.

HOME VISITATION PROGRAM PARENT SURVEY

In this first part of the interview, I will ask you about some of the ways the home visitation program may have influenced you, your life and your family.

1. I'm going to go through a list of areas and I'd like you to tell me whether the program has helped you. For each area, please tell me whether the program has helped you very much, some, a little, or not at all. If you feel the area does not apply to you, let me know.

If respondent begins to provide an example, make a note and indicate that you will come back to that in the next question. Redirect respondent to the next item.

The program has helped with….	Very Much	Some	A Little	Not At All	Not Applicable To Me	*Notes*
a. The number of people I can rely on for help	1	2	3	4	5	a. _____
b. The number of places I know about that I can go to for help	1	2	3	4	5	b. _____
Don't read examples unless asked by client: e.g., doctors, food bank, shelters,						
c. The number of places in my community that I can take my child to do things	1	2	3	4	5	c. _____
Don't read examples unless asked by client: e.g., library, parent/child groups, fun						
d. My ability to cope with stress	1	2	3	4	5	d. _____
e. My ability to solve problems	1	2	3	4	5	e. _____
f. My relationship with my child	1	2	3	4	5	f. _____
g. My relationship with my partner/spouse	1	2	3	4	5	g. _____
h. My relationship with other people	1	2	3	4	5	h. _____
i. Confidence in taking care of my child	1	2	3	4	5	i. _____
j. Patience with my child's behaviour	1	2	3	4	5	j. _____
k. My understanding of child development	1	2	3	4	5	k. _____
l. My understanding of parenting	1	2	3	4	5	l. _____
m. The health of my child	1	2	3	4	5	m. _____

2. We're interested in hearing about your experiences in the areas we've just talked about. Can you think of specific experiences in any of these areas that show how the program has or has not helped you?

- If you consider it necessary, read through the list again.

  The number of people I can rely on for help
  The number of places I know about that I can go to for help
  The number of places in my community that I can take my child to do things
  My ability to cope with stress
  My ability to solve problems
  My relationship with my child
  My relationship with my partner/spouse
  My relationship with other people
  Confidence in taking care of my child
  Patience with my child's behaviour
  My understanding of child development
  My understanding of parenting
  The health of my child

- If respondent indicated any examples in the previous question, follow-up on these.
- For each area mentioned, indicate the corresponding letter.

3. Each of us may be faced with a number of challenges that may make it more difficult for us as parents. I'm going to read you a list of challenges and I'd like you to tell me whether the program has helped you. For each challenge, I'd like you to tell me whether the program has helped you a great deal, somewhat, not at all or if this hasn't been an issue for you.

Read each item and then ask respondent: ***How much has the program helped you deal with challenges in this area?***

	A Great Deal	Somewhat	Not At All	Hasn't been an issue for me	*Comments*
a. Lack of transportation	1	2	3	4	a. _____
b. Not feeling a part of your community	1	2	3	4	b. _____
c. Your social/support network (e.g., lack of family and friends you can rely on)	1	2	3	4	c. _____
d. Not feeling good about yourself	1	2	3	4	d. _____
e. Baby's difficult temperament or nature	1	2	3	4	e. _____
f. **Family relationships (other than with your child)**	1	2	3	4	f. _____
g. Trouble controlling your anger	1	2	3	4	g. _____
h. Mental health issues (e.g., depression)	1	2	3	4	h. _____
i. Medical/physical issues	1	2	3	4	i. _____
j. Racial/cultural issues	1	2	3	4	j. _____
k. Discrimination	1	2	3	4	k. _____
l. Not having enough education	1	2	3	4	l. _____
m. Unemployment	1	2	3	4	m. _____
n. Inadequate housing	1	2	3	4	n. _____
o. Not having enough money for basic needs	1	2	3	4	o. _____
p. Involvement with the criminal justice/legal system	1	2	3	4	p. _____
q. Family violence	1	2	3	4	q. _____
r. Alcohol or drug use	1	2	3	4	r. _____
s. Gambling	1	2	3	4	s. _____
t. Child Welfare involvement with children	1	2	3	4	t. _____
u. Other stressful life events (e.g., death of a loved one)	1	2	3	4	u. _____

For the following questions, please probe for detail.

4. **What do you think your life would have been like if you had not connected to the home visitation program?**

5. **What, if any, kinds of things would you say you do differently as a parent since being involved in the home visitation program?**

6. **Do you think that your family's involvement in the home visitation program has had an impact on your child in any way? If yes, in what ways?**

7. **What, if any, has been the best part about being involved with the home visitation program?**

8. **What, if any, has been the most challenging part of being involved in the home visitation program?**

9. **Is there something about the program that could have been more helpful to you? What would that be?**

10. **Would you recommend the home visitation program to other new parents?**
    yes ☐ no ☐

11. **What would you say to them about the program?**

12. **Do you have any other comments about the program?**

INTERVIEWER, CONTINUE TO THE NEXT QUESTIONNAIRE: VISITOR-FAMILY RELATIONSHIP INVENTORY.

APPENDIX B

VISITOR-FAMILY RELATIONSHIP INVENTORY

Visitor – family Relationship Inventory

Interviewer: Please remind the respondent that no one from the home visitation program, including the home or family visitor, will ever see or hear their answers.

I am going to read a list of statements that may or may not describe your relationship with your home or family visitor. For each statement, please tell me whether you agree strongly, agree, neither agree or disagree, disagree, or disagree strongly.

	My home or family visitor…	Agree Strongly		Neither Agree or Disagree		Disagree Strongly
1.	Helps me understand	1	2	3	4	5
2.	Helps me keep a positive outlook	1	2	3	4	5
3.	Brings out the best in me	1	2	3	4	5
4.	Helps me learn to solve my problems	1	2	3	4	5
5.	Encourages me to make my own decisions	1	2	3	4	5
6.	Helps my family get along better	1	2	3	4	5
7.	Does not ask me to do anything I cannot do	1	2	3	4	5
8.	Understands my situation	1	2	3	4	5
9.	Helps me develop my role within the family	1	2	3	4	5
10.	My work with my home visitor helps my own development and the development of my baby/child.	1	2	3	4	5
11.	Understands if I tell her/him what I want to do	1	2	3	4	5
12.	Helps me develop as a member of my family	1	2	3	4	5
13.	Respects my independence	1	2	3	4	5
14.	Accepts my ways	1	2	3	4	5
15.	Motivates me to protect my baby's/child's health	1	2	3	4	5
16.	Cares about what happens to me	1	2	3	4	5
17.	Is sensitive to how I feel	1	2	3	4	5
18.	Explains the information she/he gives me (such as information sheets)	1	2	3	4	5
19.	Understands me	1	2	3	4	5
20.	Praises me when I reach a goal	1	2	3	4	5
21.	Shares with me	1	2	3	4	5
22.	Encourages me to succeed in daily life	1	2	3	4	5
23.	Respects my family's ways of doing things	1	2	3	4	5
24.	The work we do together builds my strengths.	1	2	3	4	5
25.	I trust my home visitor to look after my best interests.	1	2	3	4	5
26.	My home visitor tells me about her/himself.	1	2	3	4	5

APPENDIX C

ADDITIONAL HEALTH DATA INFORMATION

APPENDIX TABLE C-1
Selected Health and Demographic Characteristics of Mothers and Infants (n=637)
by Home Visitation Site

Capital Region Home Visitation Sites	Mother										Infant	
	Age (mean)	Age (median)	No. previous pregnancies (mean)	No. previous pregnancies (median)	Smoked during pregnancy	Drank alcohol during pregnancy	Used street drugs during pregnancy	Breastfeeding baby	Enroled in Health for 2 Pgm.	Single Parent	Gestation 37 wks. or less	Low birth weight (2500 grams or less)
Ben Calf Robe Society (n=28)	20.3	19.0	2.0	2.0	50.0%	14.3%	28.6%	53.6%	28.6%	73.1%	25.0%	10.7%
(missing values)	0	0	0	0	0	0	0	0	0	2	0	0
Bent Arrow THS (n=70)	23.2	22.0	1.8	1.0	32.8%	10.4%	13.4%	83.6%	10.4%	53.8%	20.9%	14.9%
(missing values)	3	3	3	3	3	3	3	3	3	5	3	3
Boyle Street Co-op (n=12)	24.7	24.0	1.7	1.0	41.7%	0.0%	8.3%	91.7%	8.3%	58.3%	16.7%	8.3%
(missing values)	0	0	0	0	0	0	0	0	0	0	0	0
Early Head Start (n=95)	28.0	28.0	3.3	3.0	20.5%	4.5%	2.3%	84.1%	15.9%	23.9%	18.2%	9.1%
(missing values)	7	7	7	7	7	7	7	7	7	7	7	7
Leduc County FCSS (n=27)	21.2	20.0	1.3	1.0	22.7%	0.0%	4.5%	54.5%	4.5%	36.4%	27.3%	13.6%
(missing values)	5	5	5	5	5	5	5	5	5	5	5	5
Mill Woods FRC (n=83)	25.4	26.0	2.3	2.0	30.9%	2.9%	5.9%	76.5%	8.8%	35.3%	17.6%	8.8%
(missing values)	15	15	15	15	15	15	15	15	15	15	15	15
Multicultural Health Brokers Co-op HV Program (n=34)	31.4	31.0	2.2	2.0	0.0%	0.0%	0.0%	84.8%	3.0%	9.1%	9.1%	3.0%
(missing values)	1	1	1	1	1	1	1	1	1	1	1	1
Norwood CFRC (n=115)	23.5	23.0	2.1	1.0	34.2%	3.5%	10.5%	85.1%	15.8%	47.3%	27.2%	8.8%
(missing values)	2	2	1	1	1	1	1	1	1	3	1	2
St. Albert PPA (n=16)	23.6	22.5	1.6	1.0	18.8%	12.5%	12.5%	68.8%	43.8%	50.0%	43.8%	25.0%
(missing values)	0	0	0	0	0	0	0	0	0	0	0	0
Strathcona County FCSHV Program (n=41)	27.2	27.5	2.7	2.0	26.3%	0.0%	5.3%	78.9%	0.0%	27.0%	21.1%	13.2%
(missing values)	3	3	3	3	3	3	3	3	3	4	3	3
Terra Association (n=116)	18.3	18.0	1.5	1.0	39.8%	5.3%	7.1%	84.1%	21.0%	54.1%	19.2%	8.0%
(missing values)	3	3	3	3	3	3	3	3	3	7	3	3

Source of data: Capital Health, December 1, 2001 to November 30, 2003 for home visitation group, and 2003 for other population.

Note: Data exclude infants who have died. Percentages reported are based on totals excluding missing values. Home Visitation group includes individuals who participated in the Home Visitation program or utilized services. The time period includes date of birth of the infant to the date of file closure or November 30, 2003, whichever is earlier.

APPENDIX C, TABLE C-2
Emergency Department Visit Rate per 100 for 2001 to 2003 by Age Group and Home Visitation Site

Capital Region Home Visitation Sites	Birth to Under 1 Year of Age		1 to Under 2 Years of Age		2 to 3 Years of Age	
	Rate per 100	No. of Children	Rate per 100	No. of Children	Rate per 100	No. of Children
Ben Calf Robe Society	67.9	28	100.0	17	40.0	5
Bent Arrow THS	97.1	69	166.7	39	33.3	3
Boyle Street Co-op	69.2	13	0.0	2	-	-
Early Head Start	60.7	61	91.5	47	128.6	21
Leduc County FCSS Family Connections	128.6	28	169.2	13	700.0	1
Mill Woods FRC	40.0	45	75.0	36	36.4	11
Multicultural Health Brokers Co-op HV Program	34.3	35	57.9	19	50.0	4
Norwood CFRC	63.3	98	131.5	73	56.3	32
St. Albert PPA	93.8	16	291.7	12	-	-
Strathcona County FCSHV Program	83.3	30	66.7	21	57.1	7
Terra Association	107.1	84	165.2	46	123.8	21
All Home Visitation Sites	76.9	507	124.9	325	86.7	105
General Population[1]	44.2	32,953	97.0	22,075	76.7	11,116

Source of data: Capital Health, January 1, 2001 to December 31, 2003

[1] General Population includes all children born in Edmonton between January 1, 2001 and December 31, 2003, excluding home visitation program clients.

APPENDIX C, TABLE C-3
Emergency Department Visits for Children from Birth to 3 Years of Age, 2003
Leading Causes of Visits by Percent and Rank

Cause[1]	Home Visitation			General Population[2]		
	No. of Visits	Percent	Rank	No. of Visits	Percent	Rank
Respiratory Disease	166	30.5	1	7,227	30.3	1
Digestive Disease	70	12.8	2	2,368	9.9	5
Health Status (Contact with Health System)[3]	69	12.7	3	2,577	10.8	3
Infectious/Parasitic Disease	64	11.7	4	2,106	8.8	6
Symptoms/Abnormal Findings/Ill Defined	63	11.6	5	2,575	10.8	4
Unintentional Injury	50	9.2	6	3,122	13.1	2
Nervous/Sense Organ Disease	27	5.0	7	1,727	7.2	7
Other[4]	36	6.6		2,131	8.9	
Total Number of Emergency Dept. Visits	545	100.0		23,833	100.0	

Source of data: Capital Health. Reasons for emergency department visits for the year 2003, including children from birth to 3 years of age only for the year 2003.

[1] For additional descriptions, see pages 238-239 under Coding Categorization in report, How Healthy Are We? Health Status in the Capital Region, A Technical Report 2000.

[2] General Population includes children born in Edmonton between January 1, 2001 and December 31, 2003, excluding home visitation program clients.

[3] Health Status involves mainly three types of contact with the Health System: (1) person is not sick and accesses the health system for some specific purpose (eg. To receive a vaccination); (2) when a person with a known disease or injury access the health system for a specific treatment for the disease or injury (e.g., renal dialysis or cast change); (3) when some circumstance occurs affecting the person's health status but is not an illness or injury.

[4] Other includes: perinatal conditions; skin/tissue disease; circulatory system diseases; misadventure/affects; undetermined injuries; endocrine/metabolic disease; blood/blood forming; mental disorders; genitourinary disease; and muskuloskelatal disease.

APPENDIX C, TABLE C-4

Hospitalization Rate per 100 for 2001 to 2003 by Age Group and Home Visitation Site

Capital Region Home Visitation Sites	Birth to Under 1 Year of Age		1 to Under 2 Years of Age		2 to 3 Years of Age	
	Rate per 100	No. of Children	Rate per 100	No. of Children	Rate per 100	No. of Children
Ben Calf Robe Society	50.0	28	0.0	17	0.0	5
Bent Arrow THS	47.8	69	5.1	39	0.0	3
Boyle Street Co-op	23.1	13	0.0	2	-	-
Early Head Start	57.4	61	10.6	47	7.7	21
Leduc County FCSS Family Connections	64.3	28	15.4	13	0.0	1
Mill Woods FRC	37.8	45	22.2	36	0.0	11
Multicultural Health Brokers Co-op HV Program	11.4	35	5.3	19	0.0	4
Norwood CFRC	31.6	98	8.2	73	2.4	32
St. Albert PPA	50.0	16	25.0	12	-	-
Strathcona County FCSHV Program	46.7	30	4.8	21	0.0	7
Terra Association	45.2	84	0.0	46	0.0	21
All Home Visitation Sites	42.4	507	8.6	325	1.4	105
General Population[1]	34.7	32,953	7.4	22,075	4.3	11,116

Source of data: Capital Health, January 1, 2001 to December 31, 2003.

[1] General Population includes all children born in Edmonton between January 1, 2001 and December 31, 2003, excluding home visitation program clients.

APPENDIX C, TABLE C-5
Hospitalizations for Children from Birth to 3 Years of Age, 2003
Leading Causes of Stays (Excluding Birth Events) by Percent and Rank

Cause[1]	Home Visitation			General Population[2]		
	No. of Visits	Percent	Rank	No. of Visits	Percent	Rank
Perinatal Conditions[3]	62	53.4	1	3,009	57.9	1
Health Status (Contact with Health System)[4]	16	13.8	2	175	3.4	5
Respiratory Disease	13	11.2	3	731	14.1	2
Symptoms/Abnormal Findings/Ill Defined	7	6.0	4	154	3.0	6
Congenital Anomalies	5	4.3	5	449	8.6	3
Digestive System Diseases	4	3.4	6	187	3.6	4
Other[5]	9	7.8		489	9.4	
Total Number of Hospitalizations	**116**	**100.0**		**5,194**	**100.0**	

Source of data: Capital Health. Reasons for emergency department visits for the year 2003, including children from birth to 3 years of age only for the year 2003.

[1] For additional descriptions, see pages 238-239 under Coding Categorization in report, How Healthy Are We? Health Status in the Capital Region, A Technical Report 2000.

[2] General Population includes children born in Edmonton between January 1, 2001 and December 31, 2003, excluding home visitation program clients.

[3] Perinatal Conditions refer to conditions originating in the period between the end of the 20th week of fetal life and the end of the first month of birth.

[4] Health Status involves mainly three types of contact with the Health System: (1) person is not sick and accesses the health system for some specific purpose (e.g., To receive a vaccination); (2) when a person with a known disease or injury access the health system for a specific treatment for the disease or injury (e.g., renal dialysis or cast change); (3) when some circumstance occurs affecting the person's health status but is not an illness or injury.

[5] Other includes: cancer; unintentional injuries; intentional injuries; infectious/parasitic diseases; nervous/sense organs; and muskuloskeletal disease.